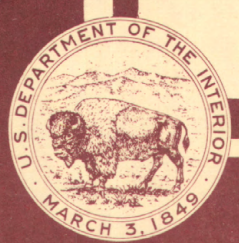
1973

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 1973

1972

OCTOBER

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

NOVEMBER

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

DECEMBER

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

1973

JANUARY

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

FEBRUARY

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

MARCH

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

APRIL

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

MAY

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

JUNE

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

JULY

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

AUGUST

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

SEPTEMBER

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

1973

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 Murfreesboro
City of Chattanooga
City of Lawrenceburg
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

CONTENTS

ILLUSTRATIONS

TABLES

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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

WATER RESOURCES DATA FOR TENNESSEE, 1973

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

INTRODUCTION

Water resources data for the 1973 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 134 gaging stations of which 107 are streamflow discharge stations and 27 are reservoir or lake stations; also included are records for 6 low-flow partial-record stations, 142 crest-stage partial-record stations, and 8 miscellaneous sites. 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 50 sampling stations of which 19 are continuous temperature record stations, 5 of which show data in addition to temperature, and 31 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 Stanley P. Sauer, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating Federal, State, and Municipal 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

COOPERATION

The U.S. Geological Survey and organizations of the State of Tennessee have had cooperative agreements for the systematic collection of streamflow records since 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, Granville Hinton, commissioner, through Division of Water Resources, R. W. Robinson, director.

Tennessee Department of Highways, Robert F. Smith, commissioner, through Lewis Evans, director of Bureau of Highways, and H. W. Derthick, engineer of structures, and through Paul D. Edens, 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 17 gaging stations, and by Tennessee Valley Authority in collecting records for 45 gaging stations, 15 temperature stations, and 29 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)

Organizations that supplied data are acknowledged in station descriptions.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows. See also table for converting English units to International System of units (SI) on page 25.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons.

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 for 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.

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

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the 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/1, UG/L) is a unit for expressing the concentration of chemical constituents in solution as the weight (micorgrams) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/1, 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 was uniformly distributed on it.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is in 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 volume of water per unit of time flowing in a channel.

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.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

Radiochemical program is a network of regularly sampled water quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are those of uranium in micrograms per liter, radium as radium-226 in picocuries per liter, and gross radiation as strontium/yttrium-90 in picocuries per liter, and gross alpha radiation as micrograms of uranium equivalent per liter.

A picocurie (PC/L, pCi/l) is one millionth of the amount of radioactivity represented by a microcurie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegration per minute.

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, miscellaneous site, 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 03433500, which appears just to the left of the station name includes the 2-digit part number "03" plus the 6-digit downstream order number "433500." 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 2 (South Atlantic slope and Eastern Gulf of Mexico basins), 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.

PART 1. 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, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for most stations, is that determined and used by the Geological Survey, 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. 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 neaded "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.

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 unusual 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, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses 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 1906, 1909, 1910, and 1920, and records for October 1965 to September 1970 are in Water-Supply Papers 2106, 2109, 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 1304, 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 69 sites during the 1973 water year by the following agencies:

Tennessee Valley Authority:	34 sites in Tennessee River basin
U.S. Army Corps of Engineers:	10 sites in Cumberland River basin
	25 sites in Lower Mississippi River basin

Information on specific sites can be obtained from the district office of the U.S. Geological Survey at the address given on page II of this report.

PART 2. 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 reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l) and water temperatures 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. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using Table 2 on page 17.

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.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," p. 3 and table for converting English Units to SI Units, p. 25).

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

Streamflow across Tennessee for the 1973 water year was among the highest for station records by most criteria of comparison. These extremely high frequency volumes and instantaneous flows resulted from large amounts of intense rainfall in December, March, April, and May in different basins across the State. Along with the flood-producing torrential rains, general rains persisted from September of last water year through the winter and spring months of the 1973 water year. In western Tennessee, from September 1972 to April 1973 at the Jackson National Weather Service recording rainfall gage, 24.6 inches of excess rainfall (above normal) fell. Seven of these eight months had excess participation. The average precipitation over the Tennessee River basin for the 1973 calendar year (includes January through September, 9 months of the 1973 water year) was the highest in 84 years of record, with 65.1 inches.

As an indication of the magnitude of mean flows across the State, fifteen long-term continuous flow gaging stations were selected, based on areal distribution and drainage area size, for analysis of mean flows. Records of mean monthly and mean annual flows were analyzed in terms of new maximum means. These fifteen stations have an average length of continuous-flow record of 45 years.

Ten of the fifteen stations recorded new maximum mean annual flows. Three other stations recorded the second highest mean annual flow, while records for the remaining two were not significantly high. Thirteen stations recorded one or more maximum monthly mean flows, with most recorded for March. Eight stations had maximum March mean flows. Four new maximum monthly mean records were set for October, December, and May. All told, 26 new maximum monthly mean flows were recorded out of 180 station-months of record in this sample of 1973 records.

Figure 1 shows the 1973 water year runoff compared with median runoff at three long-term index gaging stations. Also shown are similar comparisons for each month. At all stations for every month, with the exception of February at the Oakdale gage, the monthly mean flows for the 1973 water year exceed median flows. Average exceedence is 400 percent.

Four separate storms occurred in the 1973 water year that produced floods of 50-year recurrence intervals, or greater, at gaging stations. A December storm, centered mostly in the Cumberland River basin, caused severe flooding mostly in the central part of the basin. Most of the Tennessee River basin from Knoxville downstream, was hit by an intense storm March 14-17, that produced from 5-10 inches of rainfall. Most of the rainfall occurred within a 48-hour period, and caused extensive flooding, especially in the Chattanooga area. Damages from flooding were estimated at $100,000,000 over the basin. Many maximum peak flows were recorded at gaging stations. Many maximum peak flows were from 1.5 to 2.0 times the estimated 100-year maximum. The upper Cumberland River basin was hit by a storm in May that produced floods also of high frequency. Floods on western Tennessee streams, tributary to the Mississippi River, occurred during March and April, with most peaks recorded on April 19. A peak discharge of 1,633,000 cfs was recorded for the Mississippi River at Memphis gage on April 1, the third highest in recorded River discharges.

In addition to the flood data contained in this report, a special flood report is in progress which will describe in detail the March 1973 flood in Tennessee and adjacent states.

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 3, 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., 1970, Study and interpretation of the chemical characteristics of natural water - Revised editions U.S. Geol. Survey Water-Supply Paper 1473, 363 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

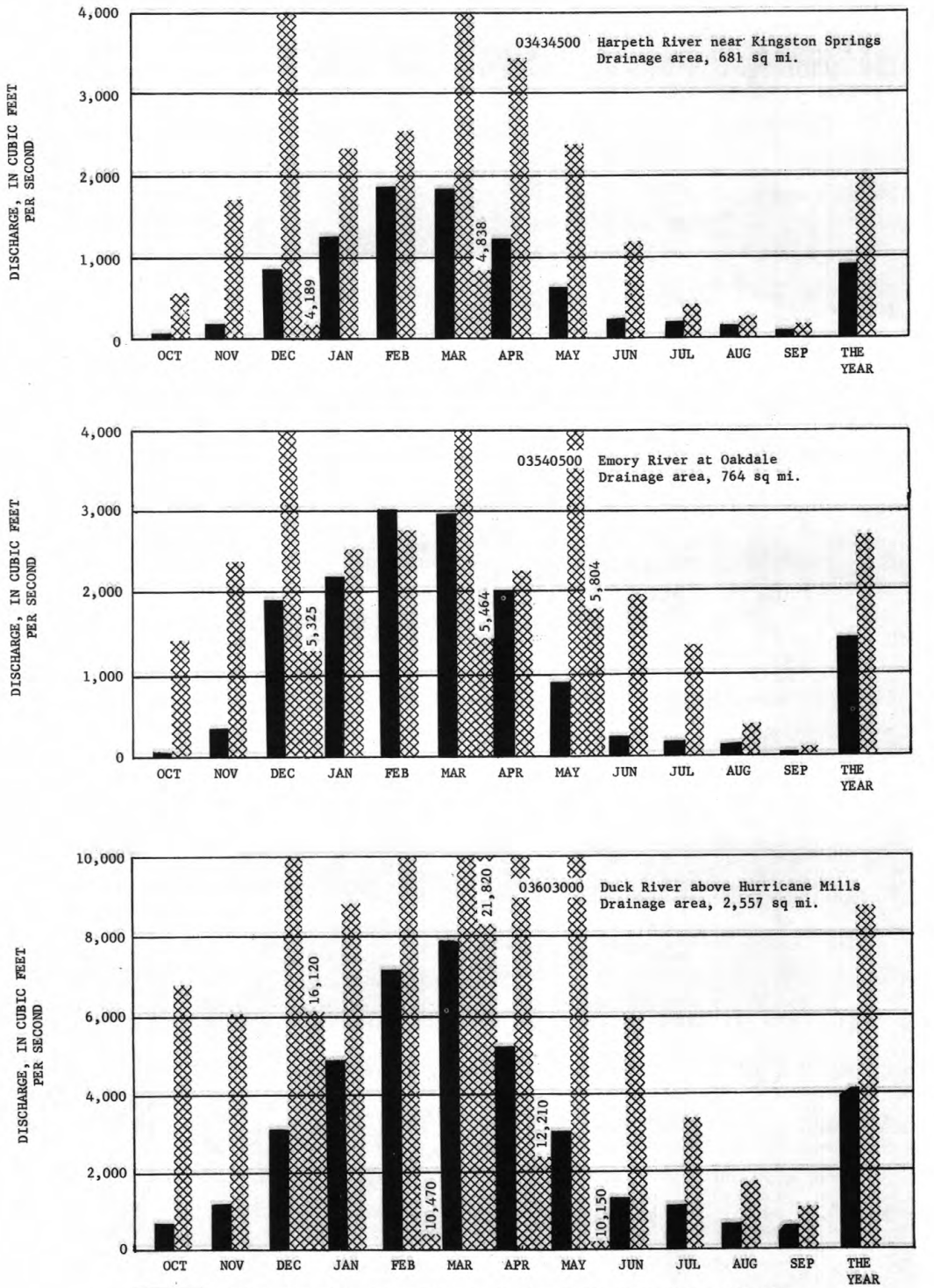


Figure 1.--Runoff during 1973 water year compared with median runoff for period 1941-70 for three representative gaging stations.

Table 3.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
	Length	
inches (in)	25.4	millimeters (mm)
	.0254	meters (m)
feet (ft)	.3048	meters (m)
yards (yd)	.9144	meters (m)
rods	5.0292	meters (m)
miles (mi)	1.609	kilometers (km)
	Area	
acres	4047	square meters (m^2)
	.4047	*hectares (ha)
	.4047	square hectometer (hm^2)
	.004047	square kilometers (km^2)
square miles (mi^2)	2.590	square kilometers (km^2)
	Volume	
gallons (gal)	3.785	**liters (l)
	3.785	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons (10^6 gal)	3785	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	28.32	cubic decimeters (dm^3)
	.02832	cubic meters (m^3)
cfs-day (ft^3/s-day)	2447	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1233	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	28.32	liters per second (l/s)
	28.32	cubic decimeters per second (dm^3/s)
	.02832	cubic meters per second (m^3/s)
gallons per minute (gpm)	.06309	liters per second (l/s)
	.06309	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimeters per second (dm^3/s)
	.04381	cubic meters per second (m^3/s)
	Mass	
ton (short)	.9072	tonne (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

**The unit liter is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

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 (210 m) downstream from Phillips Creek, 1,000 ft (300 m) downstream from bridge on U. S. Highway 27, 1.7 miles (2.7 km) downstream from Brimstone Creek, and at mile 8.6 (13.8 km).

DRAINAGE AREA.--382 sq mi (989 sq km).

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 (332.973 m) above mean sea level.

AVERAGE DISCHARGE.--39 years, 727 cfs (20.59 cu m/s), 25.84 in/yr (656 mm/yr).

EXTREMES.--Current year: Maximum discharge, 63,700 cfs (1,810 cu m/s) May 27, gage height, 37.91 ft (11.555 m), from high water mark in gage well, from rating curve extended above 27,000 cfs (765 cu m/s) on basis of slope-area and contracted-opening measurements of peak flow; minimum, 25 cfs (0.71 cu m/s) Sept. 8, 9, gage height, 1.82 ft (0.555 m).

Period of record: Maximum discharge, 63,700 cfs (1,810 cu m/s) May 27, 1973, gage height, 37.91 ft (11.555 m), from high water mark in gage well, from rating curve extended above 27,000 cfs (765 cu m/s) on basis of slope-area and contracted-opening measurements of peak flow; minimum, no flow part of each day Aug. 12-15, 1944.

Flood of Mar. 23, 1929 reached a stage of 41.2 ft (12.56 m), discharge, 74,700 cfs (2,120 cu m/s), estimated,based on field survey at old U. S. Weather Bureau gage, 1,200 ft (400 m) upstream at datum 3.41 ft (1.039 m) higher.

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

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
873, 1306, 1676	1939	Feb. 3, 1939	50,800	33.58
1206, 1726, 1676	1951	Feb. 1, 1951	45,000	31.49
2110	1970	Dec. 30, 1969	45,300	31.59

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

REVISIONS.--WSP 1436: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	757	388	1,260	1,000	840	273	1,190	933	666	671	1,590	54
2	339	345	993	800	1,900	255	974	706	501	852	833	54
3	201	2,260	846	900	1,840	369	815	3,330	391	552	518	39
4	180	1,320	775	2,000	1,280	726	1,070	4,000	311	405	358	34
5	1,440	847	803	1,500	1,010	2,040	1,110	2,000	340	399	262	35
6	722	612	2,820	1,200	1,550	1,510	926	1,000	2,040	318	207	29
7	422	807	3,230	1,000	2,000	1,100	984	800	3,340	234	172	28
8	284	6,220	1,740	800	3,430	1,090	2,530	1,100	1,330	189	150	26
9	200	2,270	9,700	700	3,810	890	2,120	1,000	781	167	132	26
10	149	1,300	22,900	600	1,930	747	1,640	800	555	169	313	27
11	121	906	6,870	500	1,260	1,070	1,200	2,500	416	209	816	31
12	99	660	3,080	450	957	2,300	975	1,500	401	161	367	39
13	349	528	2,430	400	776	1,440	790	1,000	420	127	327	36
14	641	709	2,030	380	1,620	1,080	637	800	1,450	115	268	86
15	334	797	3,100	370	3,800	4,340	538	600	655	124	262	137
16	235	682	3,740	360	2,100	18,400	471	500	800	149	176	85
17	260	671	2,010	450	1,370	14,400	439	600	1,520	135	141	61
18	756	574	1,350	600	1,040	3,320	407	400	1,910	107	122	223
19	5,200	1,230	1,060	2,500	880	1,910	384	350	875	91	107	167
20	2,400	4,290	900	3,000	719	1,480	364	400	769	84	93	88
21	1,110	1,900	2,000	2,000	606	2,940	314	250	2,400	82	172	61
22	693	1,250	4,000	3,500	517	2,270	279	200	1,600	74	134	49
23	501	916	2,000	2,500	461	1,560	263	180	805	150	96	41
24	832	701	1,500	1,440	414	1,180	286	500	511	153	78	36
25	630	654	1,200	1,030	362	1,030	373	700	365	2,320	69	33
26	469	1,130	1,000	827	331	1,190	1,450	800	279	3,520	63	30
27	378	1,090	800	968	332	1,290	5,480	20,000	1,210	4,140	57	29
28	485	1,400	700	852	306	1,200	4,420	35,000	6,970	1,210	51	27
29	577	1,950	600	1,070	------	1,160	2,130	10,000	1,420	629	46	27
30	468	1,530	550	996	------	1,530	1,310	3,000	885	393	43	37
31	403	------	700	925	------	1,320	------	1,000	------	508	43	------
TOTAL	21,635	39,937	86,687	35,618	37,441	75,410	35,869	95,949	35,916	18,437	8,066	1,675
MEAN	698	1,331	2,796	1,149	1,337	2,433	1,196	3,095	1,197	595	260	55.8
MAX	5,200	6,220	22,900	3,500	3,810	18,400	5,480	35,000	6,970	4,140	1,590	223
MIN	99	345	550	360	306	255	263	180	279	74	43	26
CFSM	1.83	3.48	7.32	3.01	3.50	6.37	3.13	8.10	3.13	1.56	.68	.15
IN.	2.11	3.89	8.44	3.47	3.65	7.34	3.49	9.34	3.50	1.80	.79	.16

CAL YR 1972 TOTAL 422,084 MEAN 1,153 MAX 22,900 MIN 18 CFSM 3.02 IN 41.10
WTR YR 1973 TOTAL 492,640 MEAN 1,350 MAX 35,000 MIN 26 CFSM 3.53 IN 47.97

PEAK DISCHARGE (BASE, 12,000 CFS)

Note.--No gage-height record Dec. 20 to Jan. 23, May 4-31.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1700	26.29	29,800	05-27	Unknown	37.91*	63,700
03-16	2200	24.96	27,400	06-28	0300	16.51	13,500

*High water mark in gage well.

03414500 East Fork Obey River near Jamestown, Tenn.

LOCATION.--Lat 36°24'58", long 85°01'35", Fentress County, on right bank 200 ft (61 m) upstream from bridge on State Highway 52, 0.5 mile (0.8 km) upstream from Poplar Cove Creek, 5.3 miles (8.5 km) west of Jamestown, and at mile 12.7 (20.4 km).

DRAINAGE AREA.--202 sq mi (523 sq km), includes 6 sq mi (16 sq km) 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 (207.355 m) above mean sea level, Sandy Hook datum. Feb. 24 to Apr. 7, 1943, nonrecording gage 200 ft (61 m) upstream at same datum.

AVERAGE DISCHARGE.--31 years, 404 cfs (11.44 cu m/s), 27.16 in/yr (690 mm/yr).

EXTREMES.--Current year: Maximum discharge, 44,800 cfs (1,270 cu m/s) May 27, gage height, 30.46 ft (9.284 m) from rating curve extended above 32,000 cfs (906 cu m/s) on basis of slope-area measurement of peak flow; minimum, 14 cfs (0.40 cu m/s) Sept. 26, 27, 28, gage height, 0.98 ft (0.299 m).
Period of record: Maximum discharge, 44,800 cfs (1,270 cu m/s) May 27, 1973, gage height, 30.46 ft (9.284 m) from rating curve extended above 32,000 cfs (906 cu m/s) on basis of slope-area measurement of peak flow; minimum, 3.6 cfs (0.10 cu m/s) Sept. 26-28, 1948; minimum gage height, 0.55 ft (0.168 m) Sept. 12-17, 1954.
Flood in March 1929 reached a stage of about 30.7 ft (9.36 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	152	569	440	580	210	600	631	599	175	400	20
2	104	155	450	400	1,290	202	515	484	491	173	311	18
3	66	220	373	460	1,210	454	454	1,860	394	139	227	17
4	51	262	351	540	883	669	675	1,640	325	114	174	17
5	71	223	364	560	696	729	796	1,010	268	301	139	16
6	84	187	739	530	1,180	678	670	712	1,240	219	115	16
7	65	178	958	470	1,420	1,280	781	531	1,230	145	101	16
8	51	804	772	425	2,530	2,060	2,090	529	719	112	91	15
9	41	620	3,800	380	2,440	1,240	1,520	544	485	98	82	17
10	33	437	17,900	340	1,380	858	1,200	462	380	114	99	20
11	27	341	3,540	310	934	714	900	3,710	305	150	101	18
12	23	274	2,090	280	700	778	726	1,460	252	114	95	18
13	37	226	1,810	260	552	610	566	878	352	89	107	18
14	38	232	1,540	240	950	517	467	609	406	75	96	32
15	40	259	2,080	240	1,790	8,360	412	458	622	72	81	43
16	33	223	1,840	235	1,370	15,800	365	383	623	115	69	32
17	40	217	1,260	258	966	5,700	334	344	446	164	60	25
18	380	208	956	307	749	2,500	311	316	352	114	54	26
19	2,310	499	772	1,560	595	1,540	306	267	256	91	49	24
20	991	1,570	904	1,500	500	1,330	297	253	199	86	43	21
21	482	903	1,090	964	438	2,220	277	227	156	75	40	19
22	313	610	2,030	1,010	404	1,560	249	193	129	65	36	17
23	235	457	1,440	899	354	1,100	235	189	109	55	33	16
24	211	376	1,080	691	315	832	306	502	93	92	30	15
25	181	344	866	538	283	737	466	636	82	1,120	29	15
26	147	517	710	458	261	666	595	1,780	72	2,030	27	15
27	127	583	600	486	245	613	2,820	14,800	422	2,320	25	14
28	139	694	522	473	227	534	2,300	10,900	849	815	24	14
29	139	820	471	685	------	504	1,310	2,000	382	437	22	19
30	124	666	410	740	------	596	872	1,100	227	288	21	19
31	119	------	470	642	------	591	------	720	------	267	20	------
TOTAL	6,940	13,257	52,757	17,321	25,242	56,182	23,415	50,128	12,465	10,224	2,801	592
MEAN	224	442	1,702	559	902	1,812	781	1,617	416	330	90.4	19.7
MAX	2,310	1,570	17,900	1,560	2,530	15,800	2,820	14,800	1,240	2,320	400	43
MIN	23	152	351	235	227	202	235	189	72	55	20	14
CFSM	1.11	2.19	8.43	2.77	4.47	8.97	3.87	8.01	2.06	1.63	.45	.10
IN.	1.28	2.44	9.72	3.19	4.65	10.35	4.31	9.23	2.30	1.88	.52	.11

CAL YR 1972 TOTAL 220,530 MEAN 603 MAX 17,900 MIN 14 CFSM 2.99 IN 40.61
WTR YR 1973 TOTAL 271,324 MEAN 743 MAX 17,900 MIN 14 CFSM 3.68 IN 49.97

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	0730	25.22	27,700	05-27	2200	30.46	44,800
03-16	1045	23.21	23,700				

03416000 Wolf River near Byrdstown, Tenn.

LOCATION.--Lat 36°33'37", long 85°04'23", Pickett County, on right bank 0.3 mile (0.5 km) upstream from bridge on county road, 0.5 mile (0.8 km) upstream from Widow Creek, 3.2 miles (5.1 km) east of Byrdstown, 5.4 miles (8.7 km) upstream from Lick Creek, and at mile 26.2 (42.2 km).

DRAINAGE AREA.--106 sq mi (275 sq km).

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 (215.658 m) above mean sea level, Sandy Hook datum.

AVERAGE DISCHARGE.--31 years, 183 cfs (5.183 cu m/s), 23.44 in/yr (595 mm/yr).

EXTREMES.--Current year: Maximum discharge, 19,100 cfs (541 cu m/s) Dec. 10, gage height, 10.23 ft (3.118 m); minimum, 14 cfs (0.40 cu m/s) Oct. 12, 13, gage height, 1.11 ft (0.338 m).
Period of record: Maximum discharge, 22,600 cfs (640 cu m/s) Jan. 29, 1957, gage height, 10.84 ft (3.304 m); from rating curve extended above 7,300 cfs (207 cu m/s) on basis of velocity-area study; minimum, 2.0 cfs (0.06 cu m/s) Sept. 17, 1954, gage height, 0.50 ft (0.152 m), result of filling of mill pond 12.5 miles (20.1 km) 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 (0.46 m) higher than that of March 1929 at a point 12.5 miles (20.1 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	43	219	174	261	105	285	275	209	362	124	27
2	32	47	175	158	392	102	243	219	170	415	103	23
3	26	56	160	171	365	138	210	702	141	239	86	21
4	26	55	150	251	308	155	305	534	121	180	74	19
5	27	48	140	228	272	180	290	374	116	161	65	18
6	25	43	321	205	411	184	252	285	509	127	58	16
7	23	43	390	181	451	255	254	228	373	104	53	15
8	20	120	350	167	1,070	391	431	288	240	90	49	14
9	19	116	2,290	146	865	308	414	248	183	80	45	15
10	18	92	8,810	130	512	250	379	254	148	129	46	16
11	17	76	1,430	122	379	217	313	1,010	122	240	50	18
12	16	63	673	110	304	197	275	450	224	140	83	19
13	30	55	693	101	256	174	226	312	245	103	48	23
14	39	57	560	98	633	164	195	233	211	185	42	35
15	31	59	1,440	100	871	3,940	174	187	370	202	38	47
16	25	53	978	99	557	4,990	160	160	342	118	35	33
17	23	56	527	98	412	2,660	148	147	261	93	32	26
18	25	60	393	101	336	1,140	139	127	322	80	30	33
19	195	191	325	436	281	680	135	115	218	74	28	30
20	113	424	474	382	241	871	126	109	166	69	26	28
21	69	255	479	301	206	1,510	116	97	130	60	25	26
22	51	184	725	381	191	742	109	88	107	54	24	24
23	44	143	499	322	173	494	108	93	91	51	23	22
24	44	116	386	263	154	391	129	116	80	48	21	20
25	42	115	307	218	138	343	215	105	72	267	20	18
26	37	177	260	198	129	304	229	108	64	1,290	19	17
27	37	186	221	218	122	268	1,100	2,530	318	792	18	16
28	37	384	195	216	112	235	931	2,760	1,020	333	18	15
29	37	405	175	338	------	238	509	642	313	203	22	14
30	34	289	161	304	------	330	363	383	200	151	24	17
31	36	------	177	269	------	311	------	266	------	134	27	------
TOTAL	1,248	4,011	24,083	6,486	10,402	22,267	8,763	13,445	7,086	6,574	1,356	665
MEAN	40.3	134	777	209	372	718	292	434	236	212	43.7	22.2
MAX	195	424	8,810	436	1,070	4,990	1,100	2,760	1,020	1,290	124	47
MIN	16	43	140	98	112	102	108	88	64	48	18	14
CFSM	.38	1.26	7.33	1.97	3.51	6.77	2.75	4.09	2.23	2.00	.41	.21
IN.	.44	1.41	8.45	2.28	3.65	7.81	3.08	4.72	2.49	2.31	.48	.23

CAL YR 1972 TOTAL 105,820 MEAN 289 MAX 8,810 MIN 14 CFSM 2.73 IN 37.14
WTR YR 1973 TOTAL 106,386 MEAN 291 MAX 8,810 MIN 14 CFSM 2.75 IN 37.34

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	0915	10.23	19,100	05-28	0015	7.56	7,390
03-15	1045	7.89	8,420				

03417500 Cumberland River at Celina, Tenn.

LOCATION.--Lat 36°33'15", long 85°30'52", Clay County, on right bank at Henry H. Horton bridge on State Highway 52, 600 ft (183 m) downstream from Obey River, 0.5 mile (0.8 km) northwest of courthouse in Celina, and at mile 380.8 (612.7 km). Prior to Feb. 2, 1973, on right bridge pier.

DRAINAGE AREA.--7,307 sq mi (18,925 sq km).

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 (149.047 m) above mean sea level. Prior to Nov. 20, 1930, nonrecording gage at site 400 ft (122 m) downstream at same datum. Since Feb. 2, 1973, auxiliary water-stage recorder 15.8 miles (25.4 km) downstream from base gage at same datum.

AVERAGE DISCHARGE.--51 years, 11,470 cfs (324.8 cu m/s), 21.32 in/yr (542 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 44,400 cfs (1,260 cu m/s) Mar. 18, gage height, 26.60 ft (8.108 m); minimum, 958 cfs (27.1 cu m/s) Oct. 10, gage height, 2.16 ft (0.658 m).
Period of record: Maximum discharge, 145,000 cfs (4,110 cu m/s) Dec. 29, 1926; maximum gage height, 57.25 ft (17.450 m) Dec. 29, 1926, from graph based on gage readings; minimum discharge observed, 69 cfs (1.95 cu m/s) Sept. 2, 11-14, 26, 1925, gage height, 0.20 ft (0.061 m).
Maximum stage since at least 1793, 59.2 ft (18.04 m) in March 1826, from Cumberland River profile.

