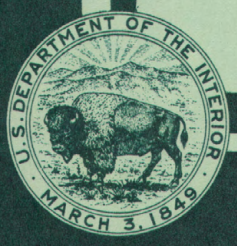
1972

Water Resources Data for Tennessee

Part 1. Surface Water Records

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the Tennessee Department of Conservation, Division of Water Resources; the Tennessee Valley Authority; and with other State, municipal, and Federal agencies

CALENDAR FOR WATER YEAR 1972

OCTOBER 1971

S	M	T	W	T	F	S
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NOVEMBER 1971

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JANUARY 1972

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FEBRUARY 1972

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MARCH 1972

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APRIL 1972

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MAY 1972

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JUNE 1972

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JULY 1972

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AUGUST 1972

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SEPTEMBER 1972

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24	25	26	27	28	29	30

1972

Water Resources Data for Tennessee

Part 1. Surface Water Records
Part 2. Water Quality Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the Tennessee Department of Conservation, Division of Water Resources; the Tennessee Valley Authority; and with other State, municipal, and Federal agencies

Prepared in cooperation with

Tennessee Department of Conservation, through the Division of Water Resources
Tennessee Department of Highways
Tennessee Department of Public Health
Tennessee Game and Fish Commission
City of Chattanooga
City of Lawrenceburg
City of Murfreesboro
Metropolitan Government of Nashville and Davidson County
Tennessee Valley Authority
Corps of Engineers, U.S. Army

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
144 Federal Office Building
Nashville, Tennessee 37203

1974

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(Letters after station name designate type of data: (c), chemical; (t), water temperature)

WATER RESOURCES DATA FOR TENNESSEE, 1972

Part 1. Surface-Water Records
Part 2. Water-Quality Records

INTRODUCTION

Water resources data for the 1972 water year for Tennessee, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, and records of water-quality data on the chemical and physical characteristics of surface water, are given in this report. In Part 1, records are included for 133 gaging stations of which 107 are streamflow discharge stations and 26 are reservoir or lake stations; also included are records for 48 low-flow partial-record stations, 144 crest-stage partial-record stations, 27 miscellaneous sites, and 3 seepage investigations. Locations of gaging stations are shown in Figure 2, and location of partial-record stations are shown in Figure 3. In Part 2, data on the quality of surface water (chemical and temperature) collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly, or less frequently, and at some sites a graphic record, are shown. Records are given for 43 sampling stations of which 17 are continuous temperature record stations, 4 of which show data in addition to temperature, and 41 are miscellaneous sites. Location of water-quality stations are shown on Figure 2 with the gaging station sites. Except where noted, the records were collected and computed by the Water Resources Division of the U. S. Geological Survey under the direction of Harry H. Barnes, Jr., district chief. These data represent that portion of the National Water Data System collected by the U. S. Geological Survey and cooperating Federal, State, Municipal, and private agencies in Tennessee.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports are for limited

distribution and are designed primarily for rapid release of data shortly after the end of the water year.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U. S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and since then are in a 5-year series. Records of chemical quality, water temperatures, and suspended sediment have been published since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." More information is given under the headings "Publications" on pages 13 and 17.

COOPERATION

Cooperative agreements between the U.S. Geological Survey and organizations of the State of Tennessee for the systematic collection of streamflow records began in 1918. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Tennessee Department of Conservation, William L. Jenkins, commissioner, through Division of Water Resources, R. W. Robinson, director.

Tennessee Department of Highways, Robert F. Smith, commissioner, through Lewis Evans, state highway engineer, and H. W. Derthick, bridge engineer, and through C. S. Harmon, director of research and planning.

Tennessee Department of Public Health, E. W. Fowinkle, commissioner, through Water Quality Control Division, S. L. Jones, director.

Tennessee Game and Fish Commission, David M. Goodrich, director.

City of Chattanooga, Robert Kirk Walker, mayor, and E. L. Spencer, city engineer.

City of Lawrenceburg, Ivan Johnston, mayor.

City of Murfreesboro, J. W. Lovell, superintendent, water and sewer department.

Metropolitan Government of Nashville and Davidson County, Beverly Briley, mayor, through Department of Public Works, W. D. Lamb, director.

Assistance in the form of funds and/or services was given by the Corps of Engineers, U. S. Army, in collecting records for 19 gaging stations, and by Tennessee Valley Authority in collecting records for 46 gaging stations, 14 temperature stations, and 28 water-quality miscellaneous sites published in this report.

The following organizations aided in collecting records:

Aluminum Co. of America
Bowaters Southern Paper Corp.
Cities Service Co. (Copperhill, Tenn. Operations)

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows:

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

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, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

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.

Mean discharge is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

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.HT.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the 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 computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (ug/l, UG/L) is a unit for expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, below:

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1}...	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*...	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})..	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.	.03640
Carbonate (CO_3^{-2})..	.03333	Nickel (Ni^{+2})*....	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})...	.01613
Chromium (Cr^{+6})*...	.11539	Nitrite (NO_2^{-1})...	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3}).	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})...	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*.	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})...	.02082
Hydroxide (OH^{-1})...	.05880	Zinc (Zn^{+2}).....	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Partial-record station is a particular site where limited streamflow or water-quality 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.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

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.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

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 separate 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 NUMBER

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 lists of gaging stations and water-quality 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 water-quality station 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 and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of 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 03335500, which appears just to the left of the station name includes the 2-digit part number "03" plus the 6-digit downstream order number "335500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 3 (Ohio River basin) and Part 7 (Lower Mississippi River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from various State reports by station number to include all records in the basin.

SURFACE WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, 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 direct reading on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30-, or 60-minute intervals. 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, in Water Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations book 3, chapter A-6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, 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 daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. 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 computed 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 computing discharge. 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 computing 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 hydrologists, 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. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

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

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 comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals 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 or a table showing gage height at 2400 is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current 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, notations of revisions of previously published records, 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 Tennessee Valley Authority 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 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 current 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 "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 information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual 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, 1965 stands for the water year October 1, 1964, to September 30, 1965. 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 table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, 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"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, or if the drainage area includes large noncontributing areas.

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

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods 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 ususual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site 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 methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

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 subjected to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For one lake a table showing gage height at 2400 is given.

Data collected at partial-record stations and 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.

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 these 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. 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

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Tennessee for the period October 1960 to September 1965 are in Water-Supply Papers 1910 and 1920, and records for October 1965 to September 1970 are in Water-Supply Paper 2110 and 2120.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. 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. Records for stations in Tennessee are compiled in Water-Supply Papers 1306 and 1311 through September 1950, and in 1726 and 1731 for October 1950 through September 1960.

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

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height record, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected in Tennessee at 78 sites during the 1972 water year by the following agencies:

Tennessee Valley Authority: 43 sites in Tennessee River basin

U. S. Army Corps of Engineers: 10 sites in Cumberland River basin
25 sites in Lower Mississippi River basin

The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Reston, Va., 22092, maintains an index of these sites. Information on records at specific sites can be obtained from that office upon request.

WATER QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads in this report.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical quality, microbiological, and water temperature. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-

temperature data represent once-daily observations except for stations where a continuous temperature recorder furnished information from which daily minimums and maximums are obtained.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperatures in degrees Celsius to degrees Fahrenheit, see table 2 below:

Table 2.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken about the same time each day when sample is collected. Large streams have a small diurnal temperature change while small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in Tennessee are listed below. Data for Cumberland and Tennessee River basins are given in Part 3 and for lower Mississippi River basin in Part 7.

Year	Part 3	Part 7	Year	Part 3	Part 7
1941	942	942	1956	1450	1452
1942	950	950	1957	1520	1522
1943	970	970	1958	1571	1573
1944	1022	1022	1959	1642	1644
1945	1030	1030	1960	1742	1744
1946	1050	1050	1961	1882	1884
1947	1102	1102	1962	1942	1944
1948	1132	1133	1963	1948	1950
1949	1162	1163	1964	1955	1957
1950	1186	1188	1965	1962	1964
1951	1197	1199	1966	1992	1994
1952	1250	1252	1967	2012	2014
1953	1290	1292	1968	2093	2096
1954	1350	1352	1969	2143	2146
1955	1400	1402	1970	2153	2156

HYDROLOGIC CONDITIONS

There was no widespread flooding or drought conditions during the year, but both floods and droughts occurred in small, scattered areas. On April 12, severe thunderstorms in the Pigeon River basin in East Tennessee caused local flooding on small streams, and in the community of Hartford, in Cocke County, one death and property damage estimated at about one-half million dollars, primarily to roads and bridges, occurred. In July, there was locally severe flooding in several portions of the state, particularly in the upper portion of the Big Sandy River basin in west central Tennessee, but most of the flooded land was pasture or woods and financial losses were not great.

SELECTED REFERENCES

American Public Health Association, and others 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.

Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved mineral and gases: U.S. Geol. Survey Techniques of Water Resources Inv., book 5, chap. A1, 160 p.

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

Corbett, D. M., and others, 1943, reprinted 1957, Stream-gaging procedures, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Hem, J. D., 1959, Study and interpretation of the chemical characteristics of natural water: U.S. Geol. Survey Water-Supply Paper 1473, 269 p.

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

PART 1. SURFACE WATER RECORDS

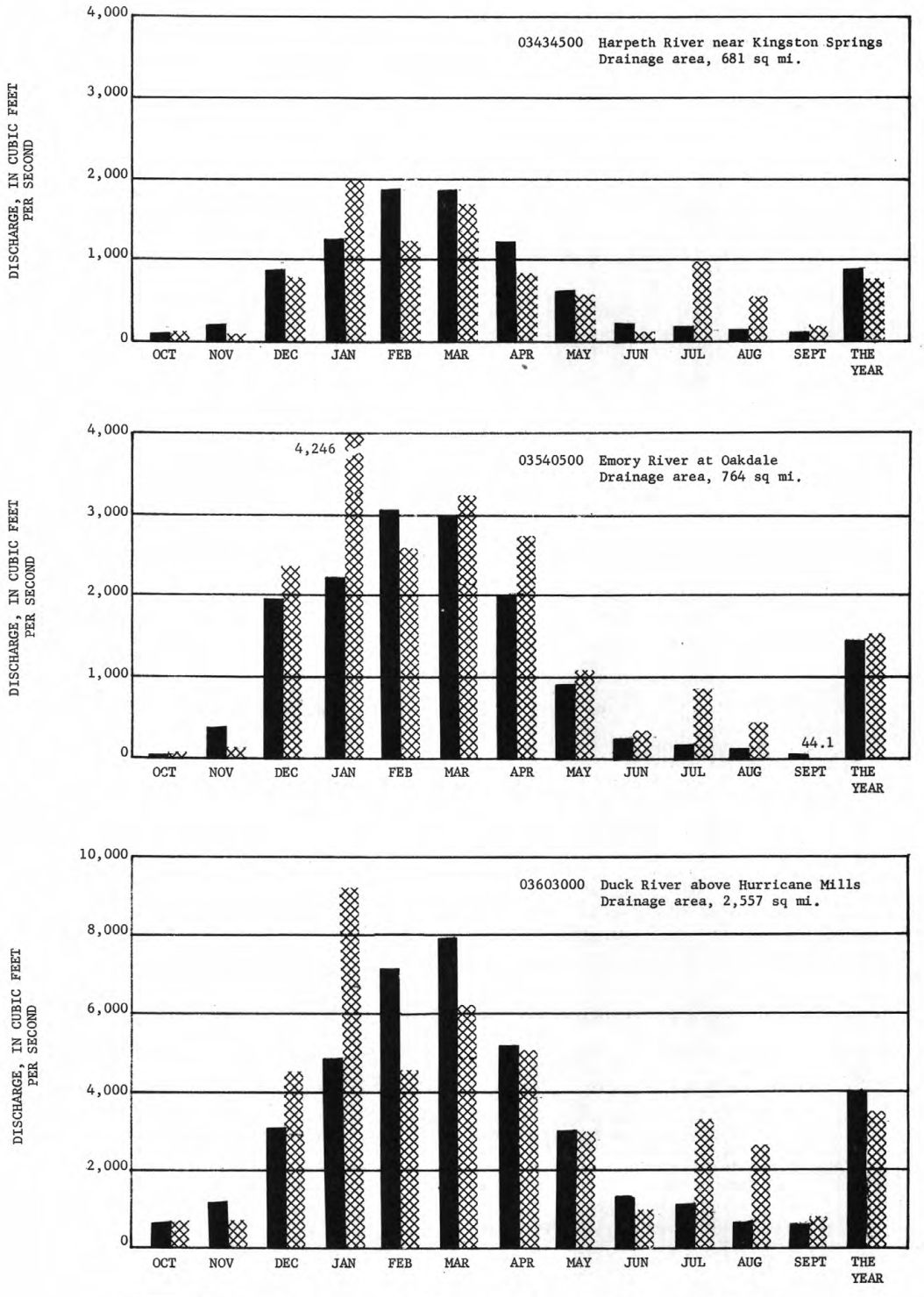

Figure 1.--Runoff during 1972 water year compared with median runoff for period 1941-70 for three representative gaging stations.

CUMBERLAND RIVER BASIN

03408500 New River at New River, Tenn.

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

DRAINAGE AREA.--382 sq mi.

PERIOD OF RECORD.--August 1934 to current year. Gage-height records collected in this vicinity 1908-52 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,092.43 ft above mean sea level.

AVERAGE DISCHARGE.--38 years, 711 cfs (25.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,000 cfs Mar. 3 (gage height, 19.25 ft); minimum, 17 cfs Sept. 17 (gage height, 1.69 ft). Period of record: Maximum discharge, 44,300 cfs Feb. 3, 1939 (gage height, 33.58 ft); no flow part of each day Aug. 12-15, 1944. Flood of Mar. 23, 1929 reached a stage of 41.2 ft (discharge, 74,700 cfs, estimated based on field survey) at old U. S. Weather Bureau gage, 1,200 ft upstream at datum 3.41 ft higher.

REMARKS.--Records good.

REVISIONS.--WSP 1436: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	68	190	1,140	911	1,010	1,110	353	131	381	1,050	43
2	87	71	167	9,570	765	4,220	859	344	99	236	633	37
3	73	429	183	4,990	800	9,110	705	642	82	219	425	34
4	65	438	731	2,740	1,020	2,660	701	681	72	318	295	33
5	117	262	736	7,690	766	1,730	640	548	65	3,150	211	32
6	325	190	882	3,620	782	1,220	544	447	60	1,200	163	32
7	200	160	9,830	1,840	873	1,020	589	382	58	614	152	33
8	127	140	3,210	1,220	812	1,150	2,950	434	67	378	160	36
9	96	119	1,460	1,290	797	1,060	1,830	641	59	261	1,080	43
10	79	108	1,080	6,410	738	973	1,260	527	64	197	2,160	62
11	71	100	1,220	3,890	682	843	1,500	443	95	163	704	49
12	61	93	1,100	2,440	723	713	5,780	385	82	137	455	34
13	55	85	1,320	1,650	3,490	623	2,530	370	55	126	359	28
14	48	80	1,130	1,260	2,630	706	1,980	616	45	205	248	23
15	52	76	1,010	899	1,730	578	2,080	1,010	39	151	180	20
16	173	70	2,320	609	1,280	1,010	1,950	810	36	117	143	18
17	151	65	1,530	589	1,150	2,340	1,930	575	207	115	119	19
18	93	62	1,080	559	1,430	1,690	1,360	443	499	150	102	20
19	73	62	801	553	1,960	1,290	1,040	352	197	136	92	48
20	60	62	1,260	869	1,440	991	843	311	323	101	130	44
21	53	74	1,700	3,300	1,130	860	1,510	319	612	81	105	31
22	48	67	1,180	2,150	1,050	4,560	7,000	265	304	70	80	25
23	46	59	878	1,670	1,000	2,550	3,690	236	184	59	64	21
24	62	61	714	1,310	1,410	1,490	1,760	207	131	53	56	83
25	293	93	594	1,840	4,630	1,110	1,190	168	100	68	97	68
26	270	127	507	1,670	4,530	906	887	144	79	120	257	47
27	162	109	442	1,340	3,170	1,010	682	125	66	127	186	38
28	121	138	399	2,720	1,870	1,790	550	110	143	817	124	200
29	100	149	369	2,890	1,290	2,220	468	98	1,250	546	78	162
30	84	203	419	1,760	------	2,010	405	98	777	3,600	60	2,570
31	74	------	1,610	1,200	------	1,460	------	150	------	2,000	50	------
TOTAL	3,427	3,820	40,052	75,678	44,859	54,903	50,323	12,234	5,981	15,896	10,018	3,933
MEAN	111	127	1,292	2,441	1,547	1,771	1,677	395	199	513	323	131
MAX	325	438	9,830	9,570	4,630	9,110	7,000	1,010	1,250	3,600	2,160	2,570
MIN	46	59	167	553	682	578	405	98	36	53	50	18
CFSM	.29	.33	3.38	6.39	4.05	4.64	4.39	1.03	.52	1.34	.85	.34
IN.	.33	.37	3.90	7.37	4.37	5.35	4.90	1.19	.58	1.55	.98	.38

CAL YR 1971 TOTAL 316,141 MEAN 866 MAX 12,300 MIN 34 CFSM 2.27 IN 30.79
WTR YR 1972 TOTAL 321,124 MEAN 877 MAX 9,830 MIN 18 CFSM 2.30 IN 31.27

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-07	1330	18.41	15,700	03-03	0200	19.25	17,000
01-02	1630	18.95	16,500	04-22	1730	16.14	12,500

03414500 East Fork Obey River near Jamestown, Tenn.

LOCATION.--Lat 36°24'58", long 85°01'35", Fentress County, on right bank 200 ft upstream from bridge on State Highway 52, 0.5 mile upstream from Poplar Cove Creek, 5.3 miles west of Jamestown, and at mile 12.7.

DRAINAGE AREA.--202 sq mi (includes 6 sq mi without surface drainage).

PERIOD OF RECORD.--October 1942 to current year. Prior to February 1943 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 680.30 ft above mean sea level, Sandy Hook datum. Feb. 24 to Apr. 7, 1943, non-recording gage 200 ft upstream at same datum.

AVERAGE DISCHARGE.--30 years, 393 cfs (26.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,400 cfs Apr. 22 (gage height, 15.48 ft); minimum, 14 cfs Sept. 15, 16, 17 (gage height, 0.88 ft).
Period of record: Maximum discharge, 30,800 cfs Mar. 12, 1963; maximum gage height, 27.20 ft Feb. 13, 1948; minimum discharge, 3.6 cfs Sept. 26-28, 1948; minimum gage height, 0.55 ft Sept. 12-17, 1954.
Flood in March 1929 reached a stage of about 30.7 ft from flood profile by Corps of Engineers.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1276: 1944, 1946(M). WSP 1506: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	55	66	700	631	689	750	280	99	89	786	26
2	56	59	63	2,700	528	2,410	570	254	76	60	342	24
3	47	131	73	3,000	612	2,930	486	274	64	57	229	22
4	57	135	175	1,800	756	1,540	542	266	54	82	168	21
5	172	113	212	2,600	629	1,120	510	222	48	336	127	22
6	110	98	541	1,850	607	849	464	195	46	217	101	23
7	71	88	3,770	1,300	693	688	533	175	51	128	109	24
8	57	80	1,520	940	640	647	1,450	200	46	84	111	22
9	47	71	902	1,100	576	555	994	315	38	62	811	20
10	41	66	774	2,100	535	485	733	306	41	50	1,120	19
11	37	62	590	1,900	511	440	889	267	48	43	489	17
12	33	57	460	1,650	679	391	1,170	237	39	37	299	17
13	30	54	385	1,200	2,670	372	949	225	34	32	218	16
14	28	50	350	866	1,830	475	917	309	30	29	178	15
15	40	47	450	622	1,250	445	1,010	368	28	26	135	15
16	84	44	540	464	922	833	1,260	309	29	25	105	14
17	73	42	455	410	782	1,430	1,240	261	45	29	85	14
18	55	42	385	372	751	1,130	912	221	50	88	70	15
19	48	43	350	361	689	847	674	190	40	130	60	17
20	42	44	410	918	579	642	554	176	36	76	63	22
21	38	44	500	2,120	505	541	930	167	36	49	58	19
22	37	41	460	1,410	502	786	5,930	158	35	39	63	17
23	37	40	410	1,060	515	678	2,360	141	31	32	50	16
24	37	40	365	890	1,010	575	1,300	123	27	31	44	18
25	132	50	340	1,030	2,150	502	889	107	24	40	44	16
26	135	50	310	935	2,220	436	657	98	21	32	102	18
27	106	53	285	801	1,840	571	508	144	20	36	67	29
28	86	63	260	1,900	1,220	1,090	424	122	53	437	48	39
29	71	68	235	1,800	895	1,760	363	93	409	493	40	41
30	63	71	243	1,170	------	1,440	316	82	157	1,320	34	172
31	57	------	225	837	------	1,010	------	108	------	1,160	29	------
TOTAL	1,995	1,901	16,104	40,806	27,727	28,307	30,284	6,393	1,755	5,349	6,185	770
MEAN	64.4	63.4	519	1,316	956	913	1,009	206	58.5	173	200	25.7
MAX	172	135	3,770	3,000	2,670	2,930	5,930	368	409	1,320	1,120	172
MIN	28	40	63	361	502	372	316	82	20	25	29	14
CFSM	.32	.31	2.57	6.51	4.73	4.52	5.00	1.02	.29	.86	.99	.13
IN.	.37	.35	2.97	7.51	5.11	5.21	5.58	1.18	.32	.99	1.14	.14

CAL YR 1971 TOTAL 170,890 MEAN 468 MAX 10,600 MIN 23 CFSM 2.32 IN 31.47
WTR YR 1972 TOTAL 167,576 MEAN 458 MAX 5,930 MIN 14 CFSM 2.27 IN 30.86

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
04-22	1015	15.48	11,400				

NOTE.--No gage-height record Dec. 11 to Jan. 12.

03416000 Wolf River near Byrdstown, Tenn.

LOCATION.--Lat 36°33'37", long 85°04'23", Pickett County, on right bank 0.3 mile upstream from bridge on county road, 0.5 mile upstream from Widow Creek, 3.2 miles east of Byrdstown, 5.4 miles upstream from Lick Creek, and at mile 26.2.

DRAINAGE AREA.--106 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Prior to June 1943 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 707.54 ft above mean sea level, Sandy Hook datum.

AVERAGE DISCHARGE.--30 years, 180 cfs (23.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,540 cfs Aug. 9 (gage height, 6.36 ft); minimum, 14 cfs Sept. 21 (gage height, 1.09 ft).

Period of record: Maximum discharge, 22,600 cfs Jan. 29, 1957 (gage height, 10.84 ft), from rating curve extended above 7,300 cfs on basis of velocity-area study; minimum, 2.0 cfs Sept. 17, 1954 (gage height, 0.50 ft, result of construction at mill dam upstream).

Flood of March 1929 reached a stage about equal to that of Jan. 29, 1957, from information by local resident. Flood of June 30, 1928, reached a stage 1.5 ft higher than that of March 1929 at a point 12.5 miles upstream, from floodmarks.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1276: 1943. WSP 1910: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	18	22	72	296	343	355	125	41	75	285	24
2	30	22	20	1,880	248	1,120	279	126	35	55	199	23
3	28	34	160	780	294	1,210	304	199	33	46	139	22
4	26	35	150	751	322	621	437	168	31	54	101	22
5	25	27	140	1,470	259	452	404	137	30	68	77	22
6	24	25	144	663	261	361	345	121	31	53	64	22
7	23	24	1,220	417	350	312	417	109	30	40	59	21
8	23	22	352	303	306	294	120	175	27	33	51	20
9	22	21	231	431	269	254	569	298	26	29	1,750	19
10	20	20	233	783	232	230	417	230	42	28	751	18
11	20	20	186	587	210	206	496	184	35	24	318	17
12	19	20	153	479	317	187	492	154	30	22	195	16
13	19	20	129	359	1,590	211	416	146	26	21	144	16
14	18	19	111	267	801	410	856	155	24	20	111	15
15	22	18	120	203	517	314	864	137	23	19	89	14
16	26	18	172	166	385	578	878	123	26	22	75	15
17	29	17	149	153	357	978	662	108	34	21	64	15
18	23	17	125	141	355	615	462	96	38	21	56	15
19	19	18	110	135	330	428	361	84	34	24	49	15
20	17	18	151	747	278	334	294	76	29	22	47	15
21	17	18	169	2,020	245	285	272	72	28	19	47	14
22	18	17	141	743	254	347	835	66	27	17	40	14
23	17	17	124	486	318	301	583	61	24	17	37	14
24	18	20	112	349	1,260	256	403	56	22	19	34	19
25	21	21	102	435	2,130	228	310	50	20	30	35	17
26	30	21	94	379	1,900	199	248	45	19	23	37	17
27	24	22	86	386	1,040	280	205	42	18	34	35	20
28	21	22	80	1,800	592	511	177	40	27	86	31	18
29	19	24	74	941	429	1,060	157	38	346	147	28	54
30	19	23	73	520	------	684	138	41	124	901	27	98
31	18	------	76	377	------	460	------	43	------	843	25	------
TOTAL	687	638	5,209	19,197	16,185	14,069	13,756	3,505	1,282	2,833	5,000	651
MEAN	22.2	21.3	168	619	558	454	459	113	42.7	91.4	161	21.7
MAX	32	35	1,220	2,020	2,130	1,210	1,120	298	346	901	1,750	98
MIN	17	17	20	72	210	187	138	38	18	17	25	14
CFSM	.21	.20	1.58	5.84	5.26	4.28	4.33	1.07	.40	.86	1.52	.20
IN.	.24	.22	1.83	6.74	5.68	4.94	4.83	1.23	.45	.99	1.75	.23

CAL YR 1971 TOTAL 85,958 MEAN 236 MAX 8,880 MIN 17 CFSM 2.23 IN 30.17
WTR YR 1972 TOTAL 83,012 MEAN 227 MAX 2,130 MIN 14 CFSM 2.14 IN 29.13

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
08-09	1715	6.36	4,540				

03417500 Cumberland River at Celina, Tenn.

LOCATION.--Lat 36°33'15", long 85°30'52", Clay County, near right bank on hollow pier of bridge on State Highway 52 at Celina, 600 ft downstream from Obey River and at mile 380.8.

DRAINAGE AREA.--7,307 sq mi.

PERIOD OF RECORD.--October 1922 to current year. Gage-height records collected at same site 1903-54 are in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 489.00 ft above mean sea level. Prior to Nov. 20, 1930, nonrecording gage at site 400 ft downstream at same datum.

AVERAGE DISCHARGE.--50 years, 11,330 cfs (21.06 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 44,600 cfs Mar. 3 (gage height, 26.20 ft); minimum, 682 cfs Dec. 15 (gage height, 1.88 ft).
Period of record: Maximum discharge, 145,000 cfs Dec. 29, 1926; maximum gage height, 57.25 ft Dec. 29, 1926, from graph based on gage readings; minimum discharge observed, 69 cfs Sept. 2, 11-14, 26, 1925 (gage height, 0.20 ft).
Maximum stage since at least 1793, 59.2 ft in March 1826, from Cumberland River profile.

REMARKS.--Records good. Flow regulated by Lake Cumberland and Dale Hollow Lake (see p. 45).

REVISIONS (WATER YEARS).--WSP 893: 1923-38. WSP 1276: 1924. WSP 1306: 1943 (monthly runoff). WSP 2110: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,000	1,820	2,020	13,300	34,200	39,800	30,200	30,900	3,390	8,800	2,720	12,900
2	10,300	3,710	916	17,300	33,900	41,800	31,400	31,900	6,930	5,080	4,700	10,100
3	5,980	5,540	885	15,700	33,400	44,300	31,300	32,400	8,290	2,150	9,620	6,340
4	3,900	5,900	1,550	18,400	34,200	42,900	29,700	33,900	5,590	927	13,800	2,760
5	7,390	13,600	5,880	22,500	33,000	41,800	29,000	32,900	5,810	1,720	13,300	1,860
6	11,600	11,800	6,670	23,400	28,300	41,100	24,700	33,900	10,300	2,110	6,300	3,840
7	9,550	8,010	5,770	22,400	27,100	39,800	21,800	29,600	10,100	3,840	3,930	7,060
8	9,340	14,000	3,600	24,300	31,900	39,300	25,000	26,200	9,540	3,290	14,200	6,850
9	10,400	15,700	4,290	22,800	30,900	39,900	29,300	29,400	8,590	4,210	14,600	7,410
10	5,370	8,060	3,060	24,900	22,800	40,100	30,800	27,200	10,300	5,140	12,900	6,650
11	3,540	6,380	1,830	22,900	16,900	38,900	28,300	29,500	10,100	9,330	13,700	4,310
12	4,590	6,710	1,710	23,400	17,400	37,800	26,800	27,100	6,800	12,900	14,200	7,910
13	8,430	6,010	1,110	21,800	24,500	37,700	27,700	19,100	9,510	12,600	11,000	10,600
14	12,800	4,950	795	21,000	28,700	37,400	29,400	10,600	7,730	12,000	7,660	12,800
15	9,550	4,000	895	21,400	32,100	35,700	29,800	11,800	7,880	14,700	9,880	14,100
16	5,300	1,980	1,120	23,000	34,100	33,200	29,500	13,500	7,710	8,990	13,500	11,500
17	3,490	4,500	805	20,900	34,100	32,500	29,200	14,900	8,430	5,320	16,100	9,160
18	2,510	2,300	4,540	19,800	33,600	29,500	28,500	15,000	5,170	10,100	16,400	5,420
19	4,760	1,830	10,800	19,700	33,800	24,500	28,200	15,300	2,070	14,300	14,400	9,930
20	8,990	8,870	6,770	18,900	28,400	17,500	29,100	18,400	3,410	15,100	9,700	16,500
21	8,990	15,500	5,130	25,200	14,100	26,300	32,500	10,900	7,010	12,700	5,770	14,000
22	8,240	19,400	6,160	27,200	20,800	32,500	33,300	7,540	6,710	11,500	7,430	11,800
23	7,000	12,000	8,620	25,600	26,100	31,800	32,400	8,830	4,950	12,200	14,200	10,900
24	4,590	9,450	7,160	24,100	31,100	31,500	31,400	9,460	5,200	7,250	14,800	12,400
25	2,450	4,330	5,020	24,700	42,500	32,500	31,200	9,750	4,940	4,360	14,800	7,340
26	5,030	2,900	3,430	24,800	42,100	31,200	30,400	11,700	4,060	5,990	14,900	15,400
27	6,040	5,690	4,450	24,200	39,700	25,800	31,000	10,800	5,190	6,030	12,100	13,900
28	6,550	14,600	6,810	37,400	37,100	28,700	30,900	5,900	7,380	6,250	6,660	10,200
29	6,310	10,500	6,820	37,400	37,800	30,700	30,900	3,770	9,880	5,570	8,310	5,670
30	5,740	3,380	8,470	34,400	------	31,000	30,900	3,940	6,860	5,460	11,800	4,010
31	4,060	------	11,000	33,200	------	29,200	------	4,540	------	3,280	14,100	------
TOTAL	213,790	233,420	138,136	736,000	884,600	1,066,700	885,000	568,630	209,850	233,197	347,480	273,620
MEAN	6,896	7,781	4,456	23,740	30,500	34,410	29,500	18,340	6,995	7,522	11,210	9,121
MAX	12,800	19,400	11,000	37,400	42,500	44,300	33,300	32,900	10,300	15,100	16,400	16,500
MIN	2,450	1,820	795	13,300	14,100	17,500	21,800	3,770	2,070	927	2,720	1,860
(†)	-152,500	-178,500	+203,900	+539,500	+137,700	-229,800	+200,900	-226,900	-127,400	-25,700	-229,200	-223,100
MEAN ‡	1,977	1,831	11,030	41,150	35,250	27,000	36,200	11,020	2,748	6,693	3,815	1,684
CFSM ‡	.27	.25	1.51	5.63	4.82	3.70	4.95	1.51	.38	.92	.52	.23
IN. ‡	.31	.28	1.74	6.49	5.20	4.26	5.53	1.74	.42	1.06	.60	.26

CAL YR 1971 TOTAL 4,700,836 MEAN 12,880 MAX 42,400 MIN 795 MEAN‡ 13,070 CFSM‡ 1.79 IN.‡ 24.28
WTR YR 1972 TOTAL 5,790,423 MEAN 15,820 MAX 44,300 MIN 795 MEAN‡ 14,970 CFSM‡ 2.05 IN.‡ 27.89

† Change in contents, in cfs days, in Lake Cumberland and Dale Hollow Lake, furnished by Corps of Engineers.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03418000 Roaring River near Hilham, Tenn.

LOCATION.--Lat 36°20'27", long 85°25'35", Overton County, on left bank 700 ft upstream from Cleek Branch, 0.2 mile downstream from bridge on State Highway 136, 1.4 miles upstream from Flat Creek, 2.7 miles west of Windle, 5.0 miles south of Hilham, and at mile 22.2.

DRAINAGE AREA.--78.7 sq mi (includes 27.1 sq mi without surface drainage).

PERIOD OF RECORD.--October 1931 to current year. Prior to June 1932 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder and since Sept. 21, 1940, concrete control. Altitude of gage is 770 ft (by barometer). June 23, 1932, to July 24, 1933, nonrecording gage at site 800 ft upstream at different datum. July 25 to Nov. 7, 1933, nonrecording gage 150 ft downstream at different datum. Nov. 8, 1933, to Sept. 23, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--41 years, 106 cfs (18.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,650 cfs July 30 (gage height, 5.19 ft); minimum, 9.1 cfs Sept. 22 (gage height, 0.88 ft).
Period of record: Maximum discharge, 9,770 cfs Mar. 17, 1963 (gage height, 12.98 ft, from highwater mark in gage house), from rating curve extended above 4,000 cfs; minimum, 1.9 cfs Oct. 19, 24, 26, 28, Nov. 9, 1940; minimum daily, 2.4 cfs Sept. 12, 13, 15-19, 1954; minimum gage height, 0.16 ft Oct. 5, 1936; minimum gage height since concrete control, 0.63 ft Sept. 16-20, 1954.

REMARKS.--Records good. Discharge affected occasionally by change in storage in a water-supply reservoir on Carr Creek since 1964.

REVISIONS (WATER YEARS).--WSP 1033: 1939(M). WSP 1143: 1948. WSP 1276: 1942. WSP 1436: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	15	12	75	188	196	176	79	30	15	165	14
2	21	16	11	934	165	778	148	79	28	14	167	14
3	20	18	16	449	177	776	145	91	26	16	105	14
4	19	16	23	450	175	388	160	74	25	28	80	15
5	20	15	32	832	146	276	143	66	24	53	66	15
6	19	13	213	432	154	227	133	60	23	27	56	14
7	17	14	829	275	187	192	263	57	23	21	53	13
8	16	13	259	223	178	204	600	91	21	18	46	12
9	16	13	201	240	167	168	288	81	22	16	51	11
10	15	13	201	309	149	155	238	67	23	15	75	11
11	15	12	170	287	133	141	270	59	20	14	49	11
12	14	12	139	254	149	127	255	54	19	13	42	11
13	14	12	124	214	423	156	226	60	19	12	39	11
14	14	12	105	168	288	229	223	61	18	12	35	10
15	23	12	127	133	242	181	235	65	18	12	32	9.8
16	52	11	149	110	203	397	279	53	21	26	30	10
17	25	11	125	102	195	399	261	49	20	82	29	11
18	21	10	101	96	183	274	222	45	28	49	27	13
19	19	11	90	94	165	224	182	42	21	29	29	11
20	17	12	154	276	144	185	166	41	21	22	33	10
21	17	11	154	688	133	176	182	51	20	19	25	9.7
22	17	10	122	358	128	199	277	42	18	16	22	10
23	17	10	102	256	124	168	233	39	16	15	20	10
24	18	12	91	212	249	149	181	37	15	18	19	15
25	28	14	80	227	467	137	156	35	14	21	24	12
26	21	12	74	190	512	123	132	33	14	26	24	15
27	18	14	69	192	400	158	114	32	14	73	20	21
28	17	14	66	619	277	181	102	31	15	224	18	14
29	16	13	63	468	231	262	95	30	21	223	16	18
30	15	13	70	288	------	243	86	30	17	814	16	24
31	15	------	79	230	------	211	------	35	------	258	15	------
TOTAL	600	384	4,051	9,681	6,332	7,680	6,171	1,669	614	2,201	1,428	389.5
MEAN	19.4	12.8	131	312	218	248	206	53.8	20.5	71.0	46.1	13.0
MAX	52	18	829	934	512	778	600	91	30	814	167	24
MIN	14	10	11	75	124	123	86	30	14	12	15	9.7
CFSM	.25	.16	1.66	3.96	2.77	3.15	2.62	.68	.26	.90	.59	.17
IN.	.28	.18	1.91	4.58	2.99	3.63	2.92	.79	.29	1.04	.67	.18

CAL YR 1971 TOTAL 38,039.0 MEAN 104 MAX 1,630 MIN 10 CFSM 1.32 IN 17.98
WTR YR 1972 TOTAL 41,200.5 MEAN 113 MAX 934 MIN 9.7 CFSM 1.44 IN 19.47

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-07	0545	4.53	1,250	03-02	1700	4.81	
01-02	0930	4.66	1,330	07-30	0100		

03421000 Collins River near McMinnville, Tenn.

LOCATION.--Lat 35°42'32", long 85°43'46", Warren County, on left bank, at downstream side of bridge on U. S. Highway 70S, 1.8 miles downstream from Barren Fork, 2.5 miles northeast of McMinnville, and at mile 19.5.

DRAINAGE AREA.--640 sq mi.

PERIOD OF RECORD.--October 1924 to current year. Prior to April 1925 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 825.78 ft above mean sea level, Sandy Hook datum. Prior to Oct. 16, 1926, non-recording gage on upstream side of bridge at same datum.

AVERAGE DISCHARGE.--48 years, 1,125 cfs (23.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 13,200 cfs Jan. 2 (gage height, 16.13 ft); minimum, 101 cfs Nov. 18 (gage height, 1.62 ft).
Period of record: Maximum discharge, 75,300 cfs Mar. 23, 1929 (gage height, 39.1 ft) from rating curve extended above 41,000 cfs on basis of slope-area measurement of peak flow; minimum, 35 cfs Sept. 21, 1930.
Flood in 1854 is believed to have been about equal to that of Mar. 23, 1929, from information by local residents.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 873: 1929, 1932(M), 1934-35, 1936(M), 1937. WSP 1276: 1925-26, 1928(M), 1933, 1936, 1940. WSP 2110: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	106	111	2,030	1,590	1,400	2,240	801	316	200	1,600	165
2	139	109	111	8,910	1,450	2,920	1,820	730	303	210	1,450	159
3	132	146	142	8,220	1,590	6,900	1,560	715	268	220	1,010	156
4	128	152	179	4,660	2,180	4,340	1,590	705	241	230	735	155
5	125	125	450	8,140	1,770	3,100	1,650	640	220	280	575	158
6	133	125	762	5,550	1,680	2,410	1,480	555	211	350	455	158
7	128	125	3,370	3,280	2,040	1,980	1,340	490	217	380	700	152
8	123	120	3,720	2,360	1,970	1,960	1,330	768	234	310	796	149
9	117	115	2,000	2,180	1,730	1,960	1,330	1,180	245	240	715	178
10	115	109	1,800	4,860	1,530	1,630	1,190	1,070	363	200	1,000	188
11	115	108	1,640	4,830	1,350	1,560	1,200	873	368	170	1,500	179
12	114	108	1,530	3,680	1,260	1,420	1,540	720	320	160	1,030	162
13	111	106	2,190	2,600	1,770	1,420	1,450	640	268	150	1,140	151
14	111	106	1,750	2,140	1,830	1,560	1,260	900	227	140	840	144
15	111	106	1,400	1,730	1,700	1,480	1,090	1,830	206	135	645	139
16	111	102	1,550	1,420	1,530	1,890	2,330	2,250	200	170	510	163
17	111	104	1,440	1,260	1,470	3,250	2,400	1,610	220	220	410	228
18	111	101	1,300	1,140	1,600	2,700	1,690	1,150	435	400	343	258
19	109	105	1,180	1,130	1,690	2,110	1,390	889	650	250	302	190
20	109	106	1,510	1,460	1,500	1,700	1,210	715	500	177	270	164
21	108	106	2,950	1,650	1,290	1,480	1,640	650	420	171	247	156
22	106	105	2,180	1,680	1,160	2,100	7,260	620	525	168	228	148
23	106	104	1,550	1,860	1,090	2,030	6,670	545	410	170	217	147
24	111	105	1,220	1,830	1,110	1,660	3,600	485	280	184	214	146
25	123	105	1,010	1,740	1,300	1,460	2,370	785	240	185	208	143
26	122	105	867	1,770	1,930	1,480	1,780	570	220	190	203	144
27	112	108	746	1,560	2,340	1,430	1,440	485	210	200	256	169
28	109	108	680	1,900	1,970	2,470	1,200	470	190	1,200	235	201
29	108	111	610	2,500	1,640	3,980	1,030	435	180	1,100	203	241
30	106	111	710	2,340	------	3,660	906	372	190	2,200	185	1,810
31	106	------	2,330	1,860	------	2,690	------	342	------	2,000	173	------
TOTAL	3,610	3,352	43,038	92,570	47,060	72,240	58,986	24,990	8,877	12,360	18,395	6,701
MEAN	116	112	1,388	2,986	1,623	2,330	1,966	806	296	399	593	223
MAX	141	152	3,720	8,910	2,340	6,900	7,260	2,250	650	2,200	1,600	1,810
MIN	106	101	111	1,130	1,090	1,400	906	342	180	135	173	139
CFSM	.18	.18	2.17	4.67	2.54	3.64	3.07	1.26	.46	.62	.93	.35
IN.	.21	.19	2.50	5.38	2.74	4.20	3.43	1.45	.52	.72	1.07	.39

CAL YR 1971 TOTAL 415,588 MEAN 1,139 MAX 16,300 MIN 101 CFSM 1.78 IN 24.16
WTR YR 1972 TOTAL 392,179 MEAN 1,072 MAX 8,910 MIN 101 CFSM 1.68 IN 22.80

PEAK DISCHARGE (BASE, 11,000 CFS).--Jan. 2 (2130) 13,200 cfs (16.13 ft).

03422500 Caney Fork near Rock Island, Tenn.

LOCATION.--Lat 35°48'26", long 85°37'44", White County, on right bank 180 ft downstream from powerhouse of Tennessee Valley Authority, 0.8 mile downstream from Great Falls Dam, 0.9 mile downstream from Collins River, 1.5 miles northwest of Rock Island, and at mile 90.3.

DRAINAGE AREA.--1,678 sq mi.

PERIOD OF RECORD.--November 1911 to April 1913, July 1913 to May 1914, August 1914 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 647.09 ft above mean sea level. Prior to Mar. 30, 1924, at sites from 80 ft to 0.5 mile upstream at different datums. Apr. 12, 1925, to Sept. 9, 1930, at present site at datum 5.00 ft higher and Sept. 10, 1930, to Sept. 18, 1964, 3.00 ft higher.

AVERAGE DISCHARGE.--58 years (1914-72), 3,144 cfs (25.44 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 41,300 cfs Apr. 22 (gage height, 21.78 ft); minimum, 31 cfs Oct. 28 (gage height, 2.01 ft); minimum daily, 32 cfs Oct. 19-27.
Period of record: Maximum discharge, 210,000 cfs Mar. 23, 1929 (gage height, 43.6 ft, present datum, from floodmark), from rating curve extended above 110,000 cfs; minimum daily, 25 cfs several days in August to October 1951.
Flood of March 1902 reached a stage about 10 ft lower than the flood of Mar. 23, 1929, at a point 8 miles downstream, from profile by Corps of Engineers.

REMARKS.--Records good. Flow regulated by Great Falls Lake beginning Dec. 8, 1916 (see Sta. 03422000). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1276: 1934, 1937. WSP 1910: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	51	59	3,350	4,100	4,250	5,890	3,730	905	606	3,290	576
2	38	53	59	26,200	3,940	10,200	5,140	3,380	1,240	55	1,360	411
3	38	54	62	21,800	4,440	20,900	4,010	3,320	780	602	1,580	63
4	38	52	60	13,400	4,580	11,900	4,650	2,100	55	614	1,740	238
5	38	53	64	22,000	4,300	8,300	4,260	2,100	1,510	602	1,120	295
6	38	53	68	14,400	4,090	6,840	4,040	3,110	1,360	762	805	298
7	38	53	10,300	8,870	4,940	5,420	3,760	2,120	958	295	820	291
8	38	217	9,200	6,190	4,920	5,740	3,760	2,850	941	540	646	232
9	38	56	5,010	6,340	4,720	5,270	3,770	3,320	670	54	1,090	236
10	38	57	4,590	14,600	4,080	4,400	3,570	3,140	118	300	1,590	66
11	38	58	4,020	12,900	3,900	3,990	6,420	3,220	417	56	1,850	238
12	37	56	4,200	9,240	3,680	3,880	8,600	2,570	1,120	56	1,500	318
13	37	56	5,990	6,510	6,620	3,600	5,980	2,470	958	56	1,650	300
14	38	56	4,550	5,380	7,290	3,540	4,770	2,500	662	56	1,410	251
15	59	45	3,860	4,340	5,930	3,710	4,030	3,330	699	57	1,080	223
16	47	46	4,100	3,840	4,820	5,780	6,490	3,370	670	58	895	223
17	47	56	4,070	3,530	4,500	8,100	7,430	3,380	56	58	830	735
18	42	56	3,570	3,410	4,770	7,090	4,840	3,380	54	58	758	1,060
19	32	58	3,390	3,390	5,050	5,510	4,280	3,370	996	59	464	554
20	32	58	3,480	3,390	4,690	4,570	4,420	3,360	1,180	610	461	367
21	32	58	6,960	3,350	3,660	4,630	5,070	3,330	776	610	512	197
22	32	59	5,320	3,590	3,630	5,610	28,800	3,060	1,620	62	353	68
23	32	59	3,730	4,820	3,510	5,810	20,700	2,340	1,210	61	411	66
24	32	59	3,460	4,660	3,470	4,580	10,800	2,380	690	61	411	64
25	32	58	3,380	4,590	4,430	4,280	6,680	1,810	53	61	346	265
26	32	58	3,370	4,730	8,990	3,870	5,240	1,830	744	61	353	1,830
27	32	315	3,360	4,390	9,450	4,770	4,290	1,770	431	63	64	1,690
28	39	283	3,340	6,510	6,220	7,260	3,970	61	547	2,450	361	1,760
29	62	58	3,310	3,110	5,420	11,400	3,720	1,810	550	2,320	403	308
30	50	58	3,300	6,280	------	10,200	3,690	1,790	642	3,300	411	2,030
31	50	------	3,320	5,240	------	7,470	------	1,790	------	3,300	408	------
TOTAL	1,214	2,309	113,552	244,350	144,140	202,870	193,070	82,091	22,612	17,903	28,972	15,253
MEAN	39.2	77.0	3,663	7,882	4,970	6,544	6,436	2,648	754	578	935	508
MAX	62	315	10,300	26,200	9,450	20,900	28,800	3,730	1,620	3,300	3,290	2,030
MIN	32	45	59	3,110	3,470	3,540	3,570	61	53	54	64	63
(†)	+6,000	+4,200	+3,600	+4,500	0	-200	-1,700	-9,600	-1,800	+5,900	+1,100	-3,000
MEAN‡	233	217	3,779	8,027	4,970	6,538	6,379	2,338	694	768	970	408
CFSM‡	.14	.13	2.25	4.78	2.96	3.90	3.80	1.39	.41	.46	.58	.24
IN.‡	.16	.14	2.60	5.52	3.19	4.49	4.24	1.61	.46	.53	.67	.27

CAL YR 1971 TOTAL 1,068,504 MEAN 2,927 MAX 40,500 MIN 32 MEAN‡ 2,921 CFSM‡ 1.74 IN.‡ 23.63
WTR YR 1972 TOTAL 1,068,336 MEAN 2,919 MAX 28,800 MIN 32 MEAN‡ 2,944 CFSM‡ 1.75 IN.‡ 23.88

† Change in contents, in cfs days, in Great Falls Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03425000 Cumberland River at Carthage, Tenn.

LOCATION.--Lat 36°14'53", long 85°57'19", Smith County, on left pier of Cordell Hull Bridge on State Highway 25, at Carthage, 1.0 mile downstream from Caney Fork and at mile 308.2.

DRAINAGE AREA.--10,690 sq mi.

PERIOD OF RECORD.--October 1922 to current year. Gage-height records collected in this vicinity since 1885 are in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 437.53 ft above mean sea level. Prior to May 12, 1936, nonrecording gage at site 1,000 ft downstream at same datum. May 12 to July 17, 1936, nonrecording gage at present site and datum. Since Oct. 1, 1957, auxiliary water-stage recorder 15.8 miles downstream from base gage at same datum.

AVERAGE DISCHARGE.--50 years, 17,010 cfs (21.61 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 66,200 cfs Mar. 4; maximum gage height, 26.43 ft Mar. 4; minimum daily discharge, 2,410 cfs Dec. 4; minimum gage height, 6.49 ft Oct. 19.
Period of record: Maximum discharge, 210,000 cfs Dec. 30, 1926; maximum gage height, 59.8 ft Dec. 30, 1926; minimum daily discharge, 366 cfs Oct. 29, 1940; minimum gage height since filling of Old Hickory Lake on Dec. 30, 1956, 4.3 ft Oct. 28, 1969. Maximum stage since at least 1793, that of Dec. 30, 1926.

REMARKS.--Records good. Flow regulated by Lake Cumberland and Dale Hollow, Great Falls, and Center Hill Lakes. (see p. 45).

REVISIONS (WATER YEARS).--WSP 893: 1923-39. WSP 1276: 1927, 1929(M), 1937(M). WSP 1306: 1943 (monthly runoff). WSP 2110: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13,800	7,200	5,060	21,400	43,500	47,800	40,000	40,500	7,050	9,830	8,310	14,200
2	13,900	7,780	3,260	32,000	41,600	53,200	39,800	40,600	7,430	8,780	6,650	13,600
3	11,900	7,280	2,470	35,500	40,800	61,800	41,100	41,800	9,910	7,080	7,190	11,900
4	9,230	8,990	2,410	31,400	43,000	65,600	40,900	40,400	9,240	4,460	13,600	9,760
5	7,290	8,860	3,400	37,000	43,800	63,300	39,700	39,700	8,090	3,080	16,600	7,220
6	8,500	14,300	9,630	40,100	38,900	61,000	37,100	39,500	9,680	4,100	14,800	4,570
7	11,000	14,200	20,500	39,200	35,100	59,000	33,500	37,800	11,700	4,020	12,300	3,590
8	10,700	13,200	14,600	37,800	40,000	57,000	36,800	35,700	12,000	4,640	11,400	5,340
9	10,000	15,700	11,700	39,200	39,000	55,300	40,000	37,500	11,800	3,480	16,000	7,570
10	10,600	14,800	12,300	44,500	37,300	54,000	39,500	35,400	11,200	3,850	17,200	9,130
11	9,070	12,000	12,600	43,400	30,600	52,100	40,100	33,500	12,100	6,630	16,500	7,310
12	6,580	9,660	8,110	40,800	25,600	48,200	38,600	34,700	11,700	10,600	17,900	10,000
13	7,940	8,860	5,450	39,100	28,300	46,600	37,700	29,800	9,390	14,100	16,100	10,500
14	14,500	8,140	5,020	33,400	38,300	51,200	36,500	22,700	11,200	13,300	13,600	15,200
15	15,700	7,340	5,090	30,800	35,500	48,100	38,500	16,700	10,400	14,100	12,800	17,700
16	15,000	6,240	5,960	31,200	41,900	46,300	37,000	18,000	10,000	15,400	14,600	16,200
17	7,850	5,860	6,070	33,800	43,300	49,500	37,200	18,600	10,100	11,600	19,100	13,400
18	5,190	5,660	11,900	31,000	41,200	46,500	37,300	20,300	8,620	10,300	21,000	11,800
19	5,480	5,250	11,900	26,900	42,100	39,600	36,200	20,200	6,840	12,900	19,100	12,600
20	7,130	5,880	12,800	27,200	40,400	32,300	35,500	20,800	6,130	15,200	14,900	17,000
21	10,500	11,100	14,600	35,400	30,100	29,300	39,300	19,200	5,020	16,700	12,100	19,400
22	12,500	18,700	15,200	39,300	23,000	38,000	43,400	13,500	6,970	14,300	11,400	17,300
23	10,200	17,800	15,000	38,200	29,200	42,500	46,400	13,000	7,810	12,300	9,120	17,100
24	8,410	13,300	14,600	36,200	35,700	44,200	44,500	13,800	6,860	12,300	16,600	14,300
25	5,850	11,000	13,700	35,200	46,300	42,800	42,800	14,700	6,050	10,500	20,800	15,400
26	6,000	7,890	8,980	35,900	55,000	44,500	41,800	16,000	5,410	7,430	21,300	14,200
27	6,440	4,540	7,460	34,800	56,100	39,400	40,900	15,900	6,170	6,420	18,000	16,300
28	8,740	7,040	9,610	41,400	52,200	39,100	40,800	13,200	6,010	6,410	13,700	15,500
29	9,290	13,400	11,200	57,100	48,000	42,200	40,500	9,510	9,300	8,440	10,700	13,000
30	9,730	10,100	12,400	52,600	------	44,100	40,600	7,170	11,100	12,800	8,820	9,440
31	7,670	------	16,500	45,700	------	41,600	------	7,570	------	11,200	11,500	------
TOTAL	296,690	302,070	309,480	1,147.5M	1,145.8M	1,486.1M	1,184.0M	767,750	265,280	296,250	443,690	370,530
MEAN	9,571	10,070	9,983	37,020	39,510	47,940	39,470	24,770	8,843	9,556	14,310	12,350
MAX	15,700	18,700	20,500	57,100	56,100	65,600	46,400	41,800	12,100	16,700	21,300	19,400
MIN	5,190	4,540	2,410	21,400	23,000	29,300	33,500	7,170	5,020	3,080	6,650	3,590
(†)	191,300	-216,000	+259,500	+599,500	+170,500	-234,200	+229,600	-272,500	-151,800	-18,900	-262,800	-270,200
MEAN‡	3,400	2,869	18,350	56,350	45,390	40,380	47,120	15,980	3,783	8,947	5,835	3,344
CFSM‡	.32	.27	1.72	5.27	4.25	3.78	4.41	1.49	.35	.84	.55	.31
IN.‡	.37	.30	1.98	6.08	4.58	4.36	4.92	1.72	.39	.96	.63	.35

CAL YR 1971 TOTAL 6,843,620 MEAN 18,750 MAX 56,400 MIN 2,410 MEAN‡ 18,940 CFSM‡ 1.77 IN.‡ 24.05
WTR YR 1972 TOTAL 8,015,140 MEAN 21,900 MAX 65,600 MIN 2,410 MEAN‡ 20,920 CFSM‡ 1.96 IN.‡ 26.64

† Change in contents, in cfs days, in Lake Cumberland, and Dale Hollow, Great Falls, and Center Hill Lakes, furnished by Corps of Engineers and Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03426500 Cumberland River below Old Hickory, Tenn.

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

DRAINAGE AREA.--11,735 sq mi.

PERIOD OF RECORD.--October 1931 to September 1942, October 1947 to current year. Prior to July 1953, published as "at dam 3, near Old Hickory."

GAGE.--Water-stage recorder. Datum of gage is 380.00 ft above mean sea level. See WSP 1726 for history of changes prior to Oct. 1, 1956.

AVERAGE DISCHARGE.--36 years, 18,190 cfs (21.05 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 67,300 cfs Mar. 5; maximum gage height, 28.86 ft Mar. 3; minimum daily discharge, 1,400 cfs July 8; minimum gage height, 2.13 ft July 8.

Period of record: Maximum discharge, 173,000 cfs Jan. 29, 1937; maximum gage height, 47.40 ft Jan. 29, 1937 (site and datum then in use); minimum daily discharge, 86 cfs Aug. 15, 1936; minimum gage height since filling of Cheatham Lake on Oct. 1, 1956, 3.49 ft Sept. 10, 1962.

Maximum stage since at least 1793, 57.4 ft Dec. 31, 1926, present site and datum, from profile by Corps of Engineers (discharge, 200,000 cfs).

REMARKS.--Records good. Flow regulated by Lake Cumberland, Dale Hollow, Great Falls, Center Hill, and Old Hickory Lakes (see p. 45).

COOPERATION.--Outflow from Old Hickory Lake furnished by Corps of Engineers.

REVISIONS(WATER YEARS).--WSP 923: 1932-39. WSP 1113: 1940(m). WSP 1910: Drainage area, at sites used prior to June 11, 1954. WSP 2110: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13,800	5,620	5,680	17,000	45,000	48,600	44,000	40,000	7,000	9,900	8,650	11,400
2	12,200	6,500	2,460	39,500	41,200	54,200	43,900	40,800	8,000	8,140	5,900	14,800
3	10,100	9,290	2,050	41,200	41,300	66,000	41,600	41,600	8,530	9,090	7,410	10,300
4	9,670	9,180	2,120	41,500	44,500	64,400	42,300	41,700	6,380	3,660	11,100	8,930
5	8,000	9,970	2,810	41,600	45,000	65,600	42,900	41,100	7,710	1,900	13,500	4,420
6	9,900	12,800	12,400	41,500	43,800	60,100	40,500	39,000	7,540	2,170	14,600	2,680
7	8,930	13,600	34,400	41,400	43,600	58,100	32,900	42,000	12,500	2,230	13,200	2,140
8	9,250	14,200	28,400	41,200	33,700	58,800	41,400	46,300	12,700	1,400	14,700	2,130
9	7,680	13,900	13,100	39,400	36,300	56,400	42,300	45,000	10,600	1,480	15,900	7,980
10	6,780	13,000	16,300	48,200	39,200	53,500	39,300	43,900	10,600	5,600	21,300	8,270
11	6,750	9,310	15,400	45,800	35,300	51,700	42,200	43,300	9,810	6,580	22,900	6,270
12	8,070	5,880	7,710	43,000	24,300	50,100	43,100	35,400	7,850	11,800	16,900	7,610
13	9,600	7,820	7,820	38,900	32,200	44,300	42,900	29,000	12,000	12,500	14,000	10,400
14	10,900	5,740	6,650	37,400	35,800	48,800	42,800	20,600	13,400	14,400	13,000	14,000
15	18,900	5,650	7,560	33,000	41,500	51,400	40,200	19,200	11,000	14,800	10,600	16,000
16	26,000	4,940	6,390	31,400	41,900	51,500	38,100	18,300	6,650	17,500	12,500	16,500
17	13,400	4,200	7,820	31,100	40,400	45,900	39,000	21,800	10,500	12,000	16,900	11,900
18	7,470	5,590	8,820	33,400	42,100	49,800	40,000	21,800	7,000	8,880	20,400	14,800
19	5,930	3,240	12,100	26,900	42,700	48,000	43,000	20,200	6,930	9,250	19,600	13,100
20	5,420	3,230	12,000	31,000	42,900	32,300	40,100	17,400	4,450	17,000	15,500	14,400
21	5,000	7,140	18,000	51,000	39,900	31,300	38,800	15,400	5,720	16,000	15,500	18,100
22	11,500	17,500	16,800	43,500	27,400	38,300	42,400	14,900	6,000	12,200	8,870	18,800
23	11,200	17,600	17,400	43,800	24,600	41,500	43,200	13,200	7,600	9,780	10,100	16,300
24	8,000	14,100	15,700	37,000	39,000	48,800	43,300	13,400	6,650	15,100	12,000	10,400
25	5,580	10,100	13,200	30,000	43,600	46,600	43,200	15,700	5,060	13,000	18,800	15,700
26	6,270	7,810	10,100	40,300	43,100	43,800	38,500	15,600	4,800	4,440	20,900	15,600
27	6,170	7,800	9,800	39,100	43,100	43,800	40,300	16,600	5,810	2,500	22,500	16,900
28	8,820	6,420	9,750	41,700	43,400	43,800	40,800	13,000	3,750	9,340	18,600	18,100
29	8,170	11,000	9,240	42,600	43,500	43,800	40,900	7,150	8,350	11,400	7,850	15,600
30	7,900	9,800	15,500	42,000	------	43,800	39,100	7,140	12,200	16,900	9,840	6,860
31	6,530	------	15,700	43,000	------	43,900	------	8,350	------	10,700	10,900	------
TOTAL	293,890	272,930	363,580	1,198,400	1,145,900	1,528,900	1,233,000	808,840	247,190	291,640	444,420	350,290
MEAN	9,480	9,098	11,730	38,660	39,510	49,320	41,100	26,090	8,240	9,408	14,340	11,680
MAX	26,000	17,600	34,400	51,000	45,000	66,000	44,000	46,300	13,400	17,500	22,900	18,800
MIN	5,000	3,230	2,050	17,000	24,300	31,300	32,900	7,140	3,750	1,400	5,900	2,130
(†)	-186,900	-214,200	+255,800	+602,700	+172,000	-233,800	+229,000	-277,000	-150,000	-20,400	-266,400	-265,800
MEAN‡	3,451	1,958	19,980	58,100	45,440	41,780	48,730	17,160	3,240	8,750	5,743	2,816
CFSM‡	.29	.17	1.70	4.95	3.87	3.56	4.15	1.46	.28	.75	.49	.24
IN.‡	.34	.19	1.96	5.71	4.18	4.10	4.63	1.69	.31	.86	.56	.27

CAL YR 1971 TOTAL 7,102,510 MEAN 19,460 MAX 58,400 MIN 2,050 MEAN‡ 19,670 CFSM‡ 1.68 IN.‡ 22.76
WTR YR 1972 TOTAL 8,178,980 MEAN 22,350 MAX 66,000 MIN 1,400 MEAN‡ 21,380 CFSM‡ 1.82 IN.‡ 24.80

† Change in contents, in cfs days, in Lake Cumberland, Dale Hollow, Great Falls, Center Hill and Old Hickory Lakes, furnished by Corps of Engineers and Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03426800 East Fork Stones River at Woodbury, Tenn.

LOCATION.--Lat 35°49'41", long 86°04'36", Cannon County, on center pier on downstream side of bridge on U.S. Highway 70S, at Woodbury, 0.4 mile downstream from Doolittle Branch, and at mile 45.6.

DRAINAGE AREA.--39.1 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1932-33, 1950, 1954, 1962. October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 676.23 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 59.0 cfs (20.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,070 cfs Jan. 10 (gage height, 8.85 ft); minimum daily, 6.4 cfs Sept. 15.
Period of record: Maximum discharge, 12,500 cfs Mar. 11, 1963 (gage height, 16.52 ft), from rating curve extended above 3,000 cfs on basis of velocity-area study and contracted-opening measurement of peak flow at bridge 4.6 miles downstream; minimum, 2.7 cfs Oct. 30, 1963.
Maximum stage since at least 1902, that of Mar. 11, 1963.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Tenn. 1967: 1963(M). WSP 2110: 1963, 1964(M), 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	8.9	146	71	118	94	60	23	14	39	7.9
2	11	11	8.6	940	65	431	78	59	23	18	27	7.7
3	11	13	28	197	177	273	70	56	22	21	22	8.2
4	16	12	20	211	137	181	71	48	21	60	19	8.6
5	18	8.9	111	335	102	143	60	43	23	56	16	9.9
6	12	9.4	380	159	120	111	58	38	25	25	17	8.6
7	11	9.4	477	100	141	97	60	38	24	19	30	7.9
8	9.2	8.9	100	74	111	111	68	98	21	16	20	7.5
9	8.9	9.0	141	105	91	89	56	102	25	15	37	7.8
10	8.9	8.9	233	584	75	82	52	67	29	14	27	7.2
11	8.6	9.0	149	386	65	72	100	56	23	13	20	6.8
12	8.4	8.7	99	183	111	64	165	47	21	13	39	6.7
13	8.2	8.6	88	120	177	71	91	63	20	12	36	6.6
14	8.2	8.6	65	85	143	77	77	60	19	12	23	6.5
15	9.3	8.3	59	63	113	68	65	51	20	12	18	6.4
16	11	8.3	53	51	91	118	98	45	20	16	16	11
17	9.1	8.5	42	46	91	125	82	42	20	14	14	29
18	8.6	8.5	34	42	95	102	71	37	20	12	14	26
19	8.4	9.9	34	41	85	84	61	35	20	12	13	14
20	8.4	9.8	75	37	72	74	67	34	19	12	12	11
21	8.8	9.1	62	47	68	75	108	34	19	11	12	9.2
22	9.1	8.5	44	46	63	79	604	31	17	10	11	9.8
23	11	8.3	35	46	65	71	221	29	17	11	11	34
24	29	11	31	48	72	61	141	28	16	11	10	58
25	22	10	28	95	91	61	108	28	16	17	11	21
26	17	9.8	26	78	163	55	89	26	17	17	10	17
27	14	11	23	70	143	82	79	25	18	21	9.9	46
28	12	11	22	303	113	123	72	24	18	101	9.2	35
29	11	11	20	187	118	270	70	24	15	74	8.8	38
30	10	9.8	170	117	------	167	65	25	18	129	8.3	151
31	10	------	101	85	------	120	------	25	------	81	8.1	------
TOTAL	359.1	288.2	2,767.5	5,027	3,029	3,655	3,041	1,378	609	869	568.3	624.3
MEAN	11.6	9.61	89.3	162	104	118	101	44.5	20.3	28.0	18.3	20.8
MAX	29	13	477	940	177	431	604	102	29	129	39	151
MIN	8.2	8.3	8.6	37	63	55	52	24	15	10	8.1	6.4
CFSM	.30	.25	2.28	4.14	2.66	3.02	2.58	1.14	.52	.72	.47	.53
IN.	.34	.27	2.63	4.78	2.88	3.48	2.89	1.31	.58	.83	.54	.59

CAL YR 1971 TOTAL 22,571.2 MEAN 61.8 MAX 1,050 MIN 8.2 CFSM 1.58 IN 21.47
WTR YR 1972 TOTAL 22,215.4 MEAN 60.7 MAX 940 MIN 6.4 CFSM 1.55 IN 21.14

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-02	0145	8.79	2,050	01-10	0230	8.85	2,070

03427500 East Fork Stones River near Lascassas, Tenn.

LOCATION.--Lat 35°55'07", long 86°20'01", Rutherford County, near right bank on downstream end of pier of highway bridge, 2.5 miles southwest of Lascassas, 3.7 miles downstream from Bradley Creek, 6.0 miles northeast of the courthouse in Murfreesboro, and at mile 15.4.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--October 1950 to November 1958, May 1963 to current year. Prior to February 1951 monthly discharge only, published in WSP 1726.

GAGE.--Water-stage recorder. Datum of gage is 507.88 ft above mean sea level, Sandy Hook datum (levels by Corps of Engineers).

AVERAGE DISCHARGE.--17 years (1950-58, 1963-72), 414 cfs (21.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,100 cfs Jan. 2 (gage height, 22.00 ft); minimum, 8.5 cfs Sept. 15.
Period of record: Maximum discharge, 22,300 cfs Mar. 22, 1955 (gage height, 34.07 ft); minimum, 0.2 cfs Oct. 23, 1953 (gage height, 2.22 ft); minimum daily, 0.4 cfs Aug. 31, 1953.
Maximum stage since at least 1902, 34.22 ft Mar. 12, 1963, from floodmark in gage well (discharge, 22,500 cfs).

REMARKS.--Records good. Frequent diurnal fluctuations at low flow caused by small mills above station.

REVISIONS (WATER YEARS).--WSP 1910: Drainage area. WSP 2110: 1955(M), maximum known(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	23	22	548	387	377	510	151	46	34	266	19
2	17	31	21	8,000	338	2,760	374	142	43	33	148	18
3	18	25	36	1,760	825	1,930	308	137	40	34	104	16
4	17	22	123	1,610	986	1,010	329	123	38	499	79	15
5	22	19	88	3,030	583	965	290	108	37	677	63	16
6	23	22	1,230	1,300	650	692	254	95	36	190	57	19
7	27	21	4,150	776	954	538	236	89	48	105	245	15
8	20	20	835	527	639	783	359	433	55	72	123	15
9	17	19	1,240	975	478	569	272	566	42	56	477	15
10	11	19	1,630	3,150	368	447	230	278	83	46	316	15
11	16	19	1,410	2,010	305	362	419	184	103	40	151	15
12	16	19	642	1,130	450	305	527	146	62	36	103	16
13	17	18	734	702	1,440	478	377	130	48	36	126	16
14	17	19	460	503	975	744	311	178	42	31	97	14
15	86	20	412	356	664	447	254	166	50	26	70	8.8
16	98	17	432	266	478	660	371	153	57	111	56	9.9
17	39	18	317	224	506	870	394	122	46	76	43	21
18	38	20	242	198	541	629	296	110	66	52	39	62
19	19	18	192	190	475	499	245	88	49	41	36	54
20	21	18	611	192	362	391	212	80	44	32	34	36
21	17	19	555	510	305	454	888	74	35	29	32	20
22	20	20	344	377	275	622	3,910	69	35	28	30	30
23	20	20	248	323	260	401	1,310	63	34	28	30	30
24	24	22	194	293	329	317	709	60	33	27	31	650
25	59	21	166	639	541	281	461	128	31	26	31	145
26	54	22	146	517	1,400	266	338	91	30	44	28	72
27	40	24	128	394	1,040	443	269	67	31	41	25	77
28	31	23	117	2,220	674	1,230	218	58	28	808	23	147
29	27	30	111	1,360	482	2,370	188	51	27	819	22	93
30	23	22	786	793	------	1,180	170	49	27	768	20	1,230
31	22	------	842	524	------	727	------	53	------	579	19	------
TOTAL	893	630	18,464	35,397	17,710	23,747	15,029	4,242	1,346	5,424	2,924	2,909.7
MEAN	28.8	21.0	596	1,142	611	766	501	137	44.9	175	94.3	97.0
MAX	98	31	4,150	8,000	1,440	2,760	3,910	566	103	819	477	1,230
MIN	11	17	21	190	260	266	170	49	27	26	19	8.8
CFSM	.11	.08	2.27	4.36	2.33	2.92	1.91	.52	.17	.67	.36	.37
IN.	.13	.09	2.62	5.03	2.51	3.37	2.13	.60	.19	.77	.42	.41

CAL YR 1971 TOTAL 135,495.0 MEAN 371 MAX 8,130 MIN 11 CFSM 1.42 IN 19.24
WTR YR 1972 TOTAL 128,715.7 MEAN 352 MAX 8,000 MIN 8.8 CFSM 1.34 IN 18.28

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-06	0500	17.42	7,440	01-02	0800	22.00	11,100

03428500 West Fork Stones River near Smyrna, Tenn.

LOCATION.--Lat 35°56'25", long 86°27'54", Rutherford County, near right bank at county bridge on Sulphur Springs Road, 400 ft upstream from Nice's Mill dam, 1.6 miles downstream from Overall Creek, 4.2 miles southeast of Smyrna, and at mile 6.4.

DRAINAGE AREA.--237 sq mi (includes 43 sq mi without surface drainage).

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

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 350 cfs (20.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,660 cfs Jan. 2 (gage height, 9.61 ft); minimum 14 cfs Oct. 1, Nov. 18.
Period of record: Maximum discharge, 30,800 cfs Dec. 9, 1966 (gage height, 17.11 ft); minimum, 2.2 cfs Nov. 6-8, 1965.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	29	34	610	544	449	634	192	50	31	359	31
2	19	28	30	5,530	482	1,590	502	177	48	24	242	29
3	18	28	39	1,860	576	1,570	417	180	48	31	187	24
4	18	35	62	1,650	754	987	450	166	41	139	150	22
5	25	33	75	2,960	487	1,060	414	156	37	212	125	20
6	27	29	332	1,520	491	786	336	142	39	104	110	22
7	22	26	2,390	1,080	911	618	300	135	48	74	105	22
8	22	24	783	659	632	717	287	634	46	64	134	22
9	19	20	819	1,330	512	602	260	708	44	57	538	22
10	18	20	1,520	2,940	429	467	234	383	50	48	383	20
11	18	18	1,470	1,880	365	383	224	265	48	44	219	20
12	18	18	726	1,210	368	309	213	216	41	37	169	20
13	23	17	798	898	1,040	293	204	200	37	31	276	20
14	21	17	570	716	826	658	191	276	33	29	199	20
15	30	20	474	553	633	467	179	309	28	26	149	18
16	64	22	516	445	511	481	190	261	67	39	123	18
17	50	22	418	384	509	658	215	200	46	44	104	26
18	39	15	355	340	498	516	191	170	35	35	90	44
19	33	20	304	320	425	425	175	152	33	37	74	35
20	32	28	735	324	348	355	170	139	31	37	64	31
21	27	24	726	632	305	362	717	126	28	35	57	28
22	26	22	502	567	286	562	3,080	113	22	28	64	29
23	24	24	390	498	295	446	1,120	107	22	28	55	35
24	39	62	320	443	366	369	682	93	18	28	55	64
25	51	36	276	547	548	334	488	87	18	33	55	69
26	54	24	256	522	1,400	309	376	79	17	29	48	55
27	60	26	234	442	986	327	304	69	24	29	41	46
28	60	27	220	1,610	693	861	256	62	28	2,020	37	50
29	53	28	204	1,330	539	2,110	229	59	28	1,280	37	41
30	44	30	674	890	------	1,170	208	55	37	1,160	33	96
31	35	------	1,040	669	------	829	------	57	------	671	29	------
TOTAL	1,009	772	17,292	35,559	16,759	21,064	13,246	5,968	1,092	6,484	4,311	999
MEAN	32.5	25.7	558	1,147	578	679	442	193	36.4	209	139	33.3
MAX	64	62	2,390	5,530	1,400	2,110	3,080	708	67	2,020	538	96
MIN	18	15	30	320	286	293	170	55	17	24	29	18
CFSM	.14	.11	2.35	4.84	2.44	2.87	1.87	.81	.15	.88	.59	.14
IN.	.16	.12	2.71	5.58	2.63	3.31	2.08	.94	.17	1.02	.68	.16

CAL YR 1971 TOTAL 125,837 MEAN 345 MAX 5,300 MIN 15 CFSM 1.46 IN 19.75
WTR YR 1972 TOTAL 124,555 MEAN 340 MAX 5,530 MIN 15 CFSM 1.43 IN 19.55

PEAK DISCHARGE (BASE, 10,000 CFS).--No peak above base.

03431000 Mill Creek near Antioch, Tenn.

LOCATION.--Lat 36°04'54", long 86°40'50", Davidson County, at downstream end of center bridge pier on Franklin Limestone Road, 900 ft upstream from Louisville and Nashville Railroad spur track bridge, 1.6 miles north of Antioch, 2.1 miles downstream from Whittemore Branch, 8.2 miles southeast of the State capitol in Nashville, and at mile 11.0.

DRAINAGE AREA.--64.0 sq mi.

PERIOD OF RECORD.--October 1953 to September 1961. Annual maximum, water years 1962-63. October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 472.57 ft above mean sea level. Dec. 5, 1961, to Nov. 29, 1963, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--17 years (1953-61, 1963-72), 86.4 cfs (18.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,300 cfs Aug. 9 (gage height, 10.86 ft); minimum, 0.30 cfs Oct. 7, 8 (gage height, 2.88 ft).
Period of record: Maximum discharge, 17,000 cfs Mar. 21, 1955 (gage height, 19.73 ft); no flow for one or more days each year 1953-56, 1964-65, and part of Aug. 27, 28, 1968.
Maximum stage since at least 1920, that of Mar. 21, 1955.

REMARKS.--Records good. Minor diversion from gage pool for industrial use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.3	2.8	69	97	147	105	28	5.6	2.8	36	7.2
2	1.9	1.6	2.5	1,120	83	782	86	27	4.8	12	19	6.4
3	2.2	1.9	7.2	259	82	390	90	30	4.8	5.4	8.8	6.4
4	4.8	1.6	7.2	347	71	251	104	23	4.0	4.8	11	5.6
5	.75	1.6	11	499	60	195	75	19	3.4	21	14	6.4
6	.30	1.9	46	231	136	150	67	15	4.0	13	38	4.8
7	.45	2.8	255	154	163	128	69	17	4.8	6.4	52	4.8
8	.45	2.2	56	115	115	207	78	374	3.1	3.7	23	5.6
9	.60	1.9	225	508	94	140	62	137	3.1	3.4	876	6.4
10	.30	1.9	230	359	77	116	57	76	3.4	2.5	171	5.6
11	.70	1.9	104	199	67	97	92	53	3.1	2.2	87	4.8
12	.70	1.9	55	138	150	82	71	42	2.8	1.9	329	4.0
13	.75	1.9	49	196	254	105	61	41	2.5	1.6	240	4.0
14	.65	2.2	41	78	166	145	55	37	2.2	1.3	109	5.6
15	.70	1.9	37	61	127	99	48	32	2.5	13	75	8.0
16	.85	1.6	36	57	100	216	56	26	2.2	44	54	18
17	.85	1.3	31	52	89	207	46	24	1.9	24	42	13
18	.75	1.3	27	44	76	164	41	21	3.1	14	33	13
19	.70	1.9	26	41	62	147	38	19	2.2	6.4	26	11
20	.70	2.5	66	43	54	118	277	19	1.9	3.7	22	4.8
21	.75	2.5	64	114	49	104	277	17	1.6	2.5	17	4.0
22	.75	1.6	47	82	44	93	210	14	1.3	2.2	15	13
23	.75	1.9	38	67	47	74	123	12	1.0	1.9	14	4.0
24	20	2.2	33	59	122	64	85	12	1.0	1.3	205	3.7
25	2.8	2.8	29	52	156	64	66	20	1.3	1.0	58	3.5
26	1.3	1.9	26	46	306	57	55	11	.95	.95	27	70
27	.45	2.8	23	74	193	92	47	9.6	2.8	1.6	19	25
28	1.3	2.8	21	503	145	89	41	8.0	1.6	1,190	15	10
29	1.3	3.7	19	267	113	399	36	8.0	3.1	395	12	15
30	1.3	2.8	89	169	------	159	32	7.2	11	137	9.6	10
31	1.6	------	84	122	------	123	------	5.6	------	60	8.0	------
TOTAL	54.50	61.8	1,797.7	6,218	3,311	5,214	2,550	1,185.4	91.05	1,981.55	2,665.4	303.6
MEAN	1.76	2.06	58.0	201	114	168	85.0	38.2	3.04	63.9	86.0	10.1
MAX	20	3.7	255	1,120	306	782	277	374	11	1,190	876	70
MIN	.45	1.3	2.5	41	47	57	32	5.6	.95	.95	8.0	3.5
CFSM	.03	.03	.91	3.14	1.78	2.63	1.33	.60	.05	1.00	1.34	.16
IN.	.03	.04	1.04	3.61	1.92	3.03	1.48	.69	.05	1.15	1.55	.18

CAL YR 1971 TOTAL 25,282.40 MEAN 69.3 MAX 1,360 MIN .45 CFSM 1.08 IN 14.70
WTR YR 1972 TOTAL 25,434.00 MEAN 69.5 MAX 1,190 MIN .45 CFSM 1.09 IN 14.78

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
07-28	0835	10.74	3,220	08-09	0755	10.86	3,300

03431300 Browns Creek at State Fairgrounds, at Nashville, Tenn.

LOCATION.--Lat 36°07'47", long 86°45'40", Davidson County, near center of span on downstream side of bridge on access road to pit area of the race track at State Fairgrounds, 300 ft west of Craighead Street, 0.3 mile upstream from bridge on U.S. Highways 31A and 41A, and 2.8 miles southeast of the State capitol in Nashville.

DRAINAGE AREA.--11.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 439.81 ft above mean sea level.

AVERAGE DISCHARGE.--8 years (1964-72), 13.3 cfs (15.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,270 cfs July 27 (gage height, 6.26 ft); minimum daily, 1.2 cfs Sept. 12.
Period of record: Maximum discharge, 1,400 cfs Apr. 8, 1965 (gage height, 6.53 ft); minimum, 0.2 cfs July 5, 1966.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.1	3.0	33	18	28	16	6.4	4.4	3.8	5.2	2.5
2	1.6	2.1	2.8	91	17	88	14	9.8	4.4	22	4.4	2.5
3	1.5	2.1	9.8	36	24	48	19	8.0	4.4	8.0	4.1	2.3
4	3.5	2.1	6.0	69	17	39	16	6.4	3.5	14	4.1	3.7
5	2.3	2.1	13	49	15	30	13	6.0	3.0	6.8	3.8	2.8
6	1.8	5.2	30	36	31	25	13	6.0	8.5	4.8	9.8	2.6
7	1.8	2.1	38	27	22	38	18	17	2.8	3.3	4.4	1.9
8	1.6	2.1	15	21	19	37	12	152	2.1	3.5	3.5	3.1
9	1.5	2.3	43	74	18	26	11	37	3.8	3.0	65	1.6
10	1.4	2.1	43	42	16	23	13	24	4.4	3.0	9.4	1.3
11	1.4	2.1	23	32	15	21	28	20	1.5	3.0	6.2	1.3
12	1.6	2.1	17	24	32	19	16	17	1.5	2.8	30	1.2
13	1.5	2.1	14	21	25	25	14	18	1.6	2.8	13	1.3
14	1.5	1.8	12	17	21	18	14	14	1.8	3.0	8.2	1.6
15	28	2.1	16	14	19	17	12	12	3.3	34	6.0	1.7
16	3.0	2.3	11	13	18	32	20	11	2.8	38	5.4	14
17	1.8	2.3	10	12	17	23	12	9.8	2.8	11	4.9	4.9
18	1.5	2.3	8.5	12	15	21	11	8.5	4.8	8.0	4.4	2.5
19	1.5	4.8	13	11	14	19	9.8	8.5	2.6	6.4	4.1	2.5
20	1.5	2.3	14	15	13	18	11	8.0	2.6	5.2	4.7	2.5
21	1.5	1.8	12	14	12	19	15	7.6	2.6	4.4	5.2	4.0
22	1.5	2.1	10	12	15	17	18	7.2	2.6	3.8	3.5	4.4
23	1.4	2.6	8.9	11	15	15	12	7.2	2.3	3.3	24	11
24	17	3.5	8.5	16	64	14	11	6.8	2.3	3.3	7.8	13
25	4.0	2.1	7.2	13	33	15	9.8	6.0	2.3	3.0	5.2	3.8
26	3.5	2.6	6.4	12	56	13	8.5	5.6	3.5	2.8	4.1	52
27	3.0	3.0	6.4	21	35	16	8.0	4.8	2.8	39	3.7	10
28	2.6	6.8	6.8	72	29	15	7.6	4.0	10	94	3.4	4.6
29	2.6	4.8	6.0	33	24	45	7.2	4.0	19	24	3.2	8.2
30	2.6	3.0	31	25	------	19	6.4	4.8	9.8	11	2.9	5.2
31	2.1	------	15	21	------	18	------	4.4	------	6.6	2.8	------
TOTAL	103.7	80.8	460.3	899	669	801	396.3	461.8	123.8	381.6	266.4	174.0
MEAN	3.35	2.69	14.8	29.0	23.1	25.8	13.2	14.9	4.13	12.3	8.59	5.80
MAX	28	6.8	43	91	64	88	28	152	19	94	65	52
MIN	1.4	1.8	2.8	11	12	13	6.4	4.0	1.5	2.8	2.8	1.2
CFSM	.28	.23	1.25	2.46	1.96	2.19	1.12	1.26	.35	1.04	.73	.49
IN.	.33	.25	1.45	2.83	2.11	2.53	1.25	1.46	.39	1.20	.84	.55

CAL YR 1971 TOTAL 4,124.81 MEAN 11.3 MAX 171 MIN .79 CFSM .96 IN 13.00
WTR YR 1972 TOTAL 4,817.70 MEAN 13.2 MAX 152 MIN 1.2 CFSM 1.12 IN 15.19

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-15	1635	4.32	516	08-09	0235	5.49	936
05-08	0620	5.08	772	08-23	1540	4.28	504
07-27	2330	6.26	1,270	09 26	1925	5.76	1,040

03431600 Whites Creek at Tucker Road, near Bordeaux, Tenn.

LOCATION.--Lat 36°12'45", long 86°49'29", Davidson County, near left bank on downstream end of bridge pier on Tucker Road, 0.8 mile downstream from Ewing Creek, 1.3 miles north of Bordeaux, 3.9 miles northwest of the State capitol in Nashville, and at mile 5.7.

DRAINAGE AREA.--51.6 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1962-64; October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.64 ft above mean sea level (Turner Engineering Company benchmark).

AVERAGE DISCHARGE.--8 years, 57.9 cfs (15.24 inches per year)

EXTREMES.--Current year: Maximum discharge, 3,290 cfs Aug. 12 (gage height, 11.61 ft); minimum daily, 1.5 cfs July 14.
Period of record: Maximum discharge, 7,050 cfs Feb. 11, 1965 (gage height, 14.54 ft); minimum, 0.2 cfs July 6, 1966, Sept. 15, 1968.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	5.0	13	65	70	200	94	22	14	3.1	8.4	7.1
2	3.9	5.0	12	400	58	900	78	22	13	8.4	6.4	6.4
3	3.9	6.4	14	1,100	68	400	78	21	12	18	5.7	5.0
4	3.5	5.0	14	430	53	250	83	18	9.8	31	11	4.2
5	3.5	5.0	15	270	45	190	65	17	7.7	21	8.4	4.2
6	3.1	5.3	35	139	97	140	58	16	11	13	390	3.9
7	2.7	5.0	200	103	88	120	217	19	31	7.7	245	5.0
8	2.7	5.0	60	80	70	200	217	863	13	5.7	55	5.0
9	2.7	5.5	447	508	58	130	121	252	8.4	4.2	515	3.9
10	2.5	5.0	318	287	63	109	100	121	9.8	3.5	109	2.4
11	2.3	5.0	141	151	63	91	515	83	8.4	2.7	68	2.7
12	2.8	5.0	88	103	163	75	294	55	6.4	3.1	550	2.4
13	2.3	5.0	59	85	189	163	172	85	5.0	2.4	207	2.0
14	2.0	4.6	50	65	148	145	127	70	3.9	1.5	91	1.8
15	3.9	4.6	65	50	118	115	103	48	5.3	6.4	58	1.7
16	8.4	5.0	55	43	94	312	109	48	12	53	38	3.1
17	4.6	5.3	45	31	83	242	78	70	7.1	13	32	4.2
18	4.6	6.4	35	38	70	163	65	68	7.7	5.7	27	4.2
19	5.0	17	30	48	60	118	55	60	8.4	4.6	21	3.5
20	4.2	13	80	434	50	91	48	48	6.4	3.9	19	3.1
21	4.6	9.8	70	532	45	83	45	31	5.3	2.7	22	2.7
22	5.3	8.4	45	203	40	78	53	27	5.3	2.4	19	2.7
23	5.3	7.7	35	109	37	60	38	22	4.6	2.0	40	4.2
24	35	9.1	30	78	100	50	34	20	3.1	1.8	45	4.2
25	18	9.1	25	88	150	45	31	17	2.4	1.7	27	5.3
26	13	8.4	20	60	350	38	27	14	2.0	1.7	20	5.0
27	9.8	10	18	83	200	55	24	13	2.0	4.6	17	354
28	7.7	9.8	17	952	140	50	22	13	18	121	15	34
29	6.4	18	16	294	100	473	21	13	4.6	34	13	18
30	5.3	16	100	142	------	175	20	17	3.5	22	12	20
31	5.0	------	90	88	------	121	------	16	------	13	9.1	------
TOTAL	188.2	229.4	2,242	7,059	2,870	5,377	2,992	2,209	251.1	418.8	2,704.0	525.9
MEAN	6.07	7.65	72.3	228	99.0	173	99.7	71.3	8.37	13.5	87.2	17.5
MAX	35	18	447	1,100	350	900	515	863	31	121	550	354
MIN	2.0	4.6	12	31	37	38	20	13	2.0	1.5	5.7	1.7
CFSM	.12	.15	1.40	4.42	1.92	3.35	1.93	1.38	.16	.26	1.69	.34
IN.	.14	.17	1.62	5.09	2.07	3.88	2.16	1.59	.18	.30	1.95	.38

CAL YR 1971 TOTAL 15,898.5 MEAN 43.6 MAX 1,090 MIN 1.8 CFSM .85 IN 11.46
WTR YR 1972 TOTAL 27,066.4 MEAN 74.0 MAX 1,100 MIN 1.5 CFSM 1.43 IN 19.51

PEAK DISCHARGE (BASE, 3,000 CFS).--Aug. 12 (1555) 3,290 cfs (11.61 ft).

03431700 Richland Creek at Charlotte Avenue, at Nashville, Tenn.

LOCATION.--Lat 36°09'04", long 86°51'16", Davidson County, near left bank on downstream end of pier of Charlotte Avenue bridge on U.S. Highway 70, 3.7 miles upstream from mouth and 4.0 miles southwest of the State capitol in Nashville.

DRAINAGE AREA.--24.3 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 409.56 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 27.4 cfs (15.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,860 cfs July 28 (gage height, 6.96 ft); minimum daily, 0.75 cfs Oct. 8-13, June 25, 26; minimum gage height, 0.95 ft June 24-27.
Period of record: Maximum discharge, 5,580 cfs Apr. 8, 1965 (gage height, 10.63 ft); minimum, 0 2 cfs several days in October and November 1965 and July 1966, and Sept. 24, 1970.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	1.5	2.4	37	35	50	34	11	1.9	1.7	15	1.6
2	.93	1.6	2.2	210	29	184	29	12	1.8	13	11	1.5
3	.84	1.5	6.8	59	40	102	32	15	1.7	4.8	7.4	1.5
4	.84	1.3	7.1	162	29	72	36	10	1.7	50	5.6	1.5
5	1.1	1.2	11	104	24	56	25	9.5	1.6	12	4.4	1.5
6	.84	1.6	33	60	65	46	23	8.1	1.5	4.8	6.7	1.5
7	.84	1.9	90	44	44	62	32	17	1.5	3.3	9.5	1.4
8	.75	1.6	23	35	36	108	26	232	1.4	2.1	4.1	2.5
9	.75	1.6	94	170	31	54	21	48	1.4	1.9	128	1.6
10	.75	1.6	98	90	26	46	20	34	3.3	1.7	24	1.3
11	.75	1.6	44	57	23	40	42	28	1.4	1.5	14	1.2
12	.75	1.6	29	43	77	34	26	23	1.3	1.5	30	1.2
13	.75	1.6	20	32	63	54	23	24	1.2	1.5	17	1.2
14	.84	1.5	15	24	46	40	21	16	1.1	1.4	11	1.2
15	14	1.5	31	17	38	34	19	12	1.2	16	8.1	1.1
16	3.3	1.5	20	13	34	110	35	10	1.2	62	6.0	8.1
17	1.6	1.6	15	12	30	78	21	8.8	1.1	14	5.2	1.6
18	1.3	1.6	12	11	25	60	17	7.4	1.0	6.0	4.4	1.5
19	1.2	2.2	16	10	22	50	16	6.7	1.0	4.1	3.7	1.4
20	1.1	1.9	28	21	19	43	15	6.0	.96	2.9	3.3	1.3
21	1.1	1.7	17	28	17	40	35	5.6	.89	2.0	8.1	1.3
22	1.2	1.7	13	17	23	35	47	5.2	.89	1.8	2.9	1.5
23	1.2	1.7	12	14	23	29	25	4.4	.82	1.7	6.0	5.6
24	17	1.9	10	24	140	26	22	4.1	.82	1.6	8.8	15
25	3.8	1.9	9.5	29	70	28	19	4.1	.75	1.4	3.7	4.4
26	2.5	1.7	8.1	20	160	23	17	3.3	.75	1.3	3.3	80
27	2.1	2.1	7.4	38	80	31	16	2.9	.82	65	2.1	84
28	1.9	2.1	7.4	216	60	26	14	2.5	3.3	358	2.0	20
29	1.6	4.0	6.0	78	48	120	13	2.1	4.8	90	1.8	20
30	1.5	2.8	54	54	------	46	12	2.1	12	43	1.7	22
31	1.5	------	22	41	------	38	------	2.0	------	25	1.7	------
TOTAL	69.56	53.6	763.9	1,770	1,357	1,765	733	576.8	55.10	797.0	360.5	289.5
MEAN	2.24	1.79	24.6	57.1	46.8	56.9	24.4	18.6	1.84	25.7	11.6	9.65
MAX	17	4.0	98	216	160	184	47	232	12	358	128	84
MIN	.75	1.2	2.2	10	17	23	12	2.0	.75	1.3	1.7	1.1
CFSM	.09	.07	1.01	2.35	1.93	2.34	1.00	.77	.08	1.06	.48	.40
IN.	.11	.08	1.17	2.71	2.08	2.70	1.12	.88	.08	1.22	.55	.44

CAL YR 1971 TOTAL 6,945.86 MEAN 19.0 MAX 342 MIN .75 CFSM .78 IN 10.63
WTR YR 1972 TOTAL 8,590.96 MEAN 23.5 MAX 358 MIN .75 CFSM .97 IN 13.15

PEAK DISCHARGE (BASE, 1,500 CFS).--July 28 (0105) 1,860 cfs (6.96 ft).

03431800 Sycamore Creek near Ashland City, Tenn.

LOCATION.--Lat 36°19'12", long 87°03'04", Cheatham County, near right bank on downstream end of pier of bridge on State Highway 49, at Sycamore, 3.2 miles north of Ashland City, and 4.4 miles upstream from Spring Creek.

DRAINAGE AREA.--97.2 sq mi.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 109 cfs (15.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,690 cfs Jan. 21 (gage height, 8.39 ft); minimum, 13 cfs Sept. 15, 16.
Period of record: Maximum discharge, 11,200 Feb. 27, 1962 (gage height, 11.52 ft); minimum, 8.3 cfs Oct. 6, 1970.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	22	35	308	153	221	181	53	32	19	34	17
2	17	22	30	207	136	560	156	62	31	24	29	17
3	17	21	29	333	132	458	149	62	31	32	25	19
4	17	20	31	358	118	358	177	51	30	223	33	17
5	17	20	31	220	95	286	152	46	29	125	24	17
6	17	21	38	156	145	230	146	42	31	44	54	16
7	16	26	77	125	219	213	307	43	46	34	271	16
8	16	25	50	441	164	240	506	1,010	34	31	56	15
9	16	23	174	402	141	205	265	364	31	28	316	15
10	16	23	191	269	122	187	213	221	69	27	101	15
11	16	22	141	217	108	171	565	162	41	25	55	14
12	15	22	76	167	123	158	406	126	32	24	250	14
13	15	22	53	140	266	195	292	205	31	23	223	14
14	15	22	53	114	233	280	233	230	30	22	111	14
15	16	23	55	84	190	219	201	173	29	22	60	13
16	19	23	47	69	150	397	213	129	29	44	44	14
17	21	24	40	64	134	424	183	99	29	46	37	18
18	19	25	38	60	119	304	159	75	27	28	32	18
19	18	30	67	65	97	233	144	60	28	22	29	17
20	17	31	72	611	78	199	132	52	27	20	27	16
21	18	27	56	1,620	70	181	131	47	27	18	25	15
22	21	25	47	392	85	171	205	43	27	17	24	16
23	21	24	42	248	89	150	146	40	26	17	28	20
24	63	26	39	170	421	134	122	38	26	17	25	21
25	45	28	36	152	632	128	102	36	25	16	23	24
26	30	27	34	120	778	119	86	34	25	15	22	21
27	25	28	36	126	415	129	71	33	20	16	21	610
28	23	30	36	1,240	298	135	64	32	20	114	20	89
29	22	37	43	416	233	370	59	32	21	108	21	43
30	22	45	58	265	------	265	55	34	20	164	19	36
31	22	------	53	187	------	213	------	35	------	50	17	------
TOTAL	649	764	1,808	9,346	5,944	7,533	5,821	3,669	904	1,415	2,056	1,211
MEAN	20.9	25.5	58.3	301	205	243	194	118	30.1	45.6	66.3	40.4
MAX	63	45	191	1,620	778	560	565	1,010	69	223	316	610
MIN	15	20	29	60	70	119	55	32	20	15	17	13
CFSM	.22	.26	.60	3.10	2.11	2.50	2.00	1.21	.31	.47	.68	.42
IN.	.25	.29	.69	3.58	2.27	2.88	2.23	1.40	.35	.54	.79	.46

CAL YR 1971 TOTAL 31,273 MEAN 85.7 MAX 2,500 MIN 15 CFSM .88 IN 11.97
WTR YR 1972 TOTAL 41,120 MEAN 112 MAX 1,620 MIN 13 CFSM 1.15 IN 15.74

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-21	0300	8.39	3,690				

03433500 Harpeth River at Bellevue, Tenn.

LOCATION.--Lat 36°03'16", long 86°55'42", Davidson County, on right bank 45 ft upstream from bridge on State Highway 100, 0.1 mile downstream from Little Harpeth River, 0.9 mile southeast of Bellevue, and at mile 62.1.

DRAINAGE AREA.--408 sq mi (includes 12 sq mi without surface drainage).

PERIOD OF RECORD.--April 1920 to current year. Monthly discharge only November 1929 to December 1931, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 541.04 ft above mean sea level (levels by Corps of Engineers). Apr. 11, 1920, to Oct. 31, 1929, Jan. 1, 1932, to Sept. 30, 1933, nonrecording gage at site 2.5 miles downstream at datum 7.85 ft lower.

AVERAGE DISCHARGE.--52 years, 544 cfs (18.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,000 cfs July 28 (gage height, 14.50 ft); minimum, 16 cfs Sept. 15, 16 (gage height, 1.05 ft).
Period of record: Maximum discharge, 40,000 cfs Feb. 13, 1948 (gage height, 24.34 ft, from floodmarks); no flow Oct. 5-10, 1922.
Maximum stage since at least 1897, that of Feb. 13, 1948.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 953: 1920-30, 1932-35. WSP 1386: 1948. WSP 1556: Drainage area. WSP 1910: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	35	47	492	730	580	668	212	54	25	773	60
2	22	32	37	3,410	634	2,090	545	203	52	29	574	58
3	21	34	34	2,660	610	2,530	482	255	49	41	438	53
4	21	29	49	1,770	580	1,640	619	226	47	46	356	49
5	21	26	100	2,560	485	1,360	534	193	44	68	300	45
6	28	29	126	1,820	604	1,100	461	173	44	92	262	42
7	24	31	1,440	1,280	1,170	940	434	158	40	62	290	38
8	20	30	1,150	986	940	1,170	447	392	40	41	291	30
9	19	29	680	1,620	772	988	408	1,230	37	37	899	28
10	18	29	1,760	2,990	646	826	371	612	35	35	497	26
11	17	27	1,340	2,130	550	718	356	443	34	34	328	24
12	17	26	739	1,280	622	622	353	356	34	34	362	22
13	17	25	574	1,000	1,200	592	338	308	31	34	460	20
14	17	25	464	798	1,080	1,070	318	299	30	34	379	18
15	17	25	419	627	898	844	293	288	29	34	270	16
16	18	23	448	501	748	880	301	251	29	70	202	16
17	25	23	396	454	658	1,120	301	216	27	164	163	22
18	25	23	340	422	586	951	269	180	27	100	137	46
19	19	25	297	403	500	822	242	155	27	82	122	81
20	18	25	457	396	430	694	283	140	27	59	108	50
21	18	29	685	637	394	606	603	133	27	40	99	38
22	18	31	472	720	378	591	1,010	121	27	40	92	33
23	17	31	386	566	358	526	1,080	109	27	38	85	34
24	89	31	334	513	454	457	575	97	26	35	96	42
25	383	31	290	539	505	427	459	87	26	34	327	34
26	176	30	254	537	796	409	394	81	26	34	200	77
27	116	31	230	493	880	408	349	70	26	52	121	115
28	90	31	209	1,440	736	431	306	65	26	7,180	93	77
29	69	35	197	1,680	634	1,120	271	62	26	3,850	79	51
30	54	42	290	1,150	------	1,150	231	59	26	2,040	70	66
31	42	------	747	898	------	817	------	58	------	1,220	64	------
TOTAL	1,479	873	14,991	36,772	19,578	28,479	13,301	7,232	1,000	15,684	8,537	1,311
MEAN	47.7	29.1	484	1,186	675	919	443	233	33.3	506	275	43.7
MAX	383	42	1,760	3,410	1,200	2,530	1,080	1,230	54	7,180	899	115
MIN	17	23	34	396	358	408	231	58	26	25	64	16
CFSM	.12	.07	1.19	2.91	1.65	2.25	1.09	.57	.08	1.24	.67	.1
IN.	.13	.08	1.37	3.35	1.79	2.60	1.21	.66	.09	1.43	.78	.1

CAL YR 1971 TOTAL 150,701 MEAN 413 MAX 6,880 MIN 16 CFSM 1.01 IN 13.74
WTR YR 1972 TOTAL 149,237 MEAN 408 MAX 7,180 MIN 16 CFSM 1.00 IN 13.61

PEAK DISCHARGE (BASE, 7,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-28	1745	14.50	9,000				

03434500 Harpeth River near Kingston Springs, Tenn.

LOCATION.--Lat 36°07'19", long 87°05'56", Cheatham County, on right bank 400 ft upstream from bridge on U.S. Highway 70, 1.7 miles northeast of Kingston Springs, 3 miles downstream from Turnbull Creek, and at mile 32.4.

DRAINAGE AREA.--681 sq mi (includes 13 sq mi without surface drainage).

PERIOD OF RECORD.--October 1924 to current year. Prior to July 1925 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 448.04 ft above mean sea level. July 8, 1925, to Jan. 22, 1939, nonrecording gage at site 150 ft downstream at same datum.

AVERAGE DISCHARGE.--48 years, 913 cfs (18.21 inches per year).

EXTREMES.--Current year. Maximum discharge, 20,200 cfs July 28 (gage height, 20.82 ft); minimum, 64 cfs Oct. 13, 14.
Period of record: Maximum discharge, 60,000 cfs Jan. 7, 1946 (gage height, 32.20 ft, from high-water mark in gage house); minimum, 12 cfs Sept. 18, 1939.
Maximum stage since at least 1897, that of Jan. 7, 1946. Flood of March 1902 reached a stage about 3 ft lower than that of Jan. 7, 1946.

REMARKS.--Records good.

REVISIONS(WATER YEARS).--WSP 953: 1927, 1933, 1935-36. WSP 1033: 1927(M), 1932-33(M), 1935(M), 1937(M), WSP 1706: 1945(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	114	113	1,140	1,330	1,130	1,330	462	165	99	1,420	145
2	83	108	112	3,860	1,140	2,420	1,100	431	160	123	1,070	133
3	81	104	113	4,860	1,070	4,450	996	471	155	168	872	123
4	79	100	150	3,000	1,040	2,870	1,400	480	148	173	730	117
5	81	96	160	3,850	885	2,230	1,210	399	140	242	618	119
6	77	96	285	3,170	1,080	1,850	1,020	350	133	191	547	113
7	73	107	973	2,100	1,870	1,580	963	326	128	191	560	110
8	80	104	2,100	1,630	1,670	2,240	1,050	2,110	123	155	547	108
9	76	98	1,320	2,340	1,350	1,940	905	2,540	119	128	1,140	102
10	72	97	2,210	5,060	1,150	1,580	802	1,470	140	112	1,160	97
11	68	94	2,230	3,560	989	1,350	748	1,010	126	102	736	93
12	66	92	1,360	2,210	1,020	1,180	718	784	119	96	712	91
13	66	91	940	1,680	1,790	1,190	682	989	119	91	1,010	88
14	66	90	787	1,370	1,820	1,570	629	846	117	89	866	86
15	78	90	690	1,110	1,510	1,580	574	706	135	89	618	86
16	113	86	709	898	1,280	1,880	591	596	158	354	490	93
17	97	84	669	802	1,120	2,450	580	515	117	408	404	96
18	81	84	552	754	1,010	2,010	525	444	112	330	350	113
19	82	122	434	724	885	1,690	480	395	115	228	310	119
20	80	122	605	712	766	1,420	453	354	112	188	274	152
21	76	103	1,010	1,120	588	1,260	790	326	110	160	249	119
22	84	96	842	1,370	670	1,160	1,260	302	104	128	232	113
23	89	95	639	1,130	640	1,050	1,340	278	99	115	221	143
24	370	97	532	963	760	911	1,100	260	94	108	218	160
25	572	97	467	1,010	1,060	840	840	338	92	96	228	162
26	466	96	414	1,010	1,850	790	712	242	91	88	505	138
27	279	97	375	933	1,800	744	618	221	96	99	314	1,520
28	212	100	350	2,790	1,470	672	558	200	126	13,000	235	440
29	173	116	413	3,080	1,230	2,380	505	188	121	7,610	197	314
30	145	124	530	2,110	------	2,280	462	145	102	3,570	167	306
31	127	------	1,010	1,810	------	1,520	------	176	------	2,110	158	------
TOTAL	4,173	3,000	23,144	52,006	34,943	52,557	25,441	13,394	3,675	30,641	17,178	5,599
MEAN	135	100	747	2,000	1,205	1,695	848	593	123	988	554	187
MAX	572	124	2,230	5,060	1,870	4,450	1,340	2,540	165	13,000	1,420	1,520
MIN	66	84	112	712	640	784	453	176	91	88	158	86
CFSM	.20	.15	1.10	2.94	1.77	2.49	1.25	.87	.18	1.45	.81	.27
IN.	.23	.16	1.26	3.39	1.91	2.87	1.39	1.00	.20	1.67	.94	.31

CAL YR 1971 TOTAL 257,447 MEAN 705 MAX 11,200 MIN 66 CFSM 1.04 IN 14.06
WTR YR 1972 TOTAL 280,752 MEAN 767 MAX 13,000 MIN 66 CFSM 1.13 IN 15.34

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-28	1430	20.82	20,200				

03435000 Cumberland River below Cheatham Dam, Tenn.

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

DRAINAGE AREA.--14,163 sq mi.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 350.00 ft above mean sea level. Prior to May 5, 1966, at datum 350.00 ft lower. Auxiliary water-stage recorder 15.3 miles downstream from base gage at same datum. Prior to June 3, 1966, auxiliary water-stage recorder and nonrecording gage on upper lock wall at former dam B, at site 8.1 miles downstream from base gage at datum 1.76 ft lower.

AVERAGE DISCHARGE.--18 years, 21,790 cfs (20.89 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 82,500 cfs Mar. 3; maximum gage height, 27.02 ft Mar. 4; minimum daily discharge, 1,160 cfs July 6; minimum gage height, 3.57 ft Dec. 18.
Period of record: Maximum discharge, 176,000 cfs Mar. 23, 1955; Mar. 1, 1962; maximum gage height, 48.39 ft Mar. 1, 1962; minimum daily discharge, 700 cfs Oct. 29, 1969; minimum gage height, 3.35 ft Jan. 1, 1969.
Maximum stage since at least 1793, 53.5 ft Jan. 25, 1937, from profile by Corps of Engineers (discharge, about 200,000 cfs on Jan. 24, 1937). Flood of Jan. 1, 1927, reached a stage of 51.7 ft, from profile (discharge, about 205,000 cfs).

REMARKS.--Records good. Some regulation by Lake Cumberland, Dale Hollow, Great Falls, Center Hill, and Old Hickory Lakes, J. Percy Priest Reservoir (see p. 45), and by Cheatham Dam.

COOPERATION.--Reported releases at Cheatham Dam furnished by Corps of Engineers.

REVISIONS.--WSP 1726: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15,200	6,300	8,480	19,700	56,700	56,200	51,400	39,500	8,980	11,900	8,210	13,300
2	13,300	6,700	3,750	43,500	48,600	60,800	48,900	40,600	5,970	11,200	9,800	15,000
3	11,400	10,600	3,100	55,100	44,700	77,600	47,800	44,100	6,950	11,100	7,940	11,600
4	8,000	9,490	3,580	56,800	45,300	77,700	45,300	43,600	7,100	4,410	8,730	7,160
5	8,650	13,400	3,590	56,500	48,800	72,100	46,700	43,700	8,110	4,450	14,900	4,920
6	10,600	12,300	13,100	55,900	47,900	71,200	45,100	41,800	9,800	1,160	15,400	2,410
7	11,600	14,000	32,000	52,500	46,100	63,400	39,000	40,800	10,000	1,600	19,200	2,030
8	10,200	18,700	38,800	51,700	46,000	64,800	43,500	54,000	11,000	1,890	22,100	2,990
9	7,200	14,900	29,600	51,500	39,500	64,800	45,900	71,200	14,200	1,600	24,400	6,450
10	7,000	14,600	24,600	65,100	43,400	61,600	44,000	54,000	11,000	4,120	25,000	8,140
11	8,210	11,700	22,900	62,000	43,300	59,100	44,400	45,000	9,500	7,590	25,300	8,170
12	8,160	6,660	21,300	54,900	37,000	57,900	48,200	40,400	9,370	12,200	23,300	7,090
13	9,460	8,750	14,800	50,200	32,800	53,500	47,100	31,600	7,160	14,800	26,700	9,350
14	9,830	6,170	11,200	46,300	42,800	52,900	45,900	25,700	12,800	14,200	18,300	12,700
15	15,000	3,210	9,390	42,000	47,600	58,800	45,200	23,600	16,000	13,500	13,200	18,600
16	31,000	4,170	11,000	38,100	49,300	61,100	38,000	17,100	6,590	19,000	17,800	14,900
17	17,200	6,120	10,300	35,500	46,900	60,900	41,100	19,300	6,800	12,900	14,000	13,000
18	11,100	4,500	8,200	36,900	45,600	57,700	41,600	21,000	9,790	7,930	19,700	16,600
19	7,250	3,860	13,700	32,600	47,600	57,300	42,900	20,900	7,460	8,580	21,700	11,600
20	4,020	4,430	18,100	31,100	47,900	46,300	43,200	18,500	5,140	16,600	15,700	11,600
21	6,920	7,360	21,400	54,700	45,300	35,800	41,400	16,900	4,340	19,600	15,900	20,800
22	11,100	13,000	20,500	52,800	36,100	38,100	44,600	13,100	8,080	14,000	10,100	18,300
23	12,300	20,400	19,200	51,500	28,300	44,200	46,700	15,200	6,400	9,200	11,200	16,800
24	10,500	14,300	22,200	46,900	39,700	50,200	44,700	13,200	7,110	13,600	10,500	15,000
25	6,010	10,600	18,700	33,900	54,800	55,700	45,000	15,300	5,690	13,800	18,400	12,000
26	9,110	10,200	12,000	43,300	62,300	49,300	42,600	18,200	4,130	6,110	20,600	14,400
27	8,600	6,490	7,440	44,900	67,500	49,000	40,200	14,600	5,890	3,830	23,100	24,000
28	8,890	13,900	9,810	57,200	62,400	50,200	40,700	11,300	4,440	20,700	19,800	24,100
29	8,670	6,600	14,900	71,700	60,200	55,100	41,200	8,660	12,500	29,600	8,300	15,100
30	8,690	6,020	17,100	76,000	------	53,600	39,100	6,800	10,500	24,500	8,830	12,600
31	8,760	------	17,200	67,200	------	53,900	------	8,590	------	15,100	10,300	------
TOTAL	323,930	289,430	481,940	1,538.0M	1,364.4M	1,770.8M	1,321.4M	878,250	252,800	350,770	508,410	370,710
MEAN	10,450	9,648	15,550	49,610	47,050	57,120	44,050	28,330	8,427	11,320	16,400	12,360
MAX	31,000	20,400	38,800	76,000	67,500	77,700	51,400	71,200	16,000	29,600	26,700	24,100
MIN	4,020	3,210	3,100	19,700	28,300	35,800	38,000	6,800	4,130	1,160	7,940	2,030
(†)	-201,100	-236,400	+247,500	+598,500	+176,400	-228,400	+271,600	-275,400	-155,200	-5,400	-280,300	-266,900
MEAN‡	3,962	1,768	23,530	68,920	53,130	49,750	53,100	19,450	3,253	11,140	7,358	3,460
CFSM‡	.28	.12	1.66	4.87	3.75	3.51	3.75	1.37	.23	.79	.52	.24
IN.‡	.32	.14	1.92	5.61	4.05	4.05	4.18	1.58	.26	.91	.60	.27

CAL YR 1971 TOTAL 8,204,230 MEAN 22,480 MAX 89,500 MIN 3,100 MEAN‡ 22,700 CFSM‡ 1.60 IN.‡ 21.75
WTR YR 1972 TOTAL 9,450,840 MEAN 25,820 MAX 77,700 MIN 1,160 MEAN‡ 24,850 CFSM‡ 1.75 IN.‡ 23.88

† Change in contents, in cfs days, in Lake Cumberland, Dale Hollow, Great Falls, Center Hill, and Old Hickory Lakes, and J. Percy Priest Reservoir, furnished by Corps of Engineers and Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03435030 Red River near Portland, Tenn.