REMARKS.--Records good prior to Mar. 15 and poor thereafter. Flow regulated by Lake Cumberland and Dale Hollow Lake (see p. 52).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,220	6,900	9,410	19,300	19,300	25,500	32,700	7,200	10,200	26,900	13,000	17,900
2	3,830	4,910	10,600	16,000	21,200	18,300	32,400	7,400	9,900	28,300	16,000	17,000
3	2,570	5,230	9,280	21,200	21,100	13,500	32,100	7,500	9,800	28,000	17,200	6,600
4	3,890	3,740	4,400	28,000	20,000	11,400	33,300	7,600	13,000	28,600	14,000	10,000
5	3,790	3,440	5,230	28,300	15,900	11,800	34,000	10,000	15,000	30,900	10,000	16,000
6	3,630	2,880	5,450	26,200	12,800	11,700	32,000	14,000	16,500	27,200	14,000	13,000
7	3,330	2,080	14,400	23,700	18,600	10,000	30,100	17,000	15,000	23,200	18,000	6,000
8	1,240	5,990	16,900	22,500	23,400	12,100	32,500	22,000	22,000	21,600	20,500	6,800
9	1,700	16,200	31,900	23,000	27,800	14,800	32,300	25,000	28,500	24,000	20,100	7,800
10	2,180	23,300	32,200	22,400	26,600	15,000	32,000	23,000	27,000	26,400	17,700	4,000
11	3,910	15,400	21,000	22,500	23,200	16,200	34,100	26,000	28,000	28,900	16,100	9,000
12	6,660	4,290	22,200	24,100	20,200	18,200	35,000	27,000	27,700	27,000	14,100	7,600
13	6,850	2,610	29,400	25,500	22,000	17,700	35,100	25,000	29,300	26,100	8,800	6,000
14	5,020	2,100	31,200	26,900	24,900	29,200	34,000	24,000	31,100	23,600	9,400	4,500
15	1,930	3,700	36,600	22,300	28,400	27,000	34,300	25,000	30,000	19,300	16,100	4,100
16	3,600	7,600	36,500	23,400	26,300	34,200	32,000	27,500	31,100	19,800	15,600	3,800
17	8,080	12,100	31,900	21,700	26,200	40,400	30,000	27,000	30,000	24,700	14,900	6,000
18	7,590	11,300	29,800	15,900	22,200	42,200	26,100	26,000	29,000	22,700	17,300	11,000
19	9,190	12,500	31,100	15,900	18,300	37,700	23,500	25,200	28,500	19,400	15,100	9,000
20	15,200	12,000	34,500	14,900	19,100	31,000	20,000	26,300	27,000	18,600	13,000	7,000
21	12,500	14,000	35,000	13,100	16,100	34,700	19,800	26,800	26,000	19,300	16,000	8,000
22	7,000	10,900	33,200	14,200	15,600	29,600	11,000	26,700	26,400	16,900	16,700	9,000
23	3,940	15,500	29,900	15,800	17,200	24,000	9,200	26,200	27,000	19,200	14,300	7,000
24	4,320	13,700	25,500	19,500	18,100	20,900	10,900	25,200	27,500	20,100	14,900	5,000
25	6,940	8,110	24,600	22,300	20,500	19,700	10,100	26,500	28,000	20,900	12,100	8,000
26	7,270	13,600	22,300	21,700	17,600	22,100	7,000	22,000	29,500	22,000	11,000	9,500
27	9,910	10,400	24,700	22,000	19,000	26,800	8,000	15,000	32,800	20,000	16,500	10,500
28	8,900	6,150	25,300	21,700	25,900	31,200	8,500	10,000	41,200	16,000	19,300	9,000
29	4,540	5,260	23,900	22,900	------	34,600	8,000	11,100	34,100	13,000	21,100	7,000
30	4,330	7,800	23,700	23,300	------	34,300	8,900	10,800	28,800	10,000	20,700	6,000
31	6,010	------	20,800	21,500	------	33,300	------	10,500	------	18,000	20,100	------
TOTAL	174,070	263,690	732,870	661,700	587,500	749,100	728,900	610,500	759,900	690,600	483,600	252,100
MEAN	5,615	8,790	23,640	21,350	20,980	24,160	24,300	19,690	25,330	22,280	15,600	8,403
MAX	15,200	23,300	36,600	28,300	28,400	42,200	35,100	27,500	41,200	30,900	21,100	17,900
MIN	1,240	2,080	4,400	13,100	12,800	10,000	7,000	7,200	9,800	10,000	8,800	3,800

CAL YR 1972 TOTAL 6,375,707 MEAN 17,420 MAX 44,300 MIN 927 MEAN/ 18,530 CFSM/ 2.54 IN./ 34.53
WTR YR 1973 TOTAL 6,694,530 MEAN 18,340 MAX 42,200 MIN 1,240 MEAN/ 18,590 CFSM/ 2.54 IN./ 34.53

/Adjusted for change in contents in Lake Cumberland and Dale Hollow Lake.

03418000 Roaring River near Hilham, Tenn.

LOCATION.--Lat 36°20'27", long 85°25'35", Overton County, on left bank 700 ft (213 m) upstream from Cleek Branch, 0.2 mile (0.3 km) downstream from bridge on State Highway 136, 1.4 miles (2.3 km) upstream from Flat Creek, 2.7 miles (4.3 km) west of Windle, 5.0 miles (8.0 km) south of Hilham, and at mile 22.2 (35.7 km).

DRAINAGE AREA.--78.7 sq mi (203.8 sq km), includes 27.1 sq mi (70.2 sq km) 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 (235 m) by barometer. June 23, 1932, to July 24, 1933, nonrecording gage at site 800 ft (244 m) upstream at different datum. July 25 to Nov. 7, 1933, nonrecording gage 150 ft (46 m) downstream at different datum. Nov. 8, 1933, to Sept. 23, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years, 108 cfs (3.059 cu m/s), 18.64 in/yr (473 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,940 cfs (140 cu m/s) Dec. 10, gage height, 8.78 ft (2.676 m); minimum, 7.3 cfs (0.21 cu m/s) Oct. 11, 12, gage height, 0.87 ft (0.265 m).
Period of record: Maximum discharge, 9,770 cfs (277 cu m/s) Mar. 17, 1963, gage height, 12.98 ft (3.956 m), from highwater mark in gage house, from rating curve extended above 4,000 cfs (113 cu m/s); minimum, 1.9 cfs (0.054 cu m/s) Oct. 19, 24, 26, 28, Nov. 9, 1940; minimum daily, 2.4 cfs (0.068 cu m/s) Sept. 12, 13, 15-19, 1954; minimum gage height, 0.16 ft (0.049 m) Oct. 5, 1936; minimum gage height since concrete control, 0.63 ft (0.192 m) Sept. 16-20, 1954.

REMARKS.--Records fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	115	133	165	55	150	213	214	118	84	15
2	15	24	92	120	240	61	133	174	164	97	69	16
3	12	32	79	139	205	117	118	511	131	83	58	15
4	12	28	76	179	205	98	239	432	106	72	51	14
5	13	24	70	160	185	93	222	268	92	78	45	13
6	11	22	193	144	414	86	187	208	586	63	41	13
7	10	23	201	127	308	211	205	163	323	56	38	13
8	9.6	28	183	117	742	251	349	218	221	58	36	14
9	9.1	27	851	103	552	204	296	205	191	50	33	15
10	8.2	25	3,550	93	305	170	263	408	145	279	31	15
11	7.8	24	1,060	87	255	150	222	1,220	112	286	38	15
12	7.8	22	512	80	202	128	194	424	98	130	50	14
13	16	32	544	73	183	109	164	254	200	90	46	13
14	12	23	377	71	267	103	141	198	162	72	42	15
15	9.9	22	835	75	320	2,180	125	150	300	72	38	20
16	9.5	21	603	73	248	3,290	113	123	250	68	37	19
17	10	22	324	72	202	1,910	104	115	200	57	35	18
18	21	20	257	73	200	821	96	98	260	52	35	19
19	153	50	231	251	183	454	92	89	175	48	30	18
20	59	123	266	202	155	445	101	81	140	46	26	17
21	35	77	254	293	127	585	85	73	120	43	25	16
22	31	64	303	272	96	369	75	70	96	40	23	14
23	27	52	256	244	86	287	75	64	80	37	22	13
24	25	45	233	218	75	249	173	79	70	35	21	12
25	21	50	211	189	68	232	182	74	63	250	20	12
26	20	74	192	183	64	227	190	250	55	1,000	19	12
27	19	74	173	178	60	205	735	1,500	53	500	18	11
28	35	197	152	162	57	177	570	2,300	682	300	17	11
29	18	195	135	162	------	169	334	800	206	160	16	12
30	15	147	125	148	------	167	258	289	134	115	15	13
31	18	------	139	139	------	160	------	223	------	96	15	------
TOTAL	689.9	1,586	12,592	4,560	6,169	13,763	6,191	11,274	5,629	4,451	1,074	437
MEAN	22.3	52.9	406	147	220	444	206	364	188	144	34.6	14.6
MAX	153	197	3,550	293	742	3,290	735	2,300	682	1,000	84	20
MIN	7.8	19	70	71	57	55	75	64	53	35	15	11
CFSM	.28	.67	5.16	1.87	2.80	5.64	2.62	4.63	2.39	1.83	.44	.19
IN.	.33	.75	5.95	2.16	2.92	6.51	2.93	5.33	2.66	2.10	.51	.21

CAL YR 1972 TOTAL 51,033.4 MEAN 139 MAX 3,550 MIN 7.8 CFSM 1.77 IN 24.12
WTR YR 1973 TOTAL 68,415.9 MEAN 187 MAX 3,550 MIN 7.8 CFSM 2.38 IN 32.34

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	0915	8.78	4,940	05-28	Unknown	Unknown	Unknown
03-16	1300	7.75	3,910	07-27	2345	5.74	2,060
05-11	0345	5.58	1,930				

NOTE.--No gage-height record Aug. 18 to Sept. 30.

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 (2.9 km) downstream from Barren Fork, 2.5 miles (4.0 km) northeast of McMinnville, and at mile 19.5 (31.4 km).

DRAINAGE AREA.--640 sq mi (1,658 sq km).

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 (251.698 m) above mean sea level, Sandy Hook datum. Prior to Oct. 16, 1926, nonrecording gage on upstream side of bridge at same datum.

AVERAGE DISCHARGE.--49 years, 1,147 cfs (32.48 cu m/s), 24.34 in/yr (618 mm/yr).

EXTREMES.--Current year: Maximum discharge, 64,100 cfs (1,820 cu m/s) Mar. 16, gage height, 36.30 ft (11.064 m); minimum, 126 cfs (3.57 cu m/s) Sept. 6, gage height, 1.29 ft (0.393 m).
Period of record: Maximum discharge, 75,300 cfs (2,130 cu m/s) Mar. 23, 1929, gage height, 39.1 ft (11.92 m), from rating curve extended above 42,000 cfs (1,190 cu m/s) on basis of slope area measurement of peak flow; minimum, 35 cfs (0.991 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,980	807	2,150	1,940	1,680	697	1,970	1,820	2,990	500	1,690	142
2	1,110	822	1,800	1,800	3,030	681	1,770	1,530	2,630	520	660	142
3	689	2,210	1,520	1,720	2,620	1,830	1,600	3,450	2,020	415	520	141
4	518	2,510	1,350	2,990	2,160	1,660	2,180	2,710	1,620	372	415	139
5	753	1,790	1,290	2,720	1,810	1,640	2,110	1,670	1,390	535	336	142
6	1,290	1,360	1,440	2,220	3,140	1,530	1,690	1,370	2,900	440	287	148
7	917	1,130	2,380	1,840	3,830	1,510	1,800	1,190	4,170	355	255	142
8	645	1,600	2,120	1,640	6,270	2,140	3,420	1,260	2,900	320	234	144
9	493	1,990	5,720	1,470	7,340	2,190	2,820	1,430	2,110	311	220	159
10	392	1,580	26,800	1,300	4,080	2,490	2,590	1,260	1,660	550	238	208
11	316	1,250	21,000	1,180	2,810	2,790	2,110	1,060	1,630	1,530	390	252
12	259	1,030	9,720	1,070	2,210	4,470	1,830	928	1,730	1,110	322	191
13	225	881	6,040	963	1,850	3,290	1,630	818	1,630	752	834	191
14	207	937	4,570	896	3,180	2,380	1,440	715	1,410	630	520	376
15	195	1,170	4,590	983	4,600	11,000	1,300	635	1,200	977	400	565
16	185	1,050	4,800	1,120	3,500	40,200	1,190	575	1,330	1,500	354	440
17	192	936	3,400	1,140	2,700	46,600	1,120	530	1,130	1,300	283	295
18	567	822	2,800	1,160	2,200	18,700	1,060	485	939	2,000	241	234
19	8,800	882	2,200	2,540	1,850	7,440	1,070	445	823	1,650	214	208
20	8,280	2,080	2,060	2,840	1,600	4,070	1,690	435	746	1,100	203	203
21	3,540	1,980	2,150	2,240	1,430	5,270	1,620	430	660	955	186	189
22	2,090	1,650	3,550	3,690	1,270	4,940	1,170	405	615	779	174	174
23	1,520	1,370	2,870	3,830	1,150	3,500	1,050	405	585	650	167	165
24	1,240	1,150	2,360	2,580	1,050	2,730	1,040	1,810	530	650	163	159
25	1,050	1,070	2,040	1,940	944	2,570	1,120	2,170	485	1,440	161	159
26	902	1,370	1,790	1,680	868	2,770	2,940	1,660	450	1,830	159	159
27	792	1,390	1,620	2,460	808	3,040	7,430	12,100	590	1,290	154	150
28	745	1,470	1,450	2,450	748	2,590	5,580	42,700	1,360	966	150	150
29	760	2,470	1,290	2,470	------	2,270	3,250	17,100	620	705	150	165
30	730	2,280	1,170	2,080	------	2,110	2,320	6,310	485	550	146	227
31	712	------	1,250	1,780	------	1,910	------	2,950	------	867	144	------
TOTAL	42,094	43,037	129,290	60,732	70,728	191,008	63,910	112,356	43,338	27,549	10,370	6,159
MEAN	1,358	1,435	4,171	1,959	2,526	6,162	2,130	3,624	1,445	889	335	205
MAX	8,800	2,510	26,800	3,830	7,340	46,600	7,430	42,700	4,170	2,000	1,690	565
MIN	185	807	1,170	896	748	681	1,040	405	450	311	144	139
CFSM	2.12	2.24	6.52	3.06	3.95	9.63	3.33	5.66	2.26	1.39	.52	.32
IN.	2.45	2.50	7.51	3.53	4.11	11.10	3.71	6.53	2.52	1.60	.60	.36

CAL YR 1972 TOTAL 556,600 MEAN 1,521 MAX 26,800 MIN 135 CFSM 2.38 IN 32.35
WTR YR 1973 TOTAL 800,571 MEAN 2,193 MAX 46,600 MIN 139 CFSM 3.43 IN 46.53

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-19	2100	15.37	12,200	03-16	2400	36.30	64,100
12-10	2100	28.83	37,100	05-28	0700	33.83	54,900

03422500 Caney Fork near Rock Island, Tenn.

LOCATION.--Lat 35°48'26", long 85°37'44", White County, on right bank 180 ft (50 m) downstream from powerhouse of Tennessee Valley Authority, 0.8 mile (1.3 km) downstream from Great Falls Dam, 0.9 mile (1.4 km) downstream from Collins River, 1.5 miles (2.4 km) northwest of Rock Island, and at mile 90.3 (145.3 km).

DRAINAGE AREA.--1,678 sq mi (4,346 sq km).

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 (197.233 m) above mean sea level. Prior to Mar. 30, 1924, at sites from 80 ft (24 m) to 0.5 mile (0.8 km) upstream at different datums. Apr. 12, 1925, to Sept. 9, 1930, at present site at datum 5.00 ft (1.524 m) higher and Sept. 10, 1930, to Sept. 18, 1964, 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--59 years (1914-73), 3,183 cfs (90.14 cu m/s), 25.76 in/yr (654 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 131,000 cfs (3,710 cu m/s) May 28, gage height, 32.89 ft (10.025 m), from Selsyn recorder in powerhouse; minimum, 49 cfs (1.39 cu m/s) Sept. 16, 17, gage height, 2.28 ft (0.695 m); minimum daily, 50 cfs (1.42 cu m/s) Sept. 15, 16.

Period of record: Maximum discharge, 210,000 cfs (5,950 cu m/s) Mar. 23, 1929, gage height, 43.6 ft (13.29 m), present datum, from floodmark, from rating curve extended above 110,000 cfs (3,120 cu m/s); minimum daily, 25 cfs (0.71 cu m/s) several days in August to October 1951.

Flood of March 1902 reached a stage about 10 ft (3.0 m) lower than the flood of Mar. 23, 1929, at a point 8 miles (13 km) downstream, from profile by Corps of Engineers.

REMARKS.--Records good, except for period of no gage-height record, which are fair. Flow regulated by Great Falls Lake beginning Dec. 8, 1916 (see sta. 03422000).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,310	3,100	4,460	3,490	4,490	3,240	4,900	5,000	5,900	1,490	1,950	752
2	1,510	2,160	3,920	3,910	7,490	3,230	4,600	4,500	5,900	2,490	1,960	1,020
3	930	2,710	3,780	4,150	6,410	3,230	4,100	12,600	4,800	2,480	1,940	997
4	638	3,210	3,550	7,520	5,530	3,240	5,400	11,000	3,000	1,600	1,930	1,040
5	630	3,200	3,430	6,760	4,550	3,260	5,000	6,810	3,200	1,410	1,930	1,200
6	2,960	3,200	3,730	5,410	8,700	3,270	4,200	5,570	6,700	1,400	1,920	966
7	3,160	3,260	6,360	4,750	10,400	3,260	5,000	5,060	10,500	1,490	1,250	51
8	1,490	3,290	5,240	3,980	17,600	3,670	8,800	4,640	6,400	1,420	1,140	51
9	1,700	3,320	16,200	3,720	19,100	6,290	7,600	4,360	4,500	1,110	1,150	51
10	1,610	3,320	76,000	3,530	10,800	7,050	6,800	3,950	3,600	840	1,150	475
11	850	3,340	48,000	3,380	7,240	7,310	5,400	3,630	3,700	1,620	1,190	52
12	1,200	3,320	22,000	3,350	5,770	11,600	4,700	3,520	4,600	1,900	694	499
13	717	3,300	15,500	3,340	4,800	7,770	4,000	3,460	4,600	1,280	1,160	624
14	55	3,300	12,000	3,330	7,830	5,730	3,700	3,410	3,500	87	1,180	390
15	55	3,300	12,000	3,320	13,200	34,200	3,400	3,390	3,110	1,650	1,170	50
16	1,000	3,290	12,000	3,300	9,610	99,900	3,300	2,870	3,510	3,010	1,180	50
17	963	3,290	8,800	3,290	6,990	89,000	3,300	3,330	3,460	2,970	1,160	51
18	2,250	3,270	6,800	3,280	5,680	36,000	3,300	3,220	3,050	1,960	1,170	793
19	6,360	3,250	5,300	3,470	4,600	17,500	3,200	3,290	2,990	2,230	71	53
20	16,000	3,280	5,480	8,040	4,090	10,500	3,200	2,880	3,000	2,970	1,100	53
21	6,680	3,290	6,210	6,610	3,790	12,500	3,200	2,730	3,000	2,020	73	55
22	3,770	3,310	10,600	11,500	3,550	11,000	3,300	2,850	2,980	92	521	53
23	3,540	3,320	8,100	9,050	3,350	9,000	3,300	2,670	3,050	891	725	54
24	3,380	3,330	6,900	6,430	3,310	6,600	3,200	2,250	3,050	710	1,230	236
25	3,380	3,330	5,250	4,750	3,290	5,800	3,200	3,230	2,680	1,620	1,190	307
26	3,360	3,320	4,880	4,480	3,290	6,200	3,300	3,260	2,480	2,610	1,110	377
27	3,340	3,320	4,120	5,500	3,280	6,400	18,500	38,000	982	1,940	1,180	376
28	3,300	3,340	3,900	5,540	3,260	5,400	12,500	108,000	2,030	1,950	1,330	363
29	3,280	3,360	3,660	5,970	------	5,400	9,500	35,000	1,780	1,950	1,280	302
30	3,240	3,380	3,420	5,110	------	4,600	5,000	13,000	1,190	1,940	1,010	56
31	3,200	------	3,340	4,470	------	4,700	------	6,200	------	1,950	995	------
TOTAL	86,858	97,010	334,930	154,730	192,000	436,850	158,900	313,680	113,142	53,080	37,039	11,397
MEAN	2,802	3,234	10,800	4,991	6,857	14,090	5,297	10,120	3,771	1,712	1,195	380
MAX	16,000	3,380	76,000	11,500	19,100	99,900	18,500	108,000	10,500	3,010	1,960	1,200
MIN	55	2,160	3,340	3,280	3,260	3,230	3,200	2,250	982	87	71	50
(†)	-2,100	+10,600	-100	+1,200	-5,300	+5,200	+100	-300	-11,400	+9,600	-12,400	+1,200
MEAN‡	2,734	3,587	10,800	5,030	6,668	14,260	5,300	10,110	3,391	2,022	795	420
CFSM‡	1.63	2.14	6.44	3.00	3.97	8.50	3.16	6.03	2.02	1.21	.47	.25
IN.‡	1.88	2.38	7.42	3.46	4.14	9.80	3.52	6.95	2.25	1.39	.55	.28

CAL YR 1972 TOTAL 1,470,059 MEAN 4,017 MAX 76,000 MIN 53 MEAN‡ 4,026 CFSM‡ 2.40 IN.‡ 32.66
WTR YR 1973 TOTAL 1,989,616 MEAN 5,451 MAX 108,000 MIN 50 MEAN‡ 5,441 CFSM‡ 3.24 IN.‡ 44.01

† 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.

NOTE.--No gage-height record March 17 to May 2.

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 (1.6 km) downstream from Caney Fork and at mile 308.2 (495.9 km).

DRAINAGE AREA.--10,690 sq mi (27,687 sq km).

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 (133.359 m) above mean sea level. Prior to May 12, 1936, nonrecording gage at site 1,000 ft (305 m) 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 (25.4 km); downstream from base gage at same datum.

AVERAGE DISCHARGE.--51 years, 17,220 cfs (487.7 cu m/s) 21.88 in/yr (556 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 82,100 cfs (2,330 cu m/s) Mar. 16; maximum gage height, 31.80 ft (9.693 m) Mar. 16; minimum daily discharge, 3,140 cfs (88.9 cu m/s) Oct. 10; minimum gage height, 6.71 ft (2.045 m) Oct. 11.
Period of record: Maximum discharge, 210,000 cfs (5,950 cu m/s) Dec. 30, 1926; maximum gage height, 59.8 ft (18.23 m) Dec. 30, 1926; minimum daily discharge, 366 cfs (10.4 cu m/s) Oct. 29, 1940; minimum gage height since filling of Old Hickory Lake on Dec. 30, 1956, 4.3 ft (1.31 m) Oct. 28, 1969.
Maximum stage since at least 1793, that of Dec. 30, 1926.

REMARKS.--Records good. Flow regulated by Lake Cumberland, Dale Hollow Lake, Cordell Hull Reservoir, and Great Falls and Center Hill Lakes. (see p. 52).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,380	11,100	14,500	36,900	28,900	21,700	55,100	15,300	21,800	31,300	20,000	18,600
2	5,440	12,700	16,700	33,800	30,000	28,200	49,100	15,500	25,400	32,200	25,100	19,400
3	5,680	13,000	15,100	32,600	26,800	17,800	51,200	21,200	25,500	34,400	24,400	13,200
4	4,950	11,500	12,800	39,300	32,300	12,800	29,200	17,700	24,000	34,400	14,800	10,500
5	6,130	8,110	12,400	43,100	30,200	13,500	43,800	18,300	18,700	33,600	11,000	12,700
6	6,900	5,740	12,800	39,600	29,100	13,900	44,200	21,500	27,900	33,300	9,140	11,100
7	5,580	5,560	19,200	36,200	28,600	12,300	48,600	21,800	31,800	32,700	8,670	7,970
8	4,130	7,570	21,500	33,800	41,100	19,700	51,400	38,500	32,700	27,900	21,200	6,300
9	3,240	16,500	38,900	32,200	48,700	17,000	48,400	48,000	45,600	24,900	27,100	8,000
10	3,140	25,100	64,900	31,900	46,800	14,100	48,800	42,700	48,500	25,900	25,100	7,190
11	4,050	23,500	66,700	31,900	40,300	16,000	31,000	44,300	48,500	28,600	17,900	7,190
12	5,980	16,700	55,100	33,600	36,400	18,400	40,500	46,900	48,600	31,400	17,000	7,560
13	8,820	11,500	59,300	36,400	35,300	19,300	41,800	43,400	50,200	32,500	13,000	8,000
14	8,280	10,500	64,800	36,900	40,000	20,600	42,600	34,500	51,500	29,200	10,600	8,260
15	6,220	10,000	68,700	34,100	44,600	47,100	42,000	38,800	50,700	22,500	16,700	7,260
16	5,310	11,200	67,900	33,100	43,300	77,000	40,700	39,300	46,600	17,300	16,200	6,460
17	9,290	14,700	62,600	29,500	39,200	75,100	42,000	38,400	45,700	21,400	15,800	6,310
18	16,100	17,700	54,700	26,500	41,300	72,400	23,600	37,200	44,800	29,700	16,600	6,580
19	27,400	14,600	48,300	23,900	32,900	74,400	35,600	32,100	41,700	28,700	18,200	8,310
20	18,100	19,900	49,500	24,500	31,000	74,100	29,200	29,600	37,800	25,000	14,400	8,370
21	18,200	19,600	51,200	21,400	30,800	69,700	26,600	30,300	33,500	25,100	14,300	7,780
22	12,800	20,900	51,100	22,600	26,500	73,100	21,200	31,800	30,300	24,500	14,900	8,110
23	9,530	19,900	48,500	27,000	24,400	66,700	15,700	30,300	27,200	23,900	16,500	8,120
24	7,830	20,800	44,300	33,700	26,600	54,600	12,700	32,900	27,100	24,100	13,800	7,540
25	9,380	15,600	39,800	35,200	26,500	52,600	14,200	34,900	29,100	26,100	13,300	7,480
26	11,900	13,300	37,300	32,200	23,900	50,200	22,600	28,200	31,800	38,200	11,500	8,550
27	11,700	17,100	36,200	26,900	26,500	55,100	27,100	35,600	36,100	41,200	13,000	9,390
28	13,700	16,500	37,700	27,800	24,700	46,600	22,400	69,500	51,100	30,500	24,300	10,800
29	10,700	17,000	38,000	28,100	------	69,600	19,900	57,100	47,600	18,700	28,200	9,040
30	11,600	14,400	37,200	23,200	------	70,900	15,900	31,900	33,800	11,500	25,800	7,550
31	11,000	------	37,800	24,800	------	64,400	------	21,500	------	11,500	22,100	------
TOTAL	290,460	442,280	1,285.5M	972,700	936,700	1,338.9M	1,037.1M	1,049.0M	1,115.6M	852,200	540,610	273,620
MEAN	9,370	14,740	41,470	31,380	33,450	43,190	34,570	33,840	37,190	27,490	17,440	9,121
MAX	27,400	25,100	68,700	43,100	48,700	77,000	55,100	69,500	51,500	41,200	28,200	19,400
MIN	3,140	5,560	12,400	21,400	23,900	12,300	12,700	15,300	18,700	11,500	8,670	6,300

CAL YR 1972 TOTAL 9,125,140 MEAN 24,930 MAX 68,700 MIN 3,080 MEAN/ 26,190 CFSM/ 2.45 IN./ 33.35
WTR YR 1973 TOTAL 10,134,670 MEAN 27,770 MAX 77,000 MIN 3,140 MEAN/ 28,400 CFSM/ 2.66 IN./ 36.06

/ Adjusted for change in contents in Lake Cumberland, Dale Hollow Lake, Cordell Hull Reservoir, and Great Falls and Center Hill Lakes.

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 (2.4 km) west of Old Hickory, 2.1 miles (3.4 km) east of Madison, 3.3 miles (5.3 km) downstream from Mansker Creek, 4.1 miles (6.6 km) downstream from Old Hickory Dam, and at mile 212.1 (km 341.3).

DRAINAGE AREA.--11,735 sq mi (30,394 sq km).

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 (115.824 m) above mean sea level. See WSP 1726 for history of changes prior to Oct. 1, 1956.

AVERAGE DISCHARGE.--37 years, 18,460 cfs (522.8 cu m/s), 21.36 in/yr (543 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge recorded, 89,000 cfs (2,520 cu m/s) Mar. 16; maximum gage height recorded, 34.93 ft (10.647 m) Mar. 16; but both may have been higher during period of no gage-height record Mar. 16-27; minimum daily discharge, 2,440 cfs (69.1 cu m/s) Oct. 9; minimum gage height, 4.56 ft (1.390 m) Sept. 16.
Period of record: Maximum discharge, 173,000 cfs (4,900 cu m/s) Jan. 29, 1937; maximum gage height, 47.40 ft (14.448 m) Jan. 29, 1937, site and datum then in use; minimum daily discharge, 86 cfs (2.44 cu m/s) Aug. 15, 1936; minimum gage height since filling of Cheatham Lake on Oct. 1, 1956, 3.49 ft (1.064 m) Sept. 10, 1962.
Maximum stage since at least 1793, 57.4 ft (17.50 m) Dec. 31, 1926, present site and datum, from profile by Corps of Engineers, discharge, 200,000 cfs (5,660 cu m/s).

REMARKS.--Records good. Flow regulated by Lake Cumberland, Dale Hollow Lake, Cordell Hull Reservoir, and Great Falls, Center Hill, and Old Hickory Lakes (see p. 52).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,770	10,400	12,000	40,700	25,400	25,200	62,400	9,200	26,000	36,200	19,600	23,400
2	3,340	9,870	14,300	38,500	27,500	23,100	47,500	13,700	25,900	32,500	19,700	11,100
3	5,110	12,600	13,700	33,000	32,700	29,600	42,500	22,200	25,600	31,800	22,400	17,200
4	6,750	14,100	15,300	38,400	33,000	15,500	42,000	28,900	28,400	31,500	23,900	8,080
5	5,970	5,630	12,800	39,200	26,000	14,400	39,700	25,300	30,600	34,500	7,690	14,300
6	6,030	5,020	8,600	39,300	25,700	15,900	40,000	26,400	31,200	36,800	7,310	11,000
7	5,030	8,960	20,100	39,400	33,400	20,700	38,700	20,700	36,000	31,600	11,900	5,140
8	2,840	12,900	25,600	33,400	43,600	24,900	47,400	33,700	30,300	31,600	12,100	5,370
9	2,440	20,100	49,000	28,200	50,800	25,100	51,500	41,400	25,700	26,400	22,200	10,200
10	4,220	17,700	74,200	30,200	46,400	22,500	46,100	38,300	38,700	24,400	30,400	6,000
11	4,680	22,500	78,800	31,600	40,500	27,500	40,700	34,900	44,300	27,000	24,600	4,960
12	3,250	21,800	67,300	30,100	38,900	23,500	34,700	38,400	49,700	28,100	14,100	5,450
13	6,070	8,800	61,100	31,200	33,600	18,300	36,700	43,100	49,400	25,600	13,600	6,950
14	7,260	5,170	63,600	33,800	35,900	18,300	38,200	42,500	49,800	25,100	13,400	11,100
15	6,160	9,640	72,100	32,200	43,200	48,400	37,600	41,900	50,500	27,800	10,700	4,970
16	3,530	6,450	74,100	33,400	46,500	80,000	38,800	40,800	46,100	18,200	17,100	4,010
17	6,640	9,400	68,000	34,500	37,900	83,200	39,200	32,400	48,800	20,400	15,900	2,530
18	12,200	18,100	60,500	26,300	39,100	84,000	36,900	32,200	48,600	26,900	17,800	6,140
19	16,200	17,900	47,000	21,400	34,600	83,200	27,500	35,300	44,000	27,000	17,300	7,630
20	18,900	18,900	41,300	23,900	34,600	82,800	39,900	37,100	42,800	28,000	12,400	4,860
21	19,200	22,300	48,900	21,000	21,400	82,700	29,000	31,900	40,300	24,000	19,600	6,480
22	20,600	26,800	47,300	27,200	22,800	78,200	23,100	27,000	29,900	23,900	14,400	6,790
23	12,600	21,800	47,100	28,700	25,700	74,800	20,600	30,600	26,500	23,800	15,700	5,970
24	9,670	18,300	40,500	36,100	26,300	73,300	17,000	43,100	29,000	25,600	15,700	5,230
25	7,740	11,900	37,400	33,500	26,200	55,400	17,900	38,900	29,200	28,200	15,400	8,420
26	9,140	15,900	37,100	31,100	26,500	49,100	24,500	24,600	32,300	31,300	15,500	11,200
27	10,200	17,100	37,100	27,200	22,300	45,700	29,600	46,000	36,300	41,800	15,100	11,600
28	13,600	26,400	36,900	25,800	21,100	55,300	39,500	71,600	45,500	42,300	22,600	8,790
29	11,100	21,800	37,300	25,300	------	61,900	32,900	70,100	49,800	28,600	27,300	8,000
30	8,580	15,000	31,300	25,600	------	62,500	13,600	49,400	44,100	9,900	22,800	5,160
31	9,620	------	44,500	29,300	------	62,500	------	29,600	------	10,200	20,100	------
TOTAL	264,440	453,240	1,324.8M	969,500	921,600	1,467.5M	1,075.7M	1,101.2M	1,135.3M	861,000	538,300	248,030
MEAN	8,530	15,110	42,740	31,270	32,910	47,340	35,860	35,520	37,840	27,770	17,360	8,268
MAX	20,600	26,800	78,800	40,700	50,800	84,000	62,400	71,600	50,500	42,300	30,400	23,400
MIN	2,440	5,020	8,600	21,000	21,100	14,400	13,600	9,200	25,600	9,900	7,310	2,530

CAL YR 1972 TOTAL 9,291,060 MEAN 25,390 MAX 78,800 MIN 1,400
WTR YR 1973 TOTAL 10,360,610 MEAN 28,390 MAX 84,000 MIN 2,440

NOTE.--No gage-height record Dec. 5 to Mar. 3, Mar. 16-27.