LOCATION.--Lat 36°33'24", long 86°34'14", Sumner County, near left bank on downstream wingwall of county road bridge, 1.5 miles upstream from Austin Branch, 2.8 miles north of New Deal, 3.5 miles southwest of Portland, and at mile 93.0.

DRAINAGE AREA.--15.1 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 680.74 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 19.7 cfs (17.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,200 cfs May 8 (gage height, 10.00 ft); minimum, 0.25 cfs Sept. 10, caused by unknown diversion; minimum unaffected by diversion, 1.04 cfs Sept. 14, 15.
Period of record: Maximum discharge, 4,460 cfs June 23, 1969 (gage height, 12.38 ft); minimum, 0.25 cfs Sept. 10, 1972, caused by unknown diversion; minimum unaffected by diversion, 0.70 cfs Aug. 27-29, 1968.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.1	3.0	9.1	26	48	26	13	5.4	2.9	5.8	1.4
2	1.7	2.1	2.8	48	23	103	22	13	5.1	10	4.9	1.4
3	1.7	2.1	3.0	25	28	76	25	18	4.8	4.8	4.0	1.4
4	1.9	1.9	3.0	63	22	61	28	12	4.5	28	3.5	1.4
5	1.9	1.9	3.0	53	18	48	22	10	4.5	8.5	3.4	1.6
6	1.9	2.6	7.6	32	29	38	25	9.2	4.2	5.2	3.2	1.6
7	1.7	3.3	26	23	37	34	80	17	5.4	4.5	4.2	1.6
8	1.9	2.4	7.6	19	29	40	40	500	4.2	3.9	3.0	1.6
9	1.9	2.4	26	85	25	30	35	92	4.2	3.8	5.5	1.8
10	1.9	2.4	27	57	21	27	30	51	4.8	3.5	3.9	1.2
11	1.9	2.4	16	35	19	24	42	39	4.2	3.1	2.9	1.2
12	1.9	2.4	11	26	33	21	34	34	3.5	3.2	2.9	1.2
13	1.9	2.4	8.6	21	47	45	32	59	3.5	2.9	3.5	1.2
14	1.9	2.4	7.6	16	36	48	31	44	3.5	2.7	2.9	1.2
15	4.9	2.4	11	11	30	36	30	37	3.9	4.0	2.6	2.9
16	4.0	2.4	9.8	10	25	62	40	32	4.5	6.1	2.6	3.5
17	1.7	2.4	8.0	11	22	50	29	28	3.2	4.8	2.3	2.6
18	1.7	2.4	6.7	11	19	39	25	24	4.5	3.7	2.3	2.3
19	1.7	3.5	6.7	11	15	31	22	19	3.9	3.1	2.1	1.9
20	1.7	3.0	15	102	14	27	21	15	3.2	2.5	1.9	1.9
21	1.9	2.6	11	110	13	26	21	12	3.2	2.2	1.9	1.8
22	2.4	2.4	8.2	51	16	24	40	9.5	2.9	2.1	1.9	1.9
23	2.4	2.6	7.3	36	24	20	23	9.1	2.6	2.0	1.9	2.3
24	2.4	3.0	6.7	29	89	18	19	8.6	2.3	1.9	3.2	7.7
25	2.6	3.0	6.3	30	85	18	18	7.7	2.3	2.1	2.3	5.9
26	2.4	2.8	6.1	23	78	17	15	7.2	2.3	1.9	2.1	2.9
27	2.4	3.5	5.7	40	54	29	13	6.3	2.3	1.9	1.9	63
28	2.1	3.0	6.3	152	41	25	13	5.9	4.8	17	1.8	6.3
29	1.9	5.8	5.9	59	33	61	12	5.9	3.2	72	1.6	5.1
30	1.9	3.5	12	40	------	39	12	8.2	2.6	21	1.6	5.7
31	2.1	------	9.9	30	------	31	------	6.8	------	7.8	1.4	------
TOTAL	66.2	81.1	294.8	1,268.1	951	1,196	825	1,153.4	113.5	243.1	89.0	137.5
MEAN	2.14	2.70	9.51	40.9	32.8	38.6	27.5	37.2	3.78	7.84	2.87	4.58
MAX	4.9	5.8	27	152	89	103	80	500	5.4	72	5.8	63
MIN	1.7	1.9	2.8	9.1	13	17	12	5.9	2.3	1.9	1.4	1.2
CFSM	.14	.18	.63	2.71	2.17	2.56	1.82	2.46	.25	.52	.19	.30
IN.	.16	.20	.73	3.12	2.34	2.95	2.03	2.84	.28	.60	.22	.34

CAL YR 1971 TOTAL 4,699.1 MEAN 12.9 MAX 294 MIN 1.7 CFSM .85 IN 11.58
WTR YR 1972 TOTAL 6,418.7 MEAN 17.5 MAX 500 MIN 1.2 CFSM 1.16 IN 15.81

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
05-08	0810	10.00	2,200				

03436000 Sulphur Fork Red River near Adams, Tenn.

LOCATION.--Lat 36°30'55", long 87°03'32", Robertson County, on left bank 600 ft downstream from county highway bridge, 2.8 miles downstream from Millers Creek, 4.1 miles southwest of Cedar Hill, 4.6 miles south of Adams, and at mile 10.2.

DRAINAGE AREA.--186 sq mi (includes 21 sq mi without surface drainage).

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 424.36 ft above mean sea level, Sandy Hook datum. Jan. 20, 1939, to Nov. 25, 1940, nonrecording gage at site 600 ft upstream at same datum.

AVERAGE DISCHARGE.--34 years, 223 cfs (16.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,700 cfs Jan. 21 (gage height, 12.51 ft); minimum, 7.8 cfs Sept. 14, 15.
Period of record: Maximum discharge, 13,700 cfs Feb. 27, 1962 (gage height, 23.2 ft, from floodmark in gage well); minimum, 1.8 cfs Sept. 27, 1948.
Maximum stage since at least 1928, 25.1 ft in June 1934, from floodmarks (discharge not determined). Flood in January 1937 reached a stage about 2.5 ft lower than that of June 1934 (discharge not determined).

REMARKS.--Records good.

REVISIONS.--WSP 1910: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	25	110	460	514	400	125	60	34	39	18
2	19	19	25	400	384	1,010	315	125	58	35	34	17
3	18	18	24	337	351	1,120	277	120	55	47	30	17
4	17	18	24	509	300	886	378	110	52	74	28	18
5	17	18	24	824	234	688	291	98	50	135	30	17
6	18	17	24	455	300	520	264	91	51	59	28	17
7	17	17	64	305	544	460	310	87	51	42	29	18
8	16	17	83	235	424	610	778	1,850	48	37	33	17
9	17	17	128	973	351	442	430	1,200	47	34	39	15
10	21	18	223	1,190	295	384	345	616	50	32	44	14
11	23	18	200	630	255	330	568	389	44	30	34	13
12	22	18	124	388	268	291	646	286	41	29	82	11
13	24	18	91	299	580	340	532	330	40	28	186	12
14	22	18	75	236	532	538	424	454	40	30	65	9.0
15	23	17	94	190	454	412	351	310	39	28	42	8.2
16	23	17	95	156	362	853	460	238	42	30	35	11
17	23	17	76	144	315	1,120	378	196	42	36	30	13
18	21	17	64	136	277	796	300	166	40	36	29	13
19	22	17	57	136	226	586	264	143	38	30	24	13
20	22	18	70	442	189	454	242	128	37	27	20	12
21	21	19	87	3,020	175	384	234	116	36	26	23	11
22	21	19	75	1,210	179	356	550	106	34	25	24	9.8
23	21	18	63	796	189	291	345	98	33	24	22	10
24	21	18	57	574	712	242	264	91	31	23	25	11
25	21	18	53	496	1,490	226	222	84	31	24	28	15
26	22	18	51	367	1,310	207	193	77	30	24	23	15
27	23	18	49	406	1,050	264	169	72	30	23	20	496
28	22	19	51	2,040	784	305	151	68	37	72	19	102
29	22	20	51	1,240	604	935	138	65	38	133	18	42
30	21	22	97	820	------	694	128	66	36	74	18	34
31	21	------	139	586	------	508	------	69	------	51	18	------
TOTAL	641	543	2,363	19,650	13,594	16,766	10,347	7,974	1,261	1,332	1,119	1,029.0
MEAN	20.7	18.1	76.2	634	469	541	345	257	42.0	43.0	36.1	34.3
MAX	24	22	223	3,020	1,490	1,120	778	1,850	60	135	186	496
MIN	16	17	24	110	175	207	128	65	30	23	18	8.2
CFSM	.11	.10	.41	3.41	2.52	2.91	1.85	1.38	.23	.23	.19	.18
IN.	.13	.11	.47	3.93	2.72	3.35	2.07	1.59	.25	.27	.22	.21

CAL YR 1971 TOTAL 51,691.0 MEAN 142 MAX 2,810 MIN 16 CFSM .76 IN 10.34
WTR YR 1972 TOTAL 76,619.0 MEAN 209 MAX 3,020 MIN 8.2 CFSM 1.12 IN 15.32

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-21	0615	12.51	4,700	05-08	1800	11.00	3,690

03436100 Red River at Port Royal, Tenn.

LOCATION.--Lat 36°33'17", long 87°08'31", Montgomery County, on left bank at county road bridge at Port Royal, 250 ft downstream from Sulphur Fork and at mile 25.5.

DRAINAGE AREA.--935 sq mi (includes 437 sq mi without surface drainage).

PERIOD OF RECORD.- July 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 376.55 ft above mean sea level. July 13, 1961, to Oct. 9, 1963, nonrecording gage and crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 1,093 cfs (15.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,500 cfs Jan. 28 (gage height, 23.98 ft); minimum, 112 cfs Oct. 14, 15.
Period of record: Maximum discharge, 43,500 cfs Feb. 27, 1962 (gage height, 43.18 ft); minimum, 54 cfs Sept. 17, 18, 1964.
Maximum stage since at least 1913, 44.4 ft Jan. 23, 1937 (from flood profile of Corps of Engineers).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	136	180	619	3,060	2,780	1,840	926	505	251	625	142
2	150	138	180	901	2,680	4,470	1,600	875	478	295	478	138
3	144	134	174	1,440	2,420	4,750	1,450	843	460	343	427	134
4	144	130	169	1,580	2,210	3,960	1,630	774	445	531	367	130
5	146	127	167	3,180	1,870	3,500	1,750	698	427	839	325	127
6	163	132	165	2,860	1,750	2,990	1,460	640	415	608	289	123
7	155	142	192	2,060	2,170	2,700	1,430	600	409	421	269	130
8	138	152	243	1,670	2,210	2,840	2,250	3,050	397	349	256	169
9	130	150	370	2,460	1,890	2,760	1,880	7,300	388	307	298	176
10	125	150	607	6,100	1,710	2,350	1,540	3,530	382	277	415	159
11	119	150	931	4,110	1,560	2,120	1,680	2,430	361	256	346	151
12	117	148	774	2,940	1,520	1,940	2,090	1,920	349	243	352	144
13	116	148	551	2,420	2,270	1,860	1,940	1,740	337	231	767	134
14	112	146	448	2,020	2,730	2,300	1,730	2,480	328	236	538	130
15	119	144	488	1,650	2,380	2,150	1,590	2,270	325	221	379	134
16	132	140	573	1,380	2,070	2,890	2,180	1,840	322	216	307	174
17	184	138	536	1,230	1,850	4,690	2,540	1,560	319	223	269	182
18	136	136	459	1,150	1,720	3,660	1,930	1,370	325	228	246	172
19	125	136	398	1,100	1,540	2,970	1,710	1,220	552	221	226	169
20	121	146	392	1,350	1,360	2,490	1,560	1,100	403	203	213	165
21	116	148	412	6,580	1,240	2,190	1,500	1,010	343	193	213	153
22	116	144	449	5,560	1,210	2,100	2,760	920	307	182	218	148
23	121	146	397	3,650	1,250	1,920	2,600	844	286	178	195	148
24	132	148	358	2,890	2,410	1,670	1,920	776	272	172	190	165
25	174	148	334	2,450	6,990	1,530	1,630	712	261	172	197	174
26	155	146	319	2,150	5,900	1,430	1,430	657	253	172	195	169
27	161	144	305	1,950	4,690	1,420	1,270	615	248	163	195	576
28	153	148	299	7,800	3,770	1,560	1,160	576	325	241	180	1,160
29	148	165	285	9,430	3,180	2,200	1,070	548	277	403	169	388
30	142	178	374	5,020	------	2,880	989	538	264	1,630	157	253
31	138	------	525	3,690	------	2,140	------	527	------	1,130	151	------
TOTAL	4,293	4,338	12,054	93,390	71,610	80,210	52,109	44,889	10,763	11,135	9,452	6,317
MEAN	138	145	389	3,013	2,469	2,587	1,737	1,448	359	359	305	211
MAX	184	178	931	9,430	6,990	4,750	2,760	7,300	552	1,630	767	1,160
MIN	112	127	165	619	1,210	1,420	989	527	248	163	151	123
CFSM	.15	.16	.42	3.22	2.64	2.77	1.86	1.55	.38	.38	.33	.23
IN.	.17	.17	.48	3.72	2.85	3.19	2.07	1.79	.43	.44	.38	.25

CAL YR 1971 TOTAL 297,140 MEAN 814 MAX 10,700 MIN 112 CFSM .87 IN 11.82
WTR YR 1972 TOTAL 400,560 MEAN 1,094 MAX 9,430 MIN 112 CFSM 1.17 IN 15.94

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-28	2400	23.98	11,500				

03436700 Yellow Creek near Shiloh, Tenn.

LOCATION.--Lat 36°20'55", long 87°32'20", Montgomery County, on left bank on downstream end of pier of bridge on State Highway 13, 2.6 miles west of Shiloh, 3.0 miles downstream from Leatherwood Creek, 9.0 miles east of Erin, and at mile 9.0.

DRAINAGE AREA.--124 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 390.13 ft above mean sea level. Prior to Oct. 14, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 165 cfs (18.07 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,080 cfs May 8 (gage height, 11.23 ft); minimum, 30 cfs Sept. 14, 15.
Period of record: Maximum discharge, 8,190 cfs Feb. 27, 1962 (gage height, 14.4 ft); minimum, 16 cfs Aug. 21, 1962; minimum gage height, 2.72 ft Sept. 13-16, 1958.

REMARKS.--Records good.

REVISIONS.--WSP 1706: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	41	52	134	423	337	311	193	87	48	125	36
2	44	41	48	224	359	465	257	176	84	53	107	36
3	43	38	49	332	313	601	232	164	81	57	95	35
4	43	37	50	408	256	593	278	150	78	57	87	34
5	43	36	50	605	216	503	268	137	75	53	80	35
6	42	38	51	490	254	428	268	127	74	49	99	34
7	40	44	56	368	417	398	304	120	72	47	214	33
8	39	39	59	272	390	364	454	1,590	70	46	119	34
9	39	36	123	539	335	302	417	1,120	69	44	300	33
10	38	35	246	922	285	271	367	635	70	43	139	32
11	38	34	284	485	250	250	327	449	68	42	99	32
12	38	34	218	335	247	231	286	348	65	44	99	32
13	38	33	186	250	348	237	259	365	64	56	97	31
14	38	33	164	185	378	281	229	355	62	45	79	30
15	38	35	148	138	359	287	201	289	63	43	68	30
16	38	35	236	109	304	564	192	242	62	77	61	32
17	39	34	208	93	274	891	173	212	59	100	55	32
18	39	35	175	84	245	696	160	185	58	62	51	34
19	38	40	161	80	219	529	150	165	58	52	48	33
20	39	40	193	139	183	426	144	151	57	47	46	33
21	40	38	222	1,400	168	365	155	140	55	44	44	31
22	43	36	198	926	164	323	217	131	54	41	43	32
23	43	37	175	636	156	271	239	124	52	40	42	34
24	45	38	161	491	220	236	217	122	50	38	42	37
25	55	37	150	402	502	218	194	115	49	39	41	38
26	52	36	140	328	521	198	175	107	49	41	41	38
27	46	36	132	340	485	192	161	101	49	38	40	275
28	45	38	128	1,650	438	188	149	96	54	760	39	116
29	44	47	118	1,120	378	489	141	93	55	402	38	79
30	43	53	128	724	------	461	136	98	50	225	37	75
31	42	------	134	527	------	374	------	91	------	159	36	------
TOTAL	1,299	1,135	4,473	14,736	9,058	11,969	7,061	5,391	1,893	2,892	2,511	1,416
MEAN	41.9	37.8	144	475	312	386	235	271	63.1	93.3	81.0	47.2
MAX	55	53	264	1,650	521	891	454	1,590	87	760	300	275
MIN	38	33	48	80	156	188	136	91	49	38	36	30
CFSM	.34	.30	1.16	3.83	2.52	3.11	1.90	2.19	.51	.75	.65	.38
IN.	.39	.34	1.34	4.42	2.72	3.59	2.12	2.52	.57	.87	.75	.42

CAL YR 1971 TOTAL 54,329 MEAN 149 MAX 3,630 MIN 33 CFSM 1.20 IN 16.30
WTR YR 1972 TOTAL 66,834 MEAN 183 MAX 1,650 MIN 30 CFSM 1.48 IN 20.05

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
05-08	1500	11.23	3,080				

Reservoirs in Cumberland River Basin

03413500 LAKE CUMBERLAND.--Lat 36°52'09", long 85°08'45", Russell County, in pylon of Wolf Creek Dam on Cumberland River and 10 miles southwest of Jamestown, Ky. Drainage area, 5,789 sq mi. Period of record, April 1950 to current year. Prior to October 1954, published as Wolf Creek Reservoir. April to June 1950, published in WSP 1726. Water-stage recorder. Datum of gage is at mean sea level, Sandy Hook datum. Prior to Dec. 6, 1950, nonrecording gage at same site at datum 545.0 ft higher. Extremes for current year: Maximum contents, 2,279,000 cfs-days Apr. 19 (elevation, 733.14 ft); minimum, 1,403,800 cfs-days Dec. 4 (elevation, 696.85 ft). Extremes for period of record: Maximum contents, 2,673,800 cfs days Apr. 15, 1962 (elevation, 747.12 ft); minimum (after first filling) 934,400 cfs-days Jan. 1, 1956 (elevation, 673.01 ft).

Reservoir is formed by earth embankment and concrete gravity dam surmounted by 10 taintor gates 37 ft high by 50 ft wide. Final closure of dam made Aug. 7, 1950. Total capacity at elevation 760.00 ft (top of gates) is 3,070,000 cfs-days, of which 1,056,000 cfs-days above elevation 723.00 ft (crest of spillway) are reserved for flood control and 1,080,000 cfs-days between elevation 673.00 ft (minimum power pool) and 723.00 ft will be used for power production. Figures given herein represent total contents, of which 934,000 cfs-days below elevation 673.00 ft is dead storage. Reservoir is used for flood control, power navigation, and recreation. Records furnished by Corps of Engineers.

03416500 DALE HOLLOW LAKE.--Lat 36°32'19", long 85°27'05", Clay County, at Dale Hollow Dam on Obey River, 3 miles east of Celina, and 7.3 miles upstream from mouth. Drainage area, 936 sq mi. Period of record, August 1943 to current year. Prior to October 1970, published as Dale Hollow Reservoir. Water-stage recorder. Datum of gage is at mean sea level, Sandy Hook datum. Prior to June 25, 1946, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 685,400 cfs-days Apr. 25 (elevation, 651.22 ft); minimum, 572,200 cfs-days Sept. 30 (elevation, 642.76 ft). Extremes for period of record: Maximum contents, 805,300 cfs-days Mar. 1, 1962 (elevation, 659.45 ft); minimum (after first filling) 428,000 cfs-days Sept. 11, 1944 (elevation, 630.63 ft).

Reservoir is formed by concrete gravity dam. Spillway is equipped with six taintor gates, each 12 ft high by 60 ft wide. Closure of dam was made Aug. 30, 1943; water in reservoir first reached minimum pool elevation May 7, 1944. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 663.0 (top of gates) is 859,800 cfs-days of which 177,500 cfs-days between elevations 663.0 ft and 651.00 ft (crest of spillway) are reserved for flood control, and 250,200 cfs-days between elevations 651.00 ft and 631.00 ft (ordinary minimum pool) are used for power production. Contents of 432,100 cfs-days below elevation 631.00 ft is dead storage. Reservoir is used for flood control, navigation, and power. Records furnished by Corps of Engineers.

03422000 GREAT FALLS LAKE.--Lat 35°48'21", long 85°38'09", Warren County, at penstock inlet on Collins River, 700 ft southwest of powerhouse of Tennessee Valley Authority, 1.5 miles northwest of Rock Island, 1.8 miles upstream from mouth of Collins River, and 2.0 miles upstream from Great Falls Dam on Caney Fork. Drainage area, 1,677 sq mi. Period of record, January 1917 to current year. Remote indicator gage. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 26,700 cfs-days Jan. 25 (elevation, 806.01 ft); minimum, 8,000 cfs-days Oct. 1 (elevation, 781.55 ft). Extremes for period of record: Maximum midnight elevation, 817.48 ft Mar. 23, 1929 (contents not determined); minimum midnight contents, 1,700 cfs-days Aug. 19, 1918 (elevation, 756.3 ft).

Reservoir is formed by concrete gravity dam. Spillway is equipped with 18 taintor gates, each 14 ft high by 25 ft wide. Closure of dam was made in 1916; dam redesigned and crest raised 35 ft in 1925. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 804.9 ft (top of gates) is 25,400 cfs-days, of which 23,900 cfs-days are controlled storage above elevation 762.0 ft (minimum pool). Contents of 1,500 cfs-days below elevation 762.0 ft is dead storage. Reservoir is used primarily for power. Records furnished by Tennessee Valley Authority.

03424000 CENTER HILL LAKE.--Lat 36°05'48", long 85°49'38", DeKalb County, at Center Hill Dam on Caney Fork, 10 miles north of Smithville, 14 miles southeast of Carthage, and at mile 26.6. Drainage area, 2,174 sq mi. Period of record, October 1948 to current year. Prior to October 1970, published as Center Hill Reservoir. Water-stage recorder. Datum of gage is at mean sea level, Sandy Hook datum. Prior to Mar. 14, 1949, nonrecording gage at site 1,320 ft upstream at same datum. Extremes for current year: Maximum contents, 703,300 cfs-days Apr. 25 (elevation, 651.55 ft); minimum 517,900 cfs-days Dec. 4 (elevation, 630.37 ft). Extremes for period of record: Maximum contents 1,004,400 cfs-days Feb. 10, 1950 (elevation, 680.6 ft); minimum (after first filling), 171,000 cfs-days Dec. 1, 2, 1949 (elevation, 576.1 ft).

Reservoir is formed by earth embankment and concrete gravity dam. Spillway is equipped with eight taintor gates, each 37 ft high by 50 ft wide. Closure of dam was made Nov. 27, 1948; water in reservoir first reached minimum pool elevation Jan. 11, 1949. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 685.0 ft (top of gates) is 1,054,800 cfs-days, of which 384,500 cfs-days between 685.0 ft and 648.0 ft (crest of spillway) are reserved for flood control, and 248,000 cfs-days between elevations 648.0 ft and 618.0 ft (ordinary minimum pool) are used for power production. Contents of 422,300 cfs-days below 618.0 ft is dead storage. Reservoir is used for flood control, navigation, and power. Records furnished by Corps of Engineers.

03426300 OLD HICKORY LAKE.--Lat 36°17'50", long 86°39'20", Sumner County, at Old Hickory Dam on Cumberland River, 2.0 miles west of Hendersonville, 10 miles northeast of the State capitol in Nashville, and at mile 216.2. Drainage area, 11,673 sq mi. Period of record, June 1954 to current year. Water-stage recorder. Datum of gage is 408.5 ft above mean sea level; gage readings have been reduced to elevation above mean sea level. Prior to Apr. 4, 1957, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 216,300 cfs-days Mar. 24 (elevation, 445.41 ft); minimum 190,200 cfs-days May 12 (elevation, 443.03 ft). Extremes for period of record: Maximum contents, 269,300 cfs-days Mar. 1, 1962 (elevation, 449.60 ft); minimum (after first filling to ordinary minimum pool), 179,400 cfs-days Oct. 22, 1957, Oct. 28, 1969 (elevation, 441.96 ft).

Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with six taintor gates, each 41 ft high and 45 ft wide. Closure of dam was made in June 1954 and water in reservoir was raised sufficiently to maintain navigation through the lock. Water in reservoir first reached ordinary minimum pool elevation Dec. 30, 1956. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 450.0 ft (maximum surcharge pool) 274,600 cfs-days of which 63,000 cfs-days between elevations 450.0 ft and 445.0 ft (normal pool) are induced surcharge storage provided to compensate for loss of natural valley storage incurred by construction of the project, and 31,800 cfs-days between elevations 445.0 ft and 442.0 ft (ordinary minimum pool) are used for power production. Contents of 179,800 cfs-days, below elevation 442.0 ft, is dead storage. Reservoir is used for navigation and power. Records furnished by Corps of Engineers.

03430050 J. PERCY PRIEST RESERVOIR.--Lat 36°09'23", long 86°37'07", Davidson County, on upstream face of J. Percy Priest Dam on Stones River, 2.6 miles east of Donelson, and 6.8 miles above mouth. Drainage area, 892 sq mi. Period of record, September 1967 to current year. Water-stage recorder. Datum of gage is at mean sea level. Prior to Dec. 15, 1967, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 213,900 cfs-days Aug. 7 (elevation, 492.20 ft); minimum, 141,100 cfs-days Feb. 3 (elevation, 481.08 ft). Extremes for period of record: Maximum contents 231,100 cfs-days June 22, 1970; minimum (after first filling to ordinary minimum pool), 109,500 cfs-days Dec. 5, 1968 (elevation, 474.75 ft).

Reservoir is formed by concrete gravity dam with earth embankments. Spillway is equipped with four taintor gates, each 41 ft high by 45 ft wide. Closure of dam was made Sept. 18, 1967; water in reservoir first reached ordinary minimum pool May 15, 1968. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 504.5 ft (maximum controlled pool) is 328,700 cfs-days, of which 193,600 cfs-days is controlled storage between elevations 504.5 ft and 480.0 ft (ordinary minimum pool). Contents of 17,200 cfs-days between elevation 480.0 ft and 483.0 ft (full winter pool) is available for power production. Contents of 176,400 cfs-days above 483.0 ft is available for flood control during the winter, and 131,100 cfs-days above 490.0 ft (full pool during spring to fall season) is available for flood control the rest of the year. Contents of 135,100 cfs-days below elevation 480.0 ft is dead storage. Reservoir is used for flood control, power, recreation, and wildlife. Records furnished by Corps of Engineers.

Reservoirs in Cumberland River basin--Continued

03434900 CHEATHAM LAKE.--Lat 36°18'56", long 87°13'10", Cheatham County, at Cheatham Dam on Cumberland River, 9.4 miles west of Ashland City, 16 miles southeast of the courthouse in Clarksville, and at mile 148.7. Drainage area, 14,159 sq mi.

Reservoir is formed by concrete gravity dam. Spillway is equipped with seven semi-submersible taintor gates, each 27 ft high by 60 ft wide. Total capacity at elevation 385.0 ft (normal pool) is 52,200 cfs-days, of which 9,800 cfs-days are controlled storage. Records of contents not published herein.

03438210 LAKE BARKLEY.--Lat 37°01'17", long 88°13'16", Lyon County, in powerhouse of Barkley Dam on Cumberland River, 1.4 miles northeast of Grand Rivers, Ky., and at mile 30.6. Drainage area, 17,598 sq mi. Period of record, July 1964 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Jan. 1, 1966, nonrecording gage, 1,200 ft upstream from Barkley Dam at same datum. Extremes for current year: Maximum contents (level pool storage), 640,400 cfs-days May 2 (elevation, 365.18 ft); minimum (level pool storage), 293,500 cfs-days Feb. 19 (elevation, 353.36 ft). Extremes for period of record: Maximum contents (level pool storage), 698,200 cfs-days May 7, 1970 (elevation, 366.74 ft); minimum since reaching permanent minimum pool elevation of 354.0 ft (level pool storage), 291,100 cfs-days Dec. 31, 1968 (elevation, 353.25 ft).

Reservoir is formed by concrete gravity dam with earth embankments. Spillway is equipped with 12 taintor gates, each 50 ft high by 55 ft wide. Construction cofferdam was closed and limited storage began July 1, 1964; reservoir reached permanent minimum pool elevation of 354.0 ft Feb. 16, 1966. Total level pool capacity at elevation 375.0 ft (top of gates) is 1,049,600 cfs-days, of which 742,000 cfs-days is controlled storage above 354.0 ft (ordinary minimum pool). Contents of 130,500 cfs-days between elevation 354.0 ft and 359.0 ft (full pool) is available for power during the spring-to-fall season. Minimum pool elevation in advance of floods is 346.0 ft, contents 171,000 cfs-days. Reservoir is used for navigation, flood control, power, and recreation. Barkley-Kentucky Canal opened July 13, 1966, for navigation and power use. Canal is 1.75 miles long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 miles upstream from Barkley Dam. For daily discharges through the canal, see Kentucky reports. Records furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03413500 Lake Cumberland			03416500 Dale Hollow Lake		
Sept. 30	709.90	1,695,400	-	646.85	625,600	-
Oct. 31	703.87	1,557,500	-137,900	645.75	611,000	-14,600
Nov. 30	697.04	1,407,800	-149,700	643.54	582,200	-28,800
Dec. 31	704.87	1,580,000	+172,200	645.97	613,900	+31,700
CAL YR 1971	-	-	-25,200	-	-	+94,800
Jan. 31	725.37	2,074,400	+494,400	649.32	659,000	+45,100
Feb. 29	729.92	2,193,000	+118,600	650.70	678,100	+19,100
Mar. 31	721.25	1,969,800	-223,200	650.22	671,500	-6,600
Apr. 30	728.76	2,162,400	+192,600	650.82	679,800	+8,300
May 31	721.10	1,966,100	-196,300	648.60	649,200	-30,600
June 30	716.18	1,844,800	-121,300	648.15	643,100	-6,100
July 31	715.34	1,824,400	-20,400	647.76	637,800	-5,300
Aug. 31	707.07	1,630,000	-194,400	645.14	603,000	-34,800
Sept. 30	698.43	1,437,700	-192,300	642.76	572,200	-30,800
WTR YR 1972	-	-	-257,700	-	-	-53,400
	03422000 Great Falls Lake			03424000 Center Hill Lake		
Sept. 30	781.55	8,000	-	640.72	605,100	-
Oct. 31	791.45	14,000	+6,000	635.50	560,300	-44,800
Nov. 30	796.97	18,200	+4,200	630.45	518,600	-41,700
Dec. 31	801.15	21,800	+3,600	636.72	570,600	+52,000
CAL YR 1971	-	-	-2,400	-	-	+1,400
Jan. 31	805.74	26,400	+4,600	643.10	626,000	+55,400
Feb. 29	805.74	26,400	0	646.75	658,800	+32,800
Mar. 31	805.56	26,200	-200	646.28	654,600	-4,200
Apr. 30	803.86	24,400	-1,800	649.60	685,100	+30,500
May 31	792.61	14,800	-9,600	645.68	649,100	-36,000
June 30	790.07	13,000	-1,800	643.15	626,500	-22,600
July 31	797.82	18,900	+5,900	643.25	627,400	+900
Aug. 31	799.17	20,000	+1,100	639.30	592,700	-34,700
Sept. 30	795.49	17,000	-3,000	634.10	548,600	-44,100
WTR YR 1972	-	-	+9,000	-	-	-56,500

Reservoirs in Cumberland River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03426300 Old Hickory Lake			03430050 J. Percy Priest Lake		
Sept. 30	444.19	202,600	-	489.56	194,500	-
Oct. 31	444.59	207,000	+4,400	487.50	180,300	-14,200
Nov. 30	444.75	208,800	+1,800	483.98	158,100	-22,200
Dec. 31	444.42	205,100	-3,700	482.59	149,800	-8,300
CAL YR 1971	-	-	+9,200	-	-	+2,100
Jan. 31	444.71	208,300	+3,200	481.86	145,600	-4,200
Feb. 29	444.84	209,800	+1,500	482.62	150,000	+4,400
Mar. 31	444.88	210,200	+400	483.53	155,400	+5,400
Apr. 30	444.82	209,600	-600	490.05	198,000	+42,600
May 31	444.42	205,100	-4,500	490.27	199,600	+1,600
June 30	444.58	206,900	+1,800	489.55	194,400	-5,200
July 31	444.45	205,400	-1,500	491.60	209,400	+15,000
Aug. 31	444.12	201,800	-3,600	489.71	195,500	-13,900
Sept. 30	444.52	206,200	+4,400	489.55	194,400	-1,100
WTR YR 1972	-	-	+3,600	-	-	-100

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03438210 Lake Barkley ‡		
Sept. 30	354.94	331,500	-
Oct. 31	354.52	321,000	-10,500
Nov. 30	354.22	315,000	-6,000
Dec. 31	354.15	314,900	-100
CAL YR 1971	-	-	-1,500
Jan. 31	355.56	392,900	+78,000
Feb. 29	354.39	362,300	-30,600
Mar. 31	354.65	356,300	-6,000
Apr. 30	364.94	644,200	+287,900
May 31	358.99	437,500	-206,700
June 30	357.46	395,900	-41,600
July 31	357.17	390,500	-5,400
Aug. 31	355.89	355,200	-35,300
Sept. 30	354.49	325,000	-30,200
WTR YR 1972	-	-	-6,500

‡ Contents based on backwater profile

03455000 French Broad River near Newport, Tenn.

LOCATION.--Lat 35°58'54", long 83°09'40", Cocke County, on left bank 15 ft downstream from bridge on U. S. Highway 411, 1 mile northeast of Newport city limits, 3.7 miles upstream from Pigeon River, and at mile 77.5.

DRAINAGE AREA.--1,858 sq mi.

PERIOD OF RECORD.--September to December 1900, February to August 1901, October to November 1901, November 1902 to December 1905, September to December 1907, October 1920 to current year. Monthly discharge only October to November 1920, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,011.61 ft above mean sea level. See WSP 1910 for history of changes prior to Mar. 31, 1934.

AVERAGE DISCHARGE.--54 years (1903-5, 1920-72), 2,882 cfs (21.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 28,700 cfs Apr. 12 (gage height, 11.12 ft); minimum, 798 cfs Oct. 16, Sept. 22 (gage height, 1.38 ft); minimum daily, 939 cfs Sept. 25.
Period of record: Maximum discharge, 76,300 cfs Aug. 30, 1940 (gage height, 19.25 ft); minimum, 208 cfs Oct. 23, 1952 (gage height, 0.97 ft); minimum daily, 240 cfs Sept. 9, 1925; minimum gage height, 0.91 ft Sept. 20, 1968.
Floods in March 1867, February 1902, and July 1916 reached stages of about 24 ft, 23.0 ft, and 22.5 ft, respectively, from reports of the Tennessee Valley Authority.

REMARKS.--Records good. Diurnal fluctuation during low flow caused by powerplants above station.

REVISIONS (WATER YEARS).--WSP 783: 1933-34. WSP 823: Drainage area. WSP 893: 1928(M). WSP 1306: 1900-1908. WSP 1336: 1903(M), 1921-22(M), 1923, 1925(M), 1927(M), 1928, 1932. WSP 1706: 1901(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,380	3,670	2,630	3,090	2,950	3,740	6,900	2,280	3,400	3,020	2,840	1,210
2	1,320	6,670	2,290	3,060	2,840	3,500	5,750	2,290	2,940	2,730	2,890	1,190
3	1,280	9,810	2,250	3,450	2,960	4,240	4,880	2,760	2,670	2,960	2,780	1,160
4	1,220	8,550	2,380	3,570	3,760	3,960	4,350	7,810	2,530	2,700	2,290	1,300
5	1,110	5,940	2,940	5,670	3,330	3,780	3,990	6,590	2,410	3,580	2,110	1,890
6	1,290	4,460	4,110	5,860	3,140	3,500	3,630	4,590	2,390	3,660	1,940	2,230
7	1,380	3,870	11,500	4,410	3,110	3,240	3,450	3,730	2,670	2,990	2,180	1,820
8	1,230	3,400	14,900	3,650	2,970	3,300	4,890	3,460	2,750	2,580	2,360	1,480
9	1,120	3,060	14,500	3,290	2,820	3,290	4,730	4,140	2,320	2,390	2,250	1,290
10	1,150	2,880	12,100	4,430	2,690	3,140	3,920	4,310	2,210	2,280	2,370	1,300
11	1,280	2,710	8,970	8,430	2,620	2,900	3,700	3,590	2,150	2,190	2,210	1,240
12	1,240	2,540	6,480	9,530	2,530	2,720	14,900	3,200	2,040	2,100	2,520	1,140
13	1,150	2,410	5,080	7,470	4,100	2,580	13,200	3,090	1,910	1,990	2,140	1,100
14	1,110	2,310	4,360	9,610	5,950	2,640	7,410	4,520	1,880	1,970	1,920	1,100
15	1,100	2,220	3,950	8,690	4,930	2,510	5,510	8,220	1,830	2,090	1,950	1,030
16	1,810	2,150	3,810	6,660	4,220	2,490	4,590	7,350	1,770	2,220	1,800	1,010
17	4,690	2,110	3,950	5,240	3,860	3,020	3,970	5,390	1,820	2,520	1,640	1,020
18	2,830	2,050	3,700	4,640	3,690	3,470	3,540	4,320	2,780	2,900	1,600	1,210
19	2,000	2,010	3,380	4,230	3,740	3,090	3,210	3,940	2,550	2,600	1,540	1,290
20	1,710	1,980	3,360	3,970	3,410	2,830	3,030	5,200	2,770	2,380	1,620	1,160
21	1,600	1,940	3,630	3,820	3,160	2,690	3,020	5,340	20,500	2,450	1,500	1,080
22	3,920	1,870	3,640	3,670	3,330	3,600	3,550	7,100	17,000	2,330	1,430	975
23	9,220	1,810	3,260	3,580	3,920	5,600	4,260	6,670	11,700	2,450	1,400	954
24	11,500	1,840	3,070	3,520	3,770	4,460	3,640	6,270	7,860	2,160	1,380	949
25	9,450	2,340	2,970	3,340	4,160	3,720	3,160	5,220	4,560	2,070	1,520	939
26	5,960	2,510	2,860	3,100	6,700	3,530	2,950	4,230	3,700	1,970	1,590	1,040
27	3,970	2,260	2,760	2,960	8,170	4,010	2,750	3,610	3,280	2,150	1,550	1,110
28	3,210	2,180	2,700	3,350	5,520	6,680	2,590	3,250	3,150	2,790	1,520	1,290
29	2,790	2,140	2,630	3,860	4,340	7,860	2,500	3,050	3,660	3,780	1,570	1,780
30	2,520	2,420	2,690	3,470	------	8,120	2,370	2,970	3,700	4,300	1,260	2,440
31	2,370	------	3,480	3,160	------	6,910	------	3,400	------	3,860	1,250	------
TOTAL	87,910	96,110	150,330	146,780	112,690	121,120	140,340	141,890	126,900	82,160	58,920	38,727
MEAN	2,836	3,204	4,849	4,735	3,886	3,907	4,678	4,577	4,230	2,650	1,901	1,291
MAX	11,500	9,810	14,900	9,610	8,170	8,120	14,900	8,220	20,500	4,300	2,890	2,440
MIN	1,100	1,810	2,250	2,960	2,530	2,490	2,370	2,280	1,770	1,970	1,250	939
CFSM	1.53	1.72	2.61	2.55	2.09	2.10	2.52	2.46	2.28	1.43	1.02	.69
IN.	1.76	1.92	3.01	2.94	2.26	2.43	2.81	2.84	2.54	1.64	1.18	.78

CAL YR 1971 TOTAL 1,130,998 MEAN 3,099 MAX 14,900 MIN 978 CFSM 1.67 IN 22.64
WTR YR 1972 TOTAL 1,303,877 MEAN 3,563 MAX 20,500 MIN 939 CFSM 1.92 IN 26.11

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
04-12	1930	11.12	28,700	06-21	0930	10.33	25,400

03461200 Cosby Creek above Cosby, Tenn.

LOCATION.--Lat 35°47'02", long 83°13'08", Cocke County, on downstream left wingwall of bridge on State Highway 32, 1,000 ft downstream from Crying Creek, 3,000 ft upstream from Stillhouse Branch, 2.4 miles southeast of Cosby, and at mile 10.6.

DRAINAGE AREA.--10.2 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1959-66 (1959-65 published as "near Cosby"); October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,644.07 ft above mean sea level. Oct. 15, 1958 to Sept. 30, 1966, crest-stage gage at same site at datum 1.08 ft lower (gage heights adjusted to present datum in WSP 2110).

AVERAGE DISCHARGE.--6 years, 27.5 cfs (36.61 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,240 cfs Apr. 12 (gage height, 3.64 ft); minimum, 7.5 cfs Sept. 3.
Period of record: Maximum discharge, 1,580 cfs Mar. 12, 1963 (gage height, 3.98 ft, present datum); minimum, 1.4 cfs Sept. 30, Oct. 1, 2, 1968.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	23	11	19	30	50	53	26	16	50	53	10
2	21	23	11	33	29	49	46	25	17	47	57	9.8
3	20	53	31	37	30	52	42	32	16	49	50	9.0
4	19	42	23	37	26	46	42	50	15	52	42	15
5	22	31	21	51	25	45	40	38	14	190	36	36
6	27	24	22	46	25	40	37	32	17	128	33	25
7	22	21	34	37	25	38	35	30	17	70	30	20
8	21	19	28	30	23	58	40	27	13	51	28	17
9	20	18	24	35	22	54	37	25	12	40	25	15
10	20	17	23	77	21	49	34	24	13	32	23	14
11	19	15	21	77	21	43	37	22	11	27	23	12
12	18	15	19	62	22	40	306	20	11	24	29	11
13	17	14	19	58	33	37	200	21	10	23	23	10
14	17	14	18	58	28	36	91	25	9.4	25	21	9.8
15	24	13	17	50	28	30	67	23	9.0	24	19	9.4
16	38	12	17	44	28	34	58	22	14	27	18	8.7
17	24	11	21	38	29	38	51	20	23	25	17	20
18	22	11	21	33	30	35	44	19	18	22	16	17
19	21	11	19	25	30	35	40	19	14	22	18	13
20	19	11	23	24	29	34	38	29	64	22	18	12
21	19	10	23	31	28	38	38	54	118	20	15	11
22	40	9.8	21	28	44	70	54	123	61	19	14	10
23	37	9.8	20	27	50	52	50	72	43	19	13	9.8
24	32	10	19	24	54	43	44	53	34	17	13	9.0
25	31	9.8	17	30	102	39	40	42	29	17	13	8.7
26	34	9.0	16	25	148	35	36	34	25	18	15	8.4
27	31	10	15	23	109	43	33	23	23	17	16	17
28	29	9.4	15	41	73	64	31	25	33	23	13	15
29	25	10	19	40	57	85	30	24	57	66	12	20
30	25	14	19	37	------	73	28	21	55	104	11	85
31	24	------	21	33	------	62	------	21	------	62	11	------
TOTAL	762	499.8	627	1,210	1,199	1,449	1,722	1,027	811.4	1,332	725	487.6
MEAN	24.6	16.7	20.2	39.0	41.3	46.7	57.4	33.1	27.0	43.0	23.4	16.3
MAX	40	53	34	77	148	85	306	123	118	190	57	85
MIN	17	9.0	11	19	21	30	28	19	9.0	17	11	8.4
CFSM	2.41	1.64	1.98	3.82	4.05	4.58	5.63	3.25	2.65	4.22	2.29	1.60
IN.	2.78	1.82	2.29	4.41	4.37	5.28	6.28	3.75	2.96	4.86	2.64	1.78

CAL YR 1971 TOTAL 12,049.8 MEAN 33.0 MAX 200 MIN 9.0 CFSM 3.24 IN 43.95
WTR YR 1972 TOTAL 11,851.8 MEAN 32.4 MAX 306 MIN 8.4 CFSM 3.18 IN 43.22

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-26	1055	2.06	266	06-20	2245	2.05	262
04-12	0920	3.64	1,240	07-05	1400	2.04	258

03461500 Pigeon River at Newport, Tenn.

LOCATION.--Lat 35°57'38", long 83°10'28", Cocke County, on left bank 100 ft upstream from bridge on U. S. Highway 25 and 70 at Newport, 0.6 mile downstream from Morell Branch, and at mile 6.8.

DRAINAGE AREA.--666 sq mi.

PERIOD OF RECORD.--September 1900 to September 1929, October 1944 to September 1946, August 1948 to current year. Monthly discharge only for some periods, published in WSP 1306. Published as "near Newport" 1945-46.

GAGE.--Water-stage recorder. Datum of gage is 1,038.76 ft above mean sea level. Prior to Oct. 1, 1929, nonrecording gage at present site at datum 2.00 ft higher. May 8, 1945, to July 22, 1946, water-stage recorder at site 4.8 miles downstream at datum 35.85 ft lower. August 13, 1948, to Sept. 30, 1970, at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--55 years, 1,231 cfs.

EXTREMES.--Current year: Maximum discharge, 35,700 cfs April 12 (gage height, 16.83 ft); minimum, 86 cfs Sept. 3 (gage height, 1.98 ft); minimum daily, 89 cfs Sept. 3.

Period of record: Maximum discharge, 50,000 cfs Feb. 28, 1902 (gage height, 23.4 ft, present datum), from report of Tennessee Valley Authority; minimum, 38 cfs Oct. 5, 1952, Sept. 13, 1954; minimum daily, 48 cfs Sept. 21, 28, 1953; minimum gage height, 1.68 ft (present datum), Sept. 13, 1954.

Floods of Mar. 7, 1867, and June 17, 1876, reached a stage of 23 ft, present datum (discharge, 48,000 cfs), and flood of Aug. 30, 1940, reached a stage of 19.3 ft, present datum (discharge, 36,000 cfs), from report of Tennessee Valley Authority.

REMARKS.--Records excellent. Considerable regulation by Lakes Junaluska, Logan, and Walters for periods of low flow (combined usable capacity of reservoirs about 12,500 cfs-days). The largest of these, Lake Walters (usable capacity, 10,400 cfs days) was completed in 1929. Mill dam 1.3 miles downstream was removed in 1945. Maximum stages for floods prior to 1945 as listed in EXTREMES paragraph would be about 1.9 ft lower under present conditions, from report of Tennessee Valley Authority.

REVISIONS (WATER YEARS).--WSP 1143: Drainage area. WSP 1306: 1901, 1904-10. WSP 1336: 1903, 1917(M), 1919-20(M), 1921, 1924(M), 1927-29(M), 1948-52 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	667	1,270	510	1,580	1,270	1,650	2,640	1,580	1,210	1,120	901	205
2	728	1,620	585	1,530	1,260	1,950	2,180	1,420	1,030	1,040	1,170	90
3	297	2,260	749	1,340	1,900	2,180	2,050	1,540	995	1,340	1,240	89
4	489	2,110	989	1,730	1,730	1,670	1,710	2,730	980	1,130	1,480	446
5	821	1,870	1,070	3,140	1,010	1,790	2,030	1,520	1,410	2,520	652	1,120
6	917	1,770	1,450	2,760	1,020	1,810	1,940	1,160	1,450	1,920	279	871
7	410	1,630	2,790	2,060	1,340	1,380	1,770	996	926	1,600	1,090	469
8	216	1,470	4,710	1,520	1,410	1,670	2,000	1,310	717	1,280	999	564
9	191	1,260	3,000	1,550	1,190	1,650	1,840	1,340	745	769	1,120	593
10	624	878	2,080	3,200	1,150	1,550	1,890	1,130	342	988	601	313
11	505	940	2,050	3,550	955	1,110	2,090	785	193	1,320	507	301
12	229	899	1,900	3,600	1,080	1,090	12,400	960	678	1,090	1,390	603
13	255	650	1,880	3,520	1,600	1,300	5,240	1,730	1,100	926	657	774
14	170	636	1,740	5,060	1,840	1,510	3,930	2,550	859	915	860	621
15	862	664	1,740	3,500	1,520	1,260	3,170	2,600	882	507	1,010	542
16	866	657	1,750	2,890	1,260	1,180	2,890	1,480	1,070	352	601	244
17	478	764	1,810	2,650	1,150	1,570	2,720	1,610	859	921	676	138
18	921	688	1,720	2,570	1,130	1,440	2,610	1,540	391	1,910	767	334
19	951	627	678	2,540	1,500	885	2,350	1,450	1,170	1,130	501	537
20	1,000	541	1,230	2,480	1,250	1,670	1,540	2,200	2,440	1,150	337	419
21	1,290	576	1,930	2,490	1,120	1,510	1,550	1,060	6,700	1,220	550	101
22	1,910	634	2,410	2,450	1,390	2,210	1,440	3,440	3,230	1,010	714	238
23	1,950	634	2,380	2,430	1,770	2,140	905	3,240	2,510	408	606	405
24	1,910	546	1,880	924	1,450	1,880	1,300	1,910	2,380	958	691	430
25	1,820	396	1,190	989	2,510	1,730	1,540	1,580	1,500	759	805	501
26	1,620	246	1,140	1,770	3,760	1,450	1,550	1,570	1,650	476	389	708
27	1,690	292	1,480	1,490	3,890	1,910	1,290	1,440	898	565	134	868
28	1,080	151	1,120	1,580	1,970	2,760	1,100	1,220	1,290	647	222	657
29	809	507	809	1,640	2,450	3,210	776	1,500	2,010	1,270	624	720
30	889	402	519	1,640	------	3,190	714	1,450	1,570	1,370	695	1,810
31	763	------	1,440	1,390	------	2,670	------	1,200	------	1,490	708	------
TOTAL	27,328	27,588	50,729	71,563	46,875	54,975	71,155	51,241	43,185	34,101	22,976	15,711
MEAN	882	920	1,636	2,308	1,616	1,773	2,372	1,653	1,440	1,100	741	524
MAX	1,950	2,260	4,710	5,060	3,890	3,210	12,400	3,440	6,700	2,520	1,480	1,810
MIN	170	151	510	924	955	885	714	785	193	352	134	89

CAL YR 1971 TOTAL 484,654 MEAN 1,328 MAX 4,710 MIN 151
WTR YR 1972 TOTAL 517,427 MEAN 1,414 MAX 12,400 MIN 89

PEAK DISCHARGE (BASE, 7,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
04-12	1300	16.83	35,700	06-21	1000	11.09	16,200

03465500 Nolichucky River at Embreeville, Tenn.

LOCATION.--Lat 36°10'35", long 82°27'27", Washington County, on left bank, at Embreeville, 2,000 ft upstream from bridge on State Highway 81, 3 miles northwest of Erwin, 5.2 miles downstream from North Indian Creek, and at mile 89.0.

DRAINAGE AREA.--805 sq mi.

PERIOD OF RECORD.--September 1900 to May 1901 (published as "near Chucky Valley"), October 1919 to current year. Monthly discharge only October 1919 to June 1920, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,519.30 ft above mean sea level. Sept. 1, 1900, to May 21, 1901, nonrecording gage at site 3 miles downstream at different datum, (destroyed by flood of May 21, 1901). July 1, 1920, to Sept. 30, 1931, nonrecording gage at bridge 2,000 ft downstream at datum 6.33 ft lower.

AVERAGE DISCHARGE.--53 years (1919-72), 1,322 cfs (22.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 38,300 cfs June 21 (gage height, 11.05 ft); minimum, 349 cfs Sept. 24, 25, 26 (gage height, 1.19 ft).
Period of record: Maximum discharge, 82,500 cfs Aug. 13, 1940 (gage height, 18.57 ft), from rating curve extended above 48,000 cfs on basis of slope-area measurement of peak flow; minimum, 85 cfs Sept. 8, 9, 1925, (gage height, 1.60 ft, site and datum then in use).
Flood of May 21, 1901, reached a stage of 24 ft (discharge, 120,000 cfs), from reports of Tennessee Valley Authority.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 803: 1935(M). WSP 823: Drainage area. WSP 1336: 1921-24, 1931(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	573	3,040	1,070	1,330	1,380	2,380	2,970	1,320	1,440	1,400	1,070	406
2	562	3,130	923	1,380	1,360	2,270	2,810	1,280	1,290	1,220	1,090	399
3	596	5,320	930	1,620	1,520	3,040	2,500	1,740	1,210	1,220	1,100	392
4	572	4,230	1,010	1,950	1,940	2,490	2,320	3,170	1,140	1,150	899	406
5	537	2,870	1,160	2,960	1,480	2,330	2,230	2,520	1,120	1,560	800	730
6	601	2,250	1,780	2,540	1,480	2,060	2,000	2,030	1,060	1,500	740	1,090
7	581	2,000	5,710	2,000	1,560	1,900	1,960	1,810	1,080	1,150	710	655
8	515	1,700	4,690	1,660	1,400	1,880	4,520	1,830	1,000	1,030	720	515
9	508	1,520	2,970	1,510	1,290	1,770	3,440	2,280	968	975	682	485
10	610	1,440	2,340	2,540	1,230	1,590	2,630	1,990	961	962	691	455
11	600	1,330	2,040	3,890	1,190	1,500	2,370	1,770	933	923	664	434
12	540	1,230	1,770	3,840	1,190	1,410	5,500	1,630	883	877	664	406
13	500	1,150	1,700	3,060	2,300	1,350	6,070	1,570	852	866	646	392
14	491	1,080	1,550	4,320	2,540	1,430	3,710	3,190	843	866	594	379
15	484	1,020	1,430	3,260	2,150	1,350	2,900	3,370	826	855	570	373
16	1,130	984	1,410	2,480	2,010	1,340	2,450	2,580	795	936	538	361
17	1,230	962	1,380	2,130	1,880	1,840	2,140	2,200	854	1,060	538	361
18	788	910	1,300	1,980	1,780	1,780	1,890	1,940	1,170	1,040	546	441
19	676	888	1,170	1,840	1,710	1,610	1,740	1,920	888	1,370	554	455
20	640	866	1,380	1,720	1,440	1,490	1,650	2,580	4,810	1,090	646	406
21	1,630	855	1,680	1,730	1,390	1,430	1,840	2,460	22,000	949	538	373
22	6,910	845	1,410	1,710	1,800	2,180	2,480	3,260	5,990	923	508	367
23	6,000	835	1,260	1,760	2,360	2,320	3,240	3,260	3,410	888	493	361
24	8,000	1,010	1,210	1,630	2,270	1,830	2,350	3,100	2,620	811	493	355
25	3,850	1,030	1,160	1,530	3,100	1,700	2,070	2,460	2,180	750	523	355
26	2,600	950	1,090	1,420	5,580	1,670	1,870	2,070	1,860	780	578	355
27	2,020	936	1,030	1,350	5,860	1,980	1,690	1,830	1,630	750	586	373
28	1,690	949	1,000	1,640	3,570	2,730	1,540	1,660	1,520	760	554	392
29	1,460	949	990	1,970	2,760	2,960	1,460	1,570	1,630	1,630	493	515
30	1,290	1,200	1,050	1,750	------	3,420	1,380	1,520	1,720	1,400	455	1,060
31	1,200	------	1,580	1,560	------	3,060	------	1,610	------	1,250	427	------
TOTAL	49,384	47,479	51,173	66,060	61,520	62,090	77,720	67,520	68,683	32,941	20,110	14,047
MEAN	1,593	1,583	1,651	2,131	2,121	2,003	2,591	2,178	2,289	1,063	649	468
MAX	8,000	5,320	5,710	4,320	5,860	3,420	6,070	3,370	22,000	1,630	1,100	1,090
MIN	484	835	923	1,330	1,190	1,340	1,380	1,280	795	750	427	355
CFSM	1.98	1.97	2.05	2.65	2.63	2.49	3.22	2.71	2.84	1.32	.81	.58
IN.	2.28	2.19	2.36	3.05	2.84	2.87	3.59	3.12	3.17	1.52	.93	.65

CAL YR 1971 TOTAL 538,525 MEAN 1,475 MAX 8,000 MIN 484 CFSM 1.83 IN 24.89
WTR YR 1972 TOTAL 618,727 MEAN 1,691 MAX 22,000 MIN 355 CFSM 2.10 IN 28.59

PEAK DISCHARGE (BASE, 9,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-24	0530	5.47	10,700	06-21	0630	11.05	38,300

03466500 Nolichucky River below Nolichucky Dam, Tenn.

LOCATION.--Lat 36°03'59", long 82°52'18", Greene County, on right bank, 0.3 mile downstream from State Highway 70, 0.3 mile downstream from Nolichucky Dam, 2.2 miles upstream from Cove Creek, 7.0 miles south of Greeneville, and at mile 45.7.

DRAINAGE AREA.--1,184 sq mi.

PERIOD OF RECORD.--October 1902 to September 1909, October 1918 to October 1925, October 1945 to current year. Published as "near Greeneville" 1903-9, 1919-25. Monthly discharge only for some periods, published in WSP 1306. Gage-height records collected in the vicinity of Greeneville from Dec. 1, 1906, to Feb. 12, 1926, are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,173.46 ft above mean sea level. May 9, 1903, to Dec. 31, 1908, and Apr. 7, 1919, to Oct. 18, 1925, nonrecording gage at bridge 8.4 miles upstream at different datums.

AVERAGE DISCHARGE.--41 years, 1,822 cfs (20.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 30,800 cfs June 21 (gage height, 15.68 ft); minimum, 395 cfs Aug. 28 (gage height, 3.07 ft), minimum daily, 515 cfs Sept. 25.

Period of record: Maximum discharge observed, 73,500 cfs Jan. 23, 1906 (gage height, 19.3 ft, site and datum then in use), from rating curve extended above 9,200 cfs; minimum, 19 cfs Oct. 4, 1970; minimum daily, 20 cfs Oct. 4, 1970; minimum gage height, 0.84 ft Sept. 20, 1956.

A flood in May 1901 reached a stage of about 38 ft, present site and datum, from profiles by the Tennessee Valley Authority. Flood of Aug. 14, 1940, reached a discharge of 73,500 cfs, by computation of flow over dam.

REMARKS.--Records good. Low flow regulated by Davy Crockett Lake since 1945 (controlled storage, 900 cfs-days).

REVISIONS.--WSP 1306: Drainage area at site used 1902-9, 1918-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	718	2,010	1,370	2,010	2,220	3,620	3,800	1,920	1,990	1,950	1,700	606
2	685	3,190	1,180	1,880	2,060	3,240	3,510	1,860	1,760	1,680	1,470	594
3	680	4,230	1,150	2,200	2,060	3,700	3,310	1,950	1,620	1,560	1,520	584
4	697	5,930	1,180	2,270	2,450	3,880	2,950	3,360	1,530	1,510	1,430	583
5	686	3,770	1,340	3,540	2,390	3,470	2,860	3,740	1,470	1,770	1,270	672
6	688	2,830	1,480	4,040	2,030	3,230	2,650	2,940	1,440	2,080	1,130	997
7	722	2,440	3,250	3,140	2,180	2,900	2,490	2,510	1,410	1,770	1,050	1,120
8	690	2,170	6,580	2,530	2,140	2,870	4,740	2,330	1,370	1,480	1,010	814
9	643	1,870	4,040	2,190	1,930	2,780	5,530	2,590	1,290	1,370	1,010	701
10	662	1,750	3,000	2,580	1,830	2,530	3,890	2,770	1,270	1,370	980	656
11	722	1,630	2,510	3,880	1,760	2,330	3,280	2,410	1,240	1,360	953	632
12	703	1,500	2,240	5,090	1,720	2,190	6,130	2,200	1,180	1,230	922	606
13	648	1,410	2,210	4,040	2,600	2,080	10,600	2,110	1,130	1,180	915	585
14	613	1,330	1,980	4,750	4,010	2,100	6,340	2,710	1,100	1,160	894	572
15	600	1,260	1,790	4,870	3,290	2,080	4,620	4,930	1,080	1,200	844	567
16	681	1,210	1,700	3,690	2,950	1,980	3,780	3,720	1,050	1,290	798	556
17	1,300	1,160	1,670	2,920	2,760	2,250	3,280	3,040	1,050	1,310	770	557
18	1,130	1,120	1,620	2,680	2,620	2,650	2,890	2,640	1,230	1,340	764	562
19	867	1,110	1,490	2,480	2,550	2,420	2,600	2,400	1,310	1,390	766	616
20	781	1,080	1,440	2,320	2,310	2,220	2,460	2,720	1,200	1,530	802	623
21	757	1,050	1,790	2,320	2,020	2,090	2,620	3,160	19,100	1,320	841	576
22	3,480	1,030	1,840	2,340	2,090	2,150	2,880	3,620	11,300	1,240	766	541
23	7,280	978	1,610	2,300	2,770	3,050	4,300	4,360	5,230	1,180	726	530
24	8,860	1,000	1,500	2,250	3,070	2,610	3,680	4,050	3,630	1,160	711	521
25	6,150	1,190	1,460	2,150	3,780	2,330	3,040	3,420	2,860	1,090	731	515
26	3,610	1,280	1,410	2,060	6,120	2,270	2,700	2,830	2,480	1,030	747	517
27	2,670	1,160	1,350	1,920	10,000	2,300	2,450	2,440	2,150	1,030	781	558
28	2,160	1,130	1,310	2,290	6,090	2,970	2,250	2,200	1,940	1,040	711	567
29	1,830	1,150	1,300	3,140	4,410	3,790	2,120	2,040	1,960	1,370	741	707
30	1,600	1,190	1,380	2,890	------	4,300	2,020	1,950	2,030	2,080	683	1,390
31	1,460	------	2,010	2,490	------	4,060	------	2,020	------	2,170	636	------
TOTAL	54,773	54,158	60,180	89,250	88,210	86,440	109,770	86,940	79,400	44,240	29,072	19,625
MEAN	1,767	1,805	1,941	2,879	3,042	2,788	3,659	2,805	2,647	1,427	938	654
MAX	8,860	5,930	6,580	5,090	10,000	4,300	10,600	4,930	19,100	2,170	1,700	1,390
MIN	600	978	1,150	1,880	1,720	1,980	2,020	1,860	1,050	1,030	636	515
CFSM	1.49	1.52	1.64	2.43	2.57	2.35	3.09	2.37	2.24	1.21	.79	.55
IN.	1.72	1.70	1.89	2.80	2.77	2.72	3.45	2.73	2.49	1.39	.91	.62

CAL YR 1971 TOTAL 674,895 MEAN 1,849 MAX 8,860 MIN 600 CFSM 1.56 IN 21.20
WTR YR 1972 TOTAL 802,058 MEAN 2,191 MAX 19,100 MIN 515 CFSM 1.85 IN 25.20

PEAK DISCHARGE (BASE, 11,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-27	0545	8.86	11,500	06-21	1645	15.68	30,800
04-13	0330	9.20	12,300				

03469000 French Broad River below Douglas Dam, Tenn.

LOCATION.--Lat 35°57'06", long 83°33'05", Sevier County, on right bank 1.0 mile downstream from Douglas Dam, 1.7 miles upstream from Millican Creek, 5.8 miles north of Sevierville, and at mile 31.3.

DRAINAGE AREA.--4,543 sq mi.

PERIOD OF RECORD.--October 1918 to current year. Published as "at Dandridge" 1918-42. Records published for both sites March to December 1942. Gage-height records collected at Dandridge 1904-42 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 865.70 ft above mean sea level. Oct. 1, 1918, to Oct. 7, 1923, nonrecording gage at Dandridge 13 miles upstream at datum 37.67 ft higher. Oct. 8, 1923, to June 18, 1931, nonrecording gage and June 19, 1931, to Sept. 30, 1942, water-stage recorder at Dandridge at datum 37.63 ft higher.

AVERAGE DISCHARGE.--54 years, 6,604 cfs (19.74 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 17,600 cfs Nov. 15, Sept. 25 (gage height, 8.97 ft); minimum, 37 cfs Apr. 23 (gage height, 1.64 ft); minimum daily, 41 cfs Apr. 23.
Period of record: Maximum discharge, 95,600 cfs Aug. 31, 1940 (gage height, 20.93 ft site and datum then in use); minimum, 4.7 cfs Mar. 10, 1943 (gage height, 1.16 ft); minimum daily, 5.5 cfs Mar. 9, 10, 1943.
Maximum discharge since closure of Douglas Dam on Feb. 19, 1943, 33,800 cfs Dec. 23, 1961 (gage height, 12.45 ft).
At the Dandridge site, a flood in March 1867 reached a stage of 25.2 ft; a flood in February 1875 reached practically the same stage; and a flood in 1901 reached a stage of about 22 ft; from investigations by Tennessee Valley Authority.

REMARKS.--Records good. Flow completely regulated by Douglas Lake (see sta. 03468500).

REVISIONS (WATER YEARS).--WSP 853: Drainage Area. WSP 1306: 1920(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,600	11,700	8,050	5,890	8,200	16,200	4,020	7,040	9,940	5,000	5,340	8,040
2	6,340	10,900	8,290	680	6,920	16,100	5,190	7,520	10,700	2,480	7,410	3,440
3	2,370	12,400	5,870	4,650	7,260	14,400	6,110	7,810	8,030	7,170	9,040	196
4	8,240	14,000	323	9,190	7,650	11,500	7,350	464	4,480	5,580	7,340	4,680
5	8,200	11,700	5,290	8,690	7,320	9,290	6,000	4,880	11,400	7,450	7,080	6,950
6	7,950	13,900	11,600	15,000	5,150	8,390	4,190	2,530	10,400	9,610	2,810	5,870
7	6,970	13,900	946	14,900	6,080	7,810	2,830	3,780	10,400	9,190	9,250	6,070
8	7,290	14,700	1,380	14,800	7,920	8,120	7,110	6,270	10,800	7,380	8,830	6,290
9	5,370	14,000	10,500	14,700	6,740	7,090	1,990	6,680	11,100	3,490	8,480	5,640
10	3,550	13,800	12,400	14,900	6,400	6,450	7,120	6,700	5,080	9,210	7,800	460
11	8,210	13,600	16,200	14,800	5,890	6,380	5,070	7,760	3,520	9,920	9,090	6,740
12	8,260	12,600	16,200	14,800	6,100	4,420	3,970	5,370	7,640	10,400	7,620	8,870
13	6,700	12,200	16,200	14,900	3,720	5,560	5,710	2,350	8,640	10,000	5,450	8,660
14	6,800	12,200	15,100	15,100	5,900	5,080	7,040	87	8,790	9,680	11,100	10,100
15	6,860	9,670	16,000	15,100	4,950	3,700	6,840	6,600	9,260	8,300	9,800	10,800
16	2,920	11,900	15,100	15,200	7,100	2,160	6,300	6,920	10,100	3,050	12,200	6,240
17	3,540	12,300	13,000	15,100	2,930	5,220	7,880	6,770	7,250	10,100	11,000	1,920
18	7,150	11,000	14,300	14,900	5,300	1,340	7,810	9,640	5,140	11,800	11,400	9,300
19	6,680	11,100	14,000	14,800	8,120	1,180	8,420	8,430	10,300	11,100	8,080	10,200
20	7,360	10,400	13,700	12,200	3,740	6,060	6,920	8,240	9,740	16,100	3,050	9,540
21	7,940	11,800	13,300	11,500	7,330	2,140	6,990	9,570	12,900	11,600	10,200	9,330
22	7,940	12,700	15,300	10,600	10,400	1,920	132	11,700	16,700	11,200	11,800	8,320
23	6,800	10,800	13,300	10,700	9,350	3,080	41	10,600	15,900	7,310	11,900	8,580
24	6,910	8,680	13,300	10,600	9,410	1,900	2,180	11,800	10,000	10,100	11,700	730
25	7,840	9,260	13,600	8,430	12,000	3,010	3,500	12,500	7,280	9,850	11,900	11,800
26	8,170	10,400	13,000	6,990	13,100	1,110	2,990	12,100	9,400	9,900	9,460	11,200
27	8,440	12,100	12,700	7,540	15,700	3,090	2,930	11,000	9,590	9,270	1,820	10,900
28	8,530	7,010	8,890	6,620	16,400	2,080	3,060	8,970	8,340	1,790	9,110	8,430
29	7,860	7,280	7,950	7,100	16,300	1,830	3,880	5,370	6,630	1,620	8,300	5,380
30	10,400	8,640	7,040	7,740	------	2,100	3,580	12,900	7,370	1,240	8,040	1,700
31	9,910	------	6,950	9,400	------	4,020	------	8,950	------	1,400	8,030	------
TOTAL	222,100	346,640	339,779	347,520	233,380	172,730	147,153	231,301	276,820	242,290	264,430	206,376
MEAN	7,165	11,550	10,960	11,210	8,048	5,572	4,905	7,461	9,227	7,816	8,530	6,879
MAX	10,600	14,700	16,200	15,200	16,400	16,200	8,420	12,900	16,700	16,100	12,200	11,800
MIN	2,370	7,010	323	680	2,930	1,110	41	87	3,520	1,240	1,820	196
(†)	-36,700	-158,600	-54,200	+30,100	+73,800	+136,900	+228,900	+73,300	-20,900	-59,200	-139,200	-113,500
MEAN‡	5,981	6,268	9,212	12,180	10,590	9,988	12,540	9,826	8,531	5,906	4,040	3,096
CFSM‡	1.32	1.38	2.03	2.68	2.33	2.20	2.76	2.16	1.88	1.30	.89	.68
IN.‡	1.52	1.54	2.34	3.09	2.51	2.53	3.08	2.49	2.10	1.50	1.03	.76

CAL YR 1971 TOTAL 2,534,156 MEAN 6,943 MAX 16,300 MIN 26 MEAN‡ 7,023 CFSM‡ 1.55 IN.‡ 20.98
WTR YR 1972 TOTAL 3,030,519 MEAN 8,280 MAX 16,700 MIN 41 MEAN‡ 8,173 CFSM‡ 1.80 IN.‡ 24.49

† Change in contents, in cfs days, in Douglas Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03470000 Little Pigeon River at Sevierville, Tenn.

LOCATION.--Lat 35°52'42", long 83°34'40", Sevier County, on left bank, 0.2 mile downstream from West Prong Little Pigeon River, 0.6 mile north of intersection of U. S. Highway 441 and State Highway 66 in Sevierville, and at mile 4.4.

DRAINAGE AREA.--353 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Prior to November 1920 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 879.45 ft above mean sea level. Nov. 23, 1920, to June 13, 1928, nonrecording gage, and June 14, 1928, to June 1, 1966, water-stage recorder, at site 0.1 mile upstream at datum 1.99 ft higher. June 2, 1966, to June 5, 1967, at site 1.5 miles downstream at datum 7.31 ft lower.

AVERAGE DISCHARGE.--52 years, 560 cfs (21.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,540 cfs Apr. 12 (gage height, 5.58 ft); minimum, 130 cfs Sept. 3, 17 (gage height, 1.33 ft).

Period of record: Maximum discharge, 41,000 cfs Mar. 26, 1965 (gage height, 16.09 ft, site and datum then in use); minimum, 2.8 cfs Sept. 21, 1925; minimum gage height, 0.08 ft Dec. 23, 1965, site and datum then in use; minimum daily discharge, 8.4 cfs Sept. 9, 1925.

Flood of Feb. 25, 1875, reached a stage of 18 ft (55,000 cfs); that of Apr. 1, 1896, 16.8 ft (46,000 cfs); and that of Mar. 7, 1867, 16.5 ft (43,000 cfs), all at site 0.1 mile upstream, from reports of Tennessee Valley Authority.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply papers indicated.

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
2110	1969	Feb. 2, 1969	14,600	8.33
2110	1970	Dec. 31, 1969	16,400	8.95
WRD Tenn. 1971	1971	Dec. 23, 1970	7,710	5.65
		July 19, 1971	19,100	9.74
		July 31, 1971	9,460	6.38

REMARKS.--Records excellent. Some regulation at low flow caused by small mills above station prior to 1967. From April 1966 to July 1967; Tennessee Valley Authority constructed a flood-control project for town of Sevierville, consisting of widening and deepening Little Pigeon River through the town and 1.8 miles downstream, and relocating the lower portion of the West Prong. The present gage is located on the new dredged channel. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 783: 1921-34. WSP 1336: 1921(M), 1922, 1923(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	309	215	544	749	974	1,050	392	328	846	857	145
2	192	303	196	2,000	698	1,080	868	378	292	595	902	141
3	188	835	1,170	1,680	950	1,620	749	1,460	270	561	769	134
4	180	729	1,090	1,460	1,020	1,150	698	1,900	259	718	569	176
5	180	536	708	2,500	769	1,140	669	1,060	248	2,790	464	372
6	419	449	857	1,810	698	998	595	749	265	1,800	406	328
7	303	449	1,800	1,130	729	879	586	604	406	1,010	449	224
8	224	378	902	823	614	1,170	769	578	270	708	1,130	196
9	210	346	641	926	569	1,060	632	604	238	660	595	358
10	224	340	708	2,330	519	902	552	527	243	729	569	238
11	201	309	614	2,560	487	779	823	479	238	510	527	196
12	184	292	614	1,740	472	688	4,680	426	210	426	510	176
13	171	275	698	1,710	1,060	632	2,020	479	196	372	434	159
14	163	259	544	2,190	1,050	749	1,080	1,680	192	406	385	148
15	176	248	479	1,430	902	614	823	1,680	184	365	340	145
16	1,050	234	464	1,010	769	660	688	974	180	365	303	138
17	464	229	623	835	769	857	604	678	315	372	275	346
18	340	220	678	718	739	698	527	544	254	419	254	412
19	281	220	569	688	739	641	479	494	201	502	238	248
20	243	220	769	623	650	614	456	569	281	650	292	205
21	229	205	749	812	604	604	527	1,060	1,870	385	238	176
22	1,780	192	604	749	708	1,170	1,640	1,050	678	328	215	167
23	1,270	184	510	718	801	857	1,340	902	441	321	205	163
24	801	224	456	632	846	708	868	812	340	419	201	152
25	835	248	412	823	2,110	669	698	623	281	510	192	145
26	823	205	385	759	4,030	660	586	519	248	472	220	152
27	614	229	352	678	2,930	1,200	510	449	224	385	196	385
28	494	220	334	1,810	1,610	2,480	464	399	1,040	419	201	623
29	412	215	340	1,870	1,170	2,750	434	372	2,620	1,050	176	1,200
30	365	254	479	1,200	------	1,900	406	358	1,710	1,530	163	4,700
31	328	------	739	890	------	1,340	------	378	------	998	152	------
TOTAL	13,545	9,356	19,699	39,648	29,761	32,243	26,821	23,177	14,522	21,621	12,427	12,348
MEAN	437	312	635	1,279	1,026	1,040	894	748	484	697	401	412
MAX	1,780	835	1,800	2,560	4,030	2,750	4,680	1,900	2,620	2,790	1,130	4,700
MIN	163	184	196	544	472	604	406	358	180	321	152	134
CFSM	1.24	.88	1.80	3.62	2.91	2.95	2.53	2.12	1.37	1.97	1.14	1.17
IN.	1.43	.99	2.08	4.18	3.14	3.40	2.83	2.44	1.53	2.28	1.31	1.30

CAL YR 1971 TOTAL 245,450 MEAN 672 MAX 7,310 MIN 148 CFSM 1.90 IN 25.87
WTR YR 1972 TOTAL 255,168 MEAN 697 MAX 4,700 MIN 134 CFSM 1.97 IN 26.89

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
04-12	1800	5.58	7,540	09-30	0830	5.40	7,110

03470500 French Broad River near Knoxville, Tenn.

LOCATION.--Lat 35°57'30", long 83°46'26", Knox County, on left bank, 0.7 mile downstream from Johnson Hollow, 7.5 miles upstream from confluence with Holston River, and 8 miles east of Knoxville.

DRAINAGE AREA.--5,101 sq mi.

PERIOD OF RECORD.--October 1945 to current year. Prior to December 1945 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Dec. 10, 1945 to Sept. 30, 1957, at site 200 ft upstream on right bank at same datum.

AVERAGE DISCHARGE.--27 years, 7,562 cfs (20.13 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 22,800 cfs Feb. 26 (elevation, 823.15 ft); minimum, 342 cfs Sept. 4 (elevation, 814.35 ft); minimum daily, 1,730 cfs July 29.
Period of record: Maximum discharge, 64,300 cfs Mar. 12, 1963 (elevation, 832.20 ft), from rating curve extended above 36,000 cfs; minimum, 67 cfs Oct. 25, 1953 (elevation, 813.38 ft); minimum daily, 68 cfs Oct. 23-26, 1953.
Flood in March 1867 reached a stage of 855.0 ft, from floodmarks, (discharge, 160,000 cfs, estimated), from investigations by Tennessee Valley Authority.

REMARKS.--Records good. Flow regulated by Douglas Lake (see sta. 03468500), 24.6 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,800	11,900	8,600	7,830	9,890	17,700	5,800	6,330	9,940	7,220	4,710	7,760
2	8,070	11,100	8,640	5,160	7,840	17,800	6,090	7,810	11,400	4,280	7,840	5,530
3	3,360	13,400	7,300	7,380	8,700	18,400	7,040	9,770	8,810	5,500	9,290	2,020
4	6,380	15,100	4,620	9,320	9,140	13,600	7,480	4,930	4,460	8,310	7,810	2,290
5	8,720	12,700	3,990	12,500	8,940	10,700	7,800	4,700	11,200	10,700	8,410	5,950
6	8,490	14,200	11,000	17,300	7,030	10,500	5,390	4,430	11,400	11,600	4,730	6,150
7	7,600	14,500	6,700	16,600	6,360	8,910	3,580	3,920	11,000	11,000	7,820	6,400
8	7,330	15,200	1,880	16,000	8,850	9,700	6,710	6,970	11,000	8,670	9,690	6,210
9	6,200	14,300	9,520	16,100	7,810	9,100	5,970	7,050	11,300	5,920	9,640	6,500
10	4,560	14,100	12,200	18,400	7,250	7,950	5,460	7,520	7,430	7,770	8,330	3,470
11	6,610	13,900	16,800	18,500	6,450	7,740	6,180	8,060	3,780	10,500	9,300	3,240
12	8,600	13,000	16,900	17,200	7,030	6,130	10,800	7,000	6,910	11,400	8,220	8,580
13	7,360	13,000	17,400	17,100	6,480	5,390	9,780	3,960	8,550	10,800	6,470	8,820
14	6,230	11,600	15,900	18,500	7,000	6,890	8,640	3,050	9,780	10,100	10,700	10,300
15	7,270	10,200	16,400	17,300	6,320	5,280	8,250	6,870	9,200	8,980	10,300	10,300
16	4,710	12,000	15,700	16,700	8,180	2,910	7,080	8,870	10,700	5,360	11,700	9,030
17	4,200	12,700	13,800	16,300	6,000	7,660	8,800	7,340	8,630	8,390	11,600	1,940
18	5,920	11,500	15,100	16,000	3,990	2,460	8,750	10,200	5,550	12,100	11,700	7,400
19	7,760	10,700	15,000	15,800	10,000	2,130	9,140	9,360	10,300	11,900	8,570	9,850
20	7,180	11,200	14,400	13,600	6,840	5,330	7,980	9,260	10,400	17,200	5,020	9,890
21	8,010	11,400	14,500	13,200	6,250	4,090	8,490	10,300	14,800	12,500	7,570	9,420
22	9,200	13,500	16,100	12,000	10,400	3,190	4,290	12,900	18,100	11,700	12,400	9,480
23	8,440	11,200	14,100	11,600	10,900	3,160	2,590	12,500	17,500	8,930	11,700	7,550
24	7,860	9,260	13,700	11,300	10,600	4,330	2,190	12,700	10,600	9,530	12,200	4,290
25	8,850	9,560	14,300	10,400	14,200	3,000	4,850	13,500	9,130	10,800	11,800	7,550
26	8,890	10,500	13,600	9,150	18,100	3,430	3,860	13,000	8,550	10,300	10,300	11,400
27	9,420	11,100	12,900	8,150	20,100	3,960	3,890	12,300	10,400	10,200	4,340	11,000
28	9,160	8,050	10,100	9,260	18,900	5,230	3,430	11,700	9,990	5,680	6,630	11,400
29	9,330	7,320	9,640	10,000	18,200	5,670	3,960	4,640	11,900	1,730	8,060	4,900
30	8,720	9,020	6,670	9,670	------	5,530	4,480	13,200	9,880	3,710	8,500	8,750
31	10,300	------	8,340	10,200	------	4,550	------	10,100	------	2,480	8,100	------
TOTAL	235,530	357,210	365,800	408,520	277,750	222,420	188,750	264,240	302,590	275,260	273,450	217,370
MEAN	7,598	11,910	11,800	13,180	9,578	7,175	6,292	8,524	10,090	8,879	8,821	7,246
MAX	10,800	15,200	17,400	18,500	20,100	18,400	10,800	13,500	18,100	17,200	12,400	11,400
MIN	3,360	7,320	1,880	5,160	3,990	2,130	2,190	3,050	3,780	1,730	4,340	1,940
(†)	-36,700	-158,600	-54,200	+30,100	+73,800	+136,900	+228,900	+73,300	-20,900	-59,200	-139,200	-113,500
MEAN‡	6,414	6,620	10,050	14,150	12,120	11,590	13,920	10,890	9,390	6,970	4,331	3,462
CFSM‡	1.26	1.30	1.97	2.77	2.38	2.27	2.73	2.13	1.84	1.37	.85	.68
IN.‡	1.45	1.45	2.27	3.20	2.56	2.62	3.04	2.46	2.05	1.58	.98	.76

CAL YR 1971 TOTAL 2,872,450 MEAN 7,870 MAX 18,100 MIN 870 MEAN‡ 7,950 CFSM‡ 1.56 IN.‡ 21.16
WTR YR 1972 TOTAL 3,388,890 MEAN 9,259 MAX 20,100 MIN 1,730 MEAN‡ 9,152 CFSM‡ 1.79 IN.‡ 24.42

† Change in contents, in cfs days, in Douglas Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03476500 South Fork Holston River below South Holston Dam, Tenn.

LOCATION.--Lat 36°31'25", long 82°05'50", Sullivan County, on right bank 1,900 ft downstream from South Holston Dam powerhouse, 1.0 mile upstream from bridge at Bristol waterworks, 1.0 mile upstream from Thomas Creek, 6.7 miles southeast of Bristol, and at mile 49.4.

DRAINAGE AREA.--703 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,450.00 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 912 cfs (17.62 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,130 cfs Mar. 5 (gage height, 37.23 ft); minimum, 4.1 cfs Jan. 9 (gage height, 32.36 ft); minimum daily, 5.1 cfs Mar. 19.
Period of record: Maximum discharge, 8,270 cfs Feb. 12, 1957 (gage height, 40.45 ft); no flow for part of day Oct. 27, 1954; minimum daily, 0.50 cfs Oct. 26, 1954.

REMARKS.--Records excellent. Flow completely regulated by South Holston Lake (see sta. 03476000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,250	1,550	1,660	1,770	2,020	3,070	338	1,130	1,790	1,640	1,350	1,840
2	1,210	1,480	1,580	797	2,000	3,080	151	1,510	1,650	629	1,200	1,240
3	13	1,610	1,540	49	2,010	3,070	259	1,650	1,750	1,340	1,380	11
4	6.4	1,900	2,270	5.8	2,060	3,070	1,420	1,580	1,430	1,730	1,190	142
5	8.2	1,800	24	8.5	2,110	3,100	441	1,490	1,890	1,920	1,170	1,530
6	9.7	1,120	1,310	326	1,920	3,080	6.4	1,450	1,630	1,770	21	1,350
7	8.3	1,660	1,780	16	2,060	2,800	672	304	1,690	1,680	1,240	1,350
8	40	1,640	1,900	5.2	1,680	2,780	791	1,550	1,680	1,630	1,200	1,340
9	6.7	2,310	1,570	176	1,060	1,920	106	1,360	1,650	422	1,090	1,260
10	6.9	1,900	1,470	6.0	1,200	1,390	614	1,360	1,120	1,640	1,200	58
11	1,430	1,590	1,620	23	1,090	1,020	392	1,270	587	1,510	1,190	1,370
12	1,190	1,700	1,520	556	1,140	490	766	1,010	1,400	1,490	1,190	1,520
13	1,520	1,090	1,270	1,090	1,580	1,500	643	71	1,450	1,360	630	1,720
14	1,260	6.6	1,870	1,380	1,000	772	930	9.1	1,440	1,510	1,240	1,810
15	1,240	1,650	1,940	1,150	529	502	9.3	8.8	1,440	1,510	1,180	1,920
16	6.8	1,010	1,760	1,070	1,570	781	8.8	564	1,420	32	1,240	1,520
17	6.1	2,070	1,820	1,200	805	1,620	514	1,630	1,260	1,340	1,310	33
18	1,320	1,580	2,330	1,020	1,100	514	1,270	1,640	503	1,430	1,510	1,800
19	1,190	1,470	259	1,150	1,410	5.1	1,460	789	1,430	1,440	1,870	1,750
20	710	2,280	1,370	779	1,620	315	1,440	7.8	1,570	1,440	952	2,470
21	844	2,180	1,180	942	1,520	6.0	1,490	9.5	1,810	1,710	1,630	2,500
22	801	1,470	1,000	972	1,600	6.7	514	941	3,060	1,510	2,420	1,830
23	6.9	2,040	1,690	5.5	1,330	752	8.9	1,450	3,040	1,110	2,470	29
24	6.5	1,520	1,650	1,090	1,230	1,320	1,000	783	3,010	1,450	2,470	8.1
25	805	670	1,860	1,330	1,900	1,430	1,490	1,740	1,750	1,570	2,450	1,510
26	776	1,580	1,640	1,170	3,010	46	1,640	1,840	1,660	1,360	1,610	1,810
27	1,380	1,780	1,620	1,150	3,020	1,650	1,310	1,920	1,830	1,400	658	2,470
28	1,540	1,140	1,850	1,740	3,080	92	1,300	1,930	1,810	1,570	1,720	1,720
29	1,580	1,390	1,780	1,780	3,080	507	772	1,960	1,860	860	1,670	1,550
30	1,270	1,640	1,380	1,820	------	86	317	1,970	1,820	10	1,820	56
31	6.4	------	1,370	2,060	------	6.0	------	1,710	------	1,010	1,850	------
TOTAL	21,447.9	46,826.6	47,883	26,637.0	49,734	40,780.8	22,073.4	36,637.2	50,430	41,023	44,121	39,517.1
MEAN	692	1,561	1,545	859	1,715	1,316	736	1,182	1,681	1,323	1,423	1,317
MAX	1,580	2,310	2,330	2,060	3,080	3,100	1,640	1,970	3,060	1,920	2,470	2,500
MIN	6.1	6.6	24	5.2	529	5.1	6.4	7.8	503	10	21	8.1
(†)	-5,500	-30,300	-26,900	+31,000	+23,200	+8,000	+37,400	+10,400	-8,900	-18,700	-7,000	-14,800
MEAN‡	514	551	677	1,859	2,515	1,574	1,982	1,517	1,384	720	1,197	824
CFSM‡	.73	.78	.96	2.64	3.58	2.24	2.82	2.16	1.97	1.02	1.70	1.17
IN.‡	.84	.87	1.11	3.05	3.86	2.58	3.15	2.49	2.20	1.18	1.96	1.31

CAL YR 1971 TOTAL 299,600.6 MEAN 821 MAX 2,430 MIN 6.1 MEAN‡ 1,076 CFSM‡ 1.53 IN.‡ 20.77
WTR YR 1972 TOTAL 467,111.0 MEAN 1,276 MAX 3,100 MIN 5.1 MEAN‡ 1,271 CFSM‡ 1.81 IN.‡ 24.60

† Change in contents, in cfs days, in South Holston Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03484000 Watauga River below Wilbur Dam, Tenn.

LOCATION.--Lat 36°20'39", long 82°07'46", Carter County, 1,800 ft downstream from Wilbur Dam, 0.7 mile downstream from Big Laurel Branch, 2.7 miles downstream from Watauga Dam, 5 miles east of Elizabethton, and at mile 33.6.

DRAINAGE AREA.--471 sq mi.

PERIOD OF RECORD.--October 1902 to December 1908 (published as "near Elizabethton"), January 1948 to current year. Prior to May 1903 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,550.00 ft above mean sea level. May 11, 1903, to Dec. 31, 1908, nonrecording gage at railroad bridge 2 miles downstream at different datum.

AVERAGE DISCHARGE.--30 years, 707 cfs (20.38 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,580 cfs Aug. 24 (gage height, 35.91 ft); minimum, 13 cfs Sept. 29, 30 (gage height, 31.10 ft); minimum daily, 13 cfs Sept. 30.

Period of record: Maximum discharge observed, 21,500 cfs Jan. 22, 1906 (gage height, 13.6 ft, site and datum then in use), from rating curve extended above 2,500 cfs; minimum, 2.3 cfs July 11, 1953; minimum daily, 2.4 cfs Aug. 14, 1949; minimum gage height at present site, 30.73 ft July 11, 1953.

Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 6,750 cfs Jan. 19, 1960 (gage height, 38.10 ft).

Floods of Aug. 14, 1940, and May 21, 1901, reached stages of about 61 ft and 58 ft, respectively, present site and datum, from reports of Tennessee Valley Authority.

REMARKS.--Records good. Flow completely regulated by Watauga Lake (see sta. 03483500) since Dec. 1, 1948. Low-flow regulated by Wilbur Lake during period of record.

REVISIONS WATER YEARS).--WSP 1276: 1906(M). WSP 1306: 1905(M), Drainage area at "near Elizabethton" site. WSP 1386: 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,240	387	563	1,110	680	1,750	470	962	752	295	1,020	1,210
2	477	344	694	362	520	918	208	1,210	845	102	968	56
3	563	442	864	1,000	400	869	538	1,850	467	55	1,060	53
4	1,690	1,410	1,560	1,150	400	849	1,560	1,770	59	53	1,220	108
5	1,020	1,000	58	1,390	410	839	864	1,800	1,510	945	844	693
6	921	766	567	1,110	56	777	745	998	848	966	61	615
7	804	1,920	806	164	160	833	1,590	59	933	1,090	936	752
8	581	2,000	1,320	63	470	1,060	1,610	1,320	1,190	714	1,220	773
9	535	1,640	1,380	179	410	868	1,130	832	1,420	60	1,070	1,180
10	528	1,200	1,270	55	61	59	1,820	945	1,090	1,040	892	56
11	695	1,300	1,290	53	59	56	1,460	1,230	499	1,170	1,170	1,170
12	1,030	855	1,100	631	56	56	1,210	61	1,150	1,350	646	1,200
13	1,360	56	990	865	1,260	55	1,070	78	1,490	1,300	628	1,590
14	56	54	1,070	1,620	533	439	1,100	57	1,420	1,440	1,340	1,620
15	158	113	1,010	1,220	58	57	602	228	1,480	1,250	1,280	1,670
16	67	429	1,020	1,070	1,630	360	66	2,230	1,550	64	1,430	255
17	478	220	992	900	66	1,380	1,050	174	1,000	1,250	1,440	51
18	805	306	1,570	950	501	75	1,360	693	527	1,450	1,830	48
19	342	410	141	990	1,100	61	1,720	57	1,440	1,600	2,020	41
20	245	1,310	786	710	436	56	1,510	54	1,580	1,730	1,070	42
21	376	1,240	733	840	57	53	1,450	53	1,090	1,880	1,940	38
22	334	1,220	786	850	56	52	521	531	1,090	1,890	2,170	387
23	174	1,980	448	56	58	382	61	1,340	1,090	1,160	2,280	43
24	52	459	620	780	57	1,540	1,040	1,220	1,460	1,170	1,980	42
25	413	383	62	980	1,600	1,170	1,680	1,070	448	1,660	1,860	932
26	422	659	60	800	1,450	83	1,430	1,580	785	1,430	1,270	469
27	415	1,250	446	700	2,270	1,650	1,310	63	813	1,420	59	617
28	414	256	541	890	3,000	507	742	57	1,250	1,170	1,310	1,440
29	416	50	536	730	2,980	764	60	54	727	972	1,220	45
30	390	402	593	56	------	544	58	952	563	59	1,250	13
31	195	------	745	920	------	60	------	869	------	872	1,280	------
TOTAL	17,196	24,061	24,621	23,194	20,794	18,222	30,035	24,397	30,566	31,607	38,764	17,209
MEAN	555	802	794	748	717	588	1,001	787	1,019	1,020	1,250	574
MAX	1,690	2,000	1,570	1,620	3,000	1,750	1,820	2,230	1,580	1,890	2,280	1,670
MIN	52	50	58	53	56	52	58	53	59	53	59	13
(†)	-200	-7,300	-4,700	+8,000	+20,500	+13,500	+10,100	+6,500	-5,700	-13,800	-25,300	-6,900
MEAN#	548	559	643	1,006	1,424	1,023	1,338	997	829	574	434	344
CFSM#	1.16	1.19	1.37	2.14	3.02	2.17	2.84	2.12	1.76	1.22	.92	.73
IN.#	1.34	1.32	1.57	2.46	3.26	2.50	3.17	2.44	1.96	1.41	1.06	.81

CAL YR 1971 TOTAL 176,897 MEAN 485 MAX 2,000 MIN 31 MEAN# 767 CFSM# 1.63 IN.# 22.10
WTR YR 1972 TOTAL 300,666 MEAN 821 MAX 3,000 MIN 13 MEAN# 807 CFSM# 1.71 IN.# 23.32

† Change in contents, in cfs days, in Watauga Lake, furnished by Tennessee Valley Authority
# Adjusted for change in contents in lakes or reservoirs listed above.

03485500 Doe River at Elizabethton, Tenn.

LOCATION.--Lat 36°20'40", long 82°12'37", Carter County, on left bank 1,500 ft upstream from bridge on State Highway 91 at Elizabethton, and 1.0 mile upstream from mouth.

DRAINAGE AREA.--137 sq mi.

PERIOD OF RECORD.--June 1907 to June 1908 (gage heights only), October 1911 to September 1916, October 1920 to current year. Published as "at Valley Forge" 1911-16, 1920-31. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,524.73 ft above mean sea level. See WSP 1910 for history of changes prior to Feb. 1, 1934.

AVERAGE DISCHARGE.--57 years (1911-16, 1920-72), 219 cfs (21.71 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,700 cfs June 21 (gage height, 5.05 ft); minimum, 55 cfs Sept. 25, 26 (gage height, 0.56 ft)
Period of record: Maximum discharge, 7,940 cfs Mar. 26, 1965 (gage height, 7.35 ft); minimum, 17 cfs Aug. 31, Sept. 7, 1925; minimum gage height, 0.18 ft June 22, 1970 (result of construction upstream).
Flood of May 21, 1901 reached a stage of 10.5 ft (discharge, 25,000 cfs) from reports of Tennessee Valley Authority.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1306: 1913(M), 1915(M), 1929(M), 1931(M), Drainage area at "at Valley Forge" site. WSP 1336: 1933(M), 1938. WSP 1910: 1901(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	199	155	218	287	443	400	230	200	179	212	61
2	110	190	147	249	269	422	396	225	186	156	204	61
3	112	906	153	246	332	677	356	364	173	157	187	61
4	103	578	172	304	339	506	361	632	165	150	155	86
5	96	369	187	411	271	474	339	477	168	257	141	225
6	130	282	235	404	278	393	310	377	161	194	128	131
7	100	267	391	336	298	363	334	324	171	165	129	92
8	88	218	331	280	248	360	1,170	328	152	147	119	82
9	96	199	278	268	236	312	779	334	148	139	108	78
10	114	196	247	448	223	293	571	294	150	133	103	78
11	100	181	222	472	222	275	479	262	145	123	96	70
12	88	169	203	422	214	261	969	247	134	115	94	66
13	84	161	222	410	379	250	962	249	128	118	98	66
14	80	153	190	439	331	285	674	355	126	116	90	64
15	80	147	181	384	317	247	520	411	123	116	80	68
16	256	142	177	309	314	277	435	344	118	146	78	66
17	153	137	174	293	307	374	373	303	166	152	78	66
18	124	134	168	275	294	366	326	273	169	136	112	72
19	110	134	154	263	279	347	298	287	125	167	119	70
20	100	137	212	243	245	317	281	333	289	115	110	66
21	110	129	208	275	242	297	497	328	1,820	103	88	62
22	153	124	187	254	405	403	527	441	709	107	80	62
23	313	116	175	256	455	348	498	414	411	107	78	61
24	694	190	172	240	479	316	417	373	302	96	86	60
25	355	208	167	260	685	304	364	316	253	103	78	59
26	263	164	162	233	1,460	287	321	273	214	118	80	62
27	212	167	155	232	1,260	336	289	245	191	96	78	89
28	178	164	159	422	762	409	268	227	180	105	73	73
29	161	167	165	480	548	453	255	219	191	454	70	207
30	150	175	192	401	------	443	240	211	236	300	66	415
31	158	------	258	330	------	421	------	229	------	363	63	------
TOTAL	4,963	6,503	6,199	10,057	11,979	11,259	14,009	9,925	7,704	4,933	3,281	2,779
MEAN	160	217	200	324	413	363	467	320	257	159	106	92.6
MAX	694	906	391	480	1,460	677	1,170	632	1,820	454	212	415
MIN	80	116	147	218	214	247	240	211	118	96	63	59
CFSM	1.17	1.58	1.46	2.37	3.01	2.65	3.41	2.34	1.88	1.16	.77	.68
IN.	1.35	1.77	1.68	2.73	3.25	3.06	3.80	2.69	2.09	1.34	.89	.75

CAL YR 1971 TOTAL 88,875 MEAN 243 MAX 1,200 MIN 80 CFSM 1.77 IN 24.13
WTR YR 1972 TOTAL 93,591 MEAN 256 MAX 1,820 MIN 59 CFSM 1.87 IN 25.41

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-26	1515	3.87	2,160	06-21	0200	5.05	3,700

03486000 Watauga River at Elizabethton, Tenn.

LOCATION.--Lat 36°21'21", long 82°13'26", Carter County, on left bank 25 ft upstream from bridge on U. S. Highway 19E at Elizabethton, 0.6 mile downstream from Doe River, and at mile 25.9.

DRAINAGE AREA.--692 sq mi.

PERIOD OF RECORD.--October 1925 to July 1949, July 1953 to current year. Monthly discharge only prior to February 1926, published in WSP 1306. Gage-height records collected in this vicinity December 1909 to July 1949 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,486.23 ft above mean sea level. Feb. 21 to Oct. 4, 1926, nonrecording gage on former Southern Railway bridge 10 ft upstream at same datum.

AVERAGE DISCHARGE.--42 years (1925-48, 1953-72), 1,055 cfs (20.70 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 7,840 cfs Feb. 26 (gage height, 8.54 ft); minimum, 127 cfs Sept. 22 (gage height, 2.02 ft); minimum daily, 133 cfs Sept. 24.
Period of record: Maximum discharge, 75,100 cfs Aug. 14, 1940 (gage height, 20.87 ft) from rating curve extended above 29,000 cfs, on basis of contracted-opening measurement of peak flow; minimum, 42 cfs Sept. 20, 1932; minimum daily, 85 cfs Dec. 3, 1953; minimum gage height, 1.54 ft Sept. 20, 1932.
Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 14,500 cfs Mar. 12, 1963 (gage height, 10.70 ft).
Flood of May 21, 1901 reached a stage of about 21 ft (discharge, 76,000 cfs), from reports of Tennessee Valley Authority.

REMARKS.--Records good. Flow partly regulated by Watauga Lake 10.8 miles (corrected) upstream (see sta. 03483500) since Dec. 1, 1948. Low-flow regulated by Wilbur Lake 8.1 miles upstream during period of record.

REVISIONS (WATER YEARS).--WSP 758: 1932(M). WSP 823: Drainage area. WSP 1336: 1927-28(M), 1930, 1931-32(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,350	566	841	1,600	1,330	2,680	803	1,230	1,010	641	1,440	1,410
2	718	646	1,070	848	950	1,560	1,040	1,470	1,180	357	1,230	263
3	731	1,360	906	1,370	846	2,030	925	2,380	796	283	1,520	160
4	1,720	1,940	1,790	1,780	1,070	1,610	2,000	2,760	362	275	1,430	236
5	1,250	1,500	533	2,230	938	1,570	1,500	2,690	1,540	1,160	1,190	952
6	1,120	1,180	672	2,040	521	1,580	1,190	1,780	1,350	1,310	491	748
7	946	2,010	1,290	994	625	1,430	2,040	670	1,230	1,270	1,160	834
8	764	2,430	1,660	566	904	1,460	3,090	1,780	1,330	1,040	1,290	989
9	698	1,930	1,890	640	776	1,610	2,490	1,450	1,580	308	1,300	1,290
10	718	1,580	1,570	813	426	569	2,590	1,370	1,560	1,060	994	281
11	841	1,410	1,630	883	400	502	2,290	1,740	590	1,330	1,280	1,110
12	1,150	1,230	1,420	1,250	397	470	2,970	601	1,410	1,520	946	1,280
13	1,400	289	1,220	1,380	1,720	446	2,710	484	1,610	1,460	755	1,580
14	339	250	1,380	2,390	1,440	869	2,290	728	1,640	1,590	1,440	1,780
15	172	241	1,290	1,890	653	436	1,510	900	1,700	1,550	1,380	1,750
16	485	666	1,260	1,590	2,060	593	858	2,900	1,800	427	1,600	633
17	633	395	1,150	1,640	810	1,980	1,530	1,010	1,470	1,250	1,540	171
18	986	475	2,040	1,380	755	931	1,870	1,160	692	1,580	2,000	157
19	495	382	470	1,170	1,900	654	2,230	571	1,700	1,830	2,440	148
20	395	1,550	954	1,280	885	583	1,970	580	2,140	1,850	1,350	141
21	490	1,230	1,150	1,280	455	540	2,310	587	4,190	2,070	2,040	134
22	538	1,340	994	1,450	710	657	1,430	1,560	2,190	2,060	2,300	376
23	549	2,300	799	535	895	800	1,050	2,210	1,730	1,360	2,560	233
24	841	820	890	945	1,090	1,890	1,720	2,120	1,860	1,310	2,030	133
25	841	679	344	1,520	3,060	1,700	2,130	1,650	1,130	1,830	2,020	973
26	685	869	312	1,300	4,580	773	2,020	2,140	1,050	1,630	1,660	503
27	757	1,180	495	1,230	4,450	1,910	1,850	639	1,170	1,640	278	756
28	653	750	834	1,610	4,320	1,320	1,270	434	1,400	1,270	1,170	1,470
29	620	293	820	1,750	3,910	1,250	566	407	1,170	1,740	1,420	525
30	572	413	806	843	------	1,250	429	1,220	803	523	1,370	647
31	413	------	1,260	1,280	------	863	------	1,370	------	1,250	1,420	------
TOTAL	23,870	31,904	33,740	41,477	42,876	36,516	52,671	42,591	43,383	38,774	45,044	21,663
MEAN	770	1,063	1,088	1,338	1,478	1,178	1,756	1,374	1,446	1,251	1,453	722
MAX	1,720	2,430	2,040	2,390	4,580	2,680	3,090	2,900	4,190	2,070	2,560	1,780
MIN	172	241	312	535	397	436	429	407	362	275	278	133
(†)	-200	-7,300	-4,700	+8,000	+20,500	+13,500	+10,100	+6,500	-5,700	-13,800	-25,300	-6,900
MEAN‡	764	820	937	1,596	2,185	1,613	2,092	1,584	1,256	806	637	492
CFSM‡	1.10	1.18	1.35	2.31	3.16	2.33	3.02	2.29	1.82	1.16	.92	.71
IN.‡	1.27	1.32	1.56	2.66	3.41	2.69	3.37	2.64	2.03	1.34	1.06	.79

CAL YR 1971 TOTAL 306,437 MEAN 840 MAX 2,430 MIN 172 MEAN‡ 1,122 CFSM‡ 1.62 IN.‡ 22.00
WTR YR 1972 TOTAL 454,509 MEAN 1,242 MAX 4,580 MIN 133 MEAN‡ 1,227 CFSM‡ 1.77 IN.‡ 24.14

† Change in contents, in cfs days, in Watauga Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03487500 South Fork Holston River at Kingsport, Tenn.

LOCATION.--Lat 36°31'51", long 82°33'29", Sullivan County, on left bank of main channel on Long Island, 1,000 ft downstream from bridge on State Highway 93 BP, at Kingsport, 1.2 miles upstream from Reedy Creek, and 4.5 miles downstream from Fort Patrick Henry Dam and at mile 3.7.

DRAINAGE AREA.--1,935 sq mi.

PERIOD OF RECORD.--September 1925 to current year. Separate records (unpublished) for sluice channel beginning October 1960. Separate record (unpublished) for main channel for period October 1960 to September 1965; separate record for main channel published since October 1965.

GAGE.--Water-stage recorder. Datum of gage is 1,175.84 ft above mean sea level. Prior to Dec. 2, 1953, water-stage recorder at site 2 miles upstream at datum 8.47 ft higher. Since May 1, 1954, supplementary water-stage recorder on downstream side of bridge over sluice channel, 2,000 ft south of main gage at datum 0.39 ft lower.

AVERAGE DISCHARGE.--47 years, 2,526 cfs (17.73 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 10,800 cfs Feb. 26; minimum daily, 776 cfs May 13.
Period of record: Maximum discharge, 68,800 cfs Aug. 14, 1940 (gage height, 18.80 ft, site and datum then in use); minimum, 210 cfs Jan. 28, 1940 (gage height, -0.20 ft, site and datum then in use); minimum daily, 301 cfs June 13, 1954.
Maximum discharge since closure of Fort Patrick Henry Dam on Oct. 27, 1953, 24,200 cfs Mar. 12, 1963 (gage height, 9.01 ft).

REMARKS.--Records good. Daily and maximum instantaneous discharge figures were obtained by adding discharges of main channel and sluice channel as determined from separate stage-discharge relations. Flow regulated by four reservoirs (see p. 122). Some diversion upstream by the city of Kingsport, Tennessee Eastman Corporation, and Holston Ordnance Works, Area A.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1033: 1930(M). WSP 1306: 1933(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,710	3,220	2,760	4,070	3,530	6,650	946	1,950	2,350	2,950	4,360	2,880
2	1,930	2,830	2,860	2,120	3,830	7,710	1,400	3,380	3,050	1,700	2,890	804
3	933	3,290	2,890	3,690	3,820	7,640	1,330	5,250	2,750	2,120	4,770	814
4	1,100	4,760	5,990	3,770	3,970	6,640	5,140	6,120	2,080	2,010	4,740	995
5	2,490	4,750	2,280	5,890	4,200	5,400	2,360	5,850	5,190	2,800	2,780	1,450
6	2,050	3,060	1,620	4,320	3,860	6,510	791	3,960	3,790	2,990	1,100	3,070
7	2,010	4,780	3,130	1,030	2,910	5,780	3,660	1,530	4,290	3,040	3,680	3,330
8	1,670	6,810	3,420	879	4,360	5,210	6,600	4,500	3,510	2,910	3,630	3,930
9	883	4,340	3,290	1,250	2,810	4,860	2,560	2,740	3,420	1,630	2,800	3,220
10	862	4,180	4,440	846	1,950	4,560	3,470	3,410	3,100	3,790	2,190	1,670
11	3,220	3,450	4,510	834	2,010	2,200	2,470	3,330	1,300	3,630	2,890	3,150
12	2,570	2,800	4,390	784	2,090	855	2,880	1,390	3,100	3,600	2,260	2,950
13	3,350	1,480	3,740	2,620	4,710	1,890	4,740	776	2,510	2,770	1,220	3,950
14	3,290	880	4,690	4,220	4,670	1,880	5,510	814	1,630	2,290	4,230	4,370
15	921	1,670	4,170	5,670	2,040	1,940	5,530	2,510	2,460	2,220	3,250	4,980
16	882	2,560	4,480	3,370	5,030	2,190	3,120	2,500	2,550	1,660	4,970	2,770
17	858	3,410	4,330	3,750	2,730	4,120	4,320	2,440	3,300	3,340	5,050	1,260
18	1,670	2,870	5,530	3,390	2,860	1,400	4,850	4,330	2,100	5,230	1,900	2,080
19	2,800	3,040	2,170	2,760	4,610	1,340	4,930	4,130	2,930	4,590	1,500	2,730
20	2,590	5,060	3,150	2,720	4,270	835	5,380	1,220	5,440	3,930	1,130	2,910
21	2,420	4,670	3,120	2,610	3,430	814	5,380	812	6,840	2,270	4,270	3,200
22	2,080	4,610	3,340	4,210	1,720	836	2,450	2,240	5,850	3,070	4,620	1,840
23	956	6,830	3,040	2,410	3,250	3,290	795	4,970	4,640	2,410	5,590	784
24	949	2,660	2,430	1,920	5,750	2,840	2,970	5,210	5,030	3,280	5,620	794
25	2,040	1,330	3,210	3,010	7,440	3,650	4,830	5,300	3,580	2,250	5,800	2,670
26	2,580	3,810	1,630	3,250	10,400	1,810	4,110	5,000	3,170	3,330	3,930	2,870
27	3,830	3,500	1,940	3,030	9,200	4,970	4,340	4,180	2,190	3,580	828	4,910
28	3,660	4,110	4,360	3,620	9,910	2,350	3,730	2,830	3,910	1,660	3,100	3,390
29	3,670	1,420	3,190	4,170	8,250	2,550	2,220	3,400	3,210	3,130	4,140	4,230
30	1,920	2,490	3,060	3,550	------	2,070	837	5,240	3,160	984	3,970	5,410
31	979	------	3,510	3,460	------	814	------	5,060	------	4,270	4,220	------
TOTAL	65,893	106,590	106,680	93,213	129,610	105,604	103,539	106,372	102,430	89,434	107,428	83,411
MEAN	2,126	3,553	3,441	3,007	4,469	3,407	3,451	3,431	3,414	2,885	3,465	2,780
MAX	4,710	6,830	5,990	5,890	10,400	7,710	6,600	6,120	6,840	5,230	5,800	5,410
MIN	858	800	1,620	784	1,720	814	791	776	1,300	984	828	784
(†)	-15,300	-55,600	-39,900	+48,200	+53,700	+30,300	+57,200	+18,700	-12,400	-31,500	-35,300	-28,000
MEAN‡	1,632	1,700	2,154	4,562	6,321	4,384	5,358	4,035	3,001	1,869	2,327	1,847
CFSM‡	.84	.88	1.11	2.36	3.27	2.27	2.77	2.09	1.55	.97	1.20	.95
IN.‡	.97	.98	1.28	2.72	3.52	2.61	3.09	2.40	1.73	1.11	1.39	1.06

CAL YR 1971 TOTAL 823,806 MEAN 2,257 MAX 7,780 MIN 734 MEAN‡ 2,799 CFSM‡ 1.45 IN.‡ 19.64
WTR YR 1972 TOTAL 1,200,204 MEAN 3,279 MAX 10,400 MIN 776 MEAN‡ 3,252 CFSM‡ 1.68 IN.‡ 22.88

† Change in contents, in cfs days, in South Holston, Watauga, Boone, and Fort Patrick Henry Lakes, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03487500 South Fork Holston River at Kingsport, Tenn.--Continued

Discharge, in cubic feet per second, in main channel only,
Water Year October 1971 to September 1972

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,150	2,960	2,560	3,630	3,210	5,700	924	1,870	2,260	2,640	3,740	2,620
2	1,880	2,640	2,780	1,950	3,470	6,510	1,300	3,020	2,300	1,640	2,620	790
3	920	3,020	2,780	3,290	3,450	5,440	1,250	4,420	2,500	2,010	4,060	801
4	1,090	4,170	5,150	3,350	3,530	5,700	4,330	5,150	2,000	1,950	4,250	977
5	2,270	4,130	2,110	4,910	3,790	4,650	2,030	4,970	4,370	2,550	2,620	1,420
6	1,960	2,950	1,590	3,670	3,550	5,610	780	3,510	2,370	2,650	1,070	2,760
7	1,960	4,090	2,250	990	2,680	5,060	3,130	1,490	3,650	2,710	3,190	2,950
8	1,640	5,700	3,140	860	3,890	4,630	5,500	3,910	3,040	2,620	3,180	3,420
9	872	3,890	3,060	1,180	2,560	4,290	2,260	2,530	3,020	1,600	2,560	2,890
10	872	3,470	2,970	810	1,890	4,030	3,140	3,100	2,740	3,230	2,080	1,620
11	2,960	3,050	4,020	820	1,920	2,110	2,350	3,040	1,230	3,130	2,480	2,830
12	2,420	2,560	4,000	771	2,000	840	2,500	1,350	2,740	3,080	2,110	2,700
13	3,070	1,410	3,410	2,340	3,950	1,800	4,200	762	2,160	2,520	1,200	3,430
14	3,030	790	4,160	3,810	4,060	1,830	4,380	800	1,560	2,140	3,660	3,760
15	908	1,640	3,950	4,860	1,970	1,880	4,730	2,430	2,220	2,140	2,880	4,370
16	872	2,360	4,080	3,040	4,390	2,040	2,850	2,410	2,260	1,610	4,270	2,640
17	848	2,090	3,910	3,410	2,560	3,600	3,750	2,360	2,860	2,940	4,370	1,230
18	1,630	2,740	4,860	3,120	2,680	1,350	4,160	3,700	1,840	4,400	1,730	1,900
19	2,610	2,850	1,950	2,650	3,950	1,310	4,190	3,650	2,560	3,950	1,470	2,410
20	2,460	4,580	2,910	2,630	3,830	820	4,500	1,190	4,580	3,300	1,090	2,620
21	2,290	4,180	2,820	2,520	3,210	800	4,520	800	5,450	2,140	3,670	2,770
22	2,020	4,140	2,970	3,850	1,670	820	2,190	2,170	4,900	2,760	3,930	1,810
23	932	5,910	2,800	2,280	2,970	2,910	780	4,250	4,010	2,180	4,760	770
24	920	2,590	3,340	1,850	4,860	2,630	2,670	4,500	4,180	2,940	4,790	780
25	1,990	1,300	3,020	2,760	6,210	3,250	4,160	4,540	3,160	2,110	4,920	2,440
26	2,420	2,490	1,590	3,950	8,330	1,710	3,630	4,290	2,710	2,970	3,480	2,610
27	3,460	5,430	1,880	2,850	7,570	4,200	3,790	3,630	2,010	3,180	912	4,130
28	3,330	3,570	3,910	3,100	2,140	2,210	3,350	2,630	3,310	1,610	2,760	2,950
29	3,330	1,370	3,020	3,650	6,890	2,360	2,130	3,100	2,850	2,830	3,590	3,560
30	1,870	2,380	2,890	3,270	------	1,850	820	4,420	2,800	944	3,500	4,470
31	968	------	3,310	3,120	------	800	------	4,310	------	3,640	3,670	------
TOTAL	61,952	95,360	97,690	84,291	113,080	93,900	90,924	94,442	89,340	80,204	94,712	74,428
MEAN	1,998	3,179	3,151	2,719	3,899	3,029	3,031	3,047	2,978	2,587	3,055	2,481
MAX	4,150	5,910	5,150	4,910	8,330	6,510	5,500	5,150	5,650	4,400	4,920	4,470
MIN	848	790	1,590	771	1,670	800	780	762	1,230	944	812	770

CAL YR 1971 TOTAL 750,129 MEAN 2,055 MAX 6,570 MIN 723
WTR YR 1972 TOTAL 1,070,323 MEAN 2,924 MAX 8,330 MIN 762

03487550 Reedy Creek at Orebank, Tenn.

LOCATION.--Lat 36°33'42", long 82°27'36", Sullivan County, on upstream right bank at Anderson Bridge, 0.1 mile south of U. S. Highway 11W, 0.3 mile north of Orebank, 1.0 mile upstream from Gaines Branch, and 9.8 miles upstream from mouth.

DRAINAGE AREA.--36.3 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,232.61 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 39.4 cfs (14.74 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,630 cfs Apr. 12 (gage height, 6.91 ft); minimum, 7.0 cfs Sept. 25, 26 (gage height, 1.44 ft).
Period of record: Maximum discharge, 2,160 cfs July 31, 1971 (gage height, 7.37 ft); minimum, 3.0 cfs Jan. 20, 1966 (gage height, 1.30 ft).
Flood of May 30, 1927, reached a stage of 11.4 ft (discharge, about 11,000 cfs), from reports of Tennessee Valley Authority.

REMARKS.--Records good, except for periods of no gage height record, which are fair. The Bloomingdale Utility District diverts an average of about 0.6 cfs for water supply, 0.8 mile above the gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	15	14	24	71	100	49	43	48	17	70	8.4
2	8.4	14	13	99	66	92	44	50	39	16	60	8.4
3	7.7	32	14	83	79	96	40	146	34	16	70	8.8
4	7.0	24	17	92	79	82	39	204	31	17	35	10
5	7.7	19	20	278	67	79	35	104	33	30	25	13
6	28	17	19	139	64	69	34	76	32	17	20	10
7	14	17	30	87	62	65	53	63	31	14	15	9.2
8	12	15	29	64	56	75	157	64	27	13	17	8.8
9	13	14	25	68	53	64	83	64	26	11	17	8.8
10	14	13	22	191	51	61	65	52	28	10	16	8.4
11	12	13	19	135	49	56	76	47	25	10	15	8.4
12	11	13	33	93	63	52	707	43	23	9.0	14	8.1
13	10	12	59	90	398	50	237	45	22	8.2	14	8.1
14	9.9	12	39	142	163	49	226	63	21	8.0	13	8.1
15	9.6	11	32	104	118	45	200	54	21	8.0	12	8.1
16	12	11	27	77	94	46	148	47	20	8.2	12	7.7
17	10	11	27	65	95	45	116	42	21	9.0	12	8.1
18	9.8	11	23	58	97	41	95	39	22	10	12	8.8
19	9.2	12	21	55	104	39	83	37	19	9.0	12	8.4
20	9.2	12	34	53	89	36	78	36	25	8.6	13	8.1
21	9.7	11	37	146	78	36	82	34	36	8.0	11	7.7
22	12	11	31	108	80	43	100	67	23	13	10	7.7
23	28	10	27	91	77	39	95	52	20	11	10	7.7
24	80	21	25	86	186	37	81	42	19	17	10	7.7
25	59	25	23	84	265	37	71	36	18	28	9.6	7.3
26	29	19	22	72	490	35	62	33	17	20	11	8.4
27	22	19	20	69	238	38	56	30	16	15	10	27
28	18	17	19	159	152	40	52	29	16	45	10	12
29	16	17	18	138	119	62	49	28	18	100	9.6	260
30	14	15	25	103	------	65	45	39	23	200	8.8	638
31	15	------	27	82	------	56	------	131	------	90	8.4	------
TOTAL	526.0	463	791	3,135	3,603	1,730	3,258	1,840	754	796.0	582.4	1,159.2
MEAN	17.0	15.4	25.5	101	124	55.8	109	59.4	25.1	25.7	18.8	38.6
MAX	80	32	59	278	490	100	707	204	48	200	70	638
MIN	7.0	10	13	24	49	35	34	28	16	8.0	8.4	7.3
CFSM	.47	.42	.70	2.78	3.42	1.54	3.00	1.64	.69	.71	.52	1.06
IN.	.54	.47	.81	3.21	3.69	1.77	3.34	1.89	.77	.82	.60	1.19

CAL YR 1971 TOTAL 17,868.0 MEAN 49.0 MAX 771 MIN 7.0 CFSM 1.35 IN 18.31
WTR YR 1972 TOTAL 18,637.6 MEAN 50.9 MAX 707 MIN 7.0 CFSM 1.40 IN 19.10

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-13	0845	5.49	657	08-02	Unknown	5.85*	805
02-26	1445	5.79	776	09-30	1030	6.48	1,220
04-12	1145	6.91	1,630				

*Peak stage from magnet

Note.--No gage-height record July 6 to Aug. 8.

03490500 Holston River at Surgoinsville, Tenn.

LOCATION.--Lat 36°28'19", long 82°50'50", Hawkins County, on right bank 1,500 ft upstream from Surgoinsville Creek and county bridge at Surgoinsville, 9.8 miles upstream from Big Creek, and at mile 118.8. Records include flow of Surgoinsville Creek.

DRAINAGE AREA.--2,874 sq mi, includes that of Surgoinsville Creek.

PERIOD OF RECORD.--October 1940 to current year. Prior to April 1941 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,088.46 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 3,557 cfs (16.81 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 22,100 cfs Feb. 26 (gage height, 9.04 ft); minimum, 948 cfs Sept. 24.
Period of record: Maximum discharge, 59,600 cfs Feb. 18, 1944 (gage height, 17.48 ft); minimum, 470 cfs Oct. 21, 1941.
Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 59,300 cfs Mar. 13, 1963 (gage height, 17.13 ft).

REMARKS.--Records fair. Flow partly regulated by four reservoirs (see p. 122).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,030	2,360	3,350	4,650	6,130	9,440	2,110	1,990	3,300	3,420	8,580	3,890
2	3,890	3,640	3,330	4,030	5,810	9,530	2,740	3,570	3,380	3,260	5,080	2,640
3	2,080	3,910	3,400	6,410	5,150	10,600	1,970	5,240	3,270	2,300	6,630	1,040
4	1,090	5,810	5,150	4,800	6,330	8,960	3,910	7,850	3,160	2,710	6,470	1,150
5	1,920	6,190	4,600	10,500	6,030	7,630	5,810	9,020	3,800	2,670	4,800	1,190
6	2,970	5,050	2,150	11,900	5,810	8,670	1,840	6,190	5,300	3,540	2,820	1,720
7	2,950	4,480	3,050	7,200	4,030	7,310	2,580	4,490	4,710	3,940	2,620	3,420
8	2,460	8,820	4,680	3,820	6,000	6,860	8,530	4,790	3,740	3,530	4,100	3,570
9	2,010	4,700	3,570	3,440	4,310	7,570	8,760	4,260	4,160	3,300	3,570	4,100
10	1,250	4,850	4,140	4,550	3,710	5,460	5,050	4,700	3,790	2,370	2,990	2,820
11	2,460	4,750	4,880	5,310	2,930	4,550	4,700	4,080	2,910	4,560	2,740	1,870
12	3,400	3,660	5,590	4,290	3,140	2,520	8,670	3,850	2,510	4,240	3,030	3,820
13	2,800	2,970	4,750	3,750	7,000	2,520	15,400	1,920	3,410	3,290	2,380	3,030
14	3,640	1,290	2,590	8,010	9,710	3,240	11,100	2,220	2,680	3,370	2,720	4,070
15	3,070	1,560	5,230	9,050	6,520	2,970	13,600	3,130	2,160	2,460	3,330	5,410
16	1,170	2,420	5,080	7,890	6,270	2,820	11,200	4,020	2,920	2,540	4,190	3,730
17	1,230	4,260	4,530	5,670	7,060	4,480	9,380	3,990	3,390	2,380	5,460	2,480
18	1,260	1,800	6,830	4,800	4,190	3,800	8,000	4,700	3,330	4,720	4,720	1,360
19	2,540	2,840	4,050	4,430	7,540	2,240	8,240	5,130	2,950	5,570	2,950	2,220
20	3,370	5,410	2,950	4,410	6,300	2,200	6,240	4,160	5,370	4,360	7,280	3,030
21	2,950	3,870	4,460	5,390	5,460	1,820	7,630	2,030	7,340	4,430	4,680	3,530
22	3,570	5,050	4,310	10,700	3,730	1,900	5,780	2,350	11,600	3,010	5,920	2,800
23	3,420	5,360	4,100	7,510	4,750	2,700	3,440	5,590	7,380	3,050	6,020	1,870
24	3,730	4,480	3,420	6,080	6,360	4,550	3,800	7,990	6,060	3,220	6,220	986
25	5,360	2,760	3,240	5,590	14,100	4,100	5,080	6,600	5,930	3,440	6,300	1,560
26	5,030	2,910	3,420	6,780	21,000	4,260	6,240	5,980	3,960	2,800	5,000	2,400
27	6,190	3,960	2,440	5,390	19,200	3,530	5,150	5,580	3,340	4,170	3,310	4,140
28	5,620	7,080	3,550	7,250	16,400	5,230	4,780	4,000	3,450	3,480	1,350	4,240
29	5,130	1,750	4,700	13,300	12,400	3,160	3,510	3,780	4,420	2,860	3,800	5,180
30	3,530	2,400	3,890	10,100	------	3,910	2,720	4,370	3,640	4,360	4,220	11,500
31	2,440	------	4,220	6,970	------	2,800	------	7,750	------	5,100	4,500	------
TOTAL	98,560	120,390	125,650	203,970	217,370	151,330	187,960	145,320	127,360	108,450	137,780	94,766
MEAN	3,179	4,013	4,053	6,580	7,496	4,882	6,265	4,688	4,245	3,498	4,445	3,159
MAX	6,190	8,820	6,830	13,300	21,000	10,600	15,400	9,020	11,600	5,570	8,580	11,500
MIN	1,090	1,290	2,150	3,440	2,930	1,820	1,840	1,920	2,160	2,300	1,350	986
(†)	-15,300	-55,600	-39,900	+48,200	+53,700	+30,300	+57,200	+18,700	-12,400	-31,500	-35,300	-28,000
MEAN‡	2,686	2,160	2,766	8,135	9,347	5,859	8,172	5,291	3,832	2,482	3,306	2,226
CFSM‡	.93	.75	.96	2.83	3.25	2.04	2.84	1.84	1.33	.86	1.15	.77
IN.‡	1.08	.84	1.11	3.26	3.51	2.35	3.17	2.12	1.49	1.00	1.33	.86

CAL YR 1971 TOTAL 1,286,130 MEAN 3,524 MAX 20,600 MIN 1,010 MEAN‡ 4,066 CFSM‡ 1.41 IN.‡ 19.20
WTR YR 1972 TOTAL 1,718,906 MEAN 4,696 MAX 21,000 MIN 986 MEAN‡ 4,669 CFSM‡ 1.62 IN.‡ 22.11

† Change in contents, in cfs days, in South Holston, Watauga, Boone, and Fort Patrick Henry Lakes, furnished by Tennessee Valley Authority.

‡ Adjusted for change in contents in lakes or reservoirs listed above.

03491000 Big Creek near Rogersville, Tenn.

LOCATION.--Lat 36°25'34" long 82°57'07", Hawkins County, on left bank 300 ft upstream from county bridge, 2.0 miles upstream from mouth, and 3 miles northeast of Rogersville.

DRAINAGE AREA.--47.3 sq mi.

PERIOD OF RECORD.--April 1941 to June 1949. Occasional low-flow measurements, water years 1950-55, 1957. Annual maximums, water years 1955-57. October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,128.9 ft above mean sea level (city of Rogersville construction plans for pumping station). Dec. 7, 1954, to Sept. 30, 1957, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--22 years (1941-48, 1957-72), 56.8 cfs (16.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,420 cfs Apr. 12 (gage height, 6.02 ft); minimum, 6.5 cfs Sept. 13, 14 (gage height, 1.51 ft).
Period of record: Maximum discharge, 5,760 cfs Mar. 12, 1963 (gage height, 9.40 ft), from rating curve extended above 3,000 cfs on basis of contracted-opening measurement of peak flow; maximum gage height, 10.68 ft Dec. 30, 1969, backwater from log jam; minimum discharge observed, 1.3 cfs Sept. 23, 1955; minimum gage height, 1.32 ft Sept. 19, Oct. 2, 1941.

REMARKS.--Records good. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1436: 1945.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	47	24	48	92	114	73	40	33	17	104	7.5
2	21	44	22	485	83	116	63	39	30	15	67	7.3
3	19	78	23	246	92	204	57	64	28	14	100	7.3
4	17	62	28	225	100	165	54	145	26	15	51	7.4
5	19	49	54	726	81	136	49	81	25	24	36	10
6	116	44	73	302	76	109	46	60	31	22	28	9.8
7	47	40	192	186	74	97	49	50	50	16	25	8.7
8	32	36	138	138	64	101	303	51	26	14	29	8.0
9	28	34	86	168	61	86	131	64	24	13	23	7.8
10	27	32	69	549	58	79	92	49	30	12	22	7.4
11	23	30	57	296	55	72	94	42	27	12	19	7.1
12	21	28	51	197	58	66	980	38	22	11	17	6.9
13	19	27	100	242	406	62	393	39	20	11	15	6.7
14	18	25	76	428	192	61	307	221	19	10	14	6.9
15	17	24	65	239	134	55	296	209	18	10	13	7.4
16	129	23	61	163	103	64	190	141	18	11	12	8.7
17	48	22	56	129	100	79	143	93	27	11	12	8.4
18	33	22	56	109	105	66	112	70	38	14	11	9.0
19	28	22	51	97	140	62	94	58	22	11	11	9.4
20	24	23	163	89	109	56	83	55	28	11	11	8.6
21	22	21	159	292	91	53	77	48	49	9.6	10	8.2
22	1,000	20	100	192	94	70	117	268	28	17	9.7	8.0
23	423	19	78	131	92	67	121	264	22	14	9.6	8.1
24	504	23	67	118	156	61	90	118	19	23	9.3	7.9
25	213	43	59	129	365	57	75	80	17	105	9.1	7.9
26	142	32	53	116	390	55	65	61	16	26	10	7.8
27	105	30	47	103	253	55	57	50	15	17	9.1	8.7
28	82	29	43	229	173	60	51	44	16	16	8.5	11
29	68	28	39	213	136	84	48	40	19	32	8.2	39
30	59	28	46	146	------	98	44	39	21	289	7.8	160
31	51	------	59	112	------	81	------	37	------	153	7.6	------
TOTAL	3,378	985	2,195	6,843	3,933	2,591	4,354	2,658	764	975.6	718.9	426.9
MEAN	109	32.8	70.8	221	136	83.6	145	85.7	25.5	31.5	23.2	14.2
MAX	1,000	78	192	726	406	204	980	268	50	289	104	160
MIN	17	19	22	48	55	53	44	37	15	9.6	7.6	6.7
CFSM	2.30	.69	1.50	4.67	2.88	1.77	3.07	1.81	.54	.67	.49	.30
IN.	2.66	.77	1.73	5.38	3.09	2.04	3.42	2.09	.60	.77	.57	.34

CAL YR 1971 TOTAL 26,253.7 MEAN 71.9 MAX 1,000 MIN 7.0 CFSM 1.52 IN 20.65
WTR YR 1972 TOTAL 29,822.4 MEAN 81.5 MAX 1,000 MIN 6.7 CFSM 1.72 IN 23.45

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-22	1415	6.00	2,400	04-12	1715	6.02	2,420

03491300 Beech Creek at Kepler, Tenn.

LOCATION.--Lat 36°24'06", long 82°53'09", Hawkins County, on upstream right wingwall of county road bridge, at Kepler, 5.9 miles east of intersection of U. S. Highway 11W and Burem Road, 6.6 miles upstream from mouth.

DRAINAGE AREA.--47.0 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-62, 1964-65. October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,107.83 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 45.4 cfs (13.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,460 cfs Apr. 12 (gage height, 9.90 ft); minimum, 2.5 cfs Sept. 13, 14, 15.
Period of record: Maximum discharge, 2,900 cfs Dec. 30, 1969 (gage height, 12.60 ft); minimum, 1.1 cfs Sept. 18, 1970.
Maximum stage known, about 14.6 ft Mar. 12, 1963, from floodmarks. A discharge of 0.97 cfs was measured on Sept. 17, 1964.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	14	17	43	72	84	65	34	22	9.3	46	2.9
2	5.8	14	14	316	65	91	55	34	17	8.[illegible]	33	2.8
3	5.5	33	17	172	95	143	50	49	16	7.4	24	3.0
4	5.3	27	45	196	93	98	47	149	15	17	31	4.8
5	18	19	75	554	61	92	43	59	14	35	32	6.2
6	69	17	71	220	60	72	41	46	40	13	15	5.4
7	19	16	74	125	69	66	49	42	33	9.7	13	3.7
8	11	14	54	84	60	114	201	45	16	8.3	13	3.1
9	9.2	13	41	150	53	77	75	48	14	7.4	11	3.3
10	9.6	13	36	387	49	66	60	40	24	7.1	10	3.0
11	8.0	11	31	202	48	58	73	37	15	6.8	8.6	2.4
12	7.0	11	46	132	69	54	799	35	12	6.2	7.7	2.7
13	6.5	10	91	122	475	50	320	38	12	5.9	7.1	2.7
14	6.3	9.6	45	233	165	50	168	142	11	5.9	8.0	2.5
15	6.0	9.2	37	127	106	45	122	126	10	5.9	6.5	2.7
16	8.3	9.2	31	85	78	48	94	72	11	9.3	5.9	2.8
17	7.3	8.9	28	68	106	51	73	55	12	12	5.6	2.9
18	6.5	8.6	24	55	132	45	60	44	12	7.7	5.4	3.3
19	6.0	9.2	20	50	154	43	54	41	10	6.5	5.4	3.3
20	5.8	12	68	49	90	41	49	40	20	5.6	5.2	3.0
21	5.8	9.6	104	244	71	40	49	37	34	10	4.8	2.8
22	283	8.6	70	124	67	88	85	67	14	63	4.3	2.8
23	254	8.0	47	97	61	61	66	59	11	157	4.1	2.8
24	255	15	40	78	179	51	54	40	10	82	4.3	2.8
25	88	42	33	109	329	48	49	35	9.0	32	5.2	2.7
26	49	23	28	80	548	46	44	32	8.6	20	4.6	2.8
27	41	24	24	72	258	55	41	29	8.0	12	4.1	4.3
28	25	24	21	285	147	70	40	25	8.6	14	3.5	5.6
29	20	23	20	182	104	138	38	24	10	88	3.4	38
30	18	21	73	122	------	105	36	29	12	162	3.1	163
31	15	------	77	89	------	77	------	36	------	55	3.0	------
TOTAL	1,280.2	476.9	1,402	4,852	3,864	2,167	3,000	1,589	461.2	889.0	337.8	294.1
MEAN	41.3	15.9	45.2	157	133	69.9	100	51.3	15.4	28.7	10.9	9.80
MAX	283	42	104	554	548	143	799	149	40	162	46	163
MIN	5.3	8.0	14	43	48	40	36	24	8.0	5.6	3.0	2.4
CFSM	.88	.34	.96	3.34	2.83	1.49	2.13	1.09	.33	.61	.23	.21
IN.	1.01	.38	1.11	3.84	3.06	1.72	2.37	1.26	.37	.70	.27	.23

CAL YR 1971 TOTAL 18,895.4 MEAN 51.8 MAX 612 MIN 3.8 CFSM 1.10 IN 14.96
WTR YR 1972 TOTAL 20,613.2 MEAN 56.3 MAX 799 MIN 2.4 CFSM 1.20 IN 16.32

PEAK DISCHARGE (BASE, 1,200 CFS).--Apr. 12 (1700) 1,460 cfs (9.90 ft).

03494000 Holston River near Jefferson City, Tenn.

LOCATION.--Lat 36°10'03", long 83°30'10", Jefferson County, on left bank 500 ft upstream from bridge on State Highway 92, 0.2 mile downstream from Cherokee Dam, 2.5 miles upstream from Mill Spring Creek, 3 miles north of Jefferson City, and at mile 52.0.

DRAINAGE AREA.--3,429 sq mi.

PERIOD OF RECORD.--October 1936 to current year. Prior to April 1937 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above mean sea level. Apr. 20, 1937 to June 30, 1941, on right bank at datum 20.02 ft higher.

AVERAGE DISCHARGE.--36 years, 4,217 cfs (16.70 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 17,300 cfs Mar. 13 (gage height, 29.22 ft); minimum, 48 cfs Oct. 4 (gage height, 19.22 ft); minimum daily, 58 cfs Oct. 3, Jan. 4.
Period of record: Maximum discharge, 58,700 cfs Aug. 15, 1940 (gage height, 41.82 ft, present datum); minimum, 2.2 cfs Dec. 8, 1941, discharge measurement; minimum daily, 2.6 cfs Dec. 25, 1941.
Maximum discharge since closure of Cherokee Dam on Dec. 5, 1941, 25,900 cfs Feb. 11, 1957 (gage height, 32.19 ft).

REMARKS.--Records good. Flow completely regulated by five reservoirs (see p. 122).

REVISIONS (WATER YEARS).--WSP 923: 1939-40(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,200	8,170	8,360	5,650	6,600	17,300	70	2,360	8,510	2,340	2,260	9,700
2	3,180	7,370	8,670	188	6,300	17,200	68	2,320	8,730	72	3,510	5,060
3	58	7,260	6,060	777	6,600	16,000	73	5,160	4,970	4,490	5,800	2,070
4	7,220	8,440	5,410	58	5,600	13,500	2,270	633	3,560	4,560	5,850	4,660
5	5,340	7,240	5,470	4,720	6,100	11,600	2,080	1,230	8,630	4,630	2,350	8,690
6	5,460	4,430	5,070	4,180	5,900	9,450	67	76	8,570	3,710	90	8,890
7	4,780	2,700	69	6,730	5,400	7,850	2,670	71	7,940	3,580	6,790	9,060
8	4,900	5,240	380	9,600	6,200	7,100	8,930	2,130	8,070	2,030	6,690	8,430
9	3,830	4,840	4,120	11,900	5,200	6,520	162	4,430	8,220	80	5,800	6,970
10	2,410	4,880	6,140	11,300	3,600	5,870	8,160	4,490	2,640	5,930	5,840	4,640
11	6,760	6,740	8,170	8,480	4,000	4,260	1,940	7,050	2,320	6,110	7,470	8,940
12	6,360	7,330	8,310	6,710	3,100	3,230	987	3,310	6,830	6,980	6,410	9,510
13	5,180	5,840	8,470	6,000	3,800	4,370	77	83	7,150	6,850	3,630	8,460
14	4,740	6,450	9,170	8,800	3,500	2,400	69	70	7,400	7,780	8,770	9,430
15	4,880	10,000	9,150	8,100	4,500	1,750	70	74	7,670	5,090	7,680	9,720
16	1,630	9,210	9,430	6,900	7,200	2,520	71	75	7,780	1,250	9,010	7,480
17	2,360	8,420	8,610	8,400	2,800	1,160	74	82	2,590	7,790	10,200	4,990
18	7,240	9,210	10,200	5,900	5,700	1,050	80	80	144	8,200	10,300	8,490
19	4,700	6,910	8,070	7,500	8,500	66	1,260	81	7,710	8,310	6,780	8,540
20	7,180	8,650	7,950	6,500	3,000	2,470	74	84	6,840	7,590	2,400	9,280
21	5,080	8,420	8,170	5,600	3,000	1,250	77	81	4,440	8,140	8,540	10,200
22	2,160	8,950	9,510	5,200	4,700	425	79	5,760	3,160	7,750	9,920	8,250
23	3,850	9,950	8,740	5,700	6,400	3,000	79	7,400	3,240	5,760	10,100	8,000
24	4,490	7,330	9,120	5,700	6,800	3,260	80	6,580	6,130	7,460	8,810	3,490
25	961	7,480	7,680	6,800	12,700	1,520	80	6,560	83	8,150	9,220	7,820
26	2,990	8,030	8,070	5,800	15,800	75	82	6,590	6,220	6,640	7,300	8,530
27	2,790	10,700	7,240	7,200	16,800	411	87	7,920	6,660	7,620	2,220	9,350
28	4,040	6,240	9,830	6,000	17,300	73	87	8,310	6,180	215	8,730	9,560
29	6,580	7,340	7,680	7,700	17,300	70	88	8,940	5,880	70	8,990	5,840
30	8,140	7,410	7,530	7,700	------	140	84	8,850	2,880	77	9,920	3,410
31	68	------	10,400	9,700	------	70	------	7,100	------	269	9,740	------
TOTAL	136,557	221,180	231,249	201,493	204,400	145,960	30,075	107,980	171,147	149,523	211,120	227,460
MEAN	4,405	7,373	7,460	6,500	7,048	4,708	1,003	3,483	5,705	4,823	6,810	7,582
MAX	8,140	10,700	10,400	11,900	17,300	17,300	8,930	8,940	8,730	8,310	10,300	10,200
MIN	58	2,700	69	58	2,800	66	67	70	83	70	90	2,070
(†)	-35,700	-150,700	-120,300	+116,800	+114,300	+79,500	+266,900	+92,900	-35,200	-55,800	-98,500	-152,800
MEAN‡	3,253	2,349	3,579	10,270	10,990	7,273	9,899	6,480	4,532	3,023	3,633	2,489
CFSM‡	.95	.69	1.04	3.00	3.21	2.12	2.89	1.89	1.32	.88	1.06	.73
IN.‡	1.09	.76	1.20	3.45	3.46	2.45	3.22	2.18	1.47	1.02	1.22	.81

CAL YR 1971 TOTAL 1,472,176 MEAN 4,033 MAX 10,700 MIN 43 MEAN‡ 4,838 CFSM‡ 1.41 IN.‡ 19.15
WTR YR 1972 TOTAL 2,038,144 MEAN 5,569 MAX 17,300 MIN 58 MEAN‡ 5,627 CFSM‡ 1.64 IN.‡ 22.34

† Change in contents, in cfs days, in South Holston, Watauga, Boone, Fort Patrick Henry, and Cherokee Lakes, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03495500 Holston River near Knoxville, Tenn.

LOCATION.--Lat 36°00'56", long 83°49'54", Knox County, on right bank at bridge on U. S. Highway 70, at Knoxville city limits, and 5.5 miles upstream from confluence with French Broad River.

DRAINAGE AREA.--3,747 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Published as "at Strawberry Plains" 1930-48. Records published for both sites June 1945 to September 1948. Gage-height records collected at Strawberry Plains from December to March 1885-97 are contained in reports of the U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 815.84 ft above mean sea level. Oct. 1, 1930, to June 8, 1931, nonrecording gage, and June 9, 1931, to Sept. 30, 1948, water-stage recorder, at site 12 miles upstream at datum 22.55 ft higher. June 19, 1945, to Oct. 4, 1960, 300 ft upstream at present datum.

AVERAGE DISCHARGE.--42 years, 4,512 cfs (16.35 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 19,300 cfs Feb. 26 (gage height, 8.60 ft); minimum, 211 cfs Aug. 1, minimum gage height, 1.56 ft Nov. 1, minimum daily discharge, 254 cfs Aug. 1.
Period of record: Maximum discharge, 62,900 cfs Mar. 28, 1935 (gage height, 20.20 ft, site and datum then in use); minimum, 44 cfs Dec. 12, 21, 22, 1941 (gage height, -0.58 ft, site and datum then in use); minimum daily, 44 cfs Dec. 21, 22, 1941.
Maximum discharge since closure of Cherokee Dam on Dec. 5, 1941, 31,400 cfs Mar. 22, 1963 (gage height, 11.20 ft).
Maximum stage since at least 1791, about 41 ft in March 1867, from profile by Tennessee Valley Authority. Flood in 1901 reached a stage of about 32 ft, from reports of Tennessee Valley Authority.

REMARKS.--Records fair. Flow regulated by five reservoirs (see p. 122).

REVISIONS (WATER YEARS).--WSP 893: 1935(M). WSP 1336: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,150	1,990	8,850	11,100	9,630	17,900	663	460	8,340	3,610	254	9,680
2	5,540	7,130	8,980	3,980	6,440	18,200	580	2,370	8,930	3,150	2,070	7,590
3	3,150	7,490	8,040	1,730	6,990	18,500	520	4,140	6,890	1,010	3,570	4,530
4	1,450	8,880	5,610	1,890	7,120	14,400	1,010	4,490	5,340	4,270	5,670	2,010
5	6,650	7,730	6,100	3,220	7,640	12,500	2,300	1,090	5,340	4,780	5,910	5,670
6	5,060	6,290	6,020	5,600	6,360	11,600	1,890	1,480	8,960	4,750	2,250	8,710
7	5,430	5,390	4,880	8,030	5,200	8,990	520	652	8,170	3,980	773	8,730
8	5,060	3,460	980	8,990	8,460	6,580	5,340	590	8,060	3,870	6,530	8,450
9	4,880	4,900	778	10,100	5,390	9,290	6,400	2,120	8,310	2,320	6,550	7,510
10	4,420	4,180	4,480	11,700	5,190	6,300	1,800	5,670	7,360	652	5,770	6,450
11	2,930	6,530	6,790	10,700	4,650	5,460	6,810	4,690	3,250	5,340	6,450	5,650
12	6,720	8,330	10,300	9,630	4,370	4,670	7,590	6,270	2,890	6,270	6,920	9,620
13	6,240	7,440	8,250	6,010	4,220	3,030	4,090	3,230	7,280	7,100	6,600	8,150
14	4,640	4,340	8,620	9,500	5,810	5,290	1,530	1,290	7,670	7,100	5,100	9,320
15	4,460	8,100	10,200	9,850	3,740	2,850	1,070	1,290	7,730	7,280	7,890	9,530
16	5,210	9,730	9,290	8,900	7,180	2,000	898	839	7,950	5,310	8,400	7,920
17	1,990	10,000	8,670	8,770	7,040	3,170	795	663	7,410	2,120	10,400	6,550
18	3,600	8,120	10,600	7,170	3,310	1,640	707	610	3,070	8,170	10,200	5,940
19	6,190	7,220	10,700	6,610	9,790	1,300	839	590	1,230	8,430	7,920	8,170
20	5,410	8,980	6,580	6,720	6,770	817	1,450	600	7,540	7,750	6,180	9,010
21	6,960	6,790	7,730	7,630	2,730	2,250	641	610	6,890	8,340	3,370	10,400
22	4,120	10,500	9,140	6,700	3,520	1,800	1,160	910	4,930	7,780	10,200	8,510
23	2,560	10,500	10,200	6,100	6,570	762	1,030	7,020	3,760	7,200	9,860	7,460
24	4,040	7,970	7,990	6,370	7,410	3,150	795	7,620	3,920	6,470	8,990	6,580
25	4,360	8,040	9,500	6,500	9,320	3,410	663	6,250	6,420	8,120	9,100	4,530
26	1,340	8,280	7,760	8,900	18,000	1,830	600	7,280	958	7,870	8,170	8,370
27	3,130	7,300	6,770	6,740	17,200	982	550	7,230	6,500	7,120	6,270	9,210
28	4,000	10,300	8,690	7,890	18,200	1,040	510	8,870	7,020	7,200	3,090	8,930
29	4,530	6,620	12,200	6,880	18,000	1,190	490	8,570	7,200	411	9,440	7,200
30	6,100	6,480	4,640	9,260	------	817	480	10,300	6,500	308	9,270	5,840
31	5,860	------	9,550	8,170	------	729	------	6,630	------	281	9,740	------
TOTAL	143,180	219,010	238,888	231,340	226,250	172,447	53,721	114,424	185,818	158,362	202,907	226,220
MEAN	4,619	7,300	7,706	7,463	7,802	5,563	1,791	3,691	6,194	5,108	6,545	7,541
MAX	7,150	10,500	12,200	11,700	18,200	18,500	7,590	10,300	8,960	8,430	10,400	10,400
MIN	1,340	1,990	778	1,730	2,730	729	480	460	958	281	254	2,010
(†)	-35,700	-150,700	-120,300	+116,800	+114,300	+79,500	+266,900	+92,900	-35,200	-55,800	-98,500	-152,800
MEAN‡	3,467	2,277	3,825	11,230	11,740	8,127	10,690	6,688	5,021	3,308	3,368	2,447
CFSM‡	.93	.61	1.02	3.00	3.13	2.17	2.85	1.78	1.34	.88	.90	.65
IN.‡	1.07	.68	1.18	3.46	3.38	2.50	3.18	2.06	1.49	1.02	1.04	.73

CAL YR 1971 TOTAL 1,598,178 MEAN 4,379 MAX 12,500 MIN 291 MEAN‡5,183 CFSM‡ 1.38 IN.‡ 18.78
WTR YR 1972 TOTAL 2,172,567 MEAN 5,936 MAX 18,500 MIN 254 MEAN‡5,994 CFSM‡ 1.60 IN.‡ 21.78

† Change in contents, in cfs days, in South Holston, Watauga, Boone, Fort Patrick Henry, and Cherokee Lakes, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03497000 Tennessee River at Knoxville, Tenn.

LOCATION.--Lat 35°57'17", long 83°51'42", Knox County, on left bank 0.7 mile downstream from confluence of French Broad and Holston Rivers, 3.5 miles upstream from First Creek, 3.6 miles upstream from Gay Street Bridge at Knoxville, and at mile 651.4. Records include flow of First Creek.

DRAINAGE AREA.--8,934 sq mi, includes that of First Creek.

PERIOD OF RECORD.--October 1899 to current year. Prior to October 1918 monthly discharge only, published in WSP 1306 (daily discharges contained in Tennessee Division of Geology, Bulletin 34). Gage-height records collected in this vicinity since 1883 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 797.38 ft above mean sea level. Prior to Sept. 1, 1943, nonrecording gages or water-stage recorders at several sites within 4 miles of present site at various datums. Since Sept. 1, 1943, auxiliary water-stage recorder 6.3 miles downstream from base gage at same datum.

AVERAGE DISCHARGE.--73 years, 12,860 cfs, unadjusted.

EXTREMES.--Current year: Maximum discharge, 41,200 cfs Feb. 26; maximum gage height, 17.43 ft June 29; minimum daily discharge, 2,730 cfs Apr. 24; minimum gage height, 9.86 ft Jan. 4.

Period of record: Maximum discharge observed, 195,000 cfs Mar. 1, 1902 (gage height, 36.4 ft, site and datum then in use), from rating curve extended above 130,000 cfs; minimum daily, 1,010 cfs Mar. 28, 1954; minimum gage height, -1.7 ft Sept. 11, 1925, site and datum then in use.

Maximum discharge since completion of several upstream dams in Dec. 1941, 89,200 cfs Mar. 12, 1963.

Maximum stage since at least 1791, 45.0 ft Mar. 8, 1867, site and datum of gage at old city pumping plant, 3.2 miles downstream from base gage (discharge, 290,000 cfs, from rating curve extended above 130,000 cfs), from high-water profile by Corps of Engineers and Tennessee Valley Authority.

REMARKS.--Records good. Flow regulated by many lakes above station. Records of water temperatures (at auxiliary gage, Station No. 03497100) for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 583: 1902(M), 1904(m). WSP 853: Drainage area. WSP 1306: 1899-1918. WSP 1706: Maximum stage and discharge since at least 1791.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,500	14,000	19,200	20,600	21,000	37,000	6,520	6,890	12,400	10,700	6,230	18,400
2	15,000	20,000	15,500	11,200	14,800	37,500	5,750	10,300	20,000	6,430	10,600	15,200
3	6,660	22,200	16,100	9,730	16,500	32,000	7,440	14,500	16,700	6,390	13,700	7,310
4	7,950	24,600	11,500	10,900	17,900	29,600	7,980	7,550	9,080	13,700	14,700	5,090
5	14,600	22,300	10,300	17,300	17,900	24,800	10,700	5,510	15,700	16,100	14,600	11,200
6	14,800	21,800	17,100	24,200	13,800	24,400	7,010	6,370	20,800	16,900	7,640	15,600
7	14,300	21,200	14,300	25,500	12,500	19,200	4,250	4,230	19,700	15,600	9,380	16,000
8	12,600	20,300	8,240	26,300	13,000	17,600	10,800	7,520	19,600	12,600	16,800	15,700
9	11,600	20,700	9,850	27,500	14,400	19,500	13,700	9,800	20,400	7,330	17,200	15,600
10	9,140	19,900	17,100	32,200	12,900	14,900	6,160	12,200	16,100	8,780	15,000	11,200
11	9,710	20,800	24,200	31,700	11,800	14,000	13,600	12,400	5,900	16,300	16,000	8,540
12	14,100	22,500	27,900	28,500	11,400	11,500	16,700	13,500	9,570	18,300	17,000	18,900
13	14,800	21,900	27,200	24,800	12,000	9,150	14,400	6,770	16,000	18,400	13,600	18,000
14	11,400	16,900	25,700	20,400	13,400	13,100	9,960	4,360	10,000	18,200	15,800	20,600
15	12,600	19,500	27,200	28,900	11,000	9,930	9,090	8,680	17,300	17,600	19,000	20,500
16	13,700	22,700	26,200	27,200	15,000	5,450	7,780	9,720	19,300	11,300	20,200	18,600
17	6,010	24,000	24,400	26,400	14,800	10,600	8,720	7,960	16,900	10,600	22,600	10,500
18	9,010	20,500	25,300	24,600	7,140	4,310	8,550	10,500	8,220	20,600	22,700	12,200
19	15,100	19,600	27,000	23,500	20,700	3,960	10,000	9,530	11,100	20,900	19,500	19,400
20	12,600	20,800	22,200	21,800	15,700	5,870	9,510	9,440	18,600	26,000	12,600	20,100
21	15,200	20,400	23,400	22,200	8,880	7,110	8,670	10,600	22,300	21,500	10,200	20,800
22	14,400	24,300	24,200	19,900	13,900	5,760	5,340	13,500	23,700	20,500	22,900	20,100
23	12,900	22,700	24,200	18,400	18,000	4,730	4,600	18,900	21,300	17,300	22,300	16,100
24	11,600	18,700	22,600	18,800	18,800	7,080	2,730	19,700	15,200	16,400	22,100	14,200
25	13,400	18,700	25,600	18,000	23,400	6,300	5,170	20,000	16,100	19,400	21,600	11,700
26	11,300	19,400	22,500	19,600	37,100	4,810	4,140	20,100	9,160	19,100	19,800	20,300
27	13,000	18,700	21,100	15,300	38,900	5,300	3,940	19,600	17,100	18,100	12,500	21,500
28	12,700	21,500	19,900	19,100	35,500	6,520	4,110	21,000	17,300	14,700	9,200	21,600
29	14,100	15,100	24,100	17,700	37,700	7,470	4,460	12,700	19,600	3,670	18,200	15,600
30	16,200	15,700	11,700	20,400	------	6,840	4,570	23,600	16,300	4,110	18,600	16,800
31	13,700	------	19,200	19,600	------	6,880	------	17,900	------	4,090	18,800	------
TOTAL	396,560	611,600	637,400	680,230	527,820	416,620	236,650	375,230	497,830	451,660	500,050	477,340
MEAN	12,860	20,390	20,560	21,940	18,200	13,440	7,888	12,100	16,590	14,570	16,130	15,910
MAX	16,700	24,600	27,900	32,200	38,900	37,500	16,700	23,600	23,700	26,000	22,900	21,600
MIN	6,010	14,000	8,240	9,730	7,140	3,860	2,730	4,230	5,900	3,670	6,230	5,090

CAL YR 1971 TOTAL 4,618,830 MEAN 12,650 MAX 27,900 MIN 1,840
WTR YR 1972 TOTAL 5,811,040 MEAN 15,890 MAX 38,900 MIN 2,730

03497300 Little River above Townsend, Tenn.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°39'52", long 83°42'41", Blount County, in Great Smoky Mountains National Park, on left bank along State Highway 73, 0.3 mile above Rush Branch, 0.4 mile southeast of park entrance, 2.2 miles southeast of Townsend, and at mile 35.3.

DRAINAGE AREA.--106 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,106.92 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 277 cfs (35.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,160 cfs Feb. 26 (gage height, 4.88 ft); minimum, 64 cfs Sept. 26 (gage height, 1.52 ft). Period of record: Maximum discharge, 14,300 cfs Mar. 26, 1965 (gage height, 11.65 ft); minimum, 32 cfs Oct. 30, 31, 1963, Oct. 7-10, 1970; minimum gage height, 1.26 ft Sept. 17, 18, 1968.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	168	138	255	355	534	490	212	154	398	350	79
2	96	174	133	828	342	638	427	202	141	329	369	77
3	94	325	420	760	418	774	379	466	133	285	350	75
4	90	267	430	854	403	611	379	583	126	293	278	83
5	105	235	365	1,130	350	556	342	427	118	1,240	246	249
6	143	219	398	838	346	466	316	355	121	801	219	138
7	96	222	696	616	365	423	300	308	146	534	246	107
8	85	193	478	480	325	517	329	312	114	398	452	98
9	92	183	400	517	304	456	281	316	103	346	293	107
10	96	180	358	1,230	285	423	267	278	114	300	281	96
11	86	168	322	1,310	267	384	578	249	103	253	246	85
12	83	160	294	948	267	346	594	228	92	222	225	85
13	70	157	298	934	600	325	501	246	88	199	196	79
14	70	146	263	992	523	369	432	567	87	209	177	74
15	90	143	253	758	485	312	374	427	81	193	160	74
16	500	138	263	578	452	374	342	346	79	180	146	71
17	250	131	297	495	471	418	304	300	105	196	141	138
18	180	128	287	433	452	379	274	270	87	196	131	146
19	140	128	268	431	427	365	253	253	77	209	128	105
20	120	136	461	372	369	350	242	260	136	249	160	87
21	100	123	448	463	342	355	267	274	466	180	123	77
22	200	116	384	439	408	611	829	312	209	199	114	75
23	250	111	334	430	418	476	600	304	163	242	109	77
24	230	140	300	391	481	418	466	285	138	202	111	71
25	260	143	273	398	829	389	389	253	123	180	107	66
26	250	123	252	346	1,460	346	333	228	111	171	114	64
27	248	140	232	327	1,150	427	293	209	103	160	116	163
28	225	130	227	523	780	539	267	190	545	228	100	174
29	202	140	222	550	611	720	246	177	927	423	92	655
30	187	151	247	466	------	684	225	168	611	550	85	1,400
31	174	------	296	403	------	594	------	174	------	452	81	------
TOTAL	4,910	4,916	10,037	19,495	14,285	14,579	11,319	9,179	5,601	10,017	5,946	4,875
MEAN	158	164	324	629	493	470	377	296	187	323	192	163
MAX	500	325	696	1,310	1,460	774	829	583	927	1,240	452	1,400
MIN	70	111	133	255	267	312	225	168	77	160	81	64
CFSM	1.49	1.55	3.06	5.93	4.65	4.43	3.56	2.79	1.76	3.05	1.81	1.54
IN.	1.72	1.73	3.52	6.84	5.01	5.12	3.97	3.22	1.97	3.52	2.09	1.71

CAL YR 1971 TOTAL 130,494 MEAN 358 MAX 4,520 MIN 70 CFSM 3.38 IN 45.80
WTR YR 1972 TOTAL 115,161 MEAN 315 MAX 1,460 MIN 64 CFSM 2.97 IN 40.41

PEAK DISCHARGE (BASE, 3,100 CFS).--No peak above base.

03498500 Little River near Maryville, Tenn.

LOCATION.--Lat 35°47'10", long 83°53'04", Blount County, on right bank on downstream side of bridge on U. S. Highway 411, 0.8 mile downstream from Crooked Creek, 5.0 miles east of Maryville, and at mile 17.3.

DRAINAGE AREA.--269 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 850.00 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 524 cfs (26.45 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,240 cfs Sept. 30 (gage height, 12.20 ft); minimum, 103 cfs Sept. 25 (gage height, 6.51 ft). Period of record: Maximum discharge, 32,200 cfs Mar. 12, 1963 (gage height, 24.20 ft), from rating curve extended above 20,000 cfs on basis of area-velocity study and road overflow computation; minimum, 32 cfs Aug. 27, 1956, minimum gage height, 6.25 ft Sept. 24, 1970; minimum daily, 44 cfs Sept. 19, 1954.
Flood of Feb. 25, 1875, reached a stage of 31 ft (discharge, 50,000 cfs) and flood of Apr. 1, 1896, reached a stage of 26 ft (discharge, 36,000 cfs) from reports by Tennessee Valley Authority.

REMARKS.--Records good. Diurnal fluctuation at low flow caused by small mills above station. The town of Maryville diverted an average of about 2.5 cfs for municipal supply, 300 ft above the gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	241	201	462	595	908	918	398	297	688	565	132
2	173	246	191	2,130	1,350	1,040	775	384	271	519	516	129
3	165	538	878	1,860	1,050	1,570	684	1,050	255	468	531	126
4	158	416	899	1,660	811	1,140	648	1,230	240	450	413	132
5	162	334	585	2,820	705	1,070	601	858	230	1,860	355	254
6	279	308	545	2,010	1,090	905	549	678	241	1,330	314	240
7	193	308	1,320	1,270	1,030	817	527	579	292	834	346	166
8	162	279	924	947	1,820	1,040	547	545	230	614	790	145
9	158	260	697	1,060	2,130	907	481	560	209	506	507	144
10	177	255	670	2,700	1,320	814	448	487	206	468	544	147
11	162	241	575	2,810	994	728	981	445	213	384	413	134
12	148	228	562	1,940	824	656	1,080	408	188	336	356	126
13	144	219	687	1,810	722	604	862	420	180	303	313	122
14	137	210	495	2,440	793	790	731	1,130	174	304	279	117
15	141	201	452	1,630	951	606	634	1,240	166	279	254	114
16	868	193	454	1,150	826	675	574	809	161	280	233	113
17	405	189	577	944	732	790	520	643	335	265	218	192
18	303	181	621	809	668	689	469	549	302	306	207	271
19	260	185	529	790	613	645	434	490	184	266	198	187
20	228	201	789	708	569	601	413	485	210	355	221	144
21	214	181	816	960	529	575	462	524	620	269	200	129
22	367	169	669	852	492	946	1,580	509	352	234	181	123
23	449	162	567	808	466	783	1,390	532	262	329	175	125
24	372	193	508	719	438	691	916	529	221	282	182	119
25	460	255	460	933	415	655	734	453	197	331	179	114
26	422	193	422	727	402	648	626	409	181	289	179	117
27	372	223	386	665	398	995	549	374	169	237	166	174
28	329	219	362	1,470	377	1,280	493	343	1,320	315	171	334
29	293	205	364	1,520	361	1,660	455	327	2,280	570	148	1,180
30	269	228	462	1,090	------	1,440	423	314	1,210	831	140	3,680
31	255	------	615	857	------	1,120	------	325	------	695	135	------
TOTAL	8,402	7,261	18,282	42,551	23,471	27,788	20,504	18,027	11,396	15,197	9,429	9,230
MEAN	271	242	590	1,373	809	896	683	582	380	490	304	308
MAX	868	538	1,320	2,820	2,130	1,660	1,580	1,240	2,280	1,860	790	3,680
MIN	137	162	191	462	361	575	413	314	161	234	135	113
CFSM	1.01	.90	2.19	5.10	3.01	3.33	2.54	2.16	1.41	1.82	1.13	1.15
IN.	1.16	1.00	2.53	5.88	3.25	3.84	2.84	2.49	1.58	2.10	1.30	1.28

CAL YR 1971 TOTAL 244,220 MEAN 669 MAX 7,570 MIN 137 CFSM 2.49 IN 33.77
WTR YR 1972 TOTAL 211,538 MEAN 578 MAX 3,680 MIN 113 CFSM 2.15 IN 29.25

PEAK DISCHARGE (BASE, 6,000 CFS).--No peak above base.

03518300 Little Tennessee River below Chilhowee Dam, Tenn.

LOCATION.--Lat 35°32'48", long 84°03'50", Blount County, on right bank on U. S. Highway 129, at Tallassee, 100 ft upstream from Cochran Creek, 0.8 mile downstream from Chilhowee Dam, 20 miles south of Maryville, and at mile 32.8. Records include flow of Cochran Creek.

DRAINAGE AREA.--1,987 sq mi, including Cochran Creek.

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

GAGE.--Water-stage recorder. Datum of gage is 799.58 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 4,749 cfs (32.46 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 11,800 cfs Jan. 15 (gage height, 11.15 ft); minimum, 1,060 cfs Apr. 6 (gage height, 6.78 ft); minimum daily, 1,330 cfs Apr. 30.
Period of record: Maximum discharge, 32,000 cfs Mar. 26, 1965 (gage height, 16.04 ft); minimum, 24 cfs Aug. 30, 1964 (gage height, 5.49 ft); minimum daily, 26 cfs Aug. 30, 1964.

REMARKS.--Records good. Flow regulated by seven reservoirs (see sta. 03517900, 03518200, and basic data release for North Carolina, 1972). Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,610	5,440	5,550	6,320	5,490	6,830	1,950	2,660	3,240	4,150	6,830	6,210
2	5,320	5,900	5,830	2,480	5,920	6,450	2,120	2,560	4,240	4,250	6,550	5,130
3	4,500	5,090	6,160	2,990	6,100	8,030	3,730	4,750	4,400	3,450	6,460	2,230
4	5,290	5,870	6,920	3,250	6,370	7,300	3,510	4,790	2,370	2,340	4,900	4,970
5	7,010	6,070	3,980	6,240	6,640	6,120	3,190	3,980	4,590	5,550	5,110	6,440
6	7,860	6,130	4,530	7,390	4,890	6,490	1,760	2,510	5,220	6,890	4,380	5,130
7	6,540	5,960	2,850	6,680	5,140	5,860	3,510	1,380	4,660	6,020	5,910	7,080
8	6,140	6,740	3,400	6,370	5,850	6,090	4,490	3,730	5,260	4,310	5,490	5,950
9	5,450	4,210	4,960	6,580	4,280	5,280	3,070	4,240	3,270	1,930	5,580	5,470
10	4,600	4,910	3,260	9,370	5,840	2,800	4,790	3,200	3,000	5,590	5,230	4,080
11	6,570	6,810	4,160	9,450	5,270	3,310	6,120	3,450	3,030	6,260	6,680	6,850
12	5,960	5,340	4,960	8,100	5,200	3,360	3,940	3,270	3,500	4,900	3,850	6,050
13	6,410	5,550	6,140	8,830	7,150	2,930	4,660	3,610	3,600	5,810	3,470	5,950
14	5,800	5,200	7,840	10,200	6,750	3,540	4,920	3,000	2,400	4,790	7,510	6,810
15	6,030	5,470	7,710	9,310	5,400	2,710	5,400	2,570	2,770	4,810	7,050	6,040
16	6,750	6,460	7,350	4,560	6,120	3,380	2,170	1,850	3,210	1,550	5,960	5,570
17	4,870	6,390	7,800	9,570	3,570	8,280	3,250	3,620	3,450	5,350	6,070	5,830
18	6,030	5,410	8,190	8,670	3,160	2,080	3,770	3,250	1,920	6,720	6,320	6,260
19	6,510	5,650	7,180	10,400	6,550	1,360	5,070	3,970	3,840	6,130	5,930	6,810
20	5,900	9,360	7,400	9,790	2,720	2,400	4,370	3,660	5,230	6,200	4,330	6,560
21	5,680	2,630	7,710	10,300	2,310	1,430	4,790	2,460	5,100	5,670	5,600	5,460
22	6,080	4,240	7,820	10,500	2,060	2,560	2,310	3,800	3,700	6,250	5,240	6,230
23	6,530	5,220	7,690	10,000	3,370	4,410	2,150	5,750	3,740	5,150	6,480	5,440
24	5,120	5,600	7,630	9,910	3,470	5,670	2,710	4,900	2,150	4,750	4,640	4,170
25	6,010	6,010	5,740	9,930	5,580	4,040	3,350	5,010	2,830	6,600	5,670	5,820
26	6,500	5,840	5,760	6,660	8,610	2,740	4,000	4,770	3,910	5,060	6,550	6,660
27	6,500	8,220	7,910	8,740	8,600	3,620	2,570	4,660	3,960	6,400	3,320	6,800
28	6,120	5,690	7,200	7,940	8,950	2,920	2,740	4,030	4,530	3,850	5,050	6,510
29	6,130	5,500	7,450	6,140	6,430	3,780	2,180	4,870	3,960	1,760	6,450	5,700
30	6,100	5,540	7,570	6,140	------	4,310	1,330	5,220	5,210	1,340	6,140	7,050
31	4,590	------	7,450	6,840	------	2,610	------	5,860	------	5,570	6,400	------
TOTAL	185,510	172,450	196,100	239,650	157,790	132,690	103,920	117,380	112,290	149,400	175,150	175,260
MEAN	5,984	5,748	6,326	7,731	5,441	4,280	3,464	3,786	3,743	4,819	5,650	5,842
MAX	7,860	9,360	8,190	10,500	8,950	8,280	6,120	5,860	5,260	6,890	7,510	7,080
MIN	4,500	2,630	2,850	2,480	2,060	1,360	1,330	1,380	1,920	1,340	3,320	2,230
(†)	-114,500	-91,800	-2,500	+75,700	+27,700	+84,100	+107,900	+59,500	+4,000	-28,800	-73,700	-99,700
MEAN‡	2,291	2,688	6,245	10,170	6,396	6,993	7,061	5,706	3,876	3,890	3,273	2,519
CFSM‡	1.15	1.35	3.14	5.12	3.22	3.52	3.55	2.87	1.95	1.96	1.65	1.27
IN.‡	1.33	1.51	3.62	5.90	3.47	4.06	3.96	3.31	2.18	2.26	1.90	1.41

CAL YR 1971 TOTAL 1,781,150 MEAN 4,880 MAX 9,360 MIN 1,290 MEAN‡ 5,193 CFSM‡ 2.61 IN.‡ 35.48
WTR YR 1972 TOTAL 1,917,590 MEAN 5,239 MAX 10,500 MIN 1,330 MEAN‡ 5,097 CFSM‡ 2.57 IN.‡ 34.92

† Change in contents, in cfs days, in Nantahala Lake, Thorpe Reservoir, and Fontana, Cheoah, Santeetlah Lakes in North Carolina, and Calderwood and Chilhowee Lakes in Tennessee, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03518500 Tellico River at Tellico Plains, Tenn.

LOCATION.--Lat 35°21'42", long 84°16'44", Monroe County, on right bank 1,300 ft upstream from bridge on Tellico Plains-Ballplay Road, 0.4 mile downstream from Laurel Creek, 0.8 mile east of Tellico Plains, and at mile 28.2.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--July 1925 to current year. Published as "near Tellico Plains" October 1927 to September 1930.

GAGE.--Water-stage recorder. Datum of gage is 846.64 ft above mean sea level. July 20, 1925, to Sept. 30, 1927, nonrecording gage at same site and datum. Oct. 1, 1927 to Sept. 30, 1930, nonrecording gage at site 0.5 mile upstream at datum 8.29 ft higher.

AVERAGE DISCHARGE.--47 years, 281 cfs (32.34 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,910 cfs July 29 (gage height, 9.41 ft); minimum, 72 cfs Sept. 26 (gage height, 1.24 ft). Period of record: Maximum discharge, 17,500 cfs Jan. 31, 1957 (gage height, 13.60 ft); minimum, 13 cfs Sept. 7, 1925 (gage height, 0.25 ft).

REMARKS.--Records excellent. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1336: 1927-28(M), 1936, 1940, 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	96	111	317	385	424	567	274	174	111	609	101
2	86	105	103	1,320	403	670	504	280	164	106	728	99
3	83	343	562	850	529	971	477	781	156	164	666	96
4	81	211	451	933	538	668	489	875	150	127	435	129
5	132	157	301	1,260	451	582	443	550	146	314	336	363
6	166	137	313	876	436	499	413	437	156	172	282	156
7	101	129	1,050	602	464	457	398	381	206	126	320	120
8	88	115	589	487	408	607	497	385	142	113	283	108
9	94	111	392	652	380	523	403	365	134	103	436	104
10	103	109	313	2,450	352	472	377	322	132	99	704	96
11	86	105	281	1,860	330	425	1,020	293	125	96	388	91
12	83	102	248	1,130	348	390	980	276	118	90	324	89
13	80	99	298	1,200	753	367	677	327	116	87	268	85
14	78	96	241	1,380	613	409	555	696	113	84	320	83
15	120	94	235	880	546	353	481	532	109	83	229	82
16	348	93	241	658	489	439	442	418	106	89	199	80
17	152	91	322	568	523	466	397	364	122	219	186	149
18	112	90	311	507	520	426	362	327	133	219	174	167
19	99	90	277	498	518	397	338	300	106	149	163	114
20	94	110	520	441	449	368	322	293	138	134	165	91
21	86	92	491	572	405	353	310	276	135	99	161	84
22	94	87	378	559	436	637	918	265	110	91	176	84
23	99	85	313	517	411	495	640	266	101	111	144	82
24	101	113	279	461	415	429	493	236	94	232	138	77
25	249	123	252	478	498	432	426	219	91	315	142	75
26	183	99	231	420	691	392	382	204	89	217	134	85
27	137	122	213	398	634	496	349	193	88	402	156	337
28	118	116	203	481	519	579	325	188	275	1,300	123	286
29	108	125	197	483	452	716	307	184	202	1,980	113	179
30	102	127	319	471	------	641	289	182	143	1,870	108	899
31	98	------	433	416	------	630	------	224	------	865	105	------
TOTAL	3,649	3,572	10,468	24,125	13,896	15,713	14,581	10,913	4,074	10,167	8,715	4,591
MEAN	118	119	338	778	479	507	486	352	136	328	281	153
MAX	348	343	1,050	2,450	753	971	1,020	875	275	1,980	728	899
MIN	78	85	103	317	330	353	289	182	88	83	105	75
CFSM	1.00	1.01	2.86	6.59	4.06	4.30	4.12	2.98	1.15	2.78	2.38	1.30
IN.	1.15	1.13	3.30	7.61	4.38	4.95	4.60	3.44	1.28	3.21	2.75	1.45

CAL YR 1971 TOTAL 117,434 MEAN 322 MAX 2,960 MIN 78 CFSM 2.73 IN 37.02
WTR YR 1972 TOTAL 124,464 MEAN 340 MAX 2,450 MIN 75 CFSM 2.88 IN 39.24

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-10	1400	8.33	4,310	07-29	2200	9.41	5,910

03519640 Baker Creek near Greenback, Tenn.

LOCATION.--Lat 35°40'21", long 84°06'28", Blount County, on right bank at downstream side of county road bridge, 1.0 mile upstream from Little Baker Creek, 3.4 miles east of Greenback, and at mile 15.0.

DRAINAGE AREA.--16.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 845.01 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 28.0 cfs (23.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 248 cfs Jan. 2 (gage height, 5.99 ft); minimum, 10.4 cfs Dec. 2.
Period of record: Maximum discharge, 1,770 cfs July 19, 1971 (gage height, 8.67 ft), minimum, 3.1 cfs Oct. 7, 8, 9, 1970.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	11	14	45	44	48	27	22	23	23	14
2	15	13	11	168	45	72	45	27	21	22	22	14
3	14	17	61	76	74	118	43	36	21	21	21	17
4	14	13	29	108	59	71	41	37	21	23	20	19
5	17	13	17	149	47	66	38	30	20	100	19	15
6	18	12	16	106	48	57	37	28	20	50	18	14
7	15	12	79	78	53	54	36	27	21	30	21	14
8	15	12	25	63	44	65	35	27	20	25	23	13
9	15	12	20	77	41	51	33	27	20	22	63	13
10	14	11	21	153	38	48	32	26	20	20	53	13
11	14	11	21	128	36	46	49	25	19	18	25	13
12	14	11	20	99	38	44	37	25	19	17	23	12
13	14	11	29	94	84	43	33	27	19	16	21	12
14	13	11	21	107	50	55	32	46	19	15	20	12
15	13	11	19	78	44	43	30	100	18	17	19	13
16	14	11	21	63	40	48	30	39	18	20	18	13
17	13	11	25	57	47	45	29	33	18	18	18	20
18	13	11	24	54	62	42	28	32	18	16	17	15
19	13	11	21	57	57	40	27	30	18	15	17	14
20	13	11	28	51	45	38	27	29	18	14	16	14
21	14	11	24	72	42	37	28	29	18	14	16	14
22	14	11	20	58	40	51	63	29	18	14	23	14
23	14	11	19	53	39	38	37	28	17	13	17	13
24	14	13	17	48	38	36	33	26	17	13	16	13
25	14	12	16	53	62	37	30	25	17	13	16	13
26	13	12	15	45	86	38	31	24	17	14	15	14
27	13	12	15	42	62	72	30	23	16	15	15	15
28	13	12	16	84	51	55	29	23	68	22	14	13
29	13	12	15	70	46	107	29	23	89	44	14	88
30	13	11	15	58	------	60	28	23	32	25	14	78
31	12	------	16	50	------	53	------	22	------	26	14	------
TOTAL	433	354	706	2,413	1,463	1,674	1,048	953	699	715	651	559
MEAN	14.0	11.8	22.8	77.8	50.4	54.0	34.9	30.7	23.3	23.1	21.0	18.6
MAX	18	17	79	168	86	118	63	100	89	100	63	88
MIN	12	11	11	14	36	36	27	22	16	13	14	12
CFSM	.88	.74	1.43	4.86	3.15	3.38	2.18	1.92	1.46	1.44	1.31	1.16
IN.	1.01	.82	1.64	5.61	3.40	3.89	2.44	2.22	1.63	1.66	1.51	1.30

CAL YR 1971 TOTAL 13,047 MEAN 35.7 MAX 500 MIN 11 CFSM 2.23 IN 30.33
WTR YR 1972 TOTAL 11,668 MEAN 31.9 MAX 168 MIN 11 CFSM 1.99 IN 27.13

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base.

03528000 Clinch River above Tazewell, Tenn.

LOCATION.--Lat 36°25'30", long 83°23'54", Claiborne County, on right bank 0.4 mile upstream from Grissom Island, 4.6 miles downstream from Big War Creek, 10 miles east of Tazewell, and at mile 159.8.

DRAINAGE AREA.--1,474 sq mi.

PERIOD OF RECORD.--October 1918 to current year. Published as "near Lone Mountain" October 1918 to September 1927; as "near Tazewell" August 1927 to December 1936; and as "above Tazewell" July 1935 to current year. Prior to April 1919 monthly discharge only, published in WSP 1306. Gage-height record "near Tazewell" January 1937 to July 1941.

GAGE.--Water-stage recorder. Datum of gage is 1,060.7 ft above mean sea level. Apr. 1, 1919 to Sept. 30, 1927, nonrecording gage on railroad bridge 23.3 miles downstream at datum 102.7 ft lower. Aug. 8, 1927, to July 16, 1941, water-stage recorder at site 8.0 miles downstream at datum 47.2 ft lower. Water-stage recorder at present site and datum since July 29, 1935.

AVERAGE DISCHARGE.--54 years, 2,058 cfs (18.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 21,700 cfs Jan. 22 (gage height, 12.70 ft); minimum, 270 cfs Sept. 26, 27 (gage height, 0.81 ft).
Period of record: Maximum discharge, 56,700 cfs Mar. 13, 1963 (gage height, 22.27 ft); minimum, 108 cfs Sept. 11, 1925. Minimum gage height at present site and datum, 0.33 ft, Sept. 20, 1955.
Maximum stage known, about 24 ft in 1862, present site and datum, from information by local resident.

REMARKS.--Records good. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: Drainage area at site "near Tazewell". WSP 1306: Drainage area at site "near Lone Mountain". WSP 1336: 1928.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	936	1,630	1,210	1,190	4,940	5,220	2,250	1,550	1,220	824	5,580	506
2	800	1,500	1,180	4,140	3,740	4,140	2,100	1,470	1,140	872	3,770	482
3	716	2,220	1,130	6,680	3,330	4,290	1,940	1,540	1,040	896	3,290	459
4	654	3,920	1,120	5,200	3,480	3,960	1,810	2,200	944	848	2,740	476
5	674	4,460	1,200	8,680	3,270	3,680	1,700	3,930	880	904	2,240	476
6	1,430	3,270	1,190	14,800	2,910	3,250	1,590	3,780	912	1,060	1,700	482
7	1,530	2,530	2,900	11,200	2,710	2,940	1,610	2,810	987	1,480	1,350	494
8	1,630	2,070	4,110	5,870	2,550	2,810	4,480	2,360	1,100	1,470	1,300	518
9	1,370	1,760	3,360	4,160	2,300	2,670	6,670	2,340	1,060	1,190	1,050	500
10	1,080	1,540	2,620	6,250	2,130	2,490	5,620	2,680	960	1,010	928	442
11	936	1,370	2,200	7,330	2,020	2,300	3,980	2,580	864	840	904	402
12	808	1,240	1,950	5,720	1,980	2,160	7,350	2,410	808	744	786	424
13	723	1,140	2,100	4,690	4,430	2,040	17,300	2,140	744	674	716	430
14	660	1,060	2,080	6,330	7,900	1,960	14,100	3,920	681	936	660	381
15	621	987	2,030	7,860	7,080	1,850	13,000	4,830	647	737	615	360
16	1,330	920	1,970	5,820	5,120	1,800	18,700	5,250	621	615	576	350
17	2,430	864	2,090	4,130	4,260	1,830	13,100	3,870	634	595	537	336
18	2,980	824	2,170	3,260	3,950	1,750	8,220	2,990	681	569	512	336
19	2,020	793	1,980	2,870	4,010	1,750	5,420	2,460	793	543	494	331
20	1,480	793	2,240	2,640	3,620	1,670	4,130	2,170	904	556	3,380	331
21	1,180	772	3,050	7,120	3,140	1,570	3,430	2,170	1,070	537	4,530	316
22	2,260	751	2,880	19,600	2,900	1,810	3,440	2,090	1,870	589	2,440	307
23	6,670	723	2,370	15,900	2,900	2,170	3,440	3,210	3,500	556	1,590	298
24	6,250	737	2,020	8,050	3,780	2,290	3,000	4,200	2,400	530	1,200	293
25	9,680	904	1,780	5,870	9,640	2,170	2,650	3,570	1,650	840	978	284
26	8,740	1,100	1,600	5,180	18,900	1,970	2,370	2,600	1,320	695	840	275
27	4,800	1,200	1,480	4,560	16,600	1,890	2,140	2,080	1,110	595	758	275
28	3,650	1,160	1,360	5,340	13,100	1,930	1,950	1,740	1,060	569	751	280
29	2,810	1,120	1,260	15,300	7,980	2,040	1,780	1,500	969	904	660	408
30	2,240	1,150	1,240	14,200	------	2,400	1,650	1,360	904	3,950	595	1,760
31	1,870	------	1,310	7,670	------	2,400	------	1,260	------	7,170	550	------
TOTAL	74,958	44,508	61,180	227,610	154,670	77,200	160,920	83,060	33,473	34,298	48,020	13,012
MEAN	2,418	1,484	1,974	7,342	5,333	2,490	5,364	2,679	1,116	1,106	1,549	434
MAX	9,680	4,460	4,110	19,600	18,900	5,220	18,700	5,250	3,500	7,170	5,580	1,760
MIN	621	723	1,120	1,190	1,980	1,570	1,590	1,260	621	530	494	275
CFSM	1.64	1.01	1.34	4.98	3.62	1.69	3.64	1.82	.76	.75	1.05	.29
IN.	1.89	1.12	1.54	5.74	3.90	1.95	4.06	2.10	.84	.87	1.21	.33

CAL YR 1971 TOTAL 862,203 MEAN 2,362 MAX 33,600 MIN 340 CFSM 1.60 IN 21.76
WTR YR 1972 TOTAL 1,012,909 MEAN 2,768 MAX 19,600 MIN 275 CFSM 1.88 IN 25.56

PEAK DISCHARGE (BASE, 14,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-06	1500	10.29	15,400	02-26	1600	12.19	20,300
01-22	1930	12.70	21,700	04-16	1100	12.16	20,200
01-29	1930	11.15	17,500				

03532000 Powell River near Arthur, Tenn.

LOCATION.--Lat 36°32'30", long 83°37'49", Claiborne County, on left bank 500 ft upstream from bridge on U. S. Highway 25E, 2.3 miles east of Arthur, 2.4 miles downstream from Indian Creek, and at mile 65.4.

DRAINAGE AREA.--685 sq mi.

PERIOD OF RECORD.--October 1919 to current year. Gage-height records collected at same site December 1892 to August 1893, September 1904 to March 1925 are in reports of U. S. Weather Bureau (published as "near Tazewell").

GAGE.--Water-stage recorder. Datum of gage is 1,043.84 ft above mean sea level (Tennessee River Survey datum). Prior to July 23, 1927, nonrecording gage, and July 23, 1927 to Sept. 30, 1970, water-stage recorder, at same site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--53 years, 1,127 cfs (22.34 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,700 cfs Jan. 22 (gage height, 15.91 ft); minimum, 122 cfs Sept. 25, 26 (gage height, 1.50 ft).
Period of record: Maximum discharge, 33,000 cfs Jan. 9, 1946 (gage height, 29.15 ft, present datum, from floodmark) from rating curve extended above 27,000 cfs on basis of slope-area measurement of peak flow; minimum, 47 cfs Jan. 6, 1940, result of freezeup; minimum daily, 60 cfs Sept. 23, 1955; minimum gage height, 1.50 ft Sept. 25, 26, 1972 (result of dredging). Flood of Jan. 29, 1918, reached a stage of 29.2 ft, present datum (discharge, 33,000 cfs).

REMARKS.--Records good. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1336: 1920, 1921(M), 1923.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	552	639	507	725	2,510	2,730	1,740	1,010	501	328	2,620	162
2	450	594	488	3,200	2,000	2,400	1,560	953	478	286	1,540	156
3	384	792	467	5,910	1,800	3,360	1,390	1,080	444	265	1,250	156
4	341	2,620	458	5,370	1,910	3,320	1,280	1,340	416	293	1,020	183
5	338	2,250	488	6,140	2,020	2,700	1,240	1,310	400	432	765	183
6	388	1,460	527	8,900	1,750	2,210	1,230	1,160	392	365	636	217
7	721	1,100	2,930	6,320	1,650	1,850	1,270	1,040	404	310	523	195
8	773	884	4,740	3,420	1,550	1,690	2,990	997	456	280	469	183
9	574	736	3,520	2,640	1,360	1,570	5,020	1,090	483	265	482	180
10	461	639	2,100	4,330	1,240	1,390	3,380	1,310	432	255	396	165
11	400	580	1,640	5,580	1,170	1,260	2,490	1,330	412	240	340	154
12	367	528	1,420	4,330	1,140	1,180	4,950	1,190	408	217	308	151
13	325	485	1,360	3,120	2,490	1,110	8,940	1,160	380	211	282	145
14	287	448	1,390	3,290	4,770	1,060	7,800	2,430	336	201	265	142
15	271	419	1,320	3,560	4,060	1,030	6,250	3,480	312	195	248	142
16	359	393	1,580	2,710	2,810	1,030	7,410	3,770	316	234	234	139
17	322	368	2,480	2,050	2,260	1,080	6,560	2,920	328	234	220	136
18	432	348	2,100	1,720	2,130	1,190	4,650	2,120	324	224	214	139
19	350	337	1,610	1,520	2,400	1,150	3,280	1,650	352	204	208	142
20	302	328	1,560	1,570	2,390	1,080	2,490	1,350	404	214	201	139
21	277	316	2,070	5,500	2,030	1,030	2,050	1,190	388	211	195	133
22	298	308	2,150	10,800	1,860	1,880	3,350	1,050	510	214	195	131
23	1,250	290	1,720	6,620	1,930	3,060	3,570	929	600	244	192	128
24	3,250	292	1,420	4,170	2,480	2,790	2,780	845	492	244	189	128
25	4,970	311	1,220	3,560	5,420	2,060	2,180	770	408	214	183	125
26	3,470	428	1,070	3,410	9,270	1,670	1,810	695	352	436	180	128
27	2,190	471	951	3,000	7,330	1,520	1,550	631	312	518	183	142
28	1,520	434	858	3,050	5,780	1,510	1,360	582	308	380	174	151
29	1,130	479	773	7,180	3,790	1,600	1,210	541	328	340	186	180
30	880	491	738	6,270	------	1,790	1,100	523	356	1,260	183	500
31	730	------	751	3,580	------	1,900	------	528	------	3,140	165	------
TOTAL	28,362	19,768	46,406	133,545	83,300	55,200	96,880	40,974	12,032	12,454	14,246	4,955
MEAN	915	659	1,497	4,308	2,872	1,781	3,229	1,322	401	402	460	165
MAX	4,970	2,620	4,740	10,800	9,270	3,360	8,940	3,770	600	3,140	2,620	500
MIN	271	290	458	725	1,140	1,030	1,100	523	308	195	165	125
CFSM	1.34	.96	2.19	6.29	4.19	2.60	4.71	1.93	.59	.59	.67	.24
IN.	1.54	1.07	2.52	7.25	4.52	3.00	5.26	2.23	.65	.68	.77	.27

CAL YR 1971 TOTAL 447,624 MEAN 1,226 MAX 13,000 MIN 201 CFSM 1.79 IN 24.31
WTR YR 1972 TOTAL 548,122 MEAN 1,498 MAX 10,800 MIN 125 CFSM 2.19 IN 29.77

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-06	1600	13.78	9,380	02-26	1230	14.39	10,000
01-22	1330	15.91	11,700	04-13	2000	15.30	11,000

03533000 Clinch River below Norris Dam, Tenn.

LOCATION.--Lat 36°12'56", long 84°04'56", Anderson County, 0.5 mile upstream from Clear Creek, 1.0 mile downstream from Norris Dam, 1.5 miles north of Norris, and at mile 78.8.

DRAINAGE AREA.--2,913 sq mi.

PERIOD OF RECORD.--October 1903 to current year. Published as "at Clinton" October 1903 to September 1927, and "near Coal Creek" May 1927 to September 1937. Records published for sites "at Clinton" and "near Coal Creek" May to September 1927; for sites "near Coal Creek" and "below Norris Dam" April 1936 to September 1937. Gage-height records collected in vicinity of Clinton from 1884 to 1943 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 819.11 ft above mean sea level. See WSP 1306 for history of changes prior to Jan. 28, 1937.

AVERAGE DISCHARGE.--69 years, 4,272 cfs (19.92 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 20,000 cfs Feb. 27, 28 (gage height, 9.63 ft); minimum, 42 cfs Sept. 30 (gage height, 1.17 ft), minimum daily, 56 cfs Jan. 4.
Period of record: Maximum discharge, 87,000 cfs Mar. 5, 1917 (gage height, 38.5 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 62,000 cfs; minimum, and minimum daily, 1.3 cfs several days in May and June, 1936 (gage height, 0.62 ft).
Maximum discharge since closure of Norris Dam on Mar. 4, 1936, 42,500 cfs Feb. 16, 1937 (gage height, 17.13 ft).
Flood of Mar. 11, 1826, reached a stage of 43.5 ft (discharge, 130,000 cfs); floods of Feb. 24, 1862, and Mar. 31, 1886, reached a stage of 41.3 ft (discharge, 117,000 cfs); at site 19.6 miles downstream at datum 42.49 ft lower, from reports of Tennessee Valley Authority.

REMARKS.--Records good. Flow completely regulated by Norris Lake (see sta. 03532500). Records of chemical analysis for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1306: Drainage area at site used 1904-27; 1936-40 (adjusted monthly runoff). WSP 1336: 1917-18, 1928. WSP 1706: 1862(M), 1886(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,420	7,210	7,170	2,950	16,900	18,100	68	7,570	5,710	1,570	3,080	6,470
2	5,810	7,000	6,970	347	14,400	17,400	68	8,450	6,260	1,510	3,540	3,980
3	4,810	7,310	5,830	514	10,000	15,500	1,060	7,190	5,600	3,110	5,230	3,100
4	4,090	7,060	6,570	56	8,140	13,100	3,840	467	4,540	2,990	5,310	3,590
5	5,350	6,870	4,360	1,310	8,160	13,000	2,880	4,080	6,360	2,910	4,990	5,700
6	5,210	7,110	7,010	5,500	8,150	10,300	1,950	4,130	5,820	3,000	3,780	6,040
7	5,350	6,830	509	8,130	7,510	6,050	3,600	3,510	6,200	3,030	5,880	6,550
8	5,520	8,150	858	8,130	6,620	5,720	5,860	6,650	5,910	2,420	5,130	6,650
9	5,070	8,440	7,550	8,190	5,870	4,860	1,500	7,410	6,130	1,200	5,350	6,710
10	4,590	8,390	7,980	8,220	5,230	3,830	3,090	8,040	4,540	4,800	5,380	4,850
11	5,060	8,330	7,960	8,240	5,070	3,740	1,360	6,940	2,480	5,170	6,170	3,470
12	5,330	8,330	7,960	8,260	4,330	2,860	2,130	6,900	5,630	5,780	5,430	3,150
13	6,880	8,310	7,900	8,260	4,800	3,370	4,270	7,010	5,910	5,750	3,050	3,380
14	6,410	8,280	5,700	8,240	5,000	3,570	4,100	758	5,940	6,180	6,910	3,440
15	5,610	8,270	5,720	8,290	4,940	2,060	4,360	1,860	5,950	4,970	7,540	3,270
16	5,350	8,300	5,840	8,320	5,030	1,030	4,390	4,080	6,960	1,750	7,530	3,420
17	4,610	8,300	5,770	8,300	4,550	4,730	4,410	3,700	3,860	5,280	7,230	3,430
18	6,040	7,310	5,930	8,270	1,940	630	4,430	8,200	3,280	5,770	7,380	3,030
19	6,270	7,300	4,880	8,280	3,370	692	4,460	7,110	4,490	6,860	6,830	3,290
20	5,870	7,380	4,520	8,280	1,820	3,480	4,470	6,780	5,810	8,210	3,450	3,430
21	6,130	7,360	5,760	10,300	1,560	1,610	4,340	6,580	5,720	6,630	6,950	3,410
22	7,040	7,440	7,920	15,400	2,130	1,220	4,880	7,000	5,640	6,380	7,340	3,320
23	7,750	7,480	7,120	15,600	2,740	2,930	4,010	6,820	5,790	4,950	7,570	2,810
24	5,350	7,500	6,960	16,300	8,240	3,000	4,600	6,080	1,970	6,400	7,790	2,240
25	6,460	7,440	6,970	17,000	8,340	1,710	4,110	6,020	214	6,370	7,910	2,150
26	6,440	7,460	6,720	16,900	12,300	66	5,550	5,810	4,520	5,270	6,830	3,440
27	6,510	7,450	7,010	16,900	18,600	697	4,830	6,990	5,530	5,800	2,710	3,430
28	6,430	7,250	6,900	16,900	19,900	67	4,150	6,700	5,690	1,560	6,040	3,370
29	3,730	7,430	6,400	16,900	19,400	70	5,280	7,240	5,540	63	7,290	3,370
30	7,340	7,420	5,530	16,900	------	206	5,980	7,190	3,300	64	7,640	327
31	7,080	------	6,440	16,900	------	68	------	6,950	------	1,530	7,580	------
TOTAL	179,910	228,710	190,717	302,087	225,040	145,666	110,026	184,215	151,294	127,277	184,840	114,817
MEAN	5,804	7,624	6,152	9,745	7,760	4,699	3,668	5,942	5,043	4,106	5,963	3,827
MAX	7,750	8,440	7,980	17,000	19,900	18,100	5,980	8,450	6,960	8,210	7,910	6,710
MIN	3,730	6,830	509	56	1,560	66	68	467	214	63	2,710	327
(†)	-66,000	-158,800	-50,500	+166,900	+77,500	+50,300	+240,400	-24,100	-92,900	-62,300	-114,800	-89,200
MEAN‡	3,675	2,330	4,523	15,130	10,430	6,321	11,680	5,165	1,946	2,096	2,259	854
CFSM‡	1.26	.80	1.55	5.19	3.58	2.17	4.01	1.77	.67	.72	.78	.29
IN.‡	1.45	.89	1.79	5.99	3.86	2.50	4.47	2.04	.75	.83	.89	.33

CAL YR 1971 TOTAL 1,619,830 MEAN 4,438 MAX 8,440 MIN 34 MEAN‡ 4,617 CFSM‡ 1.58 IN.‡ 21.52
WTR YR 1972 TOTAL 2,144,599 MEAN 5,860 MAX 19,900 MIN 56 MEAN‡ 5,522 CFSM‡ 1.90 IN.‡ 25.80

† Change in contents, in cfs days, in Norris Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03535000 Bullrun Creek near Halls Crossroads, Tenn.

LOCATION.--Lat 36°06'52", long 83°59'16", Knox County, on left bank on downstream side of bridge on U. S. Highway 441, 2.1 miles downstream from Smith Branch, 4 miles northwest of Halls Crossroads, and at mile 16.3.

DRAINAGE AREA.--68.5 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 854.91 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 92.6 cfs (18.36 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,300 cfs Apr. 12 (gage height, 9.95 ft); minimum, 7.5 cfs Sept. 11, 12, 13, 14.
Period of record: Maximum discharge, 6,200 cfs Mar. 12, 1963 (gage height, 11.08 ft); minimum, 3.9 cfs Sept. 14, 1964, July 25, 26, 27, 1966.

REMARKS.--Records good. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	17	125	135	149	138	74	39	34	64	8.0
2	14	15	16	890	121	426	118	70	35	26	40	20
3	14	133	74	444	165	600	106	132	34	23	41	11
4	14	50	122	385	145	320	100	165	32	21	27	10
5	45	33	85	824	116	225	98	104	31	106	22	11
6	115	26	150	461	115	169	82	88	30	42	20	12
7	33	22	1,070	267	125	145	88	77	66	28	20	10
8	22	20	284	181	115	133	215	88	32	23	19	9.4
9	20	18	148	280	107	112	124	92	30	20	20	21
10	20	17	107	758	101	101	109	71	40	19	31	8.7
11	17	16	86	493	95	94	153	63	32	18	20	8.0
12	15	16	77	299	107	86	2,480	57	26	16	17	7.5
13	14	15	101	560	417	83	758	116	25	15	15	7.5
14	14	14	76	764	255	85	372	497	24	15	14	8.0
15	18	14	82	389	183	80	245	318	22	14	12	9.4
16	63	14	135	234	145	85	212	180	26	15	12	8.7
17	28	14	100	177	188	83	159	132	41	17	12	14
18	21	13	86	146	228	76	130	107	28	16	12	15
19	18	14	74	132	240	71	115	92	24	14	11	11
20	16	16	148	119	180	66	106	83	35	13	11	9.4
21	16	14	124	183	148	74	115	77	32	12	11	8.0
22	16	13	92	146	135	223	613	71	24	13	10	9.4
23	16	13	77	140	121	133	360	74	21	12	10	9.4
24	17	18	68	125	178	110	218	60	20	12	10	8.7
25	27	25	63	215	480	104	159	54	19	21	10	8.7
26	26	18	57	165	461	98	129	50	18	20	12	8.0
27	20	22	52	148	328	220	110	46	17	13	11	28
28	18	23	48	374	231	263	98	43	106	23	9.4	45
29	16	21	45	333	177	290	89	41	186	24	8.7	21
30	16	20	229	226	------	205	82	41	70	251	8.7	186
31	15	------	217	164	------	164	------	43	------	210	8.0	------
TOTAL	738	682	4,110	10,147	5,542	5,073	7,872	3,206	1,166	1,106	548.8	551.8
MEAN	23.8	22.7	133	327	191	164	262	103	38.9	35.7	17.7	18.4
MAX	115	133	1,070	890	480	600	2,480	497	186	251	64	186
MIN	14	13	16	119	95	66	82	41	17	12	8.0	7.5
CFSM	.35	.33	1.94	4.77	2.79	2.39	3.82	1.50	.57	.52	.26	.27
IN.	.40	.37	2.23	5.51	3.01	2.75	4.28	1.74	.63	.60	.30	.30

CAL YR 1971 TOTAL 34,252.0 MEAN 93.8 MAX 1,330 MIN 13 CFSM 1.37 IN 18.60
WTR YR 1972 TOTAL 40,742.6 MEAN 111 MAX 2,480 MIN 7.5 CFSM 1.62 IN 22.13

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-07	1000*	7.80*	1,710	04-12	1230	9.95	5,300
01-02	1500	7.61	1,510				

*From graph based on gage readings.

03538225 Poplar Creek near Oak Ridge, Tenn.

LOCATION.--Lat 35°59'55", long 84°20'23", Roane County, on right bank, 1,000 ft upstream from county road bridge, 0.4 mile downstream from Indian Creek, 8.2 miles southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 13.8.

DRAINAGE AREA.--82.5 sq mi.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 743.50 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 158 cfs (26.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,930 cfs Dec. 7 (gage height, 17.39 ft); minimum, 7.8 cfs Sept. 17.
Period of record: Maximum discharge, 8,590 cfs Dec. 31, 1969 (gage height, 24.91 ft, from floodmark); minimum, 5.0 cfs Oct. 27, 1963.
Flood of June 29, 1928, at site about 5.0 miles upstream (drainage area, 55.9 sq mi, discharge, about 14,000 cfs) was the greatest known since at least 1900, from reports by Tennessee Valley Authority.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	31	317	168	222	254	88	45	55	95	12
2	20	30	27	1,750	155	1,050	207	90	40	41	62	12
3	18	35	87	1,300	234	1,990	179	205	37	36	60	11
4	17	29	129	752	231	611	181	305	33	32	42	11
5	32	22	81	1,490	198	385	151	180	31	76	34	13
6	64	20	226	802	194	275	137	137	29	45	30	12
7	31	20	2,410	437	218	229	142	115	45	33	29	11
8	22	18	873	303	200	279	201	148	31	27	28	10
9	20	17	284	447	185	207	162	157	27	24	35	10
10	22	17	220	1,270	170	191	149	119	31	22	50	9.9
11	19	17	240	874	156	172	269	101	29	19	40	9.1
12	17	16	234	505	168	152	257	87	24	18	36	8.9
13	15	16	359	404	486	138	232	171	22	22	34	8.8
14	14	16	267	440	369	158	202	453	20	21	31	8.6
15	25	15	244	335	276	128	178	524	19	18	29	8.6
16	47	14	285	249	215	179	277	309	20	17	28	8.6
17	26	14	232	213	279	206	290	207	28	27	27	19
18	20	14	185	189	359	184	235	158	33	21	25	18
19	18	16	156	190	404	168	193	125	22	18	22	12
20	17	21	273	167	295	145	166	112	33	16	21	9.5
21	17	19	302	263	232	257	173	100	38	14	20	8.9
22	17	17	227	259	206	1,320	1,010	88	23	15	19	12
23	18	16	181	263	184	565	697	86	19	14	18	18
24	19	23	157	238	234	342	337	72	17	14	18	15
25	23	36	138	273	658	279	235	63	17	25	19	12
26	25	28	125	226	610	237	180	58	16	23	18	21
27	21	29	112	207	455	406	147	53	16	20	17	37
28	19	32	101	291	333	594	125	49	60	27	15	61
29	18	33	90	275	255	526	112	46	337	25	14	29
30	17	37	294	243	------	404	100	47	100	465	13	314
31	17	------	520	196	------	318	------	59	------	260	13	------
TOTAL	696	654	9,090	15,168	8,127	12,317	7,178	4,512	1,242	1,490	942	750.9
MEAN	22.5	21.8	293	489	280	397	239	146	41.4	48.1	30.4	25.0
MAX	64	37	2,410	1,750	658	1,990	1,010	524	337	465	95	314
MIN	14	14	27	167	155	128	100	46	16	14	13	8.6
CFSM	.27	.26	3.55	5.93	3.39	4.81	2.90	1.77	.50	.58	.37	.30
IN.	.31	.29	4.10	6.84	3.66	5.55	3.24	2.03	.56	.67	.42	.34

CAL YR 1971 TOTAL 64,032.0 MEAN 175 MAX 3,000 MIN 13 CFSM 2.12 IN 28.87
WTR YR 1972 TOTAL 62,166.9 MEAN 170 MAX 2,410 MIN 8.6 CFSM 2.06 IN 28.03

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-07	1530	17.39	2,930	03-03	0300	17.01	2,750
01-02	2030	16.49	2,550				

03538250 East Fork Poplar Creek near Oak Ridge, Tenn.

LOCATION.--Lat 35°57'58", long 84°21'30", Roane County, near left bank, on upstream side of county road bridge, 0.3 mile north of State Highway 95, 1.7 miles upstream from Bear Creek, 5.8 miles southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 3.3.

DRAINAGE AREA.--19.5 sq mi.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 754.16 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 48.7 cfs, unadjusted.

EXTREMES.--Current year: Maximum discharge, 931 cfs Dec. 7 (gage height, 7.55 ft); minimum daily, 17 cfs Sept. 3.
Period of record: Maximum discharge, 2,610 cfs July 6, 1967 (gage height, 12.66 ft); minimum daily, 17 cfs many days in October 1964, Oct. 3, 4, 1965, Aug. 28, 1971, and Sept. 3, 1972.
The flood of Sept. 29, 1944, reached a discharge of about 4,600 cfs at site 5.1 miles upstream.

REMARKS.--Records good, except those for period of no gage height record, which are fair. Flow of stream affected by operations of the Atomic Energy Commission's Y-12 Plant (adds 10 to 20 cfs) and the sewage treatment plant of the City of Oak Ridge (adds 3 to 10 cfs).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	22	22	52	48	61	60	30	26	28	45	19
2	21	50	21	408	45	300	52	30	25	26	59	18
3	20	45	79	122	72	224	48	62	25	26	59	17
4	20	40	44	181	55	109	47	105	23	28	34	18
5	31	32	29	268	47	83	43	48	24	46	31	23
6	44	36	99	122	47	67	38	38	28	26	28	20
7	23	35	461	83	57	59	39	33	29	25	31	20
8	22	30	86	65	51	80	40	49	25	24	28	20
9	25	28	66	138	45	57	32	42	26	23	100	20
10	22	27	57	161	44	52	31	33	28	24	71	20
11	21	26	48	109	42	48	77	30	23	24	39	20
12	21	26	50	80	40	44	54	30	22	24	33	20
13	22	25	57	182	40	43	47	84	23	23	31	20
14	21	25	44	151	61	59	43	180	23	24	28	20
15	23	25	52	87	64	42	39	125	23	23	28	21
16	31	24	70	66	55	53	53	73	27	23	27	21
17	21	24	55	58	84	45	42	59	28	33	26	43
18	22	25	44	53	95	42	37	51	23	28	26	26
19	22	26	39	53	81	41	35	46	26	25	25	22
20	24	35	65	47	65	38	35	42	38	28	23	21
21	26	30	53	58	57	76	40	38	26	24	23	20
22	25	25	44	60	53	223	173	49	24	24	23	20
23	26	23	38	56	53	84	81	46	22	23	23	20
24	27	40	36	52	58	66	60	34	22	24	23	20
25	30	35	32	75	118	64	49	32	21	42	22	20
26	28	30	31	56	250	58	43	30	22	35	21	24
27	26	25	30	52	113	140	38	28	22	31	20	27
28	25	21	29	99	81	146	34	27	61	70	21	23
29	24	25	28	74	66	132	33	27	98	44	21	26
30	23	25	92	62	------	89	30	31	35	57	20	90
31	22	------	65	53	------	71	------	33	------	46	20	------
TOTAL	760	885	1,966	3,193	1,987	2,696	1,473	1,565	868	951	1,009	719
MEAN	24.5	29.5	63.4	103	68.5	87.0	49.1	50.5	28.9	30.7	32.5	24.0
MAX	44	50	461	408	250	300	173	180	98	70	100	90
MIN	20	21	21	47	40	38	30	27	21	23	20	17

CAL YR 1971 TOTAL 18,883 MEAN 51.7 MAX 698 MIN 17
WTR YR 1972 TOTAL 18,072 MEAN 49.4 MAX 461 MIN 17

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-07	0530	7.55	931	01-02	1130	6.69	752

Note.--No gage height record Oct. 21 to Nov. 26.

03540500 Emory River at Oakdale, Tenn.

LOCATION.--Lat 35°58'59", long 84°33'29", Morgan County, on left bank, at Oakdale, 1,000 ft downstream from highway bridge, 1,100 ft downstream from Mud Lick Creek, and at mile 18.3.

DRAINAGE AREA.--764 sq mi.

PERIOD OF RECORD.--June 1927 to current year. Prior to October 1929, published as Emery River at Harriman and October 1929 to September 1934 as Emery River at Oakdale.

GAGE.--Water-stage recorder. Datum of gage is 761.38 ft above mean sea level. Prior to Oct. 1, 1929, nonrecording gage at site 5.8 miles downstream at datum 43.60 ft lower, and Oct. 1, 1929, to Dec. 29, 1969, water-stage recorder at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--45 years, 1,404 cfs (24.95 inches per year).

EXTREMES.--Current year: Maximum discharge, 32,400 cfs Jan. 2 (gage height, 20.47 ft); minimum, 20 cfs Sept. 17 (gage height, 1.74 ft). Period of record: Maximum discharge, 195,000 cfs Mar. 23, 1929 (gage height, about 44.3 ft, present site and datum, and 61.1 ft, site and datum then in use, from floodmarks), from rating curve extended above 85,000 cfs; no flow at times in 1944, 1952-53. Maximum stage since at least 1857, that of Mar. 23, 1929, from report of Tennessee Valley Authority.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 923: 1940. WSP 1386: 1928-30(M), 1932, 1943, 1945(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	74	186	2,630	1,910	2,220	2,510	855	229	1,080	2,320	53
2	111	72	189	19,600	1,620	6,930	2,000	755	202	655	2,030	47
3	87	86	246	11,100	1,580	14,100	1,650	1,880	175	475	1,350	43
4	71	92	775	6,550	1,800	6,200	1,630	1,940	151	375	898	39
5	77	143	927	11,200	1,530	4,000	1,560	1,450	129	4,220	636	38
6	257	174	1,030	6,940	1,450	2,950	1,370	1,100	114	1,500	486	36
7	200	152	12,300	4,060	1,540	3,330	1,260	903	110	851	408	35
8	143	133	6,620	2,830	1,520	3,240	1,640	903	100	555	351	34
9	109	121	3,180	2,690	1,440	2,050	1,620	1,570	95	390	343	31
10	89	109	3,130	9,610	1,420	1,720	1,450	1,540	95	330	691	29
11	75	102	3,050	7,560	1,370	1,560	1,850	1,290	88	265	624	27
12	64	97	2,490	4,530	1,350	1,360	4,040	1,090	79	213	533	27
13	57	100	3,150	3,240	4,730	1,200	3,190	1,000	74	174	807	27
14	53	98	2,680	2,540	4,670	1,250	2,500	1,800	71	166	512	24
15	51	94	2,210	1,980	3,340	1,220	2,100	2,740	63	135	354	22
16	56	90	3,360	1,550	2,530	1,320	2,000	2,600	60	114	262	21
17	65	87	2,800	1,310	2,400	2,960	2,600	1,940	94	139	207	28
18	64	84	2,170	1,180	2,790	2,790	2,100	1,380	169	1,160	170	56
19	94	83	1,710	1,130	3,180	2,380	1,730	1,070	157	820	142	40
20	77	86	2,030	1,180	2,540	1,990	1,460	869	173	519	118	31
21	65	109	3,180	1,590	2,070	1,800	4,080	794	386	324	99	27
22	55	112	2,480	2,000	1,950	5,630	13,300	698	343	228	85	25
23	49	110	1,900	2,250	1,730	4,210	9,280	628	237	176	74	26
24	47	112	1,560	2,360	1,910	2,860	4,690	600	169	137	63	28
25	48	119	1,320	2,440	4,350	2,250	3,060	477	125	122	59	28
26	48	130	1,140	2,440	6,150	1,930	2,250	501	96	180	185	28
27	48	148	1,010	2,120	5,990	2,230	1,750	399	76	174	127	27
28	126	150	898	2,960	3,810	4,320	1,410	567	256	1,150	114	25
29	112	162	842	4,410	2,790	4,920	1,180	410	3,670	2,230	100	27
30	95	172	1,040	3,270	------	4,540	1,010	314	2,200	2,670	76	393
31	83	------	2,950	2,410	------	3,270	------	264	------	4,290	62	------
TOTAL	2,734	3,401	73,553	131,630	75,330	100,840	82,260	34,227	9,985	25,817	14,286	1,322
MEAN	88.2	113	2,340	4,246	2,598	3,253	2,742	1,104	333	833	461	44.1
MAX	257	174	12,300	19,600	6,150	14,100	13,300	2,740	3,670	4,290	2,320	393
MIN	47	72	186	1,130	1,350	1,200	1,010	264	60	114	59	21
CFSM	.12	.15	3.06	5.56	3.40	4.26	3.59	1.45	.44	1.09	.60	.06
IN.	.13	.17	3.53	6.41	3.67	4.91	4.01	1.67	.49	1.26	.70	.06

CAL YR 1971 TOTAL 530,955 MEAN 1,454 MAX 20,900 MIN 30 CFSM 1.90 IN 25.85
WTR YR 1972 TOTAL 554,385 MEAN 1,515 MAX 19,600 MIN 21 CFSM 1.98 IN 26.99

PEAK DISCHARGE (BASE, 19,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-02	1330	20.47	32,400	04-22	1330	17.90	23,200
03-02	2400	17.53	22,100				

03541300 Bitter Creek near Oakdale, Tenn.

LOCATION.--Lat 35°59'22", long 84°29'16", Morgan County, on left bank 0.2 mile upstream from bridge on U. S. Highway 27, 0.3 mile upstream from mouth, and 3.9 miles east of Oakdale.

DRAINAGE AREA.--12.6 sq mi.

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 760 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 24.0 cfs (25.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 894 cfs Dec. 7 (gage height, 12.35 ft); minimum, 0.18 cfs several days in June. Period of record: Maximum discharge, 2,680 cfs Dec. 30, 1969 (gage height, 21.65 ft, from floodmark); minimum, less than 0.1 cfs several days in September to November 1968.

REMARKS.--Records fair, except those below 2 cfs, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	2.0	3.0	47	24	30	36	9.3	1.7	1.7	22	.42
2	1.1	4.1	2.6	394	21	350	26	12	1.4	1.1	12	.48
3	1.2	5.3	23	125	31	250	22	24	1.2	.92	7.4	.48
4	4.1	3.9	23	140	33	100	21	34	.92	.76	4.6	.54
5	2.7	2.8	15	226	31	60	17	25	.76	2.2	3.2	1.2
6	3.0	2.2	126	103	30	40	16	20	.60	1.1	2.4	1.1
7	1.4	1.9	445	55	29	35	16	16	.54	.54	2.6	1.1
8	1.1	1.6	77	36	26	30	20	23	.48	.42	1.7	.92
9	1.2	1.4	42	82	25	28	30	23	.42	.36	16	.92
10	2.2	1.2	36	165	22	26	25	20	.54	.24	12	.76
11	3.0	1.1	50	98	21	24	22	16	.48	.24	6.9	.60
12	3.0	.92	43	59	28	22	80	14	.30	.30	9.9	.54
13	3.0	.92	45	44	117	20	50	27	.30	.42	13	.54
14	3.0	.76	36	34	75	18	40	54	.24	.30	11	.48
15	3.3	.76	32	26	49	20	32	93	.18	.24	6.4	.48
16	2.0	.76	31	22	34	35	36	52	.60	.24	3.9	.48
17	1.2	.60	28	19	46	40	44	31	3.9	.76	3.0	2.6
18	1.1	.60	22	17	67	40	38	21	2.0	20	2.2	1.2
19	1.2	.92	20	17	74	35	26	22	.76	15	1.6	.36
20	.80	1.1	31	17	49	30	22	13	3.2	9.0	1.2	.36
21	.90	1.6	33	18	36	70	20	11	2.2	5.0	.76	.42
22	1.0	1.9	27	23	30	150	245	8.7	.92	3.0	.60	.54
23	1.1	1.7	22	32	26	80	103	7.4	.48	2.5	.48	.54
24	1.2	3.2	19	36	36	40	54	5.9	.36	2.0	.48	1.7
25	1.3	3.5	16	37	91	36	34	5.0	.36	2.2	.48	1.1
26	1.2	2.4	14	34	95	27	24	3.9	.30	.54	.48	2.6
27	.95	3.2	12	31	75	65	19	3.2	.24	8.0	.48	5.2
28	.90	3.3	9.9	47	50	146	15	2.6	6.4	21	.42	5.0
29	.85	3.9	8.5	50	35	132	13	2.2	23	20	.36	12
30	.80	3.7	38	40	------	82	11	2.6	3.7	103	.36	45
31	.80	------	53	29	------	53	------	2.4	------	67	.36	------
TOTAL	50.82	63.24	1,383.0	2,103	1,306	2,114	1,157	604.2	58.48	290.08	148.26	89.66
MEAN	1.64	2.11	44.6	67.8	45.0	68.2	38.6	19.5	1.95	9.36	4.78	2.99
MAX	4.1	5.3	445	394	117	350	245	93	23	103	22	45
MIN	.80	.60	2.6	17	21	18	11	2.2	.18	.24	.36	.36
CFSM	.13	.17	3.54	5.38	3.57	5.41	3.06	1.55	.15	.74	.38	.24
IN.	.15	.19	4.08	6.21	3.86	6.24	3.42	1.78	.17	.86	.44	.26

CAL YR 1971 TOTAL 10,279.80 MEAN 28.2 MAX 581 MIN .42 CFSM 2.24 IN 30.35
WTR YR 1972 TOTAL 9,367.74 MEAN 25.6 MAX 445 MIN .18 CFSM 2.03 IN 27.66

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-07	0510	12.35	894	03-02	Unknown	e12.0	838
01-02	0715	10.73	642	04.22	0730	9.74	503

e - estimated from auxiliary gage record.

03543500 Sewee Creek near Decatur, Tenn.

LOCATION.--Lat 35°34'53", long 84°44'53", Meigs County, on right bank 0.3 mile downstream from bridge on State Highway 58, 0.5 mile downstream from Dry Fork, 5.0 miles north of Decatur, and at mile 5.7.

DRAINAGE AREA.--117 sq mi.

PERIOD OF RECORD.--May 1934 to current year. Prior to October 1935, published as Suee Creek near Decatur.

GAGE.--Water-stage recorder. Datum of gage is 694.32 ft above mean sea level.

AVERAGE DISCHARGE.--38 years, 188 cfs (21.82 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,530 cfs Mar. 3 (gage height, 6.98 ft); minimum, 24 cfs part of each day Sept. 14-16 (gage height, 0.26 ft).
Period of record: Maximum discharge, 23,900 cfs Jan. 7, 1946 (gage height, 23.97 ft, from floodmarks) from rating curve extended above 11,300 cfs on basis of slope-area measurement at gage height 22.81 ft; minimum, 11 cfs Sept. 24, 1935, Jan. 7-10, Oct. 4, 5, 7, 11, 12, 14, 15, 1940; minimum gage height, 0.15 ft Sept. 2, 3, 7-9, 13, 20, 1954.

REMARKS.--Records excellent.

REVISIONS (WATER YEARS).--WSP 1910: 1936(M), 1939(M), 1943 (M), 1946, 1948(M), 1949, 1951, 1957, 1958(P). WSP 2110: 1951 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	29	42	219	246	293	337	126	80	44	74	27
2	27	40	37	1,840	247	938	283	122	76	41	72	27
3	27	65	357	910	365	1,600	263	360	71	47	54	27
4	28	52	261	1,260	344	668	244	1,260	68	42	47	27
5	44	37	136	1,430	279	495	213	406	65	47	42	29
6	62	34	287	824	274	375	194	296	65	42	40	29
7	37	32	2,030	531	302	328	196	238	69	39	40	27
8	32	31	590	399	268	348	217	257	60	38	41	28
9	33	31	356	569	239	276	169	243	59	36	39	29
10	34	30	338	1,440	222	251	152	190	59	36	100	26
11	31	29	256	1,020	205	229	361	158	56	35	79	25
12	29	29	245	643	210	210	342	141	54	33	49	25
13	29	28	348	741	466	204	273	504	52	33	45	25
14	29	27	252	678	335	336	235	1,300	52	33	40	25
15	29	27	243	447	289	240	205	1,210	49	31	38	24
16	36	27	284	353	251	247	210	581	52	31	36	25
17	30	27	259	311	499	233	182	399	52	33	34	43
18	29	27	240	278	533	208	153	319	50	33	33	43
19	28	28	202	311	487	190	142	259	48	31	33	30
20	28	31	337	274	369	170	139	223	76	30	31	27
21	29	28	325	382	316	202	149	202	79	29	31	27
22	28	27	246	370	280	614	831	171	52	27	30	27
23	31	27	206	363	254	350	445	155	48	40	29	27
24	35	32	178	310	244	281	321	137	45	41	29	27
25	35	38	155	362	374	266	258	126	44	36	40	27
26	32	33	139	288	718	271	220	113	43	73	38	28
27	30	35	124	259	508	560	188	106	41	37	31	32
28	29	37	112	426	388	528	164	97	42	176	30	34
29	29	51	100	400	328	833	148	93	57	253	29	128
30	29	52	220	341	------	512	135	87	48	165	27	303
31	28	------	351	280	------	407	------	86	------	98	27	------
TOTAL	985	1,021	9,256	18,259	9,840	12,663	7,369	9,965	1,712	1,710	1,308	1,228
MEAN	31.8	34.0	299	589	339	408	246	321	57.1	55.2	42.2	40.9
MAX	62	65	2,030	1,840	718	1,600	831	1,300	80	253	100	303
MIN	27	27	37	219	205	170	135	86	41	27	27	24
CFSM	.27	.29	2.56	5.03	2.90	3.49	2.10	2.74	.49	.47	.36	.35
IN.	.31	.32	2.94	5.81	3.13	4.03	2.34	3.17	.54	.54	.42	.39

CAL YR 1971 TOTAL 68,413 MEAN 187 MAX 2,980 MIN 27 CFSM 1.60 IN 21.75
WTR YR 1972 TOTAL 75,316 MEAN 206 MAX 2,030 MIN 24 CFSM 1.76 IN 23.95

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-7	1130	6.83	2,450	3-3	0230	6.98	2,530
1-2	1730	6.88	2,470				

03556500 Hiwassee River near McFarland, Tenn.

LOCATION.--Lat 35°10'48", long 84°26'36", Polk County, on left bank 0.2 mile downstream from Smith Creek, 0.4 mile downstream from Apalachia powerhouse of Tennessee Valley Authority, 2.8 miles west of McFarland, and at mile 53.2.