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 (0.6 km) downstream from Doolittle Branch, and at mile 45.6 (73.4 km).

DRAINAGE AREA.--39.1 sq mi (101.3 sq km).

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 (206.115 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 65.8 cfs (1.864 cu m/s), 22.85 in/yr (580 mm/yr).

EXTREMES.--Current year: Maximum discharge, 13,200 cfs (374 cu m/s) Mar. 15, gage height, 16.75 ft (5.105 m) from rating curve extended as explained below; minimum, 7.4 cfs (0.21 cu m/s) Oct. 11.
Period of record: Maximum discharge, 13,200 cfs (374 cu m/s) Mar. 15, 1973, gage height, 16.75 ft (5.105 m), from rating curve extended above 3,000 cfs on basis of velocity-area study and contracted-opening measurement at gage height 16.52 ft (5.035 m) at bridge 4.6 miles (7.4 km) downstream; minimum, 2.7 cfs (0.08 cu m/s) Oct. 30, 1963.
Maximum stage since at least 1902, that of Mar. 15, 1973.

REMARKS.--Records poor.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	70	77	98	195	41	98	84	105	48	210	19
2	29	103	60	85	202	60	88	73	54	35	150	15
3	22	111	52	123	153	143	81	434	39	27	45	14
4	19	75	46	130	123	101	196	200	35	29	36	13
5	18	55	41	111	108	90	146	133	70	30	31	12
6	16	39	104	96	390	81	115	103	250	25	28	12
7	15	35	89	85	210	805	204	85	165	22	26	13
8	13	32	99	77	710	267	235	160	110	21	24	15
9	12	28	560	67	303	151	188	102	70	98	23	14
10	11	28	2,540	64	178	111	150	81	45	215	22	13
11	9.9	25	375	61	128	168	118	70	37	105	31	13
12	9.8	23	232	55	104	126	102	64	35	50	26	14
13	11	23	251	52	105	104	89	60	38	43	54	85
14	11	24	183	54	314	131	79	56	50	38	29	67
15	10	22	326	69	216	3,800	73	52	69	35	21	45
16	10	21	237	77	153	3,900	71	48	40	36	20	17
17	19	20	154	80	121	850	71	45	35	30	19	15
18	344	20	117	138	105	351	71	50	31	29	18	14
19	971	133	103	485	92	227	82	74	29	28	18	13
20	165	121	96	194	83	246	310	54	42	25	17	13
21	84	82	116	227	74	260	163	45	35	23	17	12
22	59	65	146	285	67	186	110	55	30	22	16	13
23	50	50	116	173	63	144	93	64	27	23	16	13
24	38	40	99	128	53	120	89	79	26	45	15	13
25	30	93	88	103	48	151	109	60	25	85	15	18
26	27	103	84	114	46	164	210	143	24	185	14	14
27	29	82	76	117	43	167	394	3,580	24	101	14	13
28	30	169	70	124	41	134	206	694	64	30	15	13
29	28	134	62	142	------	118	137	200	45	25	14	18
30	26	101	60	122	------	106	104	130	30	23	15	40
31	72	------	115	107	------	104	------	60	------	145	22	------
TOTAL	2,239.7	1,927	6,774	3,843	4,428	13,407	4,182	7,138	1,679	1,676	1,021	603
MEAN	72.2	64.2	219	124	158	432	139	230	56.0	54.1	32.9	20.1
MAX	971	169	2,540	485	710	3,900	394	3,580	250	215	210	85
MIN	9.8	20	41	52	41	41	71	45	24	21	14	12
CFSM	1.85	1.64	5.60	3.17	4.04	11.0	3.56	5.88	1.43	1.38	.84	.51
IN.	2.13	1.83	6.44	3.66	4.21	12.76	3.98	6.79	1.60	1.59	.97	.57

CAL YR 1972 TOTAL 29,741.3 MEAN 81.3 MAX 2,540 MIN 6.4 CFSM 2.08 IN 28.30
WTR YR 1973 TOTAL 48,917.7 MEAN 134 MAX 3,900 MIN 9.8 CFSM 3.43 IN 46.54

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	0100	11.25	3,150	03-16	0345	14.50	7,300
12-10	0415	14.55	7,400	05-27	1700	15.52	9,800
03-07	0845	11.05	3,030	07-10	1700	8.86	2,070
03-15	0415	16.75	13,200				

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 (4.0 km) southwest of Lascassas, 3.7 miles (6.0 km) downstream from Bradley Creek, 6.0 miles (9.7 km) northeast of the courthouse in Murfreesboro, and at mile 15.4 (24.8 km).

DRAINAGE AREA.--262 sq mi (679 sq km).

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 (154.802 m) above mean sea level, Sandy Hook datum (levels by Corps of Engineers).

AVERAGE DISCHARGE.--18 years (1950-58, 1963-73), 443 cfs (12.55 cu m/s), 22.96 in/yr (583 mm/yr).

EXTREMES.--Current year: Maximum discharge, 23,100 cfs (654 cu m/s) May 27, gage height, 34.83 ft (10.616 m); minimum, 35 cfs (0.99 cu m/s) Oct. 16, 17, Sept. 9, 10, 11, 30.
Period of record: Maximum discharge, 23,100 cfs (654 cu m/s) May 27, 1973, gage height, 34.83 ft (10.616 m); minimum, 0.2 cfs (0.006 cu m/s) Oct. 23, 1953, gage height, 2.22 ft (0.677 m); minimum daily, 0.4 cfs (0.011 cu m/s) Aug. 31, 1953.
Maximum stage since at least 1902, that of May 27, 1973. Flood of Mar. 12, 1963, reached a stage of 34.22 ft (10.430 m), from floodmarks in gage well, discharge, 22,500 cfs (637 cu m/s).

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), 1963(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362	471	506	820	1,450	141	534	1,500	1,020	73	412	37
2	178	524	371	570	1,670	159	443	1,210	593	106	198	38
3	128	849	305	909	987	1,210	377	7,480	415	83	135	42
4	100	464	317	1,100	723	665	888	1,940	334	69	110	52
5	83	299	272	737	570	562	712	1,200	271	83	94	46
6	73	203	905	576	3,370	427	527	947	2,060	86	84	42
7	66	186	793	469	1,460	4,570	1,160	815	1,020	64	78	39
8	59	166	667	414	6,150	1,820	3,370	1,140	744	58	74	37
9	54	142	5,520	364	2,240	907	1,100	902	454	57	70	36
10	49	122	16,400	338	1,160	608	884	734	335	236	69	35
11	44	106	4,410	316	780	2,230	642	656	266	545	90	38
12	42	91	1,880	283	585	1,210	520	610	440	194	105	37
13	40	83	2,500	250	513	726	422	548	489	128	82	39
14	38	94	1,470	233	2,320	590	353	510	524	107	180	41
15	39	97	3,740	413	1,620	17,200	314	474	284	102	104	101
16	40	83	1,890	553	986	20,100	284	446	485	141	72	83
17	43	74	1,070	495	705	8,780	260	429	257	133	62	56
18	1,540	67	747	440	554	2,350	230	415	188	126	57	48
19	7,800	930	606	2,550	457	1,330	340	482	155	565	54	42
20	1,280	1,100	712	1,090	382	1,560	5,500	702	130	172	52	42
21	573	564	604	789	328	1,910	3,000	482	221	118	50	40
22	323	380	1,020	2,330	286	1,130	2,000	418	120	97	49	42
23	218	283	733	1,030	258	824	1,700	436	98	88	47	39
24	182	215	576	686	226	670	1,600	1,300	86	85	45	39
25	139	664	498	507	195	1,040	2,000	835	80	495	44	38
26	111	930	446	599	178	996	3,800	902	70	1,360	43	38
27	100	583	433	1,200	164	1,120	7,000	11,100	66	854	42	38
28	127	2,080	384	869	152	810	3,800	12,100	178	255	44	36
29	123	1,150	332	1,340	------	765	2,500	1,550	120	162	41	36
30	106	720	297	841	------	712	1,900	851	80	128	39	36
31	401	------	1,100	642	------	608	------	583	------	161	37	------
TOTAL	14,461	13,720	51,504	23,753	30,469	77,730	48,160	53,697	11,583	6,931	2,663	1,313
MEAN	466	457	1,661	766	1,088	2,507	1,605	1,732	386	224	85.9	43.8
MAX	7,800	2,080	16,400	2,550	6,150	20,100	7,000	12,100	2,060	1,360	412	101
MIN	38	67	272	233	152	141	230	415	66	57	37	35
CFSM	1.78	1.74	6.34	2.92	4.15	9.57	6.13	6.61	1.47	.86	.33	.17
IN.	2.05	1.95	7.31	3.37	4.33	11.04	6.84	7.62	1.64	.98	.38	.19

CAL YR 1972 TOTAL 188,413.7 MEAN 515 MAX 16,400 MIN 8.8 CFSM 1.97 IN 26.75
WTR YR 1973 TOTAL 335,984.0 MEAN 921 MAX 20,100 MIN 35 CFSM 3.52 IN 47.70

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-19	0800	22.80	11,700	03-15	1500	34.47	22,700
12-10	1600	32.06	20,300	04-27	Unknown	Unknown	Unknown
02-08	1300	19.76	9,310	05-03	0400	22.90	11,800
03-07	1500	18.87	8,600	05-27	2315	34.83	23,100

NOTE.--No gage-height record Apr. 19 to May 2.

03428200 West Fork Stones River at Murfreesboro, Tenn.

LOCATION.--Lat 35°54'10", long 86°25'48", Rutherford County, on left bank at Murfreesboro waste treatment plant outfall, 3,000 ft (914 m) downstream from Sinking Creek, 4.5 miles (7.2 km) northwest of the courthouse in Murfreesboro, and at mile 10.7 (17.2 km).

DRAINAGE AREA.- 177 sq mi (458 sq km), includes 17 sq mi (44 sq km) without surface drainage.

PERIOD OF RECORD.--July 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 516 ft (157 m), from topographic map.

EXTREMES.--July to September 1972: Maximum discharge during period, 3,180 cfs (90.1 cu m/s) July 28, gage height, 8.91 ft (2.716 m) from high-water mark; minimum, 8.0 cfs (0.23 cu m/s) Sept. 14, 17.
Water year 1973: Maximum discharge, 27,600 cfs (782 cu m/s) Mar. 15, gage height, 23.23 ft (7.081 m); minimum, 6.5 cfs (0.18 cu m/s) Sept. 4.

REMARKS.--Records good prior to June 1973 and fair thereafter.

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										-	210	14
2										-	147	14
3										-	114	12
4										-	88	13
5										-	69	13
6										-	57	14
7										-	60	12
8										-	100	12
9										-	367	11
10										-	232	
11										-	131	9.3
12										-	102	11
13										-	137	9.9
14										-	109	9.3
15										-	80	9.2
16										-	64	9.4
17										-	52	13
18										-	45	27
19										-	38	19
20										25	32	16
21										20	28	14
22										16	39	15
23										15	29	21
24										16	30	47
25										14	29	50
26										13	26	37
27										13	22	34
28										1,360	20	32
29										854	20	26
30					------					754	18	106
31		------			------		------		------	417	15	------
TOTAL											2,510	641.1
MEAN											81.0	21.4
MAX											367	106
MIN											15	9.2
CFSM											.46	.12
IN.											.53	.13

03428200 West Fork Stones River at Murfreesboro, Tenn.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	269	367	528	801	123	359	318	775	49	50	10
2	80	275	294	389	1,140	134	302	330	390	142	43	9.1
3	59	551	247	466	566	648	261	1,930	260	104	40	7.5
4	49	324	232	721	435	388	578	722	200	79	35	7.2
5	41	239	205	472	358	343	407	455	180	81	31	7.5
6	34	191	379	392	1,520	270	302	352	910	91	25	11
7	28	168	417	336	801	2,080	649	287	515	63	19	12
8	24	162	335	307	3,430	945	1,020	461	180	55	15	11
9	23	144	2,340	281	1,380	536	555	322	188	70	12	10
10	20	131	11,100	260	740	406	483	231	166	102	10	9.7
11	19	119	2,450	239	546	1,680	362	193	152	118	26	10
12	17	108	1,450	215	455	951	301	167	184	79	136	12
13	16	103	1,700	193	406	532	250	145	170	58	58	14
14	15	106	1,040	181	1,290	434	213	130	176	47	55	41
15	14	101	2,320	290	884	13,000	188	115	124	43	53	70
16	15	91	1,310	369	606	15,000	169	106	380	230	39	53
17	16	84	742	322	448	4,470	156	96	180	170	34	39
18	683	78	564	286	376	1,480	147	86	133	121	29	29
19	3,900	319	503	1,510	328	850	190	115	110	180	22	27
20	834	614	551	535	288	907	1,950	130	88	130	19	25
21	450	332	472	420	251	1,270	700	96	79	77	19	24
22	315	253	617	1,520	221	696	420	79	73	70	16	22
23	249	206	466	567	198	540	450	166	64	62	15	20
24	216	175	401	418	179	460	620	893	55	62	14	19
25	182	335	366	334	163	866	1,560	351	50	52	13	17
26	154	627	335	459	150	628	824	258	53	110	12	16
27	146	394	319	930	143	733	2,260	8,350	48	125	11	14
28	153	911	282	535	132	515	792	6,300	73	92	12	14
29	161	682	250	660	------	459	511	1,050	70	66	12	13
30	145	470	232	465	------	458	395	645	47	55	11	13
31	210	------	735	386	------	402	------	485	------	52	11	------
TOTAL	8,400	8,562	33,021	14,986	18,235	52,204	17,374	25,364	6,073	2,835	897	587.0
MEAN	271	285	1,065	483	651	1,684	579	818	202	91.5	28.9	19.6
MAX	3,900	911	11,100	1,520	3,430	15,000	2,260	8,350	910	230	136	70
MIN	14	78	205	181	132	123	147	79	47	43	10	7.2
CFSM	1.53	1.61	6.02	2.73	3.68	9.51	3.27	4.62	1.14	.52	.16	.11
IN.	1.77	1.80	6.94	3.15	3.83	10.97	3.65	5.33	1.28	.60	.19	.12

WTR YR 1973 TOTAL 188,538.0 MEAN 517 MAX 15,000 MIN 7.2 CFSM 2.92 IN 39.62

PEAK DISCHARGE (BASE, 3,700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	1115	13.81	5,970	03-07	1745	13.04	5,500
12-10	1645	21.41	19,600	03-11	1745	11.37	4,500
01-19	0945	10.45	3,950	03-15	1615	23.23	27,600
02-08	1600	14.07	6,160	05-27	2300	21.98	21,900

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 (122 m) upstream from Nice's Mill dam, 1.6 miles (2.6 km) downstream from Overall Creek, 4.2 miles (6.8 km) southeast of Smyrna, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--237 sq mi (614 sq km), includes 43 sq mi (111 sq km) without surface drainage.

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

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 410 cfs (11.61 cu m/s), 23.49 in/yr (597 mm/yr).

EXTREMES.--Current year: Maximum discharge, 36,800 cfs (1,040 cu m/s) Mar. 15, gage height, 17.39 ft (5.300 m) from rating curve extended as explained below; minimum, 17 cfs (0.48 cu m/s) Sept. 29.
Period of record: Maximum discharge, 36,800 cfs (1,040 cu m/s) Mar. 15, 1973, gage height, 17.39 ft (5.300 m) from rating curve extended above 14,000 cfs (396 cu m/s) on basis of area-velocity study at gage height 17.11 ft (5.215 m) and flood routing from Murfreesboro gage and Overall Creek at gage heights 16.65 ft (5.075 m) and 17.39 ft (5.300 m); minimum, 2.2 cfs (0.062 cu m/s) Nov. 6-8, 1965.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	408	677	1,150	1,250	203	699	642	1,240	107	78	32
2	99	484	531	870	2,040	218	578	596	849	387	67	28
3	74	929	443	1,030	1,160	990	502	3,880	638	194	63	25
4	64	558	406	1,570	915	666	870	1,550	509	138	55	24
5	57	402	360	1,070	771	602	699	1,010	432	120	54	25
6	48	306	607	879	2,590	480	530	780	1,280	136	52	35
7	41	263	726	762	1,600	3,190	933	634	896	104	49	38
8	35	265	584	674	5,110	1,660	1,680	913	563	86	44	36
9	35	239	3,540	602	2,290	1,010	1,000	674	416	88	40	33
10	33	211	12,300	554	1,360	767	897	504	329	145	37	30
11	31	189	4,050	509	1,030	2,610	674	422	277	210	145	29
12	29	171	2,410	460	854	1,660	554	359	321	155	351	31
13	29	161	2,700	418	751	1,010	460	305	323	112	165	34
14	26	162	1,860	390	1,850	842	383	267	362	99	147	76
15	24	158	4,080	546	1,470	17,000	327	238	252	91	134	118
16	24	149	2,340	726	1,030	18,600	293	216	549	352	110	69
17	31	139	1,480	674	819	6,830	265	198	277	239	94	57
18	634	130	1,160	610	683	2,590	252	179	210	193	83	46
19	5,240	590	1,020	2,110	591	1,710	334	204	175	243	68	38
20	1,280	1,100	1,140	960	508	1,710	3,450	230	152	185	59	35
21	705	620	980	789	442	2,300	1,250	181	136	136	57	33
22	480	462	1,120	2,340	385	1,390	816	158	122	107	53	39
23	364	366	915	1,120	338	1,090	833	506	109	90	46	38
24	300	297	798	852	300	924	931	1,870	100	90	43	36
25	250	514	735	690	270	1,480	2,170	782	96	84	38	35
26	212	1,030	674	879	248	1,200	1,430	523	96	176	35	25
27	202	679	650	1,740	231	1,320	3,470	8,150	84	201	32	28
28	205	1,570	586	1,100	216	990	1,490	9,350	99	148	32	23
29	217	1,250	530	1,250	------	897	1,020	1,790	118	106	32	21
30	198	879	495	951	------	915	801	1,190	87	85	30	26
31	293	------	1,500	807	------	798	------	894	------	82	31	------
TOTAL	11,412	14,681	51,397	29,082	31,102	77,652	29,591	39,195	11,097	4,689	2,324	1,143
MEAN	368	489	1,658	938	1,111	2,505	986	1,264	370	151	75.0	38.1
MAX	5,240	1,570	12,300	2,340	5,110	18,600	3,470	9,350	1,280	387	351	118
MIN	24	130	360	390	216	203	252	158	84	82	30	21
CFSM	1.55	2.06	7.00	3.96	4.69	10.6	4.16	5.33	1.56	.64	.32	.16
IN.	1.79	2.30	8.07	4.56	4.88	12.19	4.64	6.15	1.74	.74	.36	.18

CAL YR 1972 TOTAL 182,972 MEAN 500 MAX 12,300 MIN 17 CFSM 2.11 IN 28.72
WTR YR 1973 TOTAL 303,365 MEAN 831 MAX 18,600 MIN 21 CFSM 3.51 IN 47.62

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1900	15.44	18,700	05-28	0100	16.17	24,000
03-15	1800	17.39	36,800				

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 (274 m) upstream from Louisville and Nashville Railroad spur track bridge, 1.6 miles (2.6 km) north of Antioch, 2.1 miles (3.4 km) downstream from Whittemore Branch, 8.2 miles (13.2 km) southeast of the State capitol in Nashville, and at mile 11.0 (17.7 km).

DRAINAGE AREA.--64.0 sq mi (166 sq km).

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 (144.039 m) above mean sea level. Dec. 5, 1961, to Nov. 29, 1963, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--18 years (1953-61, 1963-73), 91.7 cfs (2.597 cu m/s), 19.46 in/yr (494 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,220 cfs (204 cu m/s) Dec. 10, gage height, 14.94 ft (4.554 m); minimum, 0.50 cfs (0.014 cu m/s) Sept. 21.
Period of record: Maximum discharge, 17,000 cfs (481 cu m/s) Mar. 21, 1955, gage height, 19.73 ft (6.014 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	64	94	383	243	37	115	133	534	200	13	6.4
2	5.2	202	82	229	317	178	93	140	167	82	3.7	4.8
3	3.5	142	72	590	185	921	80	1,030	108	24	2.5	3.7
4	4.0	77	81	418	141	246	417	283	76	21	1.9	3.1
5	3.1	54	55	252	111	183	163	181	136	49	1.3	3.4
6	3.4	42	125	185	839	129	122	137	596	16	1.3	5.6
7	4.8	134	75	150	333	850	389	110	277	11	1.3	5.6
8	5.6	124	320	126	1,650	275	453	788	151	8.1	1.0	4.0
9	4.8	77	720	103	477	177	266	169	123	6.5	.90	4.0
10	4.8	59	3,520	89	293	131	193	124	78	6.4	1.3	4.8
11	5.6	46	1,110	79	207	564	148	93	60	11	19	3.4
12	8.0	38	410	72	162	242	123	73	50	5.1	54	4.8
13	8.8	35	668	69	153	157	97	60	233	3.0	26	10
14	10	37	423	62	390	122	84	51	69	6.3	15	5.6
15	8.8	29	1,580	100	268	1,940	72	44	50	17	8.8	4.0
16	8.0	26	460	98	188	3,370	67	39	40	13	5.6	2.2
17	8.8	23	271	91	149	1,000	61	36	34	10	3.1	.95
18	55	21	192	85	125	491	62	31	28	8.0	3.7	1.0
19	330	320	227	95	108	240	538	31	25	6.4	3.4	.80
20	61	170	235	79	92	580	1,580	33	22	4.8	3.1	.75
21	36	104	178	354	78	350	326	25	18	3.7	3.7	.60
22	25	77	149	391	69	211	205	23	16	4.0	2.5	.90
23	20	61	120	198	62	163	565	222	14	3.7	1.9	.95
24	17	50	104	143	55	132	650	120	11	4.0	2.5	1.3
25	13	148	95	111	50	302	487	53	11	8.8	3.4	.95
26	11	140	88	190	46	208	1,240	38	9.6	13	2.2	.85
27	18	155	80	243	42	196	1,030	2,580	14	15	1.6	.85
28	43	400	71	290	39	151	398	479	17	4.8	2.2	.90
29	34	210	64	269	------	188	246	208	8.0	2.8	1.3	1.3
30	26	140	256	177	------	168	174	130	6.4	1.9	3.1	1.3
31	92	------	1,680	137	------	142	------	123	------	16	6.4	------
TOTAL	887.0	3,205	13,605	5,858	6,872	14,044	10,444	7,587	2,982.0	586.3	200.70	88.80
MEAN	28.6	107	439	189	245	453	348	245	99.4	18.9	6.47	2.96
MAX	330	400	3,520	590	1,650	3,370	1,580	2,580	596	200	54	10
MIN	3.1	21	55	62	39	37	61	23	6.4	1.9	.90	.60
CFSM	.45	1.67	6.86	2.95	3.83	7.08	5.44	3.83	1.55	.30	.10	.05
IN.	.52	1.86	7.91	3.40	3.99	8.16	6.07	4.41	1.73	.34	.12	.05

CAL YR 1972 TOTAL 41,217.00 MEAN 113 MAX 3,520 MIN .95 CFSM 1.77 IN 23.96
WTR YR 1973 TOTAL 66,359.80 MEAN 182 MAX 3,520 MIN .60 CFSM 2.84 IN 38.57

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	Unknown	14.94	7,220	03-16	0640	13.91	5,910
12-15	0320	11.08	3,460	04-20	0200	13.02	5,020
12-31	0325	12.31	4,430	04-26	2030	10.81	3,270
03-03	0130	10.82	3,270	05-27	1605	13.53	5,530

NOTE. No gage-height record Nov. 27 to Dec. 11.

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 (91 m) west of Craighead Street, 0.3 mile (0.5 km) upstream from bridge on U.S. Highways 31A and 41A, and 2.8 miles (4.5 km) southeast of the State capitol in Nashville.

DRAINAGE AREA.--11.8 sq mi (30.6 sq km).

PERIOD OF RECORD. -December 1963 to current year.

GAGE.- Water-stage recorder. Datum of gage is 439.81 ft (134.054 m) above mean sea level.

AVERAGE DISCHARGE.--9 years (1964-73), 15.1 cfs (0.428 cu m/s), 17.38 in/yr (441 mm/yr).

EXTREMES.- Current year: Maximum discharge, 1,490 cfs (42.2 cu m/s) June 13, gage height, 6.70 ft (2.042 m); minimum, 0.15 cfs (0.004 cu m/s) Sept. 5.
Period of record: Maximum discharge, 1,490 cfs (42.2 cu m/s) June 13, 1973, gage height, 6.70 ft (2.042 m); minimum, 0.15 cfs (0.004 cu m/s) Sept. 5, 1973.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	12	24	50	42	7.8	18	32	17	7.2	1.7	.50
2	3.4	38	18	39	30	42	16	50	10	1.9	1.4	.37
3	2.9	18	15	92	25	31	44	58	8.4	3.0	1.3	.30
4	4.3	13	16	53	22	25	18	34	7.5	24	1.2	.38
5	3.5	10	13	42	18	19	13	28	42	2.9	1.0	.29
6	2.5	8.6	32	34	80	33	10	24	33	2.0	1.0	.51
7	2.5	96	17	26	56	154	57	24	17	1.6	1.0	.35
8	2.2	30	158	22	254	50	28	26	13	1.4	1.0	.30
9	2.2	19	166	19	72	40	44	17	11	1.3	1.1	4.2
10	2.0	15	393	16	52	33	22	15	9.1	3.5	1.1	.76
11	2.0	12	96	14	41	85	18	12	16	1.7	54	.42
12	2.2	9.4	68	12	32	40	16	11	39	1.0	17	.30
13	2.2	13	68	11	38	34	15	9.0	188	.95	95	54
14	2.0	8.6	84	12	44	55	13	7.8	31	2.5	12	3.2
15	1.9	6.8	212	12	34	483	12	7.0	11	.95	4.0	1.8
16	2.5	6.2	72	11	29	516	12	6.6	5.6	.93	2.7	1.2
17	2.5	5.6	50	12	25	290	10	5.8	4.1	.88	1.9	.96
18	49	6.8	40	16	22	150	17	6.7	3.1	2.1	1.6	.86
19	45	99	34	14	18	68	124	7.0	2.3	1.1	1.3	.77
20	13	33	30	12	16	136	132	6.2	1.8	.74	1.2	.69
21	9.0	22	24	54	15	60	49	5.8	1.6	.70	1.1	.61
22	6.6	16	20	47	14	45	40	5.8	1.3	3.6	1.1	.57
23	6.6	13	16	33	13	37	72	8.8	1.1	1.8	1.0	2.5
24	5.4	11	14	26	11	44	53	6.1	.95	1.4	1.0	.43
25	4.9	30	13	22	10	65	64	5.2	.89	24	.97	.40
26	4.6	16	12	58	9.4	35	250	4.9	.79	23	.95	.37
27	13	56	11	41	9.0	30	184	120	32	5.5	.92	.39
28	5.8	94	11	45	8.6	25	70	22	1.9	3.0	.88	.44
29	5.0	42	9.8	37	------	44	50	13	1.3	2.0	.83	.47
30	8.2	33	126	31	------	23	39	9.4	1.0	1.9	9.8	.43
31	27	------	114	26	------	21	------	21	------	2.5	.66	------
TOTAL	247.7	793.0	1,976.8	939	1,040.0	2,720.8	1,510	609.1	512.73	131.05	221.71	78.77
MEAN	7.99	26.4	63.8	30.3	37.1	87.8	50.3	19.6	17.1	4.23	7.15	2.63
MAX	49	99	393	92	254	516	250	120	188	24	95	54
MIN	1.9	5.6	9.8	11	8.6	7.8	10	4.9	.79	.70	.66	.29
CFSM	.68	2.24	5.41	2.57	3.14	7.44	4.26	1.66	1.45	.36	.61	.22
IN.	.78	2.50	6.23	2.96	3.28	8.58	4.76	1.92	1.62	.41	.70	.25

CAL YR 1972 TOTAL 7,190.40 MEAN 19.6 MAX 393 MIN 1.2 CFSM 1.66 IN 22.67
WTR YR 1973 TOTAL 10,780.66 MEAN 29.5 MAX 516 MIN .29 CFSM 2.50 IN 33.99

PEAK DISCHARGE (BASE, 700 CFS) (REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-07	0930	5.48	932	04-26	1750	5.21	824
12-10	0030	5.83	1,070	05-27	0630	5.04	756
12-14	2345	5.20	820	06-13	1705	6.70	1,490
03-06	2355	5.27	848	06-27	1910	5.29	856
03-15	0230	5.89	1,100	08-11	1755	5.40	900
04-19	2020	5.60	980	08-13	2110	5.96	1,120

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 (1.3 km) downstream from Ewing Creek, 1.3 miles (2.1 km) north of Bordeaux, 3.9 miles (6.3 km) northwest of the State capitol in Nashville, and at mile 5.7 (9.2 km).