DRAINAGE AREA.--1,136 sq mi.

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 830.56 ft above mean sea level.

AVERAGE DISCHARGE.--30 years, 2,354 cfs (28.14 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 14,800 cfs Jan. 11 (gage height, 8.32 ft); minimum, 179 cfs June 4, 5, 11, 12, 17, 19, 24, 25, 26, July 2 (gage height, 1.64 ft); minimum daily, 285 cfs May 21.
Period of record: Maximum discharge, 22,500 cfs June 13, 1952 (gage height, 10.42 ft) from rating curve extended above 15,000 cfs; minimum daily, 30 cfs (estimated) Sept. 18-20, 1955.

REMARKS.--Records excellent. Flow regulated by Chatuge, Nottely, Hiwassee, and Apalachia Lakes (see basic data releases for North Carolina and Georgia, 1972).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,880	2,790	2,550	3,180	2,630	1,790	866	1,720	2,090	965	2,580	2,460
2	2,890	2,810	2,550	4,130	2,670	2,090	570	1,730	2,080	510	2,610	2,070
3	2,900	2,900	2,880	3,700	2,780	3,000	1,120	2,060	1,390	2,090	2,580	1,470
4	2,900	2,860	2,860	4,180	2,850	2,120	1,960	2,470	1,030	2,130	2,520	2,120
5	2,920	2,800	2,680	4,310	2,740	2,030	2,070	2,170	1,980	2,280	2,180	2,610
6	3,020	2,800	2,940	3,680	2,720	1,910	1,060	1,860	2,180	2,560	1,440	2,510
7	2,960	2,860	3,630	3,370	2,800	1,860	2,000	324	2,530	2,500	2,220	2,470
8	2,950	3,110	1,720	3,280	2,760	2,040	2,480	1,090	2,490	1,250	2,480	2,470
9	2,940	2,840	1,490	3,320	2,710	2,020	1,540	1,020	2,510	1,160	2,480	2,460
10	2,950	2,810	3,100	5,170	2,690	1,870	2,150	1,280	1,260	2,130	2,560	2,450
11	2,950	2,800	2,160	7,920	2,540	1,070	1,760	1,860	838	2,460	2,470	2,460
12	2,960	2,790	1,610	10,400	2,680	1,120	1,340	1,060	1,850	2,460	2,140	2,470
13	2,960	2,840	3,150	10,700	2,970	1,770	2,020	1,070	2,500	2,460	1,560	2,460
14	2,810	2,830	3,110	9,770	2,800	1,490	2,280	987	2,500	2,470	2,260	2,450
15	2,810	2,820	3,090	8,380	2,740	832	1,820	1,090	2,500	2,070	2,480	2,460
16	2,870	2,840	3,080	8,260	2,700	1,030	325	1,380	2,490	1,140	2,520	2,440
17	2,810	2,840	3,100	8,210	2,720	2,400	1,070	1,260	1,740	2,120	2,490	2,490
18	2,780	2,850	3,120	6,930	2,720	708	1,100	1,790	1,120	2,510	2,430	2,550
19	2,770	2,840	3,040	3,340	2,800	304	1,110	1,820	2,170	2,550	2,120	2,510
20	2,760	2,850	3,300	3,280	2,700	2,070	923	325	3,090	2,570	1,550	2,500
21	2,770	2,800	3,480	3,290	2,630	1,160	810	285	1,890	2,440	2,230	2,480
22	2,780	2,840	3,320	3,290	2,030	1,330	1,290	1,270	2,230	2,130	2,570	2,410
23	2,820	2,760	3,270	3,260	2,080	1,790	719	2,030	2,020	1,430	2,520	2,480
24	2,820	2,640	3,240	3,230	1,860	2,180	485	1,830	916	2,170	2,490	2,480
25	2,930	2,650	3,230	3,210	2,030	1,980	795	1,700	724	2,520	2,490	2,480
26	2,860	2,600	3,220	3,170	2,720	1,410	1,150	1,680	1,850	2,500	2,160	2,470
27	2,820	2,600	3,200	1,720	2,560	2,210	1,040	1,460	2,500	1,620	1,560	2,640
28	2,780	2,580	3,180	3,000	2,670	2,100	1,090	1,350	2,140	2,460	2,260	2,700
29	2,770	2,590	3,180	2,680	2,120	2,190	1,460	1,590	2,170	2,510	2,470	2,550
30	2,780	2,540	3,170	2,670	------	2,530	909	2,290	2,130	2,100	2,470	2,500
31	2,780	------	3,200	2,660	------	1,400	------	2,140	------	2,390	2,470	------
TOTAL	88,700	83,480	90,850	147,690	75,420	53,804	39,312	45,991	58,908	64,655	71,360	73,070
MEAN	2,861	2,783	2,931	4,764	2,601	1,736	1,310	1,484	1,964	2,086	2,302	2,436
MAX	3,020	3,110	3,630	10,700	2,970	3,000	2,480	2,470	3,090	2,570	2,610	2,700
MIN	2,760	2,540	1,490	1,720	1,860	304	325	285	724	510	1,440	1,470
(†)	-56,900	-48,000	-6,600	+11,800	+16,500	+55,000	+62,200	+38,200	-13,200	-9,400	-27,700	-41,400
MEAN‡	1,026	1,183	2,718	5,145	3,170	3,510	3,384	2,716	1,524	1,782	1,408	1,056
CFSM‡	.90	1.04	2.39	4.53	2.79	3.09	2.98	2.39	1.34	1.57	1.24	.93
IN.‡	1.04	1.16	2.76	5.22	3.01	3.56	3.32	2.76	1.50	1.81	1.43	1.04

CAL YR 1971 TOTAL 863,072 MEAN 2,365 MAX 5,430 MIN 179 MEAN‡ 2,448 CFSM‡ 2.15 IN.‡ 29.25
WTR YR 1972 TOTAL 893,240 MEAN 2,441 MAX 10,700 MIN 285 MEAN‡ 2,387 CFSM‡ 2.10 IN.‡ 28.60

† Change in contents, in cfs days, in Chatuge, Hiwassee, Apalachia (North Carolina), and Nottely (Georgia) Lakes, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03560500 Davis Mill Creek at Copperhill, Tenn.

LOCATION.--Lat 34°59'43", long 84°22'56", Polk County, on right bank, 100 ft upstream from bridge on State Highway 68, 0.4 mile northwest of Louisville and Nashville Railroad station, and 0.8 mile northwest of post office at Copperhill, and 0.1 mile upstream from mouth.

DRAINAGE AREA.--5.16 sq mi.

PERIOD OF RECORD.--July 1940 to September 1941 (published as Mill Creek at Copperhill), December 1948 to current year.

GAGE.--Water-stage recorder and concrete San Dimas flume and dam. Datum of gage is 1,451.06 ft above mean sea level. July 16, 1940, to Sept. 30, 1941, water-stage recorder and sharp-crested weir at site 145 ft upstream and at datum 1.58 ft higher.

AVERAGE DISCHARGE.--23 years (1949-72), 42.2 cfs, unadjusted.

EXTREMES.--Current year: Maximum discharge, 438 cfs July 19 (gage height, 4.95 ft); minimum daily, 28 cfs Dec. 2.
Period of record: Maximum discharge, 3,520 cfs Oct. 6, 1949 (gage height, 6.02 ft in gage well, 8.5 ft from floodmarks), from rating curve extended above 150 cfs on basis of critical-depth measurement of peak flow; minimum daily, 3.1 cfs July 30, 1940.

REMARKS.--Records fair. Flow includes an unknown amount of diversion from other drainage basins through the sulphuric acid plant of Tennessee Copper Co. Some fluctuation due to irregular releases of wastes by Tennessee Copper Co. just above gage.

REVISIONS.--WSP 1206: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	42	32	37	38	57	68	94	83	93	111	109
2	38	38	28	54	40	55	65	91	91	101	102	111
3	40	43	48	39	42	41	69	100	95	103	102	109
4	41	37	37	77	38	41	68	85	90	109	99	108
5	48	35	35	44	39	39	69	87	96	110	103	105
6	46	38	38	38	42	38	81	88	78	98	102	84
7	42	37	57	36	41	40	88	86	80	102	101	95
8	35	37	40	35	40	46	82	76	75	104	103	113
9	36	37	37	39	39	41	77	73	90	110	114	110
10	33	37	37	56	38	40	74	70	98	115	103	111
11	33	35	37	49	39	40	86	58	93	115	106	111
12	37	34	39	36	45	41	77	63	97	113	106	108
13	36	33	40	42	45	44	73	86	104	109	104	108
14	37	33	36	37	43	53	72	58	115	107	103	111
15	36	33	37	35	42	54	74	45	114	112	99	110
16	39	34	39	31	48	48	76	40	99	115	101	110
17	38	37	43	33	56	51	72	39	112	107	100	121
18	38	35	36	38	53	51	77	38	112	111	100	116
19	38	34	31	42	51	45	78	47	114	126	102	113
20	39	32	44	40	47	53	78	61	119	108	104	111
21	39	31	39	41	47	65	69	75	109	105	103	114
22	44	30	33	41	48	59	109	82	98	107	102	113
23	46	30	31	39	49	56	95	88	110	107	101	111
24	45	32	35	39	53	57	99	85	105	112	101	111
25	44	31	38	38	56	68	99	84	108	113	103	105
26	43	31	39	36	55	65	104	82	106	116	100	108
27	43	33	39	37	52	69	101	85	99	134	96	111
28	42	32	37	40	54	77	97	91	113	119	98	110
29	43	34	39	40	59	77	96	86	92	127	97	121
30	42	31	38	39	------	70	94	96	96	128	105	112
31	42	------	36	41	------	71	------	93	------	120	107	------
TOTAL	1,241	1,036	1,175	1,269	1,339	1,652	2,467	2,332	2,991	3,456	3,178	3,290
MEAN	40.0	34.5	37.9	40.9	46.2	53.3	82.2	75.2	99.7	111	103	110
MAX	48	43	57	77	59	77	109	100	119	134	114	121
MIN	33	30	28	31	38	38	65	38	75	93	96	84

CAL YR 1971 TOTAL 15,068 MEAN 41.3 MAX 67 MIN 28
WTR YR 1972 TOTAL 25,426 MEAN 69.5 MAX 134 MIN 28

03563000 Ocoee River at Emf, Tenn.

LOCATION.--Lat 35°05'48", long 84°32'07", Polk County, on left bank 700 ft downstream from Tennessee Valley Authority powerplant, 0.8 mile upstream from former village of Emf, 2.0 miles downstream from Goforth Creek and at mile 19.6.

DRAINAGE AREA.--524 sq mi.

PERIOD OF RECORD.--October 1912 to current year. Prior to January 1913, monthly discharges only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 837.88 ft above mean sea level.

AVERAGE DISCHARGE.--60 years, 1,231 cfs (31.90 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 7,230 cfs May 14 (gage height, 7.73 ft); minimum, 198 cfs Sept. 18 (gage height, 3.09 ft); minimum daily, 714 cfs Oct. 7.
Period of record: Maximum discharge, 29,400 cfs July 10, 1916 (gage height, 13.7 ft) from rating curve extended above 17,000 cfs; minimum, 3.4 cfs Sept. 20, 1962 (gage height, 2.12 ft); minimum daily, 4.6 cfs Sept. 14, 1962.
Flood of Nov. 19, 1906, discharge, 62,000 cfs, was the greatest known flood since at least 1840, from reports by Tennessee Valley Authority.

REMARKS.--Records excellent. Flow regulated by Blue Ridge Lake (see sta 03558500 basic data release for Georgia, 1972), and by powerplant above station.

REVISIONS (WATER YEARS).--WSP 783: 1913-34.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,320	1,070	997	1,020	1,560	1,500	1,750	1,470	1,480	989	1,450	1,440
2	1,180	1,060	995	1,540	1,560	1,540	1,570	1,490	1,510	993	1,460	1,040
3	1,120	1,080	1,120	1,210	1,590	1,610	2,290	1,580	1,470	1,010	1,460	971
4	1,120	1,060	1,060	2,840	1,630	1,570	1,560	1,580	1,480	1,000	1,460	979
5	933	1,040	1,040	2,550	1,570	1,550	1,540	1,570	1,460	1,060	1,440	1,180
6	729	1,030	1,050	1,800	1,570	1,520	1,530	1,530	1,470	1,000	1,430	1,020
7	714	1,020	1,490	1,570	1,590	1,510	1,530	1,510	1,490	966	1,280	986
8	737	1,010	1,470	1,560	1,580	1,580	1,780	1,530	1,360	956	1,120	994
9	717	1,010	1,070	1,550	1,570	1,640	1,560	1,540	1,470	957	1,160	1,010
10	739	1,000	1,040	2,310	1,560	1,540	1,450	1,530	1,170	951	1,230	1,010
11	751	1,000	1,010	2,120	1,560	1,520	2,010	1,510	987	954	1,230	993
12	732	850	1,020	1,920	1,560	1,510	2,180	1,500	988	974	1,290	986
13	770	1,000	1,040	1,680	1,580	1,520	2,220	1,630	989	966	994	990
14	923	1,000	1,040	1,720	1,790	1,510	2,060	4,030	985	963	980	987
15	1,000	1,000	1,020	1,600	1,580	1,500	2,080	2,320	984	969	981	994
16	1,050	1,020	1,010	1,570	1,710	1,510	1,550	2,680	981	965	1,400	989
17	1,050	1,010	1,070	1,560	1,560	1,510	1,540	1,750	1,040	1,160	1,440	1,010
18	1,050	1,020	1,060	1,540	1,530	1,510	1,510	1,900	1,020	1,030	1,420	1,020
19	1,050	1,010	1,050	1,540	1,530	1,500	1,480	1,570	1,240	1,200	1,420	946
20	1,100	1,000	1,060	1,520	1,520	1,500	1,480	1,540	1,490	1,200	1,040	1,000
21	850	1,010	1,040	1,560	1,500	1,500	1,510	1,460	1,080	1,240	1,380	967
22	1,050	1,000	1,050	1,550	1,480	1,730	2,220	1,510	1,010	979	1,430	965
23	1,200	997	1,030	1,550	1,500	1,530	1,660	1,510	1,010	962	1,420	959
24	1,200	1,010	1,020	1,530	1,500	1,510	1,560	1,510	1,010	966	1,420	954
25	1,200	1,000	1,010	1,550	1,510	1,520	1,530	1,500	1,010	1,390	1,440	983
26	1,300	993	1,010	1,540	1,550	1,510	1,520	1,490	1,000	1,380	1,450	955
27	1,250	992	1,010	1,530	1,550	1,540	1,520	1,490	1,000	1,510	1,440	969
28	1,100	996	1,010	1,560	1,560	2,470	1,490	1,440	1,180	1,540	1,440	990
29	1,050	992	996	1,560	1,510	2,590	1,500	1,470	1,200	1,500	1,440	1,030
30	1,000	993	998	1,560	------	2,590	1,480	1,490	995	1,500	1,470	1,640
31	1,050	------	1,010	1,560	------	2,420	------	1,480	------	1,240	1,440	------
TOTAL	31,035	30,273	32,936	52,470	45,360	51,560	50,660	52,110	35,559	34,470	41,455	30,957
MEAN	1,001	1,009	1,062	1,693	1,564	1,663	1,689	1,681	1,185	1,112	1,337	1,032
MAX	1,320	1,080	1,490	2,840	1,790	2,590	2,290	4,030	1,510	1,540	1,470	1,640
MIN	714	850	995	1,020	1,480	1,500	1,450	1,440	981	951	980	946
(†)	-11,900	-10,000	+13,800	+23,800	+1,400	+300	-2,100	+1,100	-5,800	-4,800	-17,800	-12,900
MEAN‡	617	676	1,508	2,460	1,612	1,673	1,619	1,716	992	957	763	602
CFSM‡	1.18	1.29	2.88	4.69	3.08	3.19	3.09	3.27	1.89	1.83	1.46	1.15
IN.‡	1.36	1.44	3.32	5.41	3.32	3.68	3.45	3.78	2.11	2.11	1.68	1.28

CAL YR 1971 TOTAL 447,842 MEAN 1,227 MAX 4,020 MIN 714 MEAN‡ 1,320 CFSM‡ 2.52 IN.‡ 34.21
WTR YR 1972 TOTAL 488,845 MEAN 1,336 MAX 4,030 MIN 714 MEAN‡ 1,268 CFSM‡ 2.42 IN.‡ 32.93

† Change in contents, in cfs days, in Blue Ridge Lake (Georgia), furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03564500 Ocoee River at Parksville, Tenn.

LOCATION.--Lat 35°05'48", long 84°39'15", Polk County, on right bank 0.4 mile downstream from Lake Ocoee Dam and Ocoee No. 1 powerplant of Tennessee Valley Authority at Parksville and at mile 11.5.

DRAINAGE AREA.--595 sq mi.

PERIOD OF RECORD.--January 1911 to September 1916, March 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 716.96 ft above mean sea level.

AVERAGE DISCHARGE.--56 years, 1,308 cfs (29.85 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 6,000 cfs May 14 (gage height, 8.77 ft); minimum, 53 cfs Jan. 4 (gage height, 2.75 ft); minimum daily, 70 cfs Dec. 25, 26.
Period of record: Maximum discharge, 21,700 cfs Mar. 29, 1951 (gage height, 20.22 ft); minimum daily, 10 cfs Oct. 28, 1925.

REMARKS.--Records good. Flow regulated by Blue Ridge Lake (see sta 03558500 basic data release for Georgia, 1972), and Lake Ocoee (sta 03564000). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1306: 1916, 1921-36 (adjusted runoff). WSP 1386: 1926.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,210	1,230	1,360	1,080	1,520	1,600	2,570	1,630	1,600	1,200	1,700	1,780
2	1,070	1,170	1,570	1,640	1,440	1,750	2,500	1,370	1,550	1,180	1,300	1,110
3	1,040	1,360	1,240	2,110	1,490	2,510	2,220	2,010	1,500	1,190	1,300	986
4	1,050	1,180	1,370	1,600	1,680	1,750	1,920	2,030	1,500	950	1,300	1,000
5	1,180	1,450	1,230	2,110	1,920	1,670	1,990	2,060	1,500	1,040	1,400	1,560
6	1,080	1,310	1,270	2,050	1,990	1,630	1,570	1,590	1,500	1,260	1,350	1,330
7	1,080	1,190	1,920	2,020	1,860	1,710	1,370	1,550	1,500	1,100	1,400	1,110
8	807	1,590	1,720	2,040	1,850	1,680	1,330	1,850	1,600	1,250	1,100	780
9	627	1,100	1,730	2,060	1,870	1,820	1,620	1,300	1,700	1,210	1,100	773
10	698	1,000	1,450	2,080	1,660	1,740	1,690	1,520	1,200	1,280	1,000	797
11	761	925	1,340	2,400	1,530	1,740	1,780	1,390	1,150	867	1,150	912
12	770	1,000	1,170	2,300	1,670	1,710	2,470	1,370	1,150	825	1,250	1,020
13	1,110	1,050	1,270	2,700	1,560	1,700	2,160	1,600	950	806	1,200	1,020
14	604	1,000	1,210	3,200	2,150	1,520	1,580	5,070	950	890	1,600	1,080
15	597	1,050	1,340	2,300	1,710	1,610	1,550	2,480	1,000	792	1,200	1,130
16	597	1,200	1,230	2,100	1,250	1,600	1,550	2,510	1,050	811	1,500	1,010
17	1,190	1,350	1,090	2,100	1,350	1,530	1,530	2,500	1,100	1,140	1,400	1,050
18	1,250	1,250	1,070	2,200	1,330	1,540	1,480	2,460	1,200	940	1,200	1,060
19	1,120	1,250	1,320	2,150	1,100	1,550	1,520	2,160	1,800	1,280	1,100	1,040
20	961	1,400	1,230	2,200	1,490	1,530	1,510	1,650	2,300	997	1,200	970
21	1,060	1,150	1,230	2,200	1,390	1,470	1,580	1,520	1,100	1,250	1,300	949
22	1,320	1,250	1,330	2,200	2,010	1,600	2,610	1,570	900	1,240	1,500	854
23	1,130	1,200	1,350	2,200	1,670	1,900	2,200	1,500	800	1,120	1,700	884
24	163	1,250	1,690	2,150	1,880	1,570	1,700	1,560	900	1,300	1,600	941
25	1,390	1,100	70	2,300	2,460	1,500	1,540	1,550	800	1,380	1,400	935
26	1,630	1,100	70	2,300	2,620	1,550	1,640	1,570	1,150	1,330	1,400	1,000
27	1,580	1,170	1,500	2,180	2,280	1,610	1,560	1,050	923	1,330	1,400	946
28	1,210	492	1,440	2,210	1,690	1,910	1,580	1,490	964	1,560	1,400	995
29	963	1,060	1,460	2,260	1,720	2,460	1,690	1,500	990	2,290	1,600	1,170
30	923	1,350	1,240	2,300	------	2,660	1,660	1,610	1,370	2,340	1,700	1,650
31	834	------	1,330	1,670	------	2,650	------	1,520	------	1,600	1,600	------
TOTAL	31,005	35,177	39,840	66,410	50,140	54,770	53,670	56,540	37,697	37,748	42,350	31,842
MEAN	1,000	1,173	1,285	2,142	1,729	1,767	1,789	1,824	1,257	1,218	1,366	1,061
MAX	1,630	1,590	1,920	3,200	2,620	2,660	2,610	5,070	2,300	2,340	1,700	1,780
MIN	163	492	70	1,080	1,100	1,470	1,330	1,050	800	792	1,000	773
(†)	-11,400	-14,000	+10,200	+23,300	+1,900	+3,900	+100	+2,500	-5,600	-6,200	-17,000	-12,400
MEAN‡	632	706	1,614	2,894	1,794	1,893	1,792	1,905	1,070	1,018	818	648
CFSM‡	1.06	1.19	2.71	4.86	3.02	3.18	3.01	3.20	1.80	1.71	1.37	1.09
IN.‡	1.23	1.32	3.13	5.61	3.25	3.67	3.36	3.69	2.01	1.97	1.58	1.22

CAL YR 1971 TOTAL 494,298 MEAN 1,354 MAX 4,160 MIN 70 MEAN‡ 1,447 CFSM‡ 2.43 IN.‡ 33.01
WTR YR 1972 TOTAL 537,189 MEAN 1,468 MAX 5,070 MIN 70 MEAN‡ 1,400 CFSM‡ 2.35 IN.‡ 32.03

† Change in contents, in cfs days, in Blue Ridge Lake (Georgia), and Lake Ocoee, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.
Note.--No gage-height record July 31 to Aug. 31.

03565000 Hiwassee River above Charleston, Tenn.

LOCATION.--Lat 35°12'33", long 84°39'31", Polk County, on right bank 0.2 mile downstream from Ocoee River, 0.3 mile upstream from Louisville and Nashville Railroad bridge, 2.5 miles north of Benton, 15.2 miles upstream from Charleston, and at mile 34.2.

DRAINAGE AREA.--2,001 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE--Water-stage recorder. Datum of gage is 682.86 ft above mean sea level. Auxiliary water-stage recorder 1.8 miles downstream.

AVERAGE DISCHARGE.--19 years, 4,050 cfs (27.49 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 17,600 cfs Jan. 14 (gage height, 15.28 ft); minimum, 572 cfs July 3 (gage height, 2.08 ft); minimum daily, 1,500 cfs June 25.
Period of record: Maximum discharge, 35,300 cfs Apr. 7, 1964; maximum gage height, 25.72 ft Mar. 13, 1963; minimum, 312 cfs Oct. 4, 1959; minimum daily, 355 cfs Nov. 14, 1954.

REMARKS.--Records excellent. Flow regulated by six reservoirs (see sta 03562500, 03564000), and basic data releases from Georgia and North Carolina, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,170	4,110	3,910	4,690	4,520	4,110	4,580	3,230	3,900	2,700	4,610	4,330
2	4,030	4,090	4,390	7,580	4,680	4,680	4,340	3,560	3,700	2,100	4,290	3,780
3	4,010	4,260	4,420	8,320	5,050	7,860	3,750	5,280	3,200	2,750	4,160	2,490
4	4,090	4,580	4,940	7,680	5,670	5,530	4,140	6,520	2,800	3,330	4,040	3,040
5	4,240	4,250	4,310	9,320	5,560	4,560	4,890	5,750	3,300	3,490	3,750	4,300
6	4,270	4,310	4,340	8,060	5,460	4,740	3,650	4,440	3,800	3,980	3,310	4,230
7	4,080	3,690	6,680	6,840	5,460	4,280	3,550	2,990	4,000	3,840	3,480	3,810
8	3,900	4,970	5,420	6,320	5,430	4,320	4,350	2,880	4,100	2,920	3,820	3,380
9	3,680	4,250	3,660	6,230	5,170	4,870	4,280	3,110	4,200	2,430	3,770	3,470
10	3,750	3,830	4,430	9,380	4,850	4,440	4,170	2,770	2,600	3,260	4,030	3,200
11	3,760	3,860	4,220	11,900	4,780	3,620	3,730	3,200	2,300	3,560	3,980	3,400
12	3,780	3,790	2,990	14,600	4,750	3,640	4,720	2,600	3,100	3,370	3,540	3,660
13	4,040	3,880	4,260	13,700	5,200	3,340	4,650	3,000	3,500	3,560	3,200	3,550
14	3,570	3,810	4,700	15,800	5,970	3,810	4,620	7,600	3,700	3,290	3,600	3,600
15	3,460	3,930	4,520	11,700	5,180	3,370	3,890	5,400	3,700	3,200	3,930	3,640
16	3,620	3,890	4,660	10,600	4,730	2,550	2,990	5,100	3,700	2,240	3,910	3,540
17	4,000	4,240	4,280	10,200	4,850	4,310	2,660	5,100	3,400	3,060	4,180	3,640
18	4,140	4,160	4,860	9,780	4,790	3,530	2,920	5,000	2,500	3,720	3,850	3,780
19	4,060	3,950	4,700	6,440	5,200	2,580	3,020	4,800	4,000	3,930	3,360	3,760
20	3,820	4,410	4,780	6,090	5,240	3,380	2,730	3,300	5,800	3,980	3,090	3,590
21	3,860	3,990	5,150	6,290	4,660	3,210	2,880	1,800	4,300	3,700	3,200	3,600
22	4,080	3,970	5,020	6,430	4,510	3,390	5,270	3,000	3,000	3,510	4,090	3,380
23	4,090	4,150	5,050	6,370	4,380	3,760	5,680	3,700	3,000	2,990	4,350	3,370
24	3,320	3,850	5,120	6,150	4,390	4,480	2,960	3,400	2,000	3,240	4,120	3,560
25	4,050	3,910	4,040	6,140	4,820	4,020	2,720	3,300	1,500	4,120	4,020	3,500
26	4,600	3,860	3,530	6,070	6,250	4,250	3,370	3,200	3,000	4,020	3,600	3,490
27	4,620	3,590	4,440	4,650	6,120	3,490	3,180	2,700	3,550	3,690	3,380	3,740
28	4,170	3,510	4,750	5,710	5,250	5,460	2,970	3,000	3,290	4,140	3,390	3,940
29	3,930	3,390	4,920	5,820	4,560	5,970	3,340	3,600	3,410	5,440	4,050	3,880
30	3,740	4,020	4,530	5,650	------	6,820	3,230	4,600	3,620	6,100	4,100	5,260
31	3,530	------	4,990	5,180	------	5,660	------	3,800	------	5,290	4,230	------
TOTAL	122,460	120,500	142,010	249,690	147,480	134,030	113,230	121,730	101,970	110,950	118,430	109,910
MEAN	3,950	4,017	4,581	8,055	5,086	4,324	3,774	3,927	3,399	3,579	3,820	3,664
MAX	4,620	4,970	6,680	15,800	6,250	7,860	5,680	7,600	5,800	6,100	4,610	5,260
MIN	3,320	3,390	2,990	4,650	4,380	2,550	2,660	1,800	1,500	2,100	3,090	2,490
(†)	-68,300	-62,000	+3,600	+35,100	+18,400	+58,900	+62,300	+40,700	-18,800	-15,600	-44,700	-53,800
MEAN‡	1,747	1,950	4,697	9,187	5,720	6,224	5,851	5,240	2,772	3,076	2,378	1,870
CFSM‡	.87	.97	2.35	4.59	2.86	3.11	2.92	2.62	1.39	1.54	1.19	.93
IN.‡	1.01	1.09	2.71	5.29	3.08	3.59	3.26	3.02	1.55	1.77	1.37	1.04

CAL YR 1971 TOTAL 1,509,360 MEAN 4,135 MAX 12,500 MIN 1,410 MEAN‡ 4,311 CFSM‡ 2.15 IN.‡ 29.24
WTR YR 1972 TOTAL 1,592,390 MEAN 4,351 MAX 15,800 MIN 1,500 MEAN‡ 4,230 CFSM‡ 2.11 IN.‡ 28.77

† Change in contents, in cfs days, in Chatuge, Hiwassee, Apalachia (North Carolina), Nottely, Blue Ridge (Georgia), and Lake Ocoee, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.
NOTE.--No gage-height record May 10-June 26.

03565300 South Chestuee Creek near Benton, Tenn.

LOCATION.--Lat 35°10'02", long 84°42'59", Bradley County, on right bank 50 ft downstream from relocated county highway bridge, 0.2 mile downstream from Climer Branch, 2.4 miles southwest of Benton Station, 2.8 miles north of Ocoee, and 3.6 miles west of Benton, and at mile 9.3.

DRAINAGE AREA.--31.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 712.14 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 50.3 cfs (21.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,110 cfs July 30 (gage height, 9.07 ft); minimum, 4.8 cfs Sept. 25, 26.
Period of record: Maximum discharge, 4,140 cfs Dec. 18, 1961 (gage height, 9.09 ft) from rating curve extended above 3,200 cfs; minimum, 2.1 cfs Aug. 31, 1962.

REMARKS.--Records excellent.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	9.0	7.9	44	52	64	90	19	15	9.8	88	6.7
2	7.1	17	7.4	690	63	323	69	20	14	9.6	59	6.7
3	6.7	22	233	172	132	355	63	79	14	10	44	6.4
4	6.7	14	73	500	99	127	72	96	13	10	35	18
5	16	10	34	468	72	97	57	41	13	10	30	31
6	11	9.3	55	171	78	74	49	29	13	9.4	25	10
7	8.1	9.3	485	107	96	64	50	24	13	8.7	23	7.9
8	7.4	8.4	90	83	68	135	74	37	12	8.5	21	7.1
9	7.4	8.1	57	126	60	79	47	32	12	8.2	18	6.9
10	7.4	8.1	45	594	53	65	40	23	12	8.0	18	6.4
11	6.9	7.9	37	503	48	56	61	19	11	7.8	17	6.2
12	6.9	7.9	37	177	66	50	61	17	11	7.7	15	6.2
13	6.7	7.6	67	273	173	46	48	374	11	7.5	14	5.7
14	6.9	7.6	41	346	88	61	41	1,050	10	7.4	13	5.7
15	6.9	7.4	35	121	70	44	34	129	10	7.5	12	5.5
16	9.3	7.4	33	87	59	52	32	78	10	13	11	5.5
17	7.6	7.4	57	75	90	50	28	59	11	31	11	7.1
18	7.1	7.4	50	68	181	43	26	48	11	20	11	8.4
19	6.9	7.4	38	71	130	41	24	40	10	9.6	10	6.4
20	6.4	7.6	73	63	85	35	23	37	70	8.6	9.8	5.7
21	6.7	7.4	59	103	70	35	23	33	32	7.8	9.3	5.5
22	7.1	6.9	43	92	63	52	280	29	15	7.5	8.7	5.3
23	30	6.7	34	80	55	36	82	27	13	9.1	8.4	5.3
24	47	9.6	31	67	52	32	52	25	11	8.7	8.4	5.3
25	24	10	27	77	64	47	40	23	11	9.5	8.1	5.0
26	13	8.1	25	58	120	45	33	20	10	9.1	7.9	5.3
27	10	9.0	23	53	83	77	28	19	10	78	7.6	13
28	9.0	9.0	22	85	65	112	25	18	12	344	7.1	11
29	8.4	9.6	20	72	56	254	24	17	12	141	7.1	10
30	8.1	9.0	43	72	------	108	21	17	11	835	6.9	75
31	7.9	------	59	58	------	118	------	18	------	1,360	6.7	------
TOTAL	327.7	276.1	1,941.3	5,556	2,391	2,777	1,597	2,497	433	3,022.0	571.0	310.2
MEAN	10.6	9.20	62.6	179	82.4	89.6	53.2	80.5	14.4	97.5	18.4	10.3
MAX	47	22	485	690	181	355	280	1,050	70	1,360	88	75
MIN	6.4	6.7	7.4	44	48	32	21	17	10	7.4	6.7	5.0
CFSM	.33	.29	1.97	5.63	2.59	2.82	1.67	2.53	.45	3.07	.58	.32
IN.	.38	.32	2.27	6.50	2.80	3.25	1.87	2.92	.51	3.54	.67	.36

CAL YR 1971 TOTAL 20,695.6 MEAN 56.7 MAX 1,110 MIN 6.4 CFSM 1.78 IN 24.21
WTR YR 1972 TOTAL 21,699.3 MEAN 59.3 MAX 1,360 MIN 5.0 CFSM 1.86 IN 25.38

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-2	1245	7.10	940	5-14	0245	7.93	2,080
1-10	1915	7.04	880	7-30	2345	9.07	4,110

03565500 Oostanaula Creek near Sanford, Tenn.

LOCATION.--Lat 35°19'39", long 84°42'19", McMinn County, on right bank 20 ft downstream from highway bridge, 1.3 miles southeast of Sanford, and 3.5 miles northeast of Calhoun, and at mile 5.7.

DRAINAGE AREA.--57.0 sq mi.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 716.51 ft above mean sea level.

AVERAGE DISCHARGE.--18 years, 89.6 cfs (21.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 882 cfs Jan. 11 (gage height, 5.73 ft); minimum discharge, 22 cfs Sept. 23-26 (gage height, 2.27 ft).
Period of record: Maximum discharge, 6,840 cfs Mar. 12, 1963 (gage height, 12.62 ft); minimum, 16 cfs Oct. 13-28, 1954, Sept. 27, 1959; minimum gage height, 2.12 ft Oct. 28, 1954, Aug. 14, 1969, Dec. 3, 5-6, 1969.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	29	35	69	122	127	135	86	71	41	77	28
2	24	49	150	467	121	222	122	83	69	41	59	28
3	24	78	350	664	157	424	115	115	67	43	70	28
4	25	50	200	318	200	275	116	161	64	48	54	29
5	45	39	100	434	152	211	108	120	63	42	48	34
6	66	36	200	396	142	188	102	96	61	42	46	34
7	47	34	375	248	154	168	99	89	61	38	53	28
8	34	33	225	200	142	178	153	89	58	36	54	27
9	31	33	125	197	127	175	133	94	56	35	44	31
10	30	32	100	555	119	149	107	84	56	35	53	30
11	29	32	88	849	113	139	111	78	55	34	42	27
12	29	31	80	559	113	131	190	75	53	33	41	27
13	27	30	76	329	182	125	140	122	51	32	39	25
14	27	29	70	331	159	150	125	507	50	32	37	25
15	27	29	66	269	132	138	114	391	50	31	36	25
16	56	29	74	214	123	123	107	222	48	31	35	25
17	4[illegible]	30	91	190	130	126	103	170	49	42	33	25
18	32	30	105	176	175	117	96	148	49	103	33	31
19	30	30	86	171	216	111	92	131	47	45	32	28
20	28	35	90	176	166	105	90	119	51	39	32	26
21	28	30	103	203	147	100	88	113	62	35	31	25
22	28	30	84	208	138	103	224	106	49	34	31	24
23	30	30	75	183	130	99	249	138	45	32	30	24
24	38	40	72	165	125	93	143	107	43	32	30	24
25	41	45	69	158	125	93	121	96	42	32	30	24
26	39	40	66	153	188	101	109	91	42	33	34	26
27	33	35	64	137	189	111	102	86	42	35	34	36
28	31	35	61	143	145	136	96	82	41	50	31	34
29	30	35	59	160	132	168	93	79	46	96	30	29
30	29	35	68	143	------	183	89	77	41	179	29	190
31	29	------	77	131	------	143	------	75	------	92	29	------
TOTAL	1,034	1,073	3,484	8,596	4,264	4,712	3,672	4,030	1,582	1,473	1,257	997
MEAN	33.4	35.8	112	277	147	152	122	130	52.7	47.5	40.5	33.2
MAX	66	78	375	849	216	424	249	507	71	179	77	190
MIN	24	29	35	69	113	93	88	75	41	31	29	24
CFSM	.59	.63	1.96	4.86	2.58	2.67	2.14	2.28	.92	.83	.71	.58
IN.	.67	.70	2.27	5.61	2.78	3.08	2.40	2.63	1.03	.96	.82	.65

CAL YR 1971 TOTAL 33,833 MEAN 92.7 MAX 668 MIN 24 CFSM 1.63 IN 22.08
WTR YR 1972 TOTAL 36,174 MEAN 98.8 MAX 849 MIN 24 CFSM 1.73 IN 23.61

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-3	1145	5.29	766	1-11	1530	5.73	882

03566000 Hiwassee River at Charleston, Tenn.

LOCATION.--Lat 35°17'16", long 84°45'07", Bradley County, at Hiwassee Packing Plant, on left bank 250 ft upstream from Southern Railroad bridge, 0.3 mile upstream from bridge on U.S. Highway 11 at Charleston, and at mile 18.9.

DRAINAGE AREA.--2,298 sq mi.

PERIOD OF RECORD.--November 1898 to April 1899, November 1899 to April 1903, October 1919 to January 1940, January 1963 to current year. Gage-height records collected at this station during the period December 1884 to December 1889 are contained in United States War Department Stages of Ohio River and Principal Tributaries, 1858-89, Part 1, and during period January 1890 to December 1943, are contained in reports of the U.S. Weather Bureau.

GAGE.--Water-stage recorder and deflection recorder. Datum of gage is 665.56 ft above mean sea level. Prior to July 18, 1925, non-recording gages; July 18, 1925, to Sept. 6, 1926, water-stage recorder at Southern Railway bridge, 250 ft downstream at datum 1.50 ft higher. Auxiliary nonrecording gages at several sites and datum used periodically.

AVERAGE DISCHARGE.--31 years (1900-1902, 1919-39, 1963-72), 4,722 cfs (27.90 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 19,600 cfs Jan. 14; maximum gage height, 18.74 ft May 14; minimum daily, 1,590 cfs June 25; minimum gage height, 9.94 ft Mar. 16.
Period of record: Maximum discharge, 55,800 cfs Dec. 29, 1932 (gage height, 28.58 ft); minimum, 260 cfs Sept. 14, 1925 (gage height, -1.28 ft).
Maximum stage known, 34.0 ft, present datum, Mar. 31, 1889 (discharge, about 70,000 cfs).

REMARKS.--Records good. Some diversions above the station for industrial and municipal water supplies. Flow regulated by six reservoirs (see p. 122, and basic data releases for Georgia and North Carolina, 1972). Daily discharge figures computed using area as determined from a stage-area curve and velocity as determined from a deflection-velocity curve.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,060	4,180	4,350	5,440	5,560	4,700	5,760	3,490	4,090	2,810	5,610	4,710
2	4,060	4,340	4,270	8,930	5,710	6,200	5,220	3,790	3,950	2,100	4,870	4,060
3	4,040	4,510	4,630	10,400	6,060	9,000	4,430	5,440	3,480	2,700	4,840	2,620
4	4,130	5,040	5,140	9,240	6,990	6,400	4,770	6,660	2,880	3,640	4,600	3,110
5	4,130	4,680	5,550	11,800	6,850	5,400	5,670	5,990	3,460	3,670	4,110	4,740
6	4,390	4,620	5,140	9,990	6,510	5,600	4,670	4,870	4,110	4,420	3,670	4,720
7	4,110	4,090	5,530	8,290	6,680	5,200	3,980	3,450	4,510	4,240	3,710	4,230
8	3,940	5,290	6,640	7,640	6,520	5,300	5,030	3,330	4,420	3,080	4,250	3,560
9	3,730	4,640	4,930	7,270	6,220	5,600	5,370	3,420	4,440	2,540	4,100	3,630
10	3,710	4,190	5,290	11,500	6,130	5,200	4,720	3,020	3,180	3,310	4,300	3,490
11	3,720	4,190	5,370	16,500	6,020	4,300	4,320	3,840	2,550	3,770	4,200	3,570
12	3,820	4,240	3,820	17,000	5,600	4,100	5,590	3,580	2,610	3,710	3,800	3,770
13	3,980	4,210	4,610	15,700	6,540	4,000	5,230	4,050	3,840	3,910	3,600	3,730
14	3,630	4,050	5,390	18,000	7,170	4,400	5,120	11,200	3,920	3,730	3,900	3,830
15	3,400	4,260	5,100	13,000	6,430	3,900	4,250	6,610	3,970	3,430	4,100	3,870
16	3,840	4,220	5,280	11,600	6,080	3,200	3,500	5,810	3,820	2,420	4,100	3,710
17	4,130	4,600	5,050	11,100	5,760	5,000	2,900	5,690	3,070	2,840	4,500	3,680
18	4,370	4,500	5,670	10,600	5,700	4,000	3,170	5,430	2,850	4,220	4,000	4,070
19	4,200	4,100	5,500	7,340	6,550	3,100	3,350	5,210	3,510	4,230	3,500	4,030
20	4,000	4,590	5,380	6,520	6,450	3,800	2,990	3,740	6,160	4,230	3,200	3,920
21	4,000	4,410	6,200	7,080	5,400	3,600	3,000	2,760	4,440	4,220	3,600	3,820
22	4,260	4,240	5,810	7,750	5,200	3,800	5,670	2,810	3,120	3,620	4,300	3,600
23	4,290	4,360	5,720	7,540	5,200	4,310	6,370	4,060	3,300	3,180	4,500	3,500
24	3,790	4,030	5,590	7,260	5,000	5,080	3,310	4,550	2,310	3,270	4,400	3,720
25	4,020	4,250	4,940	7,170	5,800	4,610	2,790	3,900	1,590	4,360	4,200	3,770
26	4,810	4,180	4,110	7,340	7,000	5,360	3,480	4,420	2,480	4,360	3,800	3,660
27	4,970	4,010	4,780	6,080	6,800	3,780	3,440	3,190	3,770	3,950	3,600	3,870
28	4,470	4,090	5,350	6,460	5,800	6,540	3,230	2,890	3,560	4,760	3,600	4,260
29	4,130	3,470	5,650	7,160	4,900	7,170	3,560	3,350	3,710	6,050	4,100	4,140
30	3,920	3,870	5,110	6,910	------	7,810	3,400	4,270	3,970	7,230	4,300	5,720
31	3,970	------	5,750	6,490	------	6,980	------	4,340	------	7,770	4,600	------
TOTAL	126,020	129,450	161,650	295,100	176,630	157,440	128,290	139,160	107,070	121,770	127,960	117,110
MEAN	4,065	4,315	5,215	9,519	6,091	5,079	4,276	4,489	3,569	3,928	4,128	3,904
MAX	4,970	5,290	6,640	18,000	7,170	9,000	6,370	11,200	6,160	7,770	5,610	5,720
MIN	3,400	3,470	3,820	5,440	4,900	3,100	2,790	2,760	1,590	2,100	3,200	2,620
(†)	-68,300	-62,000	+3,600	+35,100	+18,400	+58,900	+62,300	+40,700	-18,800	-15,600	-44,700	-53,800
MEAN‡	1,862	2,248	5,331	10,652	6,725	6,979	6,353	5,802	2,942	3,425	2,686	2,110
CFSM‡	.81	.98	2.32	4.64	2.93	3.04	2.76	2.52	1.28	1.49	1.17	.92
IN.‡	.93	1.09	2.67	5.34	3.16	3.50	3.08	2.91	1.43	1.72	1.35	1.02

CAL YR 1971 TOTAL 1,610,090 MEAN 4,411 MAX 12,200 MIN 1,240 MEAN‡ 4,587 CFSM‡ 2.00 IN.‡ 27.09
WTR YR 1972 TOTAL 1,787,650 MEAN 4,884 MAX 18,000 MIN 1,590 MEAN‡ 4,764 CFSM‡ 2.07 IN.‡ 28.22

† Change in contents, in cfs days, in Chatuge, Hiwassee, Apalachia (North Carolina), Nottely, Blue Ridge (Georgia), and Lake Ocoee, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03566420 Wolftever Creek near Ooltewah, Tenn.

LOCATION.--Lat 35°03'43", long 85°03'59", Hamilton County, on right downstream wingwall of county road bridge, 0.6 mile downstream from Southern Railway bridge, 0.9 mile south of Ooltewah, 1.6 miles upstream from Little Wolftever Creek, and at mile 16.1.

DRAINAGE AREA.--18.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 755.08 ft above mean sea level

AVERAGE DISCHARGE.--8 years, 36.6 cfs (21.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,820 cfs May 14 (gage height, 7.45 ft); minimum, 4.0 cfs Sept. 3, 4, 10-15 (gage height, 0.92 ft).
Period of record: Maximum discharge, 3,210 cfs Apr. 7, 1964 (gage height, 8.32 ft) from rating curve extended above 2,500 cfs; minimum, 1.8 cfs part of each day Sept. 13-18, 1964, Oct. 10, 1969; minimum gage height, 0.82 ft Sept. 13-18, 1964.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	7.9	6.6	35	23	38	64	11	10	6.3	34	4.6
2	4.6	11	6.3	519	29	401	49	29	10	6.6	39	4.3
3	4.6	19	158	117	88	172	51	149	9.5	9.0	22	4.3
4	4.9	9.6	39	422	56	90	51	103	9.5	23	22	4.3
5	24	7.2	25	181	41	65	38	41	9.0	9.6	18	5.6
6	8.1	6.6	120	100	58	48	33	27	9.0	7.8	14	4.6
7	5.8	6.6	413	66	60	43	64	21	11	7.2	14	4.6
8	5.3	5.9	71	51	42	97	88	35	10	6.3	11	4.6
9	5.3	5.9	41	109	36	52	46	27	9.5	6.3	10	4.3
10	5.3	5.9	31	499	30	43	37	17	9.0	6.3	9.6	4.3
11	5.2	5.3	23	290	26	36	34	14	8.5	6.3	9.0	4.3
12	5.2	5.3	28	123	51	30	31	11	8.5	5.9	8.4	4.3
13	5.1	5.0	37	144	74	29	26	385	8.0	5.9	8.4	4.3
14	5.2	5.0	24	93	44	41	22	561	7.5	5.6	7.2	4.3
15	5.2	5.0	22	60	36	27	18	117	7.0	5.6	6.6	4.3
16	8.0	5.0	22	43	31	42	17	67	7.5	5.9	6.3	4.3
17	5.7	5.0	34	37	82	34	13	48	8.5	16	6.3	12
18	5.5	5.0	27	34	135	27	12	35	8.5	11	5.9	7.2
19	5.5	5.6	21	35	88	25	11	28	8.5	6.6	5.6	5.3
20	5.5	5.6	78	29	58	21	10	23	9.1	6.3	5.6	5.3
21	5.8	5.6	43	54	47	23	9.5	20	60	5.9	5.6	5.3
22	7.2	5.6	31	55	40	28	164	17	17	5.6	5.6	5.0
23	45	5.6	24	46	33	19	55	15	11	5.6	5.3	4.3
24	25	14	20	38	30	17	35	14	9.6	5.6	5.3	4.6
25	12	9.0	17	39	52	28	25	13	8.4	5.3	5.6	4.6
26	9.2	6.6	15	29	57	23	20	12	7.8	5.3	5.3	5.3
27	7.5	11	12	26	43	70	17	12	7.3	7.2	5.0	11
28	6.8	7.8	11	36	34	266	15	11	7.8	76	5.0	6.6
29	6.4	9.6	10	31	36	212	13	11	6.6	22	4.6	11
30	6.2	7.8	30	31	------	95	11	10	7.2	154	4.3	43
31	6.2	------	27	25	------	89	------	11	------	64	4.3	------
TOTAL	266.0	220.0	1,471.9	3,397	1,454	2,231	1,079.6	1,900	341.2	520.0	318.8	201.8
MEAN	8.58	7.33	47.5	110	50.1	72.0	36.0	61.3	11.4	16.8	10.3	6.73
MAX	45	19	413	519	135	401	164	561	60	154	39	43
MIN	4.6	5.0	6.3	25	23	17	9.6	10	6.6	5.3	4.3	4.3
CFSM	.46	.39	2.53	5.85	2.66	3.83	1.91	3.26	.61	.89	.55	.36
IN.	.53	.44	2.91	6.72	2.88	4.41	2.14	3.76	.68	1.03	.63	.40

CAL YR 1971 TOTAL 13,119.7 MEAN 35.9 MAX 725 MIN 4.1 CFSM 1.91 IN 25.95
WTR YR 1972 TOTAL 13,401.3 MEAN 36.6 MAX 561 MIN 4.3 CFSM 1.95 IN 26.52

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-7	0415	5.52	865	1-10	1445	5.54	870
1-2	1000	5.74	922	3-2	1930	6.02	1,010
1-4	1300	5.05	748	5-14	0030	7.45	1,820

03567500 South Chickamauga Creek near Chickamauga, Tenn.

LOCATION.--Lat 35°00'50", long 85°12'27", Hamilton County, on right bank 0.3 mile upstream from bridge on U.S. Highway 11, 1.5 miles south of Chickamauga, 6.0 miles east of the city hall in Chattanooga, and at mile 12.4.

DRAINAGE AREA.--428 sq mi.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharges only for December 1930, published in WSP 1306. Prior to October 1937, published as Chickamauga Creek near Chickamauga.

GAGE.--Water-stage recorder. Datum of gage is 651.12 ft above mean sea level. Prior to Oct. 7, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 684 cfs (21.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,190 cfs May 15 (gage height, 13.77 ft); minimum, 105 cfs Oct. 4 (gage height, 0.38 ft). Period of record: Maximum discharge, 27,600 cfs Mar. 30, 1951 (gage height, 20.73 ft); minimum, 61 cfs Oct. 8, 1941; minimum gage height, 0.24 ft Oct. 5, 6, 7, 1970.

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

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 853: 1937. WSP 1386: 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	130	146	507	499	674	1,700	345	270	235	923	152
2	130	136	137	3,210	533	1,840	1,260	377	258	225	682	151
3	125	190	927	3,740	1,020	5,010	1,070	1,240	254	244	490	149
4	119	165	1,300	4,330	1,370	3,840	1,080	1,130	244	733	401	148
5	145	146	694	5,920	943	2,090	973	629	235	427	391	162
6	155	142	768	4,830	865	1,200	804	456	234	498	327	188
7	141	137	3,330	2,830	1,220	970	750	394	298	286	311	161
8	126	125	3,050	1,360	982	1,340	1,350	597	251	254	289	151
9	112	122	1,880	1,200	781	1,480	981	821	230	242	270	146
10	114	122	797	3,020	682	995	738	555	277	229	289	142
11	117	117	610	4,650	603	841	672	429	266	214	262	140
12	118	117	532	4,150	647	723	673	371	229	203	336	137
13	120	117	743	2,880	1,540	651	599	1,510	215	194	712	135
14	115	118	655	3,110	1,190	718	543	6,290	208	188	389	133
15	113	116	518	2,200	887	641	493	7,030	202	195	262	130
16	174	115	477	1,280	767	626	458	3,850	205	268	235	132
17	179	116	576	978	1,330	783	422	1,680	206	259	217	199
18	137	111	663	852	1,900	696	385	940	208	876	207	251
19	131	112	530	798	1,960	620	361	728	206	399	199	199
20	121	113	842	737	1,300	555	347	605	974	258	193	168
21	117	113	1,270	851	1,010	520	332	550	2,770	242	192	152
22	118	109	898	928	867	1,150	1,790	508	1,180	223	188	145
23	137	108	616	1,130	761	1,380	2,420	481	433	206	179	142
24	179	139	505	867	687	818	1,080	458	334	194	173	136
25	181	147	442	753	822	749	704	619	290	185	168	135
26	173	140	396	608	1,040	833	568	421	269	189	348	138
27	149	155	360	545	1,160	820	490	353	332	260	224	166
28	137	151	331	551	871	1,990	436	324	273	943	179	210
29	132	166	307	553	729	2,680	400	306	255	1,740	165	205
30	129	158	350	577	------	2,430	369	295	248	1,800	158	935
31	126	------	596	564	------	1,750	------	285	------	1,380	154	------
TOTAL	4,202	3,953	25,246	60,509	28,966	41,413	24,248	34,577	11,854	13,789	9,513	5,538
MEAN	136	132	814	1,952	999	1,336	808	1,115	395	445	307	185
MAX	181	190	3,330	5,920	1,960	5,010	2,420	7,030	2,770	1,800	923	935
MIN	112	108	137	507	499	520	332	285	202	185	154	130
CFSM	.32	.31	1.90	4.56	2.33	3.12	1.89	2.61	.92	1.04	.72	.43
IN.	.37	.34	2.19	5.26	2.52	3.60	2.11	3.01	1.03	1.20	.83	.48

CAL YR 1971 TOTAL 231,479 MEAN 634 MAX 6,080 MIN 108 CFSM 1.48 IN 20.12
WTR YR 1972 TOTAL 263,808 MEAN 721 MAX 7,030 MIN 108 CFSM 1.68 IN 22.93

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-5	1500	12.52	6,090	5-15	0430	13.77	8,190

03568000 Tennessee River at Chattanooga, Tenn.

LOCATION.--Lat 35°05'12", long 85°16'43", Hamilton County, on right bank at Rivermont Golf and Country Club, 0.5 mile downstream from South Chickamauga Creek, 3.0 miles downstream from Chickamauga Dam, 3.5 miles upstream from Walnut Street Bridge in Chattanooga, and at mile 467.6.

DRAINAGE AREA.--21,400 sq mi, approximately.

PERIOD OF RECORD.--April 1874 to current year. Monthly discharges only for some periods, published in WSP 1306. July 1930 to December 1935, published as "at Hales Bar, near Chattanooga." Gage-height records collected in this vicinity since 1874 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 621.12 ft above mean sea level. Prior to Feb. 1, 1939, nonrecording or recording gages at several sites from 7.0 miles upstream from Chattanooga to Hales Bar Dam 33 miles downstream at or within 0.2 ft of present datum, except nonrecording gage at Bridgeport, Ala., 49.9 miles downstream at different datum Oct. 22, 1913, to Feb. 28, 1915, and Oct. 1, 1918, to Jan. 5, 1921. Auxiliary gages at several sites parts of periods since Feb. 28, 1915. Present auxiliary gage at site 2.2 miles downstream from base gage.

AVERAGE DISCHARGE.--98 years, 36,810 cfs (23.36 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 116,000 cfs Jan. 11; maximum gage height, 23.13 ft Jan. 11; maximum gage height at Walnut Street, 21.55 ft Jan. 11; minimum daily discharge, 15,800 cfs Sept. 24; minimum gage height, 10.31 ft Oct. 3.
Period of record: Maximum discharge observed, 410,000 cfs Mar. 1, 1875 (gage height, 53.8 ft, present datum, at Walnut Street) from rating curve extended above 250,000 cfs; minimum daily, 1,200 cfs Nov. 1, 1953; minimum gage height, 0.0 ft Sept. 11-14, 1881, Sept. 19, 1883 (before filling of Hales Bar Lake).
Maximum stage known, 57.9 ft Mar. 11, 1867, present datum at Walnut Street (discharge, about 459,000 cfs).

REMARKS.--Records excellent. Flow regulated since 1936 by increasing number of reservoirs above station (see p. 122, and basic data release for adjoining states, 1972).

REVISIONS (WATER YEARS).--WSP 353: 1874-1912. WSP 783: 1917. WSP 823: 1875(M). WSP 973: 1942. WSP 1306: 1916(M). WSP 1386: 1932-34 (station at Hales Bar near Chattanooga).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,200	43,200	34,100	43,300	61,300	90,700	30,400	32,700	42,100	29,000	31,800	33,000
2	31,000	39,000	36,300	47,000	54,200	91,500	21,500	29,100	33,000	23,800	35,100	25,300
3	26,200	40,700	40,900	84,100	49,700	100,000	28,600	34,100	34,000	21,800	37,900	19,600
4	28,600	46,000	39,500	80,900	50,500	98,500	26,500	35,600	31,300	27,600	37,500	16,100
5	30,700	46,100	44,200	82,500	48,800	93,900	27,000	35,200	33,600	30,500	37,100	25,400
6	34,700	41,400	44,700	82,900	49,200	81,800	25,900	35,800	33,800	35,700	23,100	31,700
7	32,600	42,700	60,100	80,600	45,100	56,200	15,900	36,100	40,700	34,800	28,400	31,700
8	33,300	44,800	76,800	77,700	44,600	47,700	20,300	36,800	36,300	28,900	31,600	31,500
9	34,200	40,400	72,300	77,400	42,900	48,200	30,800	36,200	36,200	25,200	35,100	31,800
10	34,200	42,700	60,200	92,600	39,600	44,300	23,900	33,200	36,800	30,900	35,800	23,000
11	31,700	42,500	53,700	105,000	38,100	37,000	18,900	29,100	17,800	28,800	42,600	26,700
12	32,600	42,400	54,800	103,000	39,400	33,300	24,300	27,200	28,200	31,300	36,200	27,900
13	33,700	35,700	54,800	99,400	34,200	35,600	29,700	37,200	33,700	34,300	27,600	32,200
14	29,700	42,600	54,000	95,100	44,200	35,800	26,600	51,700	35,100	33,500	37,500	37,000
15	28,400	45,500	52,200	88,900	47,100	37,100	27,300	57,500	31,700	31,200	39,100	34,700
16	35,800	44,600	53,500	87,200	42,800	25,900	28,000	52,000	31,400	24,700	40,900	25,700
17	31,800	47,200	54,900	80,900	40,400	17,700	24,100	43,700	24,500	25,700	38,300	24,700
18	33,000	47,300	54,800	69,000	45,500	33,900	24,600	41,700	32,400	36,300	36,800	37,000
19	34,100	47,300	55,000	59,200	46,200	23,200	23,900	38,600	33,100	34,400	37,200	35,700
20	33,500	47,600	56,000	58,700	46,600	33,700	28,900	35,100	47,300	43,900	27,000	33,900
21	31,700	20,300	57,000	60,300	44,000	28,100	24,900	34,700	41,100	45,200	33,400	33,700
22	33,100	44,700	56,400	64,800	45,400	28,900	28,800	34,400	36,000	40,400	38,900	34,800
23	33,300	46,700	56,200	67,100	38,200	31,300	36,100	35,800	39,600	32,200	40,100	29,800
24	32,900	44,900	52,700	66,800	44,100	32,500	32,900	38,900	36,300	33,700	38,100	15,800
25	32,900	40,800	48,000	66,400	54,200	36,500	35,300	37,200	20,900	34,600	37,600	31,100
26	32,800	41,900	48,100	66,000	74,600	33,500	36,100	36,700	27,500	37,100	34,500	33,900
27	33,100	39,100	44,500	64,200	83,900	32,800	35,300	36,400	31,700	37,500	28,400	34,600
28	34,000	40,100	44,700	62,500	91,900	36,000	34,600	36,700	31,800	31,300	33,800	36,600
29	32,600	43,200	42,600	62,600	96,100	39,200	34,900	31,700	40,300	37,900	33,000	36,400
30	39,600	36,700	42,700	62,600	------	38,300	26,500	38,400	45,000	33,000	35,600	44,400
31	34,300	------	39,400	62,400	------	36,000	------	39,200	------	32,500	35,700	------
TOTAL	1,014.5M	1,268.9M	1,587.1M	2,301.1M	1,482.8M	1,439.1M	832,500	1,158.7M	1,023.2M	1,007.7M	1,085.7M	915,700
MEAN	32,730	42,300	51,200	74,230	51,130	46,420	27,750	37,380	34,110	32,510	35,020	30,520
MAX	39,600	47,600	76,800	105,000	96,100	100,000	36,100	57,500	47,300	45,200	42,600	44,400
MIN	26,200	20,300	34,100	43,300	34,200	17,700	15,900	27,200	17,800	21,800	23,100	15,800

CAL YR 1971 TOTAL 13,157,440 MEAN 36,050 MAX 86,600 MIN 9,260
WTR YR 1972 TOTAL 15,117,000 MEAN 41,300 MAX 105,000 MIN 15,800

M Expressed in thousands.

03568500 Chattanooga Creek near Flintstone, Ga.

LOCATION.--Lat 34°58'20", long 85°19'40", Walker County, on right bank 0.8 mile south of Georgia-Tennessee State line and 2.3 miles northeast of Flintstone, and at mile 10.3.

DRAINAGE AREA.--50.6 sq mi.

PERIOD OF RECORD.--October 1950 to current year. Prior to December 1950 monthly discharges only, published in WSP 1726.

GAGE.--Water-stage recorder. Datum of gage is 649.18 ft above mean sea level.

AVERAGE DISCHARGE.--22 years, 82.9 cfs (22.25 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,920 cfs May 14 (gage height, 9.86 ft); minimum, 5.2 cfs Oct. 4.
Period of record: Maximum discharge, 6,140 cfs Feb. 23, 1962 (gage height, 13.48 ft); minimum, 1.0 cfs Sept. 8, 9, 1954.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by bleachery above station.

REVISIONS (WATER YEARS).--WSP 1910: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	11	22	1[illegible]3	79	100	208	57	3[illegible]	17	152	14
2	6.5	11	20	7[illegible]7	83	500	166	53	27	16	174	11
3	6.5	15	92	442	146	900	152	62	23	27	113	12
4	6.0	18	128	839	181	500	156	66	21	28	77	12
5	6.5	15	136	665	145	35[illegible]	142	52	18	5[illegible]	60	14
6	7.8	13	168	322	141	175	13[illegible]	44	16	44	50	14
7	10	13	890	235	181	130	119	41	18	29	48	14
8	12	12	3[illegible]5	178	153	156	194	171	16	21	42	15
9	13	11	174	168	127	134	158	241	13	18	44	16
10	13	11	126	465	114	122	134	152	12	16	49	15
11	12	11	1[illegible]0	602	111	108	120	110	11	14	38	18
12	11	1[illegible]	88	359	102	97	108	87	9.6	13	31	16
13	12	1[illegible]	128	274	179	89	96	460	8.4	13	29	15
14	12	1[illegible]	113	256	147	104	86	1,260	8.2	22	24	12
15	12	1[illegible]	99	192	131	91	76	407	8.2	43	21	10
16	15	1[illegible]	92	151	114	95[illegible]	72	247	13	44	19	10
17	17	10	102	130	198	97	66	175	1[illegible]	38	17	21
18	16	11	11[illegible]	114	239	91	59	133	15	71	17	46
19	15	12	1[illegible]0	103	262	85	55	104	15	46	16	35
20	14	12	143	92	201	78	52	87	155	36	15	29
21	13	11	147	99	158	76	48	77	152	29	14	26
22	13	8.6	117	105	136	117	329	67	55	25	14	25
23	22	11	96	109	117	99	286	67	31	29	15	25
24	35	15	85	99	106	90	185	59	21	35	15	24
25	37	19	75	96	12[illegible]	95	137	65	16	33	17	24
26	14	18	68	86	175	94	109	47	13	38	15	24
27	12	20	62	83	225	124	92	40	24	55	14	27
28	11	23	57	86	150	411	80	36	20	276	12	39
29	11	26	52	84	125	549	72	34	20	300	12	36
30	11	25	62	87	------	355	64	31	18	254	11	72
31	10	------	117	83	------	262	------	31	------	261	12	------
TOTAL	413.7	412.6	4,074	7,414	4,346	6,274	3,751	4,563	822.4	1,948	1,187	671
MEAN	13.3	13.[illegible]	131	239	150	202	125	147	27.4	62.8	38.3	22.4
MAX	37	26	890	839	262	900	329	1,260	155	300	174	72
MIN	6.0	8.6	20	83	79	76	48	31	8.2	13	11	10
CFSM	.26	.27	2.59	4.72	2.96	3.99	2.47	2.91	.54	1.24	.76	.44
IN.	.30	.30	3.00	5.45	3.20	4.61	2.76	3.35	.60	1.43	.87	.49

CAL YR 1971 TOTAL 29,498.5 MEAN 80.8 MAX 1,020 MIN 5.3 CFSM 1.60 IN 21.69
WTR YR 1972 TOTAL 35,876.7 MEAN 98.0 MAX 1,260 MIN 8.0 CFSM 1.94 IN 26.38

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-7	0930	8.89	1,270	1-4	1715	9.06	1,370
1-2	1515	8.61	1,100	5-14	0145	9.86	1,920

03571000 Sequatchie River near Whitwell, Tenn.

LOCATION.--Lat 35°12'22", long 85°29'48", Marion County, on right bank 15 ft downstream from county road bridge 1.5 miles east of Whitwell, 3.0 miles upstream from bridge on State Highway 27, 4.5 miles downstream from Griffith Creek, and at mile 25.1.

DRAINAGE AREA.--402 sq mi (includes 18 sq mi without surface drainage).

PERIOD OF RECORD.--October 1920 to current year. Prior to December 1920 monthly discharges only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 632.73 ft above mean sea level (levels by Tennessee Valley Authority). Prior to Sept. 18, 1927, nonrecording gage at same site at datum 0.03 ft higher. Sept. 18, 1927, to Sept. 30, 1930, nonrecording gage at bridge 15 ft upstream at present datum.

AVERAGE DISCHARGE.--52 years, 723 cfs (24.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,540 cfs Dec. 7 (gage height, 14.46 ft); minimum, 70 cfs Sept. 16 (gage height, 0.95 ft). Period of record: Maximum discharge, 25,700 cfs on Mar. 12, 1963 (gage height, 17.11 ft); minimum, 16 cfs Sept. 6-21, 27, 28, 1925.
Floods in March 1867 reached a stage of about 19 ft from reports of Tennessee Valley Authority.

REMARKS.--Records excellent. Prior to 1950 some diurnal fluctuation caused by small mills above station.

REVISIONS (WATER YEARS). WSP 603: 1922(M). WSP 758: 1929(M). WSP 1033: 1943(M). WSP 1386: 1921-22, 1923-25(M), 1927-28(M), 1930(M), 1933(M). WSP 1910: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	92	97	1,080	929	1,100	1,650	574	279	173	491	88
2	110	92	96	2,710	878	2,230	1,400	528	255	205	488	85
3	105	106	401	4,170	945	5,510	1,230	511	237	189	358	84
4	102	114	580	4,000	1,160	4,000	1,140	499	222	179	274	82
5	111	120	589	5,100	1,120	2,630	1,060	459	210	175	223	90
6	116	142	1,380	4,050	1,060	1,740	986	418	201	175	193	85
7	126	128	7,940	2,800	1,090	1,400	926	390	198	171	180	81
8	129	117	6,160	1,780	1,040	1,320	990	449	198	185	175	80
9	124	111	3,160	1,620	970	1,220	922	779	186	165	170	80
10	116	106	1,850	4,190	887	1,110	837	697	187	159	163	77
11	106	100	1,620	5,230	809	994	816	597	181	148	193	75
12	100	97	1,450	3,370	768	896	1,130	509	173	141	222	76
13	92	93	1,530	2,210	938	829	1,340	685	167	138	411	76
14	87	90	1,410	1,770	1,130	989	1,170	1,870	161	132	345	74
15	91	87	1,210	1,440	1,180	994	981	2,040	157	128	248	72
16	156	85	1,100	1,200	1,050	1,030	885	1,650	168	147	199	81
17	103	83	1,030	1,040	1,130	1,240	855	1,110	174	143	170	99
18	95	82	973	946	1,320	1,300	797	841	181	131	154	102
19	90	83	885	899	1,450	1,150	728	677	171	146	142	88
20	87	82	1,290	923	1,350	995	674	577	293	127	132	81
21	84	80	1,750	999	1,180	979	656	539	528	119	124	80
22	82	77	1,400	1,100	1,050	1,720	2,240	475	368	113	118	79
23	82	75	1,130	1,270	938	1,880	2,960	435	316	114	113	80
24	94	79	948	1,220	894	1,610	2,090	413	258	108	108	84
25	179	79	819	1,160	912	1,320	1,500	553	221	110	107	76
26	121	79	726	1,090	1,110	1,200	1,140	453	201	115	109	75
27	110	84	653	1,030	1,420	1,220	935	473	187	113	113	91
28	110	85	588	1,010	1,490	1,660	799	401	204	156	109	85
29	106	94	534	1,130	1,280	2,460	706	351	187	223	102	98
30	100	97	545	1,180	------	2,500	635	317	184	229	95	493
31	95	------	940	1,060	------	1,970	------	299	------	500	91	------
TOTAL	3,326	2,839	44,784	62,777	31,478	51,196	34,178	20,569	6,653	5,057	6,120	2,897
MEAN	107	94.6	1,445	2,025	1,085	1,651	1,139	664	222	163	197	96.6
MAX	179	142	7,940	5,230	1,490	5,510	2,960	2,040	528	500	491	493
MIN	82	75	96	899	768	829	635	299	157	108	91	72
CFSM	.27	.24	3.59	5.04	2.70	4.11	2.83	1.65	.55	.41	.49	.24
IN.	.31	.26	4.14	5.81	2.91	4.74	3.16	1.90	.62	.47	.57	.27

CAL YR 1971 TOTAL 272,293 MEAN 746 MAX 7,940 MIN 68 CFSM 1.86 IN 25.20
WTR YR 1972 TOTAL 271,874 MEAN 743 MAX 7,940 MIN 72 CFSM 1.85 IN 25.16

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-7	1600	14.46	9,540	3-3	1130	13.23	5,990
1-11	0330	13.13	5,780				

03571850 Tennessee River at South Pittsburg, Tenn.

LOCATION.--Lat 35°00'41", long 85°41'51", Marion County, on right bank 150 ft upstream from South Pittsburg Ferry landing on Tennessee State Highway 156, 0.5 mile downstream from Battle Creek, 0.5 mile east of South Pittsburg, 4.6 miles downstream from Sequatchie River, 6.5 miles downstream from Nickajack Dam, and at mile 418.2.

DRAINAGE AREA.--22,640 sq mi, approximately.

PERIOD OF RECORD.--July 1930 to current year. Published as "at Hales Bar, near Chattanooga", July 1930 to July 1966. Records for both sites published August 1965 to July 1966.

GAGE.--Water-stage recorder. Datum of gage is 581.01 ft above mean sea level. Prior to Feb. 13, 1932, at site 12.9 miles upstream at datum 7.85 ft higher. Feb. 13, 1932, to July 17, 1966, at site 11.5 miles upstream at datum 7.50 ft higher. Since Jan. 27, 1939, auxiliary water-stage recorder at site 10.6 miles downstream.

AVERAGE DISCHARGE.--42 years, 35,700 cfs (21.41 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 129,700 cfs Jan. 11; maximum gage height, 23.13 ft Jan. 12; minimum daily, 20,200 cfs Apr. 7; minimum gage height, 11.90 ft Oct. 3.

Period of record: Maximum discharge, 241,000 cfs Dec. 31, 1932, Jan. 1, 1933, Mar. 30, 1936 (gage height, 31.2 ft, site and datum then in use); minimum daily, 2,900 cfs Nov. 1, 15, 1953; minimum gage height, 1.21 ft Oct. 27, 1931, site and datum then in use.

Maximum stage known, 44.6 ft in March 1867, former site and datum. A stage of 37.4 ft occurred Mar. 8, 1917, former site and datum (discharge, 320,000 cfs, from rating curve extended above 225,000 cfs).

REMARKS.--Records fair. Since 1936, flow regulated by increasing number of reservoirs above station (see p. 122 and basic data releases for adjoining states). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 853: Drainage area. WSP 973: 1942. WSP 1306: 1936 (monthly runoff). WSP 1386: 1932-34.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38,500	46,300	39,400	49,100	71,000	105,000	40,300	42,500	46,300	34,400	39,000	37,400
2	34,800	42,000	40,800	60,600	64,600	101,000	30,400	39,000	38,200	29,400	39,400	31,000
3	31,300	45,700	48,700	83,200	57,600	115,000	33,000	39,200	35,600	26,400	44,000	24,200
4	30,900	49,600	46,500	101,000	55,700	115,000	30,900	44,600	29,900	31,000	45,200	24,400
5	35,200	51,100	51,600	105,000	59,300	110,000	29,900	43,700	31,900	31,800	43,500	28,400
6	36,700	48,100	55,000	101,000	58,400	99,200	30,200	43,100	39,300	41,000	29,200	34,900
7	36,700	46,400	88,500	98,200	58,800	68,900	20,200	43,400	41,200	33,700	33,000	35,500
8	36,800	50,000	97,900	91,100	49,800	57,500	22,000	47,500	43,200	32,200	35,200	34,700
9	37,200	45,000	88,500	90,200	48,900	54,900	34,700	47,100	38,600	30,900	39,400	35,600
10	37,400	45,000	75,400	101,000	47,100	53,700	29,200	44,700	36,500	32,400	39,800	24,500
11	35,900	48,000	62,700	125,000	45,500	45,700	23,200	42,800	21,200	31,700	49,000	31,800
12	36,600	49,200	65,300	124,000	43,700	37,300	23,100	39,200	29,900	32,500	43,200	30,400
13	36,700	40,900	65,100	115,000	42,800	39,200	33,900	45,500	31,400	33,200	33,400	32,400
14	31,200	44,500	62,400	112,000	50,100	39,400	32,100	65,900	37,400	34,300	40,100	40,400
15	35,800	50,800	61,700	102,000	55,900	39,700	31,900	78,700	35,900	34,700	44,300	39,400
16	39,600	48,900	61,300	98,600	54,600	32,200	33,600	70,800	35,700	31,800	45,700	30,100
17	35,500	51,000	63,000	95,300	56,200	27,200	31,000	60,500	31,600	28,900	43,100	27,900
18	36,300	52,700	63,900	84,500	54,300	30,000	28,200	59,400	26,400	35,000	38,100	39,900
19	36,800	52,800	62,700	67,500	50,300	30,500	27,500	51,700	36,900	36,600	43,000	40,400
20	37,100	54,200	65,400	68,600	55,100	39,000	29,600	45,300	51,900	43,700	34,100	38,600
21	35,800	31,200	68,600	72,300	52,800	34,100	31,000	48,500	46,500	46,900	38,000	41,100
22	36,600	43,400	67,500	73,700	52,800	34,400	36,200	46,200	43,400	43,700	40,300	38,300
23	36,900	48,500	66,300	79,100	49,700	41,300	45,900	40,800	43,800	33,000	42,200	34,300
24	36,900	50,100	61,700	78,100	53,500	40,300	43,900	36,100	33,000	38,000	42,700	21,300
25	36,800	46,100	54,400	77,300	60,500	42,800	43,200	41,100	22,200	38,200	41,500	34,000
26	37,000	46,300	54,700	76,600	78,900	38,300	43,300	40,800	28,500	36,300	40,200	37,600
27	36,900	43,000	53,100	75,500	94,200	38,100	43,200	41,100	34,600	39,000	35,400	38,300
28	38,200	44,400	50,800	72,600	98,400	50,600	43,600	39,900	34,200	41,500	37,000	40,500
29	36,800	47,700	48,400	71,900	106,000	52,000	44,200	36,700	44,700	48,900	35,900	40,500
30	43,800	41,000	47,400	72,300	------	51,000	40,900	39,500	49,500	40,600	37,300	51,300
31	40,600	------	47,200	72,400	------	48,800	------	41,700	------	40,500	38,900	------
TOTAL	1,133.3M	1,403.9M	1,885.9M	2,694.7M	1,726.5M	1,712.1M	1,010.3M	1,447.0M	1,099.4M	1,112.2M	1,231.1M	1,039.1M
MEAN	36,560	46,800	60,840	86,930	59,530	55,230	33,680	46,680	36,650	35,880	39,710	34,640
MAX	43,800	54,200	97,900	125,000	106,000	115,000	45,900	78,700	51,900	48,900	49,000	51,300
MIN	30,900	31,200	39,400	49,100	42,800	27,200	20,200	36,100	21,200	26,400	29,200	21,300

CAL YR 1971 TOTAL 15,476,700 MEAN 42,400 MAX 108,000 MIN 15,500
WTR YR 1972 TOTAL 17,495,500 MEAN 47,800 MAX 125,000 MIN 20,200

M Expressed in thousands.

03578000 Elk River near Pelham, Tenn.

LOCATION.--Lat 35°17'48", long 85°52'12", Grundy County, on right bank at downstream side of bridge on U.S. Highway 41, 1.1 miles southeast of Pelham, 1.8 miles upstream from Caldwell Creek, and at mile 194.2.

DRAINAGE AREA.--65.6 sq mi.

PERIOD OF RECORD.--October 1951 to current year. Prior to November 1951 monthly discharges only, published in WSP 1726.

GAGE.--Water-stage recorder. Datum of gage is 981.62 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 132 cfs (27.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,430 cfs Jan. 2 (gage height, 9.60 ft); minimum, 2.9 cfs Oct. 13.
Period of record: Maximum discharge, 7,240 cfs Mar. 12, 1963 (gage height, 13.17 ft); minimum, 1.0 cfs Sept. 27, 28, 1954; minimum gage height, 1.78 ft Sept. 1, 2, 1957.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.6	8.8	170	155	140	250	71	29	25	353	10
2	3.5	3.5	7.2	845	147	347	200	64	23	21	207	9.5
3	3.6	5.3	22	947	174	658	180	86	20	50	141	8.9
4	3.4	10	86	676	201	397	278	86	17	44	101	8.1
5	3.4	7.2	52	1,020	161	281	269	69	15	121	76	8.8
6	3.6	6.5	134	654	167	216	210	58	14	78	59	7.8
7	3.5	5.8	860	331	250	180	175	53	16	48	95	7.6
8	3.4	5.0	649	214	216	244	194	128	22	34	103	7.5
9	4.0	4.8	219	269	177	224	167	284	18	26	233	7.3
10	3.8	4.7	215	855	147	184	147	194	20	21	241	6.8
11	3.3	4.6	237	839	127	155	132	140	33	17	214	6.6
12	3.1	4.4	190	465	116	132	129	109	22	14	152	6.4
13	3.0	4.4	276	292	166	123	116	115	17	12	131	6.2
14	3.0	4.2	200	228	180	215	104	268	14	11	94	6.0
15	3.0	4.0	147	172	158	178	91	604	14	10	69	6.1
16	4.0	3.8	200	136	136	404	159	451	20	11	51	6.1
17	3.6	3.6	191	119	185	559	188	224	152	10	41	7.2
18	3.5	3.4	189	109	198	358	147	157	150	16	35	7.1
19	3.6	3.6	145	129	193	244	125	119	78	27	30	6.9
20	3.6	4.0	324	160	157	184	109	96	54	222	25	6.9
21	3.8	3.8	457	200	135	164	113	95	63	78	22	6.6
22	4.2	4.0	244	228	130	229	540	82	44	42	20	6.3
23	4.7	4.6	156	294	131	183	746	64	32	72	20	6.3
24	4.8	5.0	122	229	145	152	339	59	24	90	18	6.8
25	5.4	4.6	101	304	172	148	205	62	19	42	16	6.3
26	5.4	5.8	87	276	254	157	157	51	16	29	16	6.3
27	6.0	6.5	75	205	270	188	127	43	17	33	16	18
28	5.9	9.0	65	310	206	386	108	40	28	515	15	32
29	5.0	11	58	388	164	529	94	33	28	718	13	50
30	4.1	9.4	85	273	------	447	82	29	22	517	12	780
31	4.0	------	232	192	------	300	------	31	------	693	10	------
TOTAL	122.7	160.1	6,034.0	11,529	5,018	8,306	5,881	3,965	1,041	3,647	2,629	1,066.4
MEAN	3.96	5.34	195	372	173	268	196	128	34.7	118	84.8	35.5
MAX	6.0	11	860	1,020	270	658	746	604	152	718	353	780
MIN	3.0	3.4	7.2	109	116	123	82	29	14	10	10	6.0
CFSM	.06	.08	2.97	5.67	2.64	4.09	2.99	1.95	.53	1.80	1.29	.54
IN.	.07	.09	3.42	6.54	2.85	4.71	3.33	2.25	.59	2.07	1.49	.60

CAL YR 1971 TOTAL 45,447.2 MEAN 125 MAX 2,290 MIN 3.0 CFSM 1.91 IN 25.77
WTR YR 1972 TOTAL 49,399.2 MEAN 135 MAX 1,020 MIN 3.0 CFSM 2.06 IN 28.01

PEAK DISCHARGE (BASE, 1,500 CFS).--No peak above base.

03579100 Elk River near Estill Springs, Tenn.

LOCATION.--Lat 35°17'08", long 86°06'20", Franklin County, on left bank at bridge on Corn Mill Road, 1.7 miles northeast of Estill Springs, 2.7 miles downstream from Elk River Dam, 4.0 miles upstream from U.S. Highway 41-A bridge, and at mile 167.3.

DRAINAGE AREA.--275 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306 and 1726. Prior to January 1967 published as "at Estill Springs".

GAGE.--Water-stage recorder. Datum of gage is 886.43 ft above mean sea level. Prior to Oct. 1, 1926, nonrecording gage, and Oct. 1, 1926, to Dec. 31, 1966, water-stage recorder at site 4.0 miles downstream at datum 27.33 ft lower. Water-stage recorder at present site and datum since Nov. 22, 1966.

AVERAGE DISCHARGE.--52 years, 473 cfs (23.36 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,350 cfs July 28 (gage height, 7.78 ft); minimum discharge, 27 cfs July 19-20 (gage height, 1.40 ft).
Period of record: Maximum discharge, 22,900 cfs Mar. 23, 1929 (gage height, 20.2 ft, site and datum then in use); minimum daily, 11 cfs Oct. 10, 1925.

REMARKS.--Records good. Flow regulated by Woods Reservoir 2.7 miles upstream. (See sta 03579000.) Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: 1929(M), 1934-35. WSP 1306: 1922(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	55	68	842	747	605	987	401	118	71	1,530	112
2	114	126	40	2,210	454	1,310	669	387	120	126	640	110
3	114	310	53	2,640	614	1,770	470	383	122	160	184	110
4	114	118	94	2,710	685	1,370	952	381	122	164	390	112
5	116	71	236	3,190	745	1,270	974	258	122	314	382	114
6	115	71	909	2,590	795	674	798	189	122	367	342	101
7	85	70	1,250	1,410	800	668	591	200	130	152	314	96
8	67	71	1,250	848	879	678	571	668	130	52	367	96
9	67	58	1,550	1,150	908	665	771	842	130	55	760	97
10	65	42	852	2,750	741	665	455	812	132	57	995	97
11	52	58	514	2,430	453	665	454	410	132	57	805	97
12	39	70	757	1,990	546	656	454	197	97	57	720	87
13	39	70	905	1,320	837	626	499	585	48	57	905	42
14	39	70	624	1,040	835	498	525	609	30	57	442	42
15	59	70	628	796	622	454	454	1,330	53	54	367	42
16	350	70	630	691	526	871	466	1,100	81	208	279	42
17	448	70	622	396	526	1,900	723	810	172	172	220	558
18	57	71	620	499	741	1,380	471	499	398	110	220	434
19	68	72	621	568	830	956	277	205	374	38	215	43
20	68	71	1,060	641	721	520	515	267	198	41	215	42
21	86	70	1,230	829	454	280	655	620	53	230	210	42
22	97	90	776	970	454	279	1,950	164	57	342	134	42
23	100	100	470	1,050	454	323	1,800	170	58	342	90	42
24	246	100	470	1,050	493	483	1,170	176	58	208	83	42
25	230	100	462	1,050	605	720	658	162	64	116	32	42
26	101	100	462	900	611	724	596	311	67	116	85	43
27	69	100	462	650	869	454	511	360	67	122	130	43
28	43	100	373	660	853	1,170	248	288	68	2,110	130	43
29	43	100	311	995	605	2,230	188	276	68	1,700	124	48
30	43	75	313	1,200	------	1,440	366	186	71	1,550	118	1,090
31	43	------	593	1,200	------	1,140	------	118	------	1,280	116	------
TOTAL	3,317	2,619	19,205	41,665	19,403	27,444	20,218	13,384	3,462	10,485	11,544	3,951
MEAN	107	87.3	620	1,344	669	885	674	432	115	338	372	132
MAX	448	310	1,550	3,190	908	2,230	1,950	1,330	398	2,110	1,530	1,090
MIN	39	42	40	396	453	279	188	118	30	38	32	42
(†)	-1,400	-1,500	+300	-200	+100	+2,700	+300	-500	+400	+100	-300	+200
MEAN‡	61.8	37.3	629	1,338	673	972	684	416	129	341	363	138
CFSM‡	.22	.14	2.29	4.86	2.45	3.53	2.49	1.51	.47	1.24	1.32	.50
IN.‡	.26	.15	2.64	5.61	2.64	4.08	2.77	1.74	.52	1.43	1.52	.56

CAL YR 1971 TOTAL 164,518 MEAN 451 MAX 5,030 MIN 22 MEAN‡ 452 CFSM‡ 1.64 IN.‡ 22.29
WTR YR 1972 TOTAL 176,697 MEAN 483 MAX 3,190 MIN 30 MEAN‡ 483 CFSM‡ 1.76 IN.‡ 23.92

† Change in contents, in cfs days, in Woods Reservoir.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03580750 Elk River below Tims Ford Dam, Tenn.

LOCATION.--Lat 35°11'32", long 86°16'52", Franklin County, on right bank 150 ft upstream from bridge on State Highway 50, 0.3 mile downstream from Tims Ford Dam, 3.6 miles north of Lexie Crossroads, 9.5 miles west of Winchester, and at mile 133.

DRAINAGE AREA.--534 sq mi.

PERIOD OF RECORD.--April 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above mean sea level. Dec. 1, 1970, to May 12, 1971, water-stage recorder at site 2.4 miles downstream at datum 2.26 ft lower.

AVERAGE DISCHARGE.--6 years, 806 cfs (20.50 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 6,130 cfs Mar. 28 (gage height, 52.03 ft); minimum, 16 cfs July 11; minimum daily, 21 cfs July 23.
Period of record: Maximum discharge, 15,400 cfs Jan. 1, 1970 (gage height, 60.14 ft); minimum, 3.2 cfs Dec. 7, 8, 9, 1970; minimum daily, 3.5 cfs Dec. 6, 8, 9, 1970.
Maximum discharge since closure of Tims Ford Dam on Dec. 1, 1970, 6,130 cfs Mar. 28, 1972; minimum daily discharge since first filling of Tims Ford Reservoir on May 15, 1971, 21 cfs July 23, 1972.

REMARKS.--Records fair. Flow regulated by Woods Reservoir (see sta 03579000) and, since Dec. 1, 1970, Tims Ford Reservoir (see sta 03580740). Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	1,180	495	875	1,250	625	1,960	475	260	275	2,530	1,800
2	260	778	492	920	837	1,400	1,280	23	260	275	1,610	1,260
3	260	810	498	924	1,380	1,800	1,010	825	260	250	1,660	1,260
4	80	1,160	495	969	1,450	1,400	950	1,890	260	275	1,640	2,680
5	35	1,410	498	1,010	1,440	1,600	1,220	751	450	275	429	2,710
6	35	1,720	510	996	1,360	30	1,290	27	550	261	378	2,810
7	480	1,710	525	1,530	900	30	1,200	28	400	261	758	2,790
8	640	1,680	1,120	2,130	1,430	1,800	1,060	34	259	259	408	2,810
9	680	1,670	1,180	2,130	1,510	2,200	889	33	255	257	1,630	2,750
10	680	1,650	951	3,460	977	2,000	1,230	32	255	231	1,630	1,650
11	680	1,640	1,520	4,840	415	600	34	662	253	45	1,780	2,770
12	690	1,620	1,520	4,800	540	600	30	1,200	394	97	1,670	2,370
13	680	1,610	1,790	3,410	265	700	30	35	60	103	1,640	2,690
14	680	1,590	2,130	3,290	588	822	30	31	80	94	125	2,660
15	680	1,590	2,110	4,630	980	1,100	30	1,000	298	259	193	2,630
16	689	1,600	2,390	4,550	980	811	35	1,990	571	259	193	2,780
17	696	1,570	2,750	2,690	980	4,400	74	992	255	181	191	2,790
18	686	1,560	2,710	1,400	693	4,970	42	1,320	253	187	617	2,730
19	686	1,060	2,670	1,190	1,210	3,200	32	1,320	255	990	100	2,730
20	686	522	2,650	1,390	1,540	40	25	475	279	181	275	2,720
21	686	522	2,640	1,270	2,380	34	26	24	323	989	275	2,730
22	920	1,010	2,610	1,300	1,240	30	42	300	267	36	2,000	2,750
23	1,230	1,540	2,580	1,300	2,210	42	35	275	281	21	1,830	2,780
24	1,220	1,340	2,550	1,320	2,160	36	223	275	273	30	1,760	2,720
25	1,220	983	2,520	896	1,230	1,730	22	80	261	70	1,780	2,740
26	1,200	974	2,490	53	2,440	41	481	800	257	120	552	2,710
27	1,200	974	2,450	54	43	782	1,150	30	275	165	532	2,700
28	1,200	965	1,500	697	846	1,180	1,130	150	265	1,550	1,780	2,750
29	1,190	965	870	1,440	732	441	1,210	30	260	2,610	1,780	2,740
30	1,190	742	870	1,440	------	2,280	445	150	300	2,630	1,790	2,210
31	1,180	------	870	1,440	------	2,820	------	260	------	2,560	1,790	------
TOTAL	22,679	38,145	50,954	58,344	34,006	39,544	17,215	15,517	8,669	15,796	35,326	76,220
MEAN	732	1,272	1,644	1,882	1,173	1,276	574	501	289	510	1,140	2,541
MAX	1,230	1,720	2,750	4,840	2,440	4,970	1,960	1,990	571	2,630	2,530	2,810
MIN	35	522	492	53	43	30	22	23	60	21	100	1,260
(†)	-17,300	-35,500	-13,600	+18,300	+2,000	+18,500	+18,100	+9,900	-2,200	+4,500	-19,700	-65,200
MEAN‡	174	88.2	1,205	2,472	1,242	1,871	1,177	820	216	655	504	367
CFSM‡	.33	.17	2.26	4.63	2.33	3.50	2.20	1.54	.40	1.23	.94	.69
IN.‡	.37	.18	2.60	5.34	2.51	4.04	2.46	1.77	.45	1.41	1.09	.77

CAL YR 1971 TOTAL 160,935.3 MEAN 441 MAX 2,750 MIN 4.7 MEAN‡ 900 CFSM‡ 1.69 IN.‡ 22.89
WTR YR 1972 TOTAL 412,415.0 MEAN 1,127 MAX 4,970 MIN 21 MEAN‡ 902 CFSM‡ 1.69 IN.‡ 23.00

† Change in contents, in cfs days, in Woods Reservoir and Tims Ford Lake.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03580990 Jack Daniel Spring at Lynchburg, Tenn.

LOCATION.--Lat 35°17'01", long 86°21'58", Moore County, at mouth of Jack Daniel Cave at Jack Daniel Distillery, 0.5 mile east of Lynchburg.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 805.35 ft above mean sea level (Tennessee Valley Authority bench mark).

EXTREMES.--Current year: Maximum discharge, 20 cfs Jan. 2, Mar. 28; maximum gage height, 2.19 ft Mar. 28; minimum discharge, 0.60 cfs Oct. 13, 15, Nov. 15, Dec. 2 (gage height, 1 29 ft).
Period of record: Maximum discharge, 70 cfs Apr. 26, 1970 (gage height, 2.92 ft); no flow for part of Sept. 12, 1971 (caused by drainage of reservoir); minimum discharge unaffected by regulation, 0.45 cfs several days in September and October 1970.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	.70	.65	2.4	3.4	2.7	5.4	2.3	1.6	.88	1.5	.70
2	.75	.70	.67	16	3.1	7.7	4.6	2.3	1.5	.88	1.2	.70
3	.69	.90	1.1	8.8	3.2	9.3	4.1	2.1	1.4	.88	1.1	.70
4	.70	.83	1.2	9.8	3.1	6.6	3.8	2.0	1.4	.90	1.0	.70
5	.69	.79	1.2	14	2.9	5.0	3.6	1.9	1.3	.94	.99	.70
6	.70	.76	3.5	9.4	3.3	4.5	3.6	1.8	1.3	.88	.94	.70
7	.70	.76	8.1	6.2	4.0	4.4	3.6	1.9	1.3	.88	.97	.70
8	.66	.73	4.2	4.9	4.1	4.3	3.1	3.0	1.2	.82	.94	.68
9	.65	.70	3.5	6.0	3.9	4.3	2.7	3.8	1.2	.82	.88	.65
10	.65	.70	3.0	10	3.5	4.3	2.6	3.6	1.2	.82	.86	.65
11	.67	.70	2.6	8.2	3.3	4.1	2.6	3.2	1.1	.82	.88	.65
12	.67	.70	2.4	6.3	3.2	3.8	2.6	3.0	1.1	.82	.90	.65
13	.64	.70	2.5	5.4	3.4	3.6	2.5	3.2	1.1	.82	1.1	.65
14	.67	.70	2.7	4.3	3.4	3.3	2.3	4.3	1.1	.82	.95	.65
15	.66	.70	2.7	3.6	3.6	3.2	2.1	14	1.1	.82	.88	.65
16	1.1	.69	2.7	3.2	3.3	3.5	3.9	8.1	1.1	.93	.87	.65
17	.86	.70	2.8	3.0	3.4	4.3	4.6	5.6	1.1	.94	.82	.76
18	.78	.70	2.6	2.8	3.2	4.4	4.0	4.5	1.1	.88	.82	.89
19	.72	.70	2.6	2.6	2.8	4.0	3.7	3.9	1.1	.82	.82	.76
20	.67	.70	3.8	2.5	2.6	3.9	3.4	3.5	1.1	.82	.76	.75
21	.69	.70	4.3	2.6	2.6	3.7	3.3	3.1	1.1	.82	.77	.70
22	.74	.70	3.6	2.9	2.5	3.9	4.8	2.8	1.0	.82	.82	.70
23	.76	.66	3.0	2.9	2.4	3.8	5.0	2.6	1.0	.82	.81	.70
24	.86	.68	2.7	2.9	2.4	3.5	4.3	2.4	.96	.82	.76	.70
25	.84	.65	2.5	2.7	2.4	3.3	3.8	2.2	.94	.84	.76	.70
26	.79	.67	2.3	2.6	2.4	3.0	3.3	2.1	1.0	.86	.76	.73
27	.76	.75	2.1	2.8	2.8	2.9	3.0	1.9	1.0	.81	.75	.78
28	.76	.73	1.9	3.2	2.9	14	2.8	1.8	.96	1.4	.70	.92
29	.73	.73	1.8	3.8	2.8	14	2.6	1.8	.94	1.5	.70	1.1
30	.70	.71	1.9	3.8	------	9.5	2.4	1.7	.88	2.7	.70	2.4
31	.70	------	2.0	3.5	------	6.9	------	1.7	------	2.1	.70	------
TOTAL	22.69	21.54	82.62	163.1	89.9	159.7	104.1	102.1	34.18	30.68	27.41	23.37
MEAN	.73	.72	2.67	5.26	3.10	5.15	3.47	3.29	1.14	.99	.88	.78
MAX	1.1	.90	8.1	16	4.1	14	5.4	14	1.6	2.7	1.5	2.4
MIN	.64	.65	.65	2.4	2.4	2.7	2.1	1.7	.88	.81	.70	.65

CAL YR 1971 TOTAL 126.85 MEAN .35 MAX 8.1 MIN 0
WTR YR 1972 TOTAL 861.39 MEAN 2.35 MAX 16 MIN .64

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-07	0300	1.82	12	03-02	1745	1.83	12
01 02	0715	2.18	20	03-28	1000	2 19	20
01-05	0315	2.01	16	05-15	0445	2.05	16
01-10	0900	1.77	10				

03582000 Elk River above Fayetteville, Tenn.

LOCATION.--Lat 35°08'04", long 86°32'23", Lincoln County, on right bank 100 ft downstream from highway bridge, 1.8 miles southeast of Fayetteville, 4.0 miles upstream from Norris Creek, and at mile 93.9.

DRAINAGE AREA.--827 sq mi.

PERIOD OF RECORD.--August 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 650.58 ft above mean sea level.

AVERAGE DISCHARGE.--38 years, 1,389 cfs (22.81 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 8,500 cfs Jan. 2 (gage height, 14.17 ft); minimum, 74 cfs Oct. 8 (gage height, 0.75 ft).
Period of record: Maximum discharge, 35,500 cfs Jan. 5, 1949 (gage height, 27.14 ft); minimum, 67 cfs Dec. 9, 10, 11, 1970 (gage height, 0.75 ft Dec. 9, 10, 11, 1970).
Flood of March 1842 reached a stage of 27.5 ft (discharge, 37,000 cfs), from reports of Tennessee Valley Authority.

REMARKS.--Records good. Prior to August 1949, diurnal fluctuation at low flow caused by powerplants upstream. Flow regulated by Woods Reservoir since 1952 (see sta 03579000), and Tims Ford Lake (see sta 03580740).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	1,350	724	1,660	2,030	840	3,250	736	416	413	2,960	1,810
2	316	1,320	595	7,230	1,290	3,240	2,360	612	410	356	2,600	1,810
3	316	1,210	860	3,490	1,960	4,030	2,030	502	407	404	1,920	1,350
4	313	1,020	811	4,310	2,230	2,990	1,520	1,210	404	616	1,870	1,570
5	205	1,320	722	5,180	2,110	2,030	1,580	1,900	401	616	1,820	2,650
6	91	1,770	1,930	3,100	2,330	2,090	1,710	704	560	458	688	2,690
7	80	1,900	4,920	2,250	2,630	708	1,730	268	519	416	672	2,740
8	526	1,880	1,710	2,740	1,860	892	1,590	820	484	395	965	2,730
9	736	1,850	2,120	3,610	2,200	2,840	1,470	776	398	386	756	2,760
10	744	1,830	1,530	6,520	2,120	2,690	1,340	540	425	509	1,790	2,480
11	744	1,820	2,000	7,240	1,160	2,080	1,330	416	404	255	2,060	1,960
12	744	1,790	2,340	6,100	832	1,140	422	1,110	580	114	1,990	2,490
13	744	1,770	2,700	5,480	1,350	960	374	1,700	323	193	2,050	2,490
14	740	1,760	2,730	3,040	872	1,640	347	804	155	195	1,870	2,650
15	752	1,750	2,760	4,680	1,430	1,500	317	2,360	193	200	422	2,650
16	905	1,750	2,900	4,760	1,530	2,000	940	2,230	824	374	404	2,710
17	764	1,750	3,250	4,520	1,620	2,930	692	2,140	263	413	383	3,050
18	748	1,740	3,300	2,080	1,610	5,420	544	1,420	374	371	371	3,030
19	748	1,740	3,150	1,990	955	5,360	443	1,650	377	371	796	2,810
20	748	897	3,800	1,650	1,520	1,960	404	1,670	377	1,020	235	2,780
21	752	642	3,570	2,210	2,000	656	548	744	398	383	365	2,750
22	752	624	3,220	2,030	2,250	704	1,590	305	431	1,030	431	2,770
23	1,210	1,440	3,020	2,060	1,870	580	1,120	512	365	157	1,890	2,810
24	1,440	1,690	2,900	1,960	2,400	526	728	498	368	151	1,900	2,810
25	1,420	1,310	2,810	2,070	2,050	800	772	484	377	114	1,880	2,770
26	1,390	1,120	2,740	1,030	1,900	1,930	467	900	407	159	1,820	2,800
27	1,380	1,120	2,680	600	2,340	505	1,170	353	377	220	736	2,840
28	1,370	1,110	2,570	915	905	4,070	1,490	198	404	2,410	696	2,930
29	1,360	1,110	1,300	2,170	1,160	3,770	1,490	299	401	3,330	1,780	2,970
30	1,350	1,090	1,410	2,280	------	2,230	1,380	175	374	4,020	1,800	5,550
31	1,350	------	1,730	2,130	------	3,440	------	280	------	3,480	1,810	------
TOTAL	25,051	43,473	72,802	101,085	50,514	66,551	35,148	28,316	12,196	23,529	41,730	80,210
MEAN	808	1,449	2,348	3,261	1,742	2,147	1,172	913	407	759	1,346	2,674
MAX	1,440	1,900	4,920	7,240	2,630	5,420	3,250	2,360	824	4,020	2,960	5,550
MIN	80	624	595	600	832	505	317	175	155	114	235	1,350
(†)	-17,300	-35,500	-13,600	+18,300	+2,000	+18,500	+18,100	+9,900	-2,200	+4,500	-19,700	-65,200
MEAN‡	250	266	1,910	3,851	1,811	2,744	1,775	1,233	333	904	711	500
CFSM‡	.30	.32	2.31	4.66	2.19	3.32	2.15	1.49	.40	1.09	.86	.60
IN.‡	.35	.36	2.66	5.37	2.36	3.82	2.39	1.72	.45	1.26	.99	.67

CAL YR 1971 TOTAL 338,332 MEAN 927 MAX 10,100 MIN 80 MEAN‡ 1,386 CFSM‡ 1.68 IN.‡ 22.76
WTR YR 1972 TOTAL 580,605 MEAN 1,586 MAX 7,240 MIN 80 MEAN‡ 1,362 CFSM‡ 1.65 IN.‡ 22.41

† Change in contents, in cfs days, in Woods Reservoir and Tims Ford Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03584000 Richland Creek near Pulaski, Tenn.

LOCATION.--Lat 35°12'51", long 87°06'05", Giles County, on right bank 1,200 ft upstream from bridge on U.S. Highway 64, 1.0 mile downstream from Weakley Creek, 4.0 miles west of Pulaski, and at mile 30.1.

DRAINAGE AREA.--366 sq mi.

PERIOD OF RECORD.--April 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 642.54 ft above mean sea level.

AVERAGE DISCHARGE.--38 years, 582 cfs (21.59 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,860 cfs Jan. 2 (gage height, 16.41 ft); minimum, 49 cfs Sept. 14, 15 (gage height, 0.81 ft).
Period of record: Maximum discharge, 75,000 cfs Mar. 21, 1955 (gage height, 27.49 ft) from rating curve extended above 32,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 7.9 cfs Sept. 11, 1954 (gage height, 0.52 ft).
Flood in March 1902 (discharge, about 100,000 cfs) exceeded all known floods, including those of 1842 and 1856, from report by Tennessee Valley Authority.

REMARKS.--Records excellent. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 823: 1935-36(M), drainage area. WSP 1386: 1935-36, 1938, 1944, 1945-46(M), 1948, 1950-51(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	100	98	1,010	826	554	973	330	200	85	459	63
2	100	132	93	7,090	746	1,790	777	363	183	80	313	61
3	95	446	238	5,520	690	2,400	658	366	170	113	240	59
4	92	326	436	2,890	602	1,710	711	303	155	217	194	60
5	110	229	319	3,580	506	1,410	574	270	145	180	163	71
6	107	193	1,000	2,670	630	1,130	518	248	136	127	145	69
7	94	174	3,910	1,790	942	1,030	509	253	126	103	243	63
8	86	154	2,320	1,310	868	1,190	564	679	123	91	181	67
9	82	143	2,030	1,960	802	1,000	467	847	119	82	138	84
10	79	136	3,780	3,360	707	928	434	595	132	77	122	68
11	76	128	3,880	3,300	623	826	422	458	150	72	121	59
12	74	122	2,630	2,390	634	721	410	380	121	67	351	55
13	72	117	3,160	1,680	854	662	395	458	114	64	582	52
14	71	113	1,830	1,220	798	732	369	518	108	62	280	50
15	254	110	1,390	914	767	620	333	545	110	68	201	66
16	174	105	1,170	725	700	669	521	434	110	438	161	84
17	108	101	984	644	686	718	503	366	115	396	138	223
18	92	100	826	595	623	683	428	318	118	200	123	371
19	84	102	724	602	533	616	386	280	107	145	112	159
20	80	104	920	609	473	548	404	265	99	124	102	120
21	82	100	958	1,010	443	521	620	240	95	106	95	100
22	91	94	809	1,050	446	539	4,000	223	87	94	91	90
23	91	91	680	956	416	473	2,010	213	81	233	89	104
24	255	93	594	840	410	428	1,150	377	77	188	106	100
25	257	92	524	844	425	440	840	1,830	104	123	164	85
26	173	90	473	735	527	413	658	588	110	124	109	77
27	145	92	424	704	616	398	536	389	100	97	94	87
28	128	92	383	1,030	588	1,430	458	308	117	259	83	115
29	117	106	347	1,280	554	1,920	407	263	129	1,340	77	195
30	109	107	561	1,170	------	1,590	363	243	99	935	71	1,100
31	104	------	754	963	------	1,240	------	225	------	770	66	------
TOTAL	3,589	4,092	38,245	54,441	18,435	29,329	21,398	13,175	3,640	7,060	5,414	3,957
MEAN	116	136	1,234	1,756	636	946	713	425	121	228	175	132
MAX	257	446	3,910	7,090	942	2,400	4,000	1,830	200	1,340	582	1,100
MIN	71	90	93	595	410	398	333	213	77	62	66	50
CFSM	.32	.37	3.37	4.80	1.74	2.58	1.95	1.16	.33	.62	.48	.36
IN.	.36	.42	3.89	5.53	1.87	2.98	2.17	1.34	.37	.72	.55	.40

CAL YR 1971 TOTAL 63,538 MEAN 174 MAX 11,200 MIN 44 CFSM .48 IN 6.46
WTR YR 1972 TOTAL 202,775 MEAN 554 MAX 7,090 MIN 50 CFSM 1.51 IN 20.61

PEAK DISCHARGE (BASE, 6,000 CFS).--Jan. 2 (2230) 8,860 cfs (16.41 ft).

03584500 Elk River near Prospect, Tenn.

LOCATION.--Lat 35°01'39", long 86°56'52", Giles County, on right bank 50 ft upstream from county road bridge, 1.1 miles downstream from Richland Creek, 3.2 miles east of Prospect, 5.4 miles upstream from Ford Creek, 7.9 miles upstream from Tennessee-Alabama State line, and at mile 41.5.

DRAINAGE AREA.--1,784 sq mi.

PERIOD OF RECORD.--July 1904 to February 1908, January 1919 to current year. Published as "near Elkmont, Ala." 1904-8, 1919-34. Record for both sites published January to March 1934.

GAGE.--Water-stage recorder. Datum of gage is 563.29 ft above mean sea level. July 1, 1904, to Feb. 2, 1908, and Jan. 20, 1919, to Mar. 31, 1934, nonrecording gage 11.9 miles downstream at datum 13.52 ft lower.

AVERAGE DISCHARGE.--56 years (1904-7, 1919-72), 2,974 cfs (22.64 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 21,400 cfs Jan. 3 (gage height, 22.34 ft); minimum, 209 cfs Oct. 9 (gage height, 1.11 ft).

Period of record: Maximum discharge, 104,000 cfs Mar. 22, 1955 (gage height, 38.96 ft) from rating curve extended above 63,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 78 cfs Sept. 29, 1961 (caused by highway construction upstream).

Flood in March 1902 reached a stage of 40.9 ft (discharge, 130,000 cfs), and may have been equaled by a flood in March 1897, from reports by Tennessee Valley Authority.

REMARKS.--Records excellent. Flow regulated by Woods Reservoir (see sta 03579000), and Tims Ford Lake (see sta 03580740).

REVISIONS (WATER YEARS).--WSP 523: 1904-8, 1919-20. WSP 823: Drainage area. WSP 1436: 1920-22, 1923(M), 1924, 1927, 1929, 1931-32(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	391	1,490	1,260	3,850	4,000	2,580	6,230	2,150	690	534	4,430	2,000
2	427	1,500	854	18,400	3,690	6,650	5,010	1,530	828	561	3,690	2,010
3	475	1,720	1,150	21,000	2,990	11,500	3,920	1,360	805	647	2,940	1,830
4	465	1,990	1,990	15,700	4,190	8,510	3,790	1,520	775	803	2,400	1,520
5	466	1,610	1,630	15,400	3,750	6,300	3,020	2,120	746	1,060	2,280	2,170
6	440	1,720	3,230	12,500	4,060	4,680	3,030	2,270	725	954	1,690	2,880
7	337	2,130	13,200	7,310	5,990	3,990	3,060	1,120	970	695	1,060	2,930
8	262	2,140	10,600	5,440	4,930	3,840	3,150	1,830	761	599	1,190	2,930
9	439	2,100	4,990	6,960	4,210	3,880	2,830	3,540	694	553	1,270	2,990
10	835	2,070	7,970	14,200	4,090	5,160	2,480	2,380	739	524	1,350	2,980
11	833	2,040	7,920	14,400	3,550	4,570	2,520	1,730	856	622	2,190	2,450
12	835	2,010	7,540	12,700	2,680	3,540	2,110	1,380	698	495	2,380	2,430
13	835	1,990	10,300	9,810	3,630	2,730	1,420	3,040	824	268	2,900	2,560
14	829	1,960	7,030	7,890	3,620	2,980	1,300	4,290	632	251	2,610	2,820
15	832	1,940	5,750	5,290	2,960	3,180	1,180	4,910	389	293	1,890	2,850
16	1,050	1,930	5,650	6,420	3,340	3,390	3,220	4,280	401	391	710	2,880
17	1,090	1,920	5,240	6,160	3,450	4,430	3,450	3,970	999	991	628	3,320
18	896	1,910	5,360	5,180	3,460	5,930	2,180	2,680	618	842	577	3,920
19	864	1,910	4,940	3,350	3,080	7,110	1,840	2,540	538	633	540	3,420
20	851	1,840	5,840	3,530	2,450	6,340	1,580	2,520	575	666	960	3,140
21	846	954	6,730	4,630	3,180	2,650	2,130	2,350	558	1,120	460	3,060
22	855	788	5,550	5,050	3,440	2,360	4,350	1,270	561	642	502	3,010
23	875	789	4,800	4,560	2,890	2,140	6,430	948	589	1,120	1,010	3,030
24	1,560	1,710	4,390	4,220	3,390	1,850	3,460	1,130	494	614	2,140	3,080
25	1,850	1,820	4,120	4,110	3,610	1,790	2,620	2,590	503	418	2,160	3,050
26	1,730	1,390	3,910	3,890	3,340	2,590	2,140	1,810	555	348	2,160	3,000
27	1,620	1,290	3,730	2,600	4,370	2,490	1,730	1,900	585	313	1,600	3,110
28	1,570	1,280	3,580	3,080	3,160	7,880	2,460	1,130	621	887	938	3,220
29	1,540	1,300	3,090	4,520	2,700	12,200	2,460	798	633	4,910	1,260	3,470
30	1,520	1,290	2,950	5,060	------	8,140	2,420	820	602	7,210	1,980	8,710
31	1,500	------	4,110	4,470	------	6,070	------	684	------	5,980	2,000	------
TOTAL	28,918	50,531	159,404	241,680	104,200	151,450	87,520	66,590	19,964	35,944	53,895	90,770
MEAN	933	1,684	5,142	7,796	3,593	4,885	2,917	2,148	665	1,159	1,739	3,026
MAX	1,850	2,140	13,200	21,000	5,990	12,200	6,430	4,910	999	7,210	4,430	8,710
MIN	262	788	854	2,600	2,450	1,790	1,180	684	389	251	460	1,520
(†)	-17,300	-35,500	-13,600	+18,300	+2,000	+18,500	+18,100	+9,900	-2,200	+4,500	-19,700	-65,200
MEAN‡	375	501	4,703	8,386	3,662	5,482	3,521	2,467	592	1,305	1,103	852
CFSM‡	.21	.28	2.64	4.70	2.05	3.07	1.97	1.38	.33	.73	.62	.48
IN.‡	.24	.31	3.04	5.42	2.21	3.54	2.20	1.59	.37	.84	.71	.53

CAL YR 1971 TOTAL 879,955 MEAN 2,411 MAX 27,000 MIN 262 MEAN‡ 2,870 CFSM‡ 1.61 IN.‡ 21.84
WTR YR 1972 TOTAL 1,090,866 MEAN 2,981 MAX 21,000 MIN 251 MEAN‡ 2,756 CFSM‡ 1.54 IN.‡ 21.03

† Change in contents, in cfs days, in Wood Reservoir and Tims Ford Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in contents in lakes or reservoirs listed above.