DRAINAGE AREA.--51.6 sq mi (133.6 sq km).

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 (122.420 m) above mean sea level (Turner Engineering Company benchmark).

AVERAGE DISCHARGE.--9 years, 65.6 cfs (1.858 cu m/s) 17.26 in/yr (438 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,110 cfs (145 cu m/s) Apr. 19, gage height, 14.77 ft (4.502 m); minimum, 3.0 cfs (0.085 cu m/s) Aug. 29, 30, Sept. 4, 26.
Period of record: Maximum discharge, 7,050 cfs (200 cu m/s) Feb. 11, 1965, gage height, 14.54 ft (4.432 m); maximum gage height, 14.77 ft (4.502 m) Apr. 19, 1973; minimum discharge, 0.2 cfs (0.006 cu m/s) July 6, 1966, Sept. 15, 1968.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	100	88	319	189	48	75	65	91	358	32	4.0
2	11	326	68	186	148	121	75	76	33	65	26	4.0
3	8.4	124	58	588	136	148	73	278	27	25	23	3.5
4	9.1	65	53	452	115	124	85	87	23	21	22	3.5
5	8.4	43	50	252	109	109	75	58	58	19	20	3.5
6	6.4	31	133	160	445	97	75	49	260	14	19	4.0
7	6.4	648	94	124	245	725	148	43	85	12	18	5.0
8	5.7	217	1,060	94	1,120	284	196	58	48	11	17	4.5
9	5.3	121	973	73	406	200	160	37	34	11	17	5.5
10	5.7	83	1,290	63	252	154	112	32	29	15	17	6.5
11	5.7	58	431	55	163	1,000	83	31	23	12	21	6.0
12	5.7	43	301	45	118	385	70	29	21	8.0	21	5.0
13	5.7	43	385	38	217	249	63	25	30	7.5	29	20
14	5.7	40	280	38	329	364	55	25	25	8.0	24	18
15	5.0	29	753	40	249	1,800	48	21	31	9.2	13	9.2
16	4.6	28	333	35	169	1,510	40	21	27	7.0	10	6.5
17	5.3	25	189	43	124	851	32	21	20	6.5	9.2	5.0
18	28	25	136	48	103	445	48	21	18	5.5	8.0	4.0
19	40	466	139	70	85	291	864	20	51	5.5	7.5	4.0
20	16	193	127	63	75	490	1,190	21	16	5.0	6.5	4.5
21	11	106	109	231	65	368	306	17	15	4.0	6.0	6.0
22	8.4	75	94	361	58	228	200	17	14	21	5.5	5.0
23	8.4	58	78	196	58	142	302	27	14	9.8	5.0	4.5
24	6.4	45	73	130	53	109	362	58	13	149	5.0	4.5
25	5.7	136	68	103	60	160	318	25	13	98	4.5	5.0
26	5.3	109	68	329	58	130	606	21	12	67	4.0	3.5
27	12	133	63	343	53	115	497	539	17	53	4.0	4.0
28	10	476	60	245	50	100	207	149	17	37	3.5	4.5
29	8.4	182	55	172	------	103	133	53	13	31	3.3	5.0
30	7.7	118	343	133	------	91	89	34	12	27	4.0	7.0
31	217	------	914	112	------	83	------	34	------	31	5.0	------
TOTAL	501.4	4,146	8,866	5,141	5,252	11,024	6,587	1,992	1,090	1,153.0	410.0	175.2
MEAN	16.2	138	286	166	188	356	220	64.3	36.3	37.2	13.2	5.84
MAX	217	648	1,290	588	1,120	1,800	1,190	539	260	358	32	20
MIN	4.6	25	50	35	50	48	32	17	12	4.0	3.3	3.5
CFSM	.31	2.67	5.54	3.22	3.64	6.90	4.26	1.25	.70	.72	.26	.11
IN.	.36	2.99	6.39	3.71	3.79	7.95	4.75	1.44	.79	.83	.30	.13

CAL YR 1972 TOTAL 37,920.2 MEAN 104 MAX 1,290 MIN 1.5 CFSM 2.02 IN 27.34
WTR YR 1973 TOTAL 46,337.6 MEAN 127 MAX 1,800 MIN 3.3 CFSM 2.46 IN 33.41

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-08	1715	11.47	3,210	04-19	2100	14.77	5,110
03-11	0635	12.15	3,580	07-01	1820	11.28	3,100
03-15	0305	12.55	3,800				

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 (6.0 km) upstream from mouth and 4.0 miles (6.4 km) southwest of the State capitol in Nashville.

DRAINAGE AREA.--24.3 sq mi (62.9 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 409.56 ft (124.834 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 30.9 cfs (0.875 cu m/s), 17.27 in/yr (439 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,620 cfs (74.2 cu m/s) Apr. 19, gage height, 8.24 ft (2.512 m); minimum, 0.76 cfs (0.022 cu m/s) Aug. 11.
Period of record: Maximum discharge, 5,580 cfs (158 cu m/s) Apr. 8, 1965, gage height, 10.63 ft (3.240 m); minimum, 0.2 cfs (0.006 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	34	45	200	98	14	31	58	46	10	4.5	2.0
2	8.5	98	35	110	70	57	26	98	15	5.4	3.4	1.2
3	6.9	36	30	240	53	66	24	184	11	8.0	2.5	1.1
4	5.9	35	30	180	45	41	31	76	8.5	12	2.0	1.1
5	4.9	26	24	140	39	35	20	57	39	4.9	1.5	1.1
6	4.6	20	60	107	206	32	18	46	86	3.2	1.5	.98
7	4.1	300	33	80	106	310	78	41	29	2.4	1.1	1.1
8	3.8	86	343	64	448	96	70	48	19	3.8	.98	.98
9	3.5	48	340	48	164	68	64	31	12	2.0	.90	2.9
10	3.5	35	674	36	110	52	43	26	9.5	2.0	.80	14
11	3.5	26	215	31	80	320	36	23	15	2.7	70	2.3
12	3.5	20	170	26	60	110	32	19	24	1.9	84	1.8
13	3.8	23	210	22	80	76	26	15	41	1.7	142	100
14	3.8	19	180	19	112	94	24	13	21	1.7	94	37
15	3.5	15	400	27	78	772	20	12	13	2.1	30	13
16	3.5	12	190	25	58	677	19	11	9.5	1.9	14	7.3
17	4.1	10	94	24	48	330	17	9.5	7.5	2.9	9.1	5.3
18	76	9.5	52	30	42	190	16	9.0	5.9	2.9	6.8	4.5
19	108	254	57	39	37	126	403	9.0	5.4	2.1	7.8	4.2
20	30	80	62	30	33	262	350	8.5	5.4	1.9	4.9	3.4
21	25	46	52	124	29	148	132	6.9	4.3	1.6	4.2	3.1
22	18	36	45	152	25	102	102	6.4	3.8	122	3.8	2.5
23	14	27	38	76	23	74	210	10	3.5	29	3.4	2.3
24	11	23	32	57	20	57	140	9.5	3.2	10	3.1	2.3
25	7.6	72	30	45	18	104	174	5.9	2.9	50	2.9	2.5
26	6.3	42	27	178	17	68	468	4.9	2.7	53	2.5	2.0
27	12	100	26	128	15	53	308	134	21	30	1.8	1.8
28	20	246	23	116	14	42	164	33	4.9	7.3	1.8	1.8
29	17	94	22	88	------	50	110	17	2.7	4.9	1.5	1.5
30	14	64	160	64	------	38	80	12	2.1	4.2	1.5	1.5
31	45	------	410	53	------	35	------	16	------	4.5	1.5	------
TOTAL	486.3	1,936.5	4,109	2,559	2,128	4,499	3,236	1,049.6	473.8	392.0	509.78	226.56
MEAN	15.7	64.6	133	82.5	76.0	145	108	33.9	15.8	12.6	16.4	7.55
MAX	108	300	674	240	448	772	468	184	86	122	142	100
MIN	3.5	9.5	22	19	14	14	16	4.9	2.1	1.6	.80	.98
CFSM	.65	2.66	5.47	3.40	3.13	5.97	4.44	1.40	.65	.52	.67	.31
IN.	.74	2.96	6.29	3.92	3.26	6.89	4.95	1.61	.73	.60	.78	.35

CAL YR 1972 TOTAL 14,235.70 MEAN 38.9 MAX 674 MIN .75 CFSM 1.60 IN 21.79
WTR YR 1973 TOTAL 21,605.54 MEAN 59.2 MAX 772 MIN .80 CFSM 2.44 IN 33.08

NOTE.--No gage-height record Dec. 11 to Jan. 17.

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-07	0955	6.85	1,800	04-19	2055	8.24	2,620
12-10	0030	8.01	2,490	04-26	0940	6.24	1,500
03-11	0655	6.77	1,760	08-13	2215	6.36	1,560
03-15	0435	7.51	2,190				

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 (5.1 km) north of Ashland City, and 4.4 miles (7.1 km) upstream from Spring Creek.

DRAINAGE AREA.--97.2 sq mi (251.7 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (122 m) (from topographic map).

AVERAGE DISCHARGE.--12 years, 118 cfs (3.342 cu m/s), 16.49 in/yr (419 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,770 cfs (220 cu m/s) Dec. 9, gage height, 10.54 ft (3.213 m); minimum, 16 cfs (0.45 cu m/s) Oct. 16, 17.
Period of record: Maximum discharge, 11,200 cfs (317 cu m/s) Feb. 27, 1962, gage height, 11.52 ft (3.511 m); minimum, 8.3 cfs (0.24 cu m/s) Oct. 6, 1970.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	127	131	347	269	82	203	178	160	72	53	24
2	24	170	102	238	312	102	178	188	118	84	40	24
3	22	127	77	454	235	223	158	1,680	100	46	33	23
4	25	74	68	569	181	176	184	364	86	48	31	23
5	28	53	62	306	159	172	160	250	119	64	30	23
6	23	44	233	227	269	154	140	203	208	41	29	23
7	21	959	163	177	238	520	186	178	152	36	29	25
8	20	327	1,870	156	1,710	337	349	176	105	34	28	25
9	19	167	4,050	132	506	250	289	144	85	33	27	27
10	18	120	2,340	122	322	208	243	124	73	39	31	43
11	17	85	576	112	243	1,440	200	112	64	43	33	30
12	17	62	359	104	205	446	182	99	59	34	68	27
13	17	115	449	103	220	292	158	88	57	32	55	34
14	17	194	329	90	307	295	140	79	53	32	57	62
15	17	118	1,130	107	304	2,490	127	69	55	53	40	32
16	16	86	473	106	243	3,380	126	66	55	38	33	26
17	16	67	296	109	203	1,630	118	70	51	35	31	24
18	17	55	229	109	184	530	126	62	47	32	30	23
19	39	557	201	128	168	349	1,030	67	45	31	28	23
20	40	342	211	117	154	811	3,320	79	46	31	27	23
21	25	188	180	156	138	580	482	61	49	30	23	23
22	21	136	159	411	127	331	325	66	42	87	26	23
23	20	103	140	266	122	259	319	208	40	100	25	22
24	22	77	127	190	110	225	328	1,990	39	43	25	22
25	18	124	123	153	102	248	328	340	39	87	26	22
26	18	160	120	175	96	256	424	208	37	43	27	21
27	18	132	115	338	91	262	490	1,890	39	53	26	21
28	25	425	110	287	85	225	343	545	43	37	25	21
29	27	275	100	268	------	238	256	271	37	33	24	22
30	23	179	156	220	------	245	210	200	35	32	24	23
31	21	------	1,170	188	------	228	------	158	------	51	24	------
TOTAL	679	5,648	15,849	6,465	7,303	16,984	11,122	10,213	2,138	1,454	1,008	784
MEAN	21.9	188	511	209	261	548	371	329	71.3	46.9	32.5	26.1
MAX	40	959	4,050	569	1,710	3,380	3,320	1,990	208	100	68	62
MIN	16	44	62	90	85	82	118	61	35	30	23	21
CFSM	.23	1.93	5.26	2.15	2.69	5.64	3.82	3.38	.73	.48	.33	.27
IN.	.26	2.16	6.07	2.47	2.79	6.50	4.26	3.91	.82	.56	.39	.30

CAL YR 1972 TOTAL 60,075 MEAN 164 MAX 4,050 MIN 13 CFSM 1.69 IN 22.99
WTR YR 1973 TOTAL 79,647 MEAN 218 MAX 4,050 MIN 16 CFSM 2.24 IN 30.48

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-09	0545	10.54	7,770	05-03	0730	8.35	3,640
03-11	1300	8.11	3,320	05-24	1245	9.47	5,340
03-16	0500	8.96	4,490	05-27	1400	8.38	3,670
04-20	0700	10.05	6,520				

03433500 Harpeth River at Bellevue, Tenn.

LOCATION.--Lat 36°03'16", long 86°55'42", Davidson County, on right bank 45 ft (14 m) upstream from bridge on State Highway 100, 0.1 mile (0.2 km) downstream from Little Harpeth River, 0.9 mile (1.4 km) southeast of Bellevue, and at mile 62.1 (99.9 km).

DRAINAGE AREA.--408 sq mi (1,057 sq km) includes 12 sq mi (31 sq km) 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 (164.909 m) 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 (4.0 km) downstream at datum 7.85 ft (2.393 m) lower.

AVERAGE DISCHARGE.--53 years, 556 cfs (15.75 cu m/s), 18.51 in/yr (470 mm/yr).

EXTREMES.--Current year: Maximum discharge, 19,000 cfs (538 cu m/s) Mar. 16, gage height, 19.62 ft (5.980 m); minimum, 22 cfs (0.62 cu m/s) Sept. 28, gage height, 1.10 ft (0.335 m).
Period of record: Maximum discharge, 40,000 cfs (1,130 cu m/s) Feb. 13, 1948, gage height, 24.34 ft (7.419 m) from floodmark; 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	370	1,170	3,160	1,400	290	1,100	756	1,500	302	270	32
2	104	700	930	1,760	2,220	370	948	636	1,200	1,610	176	30
3	67	1,300	774	1,870	1,670	2,440	822	6,150	950	366	125	30
4	52	810	702	3,220	1,360	1,380	1,290	3,480	760	286	101	30
5	45	558	636	1,770	1,190	1,180	1,030	1,200	720	395	86	29
6	40	435	780	1,340	2,790	954	852	780	1,700	242	73	26
7	37	1,370	972	1,090	2,380	3,900	1,030	558	1,550	185	65	26
8	35	1,150	1,330	948	6,970	3,230	2,510	1,870	1,100	152	56	26
9	33	720	6,890	798	5,690	1,720	1,640	816	870	135	50	26
10	30	546	13,400	690	2,310	1,330	1,380	420	690	143	47	44
11	29	445	14,700	606	1,640	2,940	1,090	310	564	149	110	69
12	28	366	4,400	525	1,320	2,970	930	221	582	135	774	47
13	31	326	3,640	465	1,160	1,570	786	161	852	128	515	47
14	28	322	2,780	435	1,460	1,250	678	400	1,220	118	306	94
15	27	290	7,380	515	1,760	8,100	594	355	636	135	203	140
16	27	250	5,590	624	1,270	16,300	535	330	525	342	155	99
17	38	224	2,240	606	1,060	16,900	500	300	420	310	123	73
18	210	206	1,600	582	924	7,130	470	270	342	238	106	56
19	1,000	1,000	1,380	690	822	2,590	846	370	286	182	94	45
20	2,000	1,740	1,630	666	720	2,370	7,680	350	258	212	84	40
21	1,300	996	1,290	894	630	3,250	3,660	310	218	143	75	37
22	540	750	1,130	2,820	558	1,910	1,360	290	188	120	67	34
23	320	588	948	1,510	500	1,490	2,170	255	164	106	60	32
24	260	475	816	1,100	440	1,270	2,200	900	152	84	52	30
25	230	570	750	876	400	1,960	2,770	1,500	185	79	50	35
26	190	1,100	666	1,100	362	1,810	2,780	620	146	221	49	30
27	175	924	612	2,050	334	1,750	5,800	2,000	128	314	45	25
28	205	3,710	546	1,520	310	1,430	2,490	3,000	123	200	42	25
29	240	2,460	490	1,610	------	1,350	1,460	5,000	118	135	37	23
30	210	1,520	708	1,400	------	1,510	1,030	2,000	115	101	31	23
31	250	------	7,370	1,310	------	1,260	------	700	------	110	31	------
TOTAL	7,904	26,221	88,250	38,550	43,650	97,904	52,431	36,308	18,262	7,378	4,058	1,303
MEAN	255	874	2,847	1,244	1,559	3,158	1,748	1,171	609	238	131	43.4
MAX	2,000	3,710	14,700	3,220	6,970	16,900	7,680	6,150	1,700	1,610	774	140
MIN	27	206	490	435	310	290	470	161	115	79	31	23
CFSM	.63	2.14	6.98	3.05	3.82	7.74	4.28	2.87	1.49	.58	.32	.11
IN.	.72	2.39	8.05	3.51	3.98	8.93	4.78	3.31	1.67	.67	.37	.12

CAL YR 1972 TOTAL 254,269 MEAN 695 MAX 14,700 MIN 16 CFSM 1.70 IN 23.18
WTR YR 1973 TOTAL 422,219 MEAN 1,157 MAX 16,900 MIN 23 CFSM 2.84 IN 38.50

PEAK DISCHARGE (BASE, 7,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-11	0200	18.49	16,500	03-16	2345	19.62	19,000
12-15	1930	13.63	9,030	04-20	1900	14.05	9,460
12-31	1630	13.72	9,120	05-03	1700	12.29	7,690
02-08	2030	13.70	9,100				

03434500 Harpeth River near Kingston Springs, Tenn.

LOCATION.--Lat 36°07'19", long 87°05'56", Cheatham County, on right bank 400 ft (122 m) upstream from bridge on U.S. Highway 70, 1.7 miles (2.7 km) northeast of Kingston Springs, 3.0 miles (4.8 km) downstream from Turnbull Creek, and at mile 32.4 (52.1 km).

DRAINAGE AREA.--681 sq mi (1,764 sq km),includes 13 sq mi (34 sq km) 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 (136.563 m) above mean sea level. July 8, 1925, to Jan. 22, 1939, non-recording gage at site 150 ft (46 m) downstream at same datum.

AVERAGE DISCHARGE.--49 years, 935 cfs (26.48 cu m/s), 18.65 in/yr (474 mm/yr).

EXTREMES.--Current year: Maximum discharge, 22,700 cfs (643 cu m/s) Mar. 17, gage height, 22.14 ft (6.748 m); minimum, 78 cfs (2.21 cu m/s) Sept. 6.
Period of record: Maximum discharge, 60,000 cfs (1,700 cu m/s) Jan. 7, 1946, gage height, 32.20 ft (9.815 m) from high-water mark in gage house; minimum, 12 cfs (0.34 cu m/s) Sept. 18, 1939.
Maximum stage since at least 1897, that of Jan. 7, 1946. Flood of March 1902 reached a stage about 3 ft (0.91 m) 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), WSP 2110: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	879	2,040	6,700	2,150	694	1,790	2,060	2,710	249	476	90
2	294	1,480	1,630	3,240	3,010	742	1,550	1,850	2,330	1,760	500	92
3	249	1,970	1,370	3,050	2,660	2,630	1,390	6,380	1,570	885	350	85
4	200	1,620	1,210	5,370	2,060	2,320	1,680	6,900	1,300	485	286	85
5	173	1,120	1,120	3,480	1,760	1,820	1,790	3,000	1,490	607	246	82
6	158	892	1,260	2,580	4,340	1,570	1,420	2,220	3,340	480	221	82
7	148	3,150	1,530	2,110	4,520	5,330	1,540	1,820	3,180	378	200	92
8	138	3,080	2,570	1,860	9,210	6,430	3,710	2,410	1,970	322	185	92
9	131	1,730	10,200	1,610	8,900	3,010	3,030	2,790	1,530	286	170	93
10	121	1,280	17,500	1,440	4,170	2,270	2,550	1,610	1,280	286	168	114
11	115	1,030	15,300	1,330	2,830	6,200	2,000	1,400	1,090	314	155	143
12	113	859	10,200	1,210	2,220	5,750	1,690	1,230	1,140	278	607	153
13	115	802	5,170	1,100	2,000	3,020	1,470	1,090	1,620	246	976	501
14	119	840	4,470	1,050	2,270	2,350	1,300	976	2,170	225	742	848
15	115	730	8,370	1,090	2,870	11,100	1,190	879	1,320	221	449	477
16	110	652	8,940	1,190	2,230	20,200	1,120	808	1,020	239	350	334
17	117	585	4,170	1,210	1,840	22,000	1,050	766	879	547	282	252
18	207	536	2,940	1,170	1,610	14,700	1,020	706	724	408	242	197
19	2,240	1,740	2,450	1,280	1,470	4,560	2,520	694	624	326	211	172
20	4,050	2,990	2,700	1,320	1,340	3,730	14,400	827	569	306	188	152
21	1,530	2,000	2,380	1,470	1,220	4,580	8,050	814	500	294	168	142
22	918	1,480	2,100	4,650	1,120	3,230	3,480	635	431	239	153	133
23	730	1,200	1,850	3,240	1,050	2,450	4,740	618	378	246	140	125
24	624	989	1,650	2,240	976	2,040	5,350	1,950	338	225	128	122
25	547	1,160	1,550	1,790	898	2,580	5,890	2,700	386	282	126	122
26	476	1,750	1,460	1,770	833	3,080	5,780	1,160	346	314	119	117
27	467	1,600	1,390	3,400	784	2,770	10,400	3,080	302	613	113	115
28	530	5,430	1,300	2,860	736	2,390	5,750	8,960	294	520	108	105
29	596	4,620	1,220	3,000	------	2,110	3,430	9,140	260	370	102	101
30	558	2,710	1,420	2,430	------	2,310	2,560	2,420	253	298	95	103
31	724	------	8,390	2,040	------	2,020	------	1,700	------	346	93	------
TOTAL	16,891	50,904	129,850	72,280	71,077	149,986	103,640	73,593	35,344	12,595	8,349	5,321
MEAN	545	1,697	4,189	2,332	2,538	4,838	3,455	2,374	1,178	406	269	177
MAX	4,050	5,430	17,500	6,700	9,210	22,000	14,400	9,140	3,340	1,760	976	848
MIN	110	536	1,120	1,050	736	694	1,020	618	253	221	93	82
CFSM	.80	2.49	6.15	3.42	3.73	7.10	5.07	3.49	1.73	.60	.40	.26
IN.	.92	2.78	7.09	3.95	3.88	8.19	5.66	4.02	1.93	.69	.46	.29

CAL YR 1972 TOTAL 448,080 MEAN 1,224 MAX 17,500 MIN 86 CFSM 1.80 IN 24.48
WTR YR 1973 TOTAL 729,830 MEAN 2,000 MAX 22,000 MIN 82 CFSM 2.94 IN 39.87

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1445	21.82	22,000	03-17	1245	22.14	22,700
12-15	2315	13.62	10,500	04-20	0700	19.58	18,400
02-08	1600	14.55	11,700	04-27	0530	14.23	11,300
03-11	1500	13.47	10,400	05-29	1115	13.81	10,800

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 (3.2 km) southwest of Neptune, 3.0 miles (4.8 km) upstream from Half Pone Creek, 9.7 miles (15.6 km) west of Ashland City, and at mile 148.4 (238.8 km).

DRAINAGE AREA.--14,163 sq mi (36,682 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 350.00 ft (106.680 m) above mean sea level. Prior to May 5, 1966, at datum 350.00 ft (106.680 m) lower. Auxiliary water-stage recorder 15.3 miles (24.6 km) 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 (13.0 km) downstream from base gage at datum 1.76 ft (0.536 m) lower.

AVERAGE DISCHARGE.--19 years, 22,540 cfs (638.3 cu m/s), 21.61 in/yr (549 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 131,000 cfs (3,710 cu m/s) Mar. 16, 17; maximum gage height, 37.71 ft (11.494 m) Mar. 18; minimum daily discharge, 1,910 cfs (54.1 cu m/s) Sept. 17; minimum gage height, 3.78 ft (1.152 m) Oct. 8, 9, 11.
Period of record: Maximum discharge, 176,000 cfs (4,980 cu m/s) Mar. 23, 1955, Mar. 1, 1962; maximum gage height, 48.39 ft (14.749 m) Mar. 1, 1962; minimum daily discharge, 700 cfs (19.8 cu m/s) Oct. 29, 1969; minimum gage height, 3.35 ft (1.021 m) Jan. 1, 1969.
Maximum stage since at least 1793, 53.5 ft (16.31 m) Jan. 5, 1937, from profile by Corps of Engineers, discharge, about 200,000 cfs (5,660 cu m/s) on Jan. 24, 1937. Flood of Jan. 1, 1927, reached a stage of 51.7 ft (15.76 m), from profile, discharge about 205,000 cfs (5,810 cu m/s).

REMARKS --Records good. Some regulation by Lake Cumberland, Dale Hollow Lake, Cordell Hull Reservoir, Great Falls, Center Hill, and Old Hickory Lakes, J. Percy Priest Reservoir (see p. 52), and by Cheatham Dam.

REVISIONS.--WSP 1726: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,700	15,000	23,200	64,800	41,300	30,200	78,900	17,600	30,600	39,000	14,500	22,500
2	4,840	16,200	25,800	56,400	39,400	32,600	68,100	20,800	32,200	35,600	18,900	15,600
3	5,870	18,000	25,400	49,600	45,400	37,200	50,700	30,300	34,500	33,000	24,800	15,600
4	7,580	18,900	19,700	56,700	47,400	31,500	46,000	45,600	33,900	33,000	25,300	12,200
5	4,940	16,200	15,700	58,000	41,800	21,600	45,200	38,800	35,000	34,000	13,200	9,140
6	5,130	6,360	19,200	56,700	39,500	22,100	48,100	34,700	36,200	37,900	6,620	9,740
7	6,710	17,800	24,900	53,500	48,900	32,600	50,200	33,300	43,300	34,900	8,700	11,300
8	3,730	23,500	39,400	49,900	70,100	42,500	63,600	32,100	37,700	32,600	12,200	5,650
9	1,970	24,200	87,800	40,700	75,700	38,800	72,400	52,100	28,800	28,200	21,000	7,920
10	6,920	24,600	101,000	38,600	69,000	37,100	71,000	49,700	45,400	25,000	29,700	4,630
11	6,630	27,300	116,000	41,400	58,200	43,100	56,100	44,900	49,700	25,500	28,100	4,100
12	4,290	24,600	116,000	39,300	54,100	44,300	49,500	41,400	52,100	28,800	19,200	5,580
13	7,720	20,100	105,000	39,500	51,900	34,400	48,800	47,900	54,500	26,500	13,400	7,980
14	5,850	10,500	97,600	39,200	48,100	29,800	41,700	53,000	55,900	25,700	19,300	13,700
15	6,750	14,400	101,000	42,100	54,200	64,900	41,100	49,900	53,500	30,300	7,970	7,300
16	4,670	10,100	107,000	40,400	60,200	119,000	43,000	48,300	52,800	24,900	16,000	1,950
17	9,550	11,500	105,000	42,900	56,500	131,000	45,400	41,600	48,600	18,400	18,900	1,910
18	17,100	19,400	98,200	39,300	54,000	128,000	47,100	35,700	48,900	28,600	18,800	5,560
19	23,900	23,700	87,100	30,300	50,700	118,000	39,900	36,300	46,600	28,900	15,600	5,770
20	24,300	25,300	63,300	29,000	46,000	108,000	90,800	36,600	41,800	28,300	15,500	3,730
21	25,700	30,000	56,500	31,200	38,200	107,000	67,900	33,800	39,600	26,400	15,900	6,310
22	28,400	31,000	58,900	41,100	29,900	106,000	34,800	29,900	36,500	27,500	16,500	6,900
23	22,400	29,200	57,600	45,400	29,000	96,500	34,000	29,600	23,800	28,500	14,500	6,150
24	19,100	26,900	54,600	45,900	34,800	92,300	31,300	44,900	30,100	24,600	14,400	3,870
25	6,480	23,100	47,200	49,000	32,400	87,200	31,200	46,600	25,900	28,500	14,200	7,760
26	7,030	19,300	44,400	42,800	32,200	74,700	42,300	32,100	34,500	32,800	14,200	9,160
27	11,000	18,300	46,700	44,100	30,100	75,200	45,200	44,900	31,500	40,700	15,000	11,900
28	17,400	35,400	47,000	38,500	24,500	78,000	55,300	84,700	41,400	50,400	20,500	7,340
29	15,300	40,100	45,600	37,000	------	82,200	47,800	94,800	49,600	41,800	30,000	7,090
30	11,500	31,600	42,800	37,400	------	85,000	30,700	81,100	49,300	21,200	26,800	5,720
31	14,800	------	56,400	39,800	------	83,300	------	44,100	------	11,300	19,800	------
TOTAL	342,260	652,560	1,936.0M	1,360.5M	1,303.5M	2,114.1M	1,518.1M	1,357.1M	1,224.2M	932,800	549,490	244,060
MEAN	11,040	21,750	62,450	43,890	46,550	68,200	50,600	43,780	40,810	30,090	17,730	8,135
MAX	28,400	40,100	116,000	64,800	75,700	131,000	90,800	94,800	55,900	50,400	30,000	22,500
MIN	1,970	6,360	15,700	29,000	24,500	21,600	30,700	17,600	23,800	11,300	6,620	1,910

CAL YR 1972 TOTAL 11,286,360 MEAN 30,840 MAX 116,000 MIN 1,160
WTR YR 1973 TOTAL 13,534,670 MEAN 37,080 MAX 131,000 MIN 1,910

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 (2.4 km) upstream from Austin Branch, 2.8 miles (4.5 km) north of New Deal, 3.5 miles (5.6 km) southwest of Portland, and at mile 93.0 (149.6 km).

DRAINAGE AREA.--15.1 sq mi (39.1 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 680.74 ft (207.490 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 21.6 cfs (0.612 cu m/s), 19.43 in/yr (494 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,100 cfs (59.5 cu m/s) Dec. 8, gage height, 9.85 ft (3.002 m); minimum, 2.1 cfs (0.059 cu m/s) several days in October and September.
Period of record: Maximum discharge, 4,460 cfs (126 cu m/s) June 23, 1969, gage height, 12.38 ft (3.773 m); minimum, 0.25 cfs (0.007 cu m/s) Sept. 10, 1972, caused by unknown diversion; minimum unaffected by diversion, 0.70 cfs (0.020 cu m/s) Aug. 27-29, 1968.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	14	23	70	58	14	35	33	29	8.0	4.5	2.6
2	3.4	45	19	47	50	31	33	50	25	7.4	3.8	2.3
3	2.8	26	17	181	42	43	30	175	19	6.8	3.5	2.3
4	4.3	16	16	101	37	38	37	56	14	10	3.2	2.1
5	4.2	12	15	60	35	38	31	42	25	6.2	2.9	2.1
6	3.2	9.6	28	43	39	35	30	37	54	5.0	2.9	2.2
7	2.7	100	22	36	36	152	41	34	35	4.6	2.7	2.4
8	2.6	39	416	32	167	62	59	39	28	4.3	2.7	2.4
9	2.4	25	314	26	70	44	48	31	21	4.6	2.5	6.0
10	2.1	19	202	25	47	38	41	28	16	4.4	67	5.1
11	2.1	15	77	24	40	111	37	26	12	4.5	8.6	3.3
12	2.1	12	59	24	37	56	35	22	42	3.8	6.0	3.0
13	2.1	16	82	23	40	43	32	18	29	3.8	6.0	3.5
14	2.3	19	56	20	51	94	30	15	18	3.8	6.3	4.9
15	2.3	13	132	19	46	385	29	13	16	4.0	4.7	3.5
16	2.4	12	67	19	41	330	28	11	18	3.9	4.1	3.2
17	2.6	11	44	19	37	159	26	12	9.5	3.8	3.9	2.6
18	6.6	9.7	36	20	34	85	31	9.5	8.3	5.3	3.6	2.5
19	11	83	41	30	32	59	157	31	8.0	4.1	3.3	2.6
20	5.8	45	59	30	31	121	217	22	9.8	3.8	3.2	2.6
21	4.8	30	45	71	28	84	64	13	8.4	3.4	3.2	2.6
22	4.2	23	39	79	27	57	46	15	6.9	3.2	2.9	2.6
23	4.5	17	33	47	26	46	56	29	6.3	3.3	2.8	2.3
24	4.4	15	30	39	22	41	58	74	6.1	9.9	2.8	2.3
25	3.8	25	28	35	20	56	65	36	5.8	9.4	2.9	2.3
26	3.5	23	27	46	19	46	58	29	5.7	5.7	2.6	2.2
27	6.4	19	25	53	17	43	52	159	13	4.7	2.6	2.1
28	9.0	61	23	48	16	40	45	69	10	3.8	2.3	2.2
29	6.7	37	21	45	------	40	38	42	8.0	3.5	2.3	2.4
30	5.3	29	91	41	------	38	35	35	7.0	3.4	2.3	2.6
31	22	------	284	38	------	37	------	31	------	7.3	2.7	------
TOTAL	145.9	820.3	2,371	1,391	1,145	2,466	1,524	1,236.5	513.8	159.7	174.8	84.8
MEAN	4.71	27.3	76.5	44.9	40.9	79.5	50.8	39.9	17.1	5.15	5.64	2.83
MAX	22	100	416	181	167	385	217	175	54	10	67	6.0
MIN	2.1	9.6	15	19	16	14	26	9.5	5.7	3.2	2.3	2.1
CFSM	.31	1.81	5.07	2.97	2.71	5.26	3.36	2.64	1.13	.34	.37	.19
IN.	.36	2.02	5.84	3.43	2.82	6.08	3.75	3.05	1.27	.39	.43	.21

CAL YR 1972 TOTAL 9,313.8 MEAN 25.4 MAX 500 MIN 1.2 CFSM 1.68 IN 22.95
WTR YR 1973 TOTAL 12,032.8 MEAN 33.0 MAX 416 MIN 2.1 CFSM 2.19 IN 29.64

PEAK DISCHARGE (BASE, 900 CFS) REVISED

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-08	2210	9.85	2,100	03-15	0335	7.63	969
12-31	0205	7.46	918				

03436000 Sulphur Fork Red River near Adams, Tenn.

LOCATION.--Lat 36°30'55", long 87°03'32", Robertson County, on left bank 600 ft (183 m) downstream from county highway bridge, 2.8 miles (4.5 km) downstream from Millers Creek, 4.1 miles (6.6 km) southwest of Cedar Hill, 4.6 miles (7.4 km) south of Adams, and at mile 10.2 (16.4 km).

DRAINAGE AREA.--186 sq mi (482 sq km) includes 21 sq mi (54 sq km) 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 (129.345 m) above mean sea level, Sandy Hook datum. Jan. 20, 1939, to Nov. 25, 1940, nonrecording gage at site 600 ft (183 m) upstream at same datum.

AVERAGE DISCHARGE.--35 years, 228 cfs (6.457 cu m/s), 16.65 in/yr (423 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,060 cfs (257 cu m/s) Dec. 9, gage height, 18.31 ft (5.581 m); minimum, 17 cfs (0.48 cu m/s) Sept. 3, 4, 8.
Period of record: Maximum discharge, 13,700 cfs (388 cu m/s) Feb. 27, 1962, gage height, 23.2 ft (7.07 m); from floodmark in gage well; minimum, 1.8 cfs (0.051 cu m/s) Sept. 27, 1948.
Maximum stage since at least 1928, 25.1 ft (7.65 m) in June 1934, from floodmarks, discharge not determined. Flood in January 1937 reached a stage about 2.5 ft (0.76 m) lower than that of June 1934, discharge not determined.

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

REVISIONS.--WSP 1910: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	133	273	920	618	127	374	394	267	44	40	19
2	25	138	214	576	874	132	313	424	221	105	34	18
3	23	143	175	775	610	294	268	2,360	186	80	30	17
4	26	110	160	1,410	451	239	384	1,010	162	52	26	17
5	30	79	148	836	386	252	300	647	169	86	24	18
6	27	63	259	585	412	220	248	481	204	55	22	18
7	25	945	283	443	373	760	305	391	202	50	21	18
8	24	634	1,990	374	1,960	702	842	469	150	44	30	17
9	24	282	6,920	305	1,360	493	675	329	125	50	70	19
10	25	193	3,370	256	901	388	564	262	110	60	175	25
11	25	145	1,660	224	629	1,790	426	224	99	90	350	23
12	27	114	1,130	195	490	1,220	371	193	92	66	200	22
13	26	110	1,200	175	481	745	301	165	85	50	90	22
14	27	250	905	163	719	616	250	146	84	44	58	40
15	23	172	2,140	175	746	2,710	219	132	88	48	42	39
16	21	133	1,340	179	571	4,880	204	121	99	52	39	30
17	23	114	875	175	450	3,810	188	120	80	42	36	24
18	38	98	653	172	391	1,800	182	109	68	37	34	21
19	63	658	539	198	344	1,170	1,370	104	63	35	31	21
20	52	700	562	181	300	1,190	4,790	129	100	33	30	20
21	40	367	475	201	258	1,430	1,570	100	182	32	29	20
22	38	259	411	838	227	887	1,000	111	91	30	26	20
23	42	196	341	553	214	670	872	123	65	46	26	20
24	45	160	298	393	193	535	946	1,130	56	40	26	20
25	41	172	272	312	169	544	893	519	52	80	25	20
26	39	242	250	310	156	559	864	288	49	150	23	20
27	42	196	239	734	145	549	1,110	2,210	76	94	23	20
28	53	538	224	710	133	441	878	1,310	111	70	23	20
29	52	496	207	765	------	423	626	672	63	64	20	21
30	47	356	248	590	------	477	486	433	47	41	19	23
31	91	------	1,730	486	------	420	------	320	------	34	18	------
TOTAL	1,112	8,246	29,491	14,209	14,561	30,473	21,819	15,426	3,446	1,804	1,640	652
MEAN	35.9	275	951	458	520	983	727	498	115	58.2	52.9	21.7
MAX	91	945	6,920	1,410	1,960	4,880	4,790	2,360	267	150	350	40
MIN	21	63	148	163	133	127	182	100	47	30	18	17
CFSM	.19	1.48	5.11	2.46	2.80	5.28	3.91	2.68	.62	.31	.28	.12
IN.	.22	1.65	5.90	2.84	2.91	6.09	4.36	3.09	.69	.36	.33	.13

CAL YR 1972 TOTAL 111,921.0 MEAN 306 MAX 6,920 MIN 8.2 CFSM 1.65 IN 22.38
WTR YR 1973 TOTAL 142,879.0 MEAN 391 MAX 6,920 MIN 17 CFSM 2.10 IN 28.58

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-09	0800	18.31	9,060	04-20	0630	15.44	6,780
03-11	1615	10.69	3,490	05-03	0800	11.10	3,760
03-16	2130	13.55	5,420	05-27	1530	11.10	3,760

NOTE.--No gage height record July 2 to Aug. 20.

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 (76 m) downstream from Sulphur Fork and at mile 25.5 (41.0 km).

DRAINAGE AREA.- 935 sq mi (2,422 sq km), includes 437 sq mi (1,132 sq km) without surface drainage.

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

GAGE.--Water-stage recorder. Datum of gage is 376.55 ft (114.772 m) above mean sea level. July 13, 1961, to Oct. 9, 1963, non-recording gage and crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 1,167 cfs (33.05 cu m/s), 16.95 in/yr (431 mm/yr).

EXTREMES.--Current year: Maximum discharge, 22,500 cfs (637 cu m/s) Dec. 9, gage height, 34.42 ft (10.491 m); minimum, 82 cfs (2.32 cu m/s) Oct. 16.
Period of record: Maximum discharge, 43,500 cfs (1,230 cu m/s) Feb. 27, 1962, gage height, 43.18 ft (13.161 m); minimum, 54 cfs (1.53 cu m/s) Sept. 17, 18, 1964.
Maximum stage since at least 1913, 44.4 ft (13.53 m) Jan. 23, 1937 (from flood profile of Corps of Engineers).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	463	1,790	5,270	3,040	1,230	2,230	2,390	1,410	676	463	176
2	161	830	1,520	3,830	3,720	1,190	1,990	2,610	1,240	812	433	176
3	138	1,300	1,300	3,600	3,380	1,410	1,780	5,860	1,100	763	370	169
4	169	1,100	1,220	6,170	2,900	1,590	1,890	4,670	978	632	326	163
5	197	758	1,820	4,840	2,660	1,490	1,960	3,260	942	1,060	294	162
6	208	608	1,620	4,000	2,540	1,460	1,690	2,710	1,100	862	271	159
7	180	1,690	2,540	3,450	2,420	2,040	1,640	2,360	1,180	615	255	157
8	148	4,250	4,070	3,120	4,260	3,650	2,950	2,740	997	527	242	154
9	130	2,490	18,600	2,840	5,820	2,670	3,270	2,770	826	481	230	155
10	116	1,730	19,700	2,580	4,160	2,230	2,890	2,140	729	643	623	179
11	105	1,390	11,000	2,400	3,420	3,420	2,440	1,870	663	988	1,730	271
12	95	1,140	6,150	2,230	2,970	5,420	2,160	1,680	630	696	1,250	237
13	92	984	5,510	2,060	2,730	3,490	1,940	1,520	1,580	520	774	198
14	87	1,200	5,030	1,940	3,070	2,900	1,720	1,380	1,660	451	620	218
15	87	1,330	6,250	1,890	3,640	6,240	1,570	1,260	1,200	534	518	247
16	84	1,060	6,850	1,870	3,240	12,400	1,480	1,180	1,050	597	440	246
17	87	923	4,740	1,820	2,830	17,700	1,400	1,140	917	454	381	206
18	100	818	3,770	1,770	2,580	12,300	1,340	1,070	765	403	341	178
19	176	1,500	3,310	1,770	2,420	6,940	2,430	997	671	370	312	166
20	243	3,980	3,290	1,840	2,250	5,210	11,400	1,010	720	355	288	161
21	246	2,740	3,240	1,750	2,030	5,870	9,760	976	1,270	334	269	156
22	199	2,070	2,920	2,910	1,870	4,470	4,880	879	1,250	316	248	152
23	186	1,690	2,650	3,330	1,820	3,670	3,950	888	802	527	235	149
24	178	1,420	2,450	2,650	1,700	3,240	4,910	2,000	643	415	225	145
25	163	1,300	2,330	2,320	1,570	3,070	4,380	2,160	570	946	220	139
26	153	1,490	2,240	2,170	1,470	3,080	3,940	1,410	515	1,530	210	134
27	151	1,490	2,150	2,870	1,390	3,030	3,940	3,160	661	1,150	203	132
28	163	1,650	2,090	3,250	1,300	2,630	3,780	5,650	1,130	691	196	127
29	174	2,470	2,030	3,850	------	2,380	3,110	2,990	970	514	190	130
30	182	2,070	2,030	3,550	------	2,420	2,690	2,050	688	470	183	138
31	272	------	4,700	3,180	------	2,280	------	1,640	------	422	179	------
TOTAL	4,863	47,934	138,910	91,120	77,200	131,120	95,510	68,420	28,857	19,754	12,519	5,180
MEAN	157	1,598	4,481	2,939	2,757	4,230	3,184	2,207	962	637	404	173
MAX	272	4,250	19,700	6,170	5,820	17,700	11,400	5,860	1,660	1,530	1,730	271
MIN	84	463	1,220	1,750	1,300	1,190	1,340	879	515	316	179	127
CFSM	.17	1.71	4.79	3.14	2.95	4.52	3.41	2.36	1.03	.68	.43	.19
IN.	.19	1.91	5.53	3.63	3.07	5.22	3.80	2.72	1.15	.79	.50	.21

CAL YR 1972 TOTAL 571,582 MEAN 1,562 MAX 19,700 MIN 84 CFSM 1.67 IN 22.74
WTR YR 1973 TOTAL 721,387 MEAN 1,976 MAX 19,700 MIN 84 CFSM 2.11 IN 28.70

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-09	1900	34.42	22,500	04-20	1800	27.04	13,800
03-17	1100	31.58	18,400				

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 (4.2 km) west of Shiloh, 3.0 miles (4.8 km) downstream from Leatherwood Creek, 9.0 miles (14.5 km) east of Erin, and at mile 9.0 (14.5 km).

DRAINAGE AREA.--124 sq mi (321 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 390.13 ft (118.912 m) above mean sea level. Prior to Oct. 14, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 172 cfs (4.871 cu m/s), 18.84 in/yr (479 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,640 cfs (216 cu m/s) Dec. 9, gage height, 14.90 ft (4.542 m); minimum 27 cfs (0.76 cu m/s) Aug. 28.
Period of record: Maximum discharge, 8,190 cfs (232 cu m/s) Feb. 27, 1962, gage height, 14.4 ft (4.39 m); maximum gage height, 14.90 ft (4.542 m) Dec. 9, 1972; minimum discharge, 16 cfs (0.45 cu m/s) Aug. 21, 1962.

REMARKS.--Records poor.

REVISIONS.--WSP 1706: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	250	356	478	393	115	226	378	204	66	58	36
2	58	343	276	358	434	115	209	600	188	66	39	36
3	55	358	231	331	368	123	195	1,300	174	62	37	36
4	56	248	205	427	304	125	222	850	161	60	35	35
5	50	188	184	377	269	136	211	437	178	58	34	35
6	47	159	228	318	531	141	194	349	178	56	33	35
7	45	578	258	269	597	360	207	307	162	54	32	37
8	44	704	1,880	235	1,710	435	383	347	151	54	31	40
9	42	440	4,490	191	987	370	407	285	141	52	31	42
10	38	319	2,090	164	596	305	360	252	131	60	30	41
11	38	248	1,120	152	428	539	293	230	125	55	36	40
12	38	210	723	141	341	620	260	210	119	50	35	39
13	38	240	666	131	325	475	224	194	126	48	32	39
14	40	260	567	124	437	480	198	181	152	47	31	43
15	39	230	1,250	121	482	1,880	183	171	123	47	31	49
16	38	200	939	111	393	3,070	177	164	118	46	30	44
17	38	180	603	105	318	2,310	168	161	106	46	30	41
18	48	240	460	102	270	1,000	168	153	99	44	30	39
19	60	488	388	115	235	625	490	146	99	42	31	38
20	58	669	348	115	201	527	2,300	139	119	42	30	38
21	55	485	296	202	175	508	1,000	133	168	41	29	38
22	52	363	252	860	159	412	815	129	114	40	29	36
23	63	274	205	594	151	343	704	134	97	41	29	35
24	74	221	183	423	144	293	1,110	180	88	39	33	34
25	74	226	172	325	136	297	974	138	83	78	31	34
26	71	263	166	316	130	298	1,180	132	79	48	30	34
27	79	244	158	545	127	296	1,090	787	78	38	29	34
28	88	475	150	554	123	274	759	503	78	36	28	33
29	90	568	143	573	------	257	566	308	72	35	34	34
30	91	451	157	481	------	236	458	235	69	34	35	34
31	209	------	603	404	------	232	------	199	------	43	35	------
TOTAL	1,882	10,122	19,747	9,642	10,764	17,197	15,731	9,732	3,780	1,528	1,018	1,129
MEAN	60.7	337	637	311	384	555	524	314	126	49.3	32.8	37.6
MAX	209	704	4,490	860	1,710	3,070	2,300	1,300	204	78	58	49
MIN	38	159	143	102	123	115	168	129	69	34	28	33
CFSM	.49	2.72	5.14	2.51	3.10	4.48	4.23	2.53	1.02	.40	.26	.30
IN.	.56	3.04	5.92	2.89	3.23	5.16	4.72	2.92	1.13	.46	.31	.34

CAL YR 1972 TOTAL 91,678 MEAN 250 MAX 4,490 MIN 30 CFSM 2.02 IN 27.50
WTR YR 1973 TOTAL 102,272 MEAN 280 MAX 4,490 MIN 28 CFSM 2.26 IN 30.68

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-09	0500	14.90	7,640	03-16	2200	12.75	4,500
02-08	1100	10.16	2,350	04-20	Unknown	10.97	2,880

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 (16 km) southwest of Jamestown, Ky. Drainage area, 5,789 sq mi (14,994 sq km). 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 (166.12 m) higher. Extremes for current year: Maximum contents, 2,404,800 cfs-days (5,885 cu hm) June 7, elevation, 737.73 ft (224.860 m); minimum, 1,406,600 cfs-days (3,442 cu hm) Nov. 10, elevation, 696.98 ft (212.440 m). Extremes for period of record: Maximum contents, 2,673,800 cfs-days (6,543 cu hm) Apr. 15, 1962, elevation, 747.12 ft (227.722 m); minimum, after first filling, 934,400 cfs-days (2,286 cu hm) Jan. 1, 1956, elevation, 673.01 ft (205.133 m).

Reservoir is formed by earth embankment and concrete gravity dam surmounted by 10 taintor gates 37 ft (11 m) high by 50 ft (15 m) wide. Final closure of dam made Aug. 7, 1950. Total capacity at elevation 760.00 ft (231.648 m) top of gates, is 3,070,000 cfs-days (7,512 cu hm), of which 1,056,000 cfs-days (2,584 cu hm) above elevation 723.00 ft (220.370 m), crest of spillway, are reserved for flood control and 1,080,000 cfs-days (2,643 cu hm) between elevation 673.00 ft (205.130 m), minimum power pool, and 723.00 ft (220.370 m) will be used for power production. Figures given herein represent total contents, of which 934,000 cfs-days (2,285 cu hm) below elevation 673.00 ft (205.130 m) is dead storage. Reservoir is used for flood control, power, navigation, and recreation. Records furnished by Corps of Engineers. Revisions.--WSP 1556: Drainage area.

03416500 DALE HOLLOW LAKE.--Lat 36°32'19", long 85°27'05", Clay County, at Dale Hollow Dam on Obey River, 3 miles (5 km) east of Celina, and 7.3 miles (11.7 km) upstream from mouth. Drainage area, 936 sq mi (2,424 sq km). Period of record, August 1943 to current year. Prior to October 1965, 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, 757,400 cfs-days (1,853 cu hm) Mar. 24, elevation, 656.24 ft (200.022 m); minimum, 526,300 cfs-days (1,288 cu hm) Nov. 18, elevation, 639.09 ft (194.795 m). Extremes for period of record: Maximum contents, 805,300 cfs-days (1,971 cu hm) Mar. 1, 1962, elevation, 659.45 ft (201.000 m); minimum, after first filling, 428,000 cfs-days (1,047 cu hm) Sept. 11, 1944, elevation, 630.63 ft (192.216 m).

Reservoir is formed by concrete gravity dam. Spillway is equipped with six taintor gates, each 12 ft (4 m) high by 60 ft (18 m) 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 ft (202.08 m), top of gates, is 859,800 cfs-days (2,104 cu hm) of which 177,500 cfs-days (434.3 cu hm) between elevations 663.0 ft (202.08 m) and 651.00 ft (198.425 m), crest of spillway, are reserved for flood control, and 250,200 cfs-days (612.2 cu hm) between elevations 651.00 ft (198.425 m) and 631.00 ft (192.329 m), ordinary minimum pool, are used for power production. Contents of 432,100 cfs-days (1,057 cu hm) below elevation 631.00 ft (192.329 m) is dead storage. Reservoir is used for flood control, navigation, and power. Records furnished by Corps of Engineers. Revisions (water years).--WSP 1306: 1944. WSP 2110: Drainage area.

03418400 CORDELL HULL RESERVOIR.--Lat 36°17'23", long 85°56'39", Smith County, at Cordell Hull Dam on Cumberland River, 2.7 miles (4.3 km) north of Carthage, and at mile 313.5 (504.4 km). Drainage area, 8,095 sq mi (20,966 sq km). Period of record, October 1972 to September 1973. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 140,900 cfs-days (344.8 cu hm) Mar. 18, elevation, 505.65 ft (154.122 m); minimum, 21,400 cfs-days (52.37 cu hm) Oct. 9, elevation, 467.13 ft (142.381 m). Minimum, after first filling to ordinary minimum pool, 98,200 cfs-days (240.3 cu hm), Mar. 26, elevation, 497.97 ft (151.781 m).

Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with 5 taintor gates, each 41 ft (12 m) high and 45 ft (14 m) wide. Closure of dam was made Oct. 4, 1967; water in reservoir first reached ordinary minimum pool Mar. 13, 1973. Total capacity at elevation 508.0 ft (154.84 m), maximum surcharge pool, is 156,700 cfs-days (383.4 cu hm), of which 53,400 cfs-days (130.7 cu hm) is controlled storage between elevations 508.0 ft (154.84 m) and 499.0 ft (152.10 m), ordinary minimum pool. Contents of 5,000 cfs-days (12.24 cu hm) between elevation of 499.0 ft (152.10 m) and 500.0 ft (152.40 m), full winter pool, is available for power production. Contents of 48,400 cfs-days (118.4 cu hm) above 500.0 ft (152.40 m) is available for flood control during the winter, and 26,100 cfs-days (63.87 cu hm) above 504.0 ft (153.62 m), full pool during spring to fall season, is available for flood control the rest of the year. Contents of 103,300 cfs-days (252.8 cu hm) below elevation 499.0 ft (152.10 m) is dead storage. Reservoir is used for navigation, power, and flood control.

03422000 GREAT FALLS LAKE.--Lat 35°48'21", long 85°38'09", Warren County, at penstock inlet on Collins River, 700 ft (213 m) southwest of powerhouse of Tennessee Valley Authority, 1.5 miles (2.4 km) northwest of Rock Island, 1.8 miles (2.9 km) upstream from mouth of Collins River, and 2.0 miles (3.2 km) upstream from Great Falls Dam on Caney Fork. Drainage area, 1,677 sq mi (4,343 sq km). 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, 31,100 cfs-days (76.10 cu hm) May 28, elevation, 809.65 ft (246.781 m); minimum, 8,200 cfs-days (20.07 cu hm) Sept. 6, elevation, 781.90 ft (238.323 m). Extremes for period of record: Maximum midnight elevation, 817.48 ft (249.168 m) Mar. 23, 1929, contents not determined; minimum midnight contents, 1,700 cfs-days (4,160 cu hm) Aug. 19, 1918, elevation, 756.3 ft (230.52 m).

Reservoir is formed by concrete gravity dam. Spillway is equipped with 18 taintor gates, each 14 ft (4 m) high by 25 ft (8 m) wide. Closure of dam was made in 1916; dam redesigned and crest raised 35 ft (11 m) in 1925. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 804.9 ft (245.33 m), top of gates, is 25,400 cfs-days (62.15 cu hm), of which 23,900 cfs-days (58.48 cu hm) are controlled storage above elevation 762.0 ft (232.26 m), minimum pool. Contents of 1,500 cfs-days (3.671 cu hm) below elevation 762.0 ft (232.26 m) is dead storage. Reservoir is used primarily for power. Records furnished by Tennessee Valley Authority. Revisions.--WSP 2110: Drainage area.

03424000 CENTER HILL LAKE.--Lat 36°05'48", long 85°49'38", DeKalb County, at Center Hill Dam on Caney Fork, 10 miles (16 km) north of Smithville, 14 miles (23 km) southeast of Carthage, and at mile 26.6 (42.8 km). Drainage area, 2,174 sq mi (5,631 sq km). Period of record, October 1948 to current year. Prior to October 1965, 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 (402 m) upstream at same datum. Extremes for current year: Maximum contents, 905,300 cfs-days (2,215 cu hm), Mar. 18, elevation, 671.60 ft (204.704 m); minimum 533,800 cfs-days (1,306 cu hm) Jan. 18, elevation, 632.31 ft (192.728 m). Extremes for period of record: Maximum contents 1,004,400 cfs-days (2,458 cu hm) Feb. 10, 1950, elevation, 680.6 ft (207.45 m); minimum, after first filling, 171,000 cfs-days (418.4 cu hm) Dec. 1, 2, 1949, elevation, 576.1 ft (175.60 m).

Reservoir is formed by earth embankment and concrete gravity dam. Spillway is equipped with eight taintor gates, each 37 ft (11 m) high by 50 ft (15 m) 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 (208.79 m), top of gates, is 1,054,800 cfs-days (2,581 cu hm), of which 384,500 cfs-days (940.9 cu hm) between 685.0 ft (208.79 m) and 648.0 ft (197.51 m), crest of spillway, are reserved for flood control, and 248,000 cfs-days (606.9 cu hm) between elevations 648.0 ft (197.51 m) and 618.0 ft (188.37 m), ordinary minimum pool, are used for power production. Contents of 422,300 cfs-days (1,033 cu hm) below 618.0 ft (188.37 m) is dead storage. Reservoir is used for flood control, navigation, and power. Records furnished by Corps of Engineers. Revisions.--WSP 1910: Drainage area.

Reservoirs in Cumberland River basin--Continued

03426300 OLD HICKORY LAKE.--Lat 36°17'50", long 86°39'20", Sumner County, at Old Hickory Dam on Cumberland River, 2.0 miles (3.2 km) west of Hendersonville, 10 miles (16 km) northeast of the State capitol in Nashville, and at mile 216.2 (347.9 km). Drainage area, 11,673 sq mi (30,233 sq km). Period of record, June 1954 to current year: Water-stage recorder. Datum of gage is 408.5 ft (124.51 m) 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, 237,500 cfs-days (581.2 cu hm) Mar. 17, elevation, 447.18 ft (136.300 m); minimum 179,800 cfs-days (440.0 cu hm) May 6, elevation, 442.00 ft (134.722 m). Extremes for period of record: Maximum contents, 269,300 cfs-days (659.0 cu hm) Mar. 1, 1962, elevation, 449.60 ft (137.038 m); minimum, after first filling to ordinary minimum pool, 179,400 cfs-days (439.0 cu hm) Oct. 22, 1957, Oct. 28, 1969, elevation, 441.96 ft (134.709 m).

Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with six taintor gates, each 41 ft (12 m) high and 45 ft (14 m) 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 (137.16 m), maximum surcharge pool, 274,600 cfs-days (671.9 cu hm) of which 63,000 cfs-days (154.2 cu hm) between elevations 450.0 ft (137.16 m) and 445.0 ft (135.64 m), 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 (77.82 cu hm) between elevations 445.0 ft (135.64 m) and 442.0 ft (134.72 m), ordinary minimum pool, are used for power production. Contents of 179,800 cfs-days (440.0 cu hm) below elevation 442.0 ft (134.722 m), is dead storage. Reservoir is used for navigation and power. Records furnished by Corps of Engineers. Revisions.--WSP 2110: Drainage area.