03588000 Shoal Creek at Lawrenceburg, Tenn.

LOCATION.--Lat 35°14'40", long 87°21'02", Lawrence County, on left bank, at Lawrenceburg municipal water-supply intake, 500 ft downstream from Little Shoal Creek, 0.5 mile upstream from Crowson Creek, 0.9 mile west of courthouse in Lawrenceburg, and at mile 55.9. Prior to Oct. 1, 1970, at site 1,300 ft downstream.

DRAINAGE AREA.--55.4 sq mi.

PERIOD OF RECORD.--June 1932 to March 1934, March 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 784.41 ft above mean sea level. June 7, 1932, to Mar. 31, 1934, nonrecording gage at site 500 ft downstream at datum 4.01 ft lower. Mar. 22, 1967, to Sept. 30, 1970, at site 1,300 ft downstream at datum 7.71 ft lower.

AVERAGE DISCHARGE.--5 years, 84.4 cfs (20.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,740 cfs Jan. 2 (gage height, 6.24 ft); minimum daily, 26 cfs Oct. 19, 20, Nov. 1, 15, Dec. 1, 2.

Period of record: Maximum discharge, 8,500 cfs May 7, 1933 (gage height, 14.06 ft, site and datum then in use), from rating curve extended above 2,500 cfs on basis of slope-conveyance study; minimum, 16 cfs Aug. 18, Oct. 28, 1969.

Maximum stage since 1846, 20.0 ft, present site and datum, Mar. 28, 1902 (discharge, 23,000 cfs); flood of Mar. 21, 1955, reached a stage of 17.2 ft, present site and datum (discharge 18,000 cfs), from report of Tennessee Valley Authority.

REMARKS.--Records good. About 5 cfs was diverted by Lawrenceburg water plant, some of which was returned to stream through sewage treatment plant 0.6 mile downstream.

REVISIONS.--WSP 1306: Drainage area. WSP 2110: 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	26	26	276	81	84	80	63	55	35	93	39
2	29	36	26	1,130	81	387	75	65	53	44	77	39
3	30	30	44	230	82	165	77	62	53	60	66	38
4	41	28	31	409	75	134	96	55	53	45	60	42
5	30	27	34	446	70	138	78	53	49	42	55	40
6	27	28	68	203	120	108	73	52	46	37	63	37
7	27	28	151	126	124	107	72	64	45	36	101	36
8	27	27	58	108	92	161	75	175	42	35	55	37
9	27	27	288	447	84	108	68	93	45	35	50	35
10	28	28	411	258	79	98	63	76	52	34	49	34
11	27	27	181	171	76	93	62	65	47	33	50	33
12	27	28	191	139	90	90	61	57	45	32	323	33
13	27	28	125	126	107	92	59	96	43	32	176	33
14	27	27	84	113	88	101	56	90	39	36	66	33
15	27	26	110	107	83	85	55	88	47	34	55	67
16	28	27	96	96	77	104	107	65	40	213	49	111
17	28	28	82	90	79	96	70	63	42	67	49	135
18	27	30	73	90	75	85	62	57	40	46	49	86
19	26	30	71	94	70	82	60	56	38	70	47	47
20	26	28	116	98	68	74	72	58	38	60	46	45
21	28	28	101	124	65	71	311	54	39	43	105	41
22	28	27	111	109	70	70	736	50	38	41	49	50
23	30	27	86	99	68	67	135	49	37	187	61	49
24	42	28	65	96	70	64	101	371	37	94	48	43
25	31	28	54	111	72	72	88	362	38	44	44	40
26	28	27	47	86	81	67	81	85	44	40	43	39
27	27	28	46	83	75	66	76	71	47	35	43	59
28	28	30	46	168	68	110	70	62	53	232	41	56
29	27	30	50	118	67	138	65	57	43	909	39	234
30	27	27	91	98	------	91	62	62	35	294	38	389
31	28	------	69	84	------	85	------	55	------	184	38	------
TOTAL	889	844	3,032	5,933	2,337	3,293	3,146	2,731	1,323	3,039	2,128	2,000
MEAN	28.7	28.1	97.8	191	80.6	106	105	88.1	44.1	98.0	68.6	66.7
MAX	42	36	411	1,130	124	387	736	371	55	909	323	389
MIN	26	26	26	83	65	64	55	49	35	32	38	33
CFSM	.52	.51	1.77	3.45	1.45	1.91	1.90	1.59	.80	1.77	1.24	1.20
IN.	.60	.57	2.04	3.98	1.57	2.21	2.11	1.83	.89	2.04	1.43	1.34

CAL YR 1971 TOTAL 32,289 MEAN 88.5 MAX 1,310 MIN 26 CFSM 1.60 IN 21.68
WTR YR 1972 TOTAL 30,695 MEAN 83.9 MAX 1,130 MIN 26 CFSM 1.51 IN 20.61

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-02	0300	6.24	2,740	07-29	0500	5.49	2,050
04-22	0015	6.20	2,700				

03588400 Chisholm Creek at Westpoint, Tenn.

LOCATION.--Lat 35°08'04", long 87°31'45", Lawrence County, on left bank at downstream side of pier of county road bridge 0.3 mile northeast of Westpoint, and at mile 1.2.

DRAINAGE AREA.--43.0 sq mi.

PERIOD OF RECORD.--July 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft above mean sea level (Tennessee State Highway Department bench mark).

AVERAGE DISCHARGE.--10 years, 65.7 cfs (20.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,010 cfs Jan. 2 (gage height, 8.19 ft); minimum, 18 cfs Oct. 19, 20.
Period of record: Maximum discharge, 4,160 cfs Mar. 29, 1965 (gage height, 11.08 ft); minimum, 8.4 cfs July 28, 29, 1966.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	21	23	114	80	57	83	74	38	62	259	22
2	19	25	22	1,230	77	165	77	70	35	51	223	22
3	19	33	42	316	73	189	73	66	33	93	166	23
4	19	26	38	294	66	157	99	56	32	55	126	27
5	24	23	32	326	58	132	83	49	31	109	98	37
6	24	22	52	214	76	110	81	45	30	65	79	28
7	21	23	127	154	93	102	79	59	29	49	87	25
8	20	22	67	120	89	147	75	237	27	40	61	26
9	20	22	186	228	84	125	67	154	27	35	51	35
10	20	21	314	295	78	113	63	108	32	33	45	27
11	19	21	196	245	73	101	61	76	30	30	42	24
12	19	21	169	180	75	90	58	53	27	29	59	23
13	19	21	153	146	79	86	55	199	28	27	81	23
14	19	21	119	112	74	89	53	181	27	27	45	23
15	19	21	108	91	73	78	50	171	32	27	37	26
16	19	21	102	78	71	92	77	134	32	515	33	36
17	19	21	92	70	70	90	64	111	30	330	28	51
18	19	21	80	65	64	88	60	93	33	99	27	78
19	19	24	73	63	58	83	57	78	27	75	26	38
20	19	24	98	65	52	78	58	67	26	61	26	31
21	19	22	92	74	50	75	86	60	25	41	32	28
22	24	21	83	83	52	72	888	54	23	32	32	32
23	23	21	74	80	48	68	411	50	22	58	28	38
24	28	22	67	75	47	62	270	46	22	68	31	31
25	32	21	61	78	47	69	204	350	22	41	29	29
26	24	21	57	71	53	61	162	123	23	33	33	27
27	22	22	52	70	49	61	132	80	97	30	28	85
28	21	22	49	98	47	72	109	60	331	73	26	76
29	20	31	46	102	46	93	94	52	168	844	24	236
30	20	26	60	96	------	94	81	48	76	523	23	341
31	21	------	61	88	------	92	------	43	------	334	22	------
TOTAL	650	683	2,795	5,321	1,902	2,991	3,810	3,047	1,415	3,889	1,907	1,548
MEAN	21.0	22.8	90.2	172	65.6	96.5	127	98.3	47.2	125	61.5	51.6
MAX	32	33	314	1,230	93	189	888	350	331	844	259	341
MIN	19	21	22	63	46	57	50	43	22	27	22	22
CFSM	.49	.53	2.10	4.00	1.53	2.24	2.95	2.29	1.10	2.91	1.43	1.20
IN.	.56	.59	2.42	4.60	1.65	2.59	3.30	2.64	1.22	3.36	1.65	1.34

CAL YR 1971 TOTAL 27,063 MEAN 74.1 MAX 908 MIN 19 CFSM 1.72 IN 23.41
WTR YR 1972 TOTAL 29,958 MEAN 81.9 MAX 1,230 MIN 19 CFSM 1.90 IN 25.92

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-02	0830	8.19	2,010	07-16	0900	6.01	914
04-22	0430	7.12	1,420	07-29	1545	7.06	1,390

03588500 Shoal Creek at Iron City, Tenn.

LOCATION.--Lat 35°01'27", long 87°34'44", Lawrence County, near center of span on downstream side of bridge on county road, 400 ft downstream from Holly Creek, 1,350 ft upstream from Louisville and Nashville Railroad bridge, 1,350 ft northeast of Iron City Post Office, and at mile 22.0.

DRAINAGE AREA.--348 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 534.22 ft above mean sea level. Prior to Feb. 25, 1931, nonrecording gage at railroad bridge, 1,350 ft downstream at datum 0.85 ft lower. Feb. 25, 1931, to Sept. 30, 1933, nonrecording gage at site 825 ft downstream and Oct. 1, 1933, to Sept. 30, 1957, water-stage recorder at site 750 ft downstream at datum 0.69 ft higher.

AVERAGE DISCHARGE.--47 years, 614 cfs (23.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,500 cfs Jan. 2 (gage height, 14.48 ft); minimum, 135 cfs Oct. 3, 4; minimum daily, 138 cfs Oct. 4.
Period of record: Maximum discharge, 132,000 cfs Mar. 21, 1955 (gage height, 27.25 ft, site and datum then in use), from rating curve extended above 32,000 cfs on basis of contracted-opening measurement at gage height 22.9 ft and a slope-area measurement at gage height 27.25 ft; minimum, 38 cfs Aug. 31, 1943.
Flood in March 1902 reached a stage about 3 ft higher than that of Mar. 21, 1955, from information by local residents.

REMARKS.--Records good. Prior to January 1951, diurnal fluctuation at low flow caused by powerplant near Lawrenceburg.

REVISIONS(WATER YEARS).--WSP 823: Drainage area. WSP 1113: 1927(M). WSP 1436: 1926(M), 1927-29, 1930(M), 1932, 1933(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	159	175	615	677	458	680	399	308	268	1,280	162
2	143	180	162	7,890	628	1,340	594	395	293	268	1,130	160
3	140	270	248	4,250	591	2,180	547	395	278	293	736	160
4	138	230	347	2,730	531	1,480	746	358	268	293	535	174
5	186	192	265	3,460	471	1,200	696	330	257	296	433	201
6	203	180	349	2,390	552	937	664	315	247	268	374	186
7	175	182	1,320	1,550	906	823	650	327	247	233	395	168
8	160	175	798	1,140	835	1,130	638	886	237	217	366	165
9	158	170	873	1,580	755	1,080	587	970	230	208	300	180
10	156	169	2,870	3,260	676	941	543	706	244	201	271	171
11	152	165	2,340	2,290	609	825	527	575	247	192	268	160
12	151	163	1,590	1,560	596	728	516	496	224	186	254	154
13	148	162	1,850	1,200	674	668	500	760	220	183	664	148
14	149	162	1,160	930	637	701	475	796	220	177	378	146
15	152	161	884	745	603	622	450	784	227	183	278	146
16	154	158	830	622	567	671	638	646	237	1,490	244	192
17	152	157	698	567	562	723	650	555	220	1,530	227	323
18	150	156	576	534	530	698	576	487	233	540	217	438
19	149	169	500	522	485	651	538	433	214	399	211	286
20	149	178	604	515	444	597	510	399	208	535	201	214
21	153	163	668	623	426	565	560	370	201	319	227	192
22	168	155	576	687	433	547	4,140	346	189	257	275	189
23	177	152	516	662	426	499	2,060	323	183	247	220	237
24	200	156	440	626	423	466	1,160	311	180	478	237	227
25	240	158	383	622	426	495	826	1,630	180	311	217	189
26	200	153	343	575	447	475	664	718	186	247	208	177
27	177	159	312	546	453	480	565	487	264	220	198	220
28	169	163	284	710	432	537	501	403	790	214	186	338
29	162	199	270	939	423	844	460	362	505	2,900	177	610
30	159	202	379	863	------	881	429	354	330	3,200	171	2,120
31	160	------	510	758	------	779	------	338	------	2,200	165	------
TOTAL	5,078	5,198	23,120	45,961	16,218	25,021	23,090	16,654	7,867	18,553	11,043	8,433
MEAN	164	173	746	1,483	559	807	770	537	262	598	356	281
MAX	240	270	2,870	7,890	906	2,180	4,140	1,630	790	3,200	1,280	2,120
MIN	138	152	162	515	423	458	429	311	180	177	165	146
CFSM	.47	.50	2.14	4.26	1.61	2.32	2.21	1.54	.75	1.72	1.02	.81
IN.	.54	.56	2.47	4.91	1.73	2.67	2.47	1.78	.84	1.98	1.18	.90

CAL YR 1971 TOTAL 230,490 MEAN 631 MAX 9,850 MIN 138 CFSM 1.81 IN 24.64
WTR YR 1972 TOTAL 206,236 MEAN 563 MAX 7,890 MIN 138 CFSM 1.62 IN 22.05

PEAK DISCHARGE (BASE, 6,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-02	1815	14.48	11,500				

03593500 Tennessee River at Savannah, Tenn.

LOCATION.--Lat 35°13'29", long 88°15'36", Hardin County, on left bank pier of bridge on U.S. Highway 64, at Savannah, 16.8 miles downstream from Pickwick Landing Dam and at mile 189.9.

DRAINAGE AREA.--33,140 sq mi, approximately.

PERIOD OF RECORD.--September 1930 to current year. Gage-height records collected in this vicinity since June 1905, are in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft above mean sea level, datum of 1929, unadjusted. Prior to Apr. 7, 1945, at datum 41.61 ft higher. Since Oct. 1, 1948, auxiliary water-stage recorder on downstream end of lock wall in lower pool at Pickwick Landing Dam, 16.8 miles upstream from base gage at same datum. Apr. 5, 1937, to Jan. 31, 1939, auxiliary nonrecording gage 4.0 miles downstream and Feb. 1, 1939, to Sept. 30, 1948, water-stage recorder 4.3 miles downstream from base gage at same datum.

AVERAGE DISCHARGE.--42 years, 52,910 cfs (21.68 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 184,000 cfs Jan. 15; maximum gage height, 75.81 ft Jan. 16; minimum daily discharge, 13,700 cfs Sept. 4; minimum gage height, 55.05 ft Oct. 23.
Period of record: Maximum discharge, 403,000 cfs Feb. 6, 1957; maximum gage height, 92.42 ft Feb. 6, 1957; minimum discharge, 60 cfs Apr. 23, 1966; minimum gage height, 41.20 ft, present datum, Oct. 20, 1931; minimum gage height since Kentucky Lake reached minimum pool elevation on Apr. 7, 1945, 53.40 ft Jan. 12, 1948.
Maximum stage since 1867, 101.2 ft Mar. 21, 1897, present datum, from floodmarks (discharge, 450,000 cfs, from rating curve extended above 320,000 cfs). Flood of Jan. 2, 1927, reached a stage of 92.7 ft, present datum (discharge, 349,000 cfs). Minimum stage since 1905, 38.8 ft, present datum, Sept. 8, 1925.

REMARKS.--Records fair. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other reservoirs have been built above station (see p. and basic data releases for adjoining states, 1972). Flow now almost completely regulated.

COOPERATION.--Reported releases at Pickwick Landing Dam furnished by Tennessee Valley Authority.

REVISIONS(WATER YEARS).--WSP 853: 1937, drainage area. WSP 1306: 1936 (monthly runoff). WSP 2110: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45,000	44,100	40,900	64,000	85,700	103,000	58,700	44,600	36,700	48,400	64,100	37,700
2	38,700	42,500	42,900	99,400	80,900	113,000	60,700	40,000	35,200	31,500	62,900	18,300
3	26,200	45,300	53,200	134,000	78,400	125,000	63,800	39,200	40,000	24,000	59,300	16,400
4	38,800	50,100	65,700	150,000	72,900	132,000	38,900	44,800	31,500	33,000	47,200	13,700
5	38,400	47,100	63,700	153,000	67,800	134,000	32,000	42,000	34,500	34,800	62,100	19,800
6	41,400	46,300	67,900	156,000	74,200	136,000	32,200	39,200	44,800	53,600	37,200	32,100
7	42,400	38,300	87,700	157,000	78,400	137,000	29,100	43,500	38,700	37,600	34,200	39,700
8	42,100	46,800	115,000	158,000	76,100	124,000	23,000	61,700	45,300	40,500	39,000	37,100
9	39,900	42,900	124,000	165,000	71,600	112,000	21,100	61,300	34,200	44,800	42,500	41,300
10	36,500	45,600	135,000	179,000	64,700	94,300	29,300	53,500	30,500	35,900	39,900	25,700
11	35,400	44,600	134,000	183,000	65,100	79,700	34,400	54,900	29,700	27,200	42,700	34,500
12	36,600	42,600	129,000	182,000	59,000	73,400	28,500	49,400	32,300	30,100	52,700	33,800
13	37,600	41,800	127,000	182,000	57,600	62,200	34,800	70,600	32,300	30,500	34,400	34,700
14	36,800	42,300	117,000	183,000	61,400	58,600	35,600	61,600	33,700	28,600	39,500	36,800
15	34,600	43,100	101,000	184,000	68,900	55,700	34,900	71,700	35,800	41,700	49,400	37,800
16	38,500	45,600	90,200	184,000	59,800	53,300	26,700	72,100	32,500	52,900	48,800	34,700
17	34,800	44,900	83,800	180,000	57,600	47,700	33,800	72,100	38,100	34,500	47,800	37,200
18	38,100	47,800	82,500	155,000	63,000	56,600	31,500	71,900	35,900	53,700	50,000	43,900
19	37,500	49,800	82,100	111,000	65,300	59,500	30,700	71,600	40,400	37,300	49,800	47,100
20	33,800	51,400	88,300	88,300	63,600	54,900	34,200	60,700	57,200	41,700	37,300	45,700
21	35,900	44,200	94,000	90,600	67,200	40,800	33,200	51,400	54,700	38,100	41,900	48,800
22	37,000	41,900	90,700	94,800	77,400	36,900	45,300	49,100	52,600	56,800	40,600	46,400
23	38,000	41,700	85,300	93,600	76,200	49,200	71,800	50,500	49,100	50,200	46,500	41,700
24	33,800	38,900	84,800	91,900	63,800	54,500	72,300	46,800	45,500	37,300	41,100	28,800
25	40,200	46,600	70,100	86,400	62,300	64,400	72,700	47,800	23,900	34,500	36,600	41,400
26	44,100	48,000	66,000	87,200	75,100	36,900	71,800	46,600	23,300	35,200	47,900	40,100
27	33,600	40,000	66,200	91,500	81,200	58,300	71,000	43,100	35,100	37,100	44,800	42,200
28	42,000	37,000	61,500	92,600	90,900	78,500	69,000	45,300	41,800	36,400	39,900	42,400
29	41,900	39,000	54,900	92,900	103,000	70,300	54,900	45,600	56,500	71,700	39,800	47,600
30	39,900	42,800	61,800	89,600	------	58,700	48,700	45,700	49,700	83,600	38,500	70,000
31	35,700	------	57,200	86,100	------	59,700	------	53,500	------	83,500	37,500	------
TOTAL	1,175.2M	1,323.0M	2,623.4M	4,044.9M	2,069.1M	2,420.1M	1,324.6M	1,651.8M	1,171.5M	1,326.7M	1,395.9M	1,117.4M
MEAN	37,910	44,100	84,630	130,500	71,350	78,070	44,150	53,280	39,050	42,800	45,030	37,250
MAX	45,000	51,400	135,000	184,000	103,000	137,000	72,700	72,100	57,200	83,600	64,100	70,000
MIN	26,200	37,000	40,900	64,000	57,600	36,900	21,100	39,200	23,300	24,000	34,200	13,700

CAL YR 1971 TOTAL 20,393,500 MEAN 55,870 MAX 186,000 MIN 12,000 CFSM 1.69 IN. 22.89
WTR YR 1972 TOTAL 21,643,600 MEAN 59,140 MAX 184,000 MIN 13,700 CFSM 1.78 IN. 24.29

03596000 Duck River below Manchester, Tenn.

LOCATION.--Lat 35°28'15", long 86°07'18", Coffee County, on right bank 50 ft downstream from Powers Bridge, 2.0 miles southwest of Manchester, 3.2 miles downstream from Little Duck River, 7.0 miles upstream from Crumpton Creek, and at mile 265.4.

DRAINAGE AREA.--107 sq mi.

PERIOD OF RECORD.--April 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 878.23 ft above mean sea level.

AVERAGE DISCHARGE.--38 years, 176 cfs (22.34 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,780 cfs Jan. 2 (gage height, 8.72 ft); minimum, 20 cfs Oct. 2, 3, 4, 5, 10, 11, 12, 13, 15 (gage height, 0.43 ft).

Period of record: Maximum discharge, 30,000 cfs Feb. 13, 1948, and Dec. 30, 1969 (gage height, 18.95 ft) from rating curve extended above 12,000 cfs on the basis of contracted-opening measurement at gage height 15.04 ft, and a slope-area measurement at gage height 18.93 ft; minimum, 8.0 cfs Aug. 12, 1934.

Flood of March 1929 reached a stage of 23.2 ft from floodmarks by Tennessee Valley Authority (discharge, about 50,000 cfs). Flood of March 1902 reached approximately same stage.

REMARKS.--Records excellent. Occasional regulation for short periods during low flow by small reservoirs above station.

REVISIONS (WATER YEARS).--WSP 1436: 1946-47.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	21	22	301	179	157	265	101	49	32	145	31
2	21	28	21	2,760	189	931	209	111	47	47	91	31
3	20	63	50	979	350	1,060	233	137	46	40	68	31
4	20	33	46	817	432	426	345	137	45	38	59	31
5	21	26	74	1,540	270	408	280	107	44	40	52	36
6	22	24	322	638	268	303	209	87	44	38	49	31
7	21	23	805	370	387	235	183	101	51	34	343	30
8	20	22	318	288	293	355	209	568	46	32	155	31
9	21	22	183	481	228	283	177	470	53	31	209	31
10	21	22	316	1,050	191	213	147	245	66	31	340	28
11	20	22	261	607	167	183	133	169	54	30	348	28
12	21	22	336	435	169	163	145	129	47	29	195	27
13	20	22	691	315	345	161	137	159	43	29	368	27
14	21	23	296	270	303	288	123	278	42	29	157	27
15	21	22	240	207	223	217	107	338	42	28	91	27
16	24	21	265	159	185	370	659	221	43	65	68	28
17	21	22	196	139	197	554	474	151	42	44	58	44
18	21	21	172	137	205	328	228	115	40	40	53	41
19	21	23	140	248	181	238	169	94	38	33	49	32
20	21	23	358	325	147	193	165	83	38	34	46	30
21	21	24	346	533	131	181	505	83	37	30	44	29
22	21	22	202	378	139	273	1,670	79	34	29	42	28
23	21	22	154	318	163	211	687	69	33	29	40	28
24	25	24	129	253	167	163	328	66	32	29	43	28
25	26	24	114	268	221	171	221	69	32	29	41	27
26	25	23	102	223	295	197	179	69	33	29	38	35
27	23	27	92	189	305	225	151	79	36	31	36	34
28	22	25	85	328	213	387	131	62	34	169	35	31
29	21	25	85	405	177	951	117	56	32	139	33	41
30	21	24	257	275	------	516	109	53	34	310	32	134
31	21	------	399	209	------	310	------	52	------	310	31	------
TOTAL	666	745	7,077	15,445	6,720	10,651	8,695	4,538	1,257	1,858	3,359	1,037
MEAN	21.5	24.8	228	498	232	344	290	146	41.9	59.9	108	34.6
MAX	26	63	805	2,760	432	1,060	1,670	568	66	310	368	134
MIN	20	21	21	137	131	157	107	52	32	28	31	27
CFSM	.20	.23	2.13	4.65	2.17	3.22	2.71	1.36	.39	.56	1.01	.32
IN.	.23	.26	2.46	5.37	2.34	3.70	3.02	1.58	.44	.65	1.17	.36

CAL YR 1971 TOTAL 64,981 MEAN 178 MAX 3,370 MIN 18 CFSM 1.66 IN 22.59
WTR YR 1972 TOTAL 62,048 MEAN 170 MAX 2,760 MIN 20 CFSM 1.59 IN 21.57

PEAK DISCHARGE (BASE, 2,500 CFS).--Jan. 2 (1600) 3,780 cfs (8.72 ft).

03596500 Duck River at Normandy, Tenn.

LOCATION.--Lat 35°27'26", long 86°15'25", Bedford County, on right bank 50 ft downstream from county road bridge, 0.5 mile north of Normandy, 3.3 miles upstream from L & N Railroad bridge, 7.5 miles upstream from Garrison Fork Creek, and at mile 246.9.

DRAINAGE AREA.--208 sq mi.

PERIOD OF RECORD.--December 1920 to September 1931, May 1970 to May 1972 (discharge measurements only), May to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 782.65 ft above mean sea level. Dec. 10, 1920, to Sept. 30, 1931, nonrecording gage at present site and at datum 3.0 ft higher. May 26, 1970, to May 17, 1972, operated as a low-flow partial-record station.

AVERAGE DISCHARGE.--11 years, 367 cfs (23.96 inches per year).

EXTREMES.--1972: May 18 to Sept. 30, maximum discharge, 1,130 cfs July 31 (gage height, 7.07 ft); minimum, 15 cfs (caused by regulation upstream) Aug. 22 (gage height, 2.73 ft); minimum daily, 66 cfs Aug. 22.
Period of record: Maximum discharge, 60,000 cfs Mar. 23, 1929 (gage height, 21.1 ft), present datum, from rating curve extended above 30,000 cfs; minimum, 15 cfs (caused by regulation upstream) Aug. 22, 1972 (gage height, 2.73 ft); minimum daily, 40 cfs Sept. 30, 1931.

REMARKS.--Records good. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1306: 1927, 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								190	145	95	472	85
2								210	138	104	293	84
3								260	132	117	216	84
4								260	129	104	178	85
5								210	124	103	156	90
6								170	127	101	145	90
7								200	138	96	598	84
8								1,100	131	91	427	83
9								920	126	88	469	85
10								480	147	79	484	83
11								320	143	82	634	79
12								240	129	81	355	76
13								300	120	79	520	74
14								550	117	79	360	74
15								660	114	78	224	72
16								430	115	145	178	74
17								320	117	129	156	86
18								282	114	111	143	115
19								238	109	99	134	100
20								218	107	93	126	86
21								210	106	88	124	82
22								204	103	84	66	79
23								190	98	85	95	80
24								190	96	87	106	80
25								202	95	84	107	77
26								184	95	84	106	81
27								180	104	124	99	97
28								174	101	715	96	93
29								157	98	565	93	100
30					------			152	95	933	90	212
31		------			------		------	150	------	828	87	------
TOTAL								9,551	3,513	5,631	7,337	2,670
MEAN								308	117	182	237	89.0
MAX								1,100	147	933	634	212
MIN								150	95	78	66	72
CFSM								1.48	.56	.88	1.14	.43
IN.								1.71	.63	1.01	1.31	.48

03597500 Wartrace Creek at Bell Buckle, Tenn.

LOCATION.--Lat 35°35'16", long 86°20'22", Bedford County, near right bank on downstream wingwall of bridge on State Highway 82, 0.2 mile downstream from Kelly Creek, 0.9 mile east of Bell Buckle, 4.0 miles northeast of Fairfield, and at mile 7.7.

DRAINAGE AREA.--16.3 sq mi.

PERIOD OF RECORD.--October 1953 to September 1961. Annual maximums, water years 1962-66. January 1966 to current year. Prior to November 1953 monthly discharge only published in WSP 1726.

GAGE.--Water-stage recorder. Datum of gage is 822.44 ft above mean sea level. Oct. 4, 1961, to Jan. 11, 1966, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--14 years (1953-61, 1966-72), 26.6 cfs (22.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,380 cfs July 28 (gage height, 10.06 ft), from rating extended as explained below; minimum, .16 cfs July 22, 23.
Period of record: Maximum discharge, 8,240 cfs Mar. 21, 1955 (gage height, 11.25 ft), from rating curve extended above 1,200 cfs on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for many days 1954-57, 1966-69.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	.46	3.6	180	21	35	27	9.4	3.4	.53	44	.35
2	.24	1.6	3.4	500	19	200	21	8.9	2.9	20	24	.31
3	.22	4.1	24	80	68	90	21	8.4	2.4	3.8	13	.31
4	.20	1.9	13	150	39	50	36	7.0	2.0	10	8.9	.40
5	2.1	1.2	42	130	26	35	23	5.9	1.8	12	6.2	1.2
6	.72	.88	215	50	55	25	20	5.2	4.3	3.8	30	.62
7	.27	.62	180	30	47	25	20	25	8.9	1.8	75	.31
8	.22	.53	45	30	33	30	19	117	3.4	.88	17	.31
9	.21	.46	151	170	24	25	15	39	2.9	.46	146	.35
10	.20	.46	212	80	19	20	14	22	8.9	.31	33	.26
11	.18	.46	74	130	15	18	13	15	4.6	.26	19	.22
12	.18	.46	48	50	52	17	13	11	3.1	.23	15	.23
13	.18	.40	54	35	60	17	12	48	2.4	.23	12	.22
14	.18	.38	33	24	40	17	11	70	2.0	.22	8.9	.19
15	.20	2.2	28	17	30	17	9.9	89	1.6	.20	7.0	.18
16	.28	2.6	22	15	25	20	48	35	1.6	1.6	5.5	.20
17	.27	2.9	21	12	30	30	19	23	1.8	.53	4.6	5.2
18	.23	3.4	17	9.4	25	25	15	17	1.8	.26	4.1	5.2
19	.26	3.6	29	17	18	22	12	13	1.3	.31	3.4	1.8
20	.28	3.6	95	28	17	20	70	11	1.0	.26	2.9	.88
21	.30	3.1	43	64	15	20	140	9.9	.88	.19	2.4	.53
22	.41	2.6	24	42	15	20	279	8.9	.62	.17	2.2	.35
23	.67	2.6	17	33	15	20	77	7.7	.46	55	1.8	.35
24	7.4	3.4	16	24	35	20	42	7.0	.40	10	2.0	1.5
25	5.9	3.8	14	35	140	17	28	6.2	.35	7.3	1.6	.53
26	2.9	3.4	13	24	170	14	21	5.2	.40	4.3	1.3	22
27	1.6	4.1	13	20	60	17	16	5.2	.74	148	1.0	7.3
28	1.2	4.1	13	163	35	51	13	4.3	.46	1,010	.88	4.6
29	.98	4.1	13	67	35	188	12	3.8	.40	308	.62	37
30	.82	3.8	130	40	------	60	10	4.6	1.0	255	.53	69
31	.53	------	40	25	------	40	------	4.1	------	92	.40	------
TOTAL	29.27	67.61	1,690.0	2,274.4	1,183	1,205	1,075.9	646.7	67.81	1,947.64	494.23	161.90
MEAN	.94	2.25	54.5	73.4	40.8	38.9	35.9	20.9	2.26	62.8	15.9	5.40
MAX	7.4	4.1	215	500	170	200	278	117	8.9	1,010	146	69
MIN	.18	.40	3.4	9.4	15	14	9.9	3.8	.35	.17	.40	.18
CFSM	.06	.14	3.34	4.50	2.50	2.39	2.20	1.28	.14	3.85	.98	.33
IN.	.07	.15	3.86	5.19	2.70	2.75	2.46	1.48	.15	4.44	1.13	.37

CAL YR 1971 TOTAL 8,110.44 MEAN 22.2 MAX 335 MIN .10 CFSM 1.36 IN 18.51
WTR YR 1972 TOTAL 10,843.46 MEAN 29.6 MAX 1,010 MIN .17 CFSM 1.82 IN 24.75

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-28	0330	10.06	5,380				

NOTE.--No gage-height record Feb. 13 to Mar. 24.

03598000 Duck River near Shelbyville, Tenn.

LOCATION.--Lat 35°28'49", long 86°29'57", Bedford County, on right bank 150 ft downstream from Sims Bridge, 2.1 miles upstream from Sugar Creek, 2.2 miles west of Shelbyville, 2.9 miles downstream from Flat Creek, and at mile 216.2.

DRAINAGE AREA.--481 sq mi.

PERIOD OF RECORD.--October 1933 to current year. Prior to April 1934 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 683.51 ft above mean sea level. Prior to Sept. 2, 1966, at datum 2.0 ft higher.

AVERAGE DISCHARGE.--39 years, 786 cfs (22.19 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,400 cfs Jan. 2 (gage height, 20.64 ft); minimum, 78 cfs Oct. 11-15 (gage height, 1.75 ft).

Period of record: Maximum discharge, 62,900 cfs Feb. 13, 1948 (gage height, 38.40 ft, present datum, from floodmarks) from rating curve extended above 35,000 cfs on basis of slope-area measurement; minimum, 5.0 cfs Aug. 23, 1936; minimum daily, 20 cfs Sept. 2, 1945.

Flood of March 1929 reached a stage of 39.6 ft present datum (discharge, about 70,000 cfs), from high-water profile by Tennessee Valley Authority. Flood of March 1902 reached a stage about 2.0 ft higher than that of March 1929, from information by local residents.

REMARKS.--Records excellent. Prior to 1948 diurnal fluctuation caused by powerplant upstream.

REVISIONS (WATER YEARS).--WSP 783: 1934. WSP 853: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	89	111	1,570	1,100	1,030	1,440	631	274	124	1,610	115
2	84	124	105	10,100	1,010	3,230	1,210	610	249	143	1,140	114
3	81	581	300	6,920	1,350	4,420	1,090	642	234	234	839	112
4	80	333	514	3,510	1,720	2,760	1,270	774	216	202	645	112
5	82	208	349	5,290	1,470	2,030	1,270	610	202	184	517	120
6	86	158	1,760	4,050	1,330	1,680	1,120	527	245	213	427	122
7	95	135	5,120	2,160	1,540	1,430	1,010	578	231	143	1,530	119
8	88	120	2,320	1,580	1,420	1,530	1,010	1,370	249	131	1,180	112
9	83	112	1,480	2,000	1,220	1,430	907	1,750	216	120	1,410	114
10	81	108	1,980	3,580	1,070	1,250	817	1,290	241	114	1,300	112
11	80	104	1,800	3,250	946	1,100	760	942	288	106	1,110	106
12	80	102	1,830	2,250	924	992	735	760	234	104	978	101
13	79	102	2,570	1,730	1,360	924	717	1,010	191	103	781	100
14	79	100	1,790	1,420	1,410	1,150	681	1,250	173	101	892	98
15	79	98	1,160	1,170	1,260	1,080	628	1,450	159	101	613	98
16	83	97	1,030	960	1,100	1,120	1,240	1,310	156	563	456	99
17	93	96	905	849	1,090	1,600	1,800	1,010	170	406	363	122
18	89	96	774	785	1,060	1,560	1,300	810	170	220	309	156
19	83	98	661	914	1,000	1,270	992	678	152	156	274	183
20	81	100	1,190	1,170	892	1,070	899	592	143	143	238	133
21	80	105	1,470	1,790	806	967	1,960	535	139	134	209	116
22	81	100	1,110	1,810	796	1,040	4,370	492	136	119	213	110
23	87	98	793	1,540	778	1,030	3,940	460	129	111	127	107
24	150	99	635	1,330	821	899	1,930	413	124	281	139	105
25	188	105	540	1,330	1,040	842	1,390	481	120	143	156	105
26	144	108	476	1,220	1,630	831	1,130	420	120	136	152	121
27	116	110	422	1,100	1,630	856	953	381	127	578	143	183
28	102	118	377	1,640	1,400	1,410	831	359	136	6,620	134	160
29	95	121	345	1,840	1,170	3,130	746	324	132	3,670	127	158
30	92	117	1,010	1,600	------	2,870	685	295	129	4,790	122	1,530
31	90	------	1,640	1,290	------	1,810	------	291	------	2,870	119	------
TOTAL	2,896	4,042	36,567	71,748	34,343	48,341	38,831	23,045	5,485	23,063	18,253	5,043
MEAN	93.4	135	1,180	2,314	1,184	1,559	1,294	743	183	744	589	168
MAX	188	581	5,120	10,100	1,720	4,420	4,370	1,750	288	6,620	1,610	1,530
MIN	79	89	105	785	778	831	628	291	120	101	119	98
CFSM	.19	.28	2.45	4.81	2.46	3.24	2.69	1.54	.38	1.55	1.22	.35
IN.	.22	.31	2.83	5.55	2.66	3.74	3.00	1.78	.42	1.78	1.41	.39

CAL YR 1971 TOTAL 257,289 MEAN 705 MAX 9,090 MIN 79 CFSM 1.47 IN 19.90
WTR YR 1972 TOTAL 311,657 MEAN 852 MAX 10,100 MIN 79 CFSM 1.77 IN 24.10

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-2	1900	20.64	11,400	7-28	1200	17.34	8,470

03599500 Duck River at Columbia, Tenn.

LOCATION.--Lat 35°37'05", long 87°01'56", Maury County, on right bank 4 ft downstream from bridge on former U.S. Highway 31, 2 blocks north of public square at Columbia, 0.7 mile downstream from Columbia hydroelectric plant, 2.4 miles upstream from Rutherford Creek, and at mile 132.8.

DRAINAGE AREA.--1,208 sq mi.

PERIOD OF RECORD.--October 1904 to December 1908, April 1920 to current year. Monthly discharge only for some periods, published in WSP 1306. Gage-height records collected at same site, 1887-95 and 1911 (fragmentary), and since 1947, are in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 535.33 ft above mean sea level. Prior to Jan. 9, 1925, nonrecording gages near this site; all gages at datum 2.37 ft higher prior to Oct. 1, 1933.

AVERAGE DISCHARGE.--56 years (1904-8, 1920-72), 1,913 cfs (21.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 19,400 cfs Jan. 3 (gage height, 27.98 ft); minimum, 88 cfs Oct. 14, 15 (gage height, 1.77 ft).
Period of record: Maximum discharge, 61,100 cfs Feb. 14, 1948 (gage height, 51.75 ft); no flow Oct. 22, 1922.
Flood of Mar. 30, 1902, reached a stage of 48.0 ft, present datum (discharge, 50,700 cfs).

REMARKS.--Records good.

REVISIONS(WATER YEARS).--WSP 783: 1929(M). WSP 853: Drainage area. WSP 1306: 1905-9, 1920-22, 1923(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	177	153	4,500	2,840	2,480	3,570	1,080	326	148	6,510	148
2	128	168	154	14,200	2,380	4,270	2,680	981	311	179	3,250	138
3	119	212	242	13,500	2,100	3,660	2,190	954	299	198	2,110	128
4	113	718	702	10,400	2,230	3,490	2,030	871	280	296	1,410	125
5	115	941	1,420	12,400	2,950	6,420	2,230	900	267	461	1,070	123
6	110	579	1,900	11,500	2,760	4,970	2,110	834	247	391	855	118
7	103	409	3,380	8,390	3,230	3,440	1,850	718	232	256	815	110
8	100	309	11,900	5,220	3,540	3,520	1,700	1,590	234	235	1,650	113
9	100	253	7,700	4,620	2,980	3,590	1,670	3,850	227	202	1,620	118
10	105	221	4,000	5,990	2,530	3,180	1,450	3,660	376	166	1,300	118
11	103	199	4,530	4,220	2,130	2,690	1,290	2,490	321	148	1,670	118
12	94	184	6,430	7,720	1,850	2,280	1,160	1,680	307	135	1,240	113
13	90	174	5,420	5,380	2,410	2,060	1,090	1,310	289	128	1,240	110
14	88	167	5,730	3,570	3,370	2,750	1,020	1,460	263	122	990	105
15	92	157	4,270	3,130	3,090	2,860	949	2,300	235	147	875	103
16	108	150	3,470	2,440	2,680	2,480	957	2,170	232	767	760	105
17	96	144	2,910	1,960	2,290	2,610	1,490	1,690	218	1,710	564	258
18	94	139	2,530	1,680	2,180	2,930	2,390	1,500	212	1,140	448	436
19	94	140	2,290	1,530	2,140	2,480	1,980	1,140	197	755	373	377
20	96	134	2,410	1,590	1,940	2,400	2,440	917	197	486	324	289
21	98	130	3,440	2,450	1,690	1,990	4,500	773	186	339	289	240
22	98	131	3,390	3,950	1,500	1,850	11,700	674	168	256	258	207
23	94	132	2,730	3,700	1,420	1,970	10,900	603	156	220	237	174
24	548	134	2,100	3,110	1,440	1,760	7,220	557	151	209	234	156
25	1,490	139	1,690	2,800	1,560	1,570	4,260	544	149	209	228	140
26	1,010	129	1,420	2,630	2,230	1,430	2,950	466	146	216	272	128
27	598	130	1,220	2,550	4,240	1,410	2,250	486	146	226	251	125
28	395	136	1,030	3,160	3,770	1,640	1,740	455	149	3,960	216	159
29	292	142	995	5,470	3,000	4,040	1,470	406	143	15,000	192	265
30	233	145	2,040	4,670	------	6,450	1,250	380	143	13,900	171	1,030
31	200	------	4,290	3,670	------	5,030	------	359	------	10,400	156	------
TOTAL	7,143	6,914	110,690	182,150	73,189	104,480	84,536	37,998	6,801	53,005	31,578	5,877
MEAN	230	230	3,577	5,876	2,523	3,370	2,818	1,226	227	1,710	1,019	196
MAX	1,490	941	11,900	18,900	4,240	6,660	11,700	3,850	376	15,000	6,510	1,030
MIN	88	129	153	1,530	1,420	1,410	949	359	143	122	156	103
CFSM	.19	.19	2.96	4.86	2.09	2.79	2.33	1.01	.19	1.42	.84	.16
IN.	.22	.21	3.42	5.61	2.25	3.22	2.60	1.17	.21	1.63	.97	.18

CAL YR 1971 TOTAL 641,085 MEAN 1,756 MAX 17,900 MIN 88 CFSM 1.45 IN 19.74
WTR YR 1972 TOTAL 704,558 MEAN 1,925 MAX 18,900 MIN 88 CFSM 1.59 IN 21.70

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-03	1500	27.98	19,400	07-29	2200	24.69	16,400

03600500 Big Bigby Creek at Sandy Hook, Tenn.

LOCATION.--Lat 35°29'19", long 87°13'59", Maury County, on right bank 45 ft west of Louisville & Nashville Railroad track, 0.2 mile downstream from bridge on U.S. Highway 43, 0.4 mile northeast of Sandy Hook, 0.5 mile upstream from Dry Creek, 3.5 miles southwest of Mount Pleasant, and at mile 17.9.

DRAINAGE AREA.--17.5 sq mi.

PERIOD OF RECORD.--September 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 670.44 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 24.4 cfs (18.93 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,740 cfs Apr. 22 (gage height, 7.91 ft); minimum, 3.5 cfs Sept. 2, 3.
Period of record: Maximum discharge, 2,680 cfs May 13, 1967; maximum gage height, 11.22 ft Mar. 21, 1955; minimum discharge, 1.0 cfs Sept. 10, 1958, and July 9, 1959, caused by removal of gravel from channel 0.2 mile upstream; minimum natural discharge, 1.5 cfs Sept. 4-7, 1954.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	6.5	5.9	87	29	44	33	26	9.4	7.5	16	4.9
2	5.7	7.5	5.9	448	26	166	28	25	9.4	8.4	12	4.5
3	5.6	10	19	101	26	102	26	24	9.0	11	10	4.3
4	9.5	7.7	14	100	21	68	33	21	9.0	18	8.8	4.7
5	9.1	6.8	12	135	19	58	26	19	8.9	12	8.4	5.7
6	7.8	6.5	28	71	38	47	25	17	8.3	9.4	8.0	4.9
7	7.0	6.5	73	51	41	43	27	20	8.3	8.4	12	4.7
8	6.6	5.6	27	39	34	53	33	50	7.9	7.8	9.0	5.3
9	6.3	5.6	98	95	30	43	27	35	7.9	7.4	7.4	5.5
10	6.1	5.6	85	94	26	38	26	28	10	7.2	6.8	4.7
11	5.8	5.3	50	64	24	33	25	23	8.6	6.6	6.6	4.7
12	5.7	5.3	40	48	29	29	24	17	8.3	6.4	18	4.5
13	5.6	5.3	35	39	34	55	22	16	7.9	6.3	13	4.5
14	5.7	5.3	30	29	30	68	21	23	7.6	6.2	9.2	4.3
15	5.6	5.3	29	23	28	54	19	17	7.9	6.4	7.6	5.9
16	5.6	5.3	27	19	26	57	30	16	7.6	68	6.2	6.9
17	5.6	5.3	24	18	25	50	24	15	7.6	25	6.0	44
18	5.6	5.6	21	18	23	43	22	13	7.6	15	5.7	19
19	5.6	7.1	20	20	19	36	21	12	7.2	11	5.5	12
20	5.8	6.5	35	20	17	31	293	11	6.9	9.5	5.3	9.5
21	6.3	6.2	29	51	16	28	338	11	6.5	8.1	5.3	8.2
22	7.4	5.6	24	43	16	26	569	11	6.3	7.2	5.3	14
23	6.7	5.6	21	36	16	23	144	11	6.1	8.5	5.5	21
24	11	5.9	18	31	17	21	81	11	6.1	10	5.5	15
25	8.4	5.3	17	32	36	23	59	72	6.1	8.6	5.9	11
26	7.7	5.3	16	26	84	21	47	25	6.9	7.9	5.5	10
27	7.2	5.9	15	27	62	21	40	17	8.3	6.9	5.3	17
28	6.9	5.6	15	71	47	32	35	14	12	8.0	5.1	14
29	6.6	7.4	14	57	38	55	31	12	9.1	31	4.9	39
30	6.5	6.5	41	44	------	46	28	11	7.9	35	4.7	67
31	6.5	------	35	35	------	39	------	10	------	20	4.7	------
TOTAL	207.2	183.9	923.8	1,972	877	1,453	2,157	633	240.6	408.7	239.2	380.7
MEAN	6.68	6.13	29.8	63.6	30.2	46.9	71.9	20.4	8.02	13.2	7.72	12.7
MAX	11	10	98	448	84	166	569	72	12	68	18	67
MIN	5.6	5.3	5.9	18	16	21	19	10	6.1	6.2	4.7	4.3
CFSM	.38	.35	1.70	3.63	1.73	2.68	4.11	1.17	.46	.75	.44	.73
IN.	.44	.39	1.96	4.19	1.86	3.09	4.59	1.35	.51	.87	.51	.81

CAL YR 1971 TOTAL 8,570.7 MEAN 23.5 MAX 403 MIN 4.5 CFSM 1.34 IN 18.22
WTR YR 1972 TOTAL 9,676.1 MEAN 26.4 MAX 569 MIN 4.3 CFSM 1.51 IN 20.57

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-02	0115	6.31	1,040	04-22	0115	7.91	1,740

03602500 Piney River at Vernon, Tenn.

LOCATION.--Lat 35°52'16", long 87°30'05", Hickman County, on right bank at county highway bridge, 40 ft upstream from Pretty Creek, 0.2 mile northwest of Vernon, 2.3 miles downstream from Mill Creek, 6.5 miles north of Centerville, and 8.3 miles upstream from mouth. Prior to Oct. 1, 1970, at site 350 ft upstream.

DRAINAGE AREA.--202 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 461.72 ft above mean sea level. Prior to May 11, 1934, nonrecording gage; July 3, 1925, to Feb. 8, 1931, at site 350 ft upstream at datum 3.17 ft higher; Feb. 9, 1931, to May 10, 1934, at site 0.4 mile downstream at datum 0.40 ft higher. May 11, 1934, to Sept. 30, 1970, water-stage recorder at site 350 ft upstream; prior to June 29, 1965, at datum 3.17 ft higher, and 2.17 ft higher thereafter.

AVERAGE DISCHARGE.--47 years, 293 cfs (19.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,540 cfs July 28 (gage height, 12.69 ft); minimum, 80 cfs Sept. 15, 16, 17.
Period of record: Maximum discharge 32,500 cfs Dec. 21, 1926 (gage height, 16.5 ft, site and datum then in use); minimum, 35 cfs Sept. 19, 20, 1936.
Flood of March 1897 reached a stage of 17.5 ft, original site and datum (discharge, 37,000 cfs), from reports by Tennessee Valley Authority.

REMARKS.--Records good.

REVISIONS(WATER YEARS).--WSP 758: 1927(M). WSP 823: Drainage area. WSP 1306: Drainage area at site used Feb. 9, 1931, to May 10, 1934. WSP 1436: 1926(M), 1927, 1929, 1930-31(M), 1932, 1934(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	89	90	135	375	312	484	744	172	130	321	97
2	87	91	89	378	343	507	421	498	167	194	267	95
3	89	88	99	382	323	675	392	418	162	196	230	94
4	88	87	100	428	289	610	559	355	155	295	204	93
5	89	88	97	566	255	537	484	315	150	229	184	96
6	88	88	101	463	318	459	452	285	146	156	185	93
7	87	91	126	377	446	431	442	273	141	140	213	91
8	86	88	122	320	405	604	458	1,590	139	130	166	90
9	87	89	149	562	372	552	397	1,460	139	122	213	88
10	86	88	216	949	339	502	376	897	175	117	223	86
11	86	88	226	661	311	448	366	669	155	112	182	85
12	86	88	188	494	310	403	351	543	148	118	219	85
13	86	87	164	413	377	396	336	607	146	142	262	83
14	86	87	149	344	361	425	316	592	144	120	210	83
15	86	86	149	274	349	394	292	496	150	108	187	82
16	87	86	150	250	324	635	299	425	148	250	173	81
17	86	86	144	223	308	908	268	376	144	490	160	87
18	85	86	134	220	289	779	251	340	153	450	151	91
19	85	96	132	208	260	650	241	308	155	358	143	87
20	85	92	160	226	240	546	237	284	146	299	136	84
21	86	87	167	433	229	487	251	266	141	257	131	82
22	91	86	159	368	221	447	338	251	137	232	126	121
23	90	86	149	334	212	394	329	238	135	216	122	99
24	107	86	141	308	213	352	317	225	130	201	118	105
25	109	86	136	290	219	331	298	226	130	192	115	111
26	96	86	131	258	275	307	279	209	128	183	113	96
27	91	87	126	252	303	308	262	199	137	175	109	568
28	90	87	123	670	303	343	248	193	160	3,050	105	219
29	89	99	118	703	295	734	237	187	144	892	103	164
30	89	95	133	541	------	657	305	192	135	567	100	165
31	89	------	137	433	------	562	------	180	------	405	98	------
TOTAL	2,759	2,654	4,305	12,463	8,864	15,691	10,286	13,841	4,412	10,526	5,269	3,501
MEAN	89.0	88.5	139	402	306	506	343	446	147	340	170	117
MAX	109	99	226	949	446	908	559	1,590	175	3,050	321	568
MIN	85	86	89	135	212	307	237	180	128	108	98	81
CFSM	.44	.44	.69	1.99	1.51	2.51	1.70	2.21	.73	1.68	.84	.58
IN.	.51	.49	.79	2.30	1.63	2.89	1.89	2.55	.81	1.94	.97	.64

CAL YR 1971 TOTAL 84,273 MEAN 231 MAX 4,100 MIN 85 CFSM 1.14 IN 15.52
WTR YR 1972 TOTAL 94,571 MEAN 258 MAX 3,050 MIN 81 CFSM 1.28 IN 17.42

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-28	1145	12.69	7,540				

03603000 Duck River above Hurricane Mills, Tenn.

LOCATION.--Lat 35°55'48", long 87°44'35", Humphreys County, on left bank 0.4 mile downstream from Tumbling Creek, 1.3 miles upstream from bridge on State Highway 13, 3.6 miles southeast of Hurricane Mills, and at mile 26.0.

DRAINAGE AREA.--2,557 sq mi.

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1951, published as "near Hurricane Mills."

GAGE.--Water-stage recorder. Datum of gage is 370.53 ft above mean sea level. Prior to Feb. 21, 1934, nonrecording gage and Feb. 21, 1934, to Sept. 30, 1951, water-stage recorder at bridge 5.6 miles downstream at datum 8.80 ft lower.

AVERAGE DISCHARGE.--47 years, 3,857 cfs (20.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 24,000 cfs Jan. 5 (gage height, 16.40 ft); minimum, 475 cfs Oct. 14-16.
Period of record: Maximum discharge, 122,000 cfs Feb. 14, 1948 (gage height, 30.70 ft, from floodmark in gage house, present site and datum); minimum, 185 cfs Sept. 11, 12, 1925.

REMARKS.--Records good. Occasional minor fluctuations at low flow from small dams upstream. Prior to about 1953, fluctuation and regulation were more pronounced. Minor diversions for irrigation.

REVISIONS(WATER YEARS).--WSP 803: 1935. WSP 823: 1927(M). WSP 853: Drainage area. WSP 1436: 1926-28, 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	636	729	626	5,100	6,690	5,080	8,290	3,350	1,260	824	13,800	747
2	594	687	584	7,140	5,420	4,940	6,560	3,070	1,190	985	10,100	720
3	574	649	608	16,300	4,800	8,260	5,260	2,710	1,130	1,090	6,140	701
4	556	618	674	21,600	4,270	11,900	4,750	2,540	1,080	2,020	4,240	688
5	539	626	821	23,700	3,910	12,600	4,510	2,320	1,030	2,310	3,120	675
6	544	913	1,370	20,900	4,640	10,500	4,320	2,170	993	2,050	2,460	668
7	552	1,270	2,100	16,700	5,300	8,640	4,300	2,120	955	1,700	2,260	662
8	548	1,050	6,630	13,000	5,900	7,480	4,080	3,350	918	1,460	2,210	656
9	531	907	12,200	9,550	6,210	7,130	3,800	5,890	886	1,210	2,100	668
10	518	807	10,900	10,400	5,540	6,770	3,500	6,680	955	1,060	2,900	662
11	507	734	11,300	14,200	4,890	6,260	3,340	6,580	1,010	978	2,420	649
12	497	681	11,600	14,400	4,330	5,490	3,080	5,230	1,120	895	2,480	636
13	494	651	9,220	11,900	4,220	4,880	2,880	4,160	1,050	838	2,850	623
14	483	634	6,950	9,380	4,830	4,750	2,720	3,690	985	824	2,760	610
15	475	621	7,360	7,290	5,650	5,640	2,580	3,280	955	838	2,300	598
16	476	615	6,210	5,910	5,440	5,910	2,490	3,870	955	8,640	1,980	586
17	494	604	5,190	4,890	4,960	6,440	2,440	3,780	925	9,980	1,800	598
18	541	582	4,450	4,160	4,450	6,550	2,400	3,610	925	5,970	1,640	675
19	545	597	3,890	3,670	4,060	6,380	3,250	3,080	963	4,290	1,440	978
20	528	587	3,620	3,400	3,820	6,080	3,390	2,570	903	3,100	1,280	1,150
21	508	598	3,630	3,500	3,500	5,410	3,520	2,250	852	3,040	1,170	970
22	504	588	4,400	4,120	3,210	4,740	7,440	2,020	803	2,240	1,070	1,000
23	518	569	4,780	5,800	2,970	4,210	13,900	1,850	768	1,800	1,010	1,030
24	584	564	4,230	5,880	2,820	4,000	14,700	1,710	734	1,560	970	970
25	659	550	3,530	5,300	2,750	3,750	10,900	1,600	721	1,440	940	925
26	1,210	537	2,970	4,800	2,860	3,450	7,440	1,780	714	1,290	925	910
27	1,890	553	2,580	4,630	3,990	3,180	5,350	1,640	727	1,210	918	1,000
28	1,490	561	2,310	4,890	5,800	3,160	4,270	1,460	803	1,710	895	1,400
29	1,120	605	2,100	6,280	5,960	3,840	3,560	1,400	859	4,960	873	1,170
30	912	622	2,010	8,330	------	6,130	3,150	1,350	866	13,500	824	1,160
31	803	------	2,670	8,120	------	8,830	------	1,310	------	17,300	789	------
TOTAL	20,830	20,309	141,513	285,240	133,190	192,380	152,170	92,420	28,037	101,112	80,704	24,485
MEAN	672	677	4,565	9,201	4,593	6,206	5,072	2,981	935	3,262	2,603	816
MAX	1,890	1,270	12,200	23,700	6,690	12,600	14,700	6,680	1,260	17,300	13,800	1,400
MIN	475	537	584	3,400	2,750	3,160	2,400	1,310	714	824	789	586
CFSM	.26	.26	1.79	3.60	1.80	2.43	1.98	1.17	.37	1.28	1.02	.32
IN.	.30	.30	2.06	4.15	1.94	2.80	2.21	1.34	.41	1.47	1.17	.36

CAL YR 1971 TOTAL 1,168,491 MEAN 3,201 MAX 29,000 MIN 475 CFSM 1.25 IN 17.00
WTR YR 1972 TOTAL 1,272,390 MEAN 3,476 MAX 23,700 MIN 475 CFSM 1.36 IN 18.51

03604000 Buffalo River near Flat Woods, Tenn.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°29'45", long 87°49'58", Perry County, on right bank 0.5 mile downstream from Little Opossum Creek and bridge on State Highway 13, 1.3 miles north of Flat Woods, 3.9 miles upstream from Sinking Creek, and at mile 58.7.

DRAINAGE AREA.--447 sq mi.

PERIOD OF RECORD.--May 1920 to current year.

GAGE.--Water-stage recorder. Datum of gage is 513.58 ft above mean sea level. Prior to May 27, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--52 years, 709 cfs (21.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,590 cfs Apr. 23 (gage height, 11.88 ft); minimum, 154 cfs Sept. 14, 15.
Period of record: Maximum discharge, 90,000 cfs Feb. 13, 1948 (gage height, 32.0 ft, from high-water mark in gage house), from rating curve extended above 50,000 cfs on basis of slope-area and contracted-opening measurements of peak flow and rainfall-runoff study; minimum, 65 cfs Sept. 9, 1925.
Maximum stage since at least 1897, that of Feb. 13, 1948.

REMARKS.--Records good. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 758: 1933. WSP 803: 1935. WSP 823: Drainage area. WSP 1436: 1921(M), 1922-24, 1925(M), 1927(M), 1934(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	207	245	640	810	555	880	565	299	395	900	173
2	208	207	230	2,780	735	1,040	780	520	290	331	665	171
3	245	233	266	4,850	690	2,430	710	485	287	345	495	166
4	252	251	375	2,580	655	1,930	820	453	284	355	407	166
5	319	227	338	2,570	575	1,580	845	411	275	383	355	183
6	312	214	338	2,450	610	1,380	775	383	272	359	324	191
7	296	222	444	1,770	930	1,160	750	363	272	314	324	178
8	311	225	610	1,420	990	1,230	770	690	263	281	359	171
9	308	217	645	1,400	905	1,290	740	855	257	263	359	183
10	290	217	1,980	2,570	815	1,130	680	735	281	245	290	186
11	214	217	1,990	2,700	715	985	650	615	296	233	278	171
12	194	217	1,380	1,900	665	865	655	530	272	220	275	164
13	186	217	1,070	1,480	710	790	635	565	263	212	411	159
14	183	220	945	1,190	720	915	605	690	257	204	630	156
15	183	217	835	980	665	960	570	615	260	204	431	164
16	183	217	785	820	620	1,000	600	560	331	1,470	348	230
17	183	214	715	715	585	1,080	645	500	278	3,110	278	260
18	183	217	625	655	565	1,020	585	453	269	1,500	251	735
19	181	233	560	635	525	920	550	419	260	805	236	845
20	178	269	600	640	480	820	565	387	242	550	225	453
21	183	251	710	690	448	745	960	367	230	458	225	334
22	191	230	705	805	444	690	3,350	348	220	359	227	287
23	207	222	620	790	423	620	4,610	334	209	308	281	317
24	222	220	560	745	407	560	2,170	331	201	290	266	700
25	308	225	505	725	411	540	1,520	341	196	327	236	458
26	275	212	458	710	540	525	1,180	363	217	296	227	345
27	239	209	423	655	685	485	965	324	383	269	217	305
28	220	214	403	760	640	695	815	308	1,160	263	204	600
29	209	233	391	1,020	585	1,020	720	299	960	665	194	1,550
30	207	260	467	1,010	------	1,090	630	302	590	1,480	183	2,160
31	204	------	660	910	------	980	------	308	------	1,250	176	------
TOTAL	7,089	6,734	20,878	43,565	18,548	31,030	30,730	14,419	9,874	17,744	10,277	12,161
MEAN	229	224	673	1,405	640	1,001	1,024	465	329	572	332	405
MAX	319	269	1,990	4,850	990	2,430	4,610	855	1,160	3,110	900	2,160
MIN	178	207	230	635	407	485	550	299	196	204	176	156
CFSM	.51	.50	1.51	3.14	1.43	2.24	2.29	1.04	.74	1.28	.74	.91
IN.	.59	.56	1.74	3.63	1.54	2.58	2.56	1.20	.82	1.48	.86	1.01

CAL YR 1971 TOTAL 233,624 MEAN 640 MAX 6,800 MIN 168 CFSM 1.43 IN 19.44
WTR YR 1972 TOTAL 223,049 MEAN 609 MAX 4,850 MIN 156 CFSM 1.36 IN 18.56

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-03	0600	11.68	5,410	04-23	0800	11.88	5,590

03604100 Coon Creek near Hohenwald, Tenn.

LOCATION.--Lat 35°36'23", long 87°42'43", Perry County, on downstream right wingwall of bridge of private drive 150 ft south of State Highway 20, 0.1 mile upstream from Edwards Branch, 7.1 miles east of Linden, and 11 miles northwest of Hohenwald.

DRAINAGE AREA.--10.1 sq mi.

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 573 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 11.2 cfs (15.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,250 cfs July 16 (gage height, 6.02 ft); minimum, 1.6 cfs July 13, 14, 15.
Period of record: Maximum discharge, 1,350 cfs Dec. 29, 1969 (gage height, 5.73 ft) from rating curve extended above 365 cfs; maximum gage height, 6.02 ft July 16, 1972; minimum discharge, 0.50 cfs Feb. 14, 1968, caused by construction 0.5 mile upstream.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.0	3.5	26	8.5	11	9.0	8.0	4.5	5.0	5.1	2.8
2	2.8	3.0	3.5	125	7.0	35	8.0	7.5	4.5	10	4.7	2.8
3	2.8	2.8	4.0	53	7.5	36	15	7.0	4.5	6.0	4.3	2.8
4	4.8	2.6	6.0	42	6.0	31	12	6.5	4.0	12	4.0	3.0
5	4.5	2.6	4.5	37	5.4	25	10	5.7	4.0	8.0	3.8	3.6
6	3.9	2.8	4.0	27	18	20	10	5.4	4.0	6.0	5.1	3.0
7	2.8	3.3	5.0	20	18	20	15	7.5	4.0	4.2	5.8	2.9
8	2.1	2.8	7.0	14	18	23	13	24	4.0	3.3	4.0	3.2
9	2.1	2.8	19	54	16	18	12	14	4.0	2.6	4.0	3.2
10	2.1	2.8	24	76	13	16	12	11	5.0	2.5	3.6	2.9
11	2.1	2.8	12	43	11	15	11	9.7	4.5	2.1	3.5	2.9
12	2.3	2.6	8.5	26	12	12	11	8.1	4.0	2.1	6.1	2.9
13	2.3	2.6	5.7	21	11	15	10	22	4.0	1.9	4.9	2.8
14	2.3	2.8	4.5	16	10	13	9.0	16	4.0	1.9	3.8	2.8
15	3.0	2.8	9.5	13	9.0	11	9.0	14	3.5	3.9	3.5	5.4
16	2.8	2.8	6.5	6.0	8.5	14	15	12	3.5	510	3.3	4.0
17	2.6	2.6	5.4	7.0	8.0	17	11	10	3.5	109	3.2	7.2
18	2.6	2.8	4.2	5.4	7.5	15	8.0	8.0	3.5	35	3.2	3.8
19	2.6	6.0	5.1	5.1	6.0	13	8.0	7.0	3.5	20	3.0	3.0
20	2.6	3.6	12	5.1	6.0	12	20	7.0	3.2	13	3.2	2.9
21	2.8	2.6	6.5	9.0	5.7	11	15	6.0	3.0	9.0	4.5	2.8
22	3.3	2.6	5.1	6.0	5.7	10	15	6.0	3.0	6.9	3.3	5.4
23	3.3	2.5	4.5	5.7	5.4	9.0	14	5.0	3.0	5.6	3.2	4.5
24	6.5	2.6	3.9	5.4	5.4	9.0	13	8.0	3.0	4.7	3.6	4.3
25	5.7	2.6	3.6	6.0	5.4	8.0	12	15	3.0	4.3	3.5	3.3
26	3.9	2.6	3.3	5.1	9.5	7.0	11	9.0	3.5	3.8	3.2	3.2
27	7.0	2.6	3.3	5.1	6.5	7.0	11	7.0	30	3.6	3.2	3.5
28	5.1	2.6	6.5	13	6.0	20	10	6.0	40	4.7	3.0	4.7
29	3.6	3.5	4.8	11	6.0	15	9.0	6.0	20	15	2.9	18
30	3.0	4.5	39	11	------	13	8.5	5.0	8.0	8.0	2.8	12
31	3.0	------	25	9.5	------	11	------	4.5	------	5.8	2.9	------
TOTAL	103.1	88.6	259.4	708.4	262.0	492.0	346.5	287.9	196.2	829.9	118.2	129.6
MEAN	3.33	2.95	8.37	22.9	9.03	15.9	11.6	9.29	6.54	26.8	3.81	4.32
MAX	7.0	6.0	39	125	18	36	20	24	40	510	6.1	18
MIN	2.1	2.5	3.3	5.1	5.4	7.0	8.0	4.5	3.0	1.9	2.8	2.8
CFSM	.33	.29	.83	2.27	.89	1.57	1.15	.92	.65	2.65	.38	.43
IN.	.38	.33	.96	2.61	.96	1.81	1.28	1.06	.72	3.06	.44	.48

CAL YR 1971 TOTAL 3,280.2 MEAN 8.99 MAX 100 MIN 2.1 CFSM .89 IN 12.08
WTR YR 1972 TOTAL 3,821.8 MEAN 10.4 MAX 510 MIN 1.9 CFSM 1.03 IN 14.08

PEAK DISCHARGE (BASE, 750 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-16	1330	6.02	1,250				

NOTE.--No gage-height record Mar. 15 to Apr. 28, May 16 to July 6.

03604500 Buffalo River near Lobelville, Tenn.

LOCATION.--Lat 35°48'46", long 87°47'51", Perry County, on right bank 30 ft upstream from Standing Rock Bridge, 1.4 miles downstream from bridge on State Highway 13, 3 miles north of Lobelville, 13 miles downstream from Cane Creek, and at mile 17.7.

DRAINAGE AREA.--707 sq mi.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 403.02 ft above mean sea level. Nov. 1, 1927, to May 31, 1934, nonrecording gage 40 ft downstream at same datum.

AVERAGE DISCHARGE.--45 years, 1,109 cfs (21.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,410 cfs July 17 (gage height, 11.58 ft); minimum, 280 cfs Oct. 20, 21 (gage height, 2.18 ft).

Period of record: Maximum discharge, 100,000 cfs Feb. 14, 1948 (gage height, 23.76 ft, from high-water mark in gage house) from rating curve extended above 40,000 cfs on basis of slope-area measurement of peak flow; minimum, 135 cfs Aug. 18, 1953, caused by regulation upstream at unknown location; minimum discharge unaffected by regulation, 142 cfs Oct. 1-8, 1931.

Maximum stage since at least 1897, that of Feb. 14, 1948. Flood of March 1902 reached a stage of about 21.8 ft (discharge not determined), from flood profile by Tennessee Valley Authority.

REMARKS.--Records good.

REVISIONS(WATER YEARS).--WSP 803: 1935. WSP 823: Drainage area. WSP 853: 1928-37. WSP 1436: 1932(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	339	359	1,000	1,340	930	1,490	1,010	504	1,070	1,450	338
2	323	339	356	1,720	1,230	1,090	1,360	941	491	921	1,200	328
3	317	336	377	3,590	1,160	1,740	1,260	886	474	823	1,000	322
4	329	342	433	5,780	1,090	2,800	1,270	830	458	897	849	317
5	354	366	474	4,000	1,010	2,580	1,300	782	447	1,000	735	324
6	394	363	502	3,480	1,000	2,190	1,280	731	434	877	665	328
7	418	352	534	3,160	1,240	1,940	1,230	697	421	755	671	338
8	416	349	597	2,450	1,410	1,820	1,280	1,150	412	669	619	331
9	419	352	760	2,280	1,460	1,790	1,250	1,650	404	589	594	333
10	422	345	1,120	3,210	1,370	1,820	1,200	1,500	423	534	604	327
11	416	345	2,070	3,710	1,270	1,650	1,140	1,290	431	493	551	334
12	369	342	2,310	3,580	1,170	1,470	1,090	1,130	439	462	547	321
13	324	342	1,740	2,700	1,150	1,340	1,050	1,070	428	438	687	300
14	305	339	1,370	2,130	1,140	1,290	1,010	1,060	412	416	669	294
15	296	336	1,210	1,720	1,120	1,320	956	1,110	406	503	786	324
16	291	336	1,120	1,430	1,060	1,510	951	1,040	412	3,410	727	362
17	290	333	1,030	1,240	1,020	1,870	936	965	462	6,580	647	376
18	287	333	936	1,120	972	1,880	936	900	465	4,450	551	466
19	284	356	853	1,040	925	1,710	884	835	459	2,260	491	490
20	282	370	858	997	869	1,530	838	776	444	1,550	456	915
21	280	380	889	1,070	817	1,370	977	727	418	1,250	444	845
22	286	384	930	1,100	781	1,280	1,390	688	398	1,020	430	660
23	293	363	915	1,150	755	1,170	3,470	655	382	863	419	647
24	331	349	838	1,140	737	1,090	5,210	623	367	765	467	632
25	405	342	765	1,100	719	1,020	2,910	604	356	723	474	796
26	415	342	710	1,050	750	972	2,110	592	375	705	444	758
27	414	342	656	1,030	843	941	1,670	598	423	669	424	682
28	384	339	611	1,160	956	956	1,390	568	1,090	647	406	611
29	363	349	593	1,350	951	1,260	1,220	538	1,720	665	386	778
30	349	356	611	1,490	------	1,530	1,110	525	1,400	919	367	1,690
31	345	------	905	1,450	------	1,600	------	514	------	1,500	350	------
TOTAL	10,730	10,461	27,432	63,427	30,315	47,459	44,168	26,985	15,755	38,423	19,110	15,567
MEAN	346	349	885	2,046	1,045	1,531	1,472	870	525	1,239	616	519
MAX	422	384	2,310	5,780	1,460	2,800	5,210	1,650	1,720	6,580	1,450	1,690
MIN	280	333	356	997	719	930	838	514	356	416	350	294
CFSM	.49	.49	1.25	2.89	1.48	2.17	2.08	1.23	.74	1.75	.87	.73
IN.	.56	.55	1.44	3.34	1.60	2.50	2.32	1.42	.83	2.02	1.01	.82

CAL YR 1971 TOTAL 349,608 MEAN 958 MAX 9,940 MIN 280 CFSM 1.36 IN 18.40
WTR YR 1972 TOTAL 349,832 MEAN 956 MAX 6,580 MIN 280 CFSM 1.35 IN 18.41

PEAK DISCHARGE (BASE, 5,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-04	1400	10.70	6,160	07-17	1100	11.58	7,410
04-24	0900	10.37	5,780				

03605550 Trace Creek near Denver, Tenn.

LOCATION.--Lat 36°03'26", long 87°53'54", Humphreys County, on right bank 75 ft upstream from dual bridges on U.S. Highway 70, 1.5 miles northeast of Denver, 5.1 miles upstream from mouth, and 5.3 miles northeast of New Johnsonville.

DRAINAGE AREA.--30.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 389.52 ft above mean sea level. Oct. 22 to Nov. 6, 1963, at different datum.

AVERAGE DISCHARGE.--9 years, 41.9 cfs (18.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,550 cfs May 8 (gage height, 7.17 ft, from rating curve extended above 2,100 cfs); minimum, 6.4 cfs July 11.
Period of record: Maximum discharge, 3,640 cfs May 13, 1967 (gage height, 9.08 ft); minimum, 3.0 cfs Aug. 9, 13, 1969.
Maximum stage since 1897, about 11.3 ft (discharge, 5,500 cfs) from reports of Tennessee Valley Authority.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	8.5	9.2	26	71	48	70	25	14	11	42	8.8
2	12	8.5	8.6	116	62	158	58	25	14	26	35	9.2
3	12	8.2	9.9	76	58	133	60	27	13	25	29	9.2
4	12	8.2	9.8	130	50	101	130	22	12	21	25	9.2
5	12	8.1	9.5	136	42	91	85	20	12	17	22	9.6
6	11	9.4	10	86	85	71	71	19	11	14	27	8.8
7	11	12	12	67	101	64	68	19	10	12	50	8.8
8	10	9.4	11	57	70	68	85	1,180	9.6	12	30	8.8
9	10	9.0	28	216	60	55	62	193	10	10	25	8.4
10	9.9	8.5	50	169	52	49	54	109	31	9.6	22	8.4
11	10	8.5	51	133	47	44	50	93	15	8.8	20	8.0
12	9.5	8.5	37	97	48	40	47	70	12	8.4	18	7.6
13	9.4	8.6	31	78	77	41	43	97	12	8.4	19	7.2
14	9.2	8.0	27	62	61	53	40	75	11	8.4	17	7.6
15	9.1	8.3	40	52	53	43	36	54	13	9.6	15	7.2
16	8.9	8.2	44	44	46	200	37	44	12	485	15	7.6
17	9.0	7.6	36	40	42	215	33	37	11	130	14	8.8
18	8.8	6.4	31	38	39	130	29	32	10	57	13	9.2
19	8.6	11	31	38	35	103	28	29	9.6	39	12	8.0
20	8.7	9.3	59	143	32	82	26	25	9.2	29	12	7.6
21	8.8	8.4	51	278	29	70	33	22	8.8	22	13	7.6
22	9.0	8.2	41	135	28	61	91	22	8.8	19	11	11
23	8.8	8.2	36	107	27	53	58	20	8.0	15	11	9.2
24	12	8.3	32	99	37	46	46	18	7.6	13	12	11
25	11	8.4	30	91	61	42	40	17	8.0	12	11	13
26	9.3	8.2	28	73	62	38	36	16	8.7	10	11	12
27	8.8	8.5	25	80	58	37	33	15	10	9.2	11	316
28	8.8	8.8	24	500	52	40	29	15	19	215	10	54
29	9.1	12	23	190	47	251	28	15	13	150	9.6	42
30	8.5	9.8	24	119	------	117	26	20	10	83	9.2	50
31	8.4	------	27	87	------	87	------	17	------	55	8.8	------
TOTAL	306.6	265.0	886.0	3,563	1,532	2,631	1,532	2,392	353.3	1,544.4	579.6	693.8
MEAN	9.89	8.83	28.6	115	52.8	84.9	51.1	77.2	11.8	49.8	18.7	23.1
MAX	13	12	59	500	101	251	130	1,180	31	485	50	316
MIN	8.4	7.6	8.6	26	27	37	26	15	7.6	8.4	8.8	7.2
CFSM	.33	.29	.94	3.78	1.74	2.79	1.68	2.54	.39	1.64	.62	.76
IN.	.38	.32	1.08	4.36	1.87	3.22	1.87	2.93	.43	1.89	.71	.85

CAL YR TOTAL 16,145.0 MEAN 44.2 MAX 1,790 MIN 6.8 CFSM 1.45 IN. 19.75
WTR YR TOTAL 16,278.7 MEAN 44.5 MAX 1,180 MIN 7.2 CFSM 1.46 IN. 19.92

PEAK DISCHARGE (BASE, 1,850 CFS)

DATE	TIME	G. HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
05-08	0845	7.17	3,550				

03606500 Big Sandy River at Bruceton, Tenn.

LOCATION.--36°02'19", long 88°13'42", Carroll County, on right bank on downstream end of abutment of county bridge, 700 ft downstream from bridge on U.S. Highway 70, 0.6 mile upstream from Cherry Creek, 0.9 mile east of Bruceton, and at mile 31.6.

DRAINAGE AREA.--205 sq mi.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 380.58 ft above mean sea level. Prior to Mar. 1, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 271 cfs (17.95 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs July 17 (gage height, 15.14 ft); minimum, 59 cfs Sept. 14.
Period of record: Maximum discharge, 17,000 cfs Jan. 21, 1935 (gage height, 16.16 ft from graph based on gage readings), from rating curve extended above 9,200 cfs; minimum, 28 cfs Aug. 17-19, 22, Sept. 1, 1943.
Flood in March 1897 reached a stage of 18 ft (discharge, 25,000 cfs) and flood in March 1919 reached a stage of 17 ft (discharge, 21,000 cfs), from reports by Tennessee Valley Authority.

REMARKS.--Records good. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS(WATER YEARS).--WSP 853: Drainage area. WSP 923: 1929-35.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	91	112	175	206	150	218	121	120	184	107	74
2	79	91	103	677	200	686	184	152	108	703	101	72
3	76	88	149	518	217	634	228	342	101	573	90	71
4	72	82	187	694	201	413	799	187	90	916	84	70
5	69	81	141	732	164	354	485	135	84	487	82	69
6	67	95	136	518	420	231	264	117	80	194	130	68
7	66	197	173	271	556	198	223	114	76	132	333	67
8	64	127	147	217	379	335	329	1,460	73	111	108	66
9	64	109	528	606	222	234	222	2,170	71	100	86	65
10	62	100	735	767	192	186	187	2,030	137	93	83	64
11	61	97	664	650	174	170	177	1,380	122	86	81	63
12	61	95	358	356	201	162	178	362	88	81	79	62
13	61	94	200	243	344	216	173	436	80	79	260	61
14	61	92	171	200	265	338	163	322	74	76	566	60
15	60	91	495	169	204	207	149	202	106	74	299	73
16	61	90	492	148	174	631	187	163	142	2,450	102	168
17	64	90	307	143	164	622	161	144	90	11,200	87	139
18	69	91	188	166	158	407	134	129	81	6,190	85	206
19	65	154	173	203	143	239	126	119	80	2,020	84	106
20	64	147	354	308	138	194	123	112	75	886	83	88
21	65	114	248	850	142	182	260	109	70	412	84	80
22	73	101	177	783	167	199	565	107	65	188	83	102
23	80	99	154	674	158	170	281	105	63	141	82	116
24	478	109	144	323	176	154	170	119	62	121	221	155
25	522	108	138	318	184	168	143	180	61	109	152	107
26	363	102	137	218	179	163	129	112	67	100	147	144
27	146	107	134	208	160	170	122	105	125	103	95	684
28	113	102	141	923	145	440	114	103	399	236	85	246
29	100	168	136	670	139	1,040	135	102	481	465	83	359
30	95	142	209	461	------	677	141	271	371	174	80	698
31	93	------	222	238	------	381	------	207	------	123	77	------
TOTAL	3,456	3,254	7,653	13,427	6,172	10,351	6,770	11,717	3,642	28,807	4,119	4,403
MEAN	111	108	247	433	213	334	226	378	121	929	133	147
MAX	522	197	735	923	556	1,040	799	2,170	481	11,200	566	698
MIN	60	81	103	143	138	150	114	102	61	74	77	60
CFSM	.54	.53	1.20	2.11	1.04	1.63	1.10	1.84	.59	4.53	.65	.72
IN.	.63	.59	1.39	2.44	1.12	1.88	1.23	2.13	.66	5.23	.75	.80

CAL YR 1971 TOTAL 85,811 MEAN 235 MAX 4,270 MIN 48 CFSM 1.15 IN 15.57
WTR YR 1972 TOTAL 103,771 MEAN 284 MAX 11,200 MIN 60 CFSM 1.39 IN 18.83

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
05-09	0130	12.26	2,340	07-17	0400	15.14	12,000

03609500 Tennessee River near Paducah, Ky.
(International Hydrological Decade River Station)

LOCATION.--Lat 37°01'11", long 88°16'50", Marshall County, on left bank at Gilbertsville, 4,000 ft downstream from Kentucky Dam, 2.3 miles upstream from Shadie Creek, 16 miles east of Paducah, and at mile 21.6.

DRAINAGE AREA.--40,200 sq mi, approximately.

PERIOD OF RECORD.--October 1875 to September 1889 (gage heights only), October 1889 to current year. Prior to October 1931, published as "at Johnsonville, Tenn.", and October 1931 to September 1939, published as "near Johnsonville, Tenn."

GAGE.--Water-stage recorder. Datum of gage is 286.35 ft above mean sea level. Prior to October 1939, various types of gages between 75 and 80 miles upstream at datums from 33.16 ft to 34.67 ft higher. October 1939 to September 1942, water stage recorder 16.4 miles downstream at present datum. Auxiliary water stage recorder 16.4 miles downstream at present datum since Oct. 1, 1942. October 1939 to Sept. 30, 1942, auxiliary water stage recorder at same site and datum as present base gage at Gilbertsville. (See WSP 1706 for details).

AVERAGE DISCHARGE.--76 years (1889-1965, prior to opening of Barkley-Kentucky Canal), 64,060 cfs, unadjusted; 7 years (1965-72, since opening of Barkley-Kentucky Canal), 56,540 cfs, unadjusted.

EXTREMES.--Current year: Maximum discharge, 248,000 cfs Jan. 7, maximum gage height, 42.00 ft May 1; minimum daily, 20,600 cfs Apr. 28; minimum gage height, 13.92 ft May 31.
Period of record: Maximum discharge, 500,000 cfs Feb. 17, 1948; maximum gage height, 62.43 ft Feb. 2, 1937, at Gilbertsville, present datum; minimum daily discharge, 60 cfs May 16, 1961.
Maximum discharge since closure of Kentucky Dam on Aug. 30, 1944, 500,000 cfs Feb. 17, 1948.
Maximum discharge since opening of Barkley-Kentucky Canal in June 1966, 298,000 cfs Jan. 16, 1968.

REMARKS.--Records good. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other reservoirs have been built above station (see p. and basic data release for adjoining states, 1972). Flow now almost completely regulated, and since the opening of Barkley-Kentucky Canal in June 1966, interchange of water between Cumberland River basin and Tennessee River basin can occur.

REVISIONS (WATER YEARS).--WSP 1306. 1936 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40,200	34,400	36,100	55,300	105,000	108,000	76,300	37,700	40,300	35,500	51,400	39,400
2	43,200	39,400	34,400	54,000	104,000	113,000	74,400	46,800	40,900	34,500	54,100	33,400
3	37,700	44,000	34,700	86,200	103,000	122,000	66,500	52,900	40,000	36,700	54,800	29,300
4	39,100	45,400	45,000	165,000	101,000	126,000	57,300	54,900	42,300	42,400	54,300	29,800
5	36,600	42,000	36,700	185,000	96,800	129,000	56,900	79,700	41,600	44,400	54,900	29,300
6	35,100	42,500	41,000	191,000	96,100	134,000	56,000	104,000	37,000	43,700	55,400	33,200
7	39,500	43,400	50,800	190,000	95,300	129,000	44,400	109,000	37,400	39,200	44,600	34,200
8	37,100	41,700	66,600	190,000	96,200	123,000	40,100	108,000	41,000	38,300	37,500	34,100
9	39,500	47,800	96,500	191,000	95,800	118,000	41,500	110,000	40,400	36,000	45,800	34,100
10	37,000	47,800	138,000	188,000	95,300	118,000	40,200	109,000	41,000	38,100	58,200	32,000
11	37,500	47,900	139,000	191,000	79,100	120,000	39,600	110,000	37,400	36,500	53,300	32,100
12	36,700	48,300	139,000	193,000	55,400	118,000	40,300	99,900	36,100	35,700	43,900	34,600
13	36,700	38,600	132,000	190,000	56,000	118,000	42,700	88,000	38,600	36,400	41,500	35,100
14	36,900	40,100	110,000	191,000	67,400	111,000	44,800	87,900	39,400	35,800	42,700	34,200
15	37,200	34,800	92,100	191,000	83,900	100,000	45,400	85,700	39,100	34,200	42,800	33,600
16	41,700	36,500	84,800	194,000	81,800	90,500	51,900	79,400	38,200	39,400	43,800	32,100
17	41,500	35,700	70,800	196,000	79,600	85,600	49,300	64,700	38,600	45,900	43,500	33,200
18	41,900	36,500	54,700	199,000	77,700	82,200	34,300	56,500	38,300	50,800	43,500	36,000
19	37,700	37,800	53,400	191,000	75,100	80,000	31,200	55,400	39,900	50,800	43,400	35,700
20	37,300	36,900	65,800	176,000	74,600	79,000	35,200	56,300	41,400	50,100	43,900	35,800
21	38,100	38,700	76,900	156,000	76,800	76,000	39,700	46,200	40,600	42,900	39,300	44,000
22	38,300	37,900	76,900	151,000	77,200	65,400	45,500	42,700	42,100	43,100	37,600	42,700
23	37,500	36,400	77,300	140,000	76,500	57,400	33,000	44,100	40,500	43,200	39,600	37,800
24	38,200	36,400	66,100	123,000	75,400	57,600	27,500	45,700	41,700	42,600	42,500	37,000
25	38,300	36,400	55,000	111,000	79,700	62,300	24,000	44,700	31,500	40,500	42,000	36,400
26	39,400	37,200	54,900	94,900	83,500	62,000	22,700	46,700	36,800	40,800	41,300	37,000
27	34,900	37,500	55,900	86,500	82,600	71,800	23,200	44,500	35,000	40,600	42,800	37,500
28	33,400	36,100	57,100	95,900	92,800	87,700	20,600	40,100	35,900	42,700	39,900	42,900
29	38,700	37,300	56,600	103,000	108,000	91,300	24,200	39,700	51,400	52,600	39,700	47,500
30	31,200	36,600	58,400	104,000	------	81,600	27,400	40,600	50,400	52,600	38,600	53,800
31	32,200	------	56,500	106,000	------	75,000	------	39,800	------	53,300	38,700	------
TOTAL	1,169.3M	1,192.0M	2,213.0M	4,678.8M	2,471.6M	2,992.4M	1,256.1M	2,082.6M	1,193.8M	1,299.3M	1,393.9M	1,086.8M
MEAN	37,720	39,730	71,390	150,900	85,230	96,530	41,870	67,180	39,790	41,910	44,960	36,230
MAX	43,200	48,300	139,000	199,000	108,000	134,000	76,300	110,000	51,400	53,300	58,200	53,800
MIN	31,200	34,400	34,400	54,000	55,400	57,400	20,600	37,700	31,500	34,200	37,500	29,300

CAL YR 1971 TOTAL 22,316,000 MEAN 61,140 MAX 250,000 MIN 25,000
WTR YR 1972 TOTAL 23,029,600 MEAN 62,920 MAX 199,000 MIN 20,600

Reservoirs in Tennessee River basin

03468500 DOUGLAS LAKE.--Lat 35°57'40", long 83°32'20", Sevier County, at Douglas Dam on French Broad River, 6.5 miles north of Sevierville, and at mile 32.3. Drainage area, 4,541 sq mi. Period of record, February 1943 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 682,900 cfs-days May 24 (elevation, 998.30 ft); minimum, 118,600 cfs-days Dec. 30 (elevation, 941.19 ft). Extremes for period of record: Maximum contents, 760,000 cfs-days July 25, 1949 (elevation, 1,001.79 ft); minimum (after first filling), 1,000 cfs-days Jan. 16, 1956 (elevation, 883.7 ft, estimated).
Reservoir formed by concrete main dam and 10 saddle dams. Spillway equipped with 11 taintor gates, 32 ft high by 40 ft wide and 8 sluice gates 10 ft high by 5.67 ft wide. Closure of dam was made Feb. 19, 1943; water in reservoir first reached minimum pool elevation Feb. 25, 1943. Total capacity (based on 1967 survey; new capacity table put into use Jan. 1, 1971) at elevation 1,002.00 ft (top of gates) is 743,600 cfs-days, of which 703,100 cfs-days is controlled storage above elevation 920.00 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03476000 SOUTH HOLSTON LAKE.--Lat 36°31'15", long 82°05'11", Sullivan County, 470 ft upstream from South Holston Dam on South Fork Holston River, 7.0 miles southeast of Bristol, Virginia-Tennessee, and at mile 49.8. Drainage area, 703 sq mi. Period of record, November 1950 to current year. Water-stage recorder. Datum of gage is at mean sea level. Prior to May 11, 1951, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 345,200 cfs-days May 25 (elevation, 1,732.35 ft); minimum, 228,700 cfs-days Jan. 1 (elevation, 1,698.65 ft). Extremes for period of record: Maximum contents, 345,200 cfs-days May 25, 1972 (elevation, 1,732.35 ft); minimum (after first filling), 57,700 cfs-days Jan. 13, 1956 (elevation, 1,614.15 ft).
Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers 3 ft wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft in diameter. Closure of dam was made Nov. 20, 1950; water in reservoir first reached minimum pool elevation Jan. 25, 1951. Total capacity (based on 1964 survey; new capacity table put into use Jan. 1, 1971) at elevation 1,742.00 ft (spillway crest) is 385,200 cfs-days, of which 324,200 cfs-days is controlled storage above elevation 1,616.00 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03483500 WATAUGA LAKE.--Lat 36°19'20", long 82°07'16", Carter County, at Watauga Dam on Watauga River, 5 miles east of Elizabethton, and at mile 36.7. Drainage area, 468 sq mi. Period of record, December 1948 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 289,600 cfs-days May 30 (elevation, 1,959.90 ft); minimum, 229,700 cfs-days Dec. 24 (elevation, 1,940.27 ft). Extremes for period of record: Maximum contents, 289,600 cfs days May 30, 1972 (elevation, 1,959.90 ft); minimum (after first filling), 25,100 cfs-days Jan. 13, 1956 (elevation, 1,813.47 ft).
Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers 3 ft wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft in diameter. Closure of dam was made Dec. 1, 1948; water in reservoir first reached minimum pool elevation Dec. 31, 1948. Total capacity (based on 1964 survey; new capacity table put into use Jan. 1, 1971) at elevation 1,975.00 ft (spillway crest) is 341,300 cfs-days, of which 315,000 cfs-days is controlled storage above elevation 1,815.00 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03486800 BOONE LAKE.--Lat 36°26'26", long 82°26'16", Sullivan County, at Boone Dam on South Fork Holston River, 0.7 mile northeast of Spurgeon, 1.3 miles downstream from Watauga River, and at mile 18.6. Drainage area, 1,840 sq mi. Period of record, December 1952 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 94,900 cfs-days May 24 (elevation, 1,383.80 ft); minimum, 46,700 cfs-days Jan. 7 (elevation, 1,354.32 ft). Extremes for period of record: Maximum contents, 99,100 cfs days May 19, 1964 (elevation, 1,384.99 ft); minimum (after first filling), 21,300 cfs-days Jan. 23, 1956 (elevation, 1,327.06 ft).
Reservoir is formed by gravity nonoverflow type concrete dam. Spillway is equipped with five radial gates, 35 ft high by 35 ft wide. Storage began Dec. 16, 1952; water in reservoir first reached minimum pool elevation Jan. 5, 1953. Total capacity (based on 1964 survey; new capacity table put into use Jan. 1, 1971) at elevation 1,385.0 ft (top of gates) is 97,500 cfs-days, of which 74,800 cfs-days is controlled storage above elevation 1,330 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03487000 FORT PATRICK HENRY LAKE.--Lat 36°29'53", long 82°30'32", Sullivan County, at Fort Patrick Henry Dam on South Fork Holston River, 0.2 mile upstream from bridge on U.S. Highway 23, 4.5 miles southeast of Kingsport, and at mile 8.2. Drainage area, 1,903 sq mi. Period of record, October 1953 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 13,600 cfs-days Nov. 18 (elevation, 1,263.15 ft); minimum, 11,100 cfs-days Nov. 11 (elevation, 1,257.05 ft). Extremes for period of record: Maximum contents, 14,000 cfs-days Feb. 11, 1954 (elevation, 1,263.80 ft); minimum (after first filling), 9,300 cfs-days Mar. 16, 1954 (elevation, 1,252.32 ft).
Reservoir is formed by gravity nonoverflow type concrete dam. Spillway is equipped with five radial gates, 35 ft high by 35 ft wide. Storage began Oct. 27, 1953; water in reservoir first reached minimum pool elevation Dec. 8, 1953. Total capacity (based on 1964 survey; new capacity table put into use Jan. 1, 1971) at elevation 1,263 ft (top of gates) is 13,600 cfs-days, of which 2,200 cfs-days is controlled storage above elevation 1,258 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03493500 CHEROKEE LAKE.--Lat 36°10'00", long 83°29'55", Jefferson County, at Cherokee Dam on Holston River, 0.3 mile upstream from bridge on State Highway 92, 2.7 miles upstream from Mill Spring Creek, 2.8 miles north of Jefferson City, and at mile 52.3. Drainage area, 3,429 sq mi. Period of record, December 1941 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 728,900 cfs-days May 26 (elevation, 1,071.65 ft); minimum, 249,500 cfs-days Jan. 1 (elevation, 1,027.63 ft). Extremes for period of record: Maximum contents, 779,400 cfs-days May 11, 1944 (elevation, 1,074.37 ft); minimum (after first filling), 48,400 cfs-days Jan. 7, 1954 (elevation, 980.77 ft).
Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with nine radial gates 32 ft high by 40 ft wide. Storage began Dec. 5, 1941; water in reservoir first reached minimum pool elevation Jan. 6, 1942. Total capacity (based on 1964 survey; new capacity table put into use Jan. 1, 1971) at elevation 1,075.0 ft (top of gates) is 778,400 cfs-days, of which 736,200 cfs-days is controlled storage above elevation 980.0 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03499500 FORT LOUDOUN LAKE.--Lat 35°47'30", long 84°14'35", Loudon County, at Fort Loudoun Dam on Tennessee River, 1 mile northeast of Lenoir City, and at mile 602.3. Drainage area, 9,550 sq mi. Period of record, July 1943 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum midnight contents, 181,000 cfs-days Apr. 22; maximum elevation, 813.36 ft July 4; minimum midnight contents, 141,000 cfs-days Jan. 31; minimum elevation, 806.87 ft Jan. 27. Extremes for period of record: Maximum elevation, 815.00 ft Sept. 11, 1943, May 14, 1945; minimum (after first filling), 805.54 ft Jan. 18, 1954. Contents based on backwater profile.
Reservoir formed by concrete dam with earth embankment. Spillway equipped with 14 taintor gates 32 ft high by 40 ft wide. Closure of dam was made Aug. 2, 1943; water in reservoir first reached ordinary minimum pool elevation Sept. 4, 1943. Total level pool capacity (based on 1961 survey; new capacity table put into use Jan. 1, 1971) at elevation 815.00 ft (top of gates) is 198,100 cfs-days, of which 55,900 cfs-days is controlled flood storage above elevation 807.00 ft (minimum navigation pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

Reservoirs in Tennessee River basin--Continued

03518200 CHILHOWEE LAKE.--Lat 35°32'44", long 84°03'01", Blount County, at Chilhowee Dam on Little Tennessee River, 2.4 miles southwest of Chilhowee, 2.6 miles upstream from Citico Creek, 10.1 miles downstream from Calderwood Dam, and at mile 33.6. Drainage area, 1,977 sq mi (corrected). Period of record, August 1957 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 24,800 cfs-days Dec. 13 (elevation, 873.99 ft); minimum, 21,400 cfs-days Jan. 15 (elevation, 869.96 ft). Extremes for period of record: Maximum contents, 25,300 cfs-days Mar. 26, 1965 (elevation, 874.55 ft); minimum (after first filling), 18,100 cfs-days May 18, 1963 (elevation, 865.94 ft).

Reservoir is formed by concrete dam with rockfill and abutments. Spillway controlled by six taintor gates 38 ft high by 35 ft wide. Closure of dam was made June 9, 1957. Storage above spillway crest (elevation, 836.0 ft) began Aug. 1, 1957; water in reservoir first reached minimum pool elevation Aug. 9, 1957. Total capacity at elevation 874.0 ft (top of gates) is 24,800 cfs-days, of which 3,400 cfs-days is controlled storage above elevation 870.0 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Gage-height record furnished by Aluminum Co. of America; level storage records furnished by Tennessee Valley Authority.

03532500 NORRIS LAKE.--Lat 36°13'29", long 84°05'29", Anderson County, at Norris Dam on Clinch River, 2.5 miles northwest of Norris, and at mile 79.8. Drainage area, 2,912 sq mi. Period of record, June 1935 to current year. Water-stage recorder. Datum of gage is 0.11 ft above mean sea level. Gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 1,074,200 cfs-days May 17 (elevation, 1,022.75 ft); minimum, 522,900 cfs-days Jan. 1 (elevation, 983.14 ft). Extremes for period of record: Maximum contents, 1,236,700 cfs-days Feb. 11, 1937 (elevation, 1,031.21 ft); minimum (after first filling), 75,500 cfs-days Jan. 24, 1956 (elevation, 909.46 ft).

Reservoir is formed by concrete gravity dam with three drum gates 100 ft wide by 14 ft high. Some storage began in June 1935; dam was completely closed and placed in operation Mar. 4, 1936; water in reservoir first reached minimum pool elevation Mar. 24, 1936. Total capacity (based on 1970 survey; new capacity table put into use Jan. 1, 1971) at elevation 1,034.1 ft (top of gates) is 1,286,600 cfs-days, of which 1,140,400 cfs-days is controlled storage above elevation 930.11 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03535900 MELTON HILL LAKE.--Lat 35°53'04", long 84°18'01" (corrected), Loudon-Roane County line, 9 miles southwest of Oak Ridge, 19 miles west of Knoxville, at river mile 23.1, and 57 miles below Norris Dam. Drainage area, 3,343 sq mi. Period of record, August 1962 to current year. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 60,700 cfs-days Apr. 23 (elevation, 795.07 ft); minimum, 47,400 cfs-days Jan. 8 (elevation, 789.97 ft). Extremes for period of record: Maximum contents, 63,300 cfs-days Mar. 7, 1967 (elevation, 795.94 ft); minimum (after first filling), 3,900 cfs-days Apr. 13, 1963 (elevation, 754.81 ft).

Reservoir is formed by concrete gravity dam. Spillway is equipped with three radial gates, each 42 ft high by 40 ft wide. Dam completed and storage began in May 1963. Total capacity (based on 1970 survey; new capacity table put into use Jan. 1, 1971) at elevation 796 ft (top of gates) is 63,500 cfs-days, of which 16,100 cfs-days is controlled storage above elevation 790.0 ft (minimum pool). Reservoir is used for power and recreation. Records furnished by Tennessee Valley Authority.

03543000 WATTS BAR LAKE.--Lat 35°37'13", long 84°47'00", Rhea County, at Watts Bar Dam on Tennessee River, 6.5 miles southeast of Spring City, 72.4 miles downstream from Fort Loudoun Dam, and at mile 529.9. Drainage area, 17,310 sq mi, approximately. Period of record, October 1941 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum midnight contents, 530,000 cfs-days Apr. 23; maximum elevation, 743.05 ft Apr. 23; minimum midnight contents, 384,000 cfs-days Mar. 16; minimum elevation, 734.85 ft Mar. 16. Extremes for period of record: Maximum elevation, 745.12 ft Mar. 9, 1942; minimum (after first filling), 733.44 ft Mar. 20, 1945. Contents based on backwater profile.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with 20 taintor gates 32 ft high by 40 ft wide, also one 2-section leaf trashway gate 16.3 ft high by 24 ft wide. Storage began with partial closure Dec. 12, 1941, and final closure Jan. 1, 1942; water in reservoir first reached minimum navigation pool elevation Feb. 17, 1942. Total level pool capacity (based on 1961 survey; new capacity table put into use Jan. 1, 1971) at elevation 745.0 ft (top of gates) is 592,400 cfs-days, of which 191,100 cfs-days is controlled flood storage above elevation 735.0 ft (minimum navigation pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03564000 LAKE OCOEE.--Lat 35°05'40", long 84°38'53", Polk County, at Parksville Dam on Ocoee River at Parksville, 13.8 miles east of Cleveland, and at mile 11.9. Drainage area, 595 sq mi. Period of record, June 1914 to current year. Prior to October 1953, published as "Parksville (Ocoee No. 1) Reservoir," and October 1953 to September 1968, as "Parksville Lake." Nonrecording gage. Datum of gage is 6.89 ft above mean sea level. Gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents observed, 43,100 cfs-days Oct. 25 (elevation, 837.1 ft); minimum observed, 33,800 cfs-days Jan. 31 (elevation, 827.0 ft). Extremes for period of record. Maximum midnight contents observed, 53,300 cfs-days July 9, 1916; maximum midnight elevation observed, 840.2 ft Feb. 10, 1946; minimum contents observed, 27,300 cfs-days Jan. 27, 1956 (elevation, 817.7 ft); minimum midnight elevation observed, 814.8 ft Dec. 14, 1934.

Reservoir is formed by concrete dam with 347 ft of spillway. Spillway is equipped with four floodgates 6 ft high by 20 ft wide and 265 ft of flashboards about 5.7 ft high. Crest of spillway is 1.0 ft lower under gates. Dam completed and storage began in 1911. Capacity of reservoir has been considerably reduced by silting. Total capacity (based on 1968 survey; new capacity table put into use Jan. 1, 1971) at elevation 837.55 ft (about top of flashboards) is 43,500 cfs-days, of which 16,900 cfs-days is controlled above elevation 816.9 ft (minimum pool). Reservoir is used for power. Records furnished by Tennessee Valley Authority.

03566500 CHICKAMAUGA LAKE.--Lat 35°06'07", long 85°13'42", Hamilton County, at Chickamauga Dam on Tennessee River, 5.8 miles northeast of Chattanooga, 58.9 miles downstream from Watts Bar Dam, and at mile 471.0. Drainage area, 20,790 sq mi, approximately. Period of record, October 1939 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum midnight contents, 324,000 cfs-days Apr. 25; maximum elevation, 683.78 ft Apr. 25; minimum midnight contents, 197,000 cfs-days Mar. 16; minimum elevation 674.93 ft Mar. 16. Extremes for period of record: Maximum elevation, 685.37 ft May 20, 1950; minimum (after first filling), 673.27 ft Jan. 21, 1942. Contents based on backwater profile.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with eighteen 2-section lift gates 40.44 ft high by 40 ft wide. Storage began Feb. 6, 1940; water in reservoir first reached minimum navigation pool elevation Mar. 10, 1940. Total level pool capacity (based on 1961 survey; new capacity table put into use Jan. 1, 1971) at elevation 685.44 ft (top of gates is 372,600 cfs-days, of which 175,000 cfs-days is controlled flood storage above elevation 675.0 ft (minimum navigation pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03570520 NICKAJACK LAKE.--Lat 35°00'07", long 85°37'14", Marion County, at Nickajack Dam on Tennessee River, 5 miles south of Jasper, 2 miles upstream from Sequatchie River, 46.3 miles downstream from Chickamauga Dam, and at mile 424.7. Drainage area, 21,870 sq mi, approximately. Period of record, December 1967 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum midnight contents, 130,000 cfs-days Jan. 11; maximum elevation, 634.64 ft Apr. 23; minimum midnight contents, 115,000 cfs-days Oct. 31; minimum elevation, 631.86 ft Feb. 18. Extremes for period of record: Maximum elevation, 634.99 ft Apr. 19, 1969; minimum (after first filling), 630.82 ft Feb. 20, 1968. Contents based on backwater profile.

Reservoir is formed by a concrete dam with earth embankments on each side. The spillway, with crest at 595.0 ft is equipped with 10 taintor gates, each 40 by 40 ft. A trash gage, 5.5 ft high by 15 ft wide, is located between the spillway and powerhouse. Dam was completed and storage began on Dec. 14, 1967. Total level pool capacity (based on 1969 survey; new capacity table put into use Jan. 1, 1971) at elevation 635.0 ft (top of gates) is 127,200 cfs-days, of which 16,200 cfs-days is useful controlled storage above elevation 632.0 ft (ordinary minimum). Reservoir is used for navigation and power. Records furnished by Tennessee Valley Authority.

Reservoirs in Tennessee River basin--Continued

03579000 WOODS RESERVOIR.--Lat 35°17'54", long 86°05'48", Franklin County, at Elk River Dam on Elk River, 1.2 miles upstream from Spring Creek, 2.5 miles northeast of Estill Springs, 6.8 miles upstream from bridge on U.S. Highway 41-A, and at mile 170.0. Drainage area, 263 sq mi. Period of record, May 1952 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 40,200 cfs-days May 15 (elevation, 959.95 ft); minimum, 36,200 cfs-days Jan. 16 (elevation, 957.89 ft). Extremes for period of record: Maximum contents, 42,300 cfs-days Apr. 21, 22, 1956 (elevation, 960.98 ft); minimum (after first filling), 26,300 cfs-days Nov. 8-11, 1953 (elevation, 951.93 ft).

Reservoir is formed by concrete gravity and earthfill type dam with riprapped embankments. Spillway equipped with three taintor gates, 24 ft high by 50 ft wide and two sluice gates 6 ft high by 4 ft wide. Closure of dam was made May 1, 1952; water in reservoir first reached minimum pool elevation Feb. 6, 1953. Total capacity (based on 1953 survey) at elevation 962.0 ft (surcharge pool) is 44,400 cfs-days, of which 9,900 cfs-days is controlled storage above elevation 957.0 ft (minimum pool). Reservoir is used for cooling water, flood control, and recreational purposes. Records furnished by U.S. Air Force.

03580740 TIMS FORD LAKE.--Lat 35°11'51", long 86°16'41", Franklin County, in intake tower near left bank, 0.4 mile upstream from bridge on State Highway 50, 9.5 miles west of Winchester, and at mile 133.4. Drainage area, 529 sq mi. Period of record, December 1970 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 264,700 cfs-days July 30 (elevation, 887.52 ft); minimum, 178,000 cfs-days Sept. 29 (elevation, 868.62 ft). Extremes for period of record: Maximum contents, 267,900 cfs-days July 9, 1971 (elevation, 888.12 ft); minimum (after first filling), 178,000 cfs-days Sept. 29, 1972 (elevation, 868.62 ft).

Reservoir formed by concrete dam with compacted rockfill impervious earth core embankments. Spillway equipped with three radial gates 42 ft high by 40 ft wide. Storage began Dec. 1, 1970; water in reservoir first reached minimum pool elevation Feb. 23, 1971, and first filling was completed June 3, 1971. Total capacity (based on original survey) at elevation 895 ft (top of gates) is 306,500 cfs-days, of which 160,300 cfs-days is controlled storage above elevation 860 ft (minimum pool). Reservoir is used for flood control, power, and recreation. Records furnished by Tennessee Valley Authority.

03593000 PICKWICK LAKE.--Lat 35°04'16", long 88°15'04", Hardin County, at Pickwick Landing Dam on Tennessee River, 1.5 miles north of town of Pickwick Dam, 6.1 miles upstream from Lick Creek, 52.7 miles downstream from Wilson Dam, and at mile 206.7. Drainage area, 32,820 sq mi, approximately. Period of record, October 1937 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum midnight contents, 496,000 cfs-days Apr. 24; maximum elevation, 415.68 ft Apr. 25; minimum midnight contents, 349,000 cfs-days Feb. 23; minimum elevation, 407.97 ft Jan. 24. Extremes for period of record: Maximum elevation, 419.49 ft Mar. 30, 1944; minimum (after first filling), 407.12 ft Dec. 18, 1944. Contents based on backwater profile.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with twenty-two 2-section lift gates 40 ft high by 40 ft wide, one of which is used as a trash gate. Dam completed and storage began Feb. 8, 1938; water in reservoir first reached minimum pool elevation Feb. 18, 1938. Total level pool capacity (based on 1961 survey; new capacity table put into use Jan. 1, 1971) at elevation 418.0 ft (top of gates) is 557,100 cfs-days, of which 210,200 cfs-days is controlled flood storage above elevation 408.0 ft (minimum navigation pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03609000 KENTUCKY LAKE.--Lat 37°00'49", long 88°16'06", Marshall County, Ky., at Kentucky Dam on Tennessee River at Gilbertsville, and at mile 22.4. Drainage area, 40,200 sq mi, approximately. Period of record, July 1944 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum midnight contents, 1,871,000 cfs-days May 2; maximum elevation, 365.12 ft May 2; minimum midnight contents, 1,013,000 cfs-days Nov. 26; minimum elevation, 353.28 ft Feb. 19. Extremes for period of record: Maximum elevation, 368.81 ft Jan. 24, 1950; minimum (after first filling), 348.02 ft Mar. 11, 1961. Contents based on backwater profile.

Reservoir is formed by concrete dam with 24 lift gates 50 ft high by 40 ft wide. Storage began Aug. 16, 1944, and final closure was Aug. 30, 1944. Water in reservoir reached minimum pool elevation Apr. 7, 1945. Total level pool capacity (based on 1961 survey; new capacity table put into use Jan. 1, 1971) at elevation 375.0 ft (top of gates) is 3,090,000 cfs-days, of which 2,020,700 cfs-days is controlled storage above 354.0 ft (ordinary minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

Barkley-Kentucky Canal opened July 13, 1966, for navigation and power use. Canal is 1.75 miles long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 miles upstream from Barkley Dam. For daily discharges through the canal, see Kentucky reports.

OTHER RESERVOIRS.--The following small reservoirs in the Tennessee River basin are described below, but records of contents are not published herein.

03466400 DAVY CROCKETT LAKE on Nolichucky River at Nolichucky Dam, Tenn., with a total capacity of 1,300 cfs-days, of which 900 cfs-days is controlled storage.

03517900 CALDERWOOD LAKE on Little Tennessee River at Calderwood, Tenn., with a total capacity of 20,800 cfs-days, of which 2,060 cfs-days is controlled storage.

03562500 OCOEE NO. 3 LAKE on Ocoee River at Ocoee No. 3 Dam, 5.0 miles west of Ducktown, Tenn., with a total capacity of 2,040 cfs-days, of which 1,900 cfs-days is controlled storage. Records of contents previous to 1971 water year published.