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 (4.2 km) east of Donelson, and 6.8 miles (10.9 km) above mouth. Drainage area, 892 sq mi (2,310 sq km). 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, 265,900 cfs-days (650.7 cu hm) Mar. 21, elevation, 498.45 ft (151.928 m); minimum, 142,400 cfs-days (348.5 cu hm) Jan. 11, elevation 481.30 ft (146.700 m). Extremes for period of record: Maximum contents 265,900 cfs-days (650.7 cu hm) Mar. 21, 1973, elevation, 498.45 ft (151.928 m); minimum, after first filling to ordinary minimum pool, 109,500 cfs-days (267.9 cu hm) Dec. 5, 1968, elevation, 474.75 ft (144.704 m).

Reservoir is formed by concrete gravity dam with earth embankments. Spillway is equipped with four taintor gates, each 41 ft (12 m) high by 45 ft (14 m) 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 (153.77 m), maximum controlled pool, is 328,700 cfs-days (804.3 cu hm) of which 193,600 cfs-days (473.7 cu hm) is controlled storage between elevations 504.5 ft (153.77 m) and 480.0 ft (146.30 m), ordinary minimum pool. Contents of 17,200 cfs-days (42.09 cu hm) between elevations 480.0 ft (146.30 m) and 483.0 ft (147.22 m), full winter pool, is available for power production. Contents of 176,400 cfs-days (431.7 cu hm) above 483.0 ft (147.22 m) is available for flood control during the winter, and 131,100 cfs-days (320.8 cu hm) above 490.0 ft (149.35 m), full pool during spring to fall season, is available for flood control the rest of the year. Contents of 135,100 cfs-days (330.6 cu hm) below elevation 480.0 ft (146.30 m) is dead storage. Reservoir is used for flood control, power, recreation, and wildlife. Records furnished by Corps of Engineers.

03434900 CHEATHAM LAKE.--Lat 36°18'56", long 87°13'10", Cheatham County, at Cheatham Dam on Cumberland River, 9.4 miles (15 km) west of Ashland City, 16 miles (26 km) southeast of the courthouse in Clarksville, and at mile 148.7 (239.3 km). Drainage area, 14,159 sq mi (36,672 sq km).

Reservoir is formed by concrete gravity dam. Spillway is equipped with seven semi-submersible taintor gates, each 27 ft (8 m) high by 60 ft (18 m) wide. Total capacity at elevation 385.0 ft (117.35 m), normal pool, is 52,200 cfs-days (127.7 cu hm), of which 9,800 cfs-days (23.98 cu hm) 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 (2.3 km) northeast of Grand Rivers, Ky., and at mile 30.6 (49.2 km). Drainage area, 17,598 sq mi (45,579 sq km). 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 (370 m) upstream from Barkley Dam at same datum. Extremes for current year: Maximum contents, level pool storage, 790,700 cfs-days (1,935 cu hm) Mar. 28, elevation, 369.10 ft (112.502 m); minimum, level pool storage, 302,300 cfs-days (739.7 cu hm) Feb. 8, elevation, 353.76 ft (107.826 m). Extremes for period of record: Maximum contents, level pool storage, 790,700 cfs-days (1,935 cu hm) Mar. 28, 1973, elevation, 369.10 ft (112.502 m); minimum since reaching permanent pool elevation of 354.0 ft (107.90 m), level pool storage, 291,100 cfs-days (712.3 cu hm) Dec. 31, 1968, elevation, 353.25 ft (107.671 m).

Reservoir is formed by concrete gravity dam with earth embankments. Spillway is equipped with 12 taintor gages, each 50 ft (15 m) high by 55 ft (17 m) wide. Construction cofferdam was closed and limited storage began July 1, 1964; reservoir reached ordinary minimum pool elevation of 354.0 ft (107.90 m) Feb. 16, 1966. Total level pool capacity at elevation 375.0 ft (114.30 m), top of gates, is 1,049,600 cfs-days (2,568 cu hm), of which 742,000 cfs-days (1,816 cu hm) is controlled storage above 354.0 ft (107.90 m), ordinary minimum pool. Contents of 130,500 cfs-days (319.3 cu hm) between ordinary minimum pool elevation, 354.0 ft (107.90 m) and full pool elevation, 359.0 ft (109.42 m), is available for power during the spring-to-fall season. Minimum pool elevation in advance of floods is 346.0 ft (105.46 m), contents 171,000 cfs-days (418.4 cu hm). 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 (2.82 km) long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 miles (3.5 km) upstream from Barkley Dam. For daily discharges through the canal, see station 03438190, Kentucky reports. Records furnished by Corps of Engineers.

Reservoirs in Cumberland River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	698.43	1,437,700	-	642.76	572,200	-
Oct. 31	697.08	1,408,700	-29,000	640.48	543,400	-28,800
Nov. 30	701.34	1,501,300	+92,600	639.99	537,400	-6,000
Dec. 31	721.05	1,964,800	+463,500	647.71	637,100	+99,700
CAL YR 1972	-	-	+384,800	-	-	+23,200
Jan. 31	712.48	1,756,000	-208,800	647.44	633,500	-3,600
Feb. 28	711.72	1,738,000	-18,000	647.85	639,000	+5,500
Mar. 31	729.20	2,174,000	+436,000	655.14	741,300	+102,300
Apr. 30	727.28	2,123,800	-50,200	652.34	701,200	-40,100
May 31	736.10	2,359,720	+235,920	655.47	746,100	+44,900
June 30	728.43	2,153,740	-205,980	652.21	699,300	-46,800
July 31	718.70	1,906,400	-247,340	649.76	665,100	-34,200
Aug. 31	707.70	1,644,500	-261,900	644.78	598,200	-66,900
Sept. 30	702.70	1,531,400	-113,100	642.40	567,600	-30,600
WTR YR 1973	-	-	+93,700	-	-	-4,600
	03418400 Cordell Hull Reservoir			03422000 Great Falls Lake		
Sept. 30	470.23	25,100	-	795.49	17,000	-
Oct. 31	469.82	24,600	-500	792.76	14,900	-2,100
Nov. 30	471.98	27,400	+2,800	804.95	25,500	+10,600
Dec. 31	479.20	39,000	+11,600	804.90	25,400	-100
CAL YR 1972	-	-	-	-	-	+3,600
Jan. 31	491.16	70,300	+31,300	805.97	26,600	+1,200
Feb. 28	485.73	53,800	-16,500	800.56	21,300	-5,300
Mar. 31	499.18	104,200	+50,400	805.89	26,500	+5,200
Apr. 30	503.95	130,300	+26,100	805.93	26,600	+100
May 31	503.55	127,900	-2,400	805.73	26,300	-300
June 30	503.31	126,500	-1,400	792.73	14,900	-11,400
July 31	504.19	131,800	+5,300	803.97	24,500	+9,600
Aug. 31	504.33	132,600	+800	788.65	12,100	-12,400
Sept. 30	504.07	131,100	-1,500	790.56	13,300	+1,200
WTR YR 1973	-	-	+106,000	-	-	-3,700
	03424000 Center Hill Lake			03426300 Old Hickory Lake		
Sept. 30	634.10	548,600	-	444.52	206,200	-
Oct. 31	636.10	565,300	+16,700	444.40	204,900	-1,300
Nov. 30	634.64	553,100	-12,200	444.44	205,300	+400
Dec. 31	641.12	608,600	+55,500	444.97	211,300	+6,000
CAL YR 1972	-	-	+38,000	-	-	+6,200
Jan. 31	634.65	553,200	-55,400	444.00	200,500	-10,800
Feb. 28	635.90	563,600	+10,400	444.78	209,100	+8,600
Mar. 31	651.50	702,800	+139,200	444.98	211,400	+2,300
Apr. 30	653.22	719,200	+16,400	443.19	191,900	-19,500
May 31	667.32	860,000	+140,800	443.88	199,200	+7,300
June 30	646.30	654,800	-205,200	444.41	205,000	+5,800
July 31	643.08	625,900	-28,900	445.60	218,500	+13,500
Aug. 31	639.35	593,200	-32,700	444.79	209,200	-9,300
Sept. 30	638.65	587,100	-6,100	444.42	205,100	-4,100
WTR YR 1973	-	-	+38,500	-	-	-1,100

Reservoirs in Cumberland River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03430050 J. Percy Priest Lake			03438210 Lake Barkley /		
Sept. 30	489.55	194,400	-	354.49	325,000	
Oct. 31	488.50	187,100	-7,300	354.11	315,000	-10,000
Nov. 30	485.19	165,300	-21,800	357.54	406,800	+91,800
Dec. 31	483.00	152,000	-13,300	355.41	386,900	-19,900
CAL YR 1972	-	-	+2,200	-	-	+72,000
Jan. 31	482.02	146,400	-5,600	354.85	348,900	-38,000
Feb. 28	481.68	144,500	-1,900	354.39	323,300	-25,600
Mar. 31	490.70	202,700	+58,200	367.93	786,400	+463,100
Apr. 30	495.00	236,000	+33,300	366.65	703,000	-83,400
May 31	496.73	250,600	+14,600	362.45	560,700	+142,300
June 30	489.86	196,600	-54,000	358.24	436,700	-124,000
July 31	489.48	194,000	-2,600	356.64	375,800	-60,900
Aug. 31	489.64	195,100	+1,100	356.20	363,400	-12,400
Sept. 30	489.61	194,900	-200	355.08	334,800	-28,600
WTR YR 1973	-	-	+500	-	-	+9,800

/ 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 (5 m) downstream from bridge on U. S. Highway 411, 1 mile (2 km) northeast of Newport city limits, 3.7 miles (6.0 km) upstream from Pigeon River, and at mile 77.5 (124.7 km).

DRAINAGE AREA.--1,858 sq mi (4,812 sq km).

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 (308.339 m) above mean sea level. See WSP 1910 for history of changes prior to Mar. 31, 1934.

AVERAGE DISCHARGE.--55 years (1903-5, 1920-73), 2,914 cfs (82.52 cu m/s), 21.30 in/yr (541 mm/yr).

EXTREMES.--Current year: Maximum discharge, 65,900 cfs (1,870 cu m/s) Mar. 17, gage height, 17.60 ft (5.364 m); minimum, 1,190 cfs (33.7 cu m/s) Oct. 11, gage height, 1.71 ft (0.521 m); minimum daily, 1,250 cfs (35.4 cu m/s) Sept. 7.
Period of record: Maximum discharge, 76,300 cfs (2,160 cu m/s) Aug. 30, 1940, gage height, 19.25 ft (5.867 m); minimum, 208 cfs (5.89 cu m/s) Oct. 23, 1952, gage height, 0.97 (0.296 m); minimum daily, 240 cfs (6.80 cu m/s) Sept. 9, 1925; minimum gage height, 0.91 ft (0.277 m) Sept. 20, 1968.
Floods in March 1867, February 1902, and July 1916 reached stages of about 24 ft (7.3 m), 23.0 ft (7.01 m), and 22.5 ft (6.86 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,520	2,190	2,720	3,320	4,660	2,940	6,880	6,040	8,980	3,600	2,600	1,550
2	2,690	2,050	2,650	3,210	12,800	2,820	7,370	5,300	6,600	3,000	2,700	1,500
3	1,790	2,010	2,480	3,150	16,000	2,900	6,970	5,040	5,560	2,700	2,800	1,450
4	1,530	2,050	2,390	3,680	13,500	3,610	6,080	5,340	5,040	2,750	2,700	1,400
5	6,450	2,140	2,310	4,640	11,400	4,000	5,640	4,670	4,640	3,200	2,900	1,350
6	6,960	1,900	2,300	4,150	9,190	4,930	5,120	4,240	4,600	2,900	2,600	1,300
7	3,880	1,780	2,690	3,780	8,320	4,660	5,550	4,020	5,380	2,700	2,400	1,250
8	2,500	3,550	2,980	3,710	7,160	4,920	10,700	4,020	5,290	2,500	2,300	1,350
9	1,990	5,400	4,070	3,570	6,770	6,430	9,330	7,330	4,850	2,400	2,400	1,600
10	1,740	3,860	6,870	3,300	6,040	5,960	7,900	7,470	4,700	2,500	2,400	3,800
11	1,510	2,900	8,520	3,100	5,310	5,180	6,470	8,070	4,500	2,400	2,800	3,000
12	1,490	2,530	7,380	2,910	4,840	6,720	5,760	6,410	4,300	2,300	2,600	2,600
13	1,490	2,280	5,350	2,730	4,470	6,990	5,310	5,430	4,100	2,200	2,400	1,600
14	1,550	3,170	4,290	2,730	4,270	5,920	4,890	4,820	3,900	2,100	4,500	2,000
15	1,450	5,200	8,400	2,830	5,400	5,400	4,580	4,400	3,700	2,500	3,500	2,800
16	1,390	3,880	14,000	2,810	5,620	36,400	4,360	4,110	5,100	3,000	2,400	2,000
17	1,720	3,060	10,100	2,820	4,620	48,000	4,470	3,910	4,800	4,000	2,600	1,800
18	2,300	2,700	7,890	2,870	4,090	25,200	4,810	3,750	5,400	3,000	2,900	1,900
19	4,570	2,480	5,430	3,510	3,970	18,000	4,630	3,570	5,000	2,700	2,600	2,100
20	4,420	3,430	4,540	4,350	3,770	13,200	4,730	3,530	4,500	2,500	2,300	1,900
21	2,680	4,990	4,240	3,880	3,620	10,800	4,710	3,490	3,900	2,300	2,200	1,800
22	2,120	3,820	6,820	5,790	3,440	9,150	4,300	3,310	3,600	2,100	1,950	1,600
23	1,760	3,130	8,060	9,760	3,330	7,900	4,100	3,240	3,650	3,500	1,900	1,500
24	1,730	2,760	7,350	8,210	3,210	7,030	3,980	4,370	3,700	4,000	1,850	1,550
25	1,680	2,540	5,740	6,020	3,090	6,450	4,220	5,100	3,650	2,500	1,800	1,500
26	1,650	2,740	4,960	4,590	3,000	6,980	5,790	4,070	3,400	4,000	1,700	1,600
27	1,590	3,370	4,460	5,300	2,990	7,450	11,700	4,090	3,100	7,000	1,600	1,500
28	1,980	2,920	3,990	6,590	3,050	6,480	12,800	22,100	3,050	6,000	1,550	1,450
29	4,210	2,600	3,670	7,500	------	5,830	9,380	27,300	3,600	4,700	1,500	1,500
30	3,310	2,500	3,410	6,270	------	5,790	7,140	19,900	4,100	3,000	1,650	1,600
31	2,490	------	3,310	5,230	------	5,970	------	12,400	------	2,500	1,600	------
TOTAL	81,140	89,930	163,370	136,310	167,930	294,010	189,670	210,840	136,690	96,550	73,700	53,850
MEAN	2,617	2,998	5,270	4,397	5,998	9,484	6,322	6,801	4,556	3,115	2,377	1,795
MAX	6,960	5,400	14,000	9,760	16,000	48,000	12,800	27,300	8,980	7,000	4,500	3,800
MIN	1,390	1,780	2,300	2,730	2,990	2,820	3,980	3,240	3,050	2,100	1,500	1,250
CFSM	1.41	1.61	2.84	2.37	3.23	5.10	3.40	3.66	2.45	1.68	1.28	.97
IN.	1.62	1.80	3.27	2.73	3.36	5.89	3.80	4.22	2.74	1.93	1.48	1.08

CAL YR 1972 TOTAL 1,303,967 MEAN 3,563 MAX 20,500 MIN 939 CFSM 1.92 IN 26.11
WTR YR 1973 TOTAL 1,693,990 MEAN 4,641 MAX 48,000 MIN 1,250 CFSM 2.50 IN 33.92

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-15	1930	8.14	17,500	03-17	0500	17.60	65,900
02-02	1500	8.61	19,100	05-28	2130	12.91	37,200

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 (300 m) downstream from Crying Creek, 3,000 ft (900 m) upstream from Stillhouse Branch, 2.4 miles (3.9 km) southeast of Cosby, and at mile 10.6 (17.1 km).

DRAINAGE AREA.--10.2 sq mi (26.4 sq km).

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 (501.113 m) above mean sea level. Oct. 15, 1958 to Sept. 30, 1966, crest-stage gage at same site at datum 1.08 ft (0.329 m) lower (gage heights adjusted to present datum in WSP 2110).

AVERAGE DISCHARGE.--7 years, 28.6 cfs (0.810 cu m/s), 38.08 in/yr (967 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs (48.7 cu m/s) Mar. 16, gage height, 4.11 ft (1.253 m); minimum, 7.2 cfs (0.20 cu m/s) Sept. 29.
Period of record: Maximum discharge, 1,720 cfs (48.7 cu m/s) Mar. 16, 1973, gage height, 4.11 ft (1.253 m); minimum, 1.4 cfs (0.040 cu m/s), Sept. 30, Oct. 1, 2, 1968.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	24	30	33	43	17	31	40	35	18	53	9.8
2	30	28	29	31	98	17	29	39	30	16	46	9.0
3	27	29	27	33	44	22	27	38	27	15	42	8.4
4	24	27	27	35	33	20	29	32	24	14	38	8.1
5	134	26	26	33	39	23	27	30	22	13	35	8.4
6	69	25	33	34	52	22	26	27	23	11	32	7.8
7	47	28	34	30	50	22	60	26	21	11	30	8.1
8	36	39	32	30	52	22	73	34	21	11	26	7.8
9	29	35	95	28	50	20	56	37	21	9.8	25	26
10	25	31	164	26	45	19	46	34	18	11	80	30
11	23	29	145	26	40	23	41	56	16	12	80	20
12	22	26	107	24	36	24	37	45	19	9.0	47	17
13	23	26	77	23	33	22	33	38	20	8.4	40	18
14	21	32	62	23	35	21	30	33	18	7.8	38	21
15	21	29	83	23	34	29	29	30	15	10	34	21
16	20	28	82	22	30	559	27	26	124	8.4	30	19
17	38	27	66	22	30	167	26	26	62	8.1	28	17
18	36	26	56	22	28	80	24	23	42	8.7	27	21
19	111	29	49	29	27	70	22	22	33	13	23	18
20	75	32	43	26	26	90	21	22	29	11	24	17
21	53	31	54	25	24	80	19	19	26	12	23	15
22	42	30	58	43	21	69	18	18	24	10	21	17
23	35	27	56	33	20	58	17	23	20	27	19	16
24	31	26	51	28	19	52	16	47	18	23	18	14
25	28	28	47	24	19	52	23	39	16	30	17	12
26	26	32	43	23	18	51	32	45	15	115	16	10
27	27	30	40	26	18	47	96	52	14	117	15	8.1
28	36	29	37	27	17	43	111	129	26	60	13	7.8
29	31	28	33	32	------	39	67	67	27	47	12	9.0
30	30	30	32	28	------	35	54	49	20	39	11	17
31	29	------	34	28	------	33	------	40	------	35	11	------
TOTAL	1,231	867	1,752	870	981	1,848	1,147	1,186	826	741.2	954	438.3
MEAN	39.7	28.9	56.5	28.1	35.0	59.6	38.2	38.3	27.5	23.9	30.8	14.6
MAX	134	39	164	43	98	559	111	129	124	117	80	30
MIN	20	24	26	22	17	17	16	18	14	7.8	11	7.8
CFSM	3.89	2.83	5.54	2.75	3.43	5.84	3.75	3.75	2.70	2.34	3.02	1.43
IN.	4.49	3.16	6.39	3.17	3.58	6.74	4.18	4.33	3.01	2.70	3.48	1.60

CAL YR 1972 TOTAL 13,813.0 MEAN 37.7 MAX 306 MIN 8.4 CFSM 3.70 IN 50.38
WTR YR 1973 TOTAL 12,841.5 MEAN 35.2 MAX 559 MIN 7.8 CFSM 3.45 IN 46.83

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-01	2310	2.03	254	07-26	2025	2.52	472
03-16	1840	4.11	1,720	08-10	2010	2.56	493
06-16	1240	2.62	525				

03461500 Pigeon River at Newport, Tenn.

LOCATION.--Lat 35°57'38", long 83°10'28", Cocke County, on left bank 100 ft (30 m) upstream from bridge on U. S. Highway 25 and 70 at Newport, 0.6 mile (1.0 km) downstream from Morell Branch, and at mile 6.8 (10.9 km).

DRAINAGE AREA.--666 sq mi (1,725 sq km).

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 (316.614 m) above mean sea level. Prior to Oct. 1, 1929, nonrecording gage at present site at datum 2.00 ft (0.610 m) higher. May 8, 1945, to July 22, 1946, water-stage recorder at site 4.8 miles (7.7 km) downstream at datum 35.85 ft (10.927 m) lower. August 13, 1948, to Sept. 30, 1970, at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--56 years, 1,239 cfs (35.09 cu m/s).

EXTREMES.--Current year: Maximum discharge, 48,700 cfs (1,380 cu m/s) Mar. 17, gage height, 20.05 ft (6.111 m); minimum, 90 cfs (2.55 cu m/s) Sept. 27, gage height, 2.00 ft (0.610 m); minimum daily, 105 cfs (2.97 cu m/s) Sept. 3.
Period of record: Maximum discharge, 50,000 cfs (1,420 cu m/s) Feb. 28, 1902, gage height, 23.4 ft (7.13 m), present datum, from report of Tennessee Valley Authority; minimum, 38 cfs (1.08 cu m/s) Oct. 5, 1952, Sept. 13, 1954; minimum daily, 48 cfs (1.36 cu m/s) Sept. 21, 28, 1953; minimum gage height, 1.68 ft (0.512 m), present datum, Sept. 13, 1954.
Floods of Mar. 7, 1867, and June 17, 1876, reached a stage of 23 ft (7.0 m), present datum, discharge, 48,000 cfs (1,360 cu m/s), and flood of Aug. 30, 1940, reached a stage of 19.3 ft (5.88 m), present datum, discharge, 36,000 cfs (1,020 cu m/s), from report of Tennessee Valley Authority.

REMARKS.--Records excellent, except those for period of no gage height record, which are good. Considerable regulation by Lakes Junaluska, Logan, and Walters for periods of low flow, combined usable capacity of reservoirs about 12,500 cfs-days (30.59 cu hm). The largest of these, Lake Walters, usable capacity, 10,400 cfs-days (25.45 cu hm), was completed in 1929. Mill dam 1.3 miles (2.1 km) downstream was removed in 1945. Maximum stages for floods prior to 1945 as listed in EXTREMES paragraph would be about 1.9 ft (0.58 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	948	1,140	1,190	1,670	1,760	809	2,460	2,280	2,350	902	1,500	224
2	722	1,180	1,380	1,840	3,820	927	2,410	1,730	2,370	1,250	563	158
3	874	854	637	2,000	3,750	1,060	1,600	1,750	1,710	621	813	105
4	878	709	986	2,320	3,080	959	2,150	1,930	1,720	730	512	776
5	3,480	587	1,340	1,200	2,690	1,570	1,430	1,300	1,660	731	219	808
6	2,770	1,200	1,260	1,650	2,770	1,500	1,600	1,200	1,660	834	739	669
7	2,080	1,270	1,570	1,240	2,760	1,380	2,040	1,870	1,960	960	907	889
8	1,480	2,590	1,600	1,700	2,850	1,990	3,260	1,830	1,390	537	855	395
9	814	2,240	2,570	1,550	2,910	2,190	2,610	2,590	1,320	874	1,050	118
10	763	2,140	4,500	1,470	2,760	1,950	2,700	1,730	1,330	1,190	1,160	797
11	749	1,230	4,670	1,260	2,630	1,090	2,260	2,150	1,340	743	2,020	653
12	719	664	3,860	1,360	2,550	2,310	2,160	1,340	1,130	1,000	672	572
13	985	1,530	3,240	1,240	2,490	2,080	1,750	564	1,590	944	1,030	420
14	536	1,930	2,180	805	2,450	2,230	1,610	1,540	1,200	499	1,060	485
15	201	1,770	3,510	1,040	1,840	2,020	1,380	2,080	1,060	235	1,330	564
16	754	1,690	4,760	1,010	1,780	22,700	1,670	1,280	2,400	621	956	323
17	1,400	1,510	3,480	1,260	1,740	25,700	1,640	1,240	2,310	575	1,220	531
18	1,430	563	2,940	1,120	1,360	8,000	1,830	1,020	2,860	871	814	1,070
19	3,300	416	2,770	1,590	1,320	5,190	1,340	981	1,690	922	352	458
20	2,440	1,310	2,630	1,110	1,400	4,090	1,330	1,000	1,760	1,050	1,050	1,100
21	1,270	1,440	2,690	1,410	1,270	3,760	777	1,250	1,620	1,170	962	829
22	1,380	1,520	2,760	2,000	1,310	3,290	832	900	1,600	551	985	385
23	1,080	1,410	2,740	2,680	1,340	3,020	1,260	1,900	1,240	743	1,000	134
24	1,010	1,330	2,540	2,140	1,590	2,730	1,540	1,860	928	944	1,080	333
25	1,080	1,620	2,430	2,170	857	2,670	1,130	1,900	1,020	751	592	605
26	950	559	2,450	2,210	982	2,630	2,610	977	1,050	1,240	180	171
27	1,090	1,370	2,240	1,740	1,220	2,590	3,270	1,540	1,210	2,640	647	514
28	1,350	1,130	1,430	1,950	1,130	2,520	4,110	8,130	1,460	733	868	720
29	1,300	1,180	1,460	2,150	------	2,490	3,240	5,230	1,400	693	644	377
30	1,470	1,220	1,720	1,720	------	2,470	1,890	3,270	595	1,020	605	152
31	1,420	------	1,060	1,720	------	2,480	------	2,690	------	842	761	------
TOTAL	40,723	39,302	74,593	50,325	58,409	120,395	59,889	61,052	46,933	27,416	27,146	15,335
MEAN	1,314	1,310	2,406	1,623	2,086	3,884	1,996	1,969	1,564	884	876	511
MAX	3,480	2,590	4,760	2,680	3,820	25,700	4,110	8,130	2,860	2,640	2,020	1,100
MIN	201	416	637	805	857	809	777	564	595	235	180	105

CAL YR 1972 TOTAL 566,400 MEAN 1,548 MAX 12,400 MIN 89
WTR YR 1973 TOTAL 621,518 MEAN 1,703 MAX 25,700 MIN 105

PEAK DISCHARGE (BASE, 7,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-17	0100	20.05	48,700	05-28	1400	11.91	18,600

NOTE.--No gage height record Aug. 9 to Sept. 19.

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 (600 m) upstream from bridge on State Highway 81, 3 miles (5 km) northwest of Erwin, 5.2 miles (8.4 km)downstream from North Indian Creek, and at mile 89.0 (143.2 km).

DRAINAGE AREA.--805 sq mi (2,085 sq km).

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 (463.083 m) above mean sea level. Sept. 1, 1900, to May 21, 1901, non-recording gage at site 3 miles (5 km) 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 (600 m) downstream at datum 6.33 ft (1.929 m) lower.

AVERAGE DISCHARGE.--54 years (1919-73), 1,329 cfs (37.64 cu m/s), 22.42 in/yr (569 mm/yr).

EXTREMES.--Current year: Maximum discharge, 32,500 cfs (920 cu m/s) Mar. 17, gage height, 10.01 ft (3.051 m); minimum, 420 cfs (11.9 cu m/s) Oct. 4, gage height, 1.30 ft (0.396 m).
Period of record: Maximum discharge, 82,500 cfs (2,340 cu m/s) Aug. 13, 1940, gage height, 18.57 ft (5.660 m), from rating curve extended above 48,000 cfs (1,360 cu m/s) on basis of slope area measurement of peak flow; minimum, 85 cfs (2.41 cu m/s) Sept. 8, 9, 1925, gage height 1.60 ft (0.488 m), site and datum then in use.
Flood of May 21, 1901, reached a stage of 24 ft (7.3 m), discharge, 120,000 cfs (3,400 cu m/s), from reports of Tennessee Valley Authority.

REMARKS.--Records excellent.

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,080	751	1,140	1,280	1,560	943	2,870	2,840	2,200	1,170	884	511
2	664	716	1,050	1,140	6,520	913	2,470	2,430	1,950	1,260	948	505
3	492	786	976	1,130	4,830	957	2,220	2,320	1,790	1,090	1,110	495
4	441	780	935	1,430	3,190	1,150	2,110	2,460	1,760	1,050	1,300	502
5	3,370	726	897	1,500	2,560	1,410	2,030	2,040	1,620	1,190	1,230	497
6	2,520	682	907	1,300	2,440	1,720	1,810	1,870	1,690	1,050	1,150	489
7	1,190	669	1,200	1,220	2,820	1,440	2,060	1,760	2,190	935	917	459
8	834	1,720	1,020	1,240	2,620	1,790	3,710	1,850	1,830	873	838	443
9	683	1,570	1,370	1,160	2,680	2,090	2,960	2,620	1,660	905	866	559
10	593	1,100	3,090	1,040	2,330	1,850	2,640	2,040	1,510	910	1,070	1,130
11	539	923	4,160	995	1,980	1,840	2,310	2,750	1,500	1,080	1,840	734
12	517	822	3,550	927	1,800	2,670	2,080	2,550	1,520	938	1,140	564
13	516	750	2,670	844	1,660	2,180	1,900	2,150	1,590	783	1,040	500
14	511	1,490	2,100	862	1,620	1,850	1,750	1,910	1,390	749	909	593
15	491	1,890	3,910	984	1,880	1,920	1,640	1,740	1,530	827	1,060	1,070
16	462	1,300	5,040	943	1,640	18,400	1,550	1,590	3,090	931	911	723
17	493	1,100	2,960	900	1,390	22,800	1,690	1,520	2,750	818	767	585
18	673	975	2,230	949	1,290	7,390	2,010	1,440	2,600	748	857	550
19	1,090	937	1,910	1,460	1,370	5,130	1,910	1,350	1,910	728	1,020	600
20	1,240	1,710	1,720	2,070	1,300	3,980	1,920	1,350	1,600	760	803	554
21	857	1,540	1,650	1,630	1,220	3,780	1,730	1,300	1,490	798	847	496
22	721	1,240	2,480	2,270	1,150	3,550	1,630	1,190	1,740	755	774	476
23	666	1,100	2,410	2,830	1,100	3,140	1,570	1,320	1,420	772	700	476
24	657	974	2,080	2,020	1,060	2,780	1,530	2,070	1,230	1,010	662	460
25	639	927	1,830	1,660	1,030	2,540	1,600	2,400	1,120	1,170	636	1,970
26	603	1,290	1,660	1,470	1,010	2,660	2,580	2,100	1,030	1,430	625	1,440
27	581	1,370	1,510	1,920	1,010	2,550	7,500	2,200	1,020	1,300	605	755
28	883	1,130	1,370	1,960	1,000	2,240	7,540	10,400	1,450	966	580	679
29	1,410	1,040	1,250	2,150	------	2,120	4,550	6,010	2,180	887	554	652
30	911	1,030	1,170	1,890	------	2,310	3,400	3,530	1,460	778	533	686
31	797	------	1,240	1,680	------	2,470	------	2,660	------	714	521	------
TOTAL	27,124	33,038	61,485	44,854	56,060	112,563	77,270	75,760	51,820	29,375	27,697	20,153
MEAN	875	1,101	1,983	1,447	2,002	3,631	2,576	2,444	1,727	948	893	672
MAX	3,370	1,890	5,040	2,830	6,520	22,800	7,540	10,400	3,090	1,430	1,840	1,970
MIN	441	669	897	844	1,000	913	1,530	1,190	1,020	714	521	443
CFSM	1.09	1.37	2.46	1.80	2.49	4.51	3.20	3.04	2.15	1.18	1.11	.83
IN.	1.25	1.53	2.84	2.07	2.59	5.20	3.57	3.50	2.39	1.36	1.28	.93

CAL YR 1972 TOTAL 592,338 MEAN 1,618 MAX 22,000 MIN 355 CFSM 2.01 IN 27.37
WTR YR 1973 TOTAL 617,199 MEAN 1,691 MAX 22,800 MIN 441 CFSM 2.10 IN 28.52

PEAK DISCHARGE (BASE, 9,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-02	1300	5.75	11,900	04-27	1500	5.70	11,600
03-17	0200	10.01	32,500	05-28	1100	7.09	17,700

03466500 Nolichucky River below Nolichucky Dam, Tenn.

LOCATION.--Lat 36°03'59", long 82°52'18", Greene County, on right bank, 0.3 mile (0.5 km) downstream from State Highway 70, 0.3 mile (0.5 km) downstream from Nolichucky Dam, 2.2 miles (3.5 km) upstream from Cove Creek, 7.0 miles (11.3 km) south of Greeneville, and at mile 45.7 (73.5 km).

DRAINAGE AREA.--1,184 sq mi (3,067 sq km).

PERIOD OF RECORD.--October 1902 to September 1909, October 1918 to October 1925, October 1945 to September 1973 (discontinued). 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 (357.671 m) 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 (13.5 km) upstream at different datums.

AVERAGE DISCHARGE.--42 years, 1,833 cfs (51.91 cu m/s), 21.02 in/yr (534 mm/yr).

EXTREMES.--Current year: Maximum discharge, 39,400 cfs (1,120 cu m/s) Mar. 17, gage height, 18.15 ft (5.532 m); minimum, 30 cfs (0.85 cu m/s) Sept. 7, gage height, 1.09 ft (0.332 m), minimum daily, 607 cfs (17.2 cu m/s) Sept. 7, 25.
Period of record: Maximum discharge observed, 73,500 cfs (2,080 cu m/s) Jan. 23, 1906, gage height, 19.3 ft (5.88 m), site and datum then in use, from rating curve extended above 9,200 cfs (261 cu m/s); minimum, 19 cfs (0.54 cu m/s) Oct. 4, 1970; minimum daily, 20 cfs (0.57 cu m/s) Oct. 4, 1970; minimum gage height 0.84 ft (0.256 m) Sept. 20, 1956.
A flood in May 1901 reached a stage of about 38 ft (11.6 m) present site and datum, from profiles by the Tennessee Valley Authority.
Flood of Aug. 14, 1940 reached a discharge of 73,500 cfs (2,080 cu m/s) by computation of flow over dam.

REMARKS.--Records good. Low flow regulated by Davy Crockett Lake since 1945, controlled storage, 900 cfs-days (2.202 cu hm).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,810	1,060	1,370	1,870	2,150	1,370	3,360	4,170	3,310	1,740	1,400	704
2	1,290	999	1,410	1,790	3,390	1,310	3,310	3,570	2,860	1,510	1,460	681
3	919	1,010	1,310	1,730	7,710	1,300	3,060	3,350	2,570	1,520	1,270	659
4	770	1,070	1,250	1,880	4,710	1,360	2,900	3,700	2,570	1,360	1,350	644
5	3,180	1,020	1,200	2,050	3,560	1,480	2,820	3,180	2,260	1,400	1,430	655
6	5,300	949	1,170	1,980	3,190	1,830	2,600	2,770	2,120	1,500	1,460	639
7	2,630	922	1,230	1,840	3,740	1,870	2,460	2,570	2,410	1,310	1,540	607
8	1,650	1,310	1,390	1,800	3,710	1,780	3,670	2,420	2,530	1,200	1,320	635
9	1,280	2,330	1,450	1,780	3,750	2,240	4,250	2,900	2,280	1,150	1,130	616
10	1,080	1,840	5,290	1,660	3,410	2,250	3,630	3,110	2,090	1,160	1,380	823
11	959	1,480	8,240	1,540	2,950	2,150	3,250	3,260	1,930	1,220	2,110	1,100
12	890	1,300	5,950	1,470	2,570	2,430	2,860	3,770	1,930	1,310	2,170	952
13	883	1,170	4,650	1,360	2,360	2,920	2,650	3,170	1,920	1,150	1,570	725
14	849	1,220	3,650	1,290	2,210	2,350	2,450	2,750	1,930	1,040	1,380	687
15	818	2,130	3,850	1,370	2,320	2,260	2,260	2,480	1,750	1,170	1,250	779
16	779	1,890	8,030	1,490	2,430	17,800	2,150	2,270	2,950	1,180	1,320	1,100
17	766	1,530	5,500	1,400	2,100	34,500	2,070	2,160	3,790	1,210	1,180	872
18	810	1,360	3,790	1,380	1,850	15,300	2,280	2,090	3,450	1,060	1,040	762
19	1,210	1,260	3,120	1,550	1,750	8,360	2,420	1,970	2,910	992	1,120	711
20	1,780	1,360	2,780	2,370	1,820	6,180	2,340	1,890	2,280	969	1,200	739
21	1,590	1,980	2,630	2,460	1,750	5,610	2,310	1,870	2,010	982	1,060	703
22	1,210	1,670	3,060	2,100	1,660	5,790	2,100	1,770	1,950	1,000	1,050	652
23	1,060	1,470	3,790	3,320	1,580	4,790	1,990	1,740	2,050	984	977	633
24	1,000	1,340	3,260	2,910	1,530	4,200	1,930	2,290	1,750	1,070	906	626
25	979	1,240	2,890	2,370	1,470	3,760	1,940	3,260	1,560	1,270	857	607
26	934	1,240	2,610	2,080	1,430	3,810	3,580	2,940	1,440	1,410	821	1,680
27	887	1,590	2,420	2,050	1,580	3,610	7,970	3,030	1,370	1,590	793	1,660
28	905	1,500	2,200	2,580	1,430	3,230	11,400	7,080	1,430	1,420	792	928
29	1,380	1,360	2,010	2,510	------	2,960	7,000	11,900	2,000	1,180	754	790
30	1,450	1,300	1,880	2,740	------	2,920	5,120	5,710	2,260	1,100	732	904
31	1,150	------	1,800	2,340	------	2,980	------	4,070	------	1,000	706	------
TOTAL	42,198	41,900	95,180	61,060	74,110	154,700	102,130	103,210	67,660	38,157	37,528	24,273
MEAN	1,361	1,397	3,070	1,970	2,647	4,990	3,404	3,329	2,255	1,231	1,211	809
MAX	5,300	2,330	8,240	3,320	7,710	34,500	11,400	11,900	3,790	1,740	2,170	1,680
MIN	766	922	1,170	1,290	1,430	1,300	1,930	1,740	1,370	969	706	607
CFSM	1.15	1.18	2.59	1.66	2.24	4.21	2.88	2.81	1.90	1.04	1.02	.68
IN.	1.33	1.32	2.99	1.92	2.33	4.86	3.21	3.24	2.13	1.20	1.18	.76

CAL YR 1972 TOTAL 812,225 MEAN 2,219 MAX 19,100 MIN 515 CFSM 1.87 IN 25.52
WTR YR 1973 TOTAL 842,106 MEAN 2,307 MAX 34,500 MIN 607 CFSM 1.95 IN 26.46

PEAK DISCHARGE (BASE, 11,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-17	1245	18.15	39,400	05-28	2230	11.44	18,200

NOTE.--No gage height record Mar. 29 to May 2.

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 (1.6 km) downstream from Douglas Dam, 1.7 miles (2.7 km) upstream from Millican Creek, 5.8 miles (9.3 km) north of Sevierville, and at mile 31.3 (50.4 km).

DRAINAGE AREA.--4,543 sq mi (11,766 sq km).

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 (263.865 m) above mean sea level. Oct. 1, 1918, to Oct. 7, 1923, nonrecording gage at Dandridge 13 miles (21 km) upstream at datum 37.67 ft (11.482 m) 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 (11.470 m) higher.

AVERAGE DISCHARGE.--55 years, 6,663 cfs (188.7 cu m/s), 19.92 in/yr (506 mm/yr) unadjusted.

EXTREMES.--Current year: Maximum discharge, 29,600 cfs (838 cu m/s) May 31, gage height, 11.64 ft (3.548 m); minimum, 29 cfs (0.82 cu m/s) Mar. 7, gage height, 1.58 ft (0.482 m), minimum daily, 55 cfs (1.56 cu m/s) Apr. 26.
Period of record: Maximum discharge, 95,600 cfs (2,707 cu m/s) Aug. 31, 1940, gage height, 20.93 ft (6.379 m) site and datum then in use; minimum, 4.7 cfs (0.13 cu m/s) Mar. 10, 1943, gage height, 1.16 ft (0.354 m), minimum daily, 5.5 cfs (0.16 cu m/s) Mar. 9, 10, 1943.
Maximum discharge since closure of Douglas Dam on Feb. 19, 1943, 33,800 cfs (957 cu m/s) Dec. 23, 1961, gage height, 12.45 ft (3.795 m).
At the Dandridge site, a flood in March 1867 reached a stage of 25.2 ft (7.68 m); a flood in February 1875 reached practically the same stage; and a flood in 1901 reached a stage of about 22 ft (6.7 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,880	12,100	10,700	17,600	9,200	4,900	18,000	14,300	25,300	2,500	9,200	14,000
2	6,860	12,500	10,500	17,300	9,620	4,200	18,000	14,800	22,700	8,640	5,400	9,160
3	6,170	13,000	10,200	17,600	13,000	2,140	18,000	15,600	20,400	8,640	4,750	8,810
4	5,550	9,620	11,300	17,400	13,400	1,880	16,800	15,600	18,000	5,630	7,070	13,100
5	2,390	3,340	10,400	17,100	11,400	3,800	16,100	14,100	15,700	5,800	4,830	11,100
6	5,050	9,690	11,200	16,100	13,600	1,910	12,600	13,600	11,500	6,830	10,800	9,790
7	1,950	9,790	11,500	11,800	16,100	1,840	7,400	11,400	12,200	7,520	10,900	8,390
8	2,290	10,400	10,500	12,600	16,600	2,330	10,000	6,830	12,600	198	12,600	8,670
9	10,400	9,620	2,980	10,500	16,600	2,170	12,500	6,860	10,200	8,030	12,600	7,850
10	10,500	355	2,210	11,300	16,600	3,800	11,900	10,600	9,580	6,710	12,200	10,700
11	11,000	3,080	93	8,510	15,100	6,770	12,200	10,500	10,900	7,580	8,390	10,900
12	11,900	2,040	10,700	7,130	15,000	5,000	8,990	8,920	9,370	7,520	4,400	10,500
13	10,000	9,000	16,800	8,000	15,400	5,550	4,880	5,100	9,020	7,460	11,300	6,800
14	7,820	9,900	17,200	3,860	15,600	6,230	2,800	7,340	8,950	5,900	10,500	7,160
15	2,760	10,400	17,600	5,000	12,400	6,320	1,070	7,760	8,090	1,310	9,550	5,230
16	11,300	13,000	17,900	6,410	10,300	5,880	6,170	6,530	8,150	7,880	11,800	2,960
17	11,300	13,200	18,100	5,960	5,700	4,330	5,700	6,410	7,220	7,520	10,200	8,710
18	8,780	8,420	18,200	5,450	5,780	8,090	5,580	7,130	10,500	7,550	9,340	6,820
19	2,900	5,000	18,300	4,450	5,080	17,300	5,300	5,960	10,700	7,970	5,850	7,720
20	4,150	11,900	18,200	4,780	5,750	17,400	5,080	3,240	10,300	9,270	11,600	7,080
21	536	13,000	18,100	3,420	5,700	17,600	2,880	6,140	11,000	9,200	13,100	8,330
22	1,590	12,900	18,100	3,540	8,240	17,700	2,190	5,900	11,200	2,220	12,600	8,540
23	1,470	10,800	18,100	10,200	5,780	17,700	5,900	6,320	8,150	9,200	13,100	4,050
24	8,990	10,000	18,000	11,200	3,950	17,600	3,700	5,250	5,900	10,500	12,700	7,880
25	11,200	11,100	18,000	12,500	3,320	17,500	321	6,320	7,100	9,860	10,900	7,520
26	10,100	13,600	18,300	13,800	6,020	20,500	55	4,550	7,340	5,500	8,670	7,760
27	10,500	14,600	18,600	14,500	7,940	24,000	1,430	4,700	6,890	4,850	12,300	8,210
28	11,000	15,000	18,400	14,600	6,020	23,900	4,150	11,400	7,970	6,650	12,500	7,310
29	9,480	13,000	18,200	14,800	------	23,500	13,300	26,300	6,830	112	13,300	5,080
30	12,400	11,600	18,100	11,000	------	22,200	14,200	28,800	5,100	8,480	15,700	2,920
31	11,500	------	17,800	9,230	------	20,000	------	28,200	------	9,440	16,100	------
TOTAL	224,716	301,955	444,283	327,640	289,200	334,040	247,196	326,460	328,860	206,470	324,250	243,050
MEAN	7,249	10,070	14,330	10,570	10,330	10,780	8,240	10,530	10,960	6,660	10,460	8,102
MAX	12,400	15,000	18,600	17,600	16,600	24,000	18,000	28,800	25,300	10,500	16,100	14,000
MIN	536	355	93	3,420	3,320	1,840	55	3,240	5,100	112	4,400	2,920
(†)	-15,800	-107,700	-19,800	-50,500	+40,300	+314,900	+139,000	+93,600	-73,700	-40,500	-166,900	-149,200
MEAN‡	6,739	6,475	13,690	8,940	11,770	20,930	12,870	13,550	8,505	5,354	5,076	3,128
CFSM‡	1.48	1.43	3.01	1.97	2.59	4.61	2.83	2.98	1.87	1.18	1.12	.69
IN.‡	1.71	1.59	3.47	2.27	2.70	5.31	3.16	3.44	2.09	1.36	1.29	.77

CAL YR 1972 TOTAL 3,092,954 MEAN 8,451 MAX 18,600 MIN 41 MEAN‡ 8,633 CFSM‡ 1.90 IN.‡ 25.87
WTR YR 1973 TOTAL 3,598,120 MEAN 9,858 MAX 28,800 MIN 55 MEAN‡ 9,758 CFSM‡ 2.15 IN.‡ 29.16

† 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 (0.3 km) downstream from West Prong Little Pigeon River, 0.6 mile (1.0 km) north of intersection of U. S. Highway 441 and State Highway 66 in Sevierville, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--353 sq mi (914 sq km).

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 (268.056 m) above mean sea level. Nov. 23, 1920, to June 13, 1928, non-recording gage, and June 14, 1928, to June 1, 1966, water-stage recorder, at site 0.1 mile (0.2 km) upstream at datum 1.99 ft (0.607 m) higher. June 2, 1966, to June 5, 1967, at site 1.5 miles (2.4 km) downstream at datum 7.31 ft (2.228 m) lower.

AVERAGE DISCHARGE.--53 years, 566 cfs (16.03 cu m/s), 21.77 in/yr (553 mm/yr).

EXTREMES.--Current year: Maximum discharge, 38,200 cfs (1,080 cu m/s) Mar. 16, gage height, 13.88 ft (4.231 m); minimum, 96 cfs (2.72 cu m/s) Sept. 8, 9, gage height, 1.22 ft (0.372 m).

Period of record: Maximum discharge, 41,000 cfs (1,160 cu m/s) Mar. 26, 1965, gage height, 16.09 ft (4.904 m), site and datum then in use; minimum, 2.8 cfs (0.079 cu m/s) Sept. 21, 1925; minimum gage height, 0.08 ft (0.024 m) Dec. 23, 1965, site and datum then in use; minimum daily discharge, 8.4 cfs (0.24 cu m/s) Sept. 9, 1925.

Flood of Feb. 25, 1875, reached a stage of 18 ft (5.5 m), 55,000 cfs (1,560 cu m/s); that of Apr. 1, 1896, 16.8 ft (5.12 m), 46,000 cfs (1,300 cu m/s); and that of Mar. 7, 1867, 16.5 ft (5.03 m), 43,000 cfs (1,220 cu m/s), all at site 0.1 mile (0.2 km) upstream, from reports of Tennessee Valley Authority.

REMARKS.--Records good. Some regulation at low flow caused by small mills above station prior to 1967. During the period April 1966 to July 1967, Tennessee Valley Authority constructed a flood-control project for town of Sevierville, widening and deepening Little Pigeon River through the town and 1.8 miles (2.9 km) downstream, and relocating the lower portion of West Prong Little Pigeon River. 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), WRD Tenn. 1972: 1969(M), 1970(M), 1971(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,570	426	660	586	698	340	757	1,040	618	318	1,370	130
2	779	399	578	527	2,670	334	655	846	536	290	812	116
3	536	449	519	739	1,300	502	592	914	498	258	510	109
4	479	406	479	1,060	914	519	694	790	544	237	396	108
5	4,630	365	464	801	779	578	635	650	418	248	327	134
6	1,760	340	623	759	1,090	527	556	578	442	218	283	117
7	986	385	698	678	1,060	494	1,410	536	485	200	249	106
8	708	986	527	698	1,850	536	2,010	938	407	217	275	103
9	544	698	4,680	632	2,000	473	1,290	1,090	455	254	241	272
10	449	561	7,250	578	1,250	422	1,010	759	358	330	2,280	950
11	378	487	5,670	544	938	514	792	1,460	324	399	2,690	298
12	346	426	3,340	494	790	871	689	974	322	245	825	209
13	399	392	1,940	464	688	544	615	749	479	204	566	200
14	385	586	1,430	472	718	466	545	623	427	195	450	449
15	321	544	3,850	561	868	960	500	544	364	299	450	529
16	292	456	3,010	586	708	24,300	473	487	1,900	299	352	315
17	632	426	1,660	552	604	15,100	470	472	1,980	264	304	268
18	790	392	1,210	527	569	3,610	492	434	938	283	295	349
19	5,460	441	986	879	536	2,020	569	399	622	390	261	284
20	2,310	879	890	835	510	1,570	562	419	503	323	257	219
21	1,180	586	1,210	698	479	1,960	462	372	645	263	294	185
22	835	510	1,730	1,300	449	1,770	412	340	661	226	229	167
23	678	456	1,390	1,100	426	1,360	388	412	470	386	211	168
24	595	419	1,140	846	406	1,110	370	1,250	391	468	193	149
25	527	412	1,040	698	378	995	508	902	345	574	180	136
26	472	632	926	632	372	945	1,460	1,250	310	808	168	125
27	426	510	846	708	372	855	5,760	1,460	298	914	157	116
28	812	487	759	669	358	762	4,080	4,520	592	553	149	115
29	632	544	688	1,200	------	721	1,950	1,850	542	409	140	123
30	527	586	632	938	------	693	1,310	1,020	373	328	137	183
31	472	------	604	779	------	765	------	750	------	305	145	------
TOTAL	30,910	15,186	51,429	22,540	23,780	66,616	32,016	28,828	17,247	10,705	15,196	6,732
MEAN	997	506	1,659	727	849	2,149	1,067	930	575	345	490	224
MAX	5,460	986	7,250	1,300	2,670	24,300	5,760	4,520	1,980	914	2,690	950
MIN	292	340	464	464	358	334	370	340	298	195	137	103
CFSM	2.82	1.43	4.70	2.06	2.41	6.09	3.02	2.63	1.63	.98	1.39	.63
IN.	3.26	1.60	5.42	2.38	2.51	7.02	3.37	3.04	1.82	1.13	1.60	.71

CAL YR 1972 TOTAL 119,093 MEAN 325 MAX 7,250 MIN 134 CFSM .92 IN 12.55
WTR YR 1973 TOTAL 321,185 MEAN 880 MAX 24,300 MIN 103 CFSM 2.49 IN 33.85

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-19	1230	5.70	7,830	03-16	2330	13.88	38,200
12-10	2100	6.81	10,500	08-10	2300	5.51	7,370

03470500 French Broad River near Knoxville, Tenn.

LOCATION.--Lat 35°57'30", long 83°46'26", Knox County, on left bank, 0.7 mile (1.1 km) downstream from Johnson Hollow, 7.5 miles (12.1 km) upstream from confluence with Holston River, and 8 miles (13 km) east of Knoxville.

DRAINAGE AREA.--5,101 sq mi (13,212 sq km).

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 (60 m) upstream on right bank at same datum.

AVERAGE DISCHARGE.--28 years, 7,691 cfs (217.8 cu m/s), 20.47 in/yr (520 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 54,000 cfs (1,530 cu m/s) Mar. 16, elevation, 830.15 ft (253.030 m), minimum, 459 cfs (13.0 cu m/s) July 9, elevation, 814.58 ft (248.284 m); minimum daily, 989 cfs (28.0 cu m/s) Mar. 7.
Period of record: Maximum discharge, 64,300 cfs (1,820 cu m/s) Mar. 12, 1963, elevation, 832.20 ft (253.655 m), from rating curve extended above 36,000 cfs (1,020 cu m/s); minimum, 67 cfs (1.90 cu m/s) Oct. 25, 1953, elevation, 813.38 ft (247.918 m) minimum daily, 68 cfs (1.93 cu m/s) Oct. 23-26, 1953.
Flood in March 1867 reached a stage of 855.0 ft (260.60 m), from floodmarks, estimated discharge, 160,000 cfs (4,530 cu m/s), from investigations by Tennessee Valley Authority.

REMARKS.--Records excellent. Flow regulated by Douglas Lake (see sta. 03468500), 24.6 miles (39.6 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,690	11,800	11,400	18,700	9,410	4,960	19,000	15,600	28,300	3,660	12,600	14,500
2	5,590	12,900	11,400	18,200	12,700	4,790	18,800	15,800	25,100	7,400	8,800	9,830
3	6,820	13,600	11,800	19,100	14,600	2,340	18,800	17,400	22,500	9,130	6,440	9,120
4	6,010	10,800	11,300	19,400	14,700	3,680	18,500	17,100	19,600	6,840	6,120	13,100
5	8,560	5,830	11,500	18,700	13,100	2,970	17,000	15,400	17,400	5,790	6,600	11,500
6	6,420	8,240	10,800	17,500	14,300	4,460	13,900	14,200	12,000	6,960	9,970	10,300
7	4,890	9,820	13,000	12,900	17,400	989	10,300	12,600	12,500	7,600	11,300	8,810
8	2,380	11,200	11,800	13,800	19,200	3,670	12,600	8,180	13,900	3,960	12,700	8,460
9	8,460	10,800	10,400	12,200	19,900	2,440	13,600	9,590	10,700	4,970	12,900	8,680
10	11,800	4,080	13,600	11,600	18,500	4,240	13,700	11,200	10,900	6,960	14,300	11,400
11	11,400	1,840	10,600	11,500	16,900	6,060	13,100	13,100	11,000	8,030	12,600	10,900
12	11,400	3,650	14,000	7,520	16,100	8,060	12,100	10,900	10,200	7,900	6,420	10,700
13	11,400	6,980	18,300	8,050	16,300	6,090	6,570	6,950	9,620	7,820	10,300	8,440
14	7,980	10,300	19,700	6,520	16,700	7,020	4,600	7,710	9,660	6,920	11,100	6,500
15	4,440	11,000	23,100	6,750	13,900	8,160	2,510	8,480	8,830	4,050	10,700	6,810
16	9,560	13,800	23,100	4,660	12,100	34,600	4,280	7,590	10,400	4,620	11,900	3,970
17	12,200	13,300	20,800	8,500	8,700	33,000	6,110	7,060	9,580	8,070	10,600	6,480
18	11,500	10,900	20,200	6,280	5,770	10,500	7,460	7,880	11,300	8,400	10,100	9,080
19	9,720	5,830	19,900	6,050	5,500	20,100	5,910	6,640	12,100	8,140	7,500	6,130
20	10,000	10,900	19,700	6,850	6,900	19,700	5,380	4,260	10,700	10,200	10,300	8,290
21	2,310	14,200	20,100	4,980	6,680	20,400	4,590	5,930	11,400	8,540	13,500	7,480
22	2,280	13,400	21,100	4,920	9,320	20,400	3,020	6,850	12,300	5,700	13,100	9,040
23	1,800	11,500	20,500	10,500	6,120	19,700	4,660	6,410	9,520	6,910	13,600	6,870
24	7,410	10,800	19,900	12,200	5,240	19,200	5,630	6,430	6,690	10,700	13,100	5,460
25	11,500	11,500	19,700	13,300	3,570	18,900	3,140	8,250	7,680	10,700	11,200	8,010
26	11,700	13,800	19,700	14,700	6,080	20,500	1,590	5,840	7,130	8,800	9,300	7,980
27	11,100	15,200	20,100	15,400	7,110	25,400	7,610	7,030	7,530	4,700	12,300	8,090
28	10,900	16,000	19,800	15,600	9,990	25,200	10,500	16,300	8,430	8,530	12,800	8,060
29	10,000	13,700	19,400	16,300	------	24,800	11,200	29,400	8,220	2,770	13,600	7,530
30	12,700	12,400	19,200	13,300	------	23,500	17,500	32,500	6,130	4,500	16,100	2,590
31	13,100	------	18,900	10,500	------	21,900	------	32,300	------	9,670	16,700	------
TOTAL	262,020	320,070	524,800	366,480	326,790	427,729	293,660	374,880	361,320	218,940	348,550	254,110
MEAN	8,452	10,670	16,930	11,820	11,670	13,800	9,789	12,090	12,040	7,063	11,240	8,470
MAX	13,100	16,000	23,100	19,400	19,900	34,600	19,000	32,500	28,300	10,700	16,700	14,500
MIN	1,800	1,840	10,400	4,660	3,570	989	1,590	4,260	6,130	2,770	6,120	2,590
(†)	-15,800	-107,700	-19,800	-50,500	+40,300	+314,900	+139,000	+93,600	-73,700	-40,500	-166,900	-149,200
MEAN‡	7,943	7,079	16,290	10,190	13,110	23,960	14,420	15,110	9,587	5,756	5,860	3,497
CFSM‡	1.56	1.39	3.19	2.00	2.57	4.70	2.83	2.96	1.88	1.13	1.15	.69
IN.‡	1.80	1.55	3.68	2.30	2.68	5.41	3.15	3.42	2.10	1.30	1.32	.76

CAL YR 1972 TOTAL 3,537,240 MEAN 9,665 MAX 23,100 MIN 1,730 MEAN‡ 9,847 CFSM‡ 1.93 IN.‡ 26.28
WTR YR 1973 TOTAL 4,079,349 MEAN 11,180 MAX 34,600 MIN 989 MEAN‡ 11,080 CFSM‡ 2.17 IN.‡ 29.48

† 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 (600 m) downstream from South Holston Dam powerhouse, 1.0 mile (1.6 km) upstream from bridge at Bristol waterworks and from Thomas Creek, 6.7 miles (10.8 km) southeast of Bristol, and at mile 49.4 (79.5 km).

DRAINAGE AREA.--703 sq mi (1,821 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 1,450.00 ft (441.960 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 938 cfs (26.56 cu m/s), 18.12 in/yr (460 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,430 cfs (97.1 cu m/s) June 11, gage height, 37.46 ft (11.418 m); minimum, 5.2 cfs (0.15 cu m/s) July 9, gage height, 32.41 ft (9.879 m); minimum daily, 5.7 cfs (0.16 cu m/s) Mar. 2.
Period of record: Maximum discharge, 8,270 cfs (234 cu m/s) Feb. 12, 1957, gage height, 40.45 ft (12.329 m); no flow for part of day Oct. 27, 1954; minimum daily, 0.50 cfs (0.014 cu m/s) Oct. 26, 1954.