Reservoirs in Tennessee River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	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)
	03468500 Douglas Lake			03476000 South Holston Lake			03483500 Watauga Lake		
Sept. 30.....	973.24	370,100	-	1,718.32	292,500	-	1,944.75	242,500	-
Oct. 31.....	969.60	333,400	-36,700	1,716.73	287,000	-5,500	1,944.67	242,300	-200
Nov. 30.....	950.51	174,800	-158,600	1,707.67	256,700	-30,300	1,942.15	235,000	-7,300
Dec. 31.....	941.56	120,600	-54,200	1,699.03	229,800	-26,900	1,940.50	230,300	-4,700
CAL YR 1971	-	-	+29,300	-	-	+93,100	-	-	+103,000
Jan. 31.....	946.78	150,700	+30,100	1,708.94	260,800	+31,000	1,943.29	238,300	+8,000
Feb. 29.....	957.33	224,500	+73,800	1,715.88	284,100	+23,300	1,950.23	258,800	+20,500
Mar. 31.....	972.40	361,400	+136,900	1,718.16	292,000	+7,900	1,954.52	272,400	+13,600
Apr. 30.....	991.67	590,300	+228,900	1,728.48	329,400	+37,400	1,957.66	282,400	+10,000
May 31.....	997.01	663,600	+73,300	1,731.03	339,800	+10,400	1,959.69	288,900	+6,500
June 30.....	995.55	642,700	-20,900	1,728.86	330,900	-8,900	1,957.90	283,200	-5,700
July 31.....	991.16	583,600	-59,100	1,723.89	312,200	-18,700	1,953.61	269,400	-13,800
Aug. 31.....	980.01	444,300	-139,300	1,721.91	305,200	-7,000	1,945.28	244,100	-25,300
Sept. 30.....	969.34	330,800	-113,500	1,717.72	290,400	-14,800	1,942.90	237,200	-6,900
WTR YR 1972	-	-	-39,300	-	-	-2,100	-	-	-5,300
	03486800 Boone Lake			03487000 Fort Patrick Henry Lake			03493500 Cherokee Lake		
Sept. 30.....	1,379.56	86,000	-	1,259.38	12,000	-	1,049.84	448,400	-
Oct. 31.....	1,374.30	76,100	-9,900	1,260.04	12,300	+300	1,047.94	428,000	-20,400
Nov. 30.....	1,363.18	57,900	-18,200	1,260.46	12,500	+200	1,037.97	332,900	-95,100
Dec. 31.....	1,356.35	49,300	-8,600	1,261.30	12,800	+300	1,028.04	252,500	-80,400
CAL YR 1971	-	-	+2,100	-	-	-200	-	-	+95,700
Jan. 31.....	1,363.74	58,700	+9,400	1,260.70	12,600	-200	1,036.61	321,100	+68,600
Feb. 29.....	1,369.95	68,600	+9,900	1,260.95	12,700	+100	1,043.34	381,700	+60,600
Mar. 31.....	1,375.35	78,000	+9,400	1,259.68	12,100	-600	1,048.22	431,000	+49,300
Apr. 30.....	1,380.58	88,100	+10,100	1,258.71	11,700	-400	1,065.43	640,600	+209,600
May 31.....	1,381.59	90,200	+2,100	1,257.94	11,400	-300	1,070.68	714,800	+74,200
June 30.....	1,382.11	91,300	+1,100	1,260.47	12,500	+1,100	1,069.10	692,000	-22,800
July 31.....	1,382.56	92,200	+900	1,260.69	12,600	+100	1,067.38	667,700	-24,300
Aug. 31.....	1,381.24	89,400	-2,800	1,260.36	12,400	-200	1,062.76	604,500	-63,200
Sept. 30.....	1,378.08	83,100	-6,300	1,260.26	12,400	0	1,052.64	479,700	-124,800
WTR YR 1972	-	-	-2,900	-	-	+400	-	-	+31,300
	03499500 Fort Loudoun Lake‡			03518200 Chilhowee Lake			03532500 Norris Lake		
Sept. 30.....	812.08	174,000	-	873.34	24,300	-	1,005.47	799,500	-
Oct. 31.....	812.40	176,000	+2,000	873.63	24,500	+200	1,000.71	733,500	-66,000
Nov. 30.....	807.65	144,000	-32,000	873.86	24,700	+200	987.87	574,700	-158,800
Dec. 31.....	807.62	144,000	0	873.22	24,200	-500	983.26	524,200	-50,500
CAL YR 1971	-	-	+1,000	-	-	-300	-	-	+65,500
Jan. 31.....	807.01	141,000	-3,000	873.28	24,200	0	997.49	691,100	+166,900
Feb. 29.....	807.70	146,000	+5,000	872.78	23,800	-400	1,003.28	768,700	+77,600
Mar. 31.....	807.70	144,000	-2,000	873.59	24,500	+700	1,006.82	818,900	+50,200
Apr. 30.....	812.68	177,000	+33,000	871.13	22,400	-2,100	1,021.90	1,059,400	+240,500
May 31.....	812.32	175,000	-2,000	872.72	23,700	+1,300	1,020.50	1,035,200	-24,200
June 30.....	812.21	174,000	-1,000	873.13	24,100	+400	1,014.90	942,300	-92,900
July 31.....	812.75	178,000	+4,000	873.29	24,200	+100	1,010.92	880,000	-62,300
Aug. 31.....	812.17	174,000	-4,000	873.00	24,000	-200	1,003.03	765,200	-114,800
Sept. 30.....	812.36	175,000	+1,000	873.54	24,400	+400	996.31	676,000	-89,200
WTR YR 1972	-	-	+1,000	-	-	+100	-	-	-123,500

‡ Contents based on backwater profile.

Reservoirs in Tennessee River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	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)
	03535900 Melton Hill Lake			03543000 Watts Bar Lake‡			03564000 Lake Ocoee		
Sept. 30.....	793.26	55,600	-	740.93	488,000	-	835.7	41,700	-
Oct. 31.....	792.26	53,000	2,600	738.50	443,000	-45,000	836.2	42,200	+500
Nov. 30.....	792.27	53,000	0	736.00	401,000	-42,000	832.0	38,200	-4,000
Dec. 31.....	792.78	54,300	+1,300	735.60	397,000	-4,000	827.9	34,600	-3,600
CAL YR 1971	-	-	-4,300	-	-	+10,000	-	-	-300
Jan. 31.....	792.53	53,700	-600	735.65	397,000	0	827.4	34,100	-500
Feb. 29.....	794.80	59,900	+6,200	735.50	399,000	+2,000	827.9	34,600	+500
Mar. 31.....	793.67	56,700	-3,200	736.90	413,000	+14,000	832.0	38,200	+3,600
Apr. 30.....	794.32	58,500	+1,800	740.72	483,000	+70,000	834.4	40,400	+2,200
May 31.....	794.31	58,500	0	740.90	488,000	+5,000	835.8	41,800	+1,400
June 30.....	793.28	55,700	-2,800	741.21	493,000	+5,000	836.0	42,000	+200
July 31.....	792.72	54,200	-1,500	740.20	473,000	-20,000	834.6	40,600	-1,400
Aug. 31.....	792.70	54,100	-100	740.68	483,000	+10,000	835.4	41,400	+800
Sept. 30.....	792.21	52,900	-1,200	741.03	491,000	+8,000	835.9	41,900	+500
WTR YR 1972	-	-	-2,700	-	-	+3,000	-	-	+200
	03566500 Chickamauga Lake‡			03570520 Nickajack Lake‡			03579000 Woods Reservoir		
Sept. 30.....	680.72	273,000	-	632.18	116,000	-	959.51	39,300	-
Oct. 31.....	678.64	243,000	-30,000	632.03	115,000	-1,000	958.78	37,900	-1,400
Nov. 30.....	676.21	208,000	-35,000	633.71	123,000	+8,000	957.98	36,400	-1,500
Dec. 31.....	675.88	210,000	+2,000	633.15	121,000	-2,000	958.15	36,700	+300
CAL YR 1971	-	-	+10,000	-	-	+1,000	-	-	+300
Jan. 31.....	675.35	206,000	-4,000	632.20	120,000	-1,000	958.06	36,500	-200
Feb. 29.....	675.89	218,000	+12,000	632.41	128,000	+8,000	958.11	36,600	+100
Mar. 31.....	676.45	209,000	-9,000	633.70	123,000	-5,000	959.53	39,300	+2,700
Apr. 30.....	682.50	301,000	+92,000	633.54	122,000	-1,000	959.65	39,600	+300
May 31.....	682.78	307,000	+6,000	633.47	123,000	+1,000	959.40	39,100	-500
June 30.....	681.50	284,000	-23,000	633.72	124,000	+1,000	959.61	39,500	+400
July 31.....	681.18	282,000	-2,000	633.22	122,000	-2,000	959.68	39,600	+100
Aug. 31.....	680.10	262,000	-20,000	633.80	124,000	+2,000	959.52	39,300	-300
Sept. 30.....	680.67	273,000	+11,000	632.07	117,000	-7,000	959.63	39,500	+200
WTR YR 1972	-	-	0	-	-	+1,000	-	-	+200
	03580740 Tims Ford Lake			03593000 Pickwick Lake‡			0360900 Kentucky Lake‡		
Sept. 30.....	886.79	260,800	-	411.50	408,000	-	354.97	1,065,000	-
Oct. 31.....	883.70	244,900	-15,900	409.74	375,000	-33,000	354.49	1,031,000	-34,000
Nov. 30.....	876.51	210,900	-34,000	408.96	364,000	-11,000	354.27	1,019,000	-12,000
Dec. 31.....	873.27	197,000	-13,900	408.70	360,000	-4,000	354.14	1,026,000	+7,000
CAL YR 1971	-	-	+167,400	-	-	+10,000	-	-	-8,000
Jan. 31.....	877.54	215,500	+18,500	408.52	360,000	0	355.55	1,150,000	+124,000
Feb. 29.....	877.96	217,400	+1,900	408.79	369,000	+9,000	354.38	1,088,000	-62,000
Mar. 31.....	881.33	233,200	+15,800	411.00	404,000	+35,000	354.56	1,062,000	-26,000
Apr. 30.....	884.90	251,000	+17,800	413.85	457,000	+53,000	364.86	1,850,000	+788,000
May 31.....	886.90	261,400	+10,400	414.00	460,000	+3,000	358.96	1,357,000	-493,000
June 30.....	886.41	258,800	-2,600	413.97	459,000	-1,000	357.66	1,253,000	-104,000
July 31.....	887.24	263,200	+4,400	412.62	433,000	-26,000	357.74	1,295,000	+42,000
Aug. 31.....	883.47	243,800	-19,400	412.00	418,000	-15,000	355.87	1,121,000	-174,000
Sept. 30.....	868.71	178,400	-65,400	411.22	408,000	-10,000	355.11	1,107,000	-14,000
WTR YR 1972	-	-	-82,400	-	-	0	-	-	+42,000

‡ Contents based on backwater profile.

07024300 Beaver Creek at Huntingdon, Tenn.

LOCATION.--Lat 35°59'56", long 88°26'01", Carroll County, on left bank on downstream end of pier of bridge on U. S. Highway 70, 0.3 mile southwest of Huntingdon, 0.6 mile downstream from Brier Creek, and 5.6 miles upstream from mouth.

DRAINAGE AREA.--55.5 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1946, 1948, 1952-54, 1958-61 and annual maximum, water years 1954-62. October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 364.20 ft above mean sea level (Tennessee State Highway Department bench mark). Dec. 21, 1945, to Oct. 3, 1962, nonrecording gage at site 30 ft downstream at same datum; Jan. 6, 1954, to Oct. 3, 1962, crest-stage gage at same site at datum 1.17 ft higher.

AVERAGE DISCHARGE.--10 years, 95.2 cfs (23.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,420 cfs July 17 (gage height, 12.79 ft); minimum, 24 cfs June 24, 25.
Period of record: Maximum discharge, 8,350 cfs Sept. 9, 1970 (gage height, 13.96 ft) from rating curve extended above 3,600 cfs on basis of contracted opening measurement of peak flow; minimum, 19 cfs May 17, 1965.

REMARKS.--Records fair.

REVISIONS(WATER YEARS).--WSP 1920: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	36	48	97	75	59	69	47	33	72	38	27
2	31	37	45	349	75	341	61	69	32	237	36	26
3	31	36	68	180	96	347	116	113	31	281	33	27
4	30	35	64	327	69	166	468	55	28	241	32	27
5	31	35	56	399	59	155	179	45	28	113	32	30
6	30	57	58	134	265	92	86	41	27	54	57	28
7	30	77	71	89	312	85	96	43	28	44	153	29
8	30	42	57	81	102	119	123	719	27	40	42	28
9	30	41	302	271	80	75	71	1,250	28	38	36	27
10	29	38	456	412	69	67	64	249	47	38	33	27
11	29	36	260	145	66	62	62	67	29	37	31	27
12	30	36	89	84	105	58	61	55	29	35	30	29
13	30	35	65	73	139	117	59	147	35	34	36	31
14	29	35	65	60	98	111	54	71	30	34	30	34
15	29	34	304	49	75	78	50	52	29	34	30	67
16	29	35	280	43	64	376	153	46	29	1,570	30	63
17	28	39	93	45	61	237	65	42	28	3,220	30	72
18	29	41	64	55	59	103	53	39	28	594	29	47
19	31	97	78	68	52	78	48	36	28	127	28	37
20	31	58	165	160	51	67	48	34	28	330	30	35
21	31	47	87	546	52	68	174	32	28	96	38	38
22	31	43	63	483	64	79	335	33	26	49	29	40
23	32	45	55	140	59	60	116	33	26	40	36	52
24	197	53	52	103	82	55	64	37	25	39	67	49
25	63	48	50	152	81	65	53	65	26	39	47	34
26	45	44	50	83	88	58	49	34	28	36	43	94
27	42	44	48	110	68	67	45	30	122	36	29	473
28	39	47	59	662	60	245	43	29	157	154	28	270
29	38	90	54	475	57	544	62	29	128	215	28	404
30	36	57	138	117	------	295	48	75	39	58	27	556
31	35	------	84	80	------	93	------	37	------	41	27	------
TOTAL	1,187	1,398	3,428	6,072	2,583	4,422	2,975	3,654	1,206	7,976	1,195	2,728
MEAN	38.3	46.6	111	196	89.1	143	99.2	118	40.2	257	38.5	90.9
MAX	197	97	456	662	312	544	468	1,250	157	3,220	153	556
MIN	28	34	45	43	51	55	43	29	25	34	27	26
CFSM	.69	.84	2.00	3.53	1.61	2.58	1.79	2.13	.72	4.63	.69	1.64
IN.	.80	.94	2.30	4.07	1.73	2.96	1.99	2.45	.81	5.35	.80	1.83

CAL YR 1971 TOTAL 35,942 MEAN 98.5 MAX 2,420 MIN 24 CFSM 1.77 IN 24.09
WTR YR 1972 TOTAL 38,824 MEAN 106 MAX 3,220 MIN 25 CFSM 1.91 IN 26.02

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-17	0015	12.79	5,420				

07024500 South Fork Obion River near Greenfield, Tenn.

LOCATION.--Lat 36°07'05", long 88°48'39", Weakley County, on left bank 75 ft downstream from bridge on U.S. Highway 45E, 1.1 miles downstream from Mosley Branch, 2.5 miles south of Greenfield, and 9.7 miles upstream from confluence with Middle Fork.

DRAINAGE AREA.--383 sq mi.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 300.36 ft above mean sea level. Prior to June 22, 1939, nonrecording gage at site 75 ft upstream at same datum.

AVERAGE DISCHARGE.--43 years, 552 cfs (19.57 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,600 cfs July 20 (gage height, 15.80 ft); minimum 117 cfs June 25.
Period of record: Maximum discharge, 25,600 cfs Jan. 22, 1937 (gage height, 17.82 ft, from floodmarks), from rating curve extended above 14,000 cfs; minimum, 61 cfs Aug. 21, 1944.

REMARKS.--Records fair.

REVISIONS(WATER YEARS).--WSP 1311: 1936(M). WSP 1920: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	179	217	814	1,390	589	966	299	339	360	1,020	146
2	151	169	201	946	1,010	1,250	712	281	262	392	736	144
3	145	159	195	870	690	1,200	636	308	202	560	398	142
4	140	148	211	1,270	544	1,110	1,220	329	174	774	258	140
5	142	144	212	1,410	475	1,180	1,110	277	158	866	210	139
6	141	155	213	1,390	1,070	1,180	1,100	237	149	960	280	139
7	139	259	235	1,380	1,220	950	1,170	216	144	1,080	507	139
8	135	243	239	1,290	1,040	724	1,190	567	139	1,120	427	139
9	135	231	1,090	1,430	1,070	572	848	676	137	832	420	139
10	135	205	1,620	1,540	952	495	607	794	356	390	320	136
11	133	186	1,600	1,390	670	420	473	936	255	245	228	135
12	133	174	1,500	1,310	602	372	399	962	202	189	214	135
13	133	168	1,480	1,300	706	427	366	714	174	166	224	134
14	133	163	1,380	1,060	616	456	341	507	163	154	199	134
15	132	159	1,440	629	590	464	314	412	160	148	192	134
16	132	156	1,120	401	522	1,190	714	321	160	936	185	176
17	132	153	938	315	441	1,110	590	255	163	1,490	178	291
18	132	154	920	320	384	1,090	548	220	162	1,940	174	240
19	133	210	823	364	338	1,150	448	200	154	4,180	167	208
20	135	233	758	744	302	1,080	354	190	142	4,390	162	188
21	135	221	638	1,590	282	732	660	182	130	3,430	154	185
22	136	196	594	1,530	290	572	954	174	124	2,410	148	451
23	139	183	530	1,460	304	441	794	163	120	1,350	142	434
24	900	187	447	1,690	494	372	798	158	119	509	140	329
25	1,100	189	385	1,950	684	336	686	266	119	323	146	243
26	1,080	186	348	1,710	816	318	476	377	121	253	150	207
27	880	184	325	1,270	648	323	339	458	150	229	153	405
28	521	181	327	1,420	599	454	282	407	308	641	156	852
29	327	213	329	1,310	526	840	368	258	595	714	158	1,230
30	239	227	1,210	1,260	------	810	320	420	441	768	156	1,370
31	196	------	1,150	1,370	------	942	------	359	------	912	150	------
TOTAL	8,406	5,615	22,675	36,733	19,275	23,149	19,783	11,923	6,022	32,711	8,152	8,884
MEAN	271	187	731	1,185	665	747	659	385	201	1,055	263	296
MAX	1,100	259	1,620	1,950	1,390	1,250	1,220	962	595	4,390	1,020	1,370
MIN	132	144	195	315	282	318	282	158	119	148	140	134
CFSM	.71	.49	1.91	3.09	1.74	1.95	1.72	1.01	.52	2.75	.69	.77
IN.	.82	.55	2.20	3.57	1.87	2.25	1.92	1.16	.58	3.18	.79	.86

CAL YR 1971 TOTAL 214,806 MEAN 589 MAX 12,800 MIN 122 CFSM 1.54 IN 20.86
WTR YR 1972 TOTAL 203,328 MEAN 556 MAX 4,390 MIN 119 CFSM 1.45 IN 19.75

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-20	0200	15.80	4,600				

07026000 Obion River at Obion, Tenn.

LOCATION.--Lat 36°15'04", long 89°11'33", Obion County, near left bank on downstream end of pier of bridge on U.S. Highway 51, 0.5 mile upstream from Richland Creek, 0.6 mile south of Obion, and 14.5 miles downstream from North Fork.

DRAINAGE AREA.--1,852 sq mi.

PERIOD OF RECORD.--July 1929 to September 1958, October 1966 to current year. Gage height and discharge records collected at this site since 1964 are in reports of Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 246.48 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1932, nonrecording gage at present site at datum 5.00 ft higher; Oct. 1, 1932, to Aug. 2, 1939, nonrecording gage, and Aug. 3, 1939, to Sept. 30, 1958, water-stage recorder at present site at datum 15.00 ft higher.

AVERAGE DISCHARGE.--35 years (1929-58, 1966-72), 2,507 cfs (18.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 15,200 cfs July 17 (gage height, 29.23 ft); minimum, 440 cfs Oct. 14.
Period of record: Maximum discharge, 99,500 cfs Jan. 24, 1937 (gage height, 40.4 ft, present datum); minimum (under conditions of no backwater), 230 cfs Oct. 7-9, 12, 1943; minimum daily discharge, 15 cfs (backwater from Mississippi River) Feb. 4, 1937; reverse flow of 57 cfs measured by current meter on that date.

REMARKS.--Records fair.

COOPERATION.--Twenty-nine discharge measurements furnished by Corps of Engineers.

REVISIONS(WATER YEARS).--WSP 1211: 1930, 1943. WRD Tenn. 1968: Drainage area. WRD Tenn. 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	658	700	780	2,880	4,350	2,140	2,510	2,410	1,030	1,020	6,000	652
2	599	604	710	2,950	3,310	8,980	2,000	2,480	877	1,960	4,100	643
3	576	581	676	3,040	2,730	10,700	1,690	2,070	765	3,840	2,750	634
4	2,430	550	695	3,550	2,440	7,710	4,930	2,000	702	6,510	1,500	630
5	895	558	730	6,320	1,780	5,230	4,440	1,680	657	5,770	1,150	634
6	599	576	725	4,660	5,160	4,720	2,820	1,480	639	3,110	1,040	639
7	554	800	1,220	3,510	10,400	3,380	2,440	1,350	625	2,430	2,990	639
8	492	940	1,180	2,920	7,100	2,940	3,460	1,860	601	1,830	2,420	621
9	500	815	5,640	4,590	4,650	2,530	3,190	3,680	597	1,630	2,050	613
10	492	765	10,700	8,660	3,350	1,880	2,150	3,090	1,190	1,160	1,910	605
11	464	715	9,360	6,420	2,450	1,580	1,750	2,430	859	801	1,220	601
12	452	676	5,950	4,550	2,050	1,440	1,570	1,800	711	670	1,060	601
13	448	676	4,200	3,710	4,250	1,370	1,460	1,600	670	609	3,640	605
14	444	658	3,100	2,900	3,710	2,210	1,380	1,380	657	577	2,290	589
15	805	635	3,800	2,170	2,590	1,860	1,300	1,080	657	557	1,210	601
16	860	622	5,540	1,500	2,030	3,980	3,150	900	661	6,500	1,280	661
17	576	612	3,880	1,380	1,710	6,720	3,990	783	666	14,800	1,010	805
18	545	617	2,800	1,120	1,500	4,810	2,150	679	553	14,500	814	786
19	532	976	2,080	1,240	1,330	3,750	1,540	609	525	11,700	733	676
20	532	1,130	1,980	1,790	1,190	2,960	1,310	565	517	7,050	688	630
21	518	885	2,120	8,120	1,150	2,370	2,810	537	513	4,700	661	590
22	522	720	1,580	10,600	1,220	2,120	9,330	505	481	3,800	684	940
23	532	662	1,400	8,900	1,310	1,760	7,200	493	481	3,150	1,120	1,050
24	4,030	671	1,240	6,750	1,510	1,420	3,000	473	481	2,550	963	870
25	5,730	695	1,100	5,300	3,410	1,270	2,100	1,200	513	2,180	1,150	811
26	3,260	676	1,020	4,600	2,970	1,250	1,850	976	505	1,550	1,010	694
27	2,090	662	972	3,990	2,600	1,210	1,650	954	1,930	1,300	846	1,170
28	1,440	658	954	10,100	1,940	2,220	1,550	1,070	2,870	7,530	738	1,760
29	1,040	870	1,010	11,000	1,620	5,440	2,530	886	3,340	11,000	702	5,040
30	860	940	2,070	8,050	------	6,480	2,580	1,560	1,800	10,700	679	5,740
31	740	------	3,480	5,350	------	3,630	------	1,680	------	8,000	661	------
TOTAL	34,215	21,645	82,692	152,620	85,810	111,060	83,830	44,260	27,073	143,484	48,969	31,530
MEAN	1,104	722	2,667	4,923	2,959	3,583	2,794	1,428	902	4,629	1,580	1,051
MAX	5,730	1,130	10,700	11,000	10,400	10,700	9,330	3,680	3,340	14,800	6,000	5,740
MIN	444	550	676	1,120	1,150	1,210	1,300	473	481	557	661	589
CFSM	.60	.39	1.44	2.66	1.60	1.93	1.51	.77	.49	2.50	.85	.57
IN.	.69	.43	1.66	3.07	1.72	2.23	1.68	.89	.54	2.88	.98	.63

CAL YR 1971 TOTAL 926,984 MEAN 2,540 MAX 25,400 MIN 428 CFSM 1.37 IN 18.62
WTR YR 1972 TOTAL 867,188 MEAN 2,369 MAX 14,800 MIN 444 CFSM 1.28 IN 17.42

07026500 Reelfoot Creek near Samburg, Tenn.

LOCATION.--Lat 36°26'32", long 89°17'47", Obion County, on right bank at downstream side of bridge on State Highway 22, 0.5 mile downstream from confluence of North Reelfoot and South Reelfoot Creeks, 4 miles upstream from mouth, 5 miles northeast of Samburg, and 14 miles west of Union City.

DRAINAGE AREA.--110 sq mi.

PERIOD OF RECORD.--October 1950 to September 1972 (discontinued). Prior to December 1950 monthly discharge only, published in WSP 1731.

GAGE.--Water-stage recorder. Datum of gage is 286.26 ft above mean sea level. Dec. 13, 1950, to Dec. 5, 1951, nonrecording gage. Prior to July 28, 1970, at site 115 ft downstream at same datum.

AVERAGE DISCHARGE.--22 years, 116 cfs (14.32 inches per year).

EXTREMES.--Current year: Maximum discharge 13,300 cfs July 16 (gage height, 16.56 ft); minimum, .07 cfs Oct. 30.
Period of record: Maximum discharge, 16,600 cfs June 13, 1970 (gage height, 17.21 ft), from rating curve extended above 5,400 cfs; no flow at times in 1953-57, 1960, 1963-64, 1966, and 1968.

REMARKS.--Records poor.

REVISIONS(WATER YEARS).--WSP 1920: 1957-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	.45	4.5	12	114	283	92	278	.40	24	280	.35
2	3.1	.90	4.5	16	105	1,330	66	118	.52	112	245	.21
3	9.1	1.2	4.3	14	111	566	260	36	.98	148	130	.42
4	19	1.4	4.5	108	81	366	393	23	1.4	372	31	.72
5	2.0	1.8	4.6	72	44	258	141	18	1.8	197	15	1.2
6	2.2	2.4	5.2	21	975	145	93	15	2.0	43	89	1.7
7	2.7	2.3	9.9	17	562	110	98	13	2.4	15	227	2.1
8	3.1	.26	8.9	20	283	101	167	15	2.7	13	18	2.4
9	3.6	.51	818	360	160	68	69	14	2.7	5.4	93	2.9
10	3.9	.94	582	235	110	59	52	12	16	2.0	24	3.4
11	4.3	1.3	219	106	88	54	48	8.9	.52	1.6	13	3.9
12	4.8	1.3	60	55	173	48	46	8.2	.37	1.7	27	4.4
13	5.1	1.5	26	37	340	59	40	16	.42	1.7	290	4.7
14	5.4	1.7	19	22	160	60	34	13	.50	2.0	13	5.0
15	33	2.0	243	14	99	47	41	8.2	.50	2.4	7.8	5.6
16	16	2.3	73	11	60	126	538	6.0	.47	5,420	5.3	9.8
17	11	2.6	27	10	41	83	145	4.6	.50	2,790	3.5	4.8
18	7.9	2.8	17	14	33	56	67	3.5	.57	582	2.2	3.4
19	2.9	3.4	15	22	21	44	43	2.7	.60	340	1.4	3.7
20	2.7	4.0	18	28	18	34	136	2.8	.60	305	.87	3.5
21	3.2	3.9	16	631	18	32	850	3.9	.57	233	.90	3.8
22	4.3	4.0	13	283	29	30	1,080	5.0	.60	211	295	4.4
23	5.5	3.9	11	136	27	24	363	5.7	.63	117	486	4.5
24	253	3.9	10	78	197	20	147	6.8	.60	41	53	4.8
25	70	4.4	10	35	237	21	72	13	.57	47	9.7	13
26	15	4.6	10	18	150	21	47	13	141	32	13	2.5
27	4.5	4.7	9.7	295	94	26	34	13	925	15	6.0	1.6
28	1.4	4.8	10	1,140	69	1,070	28	13	468	3,620	3.0	265
29	.45	10	11	500	55	734	45	14	305	1,640	2.0	177
30	.18	5.8	29	298	------	278	32	42	86	416	1.2	158
31	.24	------	21	158	------	141	------	2.5	------	315	.66	------
TOTAL	502.47	85.06	2,314.1	4,766	4,454	6,294	5,267	747.8	1,963.92	17,064.8	2,386.53	698.80
MEAN	16.2	2.84	74.6	154	154	203	176	24.1	65.5	550	77.0	23.3
MAX	253	10	818	1,140	975	1,330	1,080	278	925	5,420	486	265
MIN	.18	.26	4.3	10	18	20	28	2.5	.37	1.6	.66	.21
CFSM	.15	.03	.68	1.40	1.40	1.85	1.60	.22	.60	5.00	.70	.21
IN.	.17	.03	.78	1.61	1.51	2.13	1.78	.25	.66	5.77	.81	.24

CAL YR 1971 TOTAL 29,498.13 MEAN 80.8 MAX 4,000 MIN .04 CFSM .73 IN 9.98
WTR YR 1972 TOTAL 46,544.48 MEAN 127 MAX 5,420 MIN .18 CFSM 1.15 IN 15.74

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-16	1800	16.56	13,300	07-28	1500	14.81	5,630

07027000 Reelfoot Lake near Tiptonville, Tenn.

LOCATION.--Lat 36°21'09", long 89°25'07", Lake County, at Middle Landing in Reelfoot Lake State Park, 0.4 mile east of Blue Bank, 0.8 mile west of the spillway and 3.3 miles southeast of Tiptonville.

DRAINAGE AREA.--240 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 270.22 feet above mean sea level.

EXTREMES.--Current year: Maximum gage height, 13.12 ft July 30; minimum, 11.42 ft June 26.
Period of record: Maximum gage height, 13.12 ft July 30, 1972; minimum, 11.42 ft June 26, 1972.

REMARKS.--Records good.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.02	12.01	12.01	12.27	12.38	12.48	12.34	12.25	11.86	11.68	12.95	12.17
2	12.00	12.03	12.02	12.25	12.36	12.49	12.30	12.24	11.84	11.74	12.82	12.16
3	12.00	12.00	11.98	12.25	12.30	12.45	12.43	12.20	11.82	11.78	12.75	12.17
4	12.00	11.96	11.95	12.40	12.24	12.50	12.36	12.15	11.82	11.81	12.65	12.15
5	11.97	11.92	11.96	12.28	12.17	12.45	12.34	12.12	11.80	11.80	12.51	12.13
6	11.97	12.02	12.03	12.24	12.38	12.29	12.23	12.09	11.81	11.80	12.45	12.10
7	11.94	12.01	12.00	12.28	12.31	12.39	12.48	12.08	11.79	11.80	12.45	12.08
8	11.91	11.97	12.02	12.20	12.30	12.33	12.40	12.12	11.75	11.78	12.46	12.10
9	11.92	11.99	12.12	12.33	12.29	12.27	12.33	12.06	11.73	11.78	12.43	12.10
10	11.90	11.96	12.26	12.36	12.25	12.28	12.28	12.07	11.76	11.77	12.38	12.05
11	11.89	11.97	12.31	12.38	12.20	12.22	12.28	12.05	11.70	11.76	12.33	12.03
12	11.86	11.91	12.38	12.29	12.20	12.20	12.18	12.06	11.65	11.75	12.39	12.01
13	11.85	11.92	12.33	12.43	12.17	12.29	12.23	12.07	11.65	11.72	12.32	11.98
14	11.85	11.92	12.28	12.50	12.03	12.27	12.27	12.05	11.63	11.67	12.29	12.00
15	11.91	11.94	12.38	12.35	12.15	12.26	12.37	12.05	11.65	11.68	12.30	12.01
16	11.91	11.95	12.45	12.30	12.14	12.28	12.41	12.07	11.65	12.46	12.28	12.00
17	11.95	11.91	12.52	12.28	12.14	12.29	12.43	12.06	11.64	12.83	12.25	11.98
18	11.94	12.00	12.37	12.30	12.15	12.33	12.39	12.05	11.62	13.02	12.24	11.97
19	11.94	11.95	12.35	12.29	12.17	12.30	12.34	12.03	11.59	13.01	12.22	11.97
20	11.93	11.95	12.37	12.37	12.12	12.29	12.42	12.02	11.62	12.95	12.22	11.95
21	11.94	12.00	12.44	12.35	12.23	12.28	12.48	12.00	11.55	12.86	12.20	12.02
22	11.94	11.97	12.33	12.37	12.19	12.34	12.50	11.99	11.51	12.75	12.25	11.95
23	11.94	11.96	12.25	12.42	12.18	12.33	12.63	11.95	11.48	12.63	12.27	11.93
24	12.04	11.97	12.28	12.39	12.27	12.33	12.61	11.93	11.46	12.52	12.28	11.93
25	12.04	11.95	12.20	12.35	12.33	12.30	12.53	11.93	11.45	12.42	12.26	11.93
26	12.04	11.92	12.19	12.31	12.30	12.27	12.45	11.91	11.46	12.43	12.27	11.93
27	12.03	11.96	12.28	12.34	12.26	12.34	12.38	11.89	11.51	12.55	12.26	11.94
28	12.05	11.95	12.26	12.36	12.25	12.37	12.32	11.88	11.60	12.82	12.23	11.93
29	12.04	11.97	12.18	12.42	12.25	12.42	12.29	11.90	11.63	13.06	12.23	12.08
30	12.02	12.00	12.27	12.40	------	12.43	12.23	11.92	11.65	13.10	12.20	12.01
31	12.05	------	12.25	12.39	------	12.45	------	11.88	------	13.05	12.19	------
MAX	12.05	12.03	12.52	12.50	12.38	12.50	12.63	12.25	11.86	13.10	12.95	12.17
MIN	11.85	11.91	11.95	12.20	12.03	12.20	12.18	11.88	11.45	11.67	12.19	11.93

07027500 South Fork Forked Deer River at Jackson, Tenn.

LOCATION.--Lat 35°35'38", long 88°48'52", Madison County, on right bank 20 ft downstream from bridge on U.S. Highway 45, 0.6 mile downstream from Meridian Creek, and 1.4 miles south of the post office in Jackson.

DRAINAGE AREA.--495 sq mi.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 330.76 ft above mean sea level. Prior to Feb. 4, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 685 cfs (18.79 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,440 cfs July 18 (gage height, 16.95 ft); minimum, 106 cfs June 24, 25.
Period of record: Maximum discharge, 43,600 cfs Jan. 21, 1935 (gage height, 24.0 ft, from floodmarks), from rating curve extended above 16,000 cfs; minimum, 67 cfs Oct 9, 1941.

REMARKS.--Records poor.

REVISIONS(WATER YEARS).--WSP 1147: 1935(M). WSP 1211: 1930(M), 1932, 1934. WSP 1561: 1957. WSP 1631: 1936, 1945. WSP 1920: Drainage area. WRD Tenn. 1971: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	188	204	623	639	341	656	323	187	148	1,530	117
2	169	185	192	2,150	577	1,560	549	463	161	260	1,260	117
3	161	181	387	1,200	551	1,510	580	559	151	363	486	258
4	157	174	470	1,940	546	1,190	2,200	332	144	608	263	147
5	154	169	282	2,100	505	1,340	1,600	260	140	874	198	152
6	151	166	261	1,320	1,000	883	900	228	136	272	171	141
7	145	172	298	970	1,600	600	720	221	131	185	168	129
8	141	182	288	679	900	720	800	2,900	129	160	151	124
9	143	183	901	1,590	550	680	670	3,340	126	157	143	124
10	136	181	1,610	2,070	460	540	580	2,000	703	150	145	120
11	134	179	999	1,280	430	460	500	924	366	140	134	117
12	136	183	703	1,290	410	420	440	544	190	136	191	115
13	133	183	518	1,100	420	400	410	533	158	133	1,250	112
14	131	181	411	824	720	450	400	438	144	130	363	111
15	129	174	959	698	530	430	410	336	728	127	196	133
16	127	168	856	567	426	1,640	500	276	709	2,350	162	502
17	127	164	482	450	385	1,500	700	250	284	3,570	148	607
18	129	168	373	364	352	1,080	590	232	192	4,300	140	595
19	129	274	323	433	303	894	431	212	228	3,870	134	252
20	124	270	590	748	282	672	575	190	155	2,960	127	175
21	126	205	456	3,110	284	570	950	178	143	1,510	130	202
22	134	184	331	2,620	317	533	1,030	172	131	499	134	165
23	141	178	288	1,430	325	499	700	166	124	286	180	164
24	1,000	194	268	966	328	440	438	160	120	220	365	250
25	860	203	261	936	345	445	339	448	120	193	243	190
26	347	185	260	611	512	518	288	208	130	172	354	160
27	237	186	259	507	448	486	260	171	157	159	188	378
28	218	187	258	2,070	373	1,400	248	160	518	178	150	964
29	207	278	306	1,560	352	1,550	497	158	402	1,570	136	2,670
30	198	253	910	1,060	------	1,100	440	392	183	1,010	126	2,750
31	192	------	895	790	------	832	------	319	------	1,410	120	------
TOTAL	6,491	5,778	15,599	38,056	14,870	25,683	19,401	17,093	7,190	28,040	9,486	12,041
MEAN	209	193	503	1,228	513	828	647	551	240	905	306	401
MAX	1,000	278	1,610	3,110	1,600	1,640	2,200	3,340	728	4,300	1,530	2,750
MIN	124	164	192	364	282	341	248	158	120	127	120	111
CFSM	.42	.39	1.02	2.48	1.04	1.67	1.31	1.11	.48	1.83	.62	.81
IN.	.49	.43	1.17	2.86	1.12	1.93	1.46	1.28	.54	2.11	.71	.90

CAL YR 1971 TOTAL 180,452 MEAN 494 MAX 7,950 MIN 124 CFSM 1.00 IN 13.56
WTR YR 1972 TOTAL 199,728 MEAN 546 MAX 4,300 MIN 111 CFSM 1.10 IN 15.01

PEAK DISCHARGE (BASE, 5,000 CFS).--No peak above base.

07029000 Middle Fork Forked Deer River near Alamo, Tenn.

LOCATION.--Lat 35°51'02", long 89°04'00", Crockett County, on right bank 30 ft downstream from bridge on State Highway 54, 0.7 mile downstream from Cypress Creek, 3.0 miles upstream from Buck Creek, 5 miles north of Alamo, and at mile 14.7.

DRAINAGE AREA.--369 sq mi.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 288.17 ft above mean sea level. Prior to June 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 510 cfs (18.77 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,260 cfs July 17 (gage height, 15.38 ft); minimum, 99 cfs Oct. 13, 15.
Period of record: Maximum discharge, 34,300 cfs Jan. 30, 1956 (gage height, 16.70 ft), from rating curve extended above 7,200 cfs on basis of contracted-opening measurement of peak flow; minimum observed, 68 cfs June 30, July 1, 1936.

REMARKS.--Records good.

REVISIONS(WATER YEARS).--WSP 1211: 1930, 1938-39, 1946-47. WRD Tenn. 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	125	174	243	339	206	446	384	173	238	143	103
2	106	123	146	921	284	893	305	306	130	1,130	257	103
3	105	121	150	524	284	664	473	633	110	822	154	103
4	105	118	169	1,350	268	625	2,540	366	108	1,270	128	104
5	104	122	183	1,120	240	604	1,050	294	106	2,320	119	106
6	103	121	174	728	1,320	387	640	218	105	741	114	105
7	103	138	169	558	1,730	317	441	190	104	352	123	104
8	102	151	162	375	767	300	487	1,780	104	207	119	103
9	102	151	1,210	851	546	299	351	3,620	104	165	116	102
10	101	135	2,120	889	365	295	315	3,900	278	143	113	102
11	101	127	1,040	687	294	244	257	3,100	215	125	112	101
12	101	124	731	588	292	219	237	1,700	221	114	282	102
13	101	123	466	391	401	262	228	571	141	111	883	101
14	101	119	309	285	400	295	217	348	111	110	392	101
15	100	118	1,110	231	363	301	206	296	109	175	351	109
16	101	118	739	189	301	2,180	405	232	150	3,160	189	320
17	101	118	578	172	264	1,470	273	197	200	6,840	139	188
18	103	119	406	182	245	779	242	179	145	5,700	113	153
19	103	158	285	208	233	508	206	166	110	3,760	110	136
20	104	153	267	479	216	351	194	154	107	3,100	108	114
21	103	169	265	3,000	208	288	579	143	108	2,060	118	179
22	103	150	284	2,600	211	279	1,910	132	104	593	108	562
23	105	138	235	1,080	211	257	761	123	103	298	233	155
24	747	134	204	714	212	243	449	118	102	223	109	221
25	568	133	191	623	217	255	285	119	102	191	108	151
26	529	133	186	381	230	250	226	116	102	174	112	362
27	337	133	182	323	224	263	199	112	106	164	109	1,180
28	204	133	178	1,750	213	1,000	185	112	445	153	109	425
29	154	149	174	893	204	1,430	1,460	111	322	172	106	1,340
30	136	160	278	686	------	832	620	621	292	166	104	3,130
31	130	------	236	483	------	664	------	186	------	158	104	------
TOTAL	5,171	4,014	13,001	23,504	11,082	16,960	16,187	20,527	4,617	34,935	5,385	10,165
MEAN	167	134	419	758	382	547	540	662	154	1,127	174	339
MAX	747	169	2,120	3,000	1,730	2,180	2,540	3,900	445	6,840	883	3,130
MIN	100	118	146	172	204	206	185	111	102	110	104	101
CFSM	.45	.36	1.14	2.05	1.04	1.48	1.46	1.79	.42	3.05	.47	.92
IN.	.52	.40	1.31	2.37	1.12	1.71	1.63	2.07	.47	3.52	.54	1.02

CAL YR 1971 TOTAL 125,299 MEAN 343 MAX 5,500 MIN 100 CFSM .93 IN 12.63
WTR YR 1972 TOTAL 165,548 MEAN 452 MAX 6,840 MIN 100 CFSM 1.22 IN 16.69

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
07-17	1400	15.38	7,260				

07029500 Hatchie River at Bolivar, Tenn.

LOCATION.--Lat 35°16'31", long 88°58'36", Hardeman County, on left bank on upstream end of bridge pier on State Highway 18, 250 ft upstream from Illinois Central Railroad bridge, 0.6 mile downstream from Spring Creek, and 1.5 miles northeast of Bolivar.

DRAINAGE AREA.--1,480 sq mi.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 323.49 ft above mean sea level. July 24, 1929, to Feb. 6, 1939, and Aug. 20, 1959, to Sept. 26, 1960, nonrecording gage at site in this vicinity at same datum.

AVERAGE DISCHARGE.--43 years, 2,233 cfs (20.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,660 cfs Jan. 9 (gage height 15.69 ft); minimum, 256 cfs Sept. 17.
Period of record: Maximum discharge, 56,300 cfs Feb. 15, 1948 (gage height, 21.53 ft), from rating curve extended above 32,000 cfs; minimum, 78 cfs Sept. 2, 1943.

REMARKS.--Records fair.

REVISIONS(WATER YEARS).--WSP 1211: 1937. WSP 1920: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	835	320	635	1,760	2,500	1,470	2,720	1,530	686	1,350	2,280	286
2	616	315	653	2,510	2,430	1,560	2,550	1,580	730	1,180	2,380	273
3	510	313	652	3,090	2,320	2,100	2,420	1,400	630	1,000	2,220	276
4	452	305	765	4,090	2,170	2,640	2,640	1,170	555	1,050	1,880	284
5	412	335	1,140	4,590	2,000	2,980	2,690	1,050	520	1,400	1,360	338
6	574	369	1,410	4,770	1,910	3,000	2,770	909	492	1,620	817	507
7	1,020	353	1,460	5,570	2,070	3,040	2,760	779	466	1,600	598	517
8	1,090	346	1,480	6,850	2,260	3,130	2,760	2,640	441	1,320	502	442
9	788	364	1,630	8,700	2,290	3,150	2,710	4,660	423	865	438	357
10	584	382	2,000	9,180	2,160	3,180	2,590	4,930	468	622	396	335
11	479	382	2,390	8,500	2,000	3,150	2,460	4,140	566	509	369	344
12	430	380	2,790	8,010	1,850	3,060	2,280	3,680	574	430	367	336
13	407	376	2,960	7,260	1,740	3,050	2,040	3,510	513	384	724	301
14	382	373	3,030	6,480	1,730	2,970	1,850	3,190	466	348	1,410	288
15	366	378	3,340	5,630	1,750	2,730	1,700	2,660	519	326	1,720	274
16	355	373	3,490	4,800	1,730	3,380	1,950	2,110	696	1,220	1,590	262
17	344	369	3,610	4,130	1,650	3,370	2,360	1,700	720	2,250	1,040	269
18	335	369	3,630	3,610	1,500	3,240	2,480	1,470	596	2,410	649	493
19	323	404	3,620	3,060	1,330	2,870	2,300	1,570	519	2,690	496	920
20	305	460	3,580	2,520	1,200	2,510	2,000	1,590	479	2,640	419	1,300
21	297	536	3,430	2,150	1,070	2,270	1,820	1,380	445	2,440	374	1,470
22	296	558	3,150	1,970	1,000	2,060	1,760	1,050	414	2,000	345	1,540
23	296	518	2,750	1,940	994	1,870	1,990	821	384	1,290	342	1,370
24	304	477	2,300	1,900	1,020	1,770	2,210	712	357	698	339	1,320
25	337	454	1,880	1,860	1,040	1,730	2,270	680	348	515	426	1,270
26	366	453	1,540	1,770	1,110	1,780	2,250	710	355	443	541	1,180
27	389	452	1,230	1,640	1,350	1,970	2,060	792	360	419	561	1,310
28	389	443	1,060	1,690	1,550	2,220	1,730	723	551	414	461	1,430
29	376	470	989	1,950	1,580	2,620	1,440	612	925	959	383	1,230
30	358	533	1,070	2,270	------	2,910	1,400	584	1,250	1,650	336	1,700
31	337	------	1,380	2,530	------	2,930	------	586	------	1,980	305	------
TOTAL	14,352	12,160	65,044	126,780	49,304	80,710	66,960	54,918	16,448	38,022	26,068	22,222
MEAN	463	405	2,098	4,090	1,700	2,604	2,232	1,772	548	1,227	841	741
MAX	1,090	558	3,630	9,180	2,500	3,380	2,770	4,930	1,250	2,690	2,380	1,700
MIN	296	305	635	1,640	994	1,470	1,400	584	348	326	305	262
CFSM	.31	.27	1.42	2.76	1.15	1.76	1.51	1.20	.37	.83	.57	.50
IN.	.36	.31	1.63	3.19	1.24	2.03	1.68	1.38	.41	.96	.66	.56

CAL YR 1971 TOTAL 677,817 MEAN 1,857 MAX 19,100 MIN 169 CFSM 1.25 IN 17.04
WTR YR 1972 TOTAL 572,988 MEAN 1,566 MAX 9,180 MIN 262 CFSM 1.06 IN 14.40

PEAK DISCHARGE (BASE, 8,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	2000	15.69	9,660				

07030240 Loosahatchie River near Arlington, Tenn.

LOCATION.--Lat 35°18'37", long 89°38'23", Shelby County, on left bank 20 ft downstream from bridge on U.S. Highways 70 and 79, 1.5 miles upstream from Beaver Creek, 1.5 miles northeast of Arlington, and at mile 32.9.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 248 ft (from topographic map).

REMARKS.--Complete records for the 1972 water year are not presently available. They will be published in a future report. Discharge measurements, stages, and certain other flow data are available, and will be provided upon request.

07030500 Wolf River at Rossville, Tenn.

LOCATION.--Lat 35°03'15", long 89°32'28", Fayette County, on left bank 85 ft downstream from county highway bridge, 0.3 mile upstream from Hurricane Creek, 0.4 mile north of Rossville, 5.0 miles downstream from Grissum Creek, and at mile 43.7.

DRAINAGE AREA.--503 sq mi.

PERIOD OF RECORD.--July 1929 to January 31, 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 300.74 ft above mean sea level. Prior to June 13, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years (1930-71), 654 cfs (17.66 inches per year).

EXTREMES.--Maximum discharge during period October 1971 to January 1972, 1,420 cfs Jan. 5 (gage height, 9.25 ft); minimum, 178 cfs Oct. 6, 7.
Period of record: Maximum discharge, 40,000 cfs Jan. 20, 1935 (gage height, 13.75 ft, from floodmarks), from rating curve extended above 12,000 cfs; minimum, 100 cfs Sept. 16, 17, 1942.

REMARKS.--Records good.

REVISIONS(WATER YEARS).--WSP 807: 1935. WSP 1117: 1930. WSP 1177: 1932. WSP 1281: 1935, 1946(M), drainage area. WSP 1391: 1937-38.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1971 TO JANUARY 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	366	187	233	446								
2	230	187	231	876								
3	201	185	282	1,080								
4	191	184	312	1,280								
5	186	185	316	1,380								
6	182	191	306	1,280								
7	183	205	307	1,200								
8	195	208	305	962								
9	210	208	392	914								
10	210	208	554	970								
11	203	209	618	840								
12	196	210	550	730								
13	187	210	478	648								
14	183	210	508	632								
15	198	209	690	586								
16	181	208	719	450								
17	181	208	631	350								
18	184	214	524	307								
19	186	235	442	301								
20	182	238	411	386								
21	181	236	378	490								
22	182	233	334	570								
23	183	235	302	540								
24	184	237	281	500								
25	187	234	272	470								
26	187	231	264	450								
27	188	227	259	440								
28	187	226	256	810								
29	186	233	254	1,000								
30	186	235	308	1,050	------							
31	187	------	385	910	------		------		------			------
TOTAL	6,073	6,426	12,102	22,848								
MEAN	196	214	390	737								
MAX	366	238	719	1,380								
MIN	181	184	231	301								
CFSM	.39	.43	.78	1.47								
IN.	.45	.48	.90	1.69								

CAL YR 1971 TOTAL 184,521 MEAN 506 MAX 12,300 MIN 169 CFSM 1.01 IN 13.65

PEAK DISCHARGE (BASE, 2,600 CFS).--No peak above base.

07031650 Wolf River near Germantown, Tenn.

LOCATION.--Lat 35°06'59", long 89°48'05", Shelby County, on left bank at bridge on Germantown Road, 2.1 miles north of Germantown, 3.6 miles downstream from Grays Creek, 6.4 miles upstream from Fletcher Creek, and at mile 18.9.

DRAINAGE AREA.--699 sq mi (revised).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 235.76 ft above mean sea level (levels by Soil Conservation Service).

EXTREMES.--Current year: Maximum discharge, 4,500 cfs Apr. 29 (gage height, 12.61 ft); minimum, 190 cfs Sept. 15, 16.
Period of record: Maximum discharge 9,890 cfs Apr. 26, 1970 (gage height, 17.35 ft); minimum, 190 cfs Sept. 15, 16, 1972.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	715	233	251	579	734	502	591	3,030	458	290	333	202
2	436	235	249	1,510	654	653	540	1,930	378	378	348	242
3	313	235	278	1,070	624	752	550	1,200	306	479	357	226
4	270	229	303	1,770	568	837	1,190	865	278	504	367	198
5	249	227	315	1,480	496	906	932	708	263	497	339	200
6	241	233	315	1,410	1,230	816	905	580	248	479	303	206
7	237	237	318	1,340	1,120	759	806	500	238	416	330	210
8	237	237	313	1,260	1,090	698	775	532	234	395	275	212
9	245	237	829	1,780	890	606	747	756	230	367	250	212
10	258	235	717	1,450	757	529	691	1,100	226	303	236	206
11	253	237	605	1,320	658	481	595	1,250	224	260	226	200
12	247	239	634	1,090	593	454	511	1,340	226	240	226	202
13	243	239	592	912	567	438	503	1,470	228	228	333	200
14	235	237	549	802	521	422	500	1,520	226	218	298	200
15	233	233	847	756	490	410	600	1,160	232	216	357	196
16	229	233	782	692	459	1,630	540	708	244	210	402	198
17	233	231	751	570	434	1,270	515	608	255	208	444	198
18	229	233	686	483	421	1,250	490	462	275	206	528	196
19	229	237	593	446	399	1,050	470	412	283	204	580	212
20	233	247	522	495	375	861	460	384	293	204	458	216
21	229	249	487	700	360	750	580	357	283	204	306	216
22	231	243	453	790	349	702	648	330	260	206	388	230
23	235	245	412	759	342	628	672	306	244	204	580	220
24	233	245	383	686	346	552	698	354	232	202	253	230
25	231	253	364	694	349	692	664	324	270	204	232	222
26	237	251	352	629	402	650	623	280	293	204	224	236
27	235	251	344	590	394	824	582	268	270	246	216	458
28	233	245	343	1,460	379	755	537	263	333	208	206	388
29	235	245	338	1,100	378	836	2,930	260	293	238	208	712
30	235	249	574	1,080	------	691	2,240	364	293	309	208	1,630
31	233	------	487	884	------	642	------	483	------	309	204	------
TOTAL	8,132	7,180	14,986	30,587	16,379	23,046	23,085	24,104	8,116	8,836	10,015	8,674
MEAN	262	239	483	987	565	743	770	778	271	285	323	289
MAX	715	253	847	1,780	1,230	1,630	2,930	3,030	458	504	580	1,630
MIN	229	227	249	446	342	410	460	260	224	202	204	196
CFSM	.37	.34	.69	1.41	.81	1.06	1.10	1.11	.39	.41	.46	.41
IN.	.43	.38	.80	1.63	.87	1.23	1.23	1.28	.43	.47	.53	.46

CAL YR 1971 TOTAL 224,923 MEAN 616 MAX 7,230 MIN 214 CFSM .88 IN 11.97
WTR YR 1972 TOTAL 183,140 MEAN 500 MAX 3,030 MIN 196 CFSM .72 IN 9.74

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
04-29	0730	12.61	4,500	09-30	0230	11.17	3,320

07032000 Mississippi River at Memphis, Tenn.

LOCATION.--Lat 35°07'37", long 90°04'25", Shelby County, on left bank 50 ft downstream from Harahan Bridge at Memphis, 1.3 miles downstream from Beale Street gage, 3.5 miles downstream from Wolf River, 70 miles upstream from St. Francis River, and at mile 734.8.

DRAINAGE AREA.--932,800 sq mi, approximately.

PERIOD OF RECORD.--Discharge: January 1933 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage heights: October 1934 to September 1951 and October 1952 to current year in reports of Geological Survey. Since November 1871, at Beale Street gage, in reports of Mississippi River Commission. December 1890 to August 1932 at Beale Street gage, September 1932 to December 1934 at nonrecording gage 1,000 ft downstream, and since December 1934 at water-stage recorder at present site, in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 183.91 ft above mean sea level. Prior to Apr. 16, 1934, Beale Street nonrecording gage 1.3 miles upstream at same datum. Apr. 16 to Dec. 21, 1934, nonrecording gage 1,000 ft downstream at same datum.

REMARKS.--Complete records for the 1972 water year are not presently available. They will be published in a future report. Discharge measurements, stage, and certain other flow data can be obtained upon request.

COOPERATION.--Records furnished by Corps of Engineers.

07032200 Nonconnah Creek near Germantown, Tenn.

LOCATION.--Lat 35°02'59", long 89°49'08", Shelby County, on left bank at downstream side of bridge on Winchester Road, 2.6 miles south of Germantown, and 17.3 miles upstream from mouth.

DRAINAGE AREA.--68.4 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-64, 1969; October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 262.92 ft above mean sea level (levels by Soil Conservation Service).

EXTREMES.--Current year: Maximum discharge, 3,180 cfs Apr. 29 (gage height, 15.44 ft); no flow on many days.
Period of record: Maximum discharge, 6,880 cfs Mar. 3, 1970 (gage height, 22.77 ft); no flow at times most years.

REMARKS.--Records fair.

REVISIONS.--WRD Tenn. 1962: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	0	.10	171	7.4	3.8	3.3	31	.70	5.0	.04	0
2	.08	0	.08	613	6.2	192	2.2	30	.25	63	.02	.68
3	.07	0	9.0	67	5.9	62	128	12	.15	1,490	.02	.64
4	.06	0	1.6	460	4.5	20	436	2.9	.11	250	.02	.03
5	.03	0	.30	158	3.3	29	41	.90	.09	44	.03	.04
6	.02	.02	.22	25	341	13	13	.38	.05	3.2	.04	.02
7	.02	.80	.27	12	158	7.0	8.2	.23	.04	.70	1.6	0
8	.02	.22	.22	7.0	28	6.2	18	80	.04	.21	.13	0
9	.02	.10	371	488	12	4.0	9.4	8.0	.03	.15	.04	0
10	.01	.08	65	155	7.0	3.3	4.8	2.0	.03	.09	.02	0
11	.01	.10	9.5	29	4.8	2.7	3.4	.51	.07	.05	.04	0
12	0	.15	2.2	12	4.2	2.2	2.5	1.2	.13	.13	29	0
13	0	.20	.73	7.8	7.8	1.9	1.9	2.3	.04	.04	2.0	0
14	0	.25	6.6	4.8	5.9	2.0	1.4	.51	.03	.03	.70	0
15	0	.25	210	3.3	4.2	5.9	32	.15	1.5	.03	.44	0
16	0	.27	18	2.3	3.3	645	317	13	.51	.03	.21	0
17	0	.22	2.8	1.9	2.5	70	44	169	.13	.03	.19	0
18	0	.27	.80	2.0	2.2	17	10	7.0	.07	.03	.13	0
19	0	1.2	.39	22	1.6	8.2	5.0	2.7	.05	.02	.09	0
20	0	.66	.27	317	1.3	4.8	3.6	1.5	.04	.02	.05	0
21	0	.25	.20	401	1.1	5.0	38	.90	.03	.02	.04	40
22	0	.20	.13	110	1.3	3.3	306	.64	.03	.02	170	2.4
23	0	.20	.08	29	.64	2.5	27	.57	.02	.03	7.0	.09
24	0	.22	.07	23	.50	2.0	7.8	2.3	.01	.03	.13	2.4
25	0	.15	.06	145	.57	207	4.0	1.1	11	.03	.03	.15
26	0	.10	.04	19	8.2	34	2.7	.51	53	.03	.01	275
27	0	.08	.04	9.4	3.8	48	2.0	.38	8.0	.58	0	67
28	0	.08	.06	621	2.3	24	31	.38	115	.11	0	18
29	0	.10	.10	100	1.9	16	1,650	.44	4.0	.58	0	678
30	0	.10	65	26	------	8.2	232	26	.64	6.5	0	367
31	0	------	27	12	------	5.0	------	2.7	------	.13	0	------
TOTAL	.47	6.27	791.86	4,053.5	631.41	1,455.0	3,385.2	401.20	195.79	1,864.82	212.02	1,451.45
MEAN	.015	.21	25.5	131	21.8	46.9	113	12.9	6.53	60.2	6.84	48.4
MAX	.13	1.2	371	621	341	645	1,650	169	115	1,490	170	678
MIN	0	0	.04	1.9	.50	1.9	1.4	.15	.01	.02	0	0
CFSM	.0002	.003	.37	1.92	.32	.69	1.65	.19	.10	.88	.10	.71
IN.	0	.003	.43	2.20	.34	.79	1.84	.22	.11	1.01	.12	.79

CAL YR 1971 TOTAL 19,338.43 MEAN 53.0 MAX 1,790 MIN 0 CFSM .77 IN 10.52
WTR YR 1972 TOTAL 14,448.99 MEAN 39.5 MAX 1,650 MIN 0 CFSM .58 IN 7.86

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-02	0230	10.47	1,490	07-03	1515	13.93	2,580
03-16	0500	10.29	1,440	09-29	2030	12.56	2,120
04-29	0545	15.44	3,180				

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 time 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. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Cumberland River basin				
03425200	Dixon Creek at Dixon Springs, Tenn.	Lat 36°21'46", long 86°02'59", Smith County, at bridge on county road, at Dixon Springs, 1.2 miles upstream from mouth.	19.1	1970, 1972	10-21-71	7.8
03425300	Goose Creek at Hartsville, Tenn.	Lat 36°23'07", long 86°07'45", Trousdale County, at bridge on State Highways 10 and 25, 2.2 miles east of Hartsville and 3.0 miles upstream from Little Goose Creek.	74.2	1953, 1970, 1972	10-21-71	33
03425350	Little Goose Creek at Hartsville, Tenn.	Lat 36°24'07", long 86°10'23", Trousdale County, at bridge on State Highways 10 and 25, at Hartsville, 0.9 mile upstream from Welch Branch.	22.3	1970, 1972	10-21-71	4.6
03425520	Spring Creek below Lebanon, Tenn.	Lat 36°15'10", long 86°14'47", Wilson County, at bridge on State Highway 141, 0.4 mile upstream from Link Branch and 4.3 miles northeast of Lebanon.	49.7	1954, 1970, 1972	10-21-71	7.1
03425580	Bartons Creek at Lebanon, Tenn.	Lat 36°12'46", long 86°19'13", Wilson County, at bridge on U.S. Highway 70, at Lebanon, 1.0 mile upstream from Sinking Creek.	15.6	1954, 1970, 1972	10-21-71	.60
03425620	Bledsoe Creek at Bethpage, Tenn.	Lat 36°28'37", long 86°18'49", Sumner County, at bridge on county road, at Bethpage, 0.7 mile upstream from Mutton Branch.	38.7	1953, 1970, 1972	10-21-71	7.1
03425640	East Camp Creek at Gallatin, Tenn.	Lat 36°23'12", long 86°28'54", Sumner County, at bridge on Long Hollow Pike, at Gallatin, 1.1 miles upstream from Liberty Branch.	19.8	1953, 1955, 1970, 1972	10-21-71	2.2
03425850	Cedar Creek near Mount Juliet, Tenn.	Lat 36°13'58", long 86°30'22", Wilson County, at U.S. 70 Highway bridge, 0.1 mile upstream from Silver Springs Branch and 2.1 miles north of Mount Juliet.	32.4	1953-54, 1970, 1972	10-21-71	2.7
03431900	Overall Creek at College Grove, Tenn.	Lat 35°47'14", long 86°40'12", Williamson County, at county road bridge, 0.3 mile east of College Grove and 0.8 mile upstream from mouth.	11.4	1959-64, 1968, 1970-72	10-18-71	.44
03432000	Harpeth River near Kirkland, Tenn.	Lat 35°49'14", long 86°41'16", Williamson County, at Louisville & Nashville RR. bridge, 1.7 miles northwest of Kirkland and 3.1 miles upstream from Nelson Creek.	64.6	1953, 1959-65, 1970-72	10-18-71	1.5
03432400	Harpeth River below Franklin, Tenn.	Lat 35°56'53", long 86°52'54", Williamson County, at bridge on U.S. Highway 431, 1.1 miles downstream from Spencer Creek and 1.8 miles northwest of courthouse in Franklin.	210	1959-64, 1969-72	10-18-71	10

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Cumberland River basin--Continued				
03433700	South Harpeth River at Linton, Tenn.a/	Lat 36°00'32", long 87°01'43", Davidson County, at new bridge on Old Harding Pike, 0.2 mile downstream from East Fork Creek and 0.9 mile south of Linton.	59.7	1967-68, 1970-72	10-18-71	14
03435002	Half Pone Creek near Henrietta, Tenn.	Lat 36°22'58", long 87°11'21", Cheatham County, at bridge on State Highway 12, 0.6 mile downstream from Raccoon Creek and 1.8 miles southeast of Henrietta.	27.3	1966-68, 1970-72	10-19-71	1.1
03435400	Elk Fork near Sadlersville, Tenn.	Lat 36°36'59", long 87°05'42", Robertson County, at bridge on Mint Spring Road, 1.2 miles northeast of Sadlersville and 3.4 miles upstream from mouth.	98.0	1962-64, 1967, 1970-72	10-19-71	15
03435900	Carr Creek near Springfield, Tenn.	Lat 36°28'54", long 86°55'45", Robertson County, at bridge on State Highway 49, 300 ft downstream from Browns Fork and 3.1 miles southwest of courthouse at Springfield.	32.0	1962-64, 1967-68, 1970-72	10-19-71	4.1
		Tennessee River basin				
03465600	Cherokee Creek near Jonesboro, Tenn.	Lat 36°14'12", long 82°27'50", Washington County, at bridge (3rd crossing) on State Highway 81, at Big Cherokee, 1.9 miles above Little Cherokee Creek, 4 miles south of Jonesboro.	9.7	1958, 1966, 1968-70, 1972	9-26-72	4.7
03466700	Little Chucky Creek at Warrensburg, Tenn.	Lat 36°07'28", long 83°05'37", Greene County, at bridge on blacktop county highway 0.2 mile south of Warrensburg, 1.0 mile upstream from mouth.	40.4	1966, 1968-70, 1972	9-26-72	2.8
03478600	Back Creek near Bluff City, Tenn.	Lat 36°31'26", long 82°15'47", Sullivan County, at county road bridge, 0.25 mile west of U.S. Highway 11-E, 0.5 mile above mouth, 3.4 miles north of Bluff City.	12.2	1964-70, 1972	9-25-72	2.5
03481400	Elk River near Elk Mills, Tenn.	Lat 36°14'56", long 81°58'38", Carter County, at bridge on county road, 0.9 mile below Nowhere Branch, 1.7 miles southeast of Elk Mills.	60.4	1966-70, 1972	9-26-72	20
03487100	Kendrick Creek near Kingsport, Tenn.	Lat 36°29'48", long 82°30'49", Sullivan County, 0.1 mile upstream from mouth, 0.7 mile downstream from Straight Branch, and 5.0 miles southeast of Kingsport.	20.3	1953-54, 1957, 1959, 1964-70, 1972	9-25-72	6.8
03487520	Horse Creek near Kingsport, Tenn.	Lat 36°30'08", long 82°33'51", Sullivan County, at bridge on State Highway 81, 500 ft downstream from Little Horse Creek, and about 3.0 miles south of Kingsport.	44.5	1953, 1957, 1959, 1964-66, 1968-70, 1972	6- 6-72 9-25-72	16 2.7
03487560	Clark Branch near Kingsport, Tenn.	Lat 36°33'06", long 82°29'22", Sullivan County, at bridge on U.S. Highway 11-W, 0.1 mile above mouth, 5.2 miles northeast of Kingsport.	2.46	1964-70, 1972	6- 6-72 9-25-72	.84 .30
03491800	Poor Valley Creek at Mooresburg, Tenn.	Lat 36°23'24", long 83°12'59", Hawkins County, at county road bridge, 3.9 miles north of Mooresburg, and 6.2 miles above mouth.	32.3	1961-62, 1964-70, 1972	6- 5-72 9-25-72	13 1.2
03494800	Richland Creek near Blaine, Tenn.	Lat 36°09'39", long 83°40'43", Grainger County, at county road bridge, 1.5 miles northeast of Blaine.	58.8	1961, 1964-70, 1972	9-25-72	2.7
03497200	Little River near Townsend, Tenn.	Lat 35°39'39", long 83°42'25", Blount County, in Great Smoky Mountain National Park, 600 ft above Middle Prong, and 3 miles southeast of Townsend.	60.1	1953-54, 1956, 1958-70, 1972	6- 6-72	71
03527600	North Fork Clinch River near Kyles Ford, Tenn.	Lat 36°35'25", long 82°59'50", Hancock County, 0.6 mile below Robinette Branch and 3 miles northeast of Kyles Ford.	85.8	1966-70, 1972	6- 6-72 9-25-72	36 11

a Previously published as "above Linton."

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin--Continued				
03527700	Greasy Rock Creek at Sneedville, Tenn.	Lat 36°31'01", long 83°12'57", Hancock County, at bridge on county road 100 ft above mouth, 1.0 miles south of Sneedville.	4.83	1963-70, 1972	6- 6-72 9-25-72	1.1 .29
03531800	Russell Creek at Tazewell, Tenn.	Lat 36°27'45", long 83°33'38", Claiborne County, at double barrel culvert on county road, 0.5 mile above unnamed tributary, 0.6 mile northeast of U.S. Highway 25-E, and 0.8 mile northeast of Tazewell.	4.65	1963-70, 1972	6- 6-72 9-25-72	1.2 .36
03531900	Indian Creek at Greers Chapel, Tenn.	Lat 36°35'18", long 83°36'20", Claiborne County, at county highway bridge, 0.1 mile below Station Creek, 0.65 mile north of Greers Chapel, and 3.5 miles above mouth.	62.5	1966-70, 1972	6- 6-72 9-25-72	28 8.2
03534200	Hinds Creek near Clinton, Tenn.	Lat 36°08'45", long 84°04'34", Anderson County, at county road bridge, 0.4 mile upstream from John Creek, and 4.5 miles northeast of Clinton.	39.3	1944, 1953-54, 1964-70, 1972	6- 5-72	16
03587300	Bluewater Creek near St. Joseph, Tenn.	Lat 35°00'44", long 87°27'08", Lawrence County, at county road bridge, 0.15 mile upstream from Ricketts Branch and 3.3 miles southeast of St. Joseph.	38.8	1961-67, 1970-72	10-28-71	10
03588240	Knob Creek near Pea Ridge, Tenn.	Lat 35°11'43", long 87°29'00", Lawrence County, at county road ford, 1.8 miles southwest of Pea Ridge and 8.8 miles southwest of Lawrenceburg.	36.7	1962-67, 1970-72	10-20-71	15
03588260	Knob Creek near Westpoint, Tenn.	Lat 35°08'22", long 87°29'12", Lawrence County, at bridge on Westpoint Road, 1.0 mile upstream from mouth and 3.4 miles northeast of Westpoint.	53.6	1953-54, 1956, 1962-67, 1970-72	10-28-71	20
03588300	Shoal Creek near Westpoint, Tenn.	Lat 35°07'14", long 87°30'31", Lawrence County, at bridge on county road, 0.8 mile east of Chinubee, 1.6 miles southeast of Westpoint, and 33.0 miles upstream from mouth.	176	1962-67, 1970-72	10-28-71	78
03588340	Factory Creek near Shawnette, Tenn.	Lat 35°11'36", long 87°36'13", Wayne County, at county road bridge, 3.9 miles east of Shawnette.	31.5	1962-67, 1972	10-20-71	24
03588360	Factory Creek near Westpoint, Tenn.	Lat 35°07'17", long 87°32'48", Lawrence County, at bridge on Westpoint Road, 0.4 mile upstream from Chisholm Creek and 1.2 miles southwest of Westpoint.	71.9	1959, 1962-67, 1970-72	10-28-71	45
03588380	Chisholm Creek near Lodi, Tenn.	Lat 35°12'08", long 87°33'22", Lawrence County, at county road ford, 1.4 miles south of Lodi and 12.6 miles southwest of Lawrenceburg.	26.8	1962-67, 1970-72	10-20-71	13
03588600	Butler Creek near Iron City, Tenn.	Lat 35°01'48", long 87°37'52", Lawrence County, at county road bridge, 1.1 miles downstream from Stults Branch and 2.9 miles west of Iron City.	46.6	1961-67, 1970-72	10-28-71	24
03590900	Second Creek near Ransom Stand, Tenn.	Lat 35°00'56", long 87°59'05", Wayne County, at bridge on State Highway 69, 0.5 mile downstream from Holly Branch and 1.7 miles southwest of Ransom Stand.	42.5	1962-64, 1970-72	10-19-71 11-18-71	10 14
03595300	Little Duck River at State Highway 55, at Manchester, Tenn.	Lat 35°28'49", long 86°04'46", Coffee County, at bridge on State Highway 55, at Manchester, 3.4 miles upstream from mouth.	35.3	1932-34‡, 1970-72	10-19-71	4.9
03596200	Carroll Creek above Ovoca Lake, near Tullahoma, Tenn.	Lat 35°24'23", long 86°12'14", Coffee County, at county road bridge, 200 ft upstream from Ovoca Lake and 3.1 miles north of Tullahoma.	3.32	1970-72	10-19-71	1.0
03596700	Garrison Fork at Beechgrove, Tenn.	Lat 35°35'37", long 86°14'22", Coffee County, at bridge on U.S. Highway 41, at Beechgrove.	16.8	1932-33, 1953-54, 1970-72	10-19-71	1.4

‡ Operated as a continuous record gaging station.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin--Continued				
03596900	Noah Fork at Noah, Tenn.	Lat 35°34'27", long 86°11'30", Coffee County, at bridge on U.S. Highway 41, at Noah.	12.1	1970-72	10-19-71	0.22
03597700	Garrison Fork near Bugscuffle, Tenn.	Lat 35°29'10", long 86°20'09", Bedford County, at Cannon bridge on Haley Road, 0.6 mile upstream from mouth, 1.4 miles west of Haley, and 1.5 miles southwest of Bugscuffle.	130	1934, 1953-54, 1970-72	10-19-71	6.4
03597900	Flat Creek at Shelbyville, Tenn.	Lat 35°28'17", long 86°28'39", Bedford County, at bridge on State Highway 64, at Shelbyville, 0.7 mile upstream from mouth.	49.6	1953-54, 1956-57, 1970-72	10-19-71	3.2
03603660	Little Buffalo River near Napier, Tenn.	Lat 35°25'53", long 87°31'13", Lewis County, at county road bridge, 0.3 mile upstream from Reed Branch and 2.6 miles west of Napier.	37.7	1964-65, 1970-72	10-19-71 11-18-71	23 24
03603730	Trace Creek near Riverside, Tenn.	Lat 35°27'15", long 87°37'10", Lewis County, at county road bridge, 0.1 mile upstream from mouth and 1.1 miles west of Riverside.	24.6	1953-54, 1964-65, 1971-72	10-19-71 11-18-71	8.1 9.1
03603900	Green River near Topsy, Tenn.	Lat 35°25'49", long 87°46'24", Wayne County, at county road bridge, 2.5 miles upstream from mouth and 3.9 miles west of Topsy.	56.4	1964-65, 1971-72	10-19-71 11-18-71	19 23

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, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are 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 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Mobile River basin							
02384000	Conasauga River near Tennga, Ga.	Lat 35°00'34", long 84°44'02", Polk County, Tenn., at bridge on U.S. Highway 411, at Conasauga, 1.5 miles north of Tennga, and 3 miles upstream from Mill Creek.	108	1930-31‡, 1938, 1940-43, 1944-47‡, 1951-72	1972	(a)	<2,500
02384900	Coahulla Creek near Cleveland, Tenn.	Lat 35°07'00", long 84°50'18", Bradley County, at bridge on State Highway 74, 2.5 miles southeast of intersection of State Highways 74 and 60 at Cleveland.	4.35	1955-72	5-13-72	6.45	510
Green River basin							
03313600	West Fork Drakes Creek tributary near Fountain Head, Tenn.	Lat 36°33'34", long 86°27'26", Sumner County, at culvert under county road, 2.3 miles northeast of Fountain Head, and 0.4 mile upstream from mouth.	.95	1967-72	4- 7-72	5.20	164
03313620	West Prong Caney Fork Creek near Oak Grove, Tenn.	Lat 36°32'36", long 86°23'29", Sumner County, at culvert under county road, 2.0 miles southwest of Oak Grove.	3.03	1967-72	5- 8-72	3.67	602
Cumberland River basin							
03409000	White Oak Creek at Sunbright, Tenn.	Lat 36°14'38", long 84°40'14", Morgan County, at bridge on U.S. Highway 27 in Sunbright.	13.5	1933‡, 1955-72	7- 4-72	11.42	2,000
03414700	Puncheon Camp Creek at Allred, Tenn.	Lat 36°19'35", long 85°11'10", Overton County, at bridge on State Highway 85 at Allred, 3.9 miles south of intersection of State Highways 85 and 52.	15.5	1955-72	7-29-72	3.67	(†)
03415700	Big Eagle Creek near Livingston, Tenn.	Lat 36°26'57", long 85°16'27", Overton County, at bridge on county road, 0.8 mile north of intersection with State Highway 42, 4.7 miles northeast of Livingston.	7.98	1955-72	7-29-72	1.95	(†)
03417700	Mathews Branch tributary near Livingston, Tenn.	Lat 36°20'04", long 85°20'23", Overton County, at culvert under State Highway 42, 3.0 miles south of intersection of State Highways 85 and 42, 2.9 miles southwest of Livingston.	.49	1955-72	1972	(a)	<80
03420360	Mud Creek tributary No. 2 near Summitville, Tenn.	Lat 35°36'10", long 86°01'33", Coffee County, at culvert under county road, 3.5 miles northwest of Summitville, and 0.7 miles upstream from mouth.	2.28	1967-72	1- 2-72	4.03	156
03420380	Mud Creek tributary near Summitville, Tenn.	Lat 35°36'20", long 86°00'24", Coffee County, at culvert under county road, 3.3 miles northwest of Summitville.	1.03	1967-72	1- 2-72	4.25	(†)
03420400	Mud Creek near Summitville, Tenn.	Lat 35°37'23", long 86°00'00", Coffee County, at bridge on county road, 4.2 miles north of Summitville.	7.30	1967-72	1- 2-72	3.95	540
03420500	Barren Fork near Trousdale, Tenn.	Lat 35°39'55", long 85°53'00", Warren County, at county highway bridge on Trousdale-McMinnville pike, 3.2 miles east of Trousdale.	126	1933-57‡, 1958-72	1- 2-72	10.36	7,150
03420600	Owen Branch near Centertown, Tenn.	Lat 35°42'30", long 85°53'05", Warren County, at bridge on U.S. Highway 70-S, 2.4 miles southeast of Centertown.	4.60	1955-72	3- 3-72	3.81	(†)

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Cumberland River basin--Continued					
03421100	Sink tributary at McMinnville, Tenn.b/	Lat 35°41'47", long 85°46'47", Warren County, at culvert under State Highway 56 at northwest city limits of McMinnville.	0.47	1955-72	3- 3-72	3.93	180
03421200	Charles Creek near McMinnville, Tenn.	Lat 35°43'00", long 85°46'05", Warren County, at bridge on county road at Faulkner Springs, 2.7 miles north of McMinnville.	31.1	1955-72	1- 2-72	8.01	2,280
03425500	Spring Creek near Lebanon, Tenn.	Lat 36°10'49", long 86°14'29", Wilson County, at bridge on Eastover Road, 3.4 miles southeast of Lebanon.	35.3	1955-61‡, 1962-72	1- 2-72	8.84	5,590
03425700	Spencer Creek near Lebanon, Tenn.	Lat 36°14'20", long 86°24'03", Wilson County, at bridge on county road, 100 ft north of junction of county road and U.S. Highway 70, 6.5 miles west of square in Lebanon.	3.32	1955-72	1- 2-72	4.47	(†)
03425800	Cedar Creek tributary at Green Hill, Tenn.	Lat 36°13'52", long 86°31'40", Wilson County, at culvert under U.S. Highway 70, 0.2 mile east of Green Hill.	.86	1955-57, 1959-72	1- 2-72	3.26	141
03426000	Drakes Creek above Hendersonville, Tenn.	Lat 36°22'14", long 86°37'00", Sumner County, at bridge on Long Hollow Pike, 4.5 miles north of Hendersonville.	19.2	1955-61‡, 1962-72	7-28-72	8.17	(†)
03427000	Bradley Creek at Lascassas, Tenn.	Lat 35°55'39", long 86°17'25", Rutherford County, at bridge on county road, 900 ft south of Lascassas.	37.0	1955-61‡, 1962-72	7-28-72	7.07	4,090
03427830	Short Creek tributary near Christiana, Tenn.	Lat 35°40'37", long 86°21'47", Rutherford County, at culvert under county road, 3.6 miles southeast of Christiana.	.17	1966-72	7-28-72	5.10	53
03427840	Short Creek near Christiana, Tenn.	Lat 35°41'34", long 86°21'49", Rutherford County, at culvert under county road, 2.5 miles southeast of Christiana.	3.54	1966-72	7-28-72	9.01	2,760
03429500	Stewart Creek near Smyrna, Tenn.	Lat 35°59'54", long 86°30'18", Rutherford County, at bridge on Fifteenth Avenue at former Sewart Air Force Base, 1.3 miles northeast of Smyrna.	69.7	1953-58‡, 1959-63, 1965-72	1- 2-72	c6.43	1,400
03430400	Mill Creek a. Nolensville, Tenn.	Lat 35°57'32", long 86°40'31", Williamson County, at bridge on Sunset Road, 0.6 mile northwest of Nolensville.	12.0	1965-72	8- 9-72	6.75	(†)
03430600	Mill Creek at Hobson Pike, near Antioch, Tenn.	Lat 36°01'14", long 86°40'51", Davidson County, at bridge on Hobson Pike, 450 ft upstream from Indian Creek, and 2.8 miles south of Antioch.	43.0	1965-72	7-28-72	8.30	3,250
03430700	Indian Creek at Pettus Road, at Nashville, Tenn.	Lat 36°00'26", long 86°40'02", Davidson County, at bridge on Pettus Road, 12.7 miles southeast of State capitol in Nashville.	3.86	1965-72	8- 9-72	2.95	(†)
03431020	Sorghum Branch at Antioch Pike, near Antioch, Tenn.	Lat 36°05'42", long 86°42'03", Davidson County, at culvert under Antioch Pike, 2.9 miles northwest of Antioch.	2.62	1966-72	8-24-72	9.00	(†)
03431040	Sevenmile Creek at Blackman Road, at Nashville, Tenn.	Lat 36°04'21", long 86°44'00", Davidson County, at bridge on Blackman Road, 7.0 miles southeast of State capitol in Nashville.	12.2	1965-72	8- 9-72	3.85	(†)
03431060	Mill Creek at Thompson Lane, near Woodbine, Tenn.	Lat 36°07'04", long 86°43'08", Davidson County, at bridge on Thompson Lane, 1.5 miles northeast of intersection of Thompson Lane and Nolensville Road (U.S. Highway 31-A, 41-A) in Woodbine.	93.4	1965-72	7-28-72	<8.90	<3,600
03431080	Sims Branch at Elm Hill Pike, near Donelson, Tenn.	Lat 36°09'09", long 86°41'02", Davidson County, at bridge on Elm Hill and McGavock Pikes, 1.5 miles southwest of intersection of Donelson Pike and Lebanon Road (U.S. Highway 70) in Donelson.	3.92	1965-72	9-26-72	4.95	(†)

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Cumberland River basin--Continued					
03431100	West Fork Browns Creek at Glendale Lane, at Nashville, Tenn.	Lat 36°05'39", long 86°47'38", Davidson County, at bridge on Glendale Lane, 5.0 miles south of State capitol in Nashville.	1.51	1965-72	8- 9-72	5.55	(†)
03431120	West Fork Browns Creek at General Bates Drive, at Nashville, Tenn.	Lat 36°06'29", long 86°47'07", Davidson County, at bridge on General Bates Drive, 4.0 miles south of State capitol in Nashville.	3.30	1965-72	8- 9-72	3.55	(†)
03431160	Middle Fork Browns Creek at Overbrook Drive, at Nashville, Tenn.	Lat 36°06'00", long 86°46'39", Davidson County, at bridge on Overbrook Drive, 1,600 ft west of U.S. Highway 31, and 4.5 miles south of State capitol in Nashville.	2.07	1965-72	1972	(a)	(†)
03431240	East Fork Browns Creek at Baird-Ward Printing Company, at Nashville, Tenn.	Lat 36°06'33", long 86°46'00", Davidson County, at bridge on access road to Baird-Ward Printing Co., Plant No. 1, 2,000 ft east of U.S. Highway 31, and 4.0 miles southeast of State capitol in Nashville.	1.58	1965-72	7-27-72	3.20	(†)
03431340	Browns Creek at Factory Street, at Nashville, Tenn.	Lat 36°08'26", long 86°45'31", Davidson County, at bridge on Factory Street, 800 ft downstream from Louisville and Nashville Railroad Bridge, and 2.3 miles southeast of State capitol in Nashville.	13.2	1965-72	7-27-72	'.70	1,750
03431520	Claylick Creek at Lickton, Tenn.	Lat 36°18'02", long 86°48'37", Davidson County, at bridge on Lickton Road in Lickton, 1,200 ft upstream from mouth.	4.13	1965-72	8- 6-72	4.10	(†)
03431530	Whites Creek at Old Hickory Blvd., at Whites Creek, Tenn.	Lat 36°16'26", long 86°49'01", Davidson County, at bridge on Old Hickory Blvd., 1 mile northeast of town of Whites Creek.	13.8	1965-72	8- 9-72	4.40	(†)
03431550	Earthman Fork at Whites Creek, Tenn.	Lat 36°15'55", long 86°49'51", Davidson County, at bridge on Whites Creek Pike in town of Whites Creek, 1,800 ft upstream from mouth.	6.29	1965-72	8-12-72	5.00	(†)
03431560	Whites Creek at Whites Creek Pike, at Whites Creek, Tenn.	Lat 36°15'03", long 86°49'43", Davidson County, at bridge on Whites Creek Pike, 0.8 mile downstream from Earthman Fork, 1 mile south of town of Whites Creek.	28.9	1965-72	8-12-72	5.40	(†)
03431580	Ewing Creek at Knight Road, near Bordeaux, Tenn.	Lat 36°13'55", long 86°48'14", Davidson County, at bridge on Knight Road, 3.0 miles northeast of Bordeaux.	13.3	1965-72	8-12-72	9.00	2,960
03431610	Eaton Creek at Cato Road, near Bordeaux, Tenn.	Lat 36°12'45", long 86°51'57", Davidson County, at bridge on Cato Road, 0.3 mile upstream from State Highway 12, 2.3 miles northwest of Bordeaux.	5.29	1965-72	9-27-72	6.10	(†)
03431630	Richland Creek at Lynnwood Blvd., at Belle Meade, Tenn.	Lat 36°05'03", long 86°51'10", Davidson County, at bridge on Lynnwood Blvd., 0.6 mile upstream from Belle Meade Blvd., and at southeast city limits of Belle Meade.	2.21	1965-72	7-27-72	2.90	(†)
03431640	Belle Meade Branch at Belle Meade Blvd., at Belle Meade, Tenn.	Lat 36°05'27", long 86°51'34", Davidson County, at northbound lane bridge on Belle Meade Blvd., 1,400 ft south of Belle Meade Country Club in Belle Meade.	1.25	1965-72	7-27-72	3.50	(†)
03431650	Vaughns Gap Branch at Percy Warner Blvd., at Belle Meade, Tenn.	Lat 36°05'43", long 86°52'38", Davidson County, at bridge on Percy Warner Blvd., 0.5 mile southwest of junction of U.S. Highway 70-S and State Highway 100, and 1 mile west of Belle Meade Country Club in Belle Meade.	2.66	1965-72	7-27-72	5.55	(†)
03431660	Jocelyn Hollow Branch at Post Road, at Belle Meade, Tenn.	Lat 36°06'21", long 86°52'09", Davidson County, at bridge on Post Road, 0.5 mile northeast of junction of U.S. Highway 70-S and State Highway 100, and 1 mile northwest of Belle Meade Country Club in Belle Meade.	1.43	1965-72	7-27-72	3.80	(†)

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Cumberland River basin--Continued					
03431670	Richland Creek at Fransworth Drive, at Belle Meade, Tenn.d/	Lat 36°07'12", long 86°51'25", Davidson County, at bridge on Fransworth Drive, 650 ft northwest of intersection of U.S. Highway 70-S and Belle Meade Blvd. in Belle Meade, and 0.5 mile upstream from Sugartree Creek.	12.4	1965-72	7-28-72	6.95	(†)
03431680	Sugartree Creek at Cross Creek Road, at Nashville, Tenn.	Lat 36°06'29", long 86°49'20", Davidson County, at bridge on Cross Creek Road, 0.6 mile west of Hillsboro High School, and 4.5 miles southwest of State capitol in Nashville.	2.30	1965-72	7-27-72	2.80	(†)
03432500	West Harpeth River near Leipers Fork, Tenn.	Lat 35°53'56", long 86°58'01", Williamson County, at bridge on State Highway 96, 1.8 miles east of Leipers Fork.	66.9	1955-61‡, 1962-72	7-28-72	10.88	1,860
03435010	Red River near Hall Town, Tenn.	Lat 36°30'03", long 86°31'08", Sumner County, at bridge on county road, 2.3 miles east of Hall Town.	1.13	1967-72	5- 8-72	4.08	(†)
03435020	Red River near New Deal, Tenn.	Lat 36°31'40", long 86°32'43", Sumner County, at bridge on county road, 1.4 miles northeast of New Deal.	9.32	1967-72	5- 8-72	7.73	1,140
03435040	Austin Branch near Portland, Tenn.	Lat 36°34'02", long 86°33'54", Sumner County, at culvert under county road, 2.9 miles southwest of Portland.	2.37	1967-72	9-27-72	5.84	(†)
03435600	Sulphur Fork Red River tributary near White House, Tenn.	Lat 36°26'52", long 86°42'53", Robertson County, at bridge on county road, 3.7 miles southwest of White House.	3.50	1967-72	9-27-72	4.07	(†)
03436800	Musterground Creek near Erin, Tenn.	Lat 36°19'12", long 87°40'19", Houston County, at bridge on State Highway 13, 0.1 mile northeast of intersection with State Highway 49, 1.5 miles east of Erin.	3.57	1955-72	1-28-72	6.86	(†)
		Tennessee River basin					
03461230	Caney Creek near Cosby, Tenn.	Lat 35°47'03", long 83°12'11", Cocke County, at culvert under State Highway 32, 3.3 miles southeast of Cosby.	1.62	1967-72	4-12-72	5.93	22(
03461260	Caney Creek at Cosby, Tenn.	Lat 35°48'09", long 83°14'18", Cocke County, at culvert under county road, 700 ft upstream from mouth, and 1.1 miles southeast of Cosby.	5.22	1967-72	1972	(a)	(†)
03465000	North Indian Creek near Unicoi, Tenn.	Lat 36°10'35", long 82°17'36", Unicoi County, on right bank 900 ft upstream from Rocky Branch, 3.4 miles southeast of Unicoi.	15.9	1945-57‡, 1959-72	6-21-72	3.72	400
03465800	Muddy Fork at Fairview, Tenn.	Lat 36°18'52", long 82°32'38", Washington County, at bridge on State Highway 81, 0.7 miles west of Fairview.	9.86	1955-72	2-26-72	3.19	(†)
03467500	Nolichucky River near Morristown, Tenn.	Lat 36°10'49", long 83°10'32", Hamblen County, on right bank along Southern Railway, 0.6 mile upstream from Susong Bridge, 7 miles southeast of Morristown.	1,679	1921-57‡, 1959-72	6-21-72	16.00	26,100
03469110	Ramsey Creek near Pittman Center, Tenn.	Lat 35°45'33", long 83°20'49", Sevier County, at culvert under State Highway 73, 1.5 miles southeast of Pittman Center.	2.18	1967-72	4-12-72	4.89	(†)
03469130	Little Pigeon River near Sevierville, Tenn.	Lat 35°51'38", long 83°30'13", Sevier County, at bridge on U.S. Highway 411, 2.9 miles east of Sevierville.	110	1954-72	1972	(a)	<7,600
03469160	East Fork Little Pigeon River near Sevierville, Tenn.	Lat 35°51'55", long 83°29'17", Sevier County, at bridge on U.S. Highway 411, 5.2 miles east of Sevierville.	64.1	1954-72	4-12-72	16.82	5,940

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Tennessee River basin--Continued					
03469500	West Prong Little Pigeon River near Pigeon Forge, Tenn.e/	Lat 35°48'21", long 83°34'28", Sevier County, at bridge on old State Highway 71, 1.6 miles northwest of Pigeon Forge.	76.2	1946-49‡, 1954-72	9-30-72	6.89	2,430
03481600	Corn Creek at Mountain City, Tenn.	Lat 36°29'23", long 81°48'52", Johnson County, at bridge on county road, 600 ft north of junction of county road and U.S. Highway 421, 1 mile northwest of Mountain City.	5.34	1959-61, 1963-72	2-26-72	2.31	(†)
03482000	Roan Creek near Neva, Tenn.	Lat 36°22'37", long 81°53'14", Johnson County, on right bank on Butler-Neva road, 1.7 miles southwest of Neva.	102	1943-55‡, 1959-72	2-26-72	6.13	3,400
03491200	Big Creek tributary near Rogersville, Tenn.	Lat 36°25'30", long 82°57'17", Hawkins County, at culvert under county road, 300 ft upstream from mouth, 2.8 miles northeast of Rogersville.	2.00	1955-72	9- 7-71 10-22-71	f4.01 3.76	91 80
03498700	Nails Creek near Knoxville, Tenn.	Lat 35°52'49", long 83°46'47", Sevier County, at culvert under State Highway 71, 0.8 mile southeast of Shooks Gap, 10.5 miles southeast of Knoxville.	.36	1955-72	4-12-72	3.67	85
03519600	Island Creek at Vonore, Tenn.	Lat 35°35'38", long 84°14'58", Monroe County, at bridge on State Highway 72, 0.5 mile northwest of Vonore.	11.2	1954-72	9-30-72	8.12	300
03519610	Baker Creek tributary near Binfield, Tenn.	Lat 35°41'56", long 84°02'46", Blount County, at culvert under county road, 1.5 miles east of Binfield.	2.10	1966-72	6-29-72	3.60	(†)
03519620	Baker Creek at Binfield, Tenn.	Lat 35°41'57", long 84°04'01", Blount County, at culvert under county road, 0.6 mile southeast of Binfield.	7.07	1966-72	1- 2-72	3.49	(†)
03519630	Griffitts Branch near Greenback, Tenn.	Lat 35°41'53", long 84°06'16", Blount County, at culvert under county road, 2.1 miles southwest of Binfield.	1.46	1966-72	8- 9-72	4.01	(†)
03519650	Little Baker Creek near Greenback, Tenn.	Lat 35°39'21", long 84°06'13", Blount County, at culvert under county road, 3.8 miles east of Greenback.	3.65	1966-72	12- 7-71	3.51	86
03519700	Bat Creek near Vonore, Tenn.	Lat 35°38'36", long 84°15'12", Loudon County, at bridge on State Highway 72, 4.5 miles north of Vonore.	30.7	1954-72	1972	(a)	<470
03520100	Sweetwater Creek near Loudon, Tenn.	Lat 35°44'17", long 84°22'25", Loudon County, at bridge on State Highway 72, 2.0 miles west of Loudon.	62.2	1954-72	5-15-72	6.27	860
03534000	Coal Creek at Lake City, Tenn.	Lat 36°13'14", long 84°09'27", Anderson County, at bridge on U.S. Highway 25-W, at Lake City.	24.5	1933‡, 1955-72	3- 2-72	4.82	(†)
03534500	Buffalo Creek at Norris, Tenn.	Lat 36°11'05", long 84°03'34", Anderson County, at culvert under Norris Freeway (State Highway 71), 1.0 mile southeast of Norris.	g9.92	1948-50‡, 1955-72	4-12-72	8.23	880
03535140	South Fork Beaver Creek at Harbison, Tenn.	Lat 36°06'51", long 83°51'15", Knox County, at culvert under Tazewell Pike, 0.4 mile south of Harbison.	1.23	1967-72	4-12-72	5.26	(†)
03535160	Beaver Creek near Halls Crossroads, Tenn.	Lat 36°04'59", long 83°54'26", Knox County, at bridge on Crippen Road, 1.2 miles east of Halls Crossroads.	14.1	1967-72	4-12-72	7.88	1,080
03535180	Willow Fork near Halls Crossroads, Tenn.	Lat 36°05'59", long 83°54'27", Knox County, at culvert under Quarry Road, 1.7 miles northeast of Halls Crossroads.	3.23	1967-72	4-12-72	6.48	318
03538130	Caney Creek near Kingston, Tenn.	Lat 35°51'53", long 84°23'07", Roane County, 1.5 miles upstream from mouth, 2.4 miles northeast of intersection of U.S. Highway 70 and Buttermilk Road, 7.5 miles east of Kingston.	3.32	1962-72	3- 3-72	6.44	(†)

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Tennessee River basin--Continued					
03538200	Poplar Creek near Oliver Springs, Tenn.	Lat 36°01'20", long 84°18'37", Anderson County, at bridge on State Highway 61, 0.9 mile downstream from Brushy Fork, 2.5 miles southeast of Oliver Springs, 4 miles upstream from Indian Creek.	55.9	1954-72	12- 7-71	13.10	(†)
03538215	Indian Creek at Oliver Springs, Tenn.	Lat 36°02'45", long 84°20'48", Roane County, at bridge on State Highway 61, 200 ft west of intersection of State Highways 61 and 62.	18.4	1962-72	1972	(a)	(†)
03538275	Bear Creek near Oak Ridge, Tenn.	Lat 35°56'50", long 84°21'48", Roane County, at bridge on county road, 200 ft west of State Highway 95, and 3.9 miles southwest of intersection of State Highway 95 and Anderson County line in Oak Ridge.	7.15	1960-64‡, 1965-72	3- 3-72	4.54	287
03538500	Emory River near Wartburg, Tenn.	Lat 36°06'46", long 84°36'54", Morgan County, at bridge on Wartburg-Lancing Road, 1.2 miles northwest of Wartburg.	83.2	1935-57‡, 1958-66, 1967-68‡, 1969-72	12- 6-71	13.61	5,140
03538600	Obed River at Crossville, Tenn.	Lat 35°57'27", long 85°03'00", Cumberland County, at bridge on old U.S. Highway 70-S, 0.9 mile west of junction of U.S. Highways 70-S and 70-N at northwest city limits of Crossville.	12.0	1955-72	1- 2-72	5.98	(†)
03538900	Self Creek near Big Lick, Tenn.	Lat 35°47'54", long 85°02'33", Cumberland County, at culvert under county road, 1.3 miles southwest of Big Lick.	3.80	1968-72	12- 7-71	4.18	229
03538950	Lick Creek at Big Lick, Tenn.	Lat 35°48'38", long 85°01'13", Cumberland County, at bridge on U.S. Highway 127, 0.3 mile northeast of Big Lick.	8.58	1967-72	1- 2-72	7.28	458
03539100	Byrd Creek near Crossville, Tenn.	Lat 35°53'40", long 85°03'38", Cumberland County, at culvert under county road, 4.0 miles southwest of Crossville.	1.10	1967-72	1- 2-72	5.92	71
03541100	Bitter Creek near Camp Austin, Tenn.	Lat 36°00'53", long 84°31'33", Morgan County, at culvert under U.S. Highway 27, 3.0 miles southeast of Camp Austin.	5.53	1967-72	4-22-72	4.95	(†)
03541200	Forked Creek near Oakdale, Tenn.	Lat 36°00'12", long 84°30'45", Morgan County, at culvert under U.S. Highway 27, 2.8 miles northeast of Oakdale.	2.44	1967-72	3- 2-72	3.94	(†)
03541500	Whites Creek near Glen Alice, Tenn.	Lat 35°47'49", long 84°45'37", Roane County, 2,200 ft above Southern Railway bridge, 1.2 miles southwest of Glen Alice.	108	1935-55‡, 1956-72	12- 7-71	12.85	6,900
03542500	Piney River at Spring City, Tenn.	Lat 35°41'59", long 84°51'17", Rhea County, at bridge on U.S. Highway 27, 0.5 mile northeast of Spring City.	95.9	1928-30‡, 1955-72	12- 7-71	13.76	(†)
03544500	Richland Creek near Dayton, Tenn.	Lat 35°30'17", long 85°01'20", Rhea County, 0.4 mile above bridge on State Highway 30, 1.0 mile northwest of Dayton.	50.2	1928-31‡, 1935-55‡, 1956-72	12- 7-71	6.67	4,350
03561900	Belcher Creek near Ducktown, Tenn.	Lat 35°04'27", long 84°23'09", Polk County, at culvert under State Highway 68, 2.7 miles north of Ducktown.	1.37	1967-72	5- 2-72	2.40	87
03566200	Brymer Creek near McDonald, Tenn.	Lat 35°07'20", long 84°57'00", Bradley County, at bridge on U.S. Highways 11 and 64, 1.9 miles east of McDonald.	9.68	1955-72	5-13-72	5.83	(†)
03567200	West Chickamauga Creek near Kensington, Ga.	Lat 34°48'10", long 85°20'52", Walker County, Ga., at bridge on State Highway 143, 2.5 miles northeast of Kensington.	73.0	1950-72	5-14-72	13.93	3,930
03570800	Little Brush Creek near Dunlap, Tenn.	Lat 35°24'15", long 85°23'18", Sequatchie County, at bridge on State Highway 8, 1.5 miles north of Dunlap.	15.4	1959-72	12- 7-71	5.82	1,280

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Tennessee River basin--Continued					
03571600	Brown Spring Branch near Sequatchie, Tenn.	Lat 35°08'55", long 85°33'28", Marion County, at culvert under State Highway 27, 2.1 miles northeast of bridge over Little Sequatchie River, 3.1 miles northeast of Sequatchie.	0 67	1955-72	12- 7-71	3.98	49
03571800	Battle Creek near Monteagle, Tenn.	Lat 35°08'03", long 85°46'15", Marion County, at bridge on U.S. Highways 41 and 64, 9.2 miles southeast of Monteagle.	50.4	1955-72	12- 7-71	8.54	5,100
03574700	Big Huckleberry Creek near Belvidere, Tenn.	Lat 35°04'00", long 86°21'29", Lincoln County, at culvert under U.S. Highway 64, 1.3 miles southeast of intersection of U.S. Highway 64 and State Highway 121, 11 miles southwest of Belvidere.	2.18	1955-72	3-27-72	3.48	164
03578500	Bradley Creek near Prairie Plains, Tenn.	Lat 35°21'21", long 85°58'45", Coffee County, on left bank 165 ft downstream from highway bridge, 1.1 miles northwest of Prairie Plains.	41.3	1952-59‡, 1960-72	12- 7-71	9.88	1,870
03579800	Miller Creek near Cowan, Tenn.	Lat 35°10'17", long 85°59'00", Franklin County, at bridge on U.S. Highway 64, 1.8 miles east of Cowan.	4.30	1955-72	7-29-72	7.15	(†)
03579900	Boiling Fork Creek at Cowan, Tenn.	Lat 35°09'45", long 86°00'20", Franklin County, at bridge on county road, 1,200 ft southeast of intersection of county road and U.S. Highway 64 in Cowan.	17.0	1955-72	7-29-72	7.19	1,520
03581500	West Fork Mulberry Creek at Mulberry, Tenn.	Lat 35°12'34", long 86°27'46", Lincoln County, at old bridge, 1,000 ft downstream from State Highway 50, 0.2 mile southwest of Mulberry.	41.2	1954-62‡, 1963-66, 1967-68‡, 1969-72	3-27-72	13.40	8,460
03582200	Norris Creek tributary near Belleville, Tenn.	Lat 35°13'55", long 86°33'50", Lincoln County, at culvert under U.S. Highway 231, 0.4 mile north of first crossing of Norris Creek from Fayetteville, 3.1 miles south of Belleville.	.034	1955-72	12- 6-71	3.98	33
03582300	Norris Creek near Fayetteville, Tenn.	Lat 35°09'53", long 86°32'43", Lincoln County, at bridge on old State Highway 50, 2.0 miles northeast of Fayetteville.	42.6	1954-72	3-27-72	7.82	3,250
03583200	Chicken Creek at McBurg, Tenn.	Lat 35°11'03", long 86°48'47", Lincoln County, at bridge on county highway R7374 in McBurg.	7.66	1955-72	3-27-72	6.41	3,280
03583300	Richland Creek near Cornersville, Tenn.	Lat 35°19'10", long 86°52'20", Marshall County, at bridge on U.S. Highway 31-A, 3.4 miles southwest of Cornersville.	47.5	1962-68‡, 1969-72	12- 6-71	11.86	3,940
03587200	Bluewater Creek tributary near Leoma, Tenn.	Lat 35°08'29", long 87°22'05", Lawrence County, at culvert under U.S. Highway 43, 1.8 miles southeast of Leoma.	.49	1955-72	1- 2-72	2.15	(†)
03587500	Shoal Creek above Little Shoal Creek at Lawrenceburg, Tenn.	Lat 35°14'02", long 87°20'00", Lawrence County, at bridge on U.S. Highway 43, 0.5 mile south of intersection of U.S. Highways 43 and 64 in Lawrenceburg.	27.0	1932-33‡, 1955-72	7-28-72	5.25	(†)
03594200	Eagle Creek near Clifton Junction, Tenn.	Lat 35°20'21", long 87°58'22", Wayne County, at bridge on State Highway 114, 2.5 miles northwest of Clifton Junction and 2.6 miles upstream from mouth.	19.0	1955-72	7-28-72	2.20	(†)
03594300	Cypress Creek tributary near Pope, Tenn.	Lat 35°37'10", long 87°57'20", Perry County, at culvert under State Highways 20 and 100, in Craig Hollow, 2.0 miles east of Pope.	.75	1955-72	1972	(a)	(†)
03597000	Garrison Fork at Fairfield, Tenn.	Lat 35°53'59", long 86°17'00", Bedford County, at bridge on county road, 0.1 mile east of Fairfield.	66.3	1954-58‡, 1959-66, 1967-68‡, 1970-72	1- 2-72	14.25	4,930
03597300	Wartrace Creek above Bell Buckle, Tenn.	Lat 35°37'45", long 86°21'22", Bedford County, at culvert under county road, 2.7 miles north of Bell Buckle.	4.99	1966-72	7-28-72	10.80	2,340

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Tennessee River basin--Continued					
03597400	Wartrace Creek near Bell Buckle, Tenn.	Lat 35°36'23", long 86°21'08", Bedford County, at bridge on county road, 1.2 miles north of Bell Buckle.	9.59	1966-72	7-28-72	8.86	3,760
03597450	Kelly Creek tributary near Bell Buckle, Tenn.	Lat 35°36'34", long 86°19'11", Bedford County, at bridge on county road, 3.0 miles northeast of Bell Buckle.	.73	1966-72	7-28-72	3.32	316
03597550	Muse Branch near Bell Buckle, Tenn.	Lat 35°34'03", long 86°19'28", Bedfc d County, at bridge on county road, 2.3 miles southeast of Bell Buckle.	1.86	1966-72	1- 2-72	3.95	355
03598200	Weakly Creek near Rover, Tenn.	Lat 35°38'05", long 86°33'03", Bedford County, at culvert under county road, 3.7 miles southeast of intersection of county road with U.S. Highway 41-A at Rover.	9.46	1955-72	1- 2-72	4.73	(†)
03599200	East Rock Creek at Farmington, Tenn.	Lat 35°30'05", long 86°42'50", Marshall County, at bridge on old State Highway 64, 0.2 mile west of Farmington.	43.1	1954-72	12- 6-71	9.21	(†)
03599400	Little Flat Creek tributary near Rally Hill, Tenn.	Lat 35°41'15", long 86°49'46", Maury County, at culvert under U.S. Highway 431 and State Highway 106, 1.5 miles north of crossing of Flat Creek in Rally Hill.	.63	1955-72	7-28-72	3.34	116
03600000	Rutherford Creek near Carters Creek, Tenn.	Lat 35°40'23", long 86°58'42", Maury County, at bridge on county road, 3.2 miles south of town of Carters Creek.	68.8	1954-58‡, 1959-72	7-28-72	11.09	(†)
03602100	Moss Spring Hollow near Centerville, Tenn.	Lat 35°45'44", long 87°27'47", Hickman County, at bridge on State Highways 48 and 100, 1.2 miles south of Centerville.	3.68	1955-72	7-16-72	1.97	(†)
03603800	Chalk Creek near Waynesboro, Tenn.	Lat 35°14'51", long 87°46'03", Wayne County, at bridge on State Highway 13, 5.0 miles south of Waynesboro.	4.88	1955-57, 1960-72	1- 2-72	3.54	(†)
03604070	Coon Creek tributary near Hohenwald, Tenn.	Lat 35°34'07", long 87°40'02", Perry County, at culvert under State Highway 20, 7 miles northwest of Hohenwald.	.51	1967-72	7-16-72	3.70	(†)
03604080	Hugh Hollow Branch near Hohenwald, Tenn.	Lat 35°34'59", long 87°40'36", Perry County, at culvert under State Highway 20, 8 miles northwest of Hohenwald.	1.52	1967-72	7-16-72	3.15	(†)
03604090	Coon Creek above Chop Hollow near Hohenwald, Tenn.	Lat 35°35'19", long 87°41'09", Perry County, at bridge on State Highway 20, 9 miles northwest of Hohenwald.	6.02	1967-72	7-16-72	4.50	(†)
03604200	Cane Creek at Farmers Exchange, Tenn.	Lat 35°38'53", long 87°39'39", Hickman County, at county road bridge 0.5 mile north of Farmers Exchange.	45.1	1955-72	7-16-72	7.05	(†)
03605700	Deer Creek tributary near Waverly, Tenn.	Lat 36°10'20", long 87°44'40", Humphreys County, at culvert under State Highway 13 in Smith Hollow, 8.0 miles northeast of Waverly.	1.04	1955-72	1-28-72	4.87	(†)
		Obion River basin					
07025220	Cane Creek near Martin, Tenn.	Lat 36°19'36", long 88°51'05", Weakley County, at bridge on U.S. Highway 45-E, 1.2 miles south of Martin.	6.79	1955-72	1972	(a)	(†)
07025225	Cane Creek tributary near Martin, Tenn.	Lat 36°18'42", long 88°50'50", Weakley County, at culvert under U.S. Highway 45-E, 2.3 miles south of Martin.	.76	1955-72	1972	(a)	(†)
07028450	Parker Branch near Trenton, Tenn.	Lat 35°55'59", long 88°53'47", Gibson County, at county road bridge, 3.6 miles southeast of Trenton.	2.85	1967-72	7-14-72	13.61	(†)

See footnotes at end of table, p. 152.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Obion River basin--Continued					
07028540	Cain Creek at Fruitland, Tenn.	Lat 35°53'44", long 88°55'37", Gibson County, at county road bridge, 0.3 mile east of junction of county road and U.S. Highway 45-W, at Fruitland.	1.67	1967-72	7-16-72	10.35	(†)
07028560	Cain Creek near Fruitland, Tenn.	Lat 35°54'56", long 88°56'19", Gibson County, at culvert under U.S. Highway 45-W, 1.6 miles north of Fruitland.	6.17	1967-72	7-16-72	12.34	1,940
07028600	Cain Creek tributary near Trenton, Tenn.	Lat 35°56'17", long 88°56'27", Gibson County, at culvert under U.S. Highway 45-W, 2.9 miles south of square in Trenton.	.95	1955-57, 1959-72	7-16-72	5.66	385
07028700	Cain Creek near Trenton, Tenn.	Lat 35°57'56", long 88°57'14", Gibson County, at bridge on State Highway 54, 1.6 miles southwest of Trenton.	14.4	1954-72	7-16-72	11.51	2,360
07028900	Middle Fork Forked Deer River near Spring Creek, Tenn.	Lat 35°48'37", long 88°37'03", Carroll County, at bridge on U.S. Highway 70, 0.7 mile downstream from Griffin Creek and 4.6 miles northeast of town of Spring Creek.	88.2	1954-57, 1959-72	7-16-72	9.15	2,350
07028930	Turkey Creek at Medina, Tenn.	Lat 35°48'26", long 88°48'07", Gibson County, at bridge on State Highway 152, 1.6 miles west of junction of said highway and U.S. Highway 45-E at Medina.	4.75	1967-72	7-16-72	14.56	(†)
07028935	Turkey Creek tributary near Medina, Tenn.	Lat 35°47'34", long 88°47'26", Madison County, at culvert under U.S. Highway 45-E, 1.0 mile southwest of junction of said highway and State Highway 152 at Medina.	1.08	1967-72	7-16-72	16.66	(†)
07028940	Turkey Creek near Medina, Tenn.	Lat 35°47'39", long 88°48'37", Gibson County, at county road (Lewis Road) bridge, 1.7 miles southwest of Medina.	7.87	1967-72	7-16-72	15.98	(†)
07028950	Turkey Creek at Fairview, Tenn.	Lat 35°46'07", long 88°49'59", Madison County, at bridge on U.S. Highway 45-E, 0.6 mile northeast of Fairview.	13.3	1967-72	7-16-72	15.42	(†)
07029050	Nash Creek near Tigrett, Tenn.	Lat 35°57'38", long 89°17'07", Dyer County, at bridge on State Highway 20, 2.3 miles west of Tigrett.	7.23	1955-72	7-16-72	10.78	(†)
07029090	Lewis Creek near Dyersburg, Tenn.	Lat 36°03'14", long 89°21'42", Dyer County, at bridge on U.S. Highway 51, 2.1 miles northeast of square in Dyersburg.	25.5	1955-72	7-16-72	18.30	(†)
		Hatchie River basin					
07029370	Cypress Creek at Selmer, Tenn.	Lat 35°10'05", long 88°35'22", McNairy County, at bridge on U.S. Highways 45 and 64 at Selmer, 0.2 mile upstream from Crooked Creek.	44.1	1954-72	7-16-72	11.46	(†)
07029420	Crystal Spring Branch Cypress Creek near Middleton, Tenn.	Lat 35°02'31", long 88°53'43", Hardeman County, at bridge on State Highway 57, 1.5 miles south of Middleton.	1.09	1955-72	4-29-72	7.58	(†)
		Loosahatchie River basin					
07030270	Clear Creek near Arlington, Tenn.h/	Lat 35°16'20", long 89°42'17", Shelby County, at bridge on U.S. Highways 70 and 79, 3.0 miles southwest of Arlington.	60.5	1954-56, 1959-72	4-29-72	14.46	3,250

† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Peak stage did not reach bottom of gage.
b Published as Bybee Branch prior to 1961.
c Furnished by Corps of Engineers, Nashville District.
d Published as at Dunham Springs Road prior to 1969.
e Published as West Fork prior to 1966.
f Revised.
g Includes 2.10 sq mi without surface drainage.
h Published as Cypress Creek prior to 1968.

Discharge measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Cumberland River basin						
Chambers Spring Branch	Sulphur Fork Red River	Lat 36°32'35", long 87°03'39", Robertson County, at county road bridge, 1.3 miles upstream from mouth and 2.6 miles south of Adams, Tenn. (03435990).	2.40	-	9-21-72	0
Tennessee River basin						
Cripple Creek	Pigeon River	Lat 35°49'09", long 83°08'00", Cocke County, 0.7 mile east-northeast of Hartford, Tenn., and at mile 0.8. (03461010).	4.65	-	4-12-72	†2,170
Nolichucky River	French Broad River	Lat 36°07'24", long 82°26'37", Unicoi County, at bridge on U.S. 19-W and 23, about 2 miles southwest of Erwin, Tenn., and at mile 95.9. (03464650).	639	1966	12- 6-71 9-26-72	1,410 *467
South Indian Creek	Nolichucky River	Lat 36°07'38", long 82°26'45", Unicoi County, 200 ft above mouth, 2.0 miles southwest of Erwin, Tenn. (03464815).	81.0	-	12- 6-71 6-14-72 9-26-72	124 *60 *18
Martin Creek	Martin Creek	Lat 36°08'01", long 82°25'55", Unicoi County, 300 ft above mouth, 1.2 miles southwest of Erwin, Tenn. (03464915).	6.32	-	12- 6-71 6-14-72 9-26-72	*8.3 *5.5 *4.3
North Indian Creek	Nolichucky River	Lat 36°10'35", long 82°17'36", Unicoi County, 900 ft upstream from Rocky Branch, 3.4 miles southeast of Unicoi, Tenn. (03465000).	15.9	1944-57‡, a1959-72	6-14-72 9-27-72	12 *4.2
Webb Creek	Little Pigeon River	Lat 35°45'39", long 83°21'20", Sevier County, just downstream from Darky Branch, 3.0 miles above mouth, 3 miles east of Pittman Center, Tenn. (03469112).	11.2	-	6- 6-72	*9.7
Clark Branch tributary	Clark Branch to Reedy Creek	Lat 36°34'21", long 82°29'44", Sullivan County, at Cherokee Rod & Gun Club, 800 ft above dam, 1.3 miles north of U.S. Highway 11-E, 3.8 miles northeast of Kingsport, Tenn. (03487558).	.45	-	6- 6-72 9-25-72	*.17 *.07
Clift Creek	Holston River	Lat 36°08'48", long 83°42'44", Knox County, 20 ft downstream from U.S. Highway 11-E, 1.5 miles north of Trentville, Tenn. (03494955).	-	-	12-16-71 6- 6-72	*2.0 *2.2
Lyon Creek	....do.....	Lat 36°02'52", long 83°43'25", Knox County, 800 ft above mouth, near Johnson cemetery, 1.4 miles north of Trentville, Tenn. (03494965).	6.84	-	6- 6-72	*5.8
Beaver Creek	Clinch River	Lat 36°03'31", long 83°58'25", Knox County, at bridge on Dry Gap Road, 500 ft upstream from unnamed tributary, 2.5 miles northeast of Dante, Tenn. (03535187).	36.4	-	6- 5-72	*18
Goodfield	Tennessee River	Lat 35°29'34", long 84°49'55", Meigs County, 250 ft downstream from Decatur Creek, 2.8 miles southeast of Decatur, and 1.7 miles northwest of Goodfield, Tenn. (03544220).	-	1970	11- 1-71 6- 6-72 9- 1-72	6.0 *8.8 *2.4
Culpepper Branch	Conasauga Creek to Hiwassee River	Lat 35°16'12", long 84°32'47", McMinn County, at bridge on Highway 411, 4.0 miles south of Etowah, Tenn. (03557160).	-	-	6- 6-72 8-31-72	*1.6 *.38
Dancing Creek	Middle Creek to Chestuee Creek to Hiwassee River	Lat 35°31'09", long 84°25'17", Monroe County, 50 ft below confluence of three tributaries, 60 ft below county road bridge, 1.8 miles southeast of Christianburg, Tenn. (03565130).	2.90	1971	12- 2-71 5- 2-72 6- 6-72	*.65 *2.4 *1.6
Liberty Branch	North Mouse Creek to Hiwassee River	Lat 35°30'03", long 84°36'49", McMinn County, at Interstate 75 bridge, near Niota, Tenn. (03566120).	-	-	6- 6-72 8-31-72	*.23 *.07

‡ Operated as a continuous-record gaging station.
a Operated as a crest-stage station.

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Tennessee River basin--Continued						
Murrell Branch	Elk River	Lat 35°11'32", long 86°16'46", Franklin County, 500 ft upstream from mouth, 3.6 miles north of Lexie Crossroads, 9.5 miles west of Winchester, Tenn. (03580749).	3.91	-	9- 1-71 9- 1-71 11-22-71 11-22-71 11-22-71 11-23-71 11-23-71 5-16-72	b26 b27 b19 b19 b19 b18 b18 b21
Shipman Creek	Duck River	Lat 35°24'12", long 86°16'36", Moore County, 100 ft downstream from Ledfords Mill, 3.5 miles southwest of Normandy, Tenn. (03596543).	-	-	9-12-72	*2.3
Do.....	....do.....	Lat 35°25'10", long 86°17'20", Bedford County, 1,000 ft upstream from Nut Cave Spring, 2.8 miles southwest of Normandy, Tenn. (03596545).	-	1969	5-15-69 9-12-72	c.29 *1.0
Do.....	....do.....	Lat 35°25'37", long 86°17'42", Bedford County, 0.2 mile below Nut Cave Spring, about 100 ft above Renegar Branch, 2.7 miles southwest of Normandy, Tenn. (03596547).	-	1969	5-15-69	c5.0
Garrison Fork Creek	....do.....	Lat 35°30'38", long 86°19'20", Bedford County, at Louisville and Nashville Railroad crossing, 1.2 miles south of Wartrace, Tenn. (03597220).	-	-	9-12-72	*6.6
Fountain Creek	....do.....	Lat 35°32'41", long 86°57'55", Maury County, at Fountain Heights, Tenn., 200 ft downstream from State Highway 50, 400 ft downstream from mill dam, and at mile 2.4. (03599452).	78.5	-	8-23-72	1.5
Silver Creek	Fountain Creek	Lat 35°32'12", long 86°57'13", Maury County, 0.5 mile downstream from county road bridge, 1.0 mile northeast of Fountain Heights, Tenn., and at mile 0.3. (03599454).	15.0	-	8-23-72	.52
Goose Creek	Duck River	Lat 35°34'38", long 86°59'23", Maury County, 150 ft downstream from Blue Spring, 2.4 miles north of Glendale, Tenn. (03599457).	4.18	-	8-23-72	.01
Duck River	Tennessee River	Lat 35°35'52", long 86°57'28", Maury County, at Sowell Mill Bridge, 5 miles east of Columbia, Tenn., and at mile 141.1. (03599460).	1,176	1925	8-23-72	399
Big Bigby Creek	Duck River	Lat 35°32'43", long 87°14'05", Maury County, at Needmore bridge, 1.2 miles downstream from West Fork and 1.7 miles west of Mount Pleasant, Tenn. (03601100).	48.3	1969	8-23-72	12
Mississippi River basin						
Horn Lake Cutoff	Horn Lake Pass	Lat 35°00'59", long 90°08'09", Shelby County, below sewage disposal pond outfall, 1,000 ft upstream from pumping station and 1.9 miles northwest of Goodman, Tenn. (07032290).	12.5	-	8-11-72 9- 8-72	11 11
Horn Lake Creek	Horn Lake Cutoff	Lat 34°59'57", long 90°07'07", Shelby County, at U.S. Highway 61 bridge, at Goodman, Tenn., and 0.9 mile southwest of intersection of Holmes Road and U.S. Highway 61. (07032310).	49.4	1953, 1955-56	8-11-72 9- 8-72	3.0 2.4

b Flow included leakage from Tims Ford Lake.
c Not previously published.

West Fork Stones River seepage investigations--new Tennessee Highway 99 bridge to USGS gage 03428500 near Smyrna, Tenn.

Discharge measurements were made Oct. 29, and Nov. 3, 4, 1971, on the West Fork Stones River and tributaries to study river gains and losses prior to selecting sites for two new gaging stations and one water quality monitor station. Both sets of measurements were made during a period of base flow. Tributary flow was considered a contribution and not a gain.

West Fork Stones River mile	Stream	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	West Fork Stones River Gain or Loss
				Oct. 29, 1971		
21.0	West Fork Stones River	Former gaging station near Murfreesboro (03428000).	128	13.2	-	-
16.2	Lytle Creek	Lat 35°51'15", long 86°24'15", Rutherford County, 500 ft upstream from mouth, 1.2 miles northwest of courthouse in Murfreesboro (03428060).	26.2	1.4	-	-
16.1	West Fork Stones River	Lat 35°51'25", long 85°24'44", Rutherford County, at county road bridge on Manson Pike at city limits of Murfreesboro (03428070).	165	13.3	-	+0.1
15.4	....do.....	Lat 35°52'04", long 86°24'52", Rutherford County, 1,000 ft downstream from Broad Street sewage plant in Murfreesboro (03428100).	165	18.0	-	+4.7
12.2	Unnamed tributary	Lat 35°53'20", long 86°26'08", Rutherford County, at culvert on U.S. Highways 41 and 70-S, 600 ft downstream from quarry outfall, and 3.8 miles northwest of the courthouse in Murfreesboro (03428132).	-	.51	-	-
11.5	West Fork Stones River	Lat 35°53'36", long 86°25'32", Rutherford County, 100 ft downstream from bridge at new sewage treatment plant, 1,000 ft upstream from Sinking Creek at Murfreesboro (03428180).	170	25.0	-	+7.0
7.9	Overall Creek	Lat 35°54'56", long 86°27'35", Rutherford County, at U.S. Highway 41 and 70-S bridge, 5.7 miles southeast of Smyrna (03428410).	51.3	0	-	-
6.4	West Fork Stones River	Gaging station near Smyrna (03428500).	237	50.0*	-	+25.0
		Overall net gain or loss				+36.8
				Nov. 3, 1971		
12.2	Outfall from quarry sump pumps	Lat 35°53'16", long 86°26'15", Rutherford County, at outfall from quarry 600 ft upstream from culvert on U.S. Highway 41 and 70-S, and 3.8 miles northwest of the courthouse in Murfreesboro (03428130).	-	2.8	-	-
12.2	Unnamed tributary	Lat 35°53'20", long 86°26'08", Rutherford County, at culvert on U.S. Highways 41 and 70-S, 600 ft downstream from quarry outfall, and 3.8 miles northwest of the courthouse in Murfreesboro (03428132).	-	.06	-2.74	-
11.5	West Fork Stones River	Lat 35°53'36", long 86°25'32", Rutherford County, 100 ft downstream from bridge at new sewage treatment plant, 1,000 ft upstream from Sinking Creek at Murfreesboro (03428180).	170	19.6	-	-
11.2	Sinking Creek	Lat 35°54'05", long 86°25'21", Rutherford County, at culvert on Thompson Lane, 200 ft upstream from mouth, at Murfreesboro (03428190).	5.85	2.6	-	-
8.4	West Fork Stones River	Lat 35°55'33", long 86°26'54", Rutherford County, 0.5 mile upstream from Overall Creek, and 5.6 miles southeast of Smyrna (03428210).	180	19.9	-	+.3
7.9	Overall Creek	Lat 35°54'56", long 86°27'35", Rutherford County, at U.S. Highways 41 and 70-S bridge, 5.7 miles southeast of Smyrna (03428410).	51.3	0	-	-
6.6	Unnamed tributary	Lat 35°56'10", long 86°27'59", Rutherford County, at bridge on Florence Road, 700 ft upstream from mouth, 4.2 miles southeast of Smyrna (03428490).	2.58	0	-	-
6.4	West Fork Stones River	Gaging station near Smyrna (03428500).	237	27.3	-	+7.4
		Overall net gain or loss				+7.7

* Discharge computed from stage records.

West Fork Stones River seepage investigations--new Tennessee Highway 99 bridge to USGS gage 03428500 near Smyrna, Tenn.--Continued

West Fork Stones River mile	Stream	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second		
				Meas. disch.	Tributary Gain or Loss	West Fork Stones River Gain or Loss
				Nov. 4, 1971		
21.0	West Fork Stones River	Former gaging station near Murfreesboro (03428000).	128	6.4	-	-
6.4	....do.....	Gaging station near Smyrna (03428500).	237	28.0*	-	+21.6
		Overall net gain or loss				+21.6

* Discharge computed from stage records.

Special study in Elk River basin - Tims Ford Dam to Prospect, Tenn.

During the period Nov. 22-24, 1971, a series of measurements were made at several sections on Elk River between Tims Ford Dam and Prospect, Tenn., and on major Elk River tributaries between those points, to study gain or loss in flow during controlled releases from Tims Ford Lake. Two release levels were measured, and results of measurements are shown in the following tables.

Site Number	Stream name and location	Elk River mile[1]	Drainage area, sq mi: at site	Drainage area, sq mi: at mouth	Drainage area, sq mi: Along Elk River	Date	Discharge, in cfs: Measured	Discharge, in cfs: at mouth	Discharge, in cfs: Along Elk River
	Low discharge release from Tims Ford Lake								
03580750	Elk River below Tims Ford Dam, Tenn. (see gaging station)	133.0	534			11-22-71 11-22-71 11-22-71 Ave.	520 496 519 512		
03580800	Beans Creek near Lexie Crossroads, Tenn. (Former low-flow site). Lat 35°07'18", long 86°18'20", Franklin County, at county road bridge 1.8 miles southwest of Lexie Crossroads, 2.0 miles northeast of Shady Grove, and at mile 1.3.	(120.1)	89.7	91.9		11-22-71 11-22-71 Ave.	18.0 17.8 17.9	18.3[2]	
03580890	Elk River near Smithland, Tenn. Lat 35°08'19", long 86°23'00", Lincoln County, at Shiloh Bridge, 1.2 miles north of Smithland, 2.4 miles upstream from Shelton Creek, 5.6 miles northeast of Flintville, and at mile 112.5.	112.5	671		137	11-22-71 11-22-71 11-22-71 Ave.	639 638 629 635	27.3[3]	+123
03581600	Mulberry Creek near Mulberry, Tenn. Lat 35°10'31", long 86°28'13", Lincoln County, at bridge on Providence Road, 2.5 miles south of Mulberry, and at mile 1.0.	(101.7)	98.6	99.1		11-23-71 11-23-71 Ave.	8.94 8.60 8.77	8.81[2]	
03582000	Elk River above Fayetteville, Tenn. (See gaging station)	93.9	827		156	11-22-71 11-22-71 11-22-71 Ave.	579 583 617 593	13.9[3]	- 42
	Cumulative:		188.3 (measured)	191.0 (mouth)	293			41.2	+ 81
03582600	Cane Creek near Fayetteville, Tenn. Lat 35°09'30", long 86°36'33", Lincoln County, at U. S. Highway 64 bridge, 2.2 miles west of intersection of U. S. Highways 64, 231, and 431 in Fayetteville, and at mile 0.6.	(86.8)	106	106		11-23-71 11-23-71 11-23-71 11-23-71 Ave.	4.93 4.97 4.67 4.64 4.80	4.80[2]	
03582630	Elk River at Harms, Tenn. Lat 35°08'44", long 86°39'30", Lincoln County, at county road bridge at Harms, 4.5 miles west of Fayetteville, and at mile 76.3.	76.3	1,023		196	11-22-71 11-22-71 Ave.	621 622 622	8.88[3]	+ 29
	Cumulative:		294.3 (measured)	297.0 (mouth)	489			50.1	+110
03582670	Swan Creek near Boonshill, Tenn. Lat 35°09'26", long 86°43'01", Lincoln County, at county road bridge at East Cyruston 4.0 miles southeast of Boonshill, and at mile 1.1.	(67.7)	49.0	50.1		11-22-71 11-22-71 Ave.	1.33 1.37 1.35	1.38[2]	
03582690	Elk River at Coldwater, Tenn. Lat 35°05'57", long 86°44'34", Lincoln County, at Hobbs Bridge, 1.0 miles northwest of Coldwater, and at mile 64.0.	64.0	1,105		82	11-23-71 11-23-71 Ave.	616 608 612	2.26[3]	- 10
	Cumulative:		343.3 (measured)	347.1 (mouth)	571			52.4	+100
03583230	Bradshaw Creek at Dellrose, Tenn. Lat 35°06'39", long 86°48'23", Lincoln County, at county road bridge 0.3 mile southwest of Dellrose, and at mile 1.3.	(56.7)	68.2	70.2		11-22-71 11-22-71 Ave.	4.60 4.63 4.62	4.75[2] 8.32[3]	

[1] For tributary streams, Elk River mile at mouth of tributary.

[2] Flow at stream mouth, based on drainage area relationship.

[3] Total flow between points on Elk River, based on drainage area and tributary measurement.

Special study in Elk River basin - Tims Ford Dam to Prospect, Tenn.--Continued

Site Number	Stream name and location	Elk River mile[1]	Drainage area, sq mi: at site	Drainage area, sq mi: at mouth	Drainage area, sq mi: Along Elk River	Date	Discharge, in cfs: Measured	Discharge, in cfs: at mouth	Discharge, in cfs: Along Elk River
	Low discharge release from Tims Ford Lake								
03583250	Indian Creek near Elkton, Tenn. Lat 35°05'20", long 86°52'17", Giles County, at county road bridge, 2.8 miles northeast of Elkton, and at mile 0.9.	(52.3)	25.8	26.4		11-22-71 11-22-71 Ave.	1.62 1.55 1.58	1.62[2] (2.84)[3]	
03583270	Elk River at Elkton, Tenn. Lat 35°02'50", long 86°53'17", Giles County, at bridge on U. S. Highway 31 at Elkton, and at mile 48.6.	48.6	1,274		169	11-23-71 11-23-71 Ave.	696 679 688	11.2[3]	+ 76
	Cumulative:		437.3 (measured)	443.7 (mouth)	740			63.6	+176
03584000	Richland Creek near Pulaski, Tenn. (See gaging station)	(42.6)	366	488		11-22-71 11-22-71 Ave.	97.1 96.1 96.6	129[2]	
03584400	Richland Creek near Elkton, Tenn. Lat 35°02'45", long 86°56'59", Giles County, at county road bridge 3.5 miles west of Elkton, and at mile 2.2.	(42.6)	485	488		11-22-71 11-22-71 Ave.	119 124 122	123[2]	
03584500	Elk River near Prospect, Tenn. (See gaging station)	41.5	1,784		510	11-23-71 11-23-71 Ave.	741 755 748	130[3]	+ 60
	Cumulative:		922.3 (measured)	931.7 (mouth)	1,250			193.6	+236
	High discharge release from Tims Ford Lake								
03580750						11-23-71 11-23-71 11-23-71 Ave.	1,560 1,540 1,510 1,540		
03580890						11-23-71 11-23-71 11-23-71 Ave.	1,560 1,610 1,590 1,590	27.3[4]	+ 50
03582000						11-24-71 11-24-71 Ave.	1,700 1,700 1,700	13.9[4]	+110
				Cumulative:				41.2	+160
03582630						11-24-71 11-24-71 Ave.	1,640 1,680 1,660	8.88[4]	- 40
				Cumulative:				50.1	+120
03582690						11-24-71 11-24-71 Ave.	1,620 1,610 1,620	2.26[4]	- 40
				Cumulative:				52.4	+ 80
03583270						11-24-71 11-24-71 Ave.	1,770 1,760 1,760	11.2[4]	+140
				Cumulative:				63.6	+220
03584500						11-24-71 11-24-71 Ave.	1,840 1,810 1,820	130[4]	+ 60
				Cumulative:				193.6	+280

Based on both levels of flow from Tims Ford Lake, measured increase in flow along Elk River from Tims Ford Dam to Prospect was 258 (± 22) cfs. Computed inflow was 194 cfs.

[1] For tributary streams, Elk River mile at mouth of tributary.

[2] Flow at stream mouth, based on drainage area relationship.

[3] Total flow between points on Elk River, based on drainage area and tributary measurement.

[4] From measurements made during low-discharge release from Tims Ford Lake, previously listed.

Duck River seepage investigations--Duck River below Manchester to near Shelbyville, Tenn.

Discharge measurements were made Sept. 8, 1972, on the Duck River and tributaries to study river gains and losses. The reach is 132.6 miles in length and extends from the gaging station Duck River below Manchester (03596000) to the gaging station Duck River at Columbia (03599500). The measurements were made during a period of base flow. Tributary flow was considered a contribution and not a gain; diversion was considered a deduction and not a loss. Seepage runs on various parts of their reach of river have been made on Sept. 29, 1949, Nov. 4, 1953, and Oct. 8, 1970.

Duck River mile	Stream	Location	Discharge, in cubic feet per second			
			Drainage Area (sq mi)	Meas. disch.	Tributary Gain or Loss	Duck River Gain or Loss
265.4	Duck River	Gaging station below Manchester (03596500).	107	29.7	-	-
258.5	....do.....	Lat 35°26'15", long 86°09'57", Coffee County, 500 ft above bridge, 4 miles north of Tullahoma (03596050).	120	39.2	-	+9.5
258.4	Crumpton Creek	Lat 35°26'11", long 86°09'57", Coffee County, just above mouth, 4 miles north of Tullahoma (03596130).	30.6	19.6	-	-
252.1	Duck River tributary	Lat 35°27'48", long 86°12'51", Coffee County, near mouth 2.6 miles east of Normandy (03596350).	-	0	-	-
251.2	Duck River	Lat 35°28'04", long 86°13'04", Coffee County, below bridge at Riley Creek, 5.5 miles north of Tullahoma (03596400).	179	76.6	-	+37.4
251.2	Fuller Branch	Lat 35°28'06", long 86°13'04", Coffee County, at bridge at mouth, at Riley Creek, 5.5 miles north of Tullahoma (03596410).	.89	<1	-	-
250.9	Riley Creek	Lat 35°28'17", long 86°13'11", Coffee County, at Riley Creek, 2.2 miles northeast of Normandy (03596420).	11.2	2.96	-	-
249.5	Duck River tributary No. 2	Lat 35°28'25", long 86°14'18", Coffee County, beside Boyd Branch Road, 2.0 miles northeast of Normandy (03596440).	.47	.063	-	-
249.5	Boyd Branch	Lat 35°28'30", long 86°14'23", Coffee County, 2.0 miles northeast of Normandy (03596450).	.80	.024	-	-
248.3	Duck River	Lat 35°27'39", long 86°14'43", Coffee-Bedford Counties, at bridge 0.8 mile northeast of Normandy (03596470).	196	73.6	-	-3.0
248.2	Duck River tributary No. 3	Lat 35°27'35", long 86°14'43", Coffee County, at bridge 0.9 mile northeast of Normandy (03596472).	.53	0	-	-
247.2	Norman Creek	Lat 35°27'13", long 86°15'14", Bedford County, at Normandy, 300 ft upstream from mouth (03596490).	9.9	7.46	-	-
247.1	Duck River	Gaging station at Normandy (03596500).	208	87.3	-	+13.7
246.1	Duck River tributary No. 4	Lat 35°27'53", long 86°15'40", Bedford County, at mouth, 0.8 mile north of Normandy (03596509).	.18	0	-	-
246.1	Duck River	Lat 35°27'55", long 86°15'41", Bedford County, 0.9 mile north of Normandy (03596510).	209	81.7	-	-5.6
245.0	....do.....	Lat 35°28'32", long 86°16'23", Bedford County, at Cortners Mill, 1.8 miles north-northwest of Normandy (03596520).	209	82.9	-	+1.2
244.7	Doddy Creek tributary	Lat 35°28'42", long 86°15'43", Bedford County, at bridge, 1.7 miles north of Normandy (03596530).	.50	.028	-	-
243.1	Duck River	Lat 35°27'57", long 86°17'46", Bedford County, at Dement Bridge, 0.6 mile northeast of Roseville, 1.8 miles southeast of Haley (03596540).	221	86.9	-	+4.0
216.2	....do.....	Gaging station near Shelbyville (03598000).	481	111	-	+24.1
194.5	....do.....	Lat 35°33'37", long 86°38'21", Bedford County, at downstream end of island, 5.8 miles northeast of Farmington (03598193).	632	118	-	+7.0
192.1	....do.....	Lat 35°34'50", long 86°38'30", Bedford-Marshall Counties, at Hopkins Bridge, 4.0 miles southeast of Chapel Hill (03598195).	635	124	-	+6.0
191.9	North Fork Creek	Lat 35°35'06", long 86°35'45", Bedford County, upstream from bridge, 0.8 mile northwest of Poplins Crossroads (03598250).	71.9	1.15	-	-

Duck River seepage investigations--Duck River below Manchester to near Shelbyville, Tenn.--Continued

Duck River mile	Stream	Location	Discharge, in cubic feet per second: Drainage Area (sq mi)	Meas. disch.	Tributary Gain or Loss	Duck River Gain or Loss
189.5	Wilson Creek	Lat 35°35'59", long 86°39'33", Marshall County, at county bridge, 2.2 miles east of Wilhoit Mills and 2.4 miles southeast of Chapel Hill (03598260).	15.5	0.17	-	-
187.5	Duck River tributary No. 5	Lat 35°34'53", long 86°40'23", Marshall County, 2.9 miles south-southeast of Chapel Hill (03598270).	1.45	0	-	-
186.7	Spring Creek	Lat 35°36'12", long 86°44'47", Marshall County, at county bridge, 0.7 mile north of Wilhoit Mills, and 1.1 miles south of Chapel Hill.	23.7	0	-	-
186.5	Duck River	Lat 35°35'33", long 86°41'48", Marshall County, U.S. Highway 31-A bridge at Wilhoit Mills, 2.1 miles south of Chapel Hill (03598300).	761	144	-	+20
185.3	Rich Creek	Lat 35°34'10", long 86°42'10", Marshall County, U.S. Highway 31-A bridge, 3.7 miles south of Chapel Hill (03598310).	16.5	.3	-	-
185.3	....do.....	Lat 35°34'44", long 86°42'50", Marshall County, at county bridge, 3.2 miles southwest of Chapel Hill (03598320).	19.2	0	-0.3	-
180.4	Big Rock Creek tributary	Lat 35°32'32", long 86°46'18", Marshall County, at Verona Pike bridge, 0.8 mile north of Verona (03599119).	2.56	0	-	-
180.4	Big Rock Creek	Lat 35°32'40", long 86°46'18", Marshall County, beside Verona Pike, 1.0 mile north of Verona (03599120).	65.3	3.93	-	-
180.4	East Rock Creek	Lat 35°32'42", long 86°44'03", Marshall County, at ford 3.3 miles north of Farmington, at mile 4.2 (03599220).	49.0	0	-	-
180.3	Rice Branch	Lat 35°34'18", long 86°47'17", Marshall County, at county road bridge, 0.9 mile south of Milltown, and 2.9 miles south of Caney Spring (03599230).	2.49	0	-	-
180.3	....do.....	Lat 35°34'29", long 86°46'45", Marshall County, at Verona Pike bridge, 2.5 miles south of Caney Spring (03599232).	3.09	0	0	-
179.1	Duck River	Lat 35°35'10", long 86°47'11", Marshall County, at Milltown, 2.1 miles southwest of Caney Spring (03599250).	916	129	-	-15
177.2	Caney Creek	Lat 35°36'28", long 86°46'05", Marshall County, at State Highway 99 bridge, 0.3 mile west of Caney Spring (03599300).	28.9	0	-	-
172.6	Duck River	Lat 35°36'46", long 86°49'10", Marshall County, upstream from U.S. Highway 431 bridge, 3.2 miles west of Caney Spring (03599350).	956	145	-	+16
168.7	....do.....	Lat 35°36'32", long 86°51'08", Maury County, at head of Cundiff Ford Island, 5.0 miles west of Caney Spring (03599362).	961	153	-	+8
166.6	Flat Creek	Lat 35°38'32", long 86°51'15", Maury County, at State Highway 99 bridge, 1.7 miles west of Pottsville (03599403).	41.6	.19	-	-
166.6	Pumpkin Creek	Lat 35°38'34", long 86°51'33", Maury County, at State Highway 99 bridge, 2.0 miles west of Pottsville (03599404).	7.30	0	-	-
164.6	Duck River	Lat 35°37'04", long 86°51'58", Maury County, at Carpenters Bridge, 2.7 miles southwest of Pottsville (03599408).	1,016	148	-	-5
161.2	Derryberry Branch	Lat 35°36'58", long 86°54'01", Maury County, at Interstate Highway 65 bridge, 4.5 miles southwest of Pottsville (035994118).	2.69	0	-	-
159.4	Duck River	Lat 35°35'33", long 86°53'07", Maury County, at Sowell Ford, 4.7 miles southwest of Pottsville (03599415).	1,025	131	-	-17

Duck River seepage investigations--Duck River below Manchester to near Shelbyville, Tenn.--Continued

Duck River mile	Stream	Location	Discharge, in cubic feet per second: Drainage Area (sq mi)	Meas. disch.	Tributary Gain or Loss	Duck River Gain or Loss
156.5	Duck River	Lat 35°34'28", long 86°52'00", Maury County, at Leftwich bridge, 5.0 miles southwest of Pottsville (03599418).	1,028	143	-	+12
155.4	Cedar Creek	Lat 35°33'26", long 86°51'59", Maury County, at ford 1 mile south of Leftwich, and 3.0 miles northwest of Berlin (03599422).	16.5	0	-	-
152.6	Duck River	Lat 35°33'52", long 86°53'38", Maury County, 1.6 miles northeast of Philadelphia (03599423).	1,051	135	-	-8
150.4	....do.....	Lat 35°34'21", long 86°55'20", Maury County, at Howard Bridge 2.3 miles northeast of Hill (03599425).	1,056	137	-	+2
148.6	....do.....	Lat 35°33'41", long 86°56'18", Maury County, at Still-house Hole, 1.0 mile north of Hill (03599426).	1,058	144	-	+7
147.3	Negro Creek	Lat 35°34'55", long 86°56'23", Maury County, 100 ft downstream from county road bridge, and 4.0 miles northeast of Glendale (03599427).	4.31	.04	-	-
145.9	Fountain Creek	Lat 35°31'05", long 86°56'31", Maury County, at Edmondson Bridge, 2.3 miles southeast of Fountain Heights and 3.0 miles southeast of Glendale (03599450).	74.0	2.83	-	-
145.9	Fountain Creek tributary	Lat 35°32'34", long 86°57'37", Maury County, at State Highway 50 bridge, 0.4 mile east of Fountain Heights (03599451).	.21	0	-	-
145.9	Fountain Creek	Lat 35°32'41", long 86°57'55", Maury County, at State Highway 50 bridge at Fountain Heights (03599452).	78.5	4.24	+1.41	-
145.9	Silver Creek	Lat 35°33'12", long 86°57'13", Maury County, at county road bridge, 1.0 mile northeast of Fountain Heights (03599454).	15.0	.06	-	-
145.9	Fountain Creek	Lat 35°33'51", long 86°57'55", Maury County, at first bridge upstream from mouth, 2.2 miles northeast of Glendale (03599455).	103	9.04	+4.80	-
144.0	Goose Creek	Lat 35°34'11", long 86°59'09", Maury County, at county road bridge above Blue Spring, 2.0 miles northwest of Fountain Heights (03599456).	3.43	0	-	-
144.0	....do.....	Lat 35°34'38", long 86°59'23", Maury County, 150 ft below Blue Spring, 2.4 miles north of Glendale (03599457).	4.18	.09	+.09	-
144.0	Goose Creek tributary	Lat 35°34'48", long 86°59'15", Maury County, at mouth, 2.7 miles north of Glendale (03599458).	.40	0	-	-
141.1	Duck River	Lat 35°35'52", long 86°57'28", Maury County, at Sowell Mill Bridge, 5 miles east of Columbia (03599460).	1,176	150	-	+6
136.5	....do.....	Lat 35°36'14", long 87°00'08", Maury County, at bridge on Iron Bridge Road, 1.8 miles east of Columbia (03599470).	1,181	*230	-	-
134.8	Bear Creek	Lat 35°38'07", long 87°00'20", Maury County, at first bridge upstream from mouth, 2 miles northeast of Columbia (03599480).	11.6	.53	-	-
133.8	Lytle Creek	Lat 35°37'16", long 87°01'02", Maury County, at Columbia, 500 ft downstream from first bridge above mouth (03599490).	10.2	.39	-	-
132.8	Duck River	Gaging station at Columbia (03599500).	1,208	112	-	-38

* Measurement poor; made in deep pool. Not used to compute gain or loss.

PART 2. WATER QUALITY RECORDS

TENNESSEE RIVER BASIN

03470000 LITTLE PIGEON RIVER AT SEVIERVILLE, TENN.

LOCATION.--Lat 35°52'42", long 83°34'40", Sevier County, temperature recorder at gaging station, on left bank, 0.2 mile downstream from West Prong Little Pigeon River, 0.6 mile north of intersection of U. S. Highway 441 and State Highway 66 in Sevierville, and at mile 4.4.

DRAINAGE AREA.--353 sq mi.

PERIOD OF RECORD.--Water temperatures: November 1968 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 31.5°C June 15; minimum, 1.5°C Feb. 20.

EXTREMES, 1968-72.--Water temperatures: Maximum, 34.0°C July 5, 19, 1969; minimum, freezing point, Jan. 7-10, 1969, Jan. 20, 21, 1971.

REMARKS.--Miscellaneous samples of chemical data published for the water year 1968, 1970.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.5	21.5	18.5	16.5	8.5	5.5	9.5	8.0	4.5	4.0	7.0	6.5
2	25.5	22.0	19.0	17.0	6.5	5.0	9.0	8.0	4.5	4.0	8.0	7.0
3	26.5	21.0	18.5	15.0	5.5	5.0	9.0	8.5	5.0	4.0	8.0	6.5
4	20.5	21.0	15.5	11.0	6.5	5.5	9.0	8.0	4.5	3.5	6.5	5.5
5	23.0	21.5	11.0	9.5	7.0	6.5	9.0	8.0	3.5	3.0	6.0	5.5
6	21.5	20.0	10.5	9.5	9.5	7.0	8.0	7.0	3.0	3.0	6.5	5.5
7	21.0	18.0	11.0	9.5	10.0	9.5	7.0	6.5	3.5	3.0	6.0	6.0
8	21.0	16.0	10.0	8.0	10.5	10.0	6.5	6.5	3.5	3.0	7.0	6.0
9	17.0	16.0	8.0	8.0	10.0	10.0	8.0	6.5	3.5	3.0	8.0	7.0
10	16.5	14.5	9.5	8.0	11.5	10.0	9.5	8.0	3.5	3.0	7.0	7.0
11	19.0	13.5	10.5	8.0	13.5	11.5	10.0	9.5	4.5	3.5	7.0	7.0
12	19.5	13.5	11.0	8.0	11.5	10.0	10.0	8.0	4.5	4.5	8.5	7.0
13	13.0	14.0	13.0	9.0	11.0	10.0	10.0	9.0	4.5	4.0	10.0	8.5
14	20.0	14.0	13.5	10.0	11.0	10.5	9.5	8.5	4.5	4.0	10.5	10.0
15	18.0	14.5	14.5	11.0	13.0	10.5	8.5	5.5	4.5	4.5	10.5	10.5
16	16.5	15.0	15.0	11.0	14.0	13.0	5.5	3.0	4.5	4.5	10.5	10.0
17	18.5	16.0	15.0	11.5	13.5	10.5	3.5	3.0	4.5	4.5	10.5	10.5
18	18.5	16.5	15.0	11.5	10.5	6.5	3.0	3.0	4.5	4.5	10.5	9.5
19	19.5	16.0	12.0	11.5	6.5	5.5	4.5	3.0	4.5	2.0	10.5	9.5
20	19.0	15.5	13.0	10.0	9.0	6.0	6.0	4.5	2.0	1.5	11.5	10.5
21	17.0	16.0	10.0	9.0	9.5	9.0	8.5	6.0	2.0	2.0	11.5	11.5
22	19.0	15.5	9.5	6.0	9.5	9.0	8.5	8.5	5.0	2.0	11.5	11.5
23	15.5	15.5	6.5	5.5	9.0	8.0	8.5	8.0	5.0	4.0	11.5	11.5
24	16.5	15.5	6.0	5.5	8.5	7.0	9.5	8.5	5.0	4.0	11.5	10.5
25	16.5	16.0	7.0	5.5	10.0	8.5	9.5	8.0	6.0	5.0	11.0	10.0
26	16.0	15.5	6.5	5.0	11.0	9.5	8.0	6.0	6.5	6.0	10.5	9.5
27	16.0	15.0	6.0	5.5	11.0	10.0	6.0	5.5	6.0	5.5	10.0	10.0
28	16.5	15.0	9.0	6.0	11.0	10.5	7.0	5.5	6.0	6.0	12.0	10.0
29	18.0	15.5	10.0	7.0	11.0	10.0	7.0	6.5	6.5	6.0	13.0	12.0
30	19.0	16.0	8.5	8.0	11.0	10.0	6.5	6.0	---	---	13.5	13.0
31	17.0	16.0	---	---	11.0	9.5	6.0	5.0	---	---	13.0	12.0
MONTH	26.5	13.5	19.0	5.0	14.0	5.0	10.0	3.0	6.5	1.5	13.5	5.5

03470000 LITTLE PIGEON RIVER AT SEVIERVILLE, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.5	21.5	18.0	21.5	16.5	21.0	19.5	24.5	21.5	28.0	21.0
2	12.0	11.5	21.0	18.5	23.5	16.5	22.0	20.5	23.5	21.5	28.5	20.5
3	11.5	11.5	19.0	16.5	25.5	18.0	24.0	22.0	23.5	21.0	28.5	21.0
4	13.0	11.5	16.5	15.5	26.5	19.5	23.5	22.0	24.5	22.0	26.0	22.0
5	13.0	13.0	16.0	14.5	29.0	21.0	22.0	18.5	25.5	22.0	23.0	20.5
6	14.0	13.0	17.0	15.5	29.0	23.0	19.0	17.0	25.5	21.5	24.0	20.0
7	14.5	14.0	19.5	16.5	26.5	23.0	19.0	18.0	27.0	22.5	25.0	20.0
8	15.0	14.5	18.5	16.0	29.0	21.0	20.5	19.0	23.5	20.5	24.5	20.0
9	14.5	13.5	18.0	16.5	26.5	22.0	23.0	20.0	21.5	20.0	23.5	21.0
10	13.5	13.5	18.5	16.0	24.5	20.5	21.0	18.5	22.0	20.0	25.5	20.0
11	14.0	13.5	19.0	16.0	26.5	19.5	24.0	20.5	22.0	21.0	27.0	20.5
12	18.5	14.0	20.0	15.5	27.0	19.0	26.0	22.0	24.0	21.0	28.5	21.0
13	20.0	16.5	18.0	16.5	29.0	20.5	28.0	23.0	25.5	21.5	28.0	20.5
14	20.5	20.0	17.0	14.5	29.0	21.5	26.5	23.5	26.5	22.0	28.5	20.5
15	21.5	20.0	17.0	16.0	31.5	23.0	28.0	23.0	28.0	22.0	29.0	21.5
16	22.0	20.5	17.0	16.0	28.0	24.5	26.5	24.0	28.5	22.0	29.0	22.0
17	21.0	19.5	18.5	16.5	25.5	23.5	26.5	24.0	29.0	23.5	24.0	21.0
18	21.5	18.5	20.0	18.0	28.5	22.0	25.5	22.0	29.5	23.5	23.0	20.5
19	23.0	19.5	20.0	18.0	26.5	23.0	28.0	23.5	30.5	24.0	26.5	20.5
20	23.5	20.5	18.5	18.0	24.5	22.0	25.0	22.0	29.0	24.5	27.0	21.0
21	22.0	21.0	18.0	17.0	23.0	18.5	28.0	24.0	29.0	23.5	25.5	20.5
22	21.0	19.0	19.0	18.0	19.5	18.5	29.5	25.0	30.0	23.5	26.5	20.5
23	19.0	16.5	19.5	18.0	20.5	18.0	30.5	25.5	26.5	23.0	24.0	20.5
24	18.5	18.0	20.0	18.0	23.5	19.0	29.5	25.5	29.0	22.0	26.5	21.0
25	18.0	15.0	21.0	19.0	25.5	19.5	29.5	25.5	28.0	22.0	28.5	20.5
26	16.0	14.0	22.0	19.5	26.5	20.0	29.0	24.5	29.5	23.0	26.5	22.0
27	18.0	14.5	22.0	19.0	28.0	21.0	29.0	24.5	30.0	23.5	23.5	23.0
28	18.0	15.0	21.0	19.0	25.0	21.0	25.0	23.5	29.5	22.0	23.0	21.5
29	20.0	15.5	22.0	19.0	21.0	19.5	24.0	23.0	29.0	21.5	22.0	21.0
30	21.0	16.5	23.0	19.0	20.0	18.5	23.5	21.0	29.5	21.0	21.0	16.5
31	---	---	20.5	19.5	---	---	21.5	20.5	29.0	21.0	---	---
MONTH	23.5	11.5	23.0	14.5	31.5	16.5	30.5	17.0	30.5	20.0	29.0	16.5
YEAR	31.5	1.5										

03482100 ROAN CREEK NEAR DOEVILLE, TENN

LOCATION.--Lat 36°22'59", long 81°55'20", Johnson County, on right bank just downstream from private bridge, 300 ft upstream from Williams Island, 2.5 miles east of Doeville, and at mile 6.47.

DRAINAGE AREA.--110 sq mi.

PERIOD OF RECORD.--Water temperatures. Sept. 1971 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 27.0°C July 20; minimum, freezing point, several days during winter period.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
1	---	---	11	21.5	19.5	21	23.0	19.5
2	---	---	12	21.0	19.0	22	21.5	19.5
3	---	---	13	19.0	17.0	23	22.0	18.0
4	---	---	14	21.0	16.0	24	23.0	19.5
5	---	---	15	23.0	16.5	25	20.0	18.5
6	---	---	16	21.5	19.0	26	18.5	16.5
7	---	---	17	19.5	18.0	27	21.5	17.0
8	23.5	19.0	18	19.0	18.0	28	21.5	18.5
9	24.5	18.5	19	21.5	18.0	29	23.0	18.5
10	24.5	19.0	20	21.5	17.0	30	21.5	18.5

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	18.5	18.0	16.5	4.5	3.0	5.0	3.0	1.5	0.0	11.5	6.5
2	19.0	18.5	19.5	16.5	3.0	0.5	6.0	5.0	4.0	1.5	11.5	9.5
3	20.0	18.5	18.5	11.5	3.0	0.5	5.0	3.0	4.5	1.0	10.5	5.5
4	21.5	18.0	11.5	8.0	5.0	1.0	8.5	4.5	1.0	0.0	8.5	4.5
5	20.5	19.0	9.0	5.0	6.0	4.5	8.5	3.5	0.5	0.0	8.0	4.5
6	19.5	16.0	11.0	6.5	9.0	6.0	4.0	2.0	3.0	0.5	6.5	2.0
7	18.0	13.0	11.0	6.5	11.5	9.0	3.5	2.0	4.5	1.5	9.0	4.0
8	16.5	11.0	6.5	3.0	10.5	9.0	3.5	0.5	3.0	0.0	9.0	6.0
9	14.0	13.5	5.0	4.5	9.0	7.0	6.0	3.0	3.5	0.5	6.0	2.0
10	14.0	11.0	8.0	5.0	11.5	8.0	8.0	6.0	4.5	0.5	8.0	4.0
11	15.0	10.0	7.0	3.5	11.5	9.5	9.0	7.0	6.0	2.0	9.0	3.5
12	16.0	10.0	9.0	4.5	10.0	7.0	8.5	5.5	5.5	3.5	11.5	6.0
13	15.5	11.5	11.0	6.5	10.0	8.5	9.0	5.5	4.5	3.5	13.0	8.0
14	18.0	13.0	11.0	8.0	9.5	7.0	9.0	4.5	6.0	2.0	12.0	9.0
15	18.0	13.0	11.5	8.0	13.0	9.5	4.5	0.0	5.0	3.0	10.5	5.5
16	18.0	16.0	12.0	9.5	14.0	12.0	0.5	0.0	5.0	2.0	9.5	8.0
17	19.5	16.0	13.0	9.0	12.0	5.5	0.0	0.0	5.0	3.5	9.0	6.0
18	18.5	15.0	13.0	8.5	5.5	1.5	3.0	0.0	4.5	4.0	7.0	5.0
19	16.0	13.0	10.0	9.5	3.5	0.0	4.5	2.0	4.0	0.0	11.0	7.0
20	17.0	16.0	9.5	8.0	7.0	3.5	6.5	4.5	1.0	0.0	13.0	6.0
21	16.5	16.0	8.0	4.5	9.0	7.0	8.5	6.5	3.0	0.0	12.0	8.5
22	17.0	15.5	4.5	2.0	8.0	4.5	9.0	8.0	6.5	3.0	12.0	9.0
23	17.0	16.5	2.0	1.0	5.0	3.0	9.0	7.0	4.5	2.0	9.0	5.0
24	18.0	15.5	1.5	1.0	8.0	5.0	10.0	7.0	6.0	4.5	7.0	3.0
25	17.0	15.5	4.5	1.5	8.5	7.0	9.0	4.0	9.5	5.5	7.0	4.5
26	16.5	14.5	3.5	1.0	8.5	6.0	4.0	0.5	8.5	5.5	8.5	2.0
27	16.0	13.0	4.0	3.0	9.5	6.5	4.5	1.5	8.5	4.0	8.5	6.0
28	17.0	13.5	6.0	4.0	10.0	8.0	6.5	4.5	9.5	4.5	10.5	8.0
29	18.0	14.0	8.0	5.5	8.0	6.0	6.5	4.0	11.0	4.5	11.5	9.5
30	17.0	14.5	7.0	3.5	8.5	6.5	6.0	3.5	---	---	11.5	9.5
31	16.0	16.0	---	---	8.5	5.0	3.5	1.0	---	---	10.0	8.0
MONTH	21.5	10.0	19.5	1.0	14.0	0.0	10.0	0.0	11.0	0.0	13.0	2.0

03482100 ROAN CREEK NEAR DOEVILLE, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	7.0	18.5	13.5	15.5	11.0	21.5	15.5	21.0	17.0	22.0	17.0
2	9.5	6.0	17.0	15.5	18.0	11.0	22.0	18.5	20.5	18.5	21.5	16.0
3	11.0	4.0	16.0	14.0	19.5	13.0	21.0	18.5	22.0	18.5	21.5	18.0
4	10.5	6.0	14.5	11.5	19.5	14.5	19.5	18.0	22.0	19.5	20.5	18.5
5	10.5	4.5	15.5	9.5	21.5	17.0	19.0	15.5	23.5	19.5	19.5	17.0
6	13.0	6.5	16.0	9.5	20.0	16.0	19.0	15.0	23.0	19.5	19.5	15.5
7	11.5	10.0	17.0	11.0	22.0	16.0	20.5	14.5	23.5	20.0	19.5	15.5
8	11.0	4.5	16.5	13.5	21.5	15.5	21.0	15.5	21.5	19.5	18.5	16.0
9	9.5	2.0	15.5	13.0	21.0	18.5	20.0	16.0	21.0	19.0	21.0	18.0
10	9.5	4.5	16.5	10.5	20.0	17.0	22.0	16.0	24.0	19.5	21.0	16.0
11	9.5	8.0	16.0	10.0	19.5	13.0	23.5	18.0	21.5	20.0	21.0	15.5
12	11.0	9.0	18.0	11.0	21.0	14.0	22.0	19.0	23.5	18.5	21.0	18.0
13	14.5	9.5	15.0	13.5	19.5	16.0	23.5	19.5	24.0	19.5	21.5	17.0
14	14.5	13.0	18.5	13.0	23.0	17.0	22.0	19.5	24.0	19.0	21.0	17.0
15	16.0	11.0	17.0	13.0	23.5	18.5	22.0	18.0	24.0	20.0	22.0	19.0
16	15.5	11.0	15.0	11.0	21.0	19.5	22.0	19.5	23.5	21.0	22.0	18.5
17	14.5	10.0	15.5	11.5	21.0	16.5	24.0	20.0	23.0	20.0	20.5	18.5
18	15.5	8.5	15.5	10.5	21.5	16.0	23.0	20.5	22.0	19.5	19.0	18.0
19	16.5	9.5	15.0	12.0	20.5	18.5	25.5	20.0	21.0	18.5	21.0	18.0
20	16.5	12.0	13.5	13.0	19.5	16.5	27.0	21.0	21.0	17.0	22.0	17.0
21	16.5	11.5	16.5	13.0	16.5	14.0	26.0	23.0	21.0	16.5	20.0	15.5
22	14.0	10.0	16.5	14.0	16.0	13.0	25.5	22.0	22.0	18.0	20.0	17.0
23	15.0	8.5	18.0	13.5	14.0	11.5	25.0	21.0	21.0	18.0	20.0	16.5
24	15.0	9.5	18.5	12.0	14.5	11.5	25.5	22.0	22.0	18.0	20.5	18.0
25	12.0	6.5	19.0	13.0	19.0	11.5	25.0	22.0	23.5	19.5	21.5	16.5
26	12.0	5.5	18.0	14.0	19.0	14.0	26.5	21.5	23.5	20.0	21.0	17.0
27	14.0	6.5	18.0	11.0	20.0	15.0	25.0	21.0	23.0	19.5	20.0	19.0
28	13.5	8.5	18.0	13.0	19.0	17.0	23.0	21.0	23.0	19.5	21.0	19.0
29	15.5	12.0	18.5	14.5	20.5	16.5	21.0	19.0	23.0	18.5	20.0	18.5
30	16.5	12.0	18.0	15.5	18.5	16.5	20.5	17.0	23.0	18.0	18.5	13.0
31	---	---	17.0	14.0	---	---	20.5	16.0	21.5	18.5	---	---
MONTH	16.5	2.0	19.0	9.5	23.5	11.0	27.0	14.5	24.0	16.5	22.0	13.0
YEAR	27.0	0.0										

03484800 DOE RIVER AT HAMPTON, TENN.

LOCATION.--Lat 36°17'16", long 82°10'33", Carter County, on left bank, 500 ft above Laurel Branch, 1,300 ft downstream from old U. S. Highway 19E Bridge, at Hampton, and at mile 7.2.

DRAINAGE AREA.--100 sq mi.

PERIOD OF RECORD.--Water temperatures: April 1968 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 26.5°C July 23, 24; minimum, freezing point on many days during winter period.

EXTREMES, 1968-72.--Water temperatures: Maximum, 28.0°C Aug. 8, 1968; minimum, freezing point on many days during winter period.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	18.0	17.0	16.0	4.0	1.0	7.0	4.5	4.0	1.5	10.0	7.0
2	19.0	18.5	19.0	16.5	2.0	0.5	8.5	6.0	6.0	3.5	13.5	9.5
3	21.0	18.0	17.0	11.5	1.5	0.0	8.0	5.0	6.0	3.5	11.5	6.0
4	21.5	17.0	11.0	9.0	5.0	0.5	9.0	5.5	3.5	0.0	9.0	5.5
5	19.5	18.0	10.0	5.5	5.5	3.0	10.0	5.5	1.0	0.0	8.5	4.5
6	19.5	16.5	11.5	8.0	9.0	5.5	5.5	3.5	3.0	0.5	7.0	3.0
7	17.0	13.5	11.5	6.0	10.5	8.5	4.0	2.0	3.5	1.0	9.5	5.0
8	15.5	11.0	6.5	4.0	9.5	8.0	4.5	2.0	3.0	0.0	10.0	5.5
9	14.0	13.0	6.0	4.5	8.5	6.5	7.0	3.5	3.5	0.5	7.0	3.5
10	13.5	11.0	8.0	5.0	10.5	7.0	9.5	7.0	4.5	0.5	9.0	5.0
11	14.5	9.5	8.0	4.5	11.0	8.0	10.0	8.5	6.5	3.0	10.5	5.0
12	15.5	10.0	9.0	5.0	9.0	6.5	9.5	6.5	5.0	3.5	12.0	6.5
13	15.0	11.0	10.5	6.0	10.0	7.0	10.5	8.0	5.0	3.5	13.5	9.0
14	15.5	12.0	11.0	8.0	9.5	6.5	10.5	6.0	6.0	3.0	13.0	9.0
15	16.5	12.0	11.0	8.5	13.0	9.5	6.0	1.5	5.0	3.5	12.0	7.0
16	16.5	15.0	11.5	9.5	13.0	11.0	1.5	0.0	4.5	3.0	10.5	9.0
17	17.0	14.5	11.5	8.5	11.0	4.5	1.0	0.0	5.0	3.5	9.5	6.0
18	16.5	14.0	11.5	8.0	4.5	0.0	2.0	0.0	4.5	2.0	8.0	6.0
19	16.5	12.0	10.0	8.5	4.0	0.0	5.5	1.5	3.0	0.0	12.0	8.0
20	17.0	14.5	9.5	8.0	6.5	20.5	8.5	5.5	1.5	0.0	13.5	7.0
21	15.5	15.0	8.0	4.0	8.5	6.0	10.0	8.5	2.0	0.0	13.5	10.0
22	17.0	15.0	4.5	1.0	6.0	3.0	10.0	8.5	6.0	2.0	12.0	9.0
23	15.5	14.5	3.0	0.5	5.0	2.0	10.5	9.0	4.5	2.0	9.0	5.0
24	16.0	14.5	3.5	2.0	8.0	5.0	12.0	9.5	6.5	4.5	8.5	4.0
25	15.5	14.5	4.0	2.0	8.5	5.5	11.5	7.0	9.5	6.0	5.5	3.5
26	15.0	13.0	4.5	1.5	8.5	5.0	7.0	3.0	8.5	4.5	8.5	2.0
27	15.0	11.5	4.5	4.0	9.5	6.0	5.5	3.5	8.0	4.5	8.5	6.0
28	16.0	13.0	6.5	4.5	11.0	8.0	8.0	5.5	9.5	4.5	11.0	8.5
29	16.0	13.5	8.5	5.5	10.0	7.0	8.5	5.5	11.0	5.5	14.0	9.5
30	16.0	13.5	6.5	3.5	10.5	8.0	8.5	6.0	---	---	11.0	9.0
31	16.5	15.0	---	---	10.5	7.0	6.0	3.5	---	---	9.0	8.0
MONTH	21.5	9.5	19.0	0.5	13.0	0.0	12.0	0.0	11.0	0.0	14.0	2.0

03484800 DOE RIVER AT HAMPTON, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.0	19.0	13.0	17.0	13.0	21.5	16.5	23.0	19.5	24.0	18.0
2	10.5	8.0	18.0	15.5	19.0	12.0	22.0	18.5	23.0	20.0	24.0	17.0
3	12.0	5.0	16.0	14.0	20.5	14.0	21.0	19.0	24.5	19.5	23.0	17.0
4	11.5	8.0	14.5	12.0	20.0	15.5	20.0	18.5	24.0	20.0	20.0	18.5
5	12.0	6.0	16.0	10.0	23.5	16.5	19.0	16.0	25.0	20.5	19.0	16.5
6	14.5	8.5	16.5	10.5	20.5	16.5	19.5	15.5	23.5	19.5	19.5	16.0
7	14.0	11.5	17.0	12.0	23.0	18.0	20.0	15.0	24.5	20.0	20.5	15.5
8	13.5	8.0	15.5	14.0	21.5	16.0	21.0	15.5	24.0	20.0	18.5	15.0
9	11.0	5.0	15.0	13.0	21.0	18.0	19.5	16.5	22.0	19.0	21.0	17.0
10	11.0	6.0	16.5	11.0	19.0	15.0	22.0	16.0	24.5	19.5	21.5	15.5
11	10.5	9.5	15.0	10.5	19.5	13.0	24.0	18.0	23.5	20.0	21.5	15.5
12	13.5	10.5	18.0	11.0	20.5	13.5	23.5	18.5	24.5	19.5	21.0	16.0
13	16.5	12.0	14.5	13.0	19.5	15.5	24.5	19.0	25.0	19.5	21.0	15.5
14	16.0	15.0	18.0	13.0	23.5	17.0	24.5	19.0	25.5	19.5	21.0	16.0
15	19.0	14.0	17.0	14.0	24.5	18.0	23.5	19.0	25.0	19.0	23.0	17.0
16	18.0	14.0	17.0	13.5	20.5	19.0	23.0	19.0	25.0	20.5	21.5	17.0
17	17.0	13.0	18.0	14.0	21.5	18.5	23.0	19.0	24.0	20.5	19.5	17.0
18	18.0	11.0	18.5	13.5	22.0	18.0	24.5	19.0	24.0	20.5	18.5	17.0
19	19.5	13.0	15.5	14.0	21.5	19.0	24.5	19.5	24.5	20.0	21.0	16.5
20	19.0	14.5	15.0	13.5	20.5	16.0	26.0	20.0	25.5	20.0	23.0	16.5
21	18.0	14.5	18.0	14.0	17.0	15.5	26.0	20.5	24.5	19.0	18.0	15.0
22	15.5	13.5	17.0	14.5	15.5	14.0	26.0	21.0	25.0	19.5	19.5	15.5
23	18.0	11.0	18.0	14.0	14.5	13.0	26.5	21.0	23.5	18.5	19.0	15.0
24	15.5	13.0	19.0	13.5	15.5	13.5	26.5	21.5	24.0	19.0	20.5	16.5
25	13.0	9.5	19.5	14.0	18.5	13.5	24.5	20.5	24.0	19.5	21.5	15.5
26	14.5	8.0	19.0	15.0	19.5	15.0	26.0	20.5	24.0	20.0	20.5	16.0
27	15.5	8.5	19.0	13.5	20.5	16.0	24.0	20.0	23.5	20.0	20.0	18.0
28	14.0	10.0	19.0	14.5	18.5	17.0	21.5	20.0	24.0	19.5	21.0	18.0
29	16.0	12.0	18.5	16.0	21.0	17.0	21.5	19.5	24.5	18.5	19.0	18.0
30	16.5	13.0	20.0	16.5	18.5	17.0	21.5	19.5	24.0	18.0	18.0	12.0
31	---	---	18.0	14.0	---	---	22.0	19.0	23.5	18.0	---	---
MONTH	19.5	5.0	20.0	10.0	24.5	12.0	26.5	15.0	25.5	18.0	24.0	12.0

03491000 BIG CREEK NEAR ROGERSVILLE, TENN.

LOCATION.--Lat 36°25'34", long 82°57'07", Hawki. County, temperature recorder at gaging station on left bank 300 ft upstream from county bridge, 2.0 miles upstream from mouth, and 3 miles northeast of Rogersville.

DRAINAGE AREA.--47.3 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1971 to September 1972.

EXTREMES, 1971-72.--Water temperatures: Maximum, 26.5°C sometime between July 25 and Aug. 6; minimum, 3.5°C Feb. 8, 9, 19.

REMARKS.--Missing record June 26 to July 6; range in temperature, 16.5°C to 23.0°C; July 25 to Aug. 6; range in temperature, 19.5°C to 26.5°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	19.5	18.0	16.0	9.5	7.0	10.0	9.0	6.5	6.0	10.0	10.0
2	21.0	20.0	18.0	16.5	9.0	6.5	9.5	8.5	6.5	5.5	11.0	10.0
3	22.0	20.0	18.0	16.5	8.5	5.5	9.5	8.5	6.5	6.0	10.5	9.0
4	21.5	20.0	16.5	15.0	8.5	7.0	9.5	9.0	6.0	4.5	9.0	8.0
5	21.0	20.0	15.0	14.0	8.5	7.0	9.5	9.5	4.5	4.5	9.0	8.5
6	20.0	19.0	14.0	13.0	9.0	8.5	9.5	8.5	4.5	4.0	8.5	7.0
7	19.0	18.0	14.0	13.0	10.5	9.0	9.0	8.5	4.0	4.0	8.5	7.0
8	18.0	16.5	13.0	10.0	10.5	10.5	9.0	8.5	4.0	3.5	9.5	8.5
9	16.5	15.5	12.0	10.0	10.5	10.0	9.0	8.5	4.0	3.5	8.5	7.0
10	16.0	15.5	12.0	10.0	11.0	10.0	9.5	9.0	4.5	4.0	9.0	7.0
11	15.5	14.5	11.0	9.0	11.0	11.0	10.0	9.5	5.0	4.5	9.0	8.0
12	15.0	14.5	11.0	9.5	11.0	9.5	10.0	9.5	5.0	4.5	10.0	8.5
13	15.0	14.5	11.0	9.5	10.0	10.0	10.0	9.5	5.0	5.0	11.0	9.5
14	16.0	14.5	11.0	10.0	10.0	10.0	10.0	9.5	5.5	4.5	11.5	10.0
15	16.0	15.0	11.0	10.5	11.0	10.0	9.5	8.0	5.5	5.0	10.5	9.0
16	16.5	16.0	11.5	10.5	12.0	11.0	8.0	6.0	5.5	5.0	10.0	9.5
17	17.0	16.0	11.5	11.0	12.0	10.0	6.5	6.0	5.5	5.0	10.0	9.0
18	17.0	16.0	11.5	11.0	10.0	8.0	6.5	6.0	5.5	5.5	9.0	8.0
19	16.5	15.5	11.5	11.0	9.5	6.5	8.0	6.5	5.5	3.5	10.0	8.5
20	17.0	16.0	11.5	10.0	9.0	6.5	9.0	8.0	5.5	4.5	11.0	9.0
21	16.5	16.5	16.5	9.0	10.0	9.0	9.0	8.5	4.5	4.5	11.5	10.0
22	16.5	15.5	15.5	8.0	10.0	9.0	10.0	9.0	6.5	4.5	12.0	10.5
23	16.0	16.0	10.0	8.0	9.5	8.5	10.0	9.5	7.0	6.5	11.	9.0
24	16.0	16.0	10.0	8.0	9.0	8.5	11.0	10.0	7.0	6.5	9.0	8.0
25	16.0	16.0	9.5	8.0	9.5	9.0	11.0	9.5	9.0	7.0	9.0	8.0
26	16.0	15.5	9.5	8.0	10.0	9.0	9.5	8.0	9.5	9.0	8.5	8.0
27	15.5	15.0	9.5	8.0	10.0	9.5	8.0	7.0	9.0	9.0	8.5	8.0
28	15.0	15.0	9.5	8.5	10.0	10.0	8.5	8.0	9.5	9.0	10.0	8.5
29	15.0	15.0	10.0	9.0	10.5	9.5	8.5	8.0	10.0	9.0	11.0	10.0
30	15.5	15.0	9.5	9.0	10.0	9.5	8.5	8.5	---	---	11.0	10.0
31	16.0	15.0	---	---	10.0	9.5	8.5	6.5	---	---	10.0	9.5
MONTH	22.0	14.5	18.0	8.0	12.0	5.5	11.0	6.0	10.0	3.5	12.0	7.0

03491000 BIG CREEK NEAR ROGERSVILLE, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.5	20.5	16.5	16.5	14.5	---	---	---	---	22.0	20.0
2	9.0	8.0	20.0	18.0	18.5	15.0	---	---	---	---	22.0	20.0
3	9.5	8.0	19.0	17.0	19.0	15.5	---	---	---	---	22.0	20.0
4	10.0	9.5	18.0	15.5	19.5	16.5	---	---	---	---	21.5	20.0
5	11.0	8.5	16.5	14.5	21.0	19.0	---	---	---	---	21.0	20.0
6	13.0	9.5	18.0	15.0	21.0	19.0	---	---	---	---	20.0	19.0
7	12.0	11.0	19.0	15.5	21.0	18.0	20.0	19.0	22.0	20.5	20.5	19.0
8	12.0	10.0	18.5	16.5	21.0	18.0	21.0	18.0	23.5	21.5	20.0	18.5
9	11.0	9.0	16.5	16.0	20.0	19.0	21.0	18.0	22.0	20.5	21.0	19.0
10	11.0	10.0	18.0	14.5	20.0	19.0	21.0	18.5	21.5	20.0	21.0	18.5
11	11.0	10.5	17.0	14.5	19.0	16.0	23.5	19.0	22.0	20.0	23.0	18.5
12	11.0	10.5	18.5	14.5	19.0	15.5	24.0	20.0	22.0	20.0	23.5	20.0
13	13.5	11.0	18.0	15.5	19.0	16.5	23.0	20.5	23.5	21.0	23.5	20.0
14	13.5	12.0	15.5	14.0	21.5	18.0	23.5	20.0	24.0	21.0	23.5	20.0
15	14.0	12.0	15.0	14.5	23.0	19.5	24.5	21.0	24.0	21.0	23.5	21.0
16	15.0	14.0	15.5	14.5	22.0	20.5	23.5	21.5	24.5	21.5	23.5	21.0
17	15.5	14.0	16.5	14.5	21.0	20.0	23.5	21.5	24.0	22.0	22.0	21.0
18	15.5	13.5	16.5	14.5	21.5	18.5	24.5	21.5	25.5	22.0	22.0	20.5
19	13.0	14.5	15.5	14.0	21.5	19.0	26.0	22.0	25.5	23.0	24.0	20.5
20	18.0	15.5	15.5	14.0	20.5	19.0	26.0	23.0	25.0	22.0	23.5	20.5
21	18.5	16.5	16.0	14.5	20.5	19.0	25.5	23.5	24.0	22.0	21.5	19.5
22	16.5	15.0	16.5	15.0	20.0	18.0	25.5	23.5	24.5	22.0	21.0	20.0
23	17.0	14.5	15.0	14.0	18.0	15.5	26.0	24.0	23.5	22.0	20.5	19.0
24	16.5	15.5	16.0	14.0	18.5	15.5	25.5	23.5	24.0	21.0	21.5	19.0
25	15.5	14.5	18.5	15.0	20.0	16.0	---	---	23.5	21.5	21.5	19.0
26	13.0	13.0	18.5	16.0	---	---	---	---	24.0	21.5	21.0	19.5
27	17.0	13.5	18.0	15.0	---	---	---	---	24.5	22.0	20.5	20.0
28	16.5	14.5	18.0	15.0	---	---	---	---	23.5	21.0	21.0	19.5
29	18.5	15.0	18.0	16.0	---	---	---	---	23.0	20.0	20.5	20.0
30	20.5	16.0	18.5	16.5	---	---	---	---	23.0	20.0	20.0	17.0
31	---	---	18.5	16.5	---	---	---	---	23.5	20.5	---	---
MONTH	20.5	8.0	20.5	14.0	23.0	14.5	---	---	---	---	24.0	17.0

03497100 TENNESSEE RIVER BELOW KNOXVILLE, TENN.

LOCATION.--Lat 35°56'46", long 83°56'48", Knox County, on left bank, under bridge on State Highway 73, 7.0 miles downstream from confluence of French Broad and Holston Rivers, near auxiliary gage for gaging station 03497000, and at mile 645.1.

DRAINAGE AREA.--8,963 sq mi.

PERIOD OF RECORD.--Water temperatures: December 1969 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 25.5°C Aug. 22; minimum, 4.5°C Feb. 5, 19, 20.

EXTREMES, 1969-72.--Water temperatures: Maximum, 29.0°C sometime between Aug. 3-6, 1970; minimum, 1.0°C Jan. 21, 1970.

REMARKS.--Missing record July 24 to Aug. 1; range in temperature (estimated), 21.0°C to 25.0°C; Aug. 28-31; range in temperature (estimated), 23.0°C to 25.0°C. Miscellaneous samples of chemical data published (as Tennessee River at Knoxville, 03497000) for the water years 1967, 1968. Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.5	24.0	20.5	20.0	11.5	10.0	9.0	8.5	7.0	6.5	8.0	7.0
2	24.5	24.5	21.0	20.5	10.0	9.5	8.5	8.0	7.0	6.5	8.0	7.0
3	25.0	24.5	20.5	19.5	10.0	9.0	8.0	7.0	8.0	7.0	7.0	6.5
4	24.5	24.0	19.5	18.0	9.0	8.5	9.5	6.0	7.0	5.5	6.5	6.5
5	24.5	24.0	18.5	18.0	10.0	8.5	9.5	8.5	5.5	4.5	7.0	6.5
6	24.0	23.5	18.0	18.0	10.0	9.0	8.5	8.0	6.0	5.5	7.0	6.5
7	23.5	23.0	18.0	16.5	10.5	9.5	8.5	8.0	6.0	5.5	8.0	6.5
8	23.0	21.5	16.5	16.0	10.5	10.0	8.5	8.0	6.0	5.5	8.5	8.0
9	22.0	22.0	16.5	16.0	10.5	10.0	9.0	8.5	6.0	5.5	8.5	7.0
10	22.0	[illegible].0	16.0	16.0	10.5	9.0	9.0	9.0	6.0	6.0	8.0	7.0
11	21.0	20.0	16.0	16.0	10.0	8.5	9.5	9.0	6.5	6.0	9.0	8.0
12	22.0	20.5	16.5	16.0	9.0	8.0	9.5	8.5	7.0	6.5	9.5	9.0
13	22.0	21.5	16.5	16.5	9.5	9.0	9.5	8.5	6.5	6.0	11.0	9.5
14	22.0	21.5	16.5	16.5	9.5	9.0	9.0	8.0	6.5	6.0	11.0	10.0
15	22.0	22.0	16.5	16.0	10.5	9.5	8.0	6.0	7.0	6.5	10.5	9.5
16	22.0	22.0	17.0	16.0	10.5	10.0	6.0	5.0	6.5	6.5	10.5	9.5
17	22.0	22.0	16.5	16.0	10.0	9.0	6.0	5.5	6.5	6.0	10.5	9.5
18	22.0	21.5	16.5	15.5	9.0	8.0	6.5	6.0	6.5	6.0	9.5	9.0
19	22.0	22.0	16.0	15.0	8.5	8.0	8.0	6.5	6.0	4.5	10.0	9.0
20	22.0	22.0	15.0	14.0	9.0	8.5	8.5	8.0	5.0	4.5	11.5	9.0
21	22.0	22.0	14.5	13.0	9.5	9.0	9.0	8.5	5.5	5.0	12.0	11.0
22	22.0	21.5	13.5	11.5	9.5	9.0	9.0	8.5	6.0	5.0	13.0	11.5
23	21.5	20.5	13.5	13.0	9.0	8.5	9.0	8.5	6.0	5.5	13.0	10.5
24	21.5	20.0	13.5	12.0	9.5	8.5	9.5	8.5	6.5	5.5	12.0	10.0
25	21.5	21.0	13.0	12.0	9.5	9.5	9.0	8.0	8.0	6.5	10.0	8.5
26	21.0	20.0	13.0	12.0	10.0	9.5	8.0	6.5	8.0	7.0	9.5	8.0
27	20.5	19.5	13.0	12.0	10.0	9.5	7.0	7.0	7.0	6.5	9.5	8.0
28	20.5	20.0	13.5	12.0	10.0	9.0	8.0	7.0	7.0	6.5	11.0	9.5
29	21.0	20.5	13.5	12.0	9.5	8.5	8.0	7.0	8.0	6.5	13.0	11.0
30	21.0	20.5	13.0	11.5	10.0	8.0	8.0	7.0	---	---	14.0	11.5
31	21.0	20.0	---	---	9.5	8.5	8.0	6.5	---	---	13.0	11.0
MONTH	25.0	19.5	21.0	11.5	11.5	8.0	9.5	5.0	8.0	4.5	14.0	6.5

03497100 TENNESSEE RIVER BELOW KNOXVILLE, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	16.5	15.5	15.5	14.5	20.5	19.5	---	---	24.0	23.5
2	11.0	10.0	18.0	15.5	16.0	15.0	21.5	19.5	24.0	24.0	24.0	24.0
3	11.0	9.5	18.0	15.0	16.0	15.5	22.0	20.5	24.5	23.0	24.5	24.0
4	11.0	10.0	15.0	14.5	17.0	15.5	22.0	21.0	23.5	23.0	24.5	24.5
5	11.0	10.0	14.5	13.5	19.0	16.5	21.0	19.0	23.0	22.0	24.5	24.0
6	12.0	10.5	16.0	14.5	18.0	15.5	19.5	19.0	23.0	22.0	24.0	24.0
7	13.5	11.5	16.0	16.0	17.0	16.0	20.0	19.0	23.0	22.0	24.0	24.0
8	13.5	11.5	16.5	16.0	18.0	16.5	20.5	20.0	23.5	23.0	24.0	24.0
9	12.0	10.0	16.5	15.5	18.5	16.5	21.0	20.0	23.0	22.0	24.0	24.0
10	11.5	10.0	16.0	15.0	18.0	16.0	22.0	20.5	22.0	21.5	24.5	24.0
11	11.5	11.0	15.0	14.5	18.5	15.5	23.0	20.5	22.0	21.0	24.5	24.5
12	14.0	11.0	15.0	14.5	19.5	16.5	21.5	20.5	22.0	22.0	24.5	24.5
13	15.5	13.5	15.5	14.5	20.0	17.0	21.5	20.0	23.0	22.0	25.0	24.5
14	16.0	14.5	16.0	15.5	19.5	17.0	21.5	20.5	24.0	23.0	25.0	25.0
15	15.5	14.0	16.5	15.5	19.5	18.0	21.5	20.0	24.0	23.5	25.0	25.0
16	16.0	14.5	18.5	16.5	20.0	17.0	22.0	21.0	21.5	23.5	25.5	25.0
17	15.5	14.5	16.5	16.0	18.5	16.5	23.0	21.0	23.5	23.5	25.5	25.5
18	15.0	13.5	17.0	16.0	19.5	17.0	23.0	20.0	23.5	23.5	25.5	25.5
19	15.5	14.5	16.0	16.0	21.0	18.0	22.0	21.0	23.5	23.5	25.5	25.5
20	16.0	14.5	16.0	16.0	20.0	18.0	22.0	21.5	24.5	23.5	25.5	25.5
21	16.0	15.0	16.0	15.5	19.5	18.5	23.0	21.0	25.0	24.0	25.5	25.5
22	15.5	14.5	16.0	16.0	19.5	18.5	23.0	21.5	25.5	24.5	25.5	25.5
23	16.5	15.0	18.5	16.0	19.0	18.5	23.0	21.5	24.5	24.0	25.5	25.5
24	16.5	16.5	16.5	16.0	20.0	19.0	---	---	24.0	24.0	25.5	25.5
25	17.0	16.0	16.5	16.0	20.0	18.5	---	---	24.0	24.0	25.5	25.5
26	17.0	16.0	16.5	16.0	21.5	19.0	---	---	24.0	24.0	25.5	25.5
27	16.0	14.5	16.5	15.5	21.5	19.5	---	---	25.0	24.0	25.5	25.5
28	15.5	14.5	16.0	15.5	20.5	18.5	---	---	---	---	25.5	25.5
29	17.0	14.5	16.0	15.5	19.5	19.0	---	---	---	---	25.5	25.5
30	16.0	15.0	16.0	15.5	20.5	19.5	---	---	---	---	25.5	24.0
31	---	---	16.0	15.5	---	---	---	---	---	---	---	---
MONTH	17.0	9.5	18.5	13.5	21.5	14.5	23.0	---	25.5	21.0	25.5	23.5

03518300 LITTLE TENNESSEE RIVER BELOW CHILHOWEE DAM, TENN.

LOCATION.--Lat 35°32'48", long 84°03'50", Blount County, temperature recorder 0.2 mile upstream from gaging station on right bank, on U. S. Highway 129 at Tallassee, 1,200 ft upstream from Cochran Creek, 0.6 mile downstream from Chilhowee Dam, 20 miles south of Maryville, and at mile 33.0.

DRAINAGE AREA.--1,987 sq mi, including Cochran Creek.

PERIOD OF RECORD.--Water temperatures: October 1963 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 18.0°C Sept. 25, 28; minimum, 4.0°C Feb. 20, 21.

EXTREMES, 1963-72.--Water temperatures: Maximum, 28.0°C Aug. 29, 1964; minimum, 2.5°C Feb. 27, 1970.

REMARKS.--Missing record Oct. 1-4, Oct. 15 to Nov. 8. Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	11.5	10.5	10.0	9.5	7.0	6.0	8.0	6.0
2	---	---	---	---	11.0	10.0	9.5	9.0	7.0	6.0	7.0	6.5
3	---	---	---	---	11.0	10.0	9.5	8.5	6.5	6.0	7.0	6.5
4	---	---	---	---	11.0	10.5	10.0	9.0	6.5	5.0	7.0	6.0
5	15.5	15.0	---	---	11.0	10.0	9.5	8.5	6.5	5.5	7.0	6.0
6	16.0	15.0	---	---	11.0	10.5	9.0	8.5	5.5	5.0	7.0	5.5
7	16.5	15.0	---	---	12.0	11.0	9.0	8.0	5.5	5.0	7.0	6.0
8	16.5	14.0	---	---	11.0	11.0	8.5	7.0	6.0	5.0	7.0	6.0
9	15.5	15.0	14.5	13.5	11.0	10.5	8.5	8.0	6.5	5.0	8.0	5.0
10	15.5	14.5	14.5	13.5	13.5	11.0	8.5	8.0	5.5	4.5	9.0	5.0
11	15.5	14.0	14.0	13.5	12.0	10.5	9.0	8.5	6.0	4.5	9.0	5.5
12	15.5	14.0	14.5	12.0	11.5	10.5	9.0	8.5	5.5	5.0	8.5	6.0
13	15.0	14.5	15.0	13.0	12.0	11.0	9.0	8.5	5.5	5.0	9.0	6.0
14	16.0	14.5	15.0	13.5	11.0	11.0	9.0	8.5	5.5	5.0	9.0	6.5
15	---	---	15.0	13.5	11.5	11.0	9.0	8.5	5.5	5.0	9.0	6.0
16	---	---	15.5	14.0	11.5	11.5	8.5	7.0	5.5	5.0	9.0	8.0
17	---	---	15.5	14.0	11.5	11.0	7.0	6.5	6.0	5.0	8.0	8.0
18	---	---	15.0	14.0	11.0	10.5	6.5	6.0	6.0	5.5	8.5	7.0
19	---	---	14.5	14.0	10.5	10.0	6.5	6.5	5.5	4.5	11.5	8.0
20	---	---	14.5	13.5	10.0	10.0	6.5	6.5	7.0	4.0	12.0	7.0
21	---	---	13.5	12.0	10.0	9.5	7.0	6.5	5.5	4.0	10.5	8.0
22	---	---	13.0	11.5	10.0	9.5	8.0	7.0	8.0	5.0	11.0	7.0
23	---	---	13.0	11.0	9.5	9.5	8.0	8.0	5.5	4.5	10.0	7.0
24	---	---	12.0	11.0	9.5	9.5	9.0	8.0	6.0	5.0	10.0	9.5
25	---	---	11.5	11.0	10.0	9.0	9.0	8.5	5.5	5.5	9.0	8.0
26	---	---	11.0	11.0	10.5	9.5	9.0	8.0	6.0	5.5	11.0	8.0
27	---	---	11.0	11.0	10.5	9.5	8.5	8.0	6.5	6.0	8.5	8.0
28	---	---	11.5	10.0	10.5	10.0	8.0	8.0	6.5	6.0	11.5	8.5
29	---	---	11.5	10.5	10.5	10.0	8.0	7.0	6.5	5.5	9.5	7.0
30	---	---	11.0	10.5	10.5	10.5	8.0	7.0	---	---	9.5	7.0
31	---	---	---	---	10.5	10.0	8.0	6.5	---	---	9.5	8.5
MONTH	---	---	---	---	13.5	9.0	10.0	6.0	8.0	4.0	12.0	5.0

03518300 LITTLE TENNESSEE RIVER BELOW CHILHOWEE DAM, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.0	14.0	10.5	15.5	10.5	14.5	13.0	15.0	12.0	15.0	14.0
2	9.5	7.0	13.5	11.0	13.5	10.0	14.0	13.0	13.5	13.0	15.5	14.0
3	10.0	7.0	12.0	11.5	13.5	10.0	14.5	12.0	14.5	13.0	17.0	14.0
4	8.5	8.0	13.5	11.0	15.0	10.0	15.5	12.0	14.5	13.0	15.0	14.0
5	10.5	6.5	14.0	10.5	13.0	10.5	13.0	13.0	14.0	13.0	14.5	14.0
6	11.5	7.0	13.5	10.0	13.5	11.0	13.5	12.0	14.0	12.0	15.0	14.0
7	9.5	8.0	14.5	10.5	13.5	11.0	13.5	11.5	14.5	13.0	15.0	14.0
8	8.5	8.0	11.5	11.0	12.0	10.5	14.5	11.5	14.5	13.0	14.5	13.5
9	11.5	7.0	12.0	11.0	12.0	10.5	14.0	11.5	14.5	13.0	15.0	14.0
10	10.0	8.0	15.0	10.5	14.0	10.5	13.0	11.5	13.5	13.0	15.5	14.0
11	8.5	8.0	13.5	10.5	14.5	10.0	13.0	11.5	13.5	13.0	15.0	14.0
12	10.0	8.5	14.0	10.0	14.0	10.5	14.0	11.5	15.0	13.0	15.5	14.0
13	9.5	8.0	11.5	11.0	14.0	11.0	13.0	11.5	16.5	13.0	15.5	14.0
14	10.5	8.0	14.5	11.0	15.0	11.0	13.5	11.5	14.0	13.0	16.0	14.5
15	11.5	9.0	15.0	11.5	15.0	11.5	14.0	11.5	14.5	13.0	16.0	14.5
16	14.5	9.0	15.0	11.0	15.5	12.0	15.5	12.0	15.0	13.5	16.0	14.5
17	13.5	9.5	14.5	11.0	14.0	12.0	13.5	11.5	14.5	13.0	15.5	15.0
18	13.0	10.0	15.0	11.0	17.0	12.0	14.0	11.5	14.5	13.5	16.0	15.0
19	13.0	10.0	14.0	11.0	14.0	13.0	13.5	12.0	14.5	13.0	16.5	15.0
20	12.0	10.0	13.5	11.5	13.5	13.0	13.5	12.0	16.0	13.5	17.0	15.0
21	13.0	10.5	15.0	11.5	14.5	13.0	13.5	12.0	14.5	13.0	16.5	15.5
22	12.0	11.0	14.0	12.0	14.0	12.0	13.5	12.0	15.0	13.5	17.0	15.5
23	14.5	10.0	14.0	11.5	14.5	11.5	15.0	12.0	14.5	13.5	17.0	15.5
24	14.5	10.0	14.0	11.5	16.5	11.0	14.0	12.0	15.5	13.5	17.0	16.0
25	12.0	10.0	14.0	11.0	17.0	11.5	13.0	13.0	15.5	14.0	18.0	15.5
26	13.5	9.5	14.0	11.0	14.5	12.0	14.0	12.0	15.5	14.0	17.0	16.0
27	14.0	9.5	13.5	11.0	15.0	12.0	13.0	12.0	17.0	14.0	16.5	16.0
28	13.5	10.0	13.5	11.0	14.5	13.0	13.5	12.0	15.5	14.0	18.0	16.0
29	14.0	11.0	13.0	11.0	14.0	13.0	15.0	12.0	15.5	14.0	16.5	16.0
30	13.5	10.5	13.0	11.0	15.0	13.0	16.0	13.0	16.0	14.0	16.5	16.0
31	---	---	12.0	11.5	---	---	13.5	12.0	15.0	14.0	---	---
MONTH	14.5	6.5	15.0	10.0	17.0	10.0	16.0	11.5	17.0	12.0	18.0	13.5

03518500 TELLICO RIVER AT TELLICO PLAINS, TENN.

LOCATION.--Lat 35°21'42", long 84°16'44", Monroe County, temperature recorder at gaging station on right bank, 1,300 ft upstream from bridge on Tellico Plains-Ballplay Road, 0.4 mile downstream from Laurel Creek, 0.8 mile east of Tellico Plains, and at mile 28.2.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--Water temperatures: July 1964 to March 1972 (discontinued).

EXTREMES, October 1971 to March 1972.--Water temperatures: Maximum, 24.5°C Oct. 2; minimum, 0.5°C Jan. 16, 17.

EXTREMES, 1964-72.--Water temperatures: Maximum, 31.0°C July 31, Aug. 2, 1964; minimum, freezing point many days during winter months, 1964-69.

REMARKS.--Miscellaneous samples of chemical data published for the water year 1969, 1970. Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, OCTOBER 1971 TO MARCH 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	19.0	19.5	18.0	9.0	8.0	9.5	8.5	5.0	4.0	12.0	10.0
2	24.5	20.0	20.5	18.5	8.0	7.0	10.5	8.5	7.0	5.0	13.0	11.5
3	23.5	19.5	20.0	15.5	7.0	5.5	10.0	8.5	8.5	6.0	12.0	8.0
4	23.5	19.5	15.5	11.5	8.0	6.5	12.0	9.0	6.0	2.0	9.0	6.5
5	23.0	20.0	11.5	10.0	10.0	8.0	12.0	8.0	3.0	1.0	9.5	6.5
6	22.0	19.5	11.5	10.0	12.0	10.0	8.0	6.0	5.0	2.0	7.0	5.0
7	20.5	17.0	12.0	10.5	13.0	12.0	6.0	5.0	5.5	4.0	8.5	6.0
8	18.5	14.0	10.5	8.5	13.0	11.0	5.5	4.5	4.5	3.0	10.0	8.0
9	18.0	15.0	8.5	8.0	11.0	10.5	10.0	5.5	5.0	3.0	8.0	5.5
10	16.5	15.5	9.5	8.5	14.0	11.0	12.0	10.0	5.0	3.0	8.0	5.0
11	16.5	12.0	9.5	8.0	14.0	11.5	12.0	11.5	6.5	4.5	10.0	6.5
12	16.5	12.0	9.5	8.0	12.0	10.5	12.0	10.0	6.0	5.0	12.0	9.0
13	16.5	13.0	10.5	8.5	13.0	11.0	14.0	10.5	7.0	6.0	13.0	10.0
14	18.5	14.0	11.5	9.5	12.0	10.5	13.5	8.5	7.0	5.0	14.0	11.0
15	18.5	15.0	12.0	10.0	15.0	12.0	8.5	4.0	8.0	6.5	11.0	9.0
16	19.0	16.5	13.0	10.5	15.5	15.0	4.0	0.5	7.0	5.5	13.0	10.5
17	19.5	16.5	13.0	11.0	15.0	11.0	3.0	0.5	8.0	6.5	11.5	8.5
18	19.5	16.0	13.5	11.0	11.0	5.5	5.0	3.0	8.0	6.0	8.5	7.0
19	18.5	16.0	13.5	13.0	6.0	4.5	8.5	5.0	6.0	2.0	12.0	8.5
20	18.5	16.5	13.5	11.5	10.5	5.0	10.5	8.5	4.0	1.5	13.0	9.0
21	19.0	17.0	11.5	9.5	11.	10.0	11.5	10.5	5.0	3.0	14.0	11.5
22	18.5	18.0	9.5	8.5	11.0	8.5	11.5	10.5	8.5	5.0	13.5	12.0
23	19.0	18.0	8.5	8.0	8.5	7.0	12.0	10.5	7.0	5.5	12.0	9.0
24	19.5	18.0	8.0	6.5	10.0	7.0	13.5	11.5	10.0	7.0	10.0	7.0
25	18.5	17.0	8.0	6.5	11.0	9.5	13.5	8.5	11.0	10.0	8.0	6.0
26	18.5	16.5	7.0	6.5	11.5	9.5	8.5	6.0	11.0	9.0	9.5	5.5
27	18.0	15.0	8.0	6.5	12.0	9.5	9.0	6.0	9.5	8.0	9.5	9.0
28	18.5	15.0	9.0	8.0	11.5	10.5	11.0	9.0	10.0	7.0	14.0	9.5
29	19.0	16.0	9.5	8.5	12.0	10.5	10.0	9.0	11.5	9.0	14.5	13.0
30	19.0	16.0	9.5	9.0	13.5	10.5	9.5	8.0	---	---	13.5	10.5
31	19.5	16.5	---	---	13.5	9.5	7.0	4.5	---	---	11.0	9.5
MONTH	24.5	12.0	20.5	6.5	15.5	4.5	14.0	0.5	11.5	1.0	14.5	5.0

03528000 CLINCH RIVER ABOVE TAZEWELL, TENN.

LOCATION.--Lat 36°25'30", long 83°23'54", Claiborne County, temperature recorder at gaging station on right bank 0.4 mile upstream from Grissom Island, 4.6 miles downstream from Big War Creek, 10 miles east of Tazewell, and at mile 159.8.

DRAINAGE AREA.--1,474 sq mi.

PERIOD OF RECORD.--Water temperatures: April 1971 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 30.0°C July 22-24; minimum, 3.0°C Jan. 17-19.

EXTREMES, April 1971 to September 1972.--Water temperatures: Maximum, 30.0°C July 22-24, 1972; minimum, 3.0°C Jan. 17-19, 1972.

REMARKS.--Records furnished by Tennessee Valley Authority. Water temperatures, March 1962 to March 1966 are published in reports of Tennessee Valley Authority. Miscellaneous samples of chemical data published for the water year 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
NOV. 04...	1145	3840	6.1	250	37	9.6	2.7	2.2	138	18	3.0	151
JAN. 06...	1200	15200	6.6	70	37	15	1.0	1.5	172	6.2	1.5	152
MAR. 03...	1000	4340	4.9	150	8.7	32	2.1	1.3	116	16	3.5	137
MAY 09...	1005	2280	3.3	70	31	14	2.7	1.2	114	16	2.5	132
JULY 11...	1300	840	4.5	40	34	11	2.8	1.5	121	18	3.0	150
SEP. 06...	1000	482	3.8	60	39	13	4.5	1.5	158	21	4.5	180

DATE	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	NON-CAR-BONATE HARD-NESS (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	PHOS-PHATE (PO4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
NOV. 04...	130	235	7.6	13.5	6	17	113	.30	.44	<.01	<.01	.70
JAN. 06...	150	238	7.5	10.0	6	9	141	.19	.14	.01	.01	.50
MAR. 03...	120	202	7.3	--	5	25	95	.26	.19	<.01	<.01	.90
MAY 09...	110	222	7.5	16.5	5	16	94	.13	.53	.01	.01	.60
JULY 11...	130	260	7.6	24.0	5	31	99	.21	.25	.02	.01	.90
SEP. 06...	150	300	7.9	22.0	5	20	130	.12	.19	.01	.01	.60

03528000 CLINCH RIVER ABOVE TAZEWELL, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	21.0	16.0	16.5	6.5	5.5	8.5	7.0	7.0	6.5	10.5	9.5
2	23.0	21.5	19.0	18.0	5.5	5.0	8.5	8.0	6.5	6.5	11.0	10.5
3	23.0	21.0	18.5	17.0	5.0	4.5	9.0	8.0	7.0	6.0	11.0	10.5
4	23.5	21.5	17.0	15.0	5.0	4.5	9.0	8.5	6.0	5.0	10.5	10.0
5	22.0	21.0	15.0	13.5	5.5	4.5	9.0	9.0	5.0	4.0	10.0	9.0
6	21.5	20.5	13.5	12.0	6.5	5.5	9.0	8.0	4.0	4.0	9.0	8.5
7	20.5	19.5	12.0	11.0	9.5	6.5	8.0	6.5	4.5	4.0	9.0	8.0
8	19.5	17.0	11.0	9.5	10.0	9.5	6.5	6.0	4.0	3.5	9.5	8.5
9	19.0	18.0	10.0	9.0	10.5	10.0	6.5	6.0	4.0	3.5	9.0	8.5
10	18.0	16.5	9.5	9.0	11.0	10.0	8.5	6.5	4.5	3.5	9.5	8.5
11	17.0	15.5	9.5	8.5	11.5	10.5	9.5	8.5	5.0	4.0	9.5	8.5
12	17.0	15.5	9.5	8.5	11.0	10.0	10.0	9.5	5.5	4.5	10.5	9.5
13	17.0	15.5	10.0	9.0	10.5	10.0	9.5	9.5	6.0	5.5	11.5	10.0
14	18.0	16.0	10.5	9.0	10.5	10.0	9.5	9.0	6.5	6.0	12.0	11.0
15	18.0	16.5	11.0	9.5	11.0	10.0	9.0	6.5	6.5	6.5	12.0	11.0
16	18.5	18.0	11.5	10.0	11.5	11.0	6.5	4.5	6.5	6.5	11.5	11.0
17	18.5	18.0	12.0	11.0	11.5	10.0	4.5	3.0	6.5	6.5	11.0	10.0
18	18.5	17.0	13.0	11.5	10.0	7.0	3.5	3.0	6.5	6.5	10.0	9.5
19	18.5	17.0	12.0	11.5	8.0	7.0	4.0	3.0	6.5	5.0	11.0	9.5
20	18.5	18.0	11.5	10.5	8.0	7.0	5.0	4.0	5.0	4.5	12.0	10.0
21	18.5	18.0	11.0	9.0	8.5	8.0	8.0	5.0	5.0	4.5	13.0	11.0
22	18.0	17.0	9.0	8.0	8.5	7.0	9.0	8.0	5.5	5.0	14.0	12.0
23	17.0	16.5	8.0	7.0	7.0	7.0	10.0	9.5	5.5	5.5	12.0	10.0
24	16.5	16.5	7.0	6.5	7.0	7.0	11.0	10.0	6.0	5.5	10.5	9.5
25	16.5	16.5	6.5	6.0	8.5	7.0	11.0	10.5	8.5	6.0	9.5	8.0
26	16.5	16.0	6.5	5.5	8.5	8.0	10.5	9.0	9.5	8.5	9.0	7.0
27	16.0	16.0	6.5	6.0	9.0	8.5	9.0	8.5	9.5	9.5	9.0	8.5
28	16.0	15.5	7.0	6.0	9.5	9.0	8.5	8.0	9.0	9.0	9.5	8.5
29	16.0	15.5	8.0	6.5	9.5	9.0	8.5	8.0	9.5	9.0	10.5	9.0
30	16.5	16.0	7.0	6.0	9.5	9.0	8.5	6.5	---	---	11.0	10.0
31	17.0	16.0	---	---	9.0	8.0	8.5	7.0	---	---	11.0	10.5
MONTH	23.5	15.5	19.0	5.5	11.5	4.5	11.0	3.0	9.5	3.5	14.0	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	19.5	16.5	21.5	19.0	23.5	21.0	21.0	20.0	26.5	23.5
2	10.0	9.0	19.0	18.5	22.0	19.0	23.5	21.0	21.0	20.5	26.5	24.5
3	10.0	8.5	19.0	18.5	23.5	20.0	25.5	23.5	22.0	21.0	26.5	24.5
4	10.5	9.5	18.5	17.0	23.5	21.0	24.5	23.5	23.0	21.0	25.5	24.5
5	11.5	9.5	18.0	16.5	24.5	21.5	24.0	22.0	24.0	22.0	24.5	23.0
6	13.0	10.5	17.0	16.5	24.0	23.0	23.5	21.5	24.0	23.0	25.0	22.0
7	14.0	13.0	18.0	16.5	25.0	23.0	23.5	21.0	24.0	23.0	24.5	22.0
8	13.5	11.5	18.0	17.0	25.0	23.0	23.5	21.0	25.0	23.0	24.0	23.0
9	11.5	11.0	18.0	17.0	24.0	23.5	24.0	21.5	24.0	22.0	25.0	23.0
10	11.0	10.0	18.0	16.5	24.0	22.0	25.0	22.0	24.0	22.0	25.0	22.0
11	10.5	10.0	18.5	16.5	24.0	21.0	26.0	23.0	24.5	22.0	25.0	23.0
12	12.0	10.5	19.0	16.5	24.0	20.5	27.0	24.0	25.5	23.5	25.5	23.5
13	13.5	12.0	18.0	17.0	24.5	21.5	26.5	24.5	26.5	24.0	25.5	23.5
14	14.5	13.5	17.0	16.0	26.0	22.0	27.0	25.0	27.0	24.0	25.5	23.5
15	15.0	14.5	17.0	16.5	26.5	24.0	26.0	25.0	27.0	24.5	25.5	23.5
16	15.0	14.5	17.0	17.0	26.0	25.0	25.0	24.5	28.0	25.0	25.5	23.5
17	15.0	14.5	18.0	16.5	25.0	24.5	25.0	24.5	27.0	25.5	24.5	23.0
18	15.5	15.0	18.5	17.0	26.5	24.0	27.0	24.5	28.5	25.5	25.0	23.0
19	16.0	15.0	18.5	17.0	26.0	24.5	29.0	25.5	28.0	26.0	26.5	22.0
20	17.0	16.0	18.5	18.0	25.5	24.0	29.5	26.0	26.5	23.0	26.5	21.0
21	18.0	17.0	18.5	18.0	24.5	23.5	29.0	27.0	23.0	21.5	25.5	19.5
22	17.0	16.5	19.0	18.5	23.5	21.0	30.0	28.0	23.5	21.5	23.5	20.5
23	16.5	16.0	19.5	18.5	21.0	19.5	30.0	28.0	23.5	22.0	24.0	19.5
24	17.0	16.0	19.5	19.0	20.0	19.0	30.0	28.5	24.5	22.0	24.5	20.0
25	16.0	15.0	20.0	19.0	21.0	19.0	28.5	28.0	24.5	23.0	25.0	22.0
26	15.0	14.0	20.5	19.5	21.5	19.5	28.5	27.0	25.5	23.5	24.0	22.0
27	15.5	14.0	20.5	19.0	23.0	20.0	28.0	26.5	26.5	24.5	23.5	22.0
28	15.5	14.5	20.5	19.5	22.0	21.0	26.5	25.5	26.0	24.0	23.5	20.5
29	16.5	14.5	21.0	19.5	23.5	21.0	25.5	24.5	25.5	23.0	23.5	22.0
30	18.0	15.5	21.0	20.0	23.5	21.0	24.5	23.0	25.5	22.0	23.5	20.5
31	---	---	21.0	20.5	---	---	23.5	20.0	25.5	23.0	---	---
MONTH	18.0	8.5	21.0	16.0	26.5	19.0	30.0	20.0	28.5	20.0	26.5	19.5

03532000 POWELL RIVER NEAR ARTHUR, TENN.

LOCATION.--Lat 36°32'30", long 83°37'49", Claiborne County, temperature recorder at gaging station on left bank 500 ft upstream from bridge on U. S. Highway 25E, 2.3 miles east of Arthur, 2.4 miles downstream from Indian Creek, and at mile 65.4.

DRAINAGE AREA.--685 sq mi.

PERIOD OF RECORD.--Water temperatures: April 1971 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 29.0°C July 20, 22-24; minimum, freezing point, Jan. 16.

EXTREMES, April 1971 to September 1972.--Water temperatures: Maximum, 29.0°C July 20, 22-24, 1972; minimum, freezing point, Jan. 16, 1972.

REMARKS.--Water temperatures August 1962 to February 1966 are published in reports of Tennessee Valley Authority. Records furnished by Tennessee Valley Authority.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
NOV.												
04...	1700	3410	5.8	380	40	8.9	5.2	2.2	136	27	3.0	213
JAN.												
06...	1445	9350	5.4	780	24	6.3	2.3	1.4	82	17	2.5	108
APR.												
06...	1330	1220	3.9	60	28	9.4	4.5	1.5	107	19	4.5	137
MAY												
09...	1300	1070	2.4	90	30	10	5.0	1.2	120	20	2.5	130
JULY												
11...	1200	245	2.0	90	31	13	6.2	1.2	147	25	3.0	162
SEP.												
06...	1315	215	1.4	60	34	14	8.5	1.5	158	24	3.5	170

DATE	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	NON-CAR-BONATE HARD-NESS (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	PHOS-PHATE (PO4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
NOV.												
04...	140	250	7.5	14.0	6	28	112	.51	.67	<.01	<.01	.60
JAN.												
06...	86	175	7.1	9.0	5	19	67	1.1	1.2	0.03	<0.01	0.80
APR.												
06...	110	202	7.9	13.0	5	22	88	.06	.11	<.01	<.01	.40
MAY												
09...	120	215	7.6	16.0	5	22	98	.05	1.6	.01	.01	.40
JULY												
11...	140	285	7.5	23.0	5	19	121	.11	.16	.01	.01	.30
SEP.												
06...	150	300	8.0	22.0	15	20	130	.11	.24	<.01	<.01	.20

03532000 POWELL RIVER NEAR ARTHUR, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	20.5	18.0	16.5	5.5	4.5	8.5	8.0	8.0	7.0	11.5	10.5
2	22.0	21.0	18.5	17.0	6.0	4.0	9.5	8.5	8.0	7.0	11.5	11.5
3	22.0	20.5	18.0	16.0	5.5	4.5	9.5	9.0	8.0	7.0	11.5	10.5
4	23.0	21.0	16.0	14.5	6.0	4.5	10.0	9.5	7.0	5.5	10.5	10.0
5	21.5	20.5	14.5	12.0	6.5	5.5	10.0	9.5	5.5	4.0	10.5	9.5
6	21.0	20.0	12.0	11.0	9.0	6.5	9.5	9.0	5.5	5.0	9.5	8.0
7	20.0	19.0	11.0	9.0	11.0	9.0	9.0	7.0	5.5	4.5	9.5	8.5
8	19.0	17.0	9.0	8.0	11.5	11.0	7.0	6.5	5.0	3.5	10.5	9.0
9	18.0	17.0	8.5	8.0	11.5	11.5	8.5	7.0	5.5	4.0	9.5	8.0
10	17.0	15.5	9.0	8.0	12.0	11.0	10.5	8.5	5.5	4.5	10.0	8.5
11	16.5	15.0	9.0	7.0	12.0	11.0	11.0	10.5	6.5	5.5	10.5	8.5
12	16.5	15.0	9.0	8.0	11.0	10.5	11.0	10.5	6.5	6.0	11.5	10.0
13	16.5	15.5	9.5	8.0	11.0	10.5	11.0	10.5	9.5	6.5	13.0	11.0
14	18.0	15.5	10.0	8.5	11.0	10.5	10.5	9.5	8.5	8.0	13.0	12.0
15	18.0	16.0	10.5	9.5	12.0	11.0	9.5	2.0	8.5	8.0	12.0	11.0
16	18.5	17.0	11.5	10.0	12.0	11.5	5.5	0.0	8.5	7.0	11.5	11.5
17	19.0	17.0	12.0	10.5	12.0	10.0	5.0	1.5	8.5	8.0	11.5	10.0
18	19.0	18.0	11.5	11.0	10.0	8.0	4.5	3.5	8.5	8.0	10.0	9.5
19	19.0	18.0	11.5	10.0	8.0	7.0	5.5	4.5	8.0	6.0	11.0	9.5
20	19.0	18.0	10.5	9.5	8.5	7.0	8.5	5.5	6.0	5.0	12.0	10.0
21	18.5	18.0	10.0	8.0	9.0	8.0	10.0	8.5	6.0	5.0	13.0	11.5
22	18.5	18.0	8.0	6.5	8.5	8.0	10.5	10.0	7.0	6.0	13.5	12.0
23	18.5	18.0	6.5	6.0	8.5	8.0	11.0	10.5	7.0	6.5	13.0	10.5
24	17.0	17.0	6.0	5.5	9.0	8.0	12.0	11.0	9.0	7.0	10.5	9.5
25	17.0	16.0	5.5	5.0	9.5	9.0	12.0	11.0	9.5	9.0	9.5	7.0
26	16.5	16.0	5.5	4.5	9.5	8.5	11.0	10.0	9.5	9.5	9.0	6.5
27	16.0	15.5	5.5	5.0	10.5	9.0	10.0	9.0	10.5	9.5	9.0	8.5
28	16.0	15.5	6.0	5.0	10.5	9.0	9.0	9.0	10.0	9.5	10.0	9.0
29	16.5	15.5	6.5	5.5	10.0	9.0	9.0	9.0	11.0	9.5	12.0	10.0
30	16.5	15.5	6.0	5.0	10.5	9.5	9.0	8.5	---	---	12.0	11.0
31	16.5	16.5	---	---	9.5	8.0	8.5	8.0	---	---	11.5	11.0
MONTH	23.0	15.0	18.5	4.5	12.0	4.0	12.0	0.0	11.0	3.5	13.5	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	19.0	16.5	20.5	18.0	24.5	21.5	20.5	19.5	25.0	23.0
2	10.5	9.5	18.5	18.5	21.0	18.5	24.5	23.0	21.5	20.5	25.0	23.0
3	10.5	8.5	18.5	17.0	22.0	19.0	25.0	23.5	23.0	21.0	25.0	23.0
4	11.0	10.0	17.0	16.5	22.0	20.0	24.5	22.0	23.5	22.0	24.5	23.5
5	11.5	9.5	17.0	15.5	24.0	20.5	22.0	20.5	24.0	23.0	23.5	22.0
6	13.5	10.5	18.0	16.0	23.5	21.5	23.0	20.0	24.0	23.0	23.5	21.0
7	13.5	13.0	18.5	17.0	24.0	21.5	23.0	20.0	24.5	23.5	24.0	21.0
8	13.5	11.5	18.5	17.0	24.0	21.5	24.0	20.5	25.0	23.0	23.0	21.5
9	11.5	11.0	17.0	16.5	23.5	22.0	24.0	21.0	24.0	23.0	24.0	21.5
10	11.0	10.5	17.0	15.5	23.0	21.5	24.5	21.5	24.0	21.5	24.0	21.0
11	11.0	10.5	18.0	15.5	23.0	19.5	25.5	23.0	24.5	23.0	24.0	21.5
12	13.0	11.0	18.5	16.0	23.0	19.5	27.0	23.5	25.0	23.0	24.5	21.5
13	13.5	13.0	18.0	16.0	23.0	20.5	26.0	24.0	26.0	23.5	24.5	22.0
14	14.0	13.5	16.0	15.5	24.5	21.0	26.5	24.0	26.0	24.0	24.0	21.5
15	15.5	14.0	16.5	15.5	25.5	23.0	26.0	24.0	26.5	24.0	24.5	22.0
16	15.5	15.0	16.5	15.5	25.0	23.5	25.5	24.5	27.0	25.0	24.5	22.0
17	15.5	15.0	17.0	16.0	23.5	22.0	25.0	24.0	27.0	25.5	23.5	22.0
18	15.5	14.5	17.0	16.0	25.5	22.0	26.0	23.5	27.0	25.0	23.5	21.5
19	16.0	15.0	17.0	16.0	25.0	23.5	28.0	24.5	28.0	25.5	24.5	22.0
20	16.5	15.5	17.0	16.5	24.5	23.5	29.0	25.5	28.0	25.0	25.0	22.0
21	17.0	16.5	18.0	16.5	23.5	23.0	28.5	25.5	28.0	25.0	23.5	21.5
22	16.5	15.5	18.5	17.0	23.0	21.0	29.0	26.0	27.0	25.0	23.0	21.5
23	16.0	15.0	19.5	18.0	21.0	20.0	29.0	26.0	26.0	24.5	23.0	21.0
24	16.0	15.0	20.5	18.5	21.0	19.5	29.0	26.5	26.0	24.0	23.5	21.0
25	15.5	14.0	21.0	19.0	22.0	20.0	28.0	26.0	26.0	24.0	24.0	21.5
26	15.0	13.0	21.5	20.0	24.0	20.5	28.0	25.5	26.5	24.5	23.0	21.5
27	15.0	13.0	21.0	19.5	24.0	21.5	27.0	25.5	26.5	24.5	22.0	21.5
28	15.0	13.5	21.0	19.5	23.5	21.5	25.5	24.5	26.0	24.0	23.5	21.5
29	15.5	14.5	21.0	19.5	23.5	21.0	24.5	23.5	25.5	23.0	23.0	22.0
30	17.0	15.5	21.0	20.0	23.5	21.5	24.0	22.0	25.5	22.0	22.0	18.5
31	---	---	20.5	19.5	---	---	23.0	20.0	25.5	23.0	---	---
MONTH	17.0	8.5	21.5	15.5	25.5	18.0	29.0	20.0	28.0	19.5	25.0	18.5

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TENN.

LOCATION.--Lat 36°06'52", long 83°59'16", Knox County, temperature recorder at gaging station on left bank on downstream side of bridge, on U. S. Highway 441, 2.1 miles downstream from Smith Branch, 4.0 miles northwest of Halls Crossroads, and at mile 16.3.

DRAINAGE AREA.--68.5 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 24.0°C July 24-29; minimum, 3.0°C Dec. 3, 4.

EXTREMES, 1966-72.--Water temperatures: Maximum, 27.0°C Aug. 7-10, 1968; minimum, freezing point Jan. 3-19, 1969, Feb. 3-5, 10, 11, 1971.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	20.5	18.0	16.5	5.5	4.5	8.0	5.5	6.5	6.0	10.0	10.0
2	20.5	20.5	18.5	17.0	4.5	3.5	7.0	6.0	6.0	5.5	10.0	10.0
3	20.5	20.0	18.5	15.5	3.5	3.0	7.0	6.5	6.5	6.0	10.0	9.0
4	20.0	20.0	15.5	12.0	5.0	3.0	8.0	6.5	6.5	5.0	9.5	9.0
5	20.0	20.0	12.0	10.0	6.5	5.0	8.0	6.5	5.0	3.5	9.5	9.5
6	20.0	19.0	10.0	9.0	9.0	6.5	6.5	5.5	3.5	3.5	9.5	8.5
7	19.0	16.5	9.0	8.5	10.0	9.0	5.5	5.0	4.0	3.5	9.5	8.5
8	16.5	14.5	8.5	6.0	10.0	10.0	5.0	4.5	4.0	4.0	10.5	9.5
9	14.5	14.5	6.0	5.5	10.0	10.0	5.5	5.0	4.0	4.0	10.5	9.5
10	14.5	14.0	6.5	5.5	10.5	9.5	9.0	5.5	4.0	4.0	9.5	9.0
11	14.0	12.0	6.5	6.0	11.0	10.5	9.0	6.5	4.5	3.5	10.0	9.0
12	13.0	12.0	6.5	6.0	11.0	9.0	9.0	8.0	4.5	4.5	11.5	10.0
13	13.0	13.0	8.5	6.5	9.0	9.0	8.0	8.0	5.0	4.5	13.0	11.5
14	14.0	13.0	9.5	8.5	9.0	9.0	8.0	8.0	5.5	5.0	13.0	13.0
15	14.5	14.0	10.0	9.5	11.0	9.0	8.0	8.0	6.5	5.5	13.0	11.5
16	16.0	14.5	10.5	10.0	11.5	11.0	8.0	8.0	6.5	6.5	12.0	12.0
17	16.5	16.0	11.0	10.5	11.5	10.0	8.0	7.0	6.5	6.5	12.0	11.5
18	17.0	16.5	11.0	11.0	10.0	5.5	7.0	6.0	6.5	6.5	11.5	10.5
19	17.0	17.0	11.0	10.0	5.5	4.0	6.5	4.5	6.5	4.5	10.5	10.5
20	18.0	17.0	10.0	8.5	6.5	4.0	9.0	6.5	4.5	3.5	12.0	10.5
21	18.0	18.0	8.5	6.5	9.0	6.5	10.0	9.0	4.5	4.0	12.0	12.0
22	18.0	18.0	6.5	5.0	9.0	7.0	10.0	10.0	5.5	4.0	13.0	12.0
23	18.0	17.0	5.0	4.0	7.0	5.5	11.0	10.0	5.5	5.5	13.0	12.0
24	18.0	18.0	4.5	4.0	6.0	5.5	12.0	11.0	6.5	5.5	12.0	10.0
25	18.0	18.0	4.0	3.5	8.0	6.0	12.0	10.5	8.0	6.5	10.0	9.0
26	18.0	17.0	3.5	3.5	8.5	8.0	10.5	8.0	8.5	8.0	9.0	7.0
27	17.0	16.0	4.0	3.5	10.0	8.5	8.0	7.0	8.5	8.0	9.0	8.5
28	16.0	16.0	4.5	4.0	10.0	10.0	8.5	7.0	8.5	8.0	11.0	9.0
29	16.0	15.5	5.5	4.5	10.0	8.0	8.5	8.5	10.0	8.5	13.0	11.0
30	16.0	15.5	6.0	5.5	10.0	8.0	8.5	8.5	---	---	13.0	12.0
31	16.5	16.0	---	---	10.0	8.0	8.5	6.5	---	---	12.0	11.5
MONTH	20.5	12.0	18.5	3.5	11.5	3.0	12.0	4.5	10.0	3.5	13.0	7.0

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	11.0	18.5	17.0	19.0	17.0	20.5	19.5	22.0	22.0	20.0	20.0
2	11.0	10.0	18.5	18.5	17.0	16.5	20.5	20.5	22.0	22.0	20.0	20.0
3	10.0	9.0	18.5	18.5	18.0	16.5	20.5	20.5	23.0	22.0	20.0	20.0
4	11.0	9.5	18.5	17.0	18.5	18.0	20.5	20.5	23.0	23.0	20.0	20.0
5	11.0	11.0	17.0	16.0	19.0	18.5	20.5	20.5	23.0	23.0	20.0	20.0
6	13.5	11.0	16.0	16.0	20.0	19.0	20.5	19.5	23.0	23.0	20.0	19.5
7	14.0	13.5	17.0	16.0	20.0	20.0	19.5	18.5	22.0	22.0	19.5	19.5
8	14.0	12.0	17.0	16.5	20.0	20.0	19.0	18.5	22.0	21.0	20.0	19.5
9	12.0	10.0	16.5	16.0	20.0	20.0	19.0	19.0	21.5	20.5	20.0	20.0
10	11.0	10.5	16.0	15.0	20.0	20.0	20.0	19.0	20.5	20.0	20.0	20.0
11	12.0	11.0	15.0	14.5	20.0	19.0	20.5	20.0	20.0	20.0	20.0	20.0
12	15.5	12.0	15.0	14.5	19.0	18.5	21.0	20.5	20.0	20.0	20.0	20.0
13	15.5	15.0	15.0	15.0	19.5	18.5	21.0	21.0	21.0	20.0	20.0	20.0
14	15.5	15.5	15.0	15.0	20.0	18.5	21.0	21.0	21.0	21.0	20.0	20.0
15	16.5	15.5	15.5	15.0	21.0	20.0	21.5	21.0	21.0	21.0	20.5	20.0
16	16.5	16.5	15.5	15.5	21.0	21.0	22.0	21.5	21.0	20.5	20.5	20.5
17	16.5	16.5	15.5	15.5	21.0	20.5	21.5	21.0	21.0	21.0	20.5	20.5
18	16.5	15.5	15.5	15.5	21.0	20.5	21.5	21.0	21.5	21.0	20.5	20.5
19	17.0	16.5	16.0	15.5	21.0	20.5	22.0	21.5	21.5	21.5	20.5	20.0
20	18.0	17.0	16.0	16.0	21.0	21.0	23.0	22.0	22.0	21.5	20.0	20.0
21	18.0	18.0	16.0	16.0	21.0	21.0	23.0	22.0	22.0	22.0	20.0	20.0
22	18.0	18.0	16.0	16.0	21.0	20.0	23.5	23.0	22.0	22.0	20.0	20.0
23	18.0	15.5	17.0	16.0	20.0	18.5	23.5	23.5	22.0	22.0	20.0	20.0
24	16.0	16.0	18.5	17.0	18.5	18.0	24.0	23.5	22.0	22.0	20.0	20.0
25	16.0	15.0	19.0	18.5	18.5	18.0	24.0	24.0	22.0	22.0	20.0	20.0
26	15.0	14.0	19.0	19.0	19.0	18.5	24.0	24.0	22.0	22.0	20.0	20.0
27	15.0	14.5	19.0	19.0	19.5	19.0	24.0	24.0	22.0	22.0	20.0	20.0
28	15.0	15.0	19.0	18.5	19.5	19.5	24.0	23.5	22.0	22.0	20.0	19.5
29	16.5	15.0	18.5	18.5	19.5	19.5	24.0	23.5	22.0	20.5	19.5	19.5
30	18.0	16.5	18.5	18.5	19.5	19.5	23.5	23.0	20.5	20.0	19.5	16.5
31	---	---	18.5	18.5	---	---	23.0	22.0	20.0	20.0	---	---
MONTH	18.0	9.0	19.0	14.5	21.0	16.5	24.0	18.5	23.0	20.0	20.5	16.5

03579100 ELK RIVER NEAR ESTILL SPRINGS, TENN.

LOCATION.--Lat 35°17'08", long 86°06'20", Franklin County, temperature recorder at gaging station on left bank at bridge on Corn Mill Road, 1.7 miles northeast of Estill Springs, 2.7 miles downstream from Elk River Dam, 4.0 miles upstream from U. S. Highway 41-A bridge, and at mile 167.3.

DRAINAGE AREA.--275 sq mi.

PERIOD OF RECORD.--Water temperatures: July 1971 to current year.

EXTREMES, July to September, 1971.--Water temperatures: Maximum, 31.5°C July 9, Aug. 9; minimum, 18.0°C Sept. 30.

EXTREMES, 1971-72.--Water temperatures: Maximum, 30.0°C Aug. 18-20; minimum, 5.5°C Feb. 9.

REMARKS.--Missing record Nov. 12 to Dec. 3; range in temperature (estimated), 12.0°C to 18.0°C; Dec. 30 to Jan. 4; 12.0°C to 15.0°C; Jan. 26 to Feb. 1, 8.0°C to 13.0°C; Feb. 4-8, 6.0°C to 9.0°C; July 19-24, 24.5°C to 26.5°C. Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, JULY TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	24.0	25.0	24.0	25.0	21.5
2	25.5	24.5	25.5	24.0	23.5	22.0
3	27.0	25.0	25.5	23.5	24.5	21.5
4	27.0	25.0	26.0	23.0	24.5	21.5
5	28.5	25.5	28.0	21.5	24.5	21.5
6	29.0	24.0	28.0	23.5	24.5	21.5
7	28.5	25.5	29.5	24.5	23.5	22.0
8	29.0	25.5	29.5	25.5	23.5	21.0
9	31.5	24.5	31.5	26.0	26.0	20.0
10	30.5	24.0	28.0	25.0	29.0	20.5
11	29.0	24.0	28.5	25.5	24.0	21.5
12	26.5	24.0	28.0	25.5	24.0	22.0
13	29.5	24.0	28.5	25.5	23.0	20.5
14	26.0	23.5	27.0	25.5	23.5	19.0
15	27.0	24.0	28.5	25.5	26.0	20.0
16	28.5	26.0	28.0	25.5	22.0	21.0
17	29.5	25.5	28.0	25.0	21.5	20.5
18	28.0	24.5	27.0	25.0	23.0	21.0
19	26.5	24.5	29.0	24.5	23.5	21.0
20	25.5	23.5	29.0	25.0	23.0	21.5
21	26.0	23.5	30.5	25.0	23.0	20.5
22	26.0	22.0	26.5	25.0	23.0	20.0
23	26.5	24.0	26.0	24.5	23.0	21.0
24	25.0	23.5	26.5	24.5	23.5	20.5
25	27.0	23.5	31.0	24.0	23.0	21.0
26	26.5	25.0	27.0	25.0	23.5	21.5
27	26.5	25.0	26.5	24.0	23.5	21.0
28	26.5	25.0	26.5	24.0	25.0	21.0
29	26.5	25.0	25.0	23.0	25.0	18.0
30	26.5	25.0	24.0	23.0	---	---
31	26.5	24.5	24.0	23.0	---	---
MONTH	31.5	22.0	31.5	21.5	29.0	18.0

03579100 ELK RIVER NEAR ESTILL SPRINGS, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.0	21.5	20.5	---	---	---	---	---	---	9.5	8.0
2	18.0	15.5	21.5	19.5	---	---	---	---	9.0	8.0	11.0	8.5
3	18.5	16.0	21.5	19.5	---	---	---	---	8.5	8.0	11.5	10.0
4	19.0	16.0	20.5	18.5	14.5	12.0	---	---	---	---	11.0	9.0
5	18.5	17.0	19.5	16.5	14.0	13.0	15.0	14.0	---	---	10.5	9.0
6	18.5	16.5	20.0	18.0	14.0	12.0	14.5	12.0	---	---	11.0	8.5
7	18.5	16.0	20.0	18.0	13.5	12.0	14.5	10.5	---	---	10.0	8.5
8	18.5	15.5	18.5	16.0	14.0	13.0	14.0	11.0	---	---	10.5	9.0
9	18.5	17.0	18.5	16.0	14.5	13.5	13.0	11.0	9.5	5.5	11.0	9.0
10	18.0	16.0	17.0	15.5	13.5	11.5	11.5	10.0	9.5	6.0	11.0	8.0
11	18.0	15.5	18.0	14.5	14.5	11.0	13.0	10.0	9.0	6.0	10.5	8.0
12	18.0	15.5	---	---	15.0	13.0	13.5	10.0	9.0	7.0	10.5	8.0
13	18.0	16.5	---	---	14.5	11.5	13.0	10.0	8.0	7.0	10.5	8.5
14	18.0	15.0	---	---	14.0	12.0	14.0	12.0	9.0	5.5	11.5	9.5
15	19.0	16.5	---	---	14.0	12.0	14.0	13.0	8.5	6.5	11.5	9.0
16	18.5	16.0	---	---	14.0	13.0	14.0	10.5	9.5	7.0	11.0	9.0
17	19.0	15.5	---	---	15.5	14.0	12.0	10.0	9.0	7.0	11.5	10.5
18	19.0	17.0	---	---	15.5	13.5	11.5	9.0	9.0	7.0	12.0	10.5
19	19.5	17.0	---	---	15.5	13.5	10.5	9.0	9.5	7.0	12.0	9.0
20	20.0	18.5	---	---	14.5	11.5	10.0	9.0	9.0	6.0	12.0	9.5
21	20.5	19.0	---	---	14.5	12.0	10.5	9.0	9.0	6.5	11.5	10.0
22	20.5	19.0	---	---	14.5	11.5	10.5	9.0	9.0	6.5	13.0	10.5
23	21.0	19.5	---	---	14.5	13.0	10.5	9.0	9.0	7.0	13.5	11.0
24	21.0	19.5	---	---	14.0	11.5	10.5	8.5	8.0	6.5	14.0	12.0
25	21.5	20.5	---	---	14.5	12.0	12.0	10.5	9.0	6.5	13.5	12.0
26	21.0	19.5	---	---	14.0	11.0	---	---	9.5	7.0	13.5	11.0
27	21.0	19.5	---	---	14.0	12.0	---	---	10.0	7.0	13.0	11.0
28	20.5	19.0	---	---	15.0	13.0	---	---	10.0	6.5	12.0	9.5
29	20.5	19.0	---	---	15.0	13.0	---	---	9.5	7.0	13.0	10.5
30	21.0	19.5	---	---	---	---	---	---	---	---	13.5	12.0
31	21.5	19.5	---	---	---	---	---	---	---	---	13.5	11.5
MONTH	21.5	15.0	---	---	15.5	11.0	---	---	10.0	5.5	14.0	8.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	12.0	20.5	18.0	23.5	20.5	24.5	22.0	26.5	25.0	28.0	25.0
2	14.5	11.5	20.5	18.5	24.0	20.5	25.0	23.0	26.5	24.0	29.0	24.5
3	15.5	13.0	20.5	19.0	25.0	21.0	26.5	24.0	28.0	24.0	26.5	24.0
4	16.0	14.5	21.0	19.5	27.0	21.5	25.5	24.0	30.0	25.5	26.0	24.5
5	16.5	13.5	21.0	19.0	29.5	22.0	26.0	24.5	28.5	26.0	27.0	25.0
6	16.0	13.5	20.5	18.5	29.5	23.5	26.0	24.0	28.0	25.5	25.5	21.0
7	15.0	14.0	20.5	19.5	25.5	24.0	26.0	23.0	27.0	25.0	21.5	17.0
8	16.5	15.0	20.5	19.0	27.0	21.5	24.0	21.0	28.0	25.5	20.5	17.0
9	16.5	13.5	21.0	20.0	25.0	23.0	24.0	23.0	27.0	24.5	19.5	18.5
10	15.5	13.5	21.5	19.5	25.0	23.0	27.0	22.0	27.0	25.0	19.5	18.0
11	15.5	14.0	21.5	18.5	25.0	23.0	29.0	22.0	27.0	24.0	20.0	18.0
12	15.0	13.5	20.5	18.5	24.5	22.0	29.5	23.5	27.0	24.0	23.0	16.5
13	15.0	13.5	21.0	19.0	26.0	21.5	28.5	23.5	26.5	24.5	23.5	17.0
14	15.0	13.5	21.0	19.0	23.5	20.0	25.0	23.0	29.0	24.5	22.0	19.0
15	15.5	13.5	20.0	18.5	23.0	20.5	24.5	23.5	30.0	25.5	24.5	18.5
16	16.0	14.0	21.5	18.5	24.0	22.0	26.0	24.0	30.0	25.5	23.0	19.0
17	18.0	15.0	21.5	19.0	24.5	23.0	26.0	24.5	28.5	25.5	20.0	18.5
18	18.0	15.0	23.0	20.0	25.5	23.0	28.0	24.5	30.0	25.5	20.0	18.5
19	16.5	15.0	22.0	20.5	25.5	24.0	---	---	30.0	26.0	22.0	19.0
20	17.0	15.0	22.0	20.5	25.5	23.5	---	---	30.0	26.5	26.5	18.5
21	19.0	16.0	22.0	20.0	25.0	22.0	---	---	28.5	26.0	22.0	19.0
22	19.5	16.5	22.0	20.0	23.5	21.0	---	---	28.0	25.5	20.0	18.5
23	20.5	16.5	23.0	20.5	23.5	20.0	---	---	28.5	24.5	19.5	18.5
24	20.5	18.0	23.5	21.5	23.5	19.5	---	---	26.0	24.5	19.5	19.5
25	19.5	18.5	23.5	21.5	24.0	20.0	29.0	25.5	27.0	23.0	20.5	19.0
26	20.0	16.5	24.5	21.0	23.5	21.5	29.0	25.5	27.0	22.0	20.5	19.0
27	20.0	16.0	24.5	21.5	23.5	21.0	29.0	25.5	26.5	25.0	20.0	19.0
28	19.0	18.0	24.5	22.0	24.0	22.0	26.5	25.0	26.5	25.5	20.0	19.0
29	19.0	18.0	25.0	22.0	24.5	22.0	26.5	25.0	26.5	24.5	20.0	19.0
30	20.0	18.0	25.0	21.5	24.5	21.5	27.0	25.0	29.5	24.5	22.0	20.0
31	---	---	24.0	21.5	---	---	27.0	24.5	28.0	24.5	---	---
MONTH	20.5	11.5	25.0	18.0	29.5	19.5	29.5	8.0	30.0	9.0	29.0	16.5

03580750 ELK RIVER BELOW TIMS FORD DAM, TENN.

LOCATION.--Lat 35°11'32", long 86°16'52", Franklin County, temperature recorder at gaging station on right bank 150 ft upstream from bridge on State Highway 50, 0.3 mile downstream from Tims Ford Dam, 3.6 miles north of Lexie Crossroads, 9.5 miles west of Winchester, and at mile 13.3.

DRAINAGE AREA.--534 sq mi.

PERIOD OF RECORD.--Water temperatures: May 1971 to current year.

EXTREMES, May to September, 1971.--Water temperatures: Maximum, 25.0°C June 24, 25; minimum, 7.0°C May 19, 21.

EXTREMES, 1971-72.--Water temperatures: Maximum, 25.0°C June 24, 25, 1971, July 23, 1972; minimum, 3.5°C Feb. 19, 1972.

REMARKS.--No record Apr. 11 to July 18, 1972. Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, MAY TO SEPTEMBER 1971
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	22.0	9.0	11.5	9.0	19.0	13.5	11.5	9.5
2	---	---	---	---	10.0	8.5	13.0	8.5	18.5	8.0	10.0	9.5
3	---	---	---	---	9.5	8.5	11.0	8.5	9.5	8.0	10.5	9.5
4	---	---	---	---	16.5	8.5	11.5	8.0	10.0	9.0	10.5	9.5
5	---	---	---	---	16.5	15.5	10.0	8.0	10.0	9.0	10.5	9.5
6	---	---	---	---	16.5	15.5	11.5	8.5	10.0	9.0	10.5	9.5
7	---	---	---	---	18.0	15.5	11.0	8.5	11.5	9.0	11.0	9.5
8	---	---	---	---	16.5	16.0	13.0	8.5	11.0	9.0	10.5	9.5
9	---	---	---	---	18.0	15.0	10.0	8.0	11.0	9.0	11.0	9.5
10	---	---	---	---	18.0	8.5	9.0	8.0	10.5	9.0	11.0	9.5
11	---	---	21.0	15.5	19.5	8.5	9.5	8.0	11.0	9.0	11.0	9.5
12	---	---	19.5	16.0	9.5	8.5	9.5	8.0	11.5	9.0	11.0	9.5
13	---	---	16.0	8.0	9.5	8.5	9.5	8.0	11.0	9.0	11.0	10.0
14	---	---	14.5	8.0	9.5	8.5	9.5	8.0	11.0	9.0	10.5	10.0
15	---	---	15.0	14.5	9.5	8.0	9.0	8.0	11.5	9.0	10.5	9.5
16	---	---	15.5	14.5	9.5	8.5	15.5	8.0	11.5	9.0	10.0	9.5
17	---	---	15.0	14.5	9.5	8.5	16.0	15.5	11.0	9.0	10.5	10.0
18	---	---	16.0	8.0	16.5	8.5	16.0	15.0	11.0	9.0	10.0	9.5
19	---	---	8.5	7.0	16.5	16.0	16.0	8.0	11.0	9.0	10.5	9.5
20	---	---	8.5	8.0	16.5	15.5	9.5	8.0	11.0	9.0	10.0	9.5
21	---	---	9.0	7.0	19.0	8.5	23.0	8.0	11.0	9.0	11.0	9.5
22	---	---	9.0	8.0	11.0	8.5	16.0	8.0	10.0	9.0	11.0	9.5
23	---	---	8.5	8.0	16.5	8.5	18.5	8.0	11.0	9.0	19.0	9.5
24	---	---	8.5	8.0	25.0	14.5	9.5	8.5	10.5	9.0	21.0	10.0
25	---	---	20.5	8.0	25.0	9.0	10.0	8.5	10.0	9.0	10.5	9.5
26	---	---	24.0	13.0	12.0	8.5	17.0	8.5	10.0	9.0	10.0	10.0
27	---	---	20.0	8.0	12.0	8.5	16.5	8.5	10.5	9.0	10.5	9.5
28	---	---	11.0	8.0	13.0	8.5	18.0	16.5	10.5	9.0	16.5	9.5
29	---	---	18.0	11.0	23.0	9.5	18.0	16.5	10.0	9.0	22.0	10.0
30	---	---	23.0	11.5	12.0	9.0	18.5	16.5	9.5	9.0	11.0	9.5
31	---	---	24.5	14.0	---	---	19.0	18.5	10.5	9.0	---	---
MONTH	---	---	---	---	25.0	8.0	23.0	8.0	19.0	8.0	22.0	9.5

03580750 ELK RIVER BELOW TIMS FORD DAM, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.5	20.0	19.5	13.5	13.0	10.5	10.0	8.5	8.0	13.5	6.5
2	10.0	9.5	22.0	19.5	13.0	13.0	10.0	10.0	8.5	8.0	11.5	7.0
3	10.0	9.5	21.5	20.0	13.0	13.0	10.0	9.5	8.5	8.0	8.5	6.5
4	20.5	9.5	21.0	20.5	13.0	13.0	10.0	9.5	8.5	8.0	8.0	7.0
5	18.5	16.5	20.5	19.0	13.0	12.0	10.0	10.0	8.0	8.0	10.0	9.0
6	21.0	16.5	20.5	19.0	12.0	12.0	10.0	10.0	8.0	8.0	13.5	5.5
7	21.5	14.5	20.5	19.5	12.0	12.0	10.0	9.5	8.0	7.0	13.0	5.5
8	21.0	20.5	19.5	18.5	12.0	12.0	10.0	9.5	8.0	7.0	14.5	4.5
9	21.0	20.5	18.5	18.0	12.0	12.0	9.5	9.5	8.0	7.0	9.0	6.5
10	21.5	20.5	18.5	18.0	12.0	10.5	9.5	9.0	8.0	7.0	10.5	6.5
11	20.5	19.5	18.0	17.0	12.0	12.0	10.0	9.0	13.0	7.0	11.5	6.0
12	20.0	19.5	18.0	16.5	12.0	11.5	10.0	9.5	8.5	6.5	14.0	7.0
13	20.5	19.5	17.0	16.5	11.5	11.5	10.0	9.5	8.0	6.0	9.5	6.5
14	20.5	20.0	17.0	16.0	11.5	11.0	10.0	10.0	10.5	6.0	10.5	7.0
15	20.5	20.0	18.0	17.0	11.5	11.0	10.0	9.0	8.0	7.0	8.0	6.5
16	20.5	20.0	18.0	17.0	12.0	11.5	9.5	9.0	8.0	7.0	12.0	6.5
17	20.5	20.0	18.0	16.0	12.0	12.0	9.0	8.5	8.0	7.0	8.0	7.0
18	20.5	20.0	17.0	16.5	12.0	12.0	8.5	8.0	9.0	7.0	8.0	7.0
19	20.5	20.0	17.0	16.5	12.0	11.0	9.5	8.0	8.0	3.5	8.0	6.0
20	20.5	20.0	17.0	16.0	11.0	10.5	8.0	8.0	7.0	4.5	18.5	5.5
21	21.0	20.5	16.5	16.0	11.0	11.0	8.5	8.0	8.0	6.0	16.0	8.0
22	21.0	20.5	16.0	15.5	11.0	11.0	8.0	8.0	9.0	7.0	15.0	4.5
23	21.0	20.5	15.5	15.0	11.0	10.5	8.0	8.0	8.0	6.5	14.0	5.0
24	20.5	20.5	15.0	14.5	11.0	10.5	8.0	7.0	8.0	6.5	8.5	4.5
25	20.5	20.5	14.5	14.5	11.0	10.0	8.0	8.0	11.5	6.5	8.0	4.5
26	20.5	20.0	14.5	13.5	10.0	10.0	8.0	8.0	9.5	6.5	15.5	4.5
27	20.5	20.0	14.0	13.5	10.0	10.0	8.5	8.0	15.0	5.5	13.5	7.0
28	20.5	20.5	14.0	13.0	10.5	10.0	9.0	8.5	10.5	5.0	9.0	6.5
29	20.5	20.5	13.5	13.0	10.5	10.0	9.0	8.5	8.5	6.5	10.0	7.0
30	20.5	20.5	13.5	13.5	10.5	10.0	8.5	8.5	---	---	8.5	7.0
31	20.5	20.0	---	---	10.5	10.5	8.5	8.5	---	---	8.0	7.0
MONTH	21.5	9.5	22.0	13.0	13.5	10.0	10.5	7.0	15.0	3.5	18.5	4.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	6.5	---	---	---	---	---	---	12.0	10.5	13.5	13.0
2	9.0	5.5	---	---	---	---	---	---	17.0	10.5	13.5	13.0
3	11.5	6.5	---	---	---	---	---	---	17.0	10.5	13.5	13.0
4	10.5	6.5	---	---	---	---	---	---	18.0	10.5	13.5	13.0
5	11.5	5.5	---	---	---	---	---	---	21.5	10.5	14.0	13.5
6	11.0	6.5	---	---	---	---	---	---	20.0	10.5	14.0	13.5
7	10.5	7.0	---	---	---	---	---	---	21.5	10.5	14.0	13.5
8	9.0	5.5	---	---	---	---	---	---	19.0	10.5	14.0	13.5
9	12.0	5.0	---	---	---	---	---	---	18.5	11.5	14.0	13.5
10	11.0	6.0	---	---	---	---	---	---	14.5	11.5	14.5	14.0
11	---	---	---	---	---	---	---	---	13.5	11.5	14.5	14.0
12	---	---	---	---	---	---	---	---	13.5	12.0	14.5	14.0
13	---	---	---	---	---	---	---	---	13.5	12.0	15.0	14.5
14	---	---	---	---	---	---	---	---	13.0	11.5	15.0	14.5
15	---	---	---	---	---	---	---	---	11.5	10.5	15.0	14.5
16	---	---	---	---	---	---	---	---	10.5	10.5	15.0	14.5
17	---	---	---	---	---	---	---	---	10.5	10.5	15.5	15.0
18	---	---	---	---	---	---	---	---	12.0	10.5	15.5	15.0
19	---	---	---	---	---	---	21.5	13.0	14.0	11.5	16.0	15.0
20	---	---	---	---	---	---	20.0	10.5	12.0	11.0	16.0	15.5
21	---	---	---	---	---	---	20.5	10.5	11.0	10.5	16.0	15.5
22	---	---	---	---	---	---	19.5	10.0	11.5	10.5	16.0	16.0
23	---	---	---	---	---	---	19.5	10.0	12.0	11.5	16.5	16.0
24	---	---	---	---	---	---	21.0	10.5	13.0	12.0	16.5	16.0
25	---	---	---	---	---	---	13.5	10.0	13.0	12.0	17.0	16.5
26	---	---	---	---	---	---	10.5	10.0	14.5	12.0	17.0	16.5
27	---	---	---	---	---	---	22.0	10.0	14.5	13.0	18.0	17.0
28	---	---	---	---	---	---	22.0	10.5	13.5	13.0	18.0	17.0
29	---	---	---	---	---	---	15.5	10.0	13.5	12.0	18.5	18.0
30	---	---	---	---	---	---	12.0	10.5	13.5	13.0	19.0	18.0
31	---	---	---	---	---	---	12.0	10.5	13.5	13.0	---	---
MONTH	---	---	---	---	---	---	---	---	21.5	10.5	19.0	13.0

03582600 CANE CREEK NEAR FAYETTEVILLE, TENN.

LOCATION.--Lat 35°09'30", long 86°36'32", Lincoln County, on right bank, at bridge on U. S. Highway 64, near west city limits of Fayetteville, and at mile 0.6.

DRAINAGE AREA.--106 sq mi.

PERIOD OF RECORD.--Water temperatures: March 1968 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 26.5°C July 27; minimum, 1.0°C Jan. 16, 17.

EXTREMES, 1968-72.--Water temperatures: Maximum, 29.5°C Aug. 1, 2, 5, 1970; minimum, freezing point, at least once during winter period 1968-71.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	21.0	20.0	19.0	8.5	6.5	10.5	9.0	7.0	6.0	15.0	14.0
2	23.0	21.0	20.5	19.5	7.0	6.0	11.5	9.5	8.5	7.0	15.0	10.5
3	23.5	20.5	20.0	16.0	8.0	6.0	11.5	9.5	9.0	7.0	10.5	9.0
4	23.5	20.5	16.0	13.0	8.5	7.0	13.0	11.5	7.0	4.5	9.5	8.5
5	23.0	21.5	13.0	11.0	9.0	8.5	12.0	8.5	7.0	4.0	10.5	9.0
6	21.5	19.5	13.5	11.0	13.0	9.0	9.0	8.0	8.5	6.5	10.0	8.0
7	19.5	17.0	13.0	9.5	14.0	13.0	8.5	7.0	7.0	5.5	11.0	9.0
8	19.0	15.5	9.5	8.0	14.0	13.5	9.5	7.0	7.0	4.0	11.5	10.0
9	18.5	16.5	9.0	8.5	13.5	11.0	14.5	9.5	8.0	4.5	11.0	8.5
10	20.0	17.0	10.0	8.0	16.5	11.5	14.5	14.0	8.5	6.0	12.0	8.5
11	16.0	13.0	10.0	7.0	16.0	13.0	14.5	11.0	9.0	6.0	14.0	10.0
12	16.0	13.5	11.0	8.0	13.5	12.0	14.5	11.5	8.5	8.0	15.5	12.0
13	16.5	14.5	12.0	9.0	14.0	13.0	14.0	8.5	8.0	6.0	15.5	14.0
14	16.5	14.5	14.0	11.5	15.0	14.0	8.5	5.5	9.0	6.0	14.5	13.5
15	18.0	16.0	15.0	12.0	16.0	15.0	8.5	4.0	11.0	8.5	15.5	12.0
16	18.5	17.0	15.0	11.5	16.0	15.0	4.0	1.0	9.0	8.0	16.0	14.5
17	19.0	18.5	15.0	11.5	15.0	11.5	5.5	1.5	9.5	8.5	14.5	13.0
18	19.5	19.0	15.5	13.0	13.0	9.0	9.0	5.0	9.5	8.0	13.5	12.0
19	19.5	19.0	15.0	13.0	9.5	8.5	10.5	7.0	8.0	5.5	15.0	11.0
20	19.5	17.0	14.0	11.0	14.5	9.5	13.0	10.5	8.0	4.5	16.0	11.5
21	19.5	18.5	11.5	9.0	14.0	12.0	14.0	13.0	9.5	6.5	16.0	15.0
22	20.5	19.0	9.0	7.0	12.0	10.5	14.5	14.0	10.5	9.0	16.0	14.0
23	20.5	19.5	9.5	7.0	10.5	10.0	14.5	14.0	11.0	8.5	15.0	13.0
24	20.5	19.5	8.0	6.5	11.0	10.0	15.5	13.5	13.5	11.0	14.0	10.5
25	20.0	19.5	7.0	5.5	11.5	10.5	15.5	10.0	14.0	11.5	10.5	8.5
26	19.5	18.5	7.0	5.5	13.5	11.5	10.5	6.0	14.0	10.5	10.5	6.5
27	19.5	17.0	8.0	6.5	14.5	13.0	10.5	8.5	11.5	9.0	12.0	10.0
28	19.0	16.5	8.5	5.5	14.5	12.0	10.5	9.5	12.0	9.0	16.5	13.0
29	19.5	16.5	9.5	8.5	12.0	10.5	9.5	9.0	14.5	10.5	16.5	14.5
30	19.0	16.5	9.0	8.0	15.0	11.5	9.0	7.0	---	---	14.5	11.5
31	20.0	18.5	---	---	14.5	10.5	7.0	5.5	---	---	13.5	11.5
MONTH	24.0	13.0	20.5	5.5	16.5	6.0	15.5	1.0	14.5	4.0	16.5	6.5

03582600 CANE CREEK NEAR FAYETTEVILLE, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	11.5	19.5	17.0	19.0	16.5	24.5	21.5	23.5	21.5	24.0	22.0
2	14.5	10.0	19.5	18.5	19.5	16.5	24.5	23.0	24.5	23.0	24.0	22.0
3	16.0	11.0	19.5	18.0	20.5	18.0	25.0	22.0	25.0	23.5	24.0	22.0
4	15.5	14.0	18.5	16.5	21.5	19.0	24.5	22.0	25.5	24.0	23.0	22.0
5	14.5	11.0	18.5	15.5	23.0	20.0	23.0	21.0	25.0	19.5	23.0	21.5
6	16.5	12.0	19.0	16.0	24.0	21.0	22.0	19.5	24.5	23.5	23.0	20.5
7	18.0	16.5	18.5	18.0	24.0	21.5	21.5	19.0	25.0	23.5	23.5	21.0
8	16.5	11.5	18.5	17.0	24.0	20.5	22.0	19.0	24.5	23.0	23.5	21.5
9	14.0	9.5	18.5	15.0	23.5	21.0	23.5	20.5	25.0	23.5	24.0	22.0
10	15.0	11.5	16.0	14.5	23.5	20.5	24.0	21.0	24.5	19.0	23.0	21.0
11	16.0	14.5	17.0	15.0	21.0	19.0	24.5	21.0	24.0	21.5	23.0	21.5
12	18.0	16.0	18.0	15.5	21.0	20.0	24.5	1.5	23.5	21.0	24.0	21.0
13	19.5	18.0	18.0	17.0	22.0	20.5	24.5	21.5	22.0	20.5	24.0	21.0
14	21.5	19.0	18.5	14.5	23.5	21.0	24.5	22.0	24.0	21.0	24.5	21.5
15	23.0	20.5	19.0	16.5	24.0	22.0	24.5	23.0	24.0	21.0	24.5	22.0
16	23.0	19.0	19.0	16.0	24.0	23.0	24.5	22.0	24.0	21.5	24.0	21.5
17	20.5	18.5	20.5	18.0	23.5	22.0	25.0	21.5	24.5	22.0	23.0	21.5
18	20.5	16.5	20.5	18.0	24.0	22.0	25.5	23.5	24.5	23.0	22.0	21.0
19	21.5	18.5	20.0	18.0	24.5	22.0	25.5	23.5	25.5	23.0	23.0	21.5
20	21.5	19.5	20.5	18.0	23.5	22.0	26.0	21.5	25.5	23.5	24.0	21.5
21	20.0	19.5	21.0	18.5	23.5	21.0	26.0	23.0	25.5	23.5	24.0	21.5
22	20.0	18.5	21.0	18.5	22.0	20.0	25.5	19.0	25.5	23.5	23.0	22.0
23	18.5	15.5	21.5	19.0	21.0	18.5	25.0	24.0	24.5	23.0	23.0	21.5
24	16.5	15.5	21.5	18.5	22.0	18.0	26.0	23.0	24.5	22.0	23.0	21.5
25	16.0	14.5	20.5	18.0	22.0	19.5	26.0	23.5	25.5	23.0	23.0	21.5
26	15.5	13.0	21.0	18.0	23.0	21.0	26.0	23.5	26.5	24.0	24.0	22.0
27	16.5	13.5	21.0	19.0	23.5	21.0	26.5	23.5	25.5	24.0	23.0	23.0
28	16.5	15.5	21.5	19.0	24.0	22.0	25.5	23.0	24.5	22.0	23.0	22.0
29	17.0	15.5	21.0	19.5	24.5	21.5	23.0	22.0	25.0	21.0	22.0	21.5
30	18.5	16.5	21.0	19.5	24.5	21.0	22.0	20.5	24.5	21.0	21.0	18.0
31	---	---	20.5	18.0	---	---	21.0	22.0	24.5	21.0	---	---
MONTH	23.0	9.5	21.5	14.5	24.5	16.5	26.5	19.0	26.5	19.0	24.5	18.0

03584000 RICHLAND CREEK NEAR PULASKI, TENN.

LOCATION.--Lat 35°12'51", long 87°06'05", Giles County, temperature recorder at gaging station on right bank, 1,200 ft upstream from bridge on U. S. Highway 64, 1.0 mile downstream from Weakley Creek, 4.0 miles west of Pulaski, and at mile 30.1.

DRAINAGE AREA.--366 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1967, March 1968 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 24.0°C July 27, 28, Aug. 26; minimum, 3.0°C Jan. 16.

EXTREMES, 1964-72.--Water temperatures: Maximum, 27.0°C July 14, 1966, Aug. 8, 9, 1968; minimum, freezing point, Jan. 11, 1970.

REMARKS.--Records furnished by Tennessee Valley Authority. Miscellaneous samples of chemical data published for the water years 1966, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	20.0	19.0	18.5	8.5	6.5	10.0	9.0	7.0	6.5	14.0	13.0
2	21.0	20.0	19.5	18.5	7.0	6.5	10.0	9.5	9.0	7.0	13.5	9.5
3	21.0	19.5	18.5	15.5	7.0	6.5	11.0	9.0	9.0	6.5	9.5	8.5
4	20.5	19.5	15.5	13.0	8.0	6.5	12.0	9.5	6.5	5.0	9.0	8.5
5	20.0	19.0	13.0	11.5	9.0	8.0	9.5	8.0	6.0	4.5	10.0	9.0
6	20.0	18.0	13.5	11.0	12.0	9.0	9.0	8.0	6.5	5.5	10.0	8.0
7	19.0	17.0	12.0	9.5	12.0	12.0	9.0	9.5	7.0	6.0	10.5	9.5
8	18.0	16.0	9.5	8.5	13.0	11.5	9.5	8.0	7.0	5.0	11.5	10.0
9	17.0	16.5	10.0	9.5	11.5	11.0	10.5	9.5	8.0	5.5	10.5	8.5
10	16.5	15.0	10.5	9.0	14.5	11.5	13.0	10.5	8.5	6.0	11.5	8.5
11	15.5	13.5	10.5	8.5	14.0	12.0	13.5	11.5	9.0	6.5	13.0	10.0
12	16.0	14.0	11.0	9.0	12.0	11.0	11.5	10.0	8.5	8.0	15.0	11.5
13	15.5	15.0	12.0	10.0	12.0	11.5	13.5	11.0	8.0	6.5	14.0	12.0
14	16.5	14.5	13.5	11.5	14.0	11.5	11.0	8.0	9.0	6.5	13.5	11.5
15	18.5	16.0	14.0	12.0	14.5	14.0	8.0	4.0	10.5	8.5	14.0	11.0
16	18.5	16.5	13.5	11.5	14.0	13.5	4.0	3.0	9.0	8.0	14.5	13.0
17	18.5	17.0	13.5	11.5	13.5	10.0	5.5	3.5	9.5	8.5	13.0	11.5
18	19.0	18.0	14.0	12.0	10.0	8.0	8.5	5.0	9.5	8.0	12.0	11.0
19	18.5	17.0	14.0	10.5	9.5	7.0	10.5	8.5	8.0	6.0	13.5	10.0
20	17.0	16.5	11.5	10.0	11.5	9.5	11.5	10.5	8.0	5.5	14.5	11.0
21	17.0	16.5	10.0	8.0	11.5	10.0	13.0	11.5	9.5	7.0	14.5	13.0
22	18.5	17.0	8.5	7.0	10.5	9.5	13.5	13.0	10.0	9.0	14.5	12.0
23	19.0	18.5	7.0	7.0	9.5	9.5	13.5	13.0	10.5	8.5	14.0	11.0
24	19.0	17.0	8.0	6.5	11.0	9.5	14.5	13.0	12.0	10.5	11.5	9.5
25	19.0	18.0	7.0	6.0	11.5	10.5	14.0	9.5	13.0	11.0	9.5	7.0
26	18.0	16.5	8.0	6.0	13.0	11.0	9.5	8.0	13.0	10.0	10.0	7.0
27	18.0	16.0	8.0	6.5	14.0	12.0	9.5	8.0	11.0	9.0	12.0	9.5
28	18.0	16.0	9.0	6.5	13.5	10.5	9.5	8.5	11.5	9.0	15.5	12.0
29	18.5	16.0	9.0	8.0	12.0	10.5	8.5	8.5	13.5	10.0	14.5	11.5
30	18.0	16.0	9.0	8.0	13.5	12.0	8.5	6.5	---	---	12.0	11.0
31	18.5	17.0	---	---	12.0	9.5	7.0	6.0	---	---	13.5	10.5
MONTH	21.0	13.5	19.5	6.0	14.5	6.5	14.5	3.0	13.5	4.5	15.5	7.0

03584000 RICHLAND CREEK NEAR PULASKI, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	11.0	17.0	16.0	17.0	15.0	21.0	20.5	21.0	19.5	21.5	20.0
2	13.0	9.5	17.0	16.5	18.0	15.0	21.5	20.5	22.0	20.0	21.5	20.0
3	14.5	10.5	16.5	15.0	19.0	16.0	22.0	20.5	23.0	20.5	21.5	20.5
4	14.0	11.5	16.5	15.0	19.5	17.0	21.5	20.5	23.0	21.0	21.0	20.5
5	14.0	10.5	16.5	14.5	20.5	18.5	20.5	20.0	22.0	21.0	21.0	19.5
6	15.5	11.5	17.0	15.0	21.0	19.0	20.0	18.5	22.0	20.5	21.0	18.5
7	16.0	15.0	17.0	16.0	21.5	20.0	19.5	17.0	22.0	20.0	21.0	19.0
8	15.0	11.0	17.0	16.0	21.0	19.0	20.0	18.5	22.0	20.0	21.0	19.5
9	13.0	9.5	16.5	15.0	21.0	19.5	21.0	19.5	22.0	21.0	21.5	20.5
10	14.0	11.0	15.5	14.0	20.5	19.5	21.5	20.0	21.5	20.5	21.0	19.5
11	15.0	13.5	16.0	14.0	19.5	18.0	22.0	20.5	21.5	20.0	21.0	20.0
12	16.0	15.0	16.5	14.0	19.5	18.5	22.0	21.0	21.0	19.5	21.5	19.5
13	17.0	15.5	17.0	16.0	20.5	18.5	23.0	21.0	20.5	19.0	21.5	19.5
14	18.5	16.5	18.0	16.0	21.0	19.5	23.0	21.0	21.5	19.5	22.0	20.0
15	20.0	18.0	18.0	15.5	21.0	20.5	23.0	21.0	21.5	19.5	22.0	20.5
16	20.0	17.0	18.0	15.5	21.0	20.0	22.0	20.0	21.5	20.0	21.5	20.0
17	18.5	16.0	18.5	16.0	20.5	20.0	21.5	19.5	22.0	20.5	21.0	20.0
18	18.5	15.0	18.5	16.0	21.5	19.5	22.0	20.5	22.0	21.0	20.5	19.5
19	19.0	16.0	18.0	16.0	21.0	20.0	23.0	21.0	23.0	21.0	21.0	20.0
20	19.0	17.0	18.5	16.0	21.0	20.0	23.5	21.5	23.0	21.5	21.5	20.0
21	18.0	17.0	19.0	16.5	21.0	20.0	23.5	21.0	23.0	21.5	21.5	20.0
22	17.0	16.0	19.0	16.5	20.0	19.0	23.5	21.5	23.0	21.5	21.0	20.5
23	16.0	14.0	19.5	17.0	19.5	18.0	23.5	20.5	22.0	21.0	21.0	20.0
24	15.0	14.0	19.5	16.5	20.0	18.0	22.0	20.5	22.0	20.5	21.0	20.0
25	14.0	12.0	18.5	16.0	20.0	19.0	23.0	21.0	23.0	21.0	21.0	20.0
26	12.0	11.5	19.0	16.0	20.0	19.5	23.5	21.5	24.0	21.0	21.5	20.5
27	14.0	12.0	19.0	17.0	20.5	19.5	24.0	22.0	23.0	21.0	21.0	21.0
28	15.5	13.5	19.5	17.0	21.0	20.0	24.0	21.0	21.5	19.5	21.0	20.5
29	15.5	14.5	19.0	18.0	21.5	19.5	21.5	20.0	22.0	18.5	20.5	19.5
30	16.0	15.0	19.0	18.0	21.5	20.0	20.5	19.5	21.5	18.5	19.5	16.5
31	---	---	18.5	16.0	---	---	20.5	19.5	21.5	18.5	---	---
MONTH	20.0	9.5	19.5	14.0	21.5	15.0	24.0	17.0	24.0	18.5	22.0	16.5

03596500 DUCK RIVER AT NORMANDY, TENN.

LOCATION.--Lat 35°27'25", long 86°15'23", Bedford County, temperature recorder at gaging station, at county road bridge at Normandy, 3.3 miles upstream from railroad bridge, and at mile 246.9.

DRAINAGE AREA.--208 sq mi.

PERIOD OF RECORD.--Water temperatures: April 1968 to March 1972 (discontinued).

EXTREMES, October 1971 to March 1972.--Water temperatures: Maximum, 21.5°C Oct. 1, 2; minimum, 3.5°C Jan. 17.

EXTREMES, April 1968 to March 1972.--Water temperatures: Maximum, 27.0°C July 15, 16, 1970; minimum, freezing point, Jan. 8-11, 1970.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, OCTOBER 1971 TO MARCH 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	20.5	19.0	18.5	8.5	6.5	10.5	9.5	6.0	5.5	16.0	15.0
2	21.5	20.5	19.5	18.5	7.0	6.0	10.5	9.0	8.0	6.5	16.0	13.5
3	21.0	20.5	18.5	14.5	8.0	6.5	9.5	8.0	8.0	6.0	13.5	11.0
4	21.5	20.5	14.5	13.0	8.5	8.0	10.5	9.5	6.0	4.0	11.0	10.5
5	21.0	20.5	13.0	12.0	9.5	8.5	10.0	6.5	5.5	4.5	12.0	10.5
6	20.5	19.0	13.5	12.0	11.5	9.5	6.5	6.0	6.0	5.5	12.0	9.5
7	19.5	17.0	13.0	9.5	11.5	11.0	6.5	5.5	6.5	6.0	---	---
8	18.0	16.5	9.5	8.5	12.0	11.5	6.5	5.5	6.5	5.0	---	---
9	18.0	16.5	10.0	9.5	11.5	11.0	9.5	6.5	9.5	8.0	---	---
10	16.5	14.5	10.0	9.0	14.0	11.5	10.5	9.5	10.0	8.5	---	---
11	15.5	14.0	9.5	8.5	13.5	11.5	13.0	10.5	11.0	9.0	---	---
12	15.5	14.0	10.5	9.0	12.0	11.0	11.5	10.0	10.5	10.0	---	---
13	16.0	15.0	11.5	10.0	13.0	11.5	13.0	11.0	10.5	10.0	---	---
14	16.0	15.0	13.0	11.5	13.5	11.5	11.5	9.0	11.0	9.0	---	---
15	17.0	16.0	13.5	12.0	15.0	13.5	9.0	4.5	12.0	10.5	---	---
16	18.0	17.0	13.0	11.5	14.5	14.0	4.5	4.0	11.5	10.0	---	---
17	18.5	18.0	13.5	12.0	14.5	11.5	4.5	3.5	12.0	10.5	---	---
18	19.0	18.5	14.0	13.0	12.0	9.0	6.0	4.0	13.0	10.5	---	---
19	19.0	18.5	14.5	12.0	9.5	8.0	8.5	6.0	10.5	9.0	---	---
20	19.0	18.0	12.0	11.0	11.5	9.5	9.5	8.5	10.0	8.0	---	---
21	19.0	18.5	11.0	9.0	11.5	11.0	11.0	9.5	11.0	9.0	---	---
22	19.0	19.0	9.0	7.0	11.0	10.0	12.0	10.5	13.0	11.0	---	---
23	19.5	19.0	7.0	6.5	11.0	10.0	13.0	11.5	12.0	11.0	---	---
24	19.5	19.0	7.0	6.5	11.0	9.5	14.0	12.0	13.5	12.0	---	---
25	19.5	18.0	7.0	6.0	12.0	10.5	13.5	9.0	15.0	13.5	---	---
26	18.5	17.0	7.0	5.5	12.0	11.0	8.5	7.0	15.0	13.0	---	---
27	18.0	16.5	8.0	7.0	13.5	12.0	11.0	7.0	14.0	12.0	---	---
28	18.0	16.5	9.0	7.0	13.5	11.5	10.0	9.0	14.5	11.5	---	---
29	18.0	16.5	9.5	9.0	12.0	10.0	9.0	8.0	15.5	13.0	---	---
30	18.0	17.0	9.0	8.0	13.5	11.5	8.0	6.5	---	---	---	---
31	18.5	18.0	---	---	13.0	10.5	6.5	5.0	---	---	---	---
MONTH	21.5	14.0	19.5	5.5	15.0	6.0	14.0	3.5	15.5	4.0	---	---

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°29'45", long 87°49'58", Perry County, temperature recorder at gaging station on right bank, 0.5 mile downstream from Little Opossum Creek and bridge on State Highway 13, 1.3 miles north of Flat Woods, 3.9 miles upstream from Sinking Creek, and at mile 58.7.

DRAINAGE AREA.--447 sq mi.

PERIOD OF RECORD.--Water temperatures: June 1964 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 26.5°C July 27; minimum, 3.0°C Jan. 16, 17.

EXTREMES, 1964-72.--Water temperatures: Maximum, 31.0°C July 13-15, 1966; minimum, freezing point, Jan. 9-11, 1970.

REMARKS.--Thermograph record furnished by Tennessee Valley Authority. Miscellaneous samples of chemical data published for the water years 1967-71.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)
NOV. 17...	1230	227	4.7	40	20	15	2.4	2.0	.6
FEB. 01...	1130	812	4.4	40	10	11	1.6	1.2	.6
MAR. 21...	1045	744	3.0	20	0	11	1.6	1.2	.7
MAY 09...	1130	860	5.8	40	0	13	1.8	1.3	.8
JUNE 13...	1130	262	7.3	20	0	15	2.1	1.1	.6

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
NOV. 17...	1.6	.1	63	54	--	48	4	.02	4.6
FEB. 01...	2.3	.0	49	39	0	34	2	.05	5.8
MAR. 21...	2.4	.1	43	36	0	34	4	.04	5.4
MAY 09...	3.0	.0	45	44	0	40	4	.02	4.6
JUNE 13...	2.2	.0	62	52	0	46	4	.01	3.4

DATE	FECAL COLI-FORM (COL. PER 00 ML)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DIS-SOLVED OXYGEN (MG/L)
NOV. 17...	27	--	--	104	7.0	15.0	5	1.9	7.6
FEB. 01...	37	.2	1.1	80	7.3	5.5	2	--	11.5
MAR. 21...	19	.4	2.0	78	7.3	13.5	5	1.0	9.2
MAY 09...	--	--	1.4	86	7.4	17.0	1	1.8	9.4
JUNE 13...	--	--	1.1	96	7.6	22.0	5	1.0	7.3

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

RADIOISOTOPES

DATE	TIME	DIS-SOLVED NATURAL URANIUM (U) (UG/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)
NOV., 1971 17...	1340	.03	.06	1.0	.3	1.4	1.8

DATE	TIME	TOTAL FILT-RABLE RESIDUE (MG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
NOV., 1971. 17...	1340	56	<.4	<.1	<.4	<.4	2

MINOR ELEMENTS

The sample taken at 1230 hours Nov. 17, 1971, was analyzed for certain minor elements in addition to the analyses shown in the preceding tables. The results of these analyses, shown as dissolved concentration in micrograms per liter (UG/L), are as follows: zinc, 10; copper, 2; nickel, 1; mercury, 0.6; and cadmium, chromium, cobalt, lead, 0.

PESTICIDES

A bottom deposit sample taken at 1245 hours on Nov. 17, 1971, was analyzed for the following pesticides: Aldrin, DDD, DDE, DDT, dieldrin, endrin, heptachlor, heptachlor epoxide, lindane, malathion, methyl parathion, parathion, and chlordane. Concentrations were reported as less than 0.20 micrograms per kilogram (UG/KG) in all cases except chlordane, which was reported as less than 1.0 UG/KG.

A water sample taken at the same time was analyzed for diazinon; 2, 4-D; silvex, and 2, 4, 5-T; in addition to the pesticides listed above for bottom deposits. In all instances, concentration was reported as 0.00 micrograms per liter (UG/L).

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	22.0	20.0	18.5	8.0	7.0	9.5	8.5	7.0	5.5	15.0	14.0
2	24.0	23.0	20.0	19.5	8.0	6.5	9.5	8.5	8.0	6.5	15.0	10.5
3	23.0	22.0	19.5	16.0	7.0	6.5	10.0	8.5	8.5	7.0	10.5	8.5
4	22.0	21.5	16.0	14.0	6.5	6.0	10.5	9.5	7.0	6.0	8.5	8.0
5	21.5	21.0	14.0	13.0	7.0	6.5	10.5	8.5	6.0	5.0	8.5	8.0
6	21.0	19.5	13.5	13.0	8.5	7.0	8.5	6.5	6.5	5.5	9.0	7.0
7	20.0	18.5	13.0	10.0	10.0	8.5	7.0	6.0	7.0	6.5	10.0	8.5
8	19.0	18.0	10.0	9.0	10.5	10.0	8.0	6.5	6.5	6.0	10.0	9.0
9	18.5	18.0	10.0	9.5	10.5	10.0	9.5	8.0	7.0	6.0	9.5	8.5
10	18.0	16.0	10.0	9.5	12.0	10.0	11.5	9.5	7.0	6.5	10.0	8.5
11	16.5	15.0	10.0	9.0	12.0	11.0	12.0	11.0	8.5	7.0	11.0	9.0
12	17.0	15.5	11.0	9.5	11.0	10.0	11.0	10.0	8.0	8.0	13.5	11.0
13	16.5	15.5	12.0	10.0	10.5	10.0	11.0	10.0	8.5	7.0	13.0	12.0
14	17.0	15.5	13.5	11.5	11.5	10.0	10.5	8.5	9.0	6.5	13.0	11.5
15	18.5	16.5	13.5	12.0	13.0	11.5	8.5	4.5	10.0	9.0	13.5	11.0
16	19.0	17.0	13.5	12.0	13.0	12.0	4.5	3.0	9.5	9.0	13.5	13.0
17	19.5	18.0	13.5	12.0	13.0	11.0	3.5	3.0	10.0	9.0	13.0	12.0
18	20.0	18.5	13.5	13.0	11.0	8.5	5.5	3.5	10.5	8.5	12.0	11.5
19	19.5	18.5	13.5	12.0	8.5	7.0	8.5	5.5	9.0	7.0	13.0	11.0
20	19.5	18.5	12.0	10.5	9.0	7.0	10.0	8.5	8.5	6.5	13.5	11.0
21	18.5	18.5	11.0	9.5	9.0	9.0	11.5	10.0	10.0	8.0	13.5	13.0
22	19.0	18.5	9.5	8.0	9.0	8.5	13.0	11.5	10.5	9.5	14.0	13.0
23	19.0	18.5	8.0	7.0	8.5	8.5	13.5	13.0	11.5	9.5	14.0	12.0
24	19.0	18.5	7.0	7.0	9.0	8.5	14.0	13.0	13.0	11.5	13.0	10.5
25	19.0	18.5	7.0	6.5	9.5	9.0	14.0	11.0	13.5	12.0	10.5	8.5
26	19.0	18.0	7.0	6.5	11.0	9.5	11.0	9.0	14.0	11.5	9.0	8.0
27	19.0	17.0	7.0	7.0	13.0	11.0	9.0	9.0	13.0	11.0	10.5	9.0
28	19.0	17.0	8.0	6.5	13.0	10.5	9.0	8.5	12.0	10.5	14.0	10.5
29	19.0	17.0	8.5	8.0	11.0	10.0	8.5	8.0	14.0	11.5	14.0	11.5
30	18.5	18.0	8.5	8.0	12.0	11.0	8.0	6.5	---	---	13.0	11.5
31	19.0	18.0	---	---	11.0	9.5	6.5	6.0	---	---	13.0	11.0
MONTH	24.0	15.0	20.0	6.5	13.0	6.0	14.0	3.0	14.0	5.0	15.0	7.0

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	18.0	16.5	20.0	19.0	24.5	23.5	23.5	22.0	24.5	22.0
2	11.5	10.5	18.0	17.0	21.0	18.0	25.5	23.5	24.5	22.0	24.0	22.0
3	13.0	11.0	18.5	17.0	23.0	20.0	25.5	24.0	25.0	23.5	24.5	22.0
4	14.0	12.0	18.0	16.5	23.5	21.0	25.0	24.0	25.5	24.0	24.5	22.0
5	14.0	11.5	19.0	16.5	24.5	21.5	24.0	21.5	25.5	24.5	23.0	21.0
6	14.5	11.5	19.5	17.0	25.5	23.5	22.0	20.5	25.5	24.0	22.0	20.5
7	15.5	14.0	19.0	18.5	26.0	24.0	21.5	20.0	25.0	24.0	23.0	20.5
8	15.5	13.5	18.5	18.0	25.5	24.0	22.0	20.5	25.0	23.0	23.0	21.5
9	14.0	11.0	18.5	17.0	25.5	24.0	23.5	21.0	24.5	23.5	24.0	22.0
10	13.5	11.5	17.0	15.5	25.5	24.0	23.5	22.0	24.0	23.0	23.5	21.5
11	15.0	13.5	16.5	15.5	24.0	21.5	25.0	23.0	24.5	23.0	24.5	21.5
12	16.5	15.0	17.0	16.0	23.5	22.0	25.0	23.5	24.5	23.0	24.5	22.0
13	18.0	16.5	19.0	16.5	24.5	22.0	25.5	24.0	24.5	23.0	24.5	22.0
14	19.0	17.0	19.5	18.0	25.0	23.5	26.0	24.0	24.0	22.0	25.0	22.0
15	20.5	18.5	19.5	18.5	25.0	24.0	25.5	24.0	24.5	22.0	24.5	23.0
16	21.0	19.0	19.5	18.0	24.5	23.5	24.0	20.0	25.0	23.0	24.5	23.0
17	20.5	18.0	20.0	18.5	24.0	23.0	21.0	19.5	25.0	23.5	23.0	22.0
18	20.0	17.0	20.0	18.5	23.5	23.0	23.0	20.5	25.5	23.5	23.0	21.5
19	20.5	18.0	20.0	18.5	23.5	22.0	23.0	22.0	25.5	24.5	23.5	21.5
20	20.5	18.5	20.0	19.0	25.5	23.0	24.0	22.0	25.5	23.5	24.5	23.0
21	19.5	18.5	21.0	19.0	25.0	24.0	24.5	23.0	25.5	23.5	24.5	23.0
22	18.5	16.5	21.5	19.5	24.0	23.0	25.0	23.5	25.0	23.5	24.0	23.0
23	16.5	16.0	22.0	20.5	23.5	21.5	25.0	24.0	25.0	23.5	23.5	22.0
24	16.5	16.0	22.0	20.5	24.0	21.0	25.0	23.5	25.0	23.5	23.0	21.5
25	16.0	15.0	23.0	20.5	23.5	22.0	25.5	24.0	25.0	24.0	24.0	22.0
26	15.0	13.0	23.0	21.0	24.0	23.0	26.0	24.0	25.0	23.5	24.0	23.0
27	15.0	13.5	23.0	21.0	24.0	23.0	26.5	25.0	24.5	23.5	24.5	23.5
28	15.5	14.5	23.0	21.5	23.5	22.0	26.0	24.0	24.5	23.0	23.5	22.0
29	16.5	15.5	22.0	21.5	24.0	22.0	24.0	23.0	24.5	22.0	22.0	21.0
30	17.0	15.5	22.0	21.5	24.5	23.0	23.0	21.5	24.5	22.0	21.0	19.0
31	---	---	21.5	19.5	---	---	23.0	21.5	24.5	22.0	---	---
MONTH	21.0	10.5	23.0	15.5	26.0	18.0	26.5	19.5	25.5	22.0	25.0	19.0

03606500 BIG SANDY RIVER AT BRUCETON, TENN.

LOCATION.--Lat 36°02'19", long 88°13'42", Carroll County, temperature recorder at gaging station on right bank on downstream end of abutment of county bridge, 700 ft downstream from bridge on U. S. Highway 70, 0.6 mile upstream from Cherry Creek, 0.9 mile east of Bruceton, and at mile 31.6.

DRAINAGE AREA.--205 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1970 to current year.

EXTREMES, 1971-72.--Water temperatures: Maximum, 25.5°C July 19; minimum, 1.5°C Jan. 16, 17.

EXTREMES, 1970-72.--Water temperatures: Maximum, 25.5°C July 19, 1972; minimum, 1.0°C Feb. 10, 14, 1971.

REMARKS.--Miscellaneous samples of chemical data published for the water years 1968, 1970, 1971. Records furnished by Tennessee Valley Authority.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
JAN.												
11...	0845	645	6.8	100	3.6	1.3	2.0	2.0	11	8.0	3.0	40
MAR.												
13...	0950	158	8.1	620	3.0	1.3	2.3	.7	14	5.0	3.0	23
MAY												
11...	1000	1550	5.6	660	3.2	1.7	2.2	2.0	10	11	2.5	43
JULY												
18...	1025	5470	3.2	510	2.4	.4	.7	1.6	6	4.5	1.0	35
SEP.												
26...	1230	86	9.9	600	3.4	1.7	1.9	1.2	16	2.7	3.0	40

DATE	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	NON-CAR-BONATE HARD-NESS (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	PHOS-PHATE (PO4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
JAN.												
11...	14	37	6.2	10.5	90	5	9	.43	.47	.04	.02	.15
MAR.												
13...	13	40	6.4	14.5	7	2	11	.10	.19	.01	<.01	.20
MAY												
11...	15	40	5.9	13.5	35	7	8	.43	.64	.06	.03	.20
JULY												
18...	8	31	5.8	23.0	70	3	5	.80	.66	.06	.03	.10
SEP.												
26...	15	48	6.7	21.0	20	2	13	.12	.25	.02	<.01	.20

03606500 BIG SANDY RIVER AT BRUCETON, TENN.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	20.0	18.5	16.5	9.5	8.0	10.0	8.5	5.5	4.5	15.5	14.0
2	20.5	19.5	19.5	18.0	8.5	7.0	9.0	8.5	6.5	5.5	15.5	8.5
3	20.5	19.5	19.0	14.5	7.0	6.5	8.5	6.0	7.0	5.5	8.5	6.5
4	20.5	20.0	14.5	11.5	8.0	6.5	10.0	8.0	5.5	4.0	7.0	6.0
5	20.0	18.5	13.0	10.5	9.0	8.0	8.0	4.5	5.0	3.0	8.5	6.5
6	18.5	16.5	12.0	10.5	10.5	9.0	4.5	2.0	5.0	5.0	9.5	6.5
7	17.0	15.5	10.5	8.5	11.5	10.5	5.0	3.0	5.0	4.5	10.5	9.0
8	16.5	15.0	9.0	6.5	12.0	11.0	6.0	4.5	4.5	3.0	10.5	9.5
9	17.0	15.0	10.0	9.0	11.0	10.0	9.0	6.0	6.0	4.0	10.0	8.0
10	17.0	13.5	10.5	9.0	14.5	11.0	11.0	9.0	6.5	5.0	11.0	8.0
11	15.0	13.0	11.0	8.5	14.5	11.5	11.5	10.5	8.0	5.5	13.5	10.0
12	15.5	13.5	12.0	9.5	11.5	10.0	11.0	8.5	7.0	6.5	15.5	13.0
13	16.0	15.0	14.0	11.0	11.0	10.0	10.5	9.0	7.0	6.5	15.0	13.5
14	17.0	15.0	15.5	13.5	14.0	11.0	9.0	6.0	8.0	5.5	13.5	12.0
15	18.0	16.0	15.5	14.5	15.0	14.0	6.0	3.0	10.0	8.0	14.5	11.5
16	18.5	16.5	15.0	13.0	14.0	11.5	3.0	1.5	9.0	7.0	14.5	13.5
17	19.0	18.0	14.5	12.0	11.5	9.5	3.5	1.5	9.5	7.0	13.5	13.0
18	19.5	18.0	14.5	13.5	9.5	6.5	6.0	3.5	9.5	8.0	13.5	13.0
19	19.0	16.5	14.5	11.5	8.0	6.5	8.5	6.0	8.0	6.0	14.0	11.0
20	18.0	16.5	11.5	10.0	10.5	8.0	11.5	8.5	8.0	5.5	15.0	11.5
21	18.0	18.0	10.5	9.0	10.5	9.5	11.5	11.0	10.0	8.0	15.0	14.0
22	18.5	18.0	9.0	7.0	9.5	8.5	13.0	11.0	10.0	9.0	15.0	13.0
23	18.5	18.0	8.0	7.0	9.5	8.5	14.0	13.0	11.0	8.5	14.5	13.0
24	18.5	18.5	8.0	8.0	10.0	9.5	14.5	13.0	12.0	11.0	13.0	10.0
25	18.5	16.0	8.0	7.0	11.5	10.0	14.0	9.0	12.0	10.5	10.0	8.5
26	16.5	16.0	8.0	6.5	13.5	11.5	9.0	6.5	11.5	9.5	10.0	7.0
27	18.0	16.0	8.5	8.0	14.5	13.5	8.0	7.0	10.5	8.5	13.0	10.0
28	18.0	16.0	9.0	7.0	15.0	10.5	7.0	5.5	11.5	8.5	15.5	13.0
29	18.0	16.5	9.5	9.0	11.5	9.5	5.5	4.5	14.0	10.5	14.5	11.5
30	18.0	16.0	9.0	8.5	14.0	11.5	5.0	4.5	---	---	11.5	9.5
31	17.0	16.0	---	---	13.5	10.0	5.5	3.5	---	---	13.0	10.0
MONTH	21.0	13.0	19.5	6.5	15.0	6.5	14.5	1.5	14.0	3.0	15.5	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	11.0	18.0	16.5	16.0	14.0	20.5	19.5	22.0	20.0	21.0	19.0
2	13.0	9.5	17.0	16.0	16.0	14.0	19.5	18.5	22.0	20.5	20.5	19.5
3	13.5	11.0	16.5	15.0	17.0	15.0	20.5	19.0	23.5	21.0	20.0	19.5
4	15.0	11.5	15.0	14.0	18.5	16.0	20.5	19.5	23.0	21.5	20.0	19.0
5	15.0	13.0	15.5	13.5	19.5	17.0	20.0	18.5	22.0	21.5	19.5	18.5
6	16.5	13.5	16.5	14.5	20.0	18.0	19.0	17.0	22.0	21.0	19.0	17.0
7	18.0	16.5	16.0	15.0	20.0	18.5	16.0	16.5	23.0	21.5	19.5	18.0
8	16.5	13.0	16.5	15.0	19.0	17.0	18.5	16.5	22.0	20.5	20.5	19.5
9	14.5	11.0	16.5	15.0	19.5	18.0	20.0	18.5	22.0	20.5	21.0	19.5
10	15.0	13.5	15.5	14.0	19.0	18.0	20.5	19.5	21.5	20.5	20.0	19.0
11	16.5	15.0	15.5	13.5	17.0	16.0	21.0	19.5	20.5	19.0	21.0	19.5
12	19.5	16.5	15.5	14.0	18.0	16.0	21.0	19.5	21.0	20.0	21.0	19.5
13	19.5	18.5	16.5	15.0	19.5	18.0	22.0	20.5	22.0	20.0	21.0	19.5
14	20.5	19.0	16.5	16.0	20.5	19.0	22.0	20.5	23.0	21.5	22.0	20.0
15	21.0	19.5	16.5	15.0	20.0	19.0	23.0	21.0	23.0	21.0	21.0	20.0
16	20.0	18.5	16.0	14.5	19.5	18.5	23.0	21.0	21.5	20.5	21.0	20.0
17	19.0	16.5	16.5	15.0	19.0	18.0	23.5	21.5	21.5	20.5	21.0	20.5
18	19.0	15.5	16.5	15.0	19.0	18.0	24.5	23.0	22.0	20.5	21.0	20.5
19	19.0	16.5	17.0	15.0	20.0	18.5	25.5	24.0	22.0	21.0	22.0	20.5
20	19.0	18.5	17.0	15.5	20.5	18.5	25.0	24.0	23.0	21.0	22.0	20.5
21	18.5	18.0	18.0	15.5	20.0	17.0	24.5	24.0	22.0	21.0	21.5	20.0
22	18.5	17.0	18.0	16.0	18.5	15.5	24.5	23.0	22.0	21.0	20.0	19.5
23	18.5	16.5	18.5	16.0	17.0	15.0	23.5	23.0	22.0	21.0	20.0	19.5
24	18.0	16.5	18.0	16.0	17.0	15.0	24.0	23.0	21.5	20.5	21.0	20.0
25	16.5	14.0	18.0	16.0	18.0	16.0	24.0	23.0	22.0	21.0	21.0	20.5
26	14.5	12.0	18.5	16.5	18.5	17.0	24.0	23.0	21.5	20.5	21.5	20.5
27	15.5	13.0	18.5	17.0	19.5	17.0	24.5	23.0	20.5	19.5	22.0	21.0
28	16.5	15.0	18.5	17.0	19.5	18.5	24.0	21.5	---	---	21.5	20.5
29	17.0	16.0	18.5	17.0	20.0	19.0	23.0	21.5	---	---	20.5	18.5
30	18.0	15.5	18.5	17.0	20.5	19.5	22.0	21.0	---	---	18.5	16.0
31	---	---	18.0	16.0	---	---	21.5	20.0	---	---	---	---
MONTH	21.0	9.5	18.5	13.5	20.5	14.0	25.5	16.5	23.5	19.0	22.0	16.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

CUMBERLAND RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
03422500 - CANEY FORK NEAR ROCK ISLAND, TN. (LAT 35 48 26 LONG 085 37 44)												
NOV., 1971												
17...	1235	52	4.3	80	38	6.4	2.3	1.2	125	15	3.5	140
JAN., 1972												
19...	1240	3290	4.2	80	19	2.9	1.0	1.0	56	8.2	1.5	66
MAR.												
14...	0800	3390	4.1	110	19	4.1	1.0	.7	64	8.8	3.0	87
MAY												
18...	1115	3270	4.6	130	16	2.6	1.0	1.0	50	12	2.0	68
JULY												
19...	1230	53	2.9	10	30	7.0	1.2	1.0	111	14	3.0	118
SEP.												
20...	1135	1780	4.2	70	30	6.8	1.7	1.3	106	12	3.5	120
TENNESSEE RIVER BASIN												
03486200 - BUFFALO CREEK AT MILLIGAN COLLEGE, TN. (LAT 36 18 25 LONG 082 17 30)												
OCT., 1971												
04...	1210	6.3	7.4	60	56	9.4	2.4	2.2	204	5.8	4.0	188
03486300 - WATAUGA RIVER NEAR RIOVISTA, TN. (LAT 36 20 45 LONG 082 17 00)												
NOV., 1971												
03...	1530	--	6.3	460	10	2.5	5.7	1.7	21	19	3.0	72
JAN., 1972												
11...	1615	--	6.5	120	12	3.3	5.7	1.3	27	28	2.5	86
MAR.												
13...	1450	--	7.2	60	18	5.1	12	1.5	46	44	5.5	--
MAY												
15...	0825	--	6.0	330	12	4.1	12	1.5	53	22	2.0	98
JULY												
13...	1645	--	4.1	50	9.8	3.6	5.4	.8	29	21	3.5	72
SEP.												
29...	1210	--	5.8	80	13	4.2	8.0	1.5	32	37	3.5	105
03518400 - N. F. CITICO CREEK NR TELLICO PLAINS, TN. (LAT 35 23 51 LONG 084 04 26)												
OCT., 1971												
01...	1435	7.2	4.7	30	1.4	.4	1.0	.7	6	1.0	1.0	8
03520045 - SWEETWATER CREEK BELOW SWEETWATER, TN. (LAT 35 37 31 LONG 084 26 57)												
NOV., 1971												
08...	1140	12	7.6	150	40	13	6.7	1.8	168	16	8.5	172
JAN., 1972												
13...	1120	151	6.2	150	25	7.0	11	1.5	98	4.5	19	146
MAR.												
06...	1020	113	5.7	130	26	9.5	1.6	1.5	112	15	4.5	--
MAY												
01...	1115	39	5.7	190	31	11	2.3	1.2	137	10	4.0	131
JULY												
06...	1020	21	6.6	200	36	13	3.6	2.1	162	2.7	7.5	168
SEP.												
07...	1215	14	6.9	90	36	13	12	1.5	162	5.3	17	186

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
CUMBERLAND RIVER BASIN
(Analyses furnished by Tennessee Valley Authority)

DATE	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NONCARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PHOSPHATE (PO4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
03422500 - CANEY FORK NEAR ROCK ISLAND, TN. (LAT 35 48 26 LONG 085 37 44)												
NOV., 1971												
17...	120	210	7.7	15.5	3	17	103	.17	.15	.01	.01	.30
JAN., 1972												
19...	58	125	7.1	8.5	5	12	46	.06	<.01	.01	<.01	.40
MAR.												
14...	65	130	7.2	12.0	5	12	52	.03	.11	<.01	<.01	.40
MAY												
18...	55	120	7.2	19.5	5	14	41	.08	.20	.02	.01	.30
JULY												
19...	100	220	7.2	21.0	5	9	91	.03	.07	.03	.01	.30
SEP.												
20...	54	185	7.8	23.0	5	0	87	.07	.15	.02	<.01	<.05
TENNESSEE RIVER BASIN												
03486200 - BUFFALO CREEK AT MILLIGAN COLLEGE, TN. (LAT 36 18 25 LONG 082 17 30)												
OCT., 1971												
04...	180	296	8.1	16.5	3	13	167	.13	.16	.01	<.01	1.1
03486300 - WATAUGA RIVER NEAR RIOVISTA, TN. (LAT 36 20 45 LONG 082 17 00)												
NOV., 1971												
03...	36	105	6.3	15.0	15	19	17	.61	1.3	1.4	.01	.60
JAN., 1972												
11...	44	130	6.3	--	5	22	22	.21	.50	1.6	.01	.70
MAR.												
13...	66	198	--	12.0	2	28	38	.13	.65	2.0	<.01	.80
MAY												
15...	48	168	6.6	18.0	5	5	43	.41	.28	.33	.01	.40
JULY												
13...	40	135	6.6	14.5	5	16	24	.07	.33	1.1	.02	.50
SEP.												
29...	50	170	6.4	15.0	2	24	26	.12	.58	1.6	.02	.70
03518400 - N. F. CITICO CREEK NR TELLICO PLAINS, TN. (LAT 35 23 51 LONG 084 04 26)												
OCT., 1971												
01...	5	14	6.4	18.5	5	0	5	.02	<.01	<.01	<.01	.05
03520045 - SWEETWATER CREEK BELOW SWEETWATER, TN. (LAT 35 37 31 LONG 084 26 57)												
NOV., 1971												
08...	150	280	7.3	8.5	5	12	138	1.8	.47	.53	.08	1.0
JAN., 1972												
13...	92	205	7.1	14.0	10	12	80	.80	.60	.06	.02	1.2
MAR.												
06...	100	187	--	11.0	3	12	92	.33	.31	.06	.02	1.1
MAY												
01...	120	208	7.4	16.0	2	8	112	.67	.46	.14	<.01	1.0
JULY												
06...	150	305	7.3	18.0	5	17	133	.71	.40	.19	.12	.90
SEP.												
07...	140	315	7.6	19.5	10	7	133	1.5	.46	.50	.12	.90

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
03528400 - WHITE CREEK NEAR SHARPS CHAPEL, TN. (LAT 36 20 42 LONG 083 53 40)												
OCT., 1971												
27...	1215	1.2	6.8	50	40	17	.7	1.2	194	2.9	1.5	157
DEC.												
29...	1105	2.0	6.7	60	39	14	.7	.5	178	4.5	1.0	145
JAN., 1972												
26...	1105	7.2	6.3	50	32	13	.6	.5	153	2.9	1.5	133
FEB.												
23...	--	6.5	6.1	40	32	11	.5	.5	142	3.7	2.0	132
MAR.												
29...	1130	12	5.8	40	28	13	.5	.8	137	3.7	1.5	135
APR.												
26...	1130	7.6	6.0	20	34	9.0	.7	.5	139	3.8	2.0	121
MAY												
25...	1250	3.6	7.4	30	28	17	.6	1.0	160	4.3	1.5	128
JUNE												
29...	1130	2.2	7.5	10	33	18	1.0	1.1	180	3.7	2.0	152
JULY												
26...	1225	1.5	6.4	30	32	19	.6	.5	184	3.5	1.5	156
AUG.												
30...	1105	1.1	7.3	80	34	18	.5	.5	187	2.7	2.0	158
SEP.												
28...	1205	1.2	7.5	20	37	18	.7	1.2	190	3.7	1.0	155
03533000 - CLINCH R BL NORRIS DAM, TENN (LAT 36 12 56 LONG 084 04 56.01)												
OCT., 1971												
19...	1430	464	3.7	50	34	7.8	2.6	1.5	120	14	3.0	138
NOV.												
09...	1030	8390	3.3	70	33	8.7	3.0	1.8	120	20	3.0	133
30...	1100	7530	4.8	60	32	8.9	1.7	.7	119	17	2.5	137
JAN., 1972												
11...	1535	8250	2.5	90	32	8.7	3.4	1.3	122	17	4.0	138
FEB.												
09...	1600	4910	3.3	30	32	8.0	2.5	1.5	115	17	3.0	131
MAR.												
04...	1315	13100	4.8	40	29	7.2	1.9	1.2	107	13	2.5	123
APR.												
12...	1200	2870	4.5	30	30	8.0	2.3	1.5	108	17	3.5	--
MAY												
09...	1045	7750	4.4	20	30	8.0	2.3	1.2	109	16	3.0	127
JUNE												
14...	0940	5550	5.1	10	30	8.3	2.8	1.3	110	16	3.0	124
JULY												
10...	1530	8160	5.1	20	30	8.9	2.4	1.5	114	15	3.0	132
AUG.												
07...	1230	8250	4.4	140	29	9.5	2.5	1.0	116	15	3.0	132
SEP.												
19...	1130	3530	4.1	40	31	9.7	2.5	1.2	122	14	2.5	128
03533098 - CLEAR CREEK NEAR ANDERSONVILLE, TN. (LAT 36 12 58 LONG 084 03 00)												
OCT., 1971												
04...	0830	--	7.8	40	33	13	1.0	1.2	154	2.9	2.0	131
NOV.												
01...	0830	--	6.8	40	35	14	1.0	1.2	156	3.1	2.0	134
JAN., 1972												
11...	1400	--	6.7	40	24	3.2	.7	.7	76	3.5	2.5	85
MAR.												
08...	--	--	6.5	10	22	7.0	.6	1.0	94	2.9	2.5	96
MAY												
10...	1400	--	7.8	20	24	11	.7	1.0	120	3.5	2.0	104
JUNE												
27...	1300	--	7.3	10	30	12	1.2	1.1	151	2.1	1.5	127

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PHOSPHATE (PO4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
03528400 - WHITE CREEK NEAR SHARPS CHAPEL, TN. (LAT 36 20 42 LONG 083 53 40)												
OCT., 1971												
27...	170	290	7.9	14.5	4	11	159	.02	<.01	<.01	<.01	.10
DEC.												
29...	150	250	8.0	9.0	3	4	146	.03	.01	.01	.01	.06
JAN., 1972												
26...	130	205	7.9	9.5	4	4	125	--	--	--	--	--
FEB.												
23...	120	200	7.5	9.0	6	4	116	.01	.03	<.01	<.01	.10
MAR.												
29...	130	202	7.8	13.0	5	18	112	.02	<.01	<.01	<.01	.07
APR.												
26...	120	212	7.7	13.5	3	6	114	.02	.04	<.01	<.01	.09
MAY												
25...	140	215	7.8	15.5	2	9	131	.08	.01	.01	.01	.10
JUNE												
29...	160	270	7.8	18.0	5	12	148	.03	.06	.01	.01	.10
JULY												
26...	160	290	7.9	16.5	5	9	151	.20	.01	.01	.01	.10
AUG.												
30...	160	290	8.0	16.5	5	7	153	.02	.05	.01	.01	.20
SEP.												
28...	160	295	7.8	17.0	0	4	156	.12	<.01	<.01	<.01	.10
03533000 - CLINCH R BL NORRIS DAM, TENN (LAT 36 12 56 LONG 084 04 56.01)												
OCT., 1971												
19...	120	216	7.4	19.0	5	22	98	.10	.17	.11	<.01	.20
NOV.												
09...	120	200	7.4	18.0	5	22	98	.11	.18	<.01	<.01	.40
30...	120	240	7.8	14.0	3	22	98	.03	.11	.01	.01	.30
JAN., 1972												
11...	170	220	8.0	10.5	5	70	100	.07	.10	.01	.01	.30
FEB.												
09...	110	205	7.4	--	5	16	94	.06	.08	.01	<.01	.50
MAR.												
04...	100	170	7.6	--	3	12	88	.05	.02	<.01	<.01	.60
APR.												
12...	110	210	--	11.0	4	19	89	.06	.19	<.01	<.01	.80
MAY												
09...	110	215	7.6	9.0	4	21	89	.05	.20	<.01	<.01	.80
JUNE												
14...	110	200	7.4	10.0	4	20	90	.06	.15	.01	.01	.70
JULY												
10...	110	230	7.4	11.5	2	16	94	.02	.10	.01	.01	.80
AUG.												
07...	110	230	8.1	13.0	2	15	95	.04	.12	.01	.01	.60
SEP.												
19...	120	230	8.0	15.0	3	20	100	.05	.06	.04	<.01	.60
03533098 - CLEAR CREEK NEAR ANDERSONVILLE, TN. (LAT 36 12 58 LONG 084 03 00)												
OCT., 1971												
04...	140	245	7.6	15.0	2	14	126	.05	.07	<.01	<.01	.40
NOV.												
01...	140	220	7.4	15.0	2	12	128	.02	.35	<.01	<.01	.30
JAN., 1972												
11...	72	130	7.2	13.5	3	10	62	.06	<.01	<.01	<.01	.60
MAR.												
08...	84	150	7.6	14.0	3	7	77	.04	.03	<.01	<.01	.50
MAY												
10...	100	195	7.5	--	2	2	98	.02	.35	.01	.01	.40
JUNE												
27...	120	230	7.5	15.5	3	0	124	.04	.04	.01	.01	.40

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
03533102 - CLEAR CREEK AT NORRIS, TN. (LAT 36 12 48 LONG 084 03 38)												
OCT., 1971												
04...	0840	--	8.5	40	33	14	.8	1.2	151	3.1	3.0	144
NOV.												
01...	0845	--	7.6	30	35	14	1.0	1.2	162	3.5	2.0	146
JAN., 1972												
11...	1430	--	6.5	40	25	4.2	.5	.7	88	4.5	2.0	91
MAR.												
08...	--	--	6.3	20	22	8.9	.5	1.0	102	2.9	2.5	92
MAY												
10...	1410	--	7.8	20	25	12	.7	.7	128	3.7	2.0	106
JUNE												
27...	1300	--	7.5	10	30	12	1.2	1.1	147	2.5	1.5	128
03534100 - CLINCH RIVER NEAR CLINTON, TN. (LAT 36 07 22 LONG 084 06 52)												
OCT., 1971												
19...	1515	--	3.6	60	32	8.8	2.8	1.7	122	14	2.5	135
NOV.												
09...	1145	--	3.3	70	33	8.6	3.0	1.7	120	21	3.0	133
30...	1140	--	2.9	80	31	6.8	3.7	1.7	107	18	3.5	132
JAN., 1972												
11...	--	--	2.5	80	32	8.5	3.2	1.7	117	18	3.5	124
FEB.												
09...	--	--	3.4	70	34	6.9	2.6	1.5	114	18	2.5	129
MAR.												
04...	1345	--	3.9	80	28	9.0	2.5	1.2	106	16	3.0	123
APR.												
12...	1245	--	3.1	30	30	8.4	2.3	1.2	109	17	3.0	122
MAY												
09...	0945	--	4.3	10	32	6.6	2.6	1.2	108	18	3.0	129
JUNE												
14...	1250	--	4.8	50	30	8.4	2.6	1.6	111	16	3.0	129
JULY												
10...	1545	--	4.5	30	29	10	2.6	1.2	116	15	3.0	140
AUG.												
07...	1200	--	4.2	40	29	11	2.3	.8	114	15	3.0	149
SEP.												
19...	1245	--	6.6	50	32	9.5	2.5	1.5	123	14	3.0	125
03534900 - CLINCH RIVER AT EDGEMOOR, TN. (LAT 36 01 32 LONG 084 10 03)												
NOV., 1971												
04...	1305	--	4.3	50	35	9.7	3.9	2.2	135	17	3.0	144
DEC.												
23...	1030	--	2.0	160	33	8.7	3.0	1.5	123	18	4.0	140
JAN., 1972												
21...	1530	--	2.4	50	32	8.9	3.6	1.5	119	17	3.5	144
FEB.												
24...	1240	--	3.2	130	35	5.7	2.8	1.7	112	15	3.5	133
MAR.												
23...	1250	--	4.2	60	30	8.0	2.5	1.2	111	14	2.5	117
MAY												
04...	1315	--	3.6	60	33	9.2	2.3	1.2	123	17	3.0	132
JUNE												
08...	1015	--	4.6	20	29	9.2	2.1	1.3	110	16	3.0	136
JULY												
06...	1400	--	4.5	60	30	9.5	2.1	1.3	118	14	3.5	136
AUG.												
03...	1015	--	4.1	100	29	10	2.8	1.3	113	16	3.5	145
SEP.												
01...	1130	--	4.5	20	31	9.1	2.5	1.0	118	14	2.0	135

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NONCARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PHOSPHATE (PO4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
03533102 - CLEAR CREEK AT NORRIS, TN. (LAT 36 12 48 LONG 084 03 38)												
OCT., 1971												
04...	140	245	7.8	15.5	2	16	124	.08	.10	<.01	<.01	.30
NOV.												
01...	140	220	7.7	15.5	2	7	133	.03	<.01	<.01	<.01	.20
JAN., 1972												
11...	80	130	7.6	13.0	3	8	72	.07	.08	<.01	<.01	.40
MAR.												
08...	91	150	7.5	13.5	3	7	84	.02	.08	<.01	<.01	.30
MAY												
10...	110	195	7.6	14.5	2	5	105	.02	1.1	.01	.01	.20
JUNE												
27...	130	230	7.5	15.5	3	9	121	.06	.17	.01	.01	.30
03534100 - CLINCH RIVER NEAR CLINTON, TN. (LAT 36 07 22 LONG 084 06 52)												
OCT., 1971												
19...	120	218	7.4	21.0	5	20	100	.05	.10	.08	<.01	.30
NOV.												
09...	120	208	7.5	16.5	5	22	98	.07	.22	<.01	<.01	.30
30...	100	200	7.6	12.0	5	12	88	.04	.09	.01	.01	.30
JAN., 1972												
11...	110	208	7.5	13.0	5	14	96	.12	.08	<.01	<.01	.40
FEB.												
09...	110	200	7.8	9.0	5	16	94	.05	.15	<.01	<.01	.40
MAR.												
04...	110	205	7.7	--	5	23	87	.06	.02	<.01	<.01	.70
APR.												
12...	110	212	7.7	13.0	5	21	89	.05	.10	<.01	<.01	.60
MAY												
09...	110	215	7.6	10.0	5	21	89	.04	.29	<.01	<.01	.80
JUNE												
14...	110	205	7.8	14.0	4	18	91	.05	.15	.01	.01	.80
JULY												
10...	110	225	7.8	15.5	2	15	95	.02	.15	.01	.01	.60
AUG.												
07...	120	232	7.5	15.0	5	26	94	.02	.17	.01	.01	.60
SEP.												
19...	120	230	7.7	19.0	3	19	101	.02	.02	.03	<.01	.60
03534900 - CLINCH RIVER AT EDGEMOOR, TN. (LAT 36 01 32 LONG 084 10 03)												
NOV., 1971												
04...	130	230	7.6	18.5	5	19	111	.06	.39	.09	.01	.30
DEC.												
23...	120	232	7.6	11.0	3	19	101	.08	.19	<.01	<.01	.20
JAN., 1972												
21...	120	212	7.4	10.0	5	22	98	.08	.21	<.01	<.01	.30
FEB.												
24...	110	195	7.6	6.5	5	18	92	.08	.13	.01	<.01	.40
MAR.												
23...	110	185	7.7	10.5	5	19	91	.16	.33	.01	<.01	.70
MAY												
04...	120	215	7.6	10.5	5	19	101	.08	.26	<.01	<.01	.40
JUNE												
08...	110	220	7.4	12.0	4	20	90	.06	.06	.01	.01	.80
JULY												
06...	110	225	7.5	20.5	2	17	97	.08	.26	.02	.0	.70
AUG.												
03...	110	235	7.3	23.0	5	17	93	.17	.41	.03	.01	.40
SEP.												
01...	110	230	8.0	16.0	5	13	97	.05	.11	.01	.01	.60

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
03563100 - GREASY CREEK NEAR ARCHVILLE, TN. (LAT 35 07 04 LONG 084 34 14)												
JAN., 1972												
26...	1035	---	6.3	50	3.8	1.1	1.6	1.0	12	5.3	2.0	33
MAR.												
27...	1030	---	6.7	30	3.8	1.2	1.4	.7	13	5.5	2.0	42
MAY												
26...	1130	---	8.7	70	4.6	1.-	2.2	1.1	20	5.3	1.5	40
JULY												
31...	1000	---	6.9	50	3.6	1.9	1.2	.6	16	5.8	1.0	42
SEP.												
25...	1215	---	8.6	100	7.8	2.8	2.3	.8	38	4.5	1.5	53
03564500 - OCOEE RIVER AT PARKSVILLE, TN. (LAT 35 05 48 LONG 084 39 15)												
JAN., 1972												
26...	0900	2200	6.0	140	17	2.9	2.0	1.0	12	44	1.0	92
MAR.												
27...	0910	2620	6.0	180	16	2.5	1.5	.5	10	41	.5	75
MAY												
26...	1200	2270	6.1	210	12	1.7	1.8	1.1	12	29	1.5	72
JULY												
31...	0940	2090	6.1	180	--	--	1.8	.6	10	42	1.5	90
SEP.												
25...	1125	1760	6.4	90	17	2.1	1.6	.8	13	40	1.5	89
03566405 - TENNESSEE RIVER NR HARRISON BAY STATE PK, TN. (LAT 35 12 43 LONG 085 05 18)												
OCT., 1971												
15...	0935	---	5.7	180	22	4.0	11	1.5	64	20	16	102
NOV.												
15...	1200	---	4.8	100	22	4.9	10	1.5	64	14	18	121
DEC.												
22...	1020	---	4.4	140	21	4.4	8.1	1.3	60	16	14	115
JAN., 1972												
13...	0900	---	4.8	200	16	3.5	4.8	1.5	50	13	8.5	73
FEB.												
17...	1035	---	5.0	100	18	4.4	4.8	1.4	64	23	6.5	100
MAR.												
10...	1035	---	5.0	130	22	3.6	5.0	1.2	66	15	7.0	100
APR.												
14...	0915	---	4.1	60	18	4.5	7.1	1.6	62	15	6.0	82
MAY												
18...	0900	---	4.3	130	17	4.7	3.7	1.5	57	14	5.0	79
JUNE												
09...	1125	---	4.4	70	20	5.3	5.2	1.3	70	13	7.0	100
JULY												
18...	1100	---	4.2	80	21	5.3	6.6	.8	72	15	9.0	101
AUG.												
18...	0950	---	4.8	100	17	4.9	5.6	1.0	61	13	8.0	90
SEP.												
22...	1035	---	5.0	170	20	4.9	6.7	1.5	68	12	10	103
03566650 - NORTH CHICAMAUGA CREEK NEAR HIXSON, TN. (LAT 35 08 58 LONG 085 13 09)												
OCT., 1971												
14...	0825	---	4.8	80	23	3.8	1.7	1.0	80	8.4	2.5	90

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PHOSPHATE (PO4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
03563100 - GREASY CREEK NEAR ARCHVILLE, TN. (LAT 35 07 04 LONG 084 34 14)												
JAN., 1972												
26...	14	41	6.8	4.5	5	4	10	.01	.01	<.01	<.01	.04
MAR.												
27...	14	40	6.9	8.5	5	3	11	.02	<.01	<.01	<.01	<.01
MAY												
26...	19	50	6.8	17.0	2	3	16	.02	.01	.01	.01	.05
JULY												
31...	17	43	6.6	19.5	5	4	13	.04	.07	.04	.01	.06
SEP.												
25...	31	69	7.4	19.5	3	0	31	.05	.09	.01	<.01	<.05
03564500 - OCOEE RIVER AT PARKSVILLE, TN. (LAT 35 05 48 LONG 084 39 15)												
JAN., 1972												
26...	54	120	6.5	9.5	5	44	10	.07	.02	.05	<.01	.10
MAR.												
27...	50	125	6.7	10.0	5	42	8	.04	<.01	.42	<.01	.10
MAY												
26...	36	115	6.5	16.5	2	26	10	.04	.01	.13	.01	.08
JULY												
31...	50	126	6.5	23.0	2	42	8	.03	.07	.01	.01	.10
SEP.												
25...	52	120	6.7	24.0	0	41	11	.02	.05	.23	<.01	.10
03566405 - TENNESSEE RIVER NR HARRISON BAY STATE PK, TN. (LAT 35 12 43 LONG 085 05 18)												
OCT., 1971												
15...	72	165	7.1	26.0	5	19	52	.12	.18	<.01	.01	.40
NOV.												
15...	75	195	7.4	16.0	6	22	52	.12	.18	<.01	.01	.40
DEC.												
22...	70	168	7.2	5.5	6	21	49	.12	.05	.03	.01	.50
JAN., 1972												
13...	56	125	7.0	12.0	12	15	41	.19	.20	.03	<.01	.40
FEB.												
17...	63	170	7.3	9.0	5	10	52	.08	.18	<.01	<.01	.40
MAR.												
10...	70	155	7.2	10.0	10	16	54	.14	.15	.04	<.01	.50
APR.												
14...	64	148	7.2	16.0	5	13	51	.07	.11	.03	<.01	.40
MAY												
18...	62	143	7.1	21.0	5	15	47	.12	.27	.02	.01	.30
JUNE												
09...	71	150	6.9	24.0	5	14	57	.12	.19	.01	.01	.30
JULY												
18...	74	190	7.0	25.0	5	15	59	.12	.16	.04	.01	.40
AUG.												
18...	63	155	7.6	26.5	5	13	50	.09	.28	.01	.01	.30
SEP.												
22...	69	160	7.3	26.0	4	13	56	.09	.22	.02	.01	.30
03566650 - NORTH CHICAMAUGA CREEK NEAR HIXSON, TN. (LAT 35 08 58 LONG 085 13 09)												
OCT., 1971												
14...	74	150	7.2	14.5	5	8	66	.05	.07	.02	<.01	.40

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

DATE	TOTAL FILTRABLE RESIDUE (MG/L)	TOTAL NON-FILTRABLE RESIDUE (MG/L)	DISSOLVED GROSS ALPHA AS U-NAT. (PC/L)	SUSPENDED GROSS ALPHA AS U-NAT. (PC/L)	DISSOLVED GROSS BETA AS CS-137 (PC/L)	SUSPENDED GROSS BETA AS CS-137 (PC/L)	DISSOLVED RA-226 (PLANCHET COUNT) (PC/L)
03571850 - TENNESSEE RIVER AT SOUTH PITTSBURG, TN. (LAT 35 00 41 LONG 085 41 51) A/							
OCT. 21...	110	7	<.5	.2	4.5	.5	--
NOV. 29...	130	4	.5	<.1	3.7	.5	--
DEC. 21...	100	12	<.4	.3	3.7	.9	--
JAN. 27...	96	26	.5	.7	2.7	1.5	--
FEB. 24...	160	7	1.7	.2	3.2	.6	--
MAR. 20...	92	14	<.3	.4	2.2	.9	--
APR. 21...	93	6	.4	<.1	3.5	.5	--
MAY 23...	84	11	.4	.4	2.8	1.0	--
JUNE 23...	100	10	<.4	.3	2.7	.4	--
JULY 27...	100	5	<.3	<.1	2.9	.4	--
AUG. 21...	93	7	.4	.2	3.2	<.4	--
SEP. 21...	110	10	.6	.1	3.8	1.0	<.1

DATE	TIME	DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
03594413 - BEECH LAKE NEAR LEXINGTON, TN. (LAT 35 39 40 LONG 088 25 02) B/												
JAN., 1972 12...	1240	--	4.4	90	3.2	1.2	2.0	1.0	13	2.3	2.5	35
MAR. 14...	0835	--	3.5	110	3.6	1.2	1.7	1.2	14	4.1	3.0	40
MAY 16...	1230	--	1.2	150	2.8	1.7	2.1	1.5	14	5.3	2.5	25
JULY 26...	1105	--	2.6	110	3.2	1.7	1.7	.8	15	3.6	2.5	35
SEP. 13...	1145	--	3.9	70	3.4	1.4	1.7	1.0	16	4.0	2.5	33
03594422 - BEECH RIVER AT ST HWY 104 NR LEXINGTON TN (LAT 35 37 44 LONG 088 23 11) B/												
JAN., 1972 12...	1330	45	8.9	380	4.4	1.7	3.2	1.3	18	4.1	4.5	52
MAR. 14...	1155	43	7.2	200	4.0	1.4	2.6	.8	16	3.7	3.5	36
MAY 16...	1350	49	6.0	310	3.2	1.8	2.5	1.0	16	4.1	3.0	24
JULY 26...	1015	44	6.4	340	3.6	1.7	3.1	.8	18	3.9	3.0	24
SEP. 13...	1120	34	8.3	410	4.0	1.6	1.6	1.5	17	1.6	3.0	33

A/ Analyses by U. S. Geological Survey

B/ Analyses furnished by Tennessee Valley Authority

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
TENNESSEE RIVER BASIN

DATE	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)
03571850 - TENNESSEE RIVER AT SOUTH PITTSBURG, TN. (LAT 35 00 41 LONG 085 41 51) A/						
OCT. 21...	.04	.20	<1.5	.5	3.6	.5
NOV. 29...	.03	.24	1.4	<.4	3.0	.5
DEC. 21...	.03	.18	<1.1	.9	2.9	.8
JAN. 27...	.04	.13	1.5	2.1	2.1	1.3
FEB. 24...	.03	.19	5.2	.5	2.7	.5
MAR. 20...	.04	.13	<1.0	1.2	1.7	.8
APR. 21...	.04	.24	1.2	<.4	2.8	.4
MAY 23...	.04	.07	1.3	1.2	2.3	.9
JUNE 23...	.03	.11	<1.1	.8	2.1	<.4
JULY 27...	.10	.09	<.8	<.4	2.3	<.4
AUG. 21...	.08	.07	1.2	.6	2.5	<.4
SEP. 21...	--	.11	1.9	.4	3.0	.9

DATE	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	NON-CAR-BONATE HARD-NESS (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	PHOS-PHATE (PO4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
03594413 - BEECH LAKE NEAR LEXINGTON, TN. (LAT 35 39 40 LONG 088 25 02) B/												
JAN., 1972 12...	13	32	6.3	8.0	5	2	11	.10	.51	.01	<.01	.05
MAR. 14...	14	36	6.5	11.0	7	3	11	.09	.47	.02	<.01	<.01
MAY 16...	14	41	6.3	23.5	5	3	11	.07	.39	.01	.01	.01
JULY 26...	15	44	6.2	31.5	5	3	12	.09	.30	.04	.01	.05
SEP. 13...	14	43	6.9	26.5	10	1	13	.10	.55	.01	<.01	<.05
03594422 - BEECH RIVER AT ST HWY 104 NR LEXINGTON TN (LAT 35 37 44 LONG 088 23 11) B/												
JAN., 1972 12...	18	15	6.6	10.0	51	3	15	.42	.35	.03	<.01	.50
MAR. 14...	16	43	6.4	14.0	15	3	13	.09	.36	.04	<.01	.20
MAY 16...	16	46	6.4	24.0	5	3	13	.37	.38	.01	.01	.30
JULY 26...	16	53	6.5	26.0	5	1	15	.55	.39	.05	.01	.20
SEP. 13...	16	53	6.5	23.5	5	2	14	.70	.87	.03	<.01	.30

A/ Analyses by U. S. Geological Survey

B/ Analyses furnished by Tennessee Valley Authority

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
TENNESSEE RIVER BASIN
(Analyses furnished by Tennessee Valley Authority)

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
03594435 - PINEY CREEK AT ST HWY 104 NR LEXINGTON TN (LAT 35 35 47 LONG 088 22 04)												
JAN., 1972												
12...	1400	37	8.0	110	3.4	1.3	1.6	.6	12	3.5	3.5	40
MAR.												
14...	1025	24	7.9	200	3.0	1.2	1.9	.7	11	5.1	3.0	36
MAY												
16...	1330	18	7.6	230	2.8	1.4	1.4	1.1	10	4.3	2.5	40
JULY												
26...	0950	15	5.6	190	3.2	1.6	1.8	.5	14	3.7	2.0	30
SEP.												
12...	1400	3.4	9.0	250	3.0	1.6	1.7	.8	16	1.6	2.0	35
03594448 - PIN OAK LAKE NEAR CHESTERFIELD, TN. (LAT 35 40 47 LONG 088 16 52)												
JAN., 1972												
12...	1000	--	3.0	50	3.6	1.1	1.3	1.0	12	4.3	3.0	37
MAR.												
14...	1010	--	4.1	130	3.8	1.1	1.4	.7	10	5.1	2.0	33
MAY												
16...	1120	--	3.8	80	2.8	1.4	1.4	1.0	9	6.6	2.5	22
JULY												
26...	1440	--	3.2	40	2.8	1.6	1.5	.3	12	6.0	1.5	27
SEP.												
13...	1115	--	3.8	70	2.8	1.6	1.2	.5	10	4.9	2.0	26
03594482 - TURKEY CREEK AT MIDDLEBURG RD NR DECATUR T (LAT 35 35 32 LONG 088 08 41)												
JAN., 1972												
12...	0915	--	9.8	230	22	2.9	2.8	1.4	67	9.3	5.0	82
MAR.												
14...	1045	13	8.6	220	21	2.9	3.2	.7	63	9.5	5.0	86
MAY												
16...	0840	7.6	11	300	20	8.5	3.0	1.2	90	11	5.0	102
JULY												
26...	1530	5.6	9.4	210	31	4.5	2.7	1.2	104	10	4.5	114
SEP.												
12...	0945	1.8	10	300	35	5.1	3.5	1.5	116	10	5.0	143
03600350 - DUCK RIVER NEAR SANTA FE, TN. (LAT 35 40 21 LONG 087 07 43)												
JAN., 1972												
21...	1025	--	6.0	220	58	6.3	3.5	1.5	170	20	6.0	196
MAR.												
10...	1000	--	5.1	100	56	5.6	2.2	.7	166	14	5.0	183
MAY												
08...	1030	--	4.1	200	52	4.9	5.9	2.0	156	15	6.0	190
AUG.												
17...	0910	--	5.0	110	46	5.6	3.7	1.7	140	16	5.0	193
03600400 - DUCK RIVER AT WILLIAMSPORT, TN. (LAT 35 41 40 LONG 087 13 14)												
JAN., 1972												
21...	1045	--	6.1	100	57	5.8	2.8	1.2	170	14	5.0	181
MAR.												
10...	0940	--	5.1	180	54	5.9	2.2	.7	167	13	4.5	184
MAY												
08...	1045	--	3.1	140	49	5.5	4.6	1.2	154	15	4.5	172
AUG.												
17...	0930	--	6.0	100	44	5.5	3.5	1.5	140	13	5.0	187

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PHOSPHATE (PO4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
03594435 - PINEY CREEK AT ST HWY 104 NR LEXINGTON TN (LAT 35 35 47 LONG 088 22 04)												
JAN., 1972												
12...	14	32	6.3	9.5	5	4	10	.10	.32	.02	<.01	.20
MAR.												
14...	12	33	6.4	--	10	3	9	.07	.46	.03	<.01	.20
MAY												
16...	13	45	6.4	20.5	5	5	8	.10	.37	.01	.01	.10
JULY												
26...	14	42	6.4	26.5	5	3	11	.11	.27	.05	.01	.10
SEP.												
12...	14	38	7.0	23.5	20	1	13	.09	.30	.02	.01	.10
03594448 - PIN OAK LAKE NEAR CHESTERFIELD, TN. (LAT 35 40 47 LONG 088 16 52)												
JAN., 1972												
12...	14	35	6.3	8.5	5	4	10	.05	.30	.09	<.01	.05
MAR.												
14...	14	36	6.5	11.5	3	6	8	.12	.36	.02	<.01	.10
MAY												
16...	13	37	6.0	23.5	5	6	7	.07	.40	.01	.01	.01
JULY												
26...	14	42	6.9	35.0	5	4	10	.05	.29	.05	.01	.05
SEP.												
13...	14	34	6.7	25.5	15	6	8	.05	.34	<.01	<.01	.07
03594482 - TURKEY CREEK AT MIDDLEBURG RD NR DECATUR T (LAT 35 35 32 LONG 088 08 41)												
JAN., 1972												
12...	68	140	7.2	6.0	5	13	55	.08	.12	.02	<.01	.30
MAR.												
14...	64	145	7.2	12.0	5	12	52	.15	.05	.02	<.01	.20
MAY												
16...	86	150	7.3	15.5	0	12	74	.04	.16	.01	.01	.20
JULY												
26...	97	190	7.5	29.5	5	12	85	.11	.24	.07	.01	.20
SEP.												
12...	110	220	7.4	21.0	10	15	95	.06	.19	.01	<.01	.10
03600350 - DUCK RIVER NEAR SANTA FE, TN. (LAT 35 40 21 LONG 087 07 43)												
JAN., 1972												
21...	170	300	7.5	7.5	5	31	139	.84	.17	.22	.03	1.2
MAR.												
10...	160	275	7.5	10.0	5	27	136	1.3	.34	.08	.01	.80
MAY												
08...	150	300	7.8	19.0	5	22	128	2.6	.75	.11	.02	.60
AUG.												
17...	140	295	7.3	24.5	10	25	115	1.1	.28	.15	.02	.60
03600400 - DUCK RIVER AT WILLIAMSPORT, TN. (LAT 35 41 40 LONG 087 13 14)												
JAN., 1972												
21...	160	275	7.6	7.0	5	21	139	.82	.15	.07	<.01	1.1
MAR.												
10...	160	285	7.7	10.0	5	23	137	.94	.26	.05	<.01	.80
MAY												
08...	140	292	7.1	19.0	5	14	126	1.6	.01	.04	.01	.70
AUG.												
17...	130	280	7.3	25.0	10	15	115	1.1	.27	.06	.02	.80

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
03601500 - BIG BIGBY CREEK AT CROSS BRIDGES, TN. (LAT 35 37 04 LONG 087 12 34)												
JAN., 1972												
21...	1000	--	7.4	160	57	7.5	4.6	3.2	156	21	20	215
MAR.												
10...	1030	--	5.6	120	51	5.6	3.2	1.7	137	20	14	--
MAY												
08...	1000	--	4.9	310	49	5.9	4.3	4.3	133	20	8.0	192
AUG.												
17...	0845	--	8.3	80	64	8.7	6.5	5.0	176	24	22	275
03601600 - DUCK RIVER NEAR SHADY GROVE, TN. (LAT 35 48 09 LONG 087 15 55)												
JAN., 1972												
21...	--	--	6.2	130	56	6.2	2.6	1.2	166	16	6.5	192
MAR.												
10...	0925	--	5.5	140	53	5.8	2.2	.5	159	14	4.5	178
MAY												
08...	1110	--	4.1	100	50	5.7	4.3	1.3	156	15	5.5	180
AUG.												
17...	1000	--	5.8	150	44	5.2	3.5	1.7	136	13	5.0	184
03602000 - DUCK RIVER AT CENTERVILLE, TN. (LAT 35 47 03 LONG 087 27 36)												
JAN., 1972												
21...	--	--	5.9	190	51	6.4	2.5	1.2	154	17	6.0	178
MAR.												
10...	0845	--	5.5	120	48	5.5	2.2	1.0	144	14	5.0	169
MAY												
08...	1145	--	3.4	190	43	6.1	3.7	1.2	137	14	5.0	157
AUG.												
17...	1040	--	6.9	300	41	5.9	2.5	1.3	142	8.6	4.5	176

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

TENNESSEE RIVER BASIN

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DATE	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NONCARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PHOSPHATE (PO4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
03601500 - BIG BIGBY CREEK AT CROSS BRIDGES, TN. (LAT 35 37 04 LONG 087 12 34)												
JAN., 1972												
21...	170	335	7.7	10.0	5	42	128	6.2	.21	.06	<.01	1.1
MAR.												
10...	150	270	--	9.5	5	38	112	2.4	.19	.03	<.01	.80
MAY												
08...	150	300	7.1	16.5	8	38	109	6.7	.32	.12	.02	.70
AUG.												
17...	200	415	7.7	21.5	5	56	144	6.7	.22	.03	.01	.80
03601600 - DUCK RIVER NEAR SHADY GROVE, TN. (LAT 35 48 09 LONG 087 15 55)												
JAN., 1972												
21...	166	300	7.8	7.5	5	30	136	1.9	.25	.04	<.01	1.1
MAR.												
10...	160	280	7.5	10.5	5	30	130	1.3	.44	.05	<.01	.80
MAY												
08...	150	288	7.8	19.5	5	22	128	1.3	.43	.02	.01	.70
AUG.												
17...	130	270	7.4	25.5	10	18	112	1.3	.39	.03	.01	.80
03602000 - DUCK RIVER AT CENTERVILLE, TN. (LAT 35 47 03 LONG 087 27 36)												
JAN., 1972												
21...	150	278	7.5	8.5	5	24	126	1.3	.15	.04	<.01	1.0
MAR.												
10...	140	268	7.5	9.5	5	22	118	1.2	.30	.03	<.01	.80
MAY												
08...	130	262	7.6	18.5	5	18	112	1.2	.19	.01	.01	.50
AUG.												
17...	130	263	7.1	23.5	5	14	116	1.0	.26	.03	.01	.90

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