REMARKS.--Records excellent. Flow completely regulated by South Holston Lake (see sta. 03476000). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	1,490	1,780	3,150	664	644	8.7	2,790	2,900	8.4	1,640	1,860
2	1,520	1,500	1,910	3,150	496	5.7	1,430	2,260	2,900	1,660	1,410	1,100
3	1,540	1,690	11	3,160	1,270	6.0	1,240	2,130	1,560	1,430	397	1,120
4	1,570	986	1,860	3,170	1,140	7.0	1,490	2,150	1,610	37	906	1,350
5	671	7.1	1,870	3,170	1,550	965	1,480	2,340	1,420	835	9.0	1,260
6	1,480	1,500	1,910	2,920	1,550	6.5	1,110	2,300	1,660	957	1,300	1,050
7	1,580	1,610	2,080	3,140	1,480	6.0	549	2,290	1,340	1,410	1,190	1,480
8	1,540	1,900	1,880	3,140	1,490	6.4	8.0	2,580	1,780	9.7	1,450	2,520
9	1,600	2,500	1,740	3,180	2,720	36	1,400	2,450	2,910	1,340	1,370	1,620
10	1,690	1,770	745	3,190	3,090	22	2,100	2,300	2,900	1,390	1,540	1,920
11	1,760	1,470	1,450	3,190	1,880	34	2,310	2,340	2,230	1,270	1,170	2,130
12	1,800	941	1,950	3,180	2,220	35	1,310	1,770	1,470	1,290	20	1,650
13	2,420	1,430	2,900	3,180	1,560	6.6	773	1,710	666	1,430	1,230	889
14	1,700	1,720	2,810	2,670	1,640	70	1,240	2,370	214	1,060	1,500	635
15	445	1,770	2,820	2,820	1,110	6.9	157	2,350	215	122	1,540	707
16	1,820	1,870	2,850	1,520	1,010	289	1,470	1,770	217	1,410	1,510	611
17	2,380	2,180	2,820	814	1,500	209	1,110	1,770	219	1,200	1,490	1,470
18	2,430	1,900	2,810	866	914	13	1,240	1,840	176	1,500	1,490	978
19	2,450	2,260	2,820	542	1,140	7.2	1,160	1,650	555	1,450	439	1,330
20	2,440	1,800	2,830	819	1,280	14	12	987	226	1,530	1,430	1,040
21	1,600	2,510	2,830	7.5	1,290	356	37	1,780	228	1,390	1,320	1,510
22	8.0	2,520	2,830	631	2,120	89	7.6	1,780	229	1,050	1,320	1,280
23	2,340	2,490	2,810	828	590	1,580	1,270	1,780	229	1,350	1,340	126
24	2,450	2,490	2,810	946	149	1,190	1,110	1,680	229	1,160	1,370	1,440
25	2,440	2,030	2,810	950	5.9	1,030	778	1,720	105	1,480	1,460	1,320
26	2,420	1,740	2,500	1,080	1,220	655	1,430	1,570	1,850	1,420	1,460	1,200
27	2,500	1,980	3,100	897	1,690	665	1,340	1,720	1,760	1,350	1,570	1,480
28	1,870	1,700	3,100	7.6	1,330	943	1,260	1,450	1,790	1,240	2,590	1,460
29	1,040	1,870	3,130	1,380	------	1,650	2,290	1,580	1,770	73	3,060	1,360
30	1,630	2,000	3,160	1,640	------	1,460	2,620	2,900	1,180	1,340	3,010	10
31	1,480	------	3,160	846	------	787	------	2,900	------	1,470	2,520	------
TOTAL	53,024.0	53,624.1	74,086	60,184.1	38,098.9	12,794.3	33,740.3	63,007	36,538	34,662.1	44,051.0	37,906
MEAN	1,710	1,787	2,390	1,941	1,361	413	1,125	2,032	1,218	1,118	1,421	1,264
MAX	2,500	2,520	3,160	3,190	3,090	1,650	2,620	2,900	2,910	1,660	3,060	2,520
MIN	8.0	7.1	11	7.5	5.9	5.7	7.6	987	105	8.4	9.0	10
(†)	-8,800	-17,900	+15,800	-25,700	+4,800	+61,900	+13,800	-7,700	-7,200	-8,000	-22,400	-27,000
MEAN‡	1,427	1,191	2,900	1,112	1,532	2,409	1,585	1,784	978	860	698	364
CFSM‡	2.03	1.69	4.13	1.58	2.18	3.43	2.25	2.54	1.39	1.22	.99	.52
IN.‡	2.34	1.89	4.76	1.82	2.27	3.95	2.51	2.93	1.55	1.41	1.15	.58

CAL YR 1972 TOTAL 531,687.6 MEAN 1,453 MAX 3,160 MIN 5.1 MEAN‡ 1,588 CFSM‡ 2.26 IN.‡ 30.76
WTR YR 1973 TOTAL 541,715.8 MEAN 1,484 MAX 3,190 MIN 5.7 MEAN‡ 1,406 CFSM‡ 2.00 IN.‡ 27.16

† 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 (500 m) downstream from Wilbur Dam, 0.7 mile (1.1 km) downstream from Big Laurel Branch, 2.7 miles (4.3 km) downstream from Watauga Dam, 5 miles (8 km) east of Elizabethton, and at mile 33.6 (54.1 km).

DRAINAGE AREA.--471 sq mi (1,220 sq km).

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 (472.440 m) above mean sea level. May 11, 1903, to Dec. 31, 1908, non-recording gage at railroad bridge 2 miles (3 km) downstream at different datum.

AVERAGE DISCHARGE.--31 years, 714 cfs (20.22 cu m/s), 20.59 in/yr (523 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,580 cfs (101 cu m/s) Oct. 26, gage height, 35.91 ft (10.945 m); minimum, 11 cfs (0.31 cu m/s) Oct. 4, gage height, 31.04 ft (9.461 m); minimum daily, 12 cfs (0.34 cu m/s) Oct. 2, 3.

Period of record: Maximum discharge observed, 21,500 cfs (609 cu m/s) Jan. 22, 1906, gage height, 13.6 ft (4.15 m), site and datum then in use, from rating curve extended above 2,500 cfs (70.8 cu m/s); minimum, 2.3 cfs (0.065 cu m/s) July 11, 1953; minimum daily, 2.4 cfs (0.068 cu m/s) Aug. 14, 1949; minimum gage height at present site, 30.73 ft (9.367 m) July 11, 1953.

Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 6,750 cfs (191 cu m/s) Jan. 19, 1960, gage height, 38.10 ft (11.613 m).

Floods of Aug. 14, 1940, and May 21, 1901, reached stages of about 61 ft (18.6 m) and 58 ft (17.7 m), respectively, present site and datum, from reports of Tennessee Valley Authority.

REMARKS.--Records good. Flow completely regulated by Watauga Lake since Dec. 1, 1948 (see sta. 03483500). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	484	423	711	370	598	52	3,050	3,060	55	922	1,090
2	12	51	500	784	410	54	1,550	1,570	3,060	1,390	1,390	49
3	12	691	44	652	1,300	48	1,860	1,400	1,270	1,060	51	185
4	19	37	585	571	1,300	47	1,670	1,680	1,540	44	42	1,120
5	28	36	47	891	1,510	45	1,780	1,220	1,340	715	42	637
6	93	34	701	685	1,270	43	1,370	860	1,370	444	837	37
7	38	837	1,100	643	1,520	47	665	948	1,930	1,160	667	245
8	38	1,490	467	1,310	1,160	46	53	1,140	1,900	60	1,250	37
9	37	2,410	170	1,330	1,300	68	1,790	1,140	1,930	1,290	1,160	36
10	33	1,500	264	1,780	1,730	55	2,230	1,030	1,670	1,490	1,170	1,640
11	31	455	843	1,920	896	61	2,560	978	1,700	1,340	637	623
12	322	49	54	1,840	1,240	247	1,350	1,240	1,630	1,450	39	280
13	66	951	52	2,340	1,110	198	975	1,320	1,160	918	857	43
14	27	704	824	1,200	1,220	62	1,360	1,720	1,260	647	794	207
15	35	879	1,550	1,210	749	48	299	1,390	1,130	56	1,050	72
16	854	1,740	814	1,660	724	463	1,690	1,670	977	1,570	1,220	37
17	616	1,630	464	608	1,010	158	1,340	1,680	60	1,220	1,440	39
18	610	1,280	637	444	544	50	1,410	1,760	1,230	1,120	768	34
19	648	719	1,700	106	882	48	1,200	995	1,100	1,090	48	34
20	601	1,820	1,790	427	909	50	867	624	1,190	1,540	1,230	33
21	1,170	1,420	1,980	46	1,010	289	796	1,380	1,390	1,050	705	34
22	47	2,030	1,730	526	2,510	105	53	1,150	1,330	1,020	619	37
23	1,530	1,190	1,690	917	543	1,060	827	1,240	894	1,380	1,030	37
24	1,460	304	1,660	998	135	574	784	1,500	63	1,130	1,540	800
25	1,450	1,330	1,210	900	43	673	794	1,290	1,200	1,440	1,530	41
26	1,470	846	870	960	750	591	804	875	1,260	1,380	1,530	325
27	1,380	131	784	1,040	1,420	900	1,050	50	1,070	927	1,810	625
28	672	84	703	60	1,450	1,010	1,300	70	1,270	1,040	2,590	700
29	50	519	760	620	------	2,100	2,230	2,560	1,370	142	3,190	56
30	537	363	643	670	------	1,520	2,950	3,060	707	1,200	2,900	56
31	517	------	563	340	------	949	------	3,060	------	1,230	1,730	------
TOTAL	14,416	26,014	25,622	28,189	29,015	12,207	37,659	43,650	41,061	30,598	34,788	9,189
MEAN	465	867	827	909	1,036	394	1,255	1,408	1,369	987	1,122	306
MAX	1,530	2,410	1,980	2,340	2,510	2,100	2,950	3,060	3,060	1,570	3,190	1,640
MIN	12	34	44	46	43	43	52	50	60	44	39	33
(†)	+2,100	-7,900	+12,000	-3,700	+700	+47,500	+1,300	+1,800	-16,900	-16,900	-22,300	+600
MEAN‡	533	604	1,214	790	1,061	1,926	1,299	1,466	805	442	403	326
CFSM‡	1.13	1.28	2.58	1.68	2.25	4.09	2.76	3.11	1.71	.94	.86	.69
IN.‡	1.30	1.43	2.97	1.93	2.35	4.71	3.08	3.59	1.91	1.08	.99	.77

CAL YR 1972 TOTAL 300,840 MEAN 822 MAX 6,000 MIN 12 MEAN‡ 858 CFSM‡ 1.82 IN.‡ 24.79
WTR YR 1973 TOTAL 332,408 MEAN 911 MAX 3,190 MIN 12 MEAN‡ 906 CFSM‡ 1.92 IN.‡ 26.11

† 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 (500 m) upstream from bridge on State Highway 91 at Elizabethton, and 1.0 mile (1.6 km) upstream from mouth.

DRAINAGE AREA.--137 sq mi (355 sq km).

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 (464.738 m) above mean sea level. See WSP 1910 for history of changes prior to Feb. 1, 1934.

AVERAGE DISCHARGE.--58 years (1911-16, 1920-73), 220 cfs (6.230 cu m/s), 21.81 in/yr (554 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,640 cfs (160 cu m/s) Mar. 17, gage height, 6.20 ft (1.890 m); minimum, 76 cfs (2.15 cu m/s) Sept. 27, 28, 29, gage height, 0.69 ft (0.210 m).
Period of record: Maximum discharge, 7,940 cfs (225 cu m/s) Mar. 26, 1965, gage height, 7.35 ft (2.240 m); minimum, 17 cfs (0.48 cu m/s) Aug. 31, Sept. 7, 1925; minimum gage height, 0.18 ft (0.055 m) June 22, 1970 (result of construction upstream).
Flood of May 21, 1901 reached a stage of 10.5 ft (3.20 m), discharge, 25,000 cfs (708 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	116	199	212	246	164	346	452	338	221	172	90
2	156	112	182	199	843	160	315	387	298	218	172	86
3	120	142	174	210	640	166	291	426	278	190	166	82
4	110	129	172	233	456	165	302	382	275	193	147	91
5	890	121	167	212	385	218	286	334	238	256	134	91
6	392	112	186	208	435	195	251	310	242	196	163	82
7	249	121	208	197	473	187	330	290	401	178	134	82
8	191	322	192	202	499	247	404	318	290	161	126	84
9	156	262	296	191	494	232	375	318	253	152	136	131
10	135	214	914	177	424	212	354	286	242	169	382	200
11	120	186	1,070	165	349	228	315	572	231	221	631	117
12	114	165	665	144	311	298	292	452	212	155	258	99
13	114	152	494	140	286	248	265	378	267	139	201	92
14	107	296	394	159	290	234	243	326	218	131	179	241
15	100	250	642	182	293	292	228	298	238	155	213	212
16	96	216	661	163	261	3,250	215	275	322	286	166	145
17	107	194	465	158	223	3,300	253	278	326	231	150	120
18	114	174	368	164	216	1,280	242	256	306	166	253	119
19	193	173	318	293	221	805	233	238	242	155	191	117
20	162	249	296	291	214	603	220	238	215	150	192	103
21	134	196	291	251	204	643	206	225	221	158	200	96
22	126	189	355	376	195	578	195	208	245	136	178	93
23	119	178	334	357	190	497	194	271	205	129	161	89
24	119	164	310	295	184	428	196	483	184	152	144	87
25	112	167	298	255	178	385	210	521	169	175	132	89
26	110	233	278	238	180	378	379	473	161	231	123	82
27	105	202	262	300	178	374	1,340	499	163	249	114	77
28	139	193	238	265	171	322	1,200	1,290	364	184	109	77
29	131	183	224	305	------	326	757	864	397	181	103	83
30	121	194	216	253	------	347	561	549	263	150	98	143
31	119	------	229	245	------	359	------	406	------	136	94	------
TOTAL	5,221	5,605	11,098	7,040	9,039	17,121	10,998	12,603	7,804	5,604	5,622	3,300
MEAN	168	187	358	227	323	552	367	407	260	181	181	110
MAX	890	322	1,070	376	843	3,300	1,340	1,290	401	286	631	241
MIN	96	112	167	140	171	160	194	208	161	129	94	77
CFSM	1.23	1.37	2.61	1.66	2.36	4.03	2.68	2.97	1.90	1.32	1.32	.80
IN.	1.42	1.52	3.01	1.91	2.45	4.65	2.99	3.42	2.12	1.52	1.53	.90

CAL YR 1972 TOTAL 97,850 MEAN 267 MAX 1,820 MIN 59 CFSM 1.95 IN 26.57
WTR YR 1973 TOTAL 101,055 MEAN 277 MAX 3,300 MIN 77 CFSM 2.02 IN 27.44

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-17	0045	6.20	5,640	05-28	1115	3.48	1,750
04-27	1415	3.83	2,110				

03486000 Watauga River at Elizabethton, Tenn.

LOCATION.--Lat 36°21'21", long 82°13'26", Carter County, on left bank 25 ft (8 m) upstream from bridge on U. S. Highway 19E at Elizabethton, 0.6 mile (1.0 km) downstream from Doe River, and at mile 25.9 (41.7 km).

DRAINAGE AREA.--692 sq mi (1,792 sq km).

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 (453.003 m) above mean sea level. Feb. 21 to Oct. 4, 1926, nonrecording gage on former Southern Railway bridge 10 ft (3 m) upstream at same datum.

AVERAGE DISCHARGE.--43 years (1925-48, 1953-73), 1,062 cfs (30.08 cu m/s), 20.84 in/yr (529 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 10,200 cfs (289 cu m/s) Mar. 16, gage height, 9.41 ft (2.868 m); minimum, 136 cfs (3.85 cu m/s) Sept. 26, gage height, 2.06 ft (0.628 m); minimum daily, 146 cfs (4.13 cu m/s) Sept. 8, 23.
Period of record: Maximum discharge, 75,100 cfs (2,130 cu m/s) Aug. 14, 1940, gage height, 20.87 ft (6.361 m), from rating curve extended above 29,000 cfs (821 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 42 cfs (1.19 cu m/s) Sept. 20, 1932; minimum daily, 85 cfs (2.41 cu m/s) Dec. 3, 1953; minimum gage height, 1.54 ft (0.469 m) Sept. 20, 1932.
Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 14,500 cfs (411 cu m/s) Mar. 12, 1963, gage height, 10.70 ft (3.261 m).
Flood of May 21, 1901, reached a stage of about 21 ft (6.4 m), discharge, 76,000 cfs (2,150 cu m/s), from reports of Tennessee Valley Authority.

REMARKS.--Records good. Flow partly regulated by Watauga Lake 10.8 miles (17.4 km) upstream since Dec. 1, 1948 (see sta. 03483500). Low-flow regulated by Wilbur Lake 8.1 miles (13.0 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	581	700	1,050	682	891	659	3,620	3,580	354	1,390	1,340
2	265	310	928	1,200	1,450	281	1,860	2,210	3,500	1,420	1,470	267
3	204	827	356	1,030	2,140	277	2,350	1,980	1,790	1,400	498	153
4	191	296	804	909	2,120	273	2,100	2,140	2,020	416	241	1,300
5	1,660	220	372	1,230	2,280	326	2,230	1,710	1,680	946	221	770
6	877	210	715	1,090	1,910	296	1,720	1,280	1,670	836	840	150
7	492	961	1,680	1,010	2,320	287	1,300	1,400	2,390	1,270	986	336
8	366	1,800	746	1,570	2,200	372	630	1,560	2,340	418	1,310	146
9	296	2,960	666	1,640	2,150	366	2,060	1,560	2,350	1,300	1,240	185
10	251	2,070	2,970	2,010	2,470	360	2,850	1,420	2,050	1,590	1,620	1,650
11	223	709	3,250	2,240	1,460	376	2,930	1,810	2,060	1,660	1,450	802
12	424	410	1,400	2,100	1,730	671	1,850	1,830	1,930	1,580	425	505
13	337	988	1,010	2,550	1,570	575	1,360	1,740	1,690	1,340	1,070	183
14	195	1,190	1,550	1,400	1,670	410	1,690	2,250	1,540	810	1,010	430
15	191	1,360	2,510	1,500	1,170	458	820	1,720	1,530	292	1,110	345
16	878	2,060	2,090	1,900	1,130	5,850	1,730	2,020	1,390	1,700	1,360	202
17	803	2,120	1,530	1,050	1,620	5,630	1,720	1,990	545	1,600	1,610	178
18	792	1,710	1,180	660	956	2,000	1,830	2,170	1,440	1,330	1,300	188
19	972	1,020	2,300	543	1,310	1,380	1,540	1,360	1,470	1,440	314	181
20	990	1,960	2,300	907	1,300	1,070	1,180	929	1,470	1,580	1,190	162
21	1,310	1,850	2,470	465	1,170	1,340	1,070	1,590	1,610	1,440	1,010	152
22	387	2,330	2,410	899	2,990	1,160	386	1,460	1,600	1,050	809	151
23	1,560	1,470	2,310	1,420	1,170	1,910	923	1,640	1,340	1,560	1,180	146
24	1,740	848	2,240	1,350	435	1,260	1,150	2,280	373	1,310	1,670	865
25	1,570	1,490	1,730	1,290	308	1,210	1,070	2,180	1,220	1,590	1,680	163
26	1,800	1,090	1,390	1,340	855	1,320	1,360	1,780	1,470	1,750	1,660	255
27	1,550	668	1,340	1,390	1,680	1,490	3,320	1,030	1,290	1,290	1,940	689
28	899	344	1,130	600	2,040	1,430	3,110	2,610	1,690	1,320	2,650	808
29	268	689	1,060	855	------	2,670	3,260	3,840	1,880	342	3,290	194
30	654	745	1,030	1,200	------	1,990	3,700	3,950	1,180	1,210	3,040	254
31	737	------	731	861	------	1,660	------	3,690	------	1,360	1,870	------
TOTAL	23,339	35,286	46,898	39,259	44,286	39,589	53,758	62,749	52,088	37,504	41,454	13,150
MEAN	753	1,176	1,513	1,266	1,582	1,277	1,792	2,024	1,736	1,210	1,337	438
MAX	1,800	2,960	3,250	2,550	2,990	5,850	3,700	3,950	3,580	1,750	3,290	1,650
MIN	191	210	356	465	308	273	386	929	373	292	221	146
(†)	+2,100	-7,900	+12,000	-3,700	+700	+47,500	+1,300	+1,800	-16,900	-16,900	-22,300	+600
MEAN‡	821	913	1,900	1,147	1,607	2,809	1,835	2,082	1,173	665	618	458
CFSM‡	1.19	1.32	2.75	1.66	2.32	4.06	2.65	3.01	1.70	.96	.89	.66
IN.‡	1.37	1.47	3.17	1.91	2.42	4.68	2.96	3.47	1.89	1.11	1.03	.74

CAL YR 1972 TOTAL 470,518 MEAN 1,286 MAX 4,580 MIN 138 MEAN‡ 1,321 CFSM‡ 1.91 IN.‡ 25.99
WTR YR 1973 TOTAL 489,360 MEAN 1,341 MAX 5,850 MIN 146 MEAN‡ 1,336 CFSM‡ 1.93 IN.‡ 26.21

† 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 (300 m) downstream from bridge on State Highway 93 BP, at Kingsport, 1.2 miles (1.9 km) upstream from Reedy Creek, 4.5 miles (7.2 km) downstream from Fort Patrick Henry Dam, and at mile 3.7 (6.0 km).

DRAINAGE AREA.--1,935 sq mi (5,012 sq km).

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 (358.396 m) above mean sea level. Prior to Dec. 2, 1953, water-stage recorder at site 2 miles (3 km) upstream at datum 8.47 ft (2.582 m) higher. Since May 1, 1954, supplementary water-stage recorder on downstream side of bridge over sluice channel, 2,000 ft (600 m) south of main gage at datum 0.39 ft (0.119 m) lower.

AVERAGE DISCHARGE.--48 years, 2,553 cfs (72.30 cu m/s), 17.92 in/yr (455 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 11,100 cfs (314 cu m/s) Dec. 10; minimum daily, 730 cfs (20.7 cu m/s) Feb. 25.
Period of record: Maximum discharge, 68,800 cfs (1,950 cu m/s) Aug. 14, 1940, gage height, 18.80 ft (5.730 m), site and datum then in use; minimum, 210 cfs (5.95 cu m/s) Jan. 28, 1940, gage height, -0.20 ft (-0.061 m), site and datum then in use; minimum daily, 301 cfs (8.52 cu m/s) June 13, 1954.
Maximum discharge since closure of Fort Patrick Henry Dam on Oct. 27, 1953, 24,200 cfs (685 cu m/s) Mar. 12, 1963, gage height, 9.01 ft (2.746 m).

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. 131). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,920	3,020	3,170	5,640	2,180	2,250	828	6,500	8,320	1,560	3,840	4,900
2	3,010	2,760	5,740	4,760	1,780	765	3,800	7,530	7,980	3,030	5,670	1,860
3	2,470	2,830	1,980	4,980	3,720	952	3,180	4,910	5,180	3,590	5,340	1,120
4	3,400	2,080	3,180	5,060	3,490	747	4,780	5,320	3,390	2,190	778	4,580
5	5,400	956	2,720	5,100	3,500	1,160	4,990	5,930	4,270	1,870	777	3,140
6	5,850	1,880	3,380	5,240	4,560	756	4,040	5,400	5,200	1,310	2,200	1,230
7	3,630	4,090	3,980	4,860	3,950	775	2,650	4,520	4,680	3,320	1,980	1,930
8	3,600	5,480	4,340	5,100	5,330	756	844	5,390	4,420	743	3,630	1,820
9	3,470	6,950	3,240	5,960	5,710	855	5,970	5,210	6,420	3,530	2,870	2,020
10	3,200	4,700	7,370	6,030	6,440	815	8,860	5,360	6,390	3,580	2,700	3,100
11	5,000	3,940	8,510	7,150	4,610	876	6,220	5,070	5,090	2,700	2,980	4,740
12	3,370	3,000	9,750	7,020	3,980	865	2,600	4,590	5,320	2,840	820	3,600
13	4,080	3,000	9,630	8,100	4,080	766	757	5,010	4,050	2,920	3,310	2,670
14	4,170	3,470	7,590	5,250	4,490	785	2,200	5,030	2,660	2,440	3,020	944
15	862	4,710	8,670	3,030	4,490	867	1,200	4,100	2,220	765	3,590	1,750
16	3,930	6,230	8,210	4,440	3,400	6,830	3,050	4,980	1,950	3,970	4,680	1,270
17	3,140	4,830	8,760	3,240	4,520	9,710	3,880	3,930	1,530	3,690	4,540	1,070
18	2,950	5,610	7,730	2,510	1,540	9,170	4,060	3,440	1,730	4,240	3,420	1,440
19	3,330	4,870	7,080	794	2,430	5,560	3,190	4,370	2,570	4,470	965	2,020
20	3,700	6,300	6,150	2,560	3,130	3,600	2,340	3,150	2,240	4,900	4,060	1,690
21	2,850	4,570	6,620	756	2,820	2,980	777	3,500	1,920	3,170	2,360	3,850
22	1,430	7,260	8,530	1,290	7,600	5,020	766	3,920	1,870	1,990	2,370	2,030
23	2,850	5,770	9,320	3,720	1,770	5,370	3,970	4,590	1,570	3,900	2,520	950
24	4,380	4,550	8,050	3,710	851	4,270	2,520	3,910	1,040	3,140	4,850	1,030
25	5,590	4,590	6,400	3,410	730	4,490	2,470	6,500	1,610	3,420	4,070	1,920
26	5,150	3,270	5,360	2,800	747	4,340	3,780	5,350	3,820	2,810	5,510	2,530
27	4,620	2,870	4,880	3,230	1,210	3,590	6,100	3,450	3,090	2,670	6,650	2,540
28	3,470	3,150	7,070	1,660	5,000	3,530	9,100	7,400	3,190	2,020	5,740	2,420
29	1,900	3,610	5,450	2,560	------	5,200	4,500	8,990	2,510	984	4,480	2,590
30	2,520	4,480	4,770	2,830	------	4,610	6,500	8,940	2,600	2,430	3,820	1,120
31	3,290	------	6,100	2,480	------	3,970	------	8,930	------	3,230	3,440	------
TOTAL	110,532	124,826	193,730	125,270	98,058	96,230	109,922	165,220	108,830	87,422	106,980	67,874
MEAN	3,566	4,161	6,249	4,041	3,502	3,104	3,664	5,330	3,628	2,820	3,451	2,262
MAX	5,850	7,260	9,750	8,100	7,600	9,710	9,100	8,990	8,320	4,900	6,650	4,900
MIN	862	956	1,980	756	730	747	757	3,150	1,040	743	777	944

CAL YR 1972 TOTAL 1,350,129 MEAN 3,689 MAX 10,400 MIN 776 MEAN† 3,865 CFSM† 2.00 IN.† 27.19
WTR YR 1973 TOTAL 1,394,894 MEAN 3,822 MAX 9,750 MIN 730 MEAN† 3,736 CFSM† 1.93 IN.† 26.21

† Adjusted for change in contents in South Holston, Watauga, Boone, and Fort Patrick Henry Lakes, furnished by Tennessee Valley Authority.

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

Discharge, in cubic feet per second, in main channel only,
Water Year October 1972 to September 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,530	2,770	3,040	4,970	2,080	2,030	811	5,550	7,040	1,510	3,320	4,150
2	2,820	2,600	4,970	4,330	1,730	753	3,450	6,410	6,780	2,620	4,700	1,800
3	2,400	2,640	1,930	4,500	3,350	935	3,040	4,270	4,610	3,070	4,560	1,080
4	3,070	1,970	2,950	4,560	3,190	735	4,190	4,690	3,170	2,020	760	3,910
5	4,400	944	2,470	4,590	3,230	1,140	4,380	5,190	3,790	1,800	760	2,820
6	4,950	1,800	3,080	4,690	4,040	744	3,730	4,690	4,440	1,240	2,110	1,220
7	3,160	3,650	3,590	4,380	3,630	763	2,400	3,980	4,060	2,830	1,900	1,800
8	3,190	4,760	3,890	4,590	4,630	744	821	4,800	3,920	720	3,100	1,740
9	3,150	5,980	2,930	5,210	4,990	841	5,040	4,690	5,520	3,030	2,520	1,870
10	2,920	4,250	6,070	5,190	5,570	801	7,390	4,670	5,550	3,080	2,400	2,780
11	4,230	3,610	7,160	6,120	4,170	861	5,430	4,400	4,480	2,340	2,590	4,130
12	3,100	2,870	8,060	6,020	3,670	851	2,380	4,000	4,650	2,440	801	3,210
13	3,560	2,850	7,990	6,830	3,690	753	744	4,400	3,670	2,500	2,910	2,440
14	3,530	3,210	6,460	4,460	3,940	772	2,030	4,380	2,430	2,120	2,700	933
15	845	4,170	7,230	2,810	3,940	841	1,150	3,670	2,050	740	3,150	1,710
16	3,370	5,500	6,900	3,960	3,120	5,480	2,850	4,350	1,870	3,310	3,960	1,260
17	2,820	4,310	7,320	3,000	4,080	7,910	3,470	3,490	1,480	3,160	3,910	1,060
18	2,710	4,990	6,550	2,310	1,470	7,580	3,530	3,040	1,610	3,610	3,050	1,410
19	2,950	4,230	6,070	782	2,260	4,840	2,870	3,830	2,260	3,790	933	1,940
20	3,240	5,410	5,370	2,340	2,850	3,270	2,240	2,930	2,040	4,130	3,480	1,650
21	2,560	4,190	5,680	744	2,560	2,670	763	3,230	1,820	2,820	2,150	3,350
22	1,380	6,250	7,090	1,260	6,370	4,420	753	3,670	1,780	1,740	2,180	1,950
23	2,640	5,080	7,720	3,410	1,640	4,730	3,510	4,230	1,510	3,350	2,290	944
24	3,790	3,960	6,780	3,330	831	3,890	2,400	3,630	1,010	2,830	4,100	1,030
25	4,720	4,020	5,550	3,160	718	3,980	2,380	5,660	1,480	3,050	3,580	1,830
26	4,440	2,950	4,650	2,610	735	3,810	3,390	4,590	3,130	2,480	4,610	2,300
27	3,930	2,740	4,330	2,930	1,180	3,350	5,040	3,140	2,640	2,440	5,520	2,350
28	3,070	3,020	6,050	1,590	4,230	3,290	7,580	5,930	2,760	1,880	4,810	2,230
29	1,840	3,410	4,840	2,360	------	4,630	4,100	7,530	2,220	944	3,880	2,470
30	2,380	4,150	4,330	2,580	------	4,170	5,590	7,490	2,260	2,150	3,400	1,110
31	2,940	------	5,350	2,340	------	3,570	------	7,490	------	2,890	3,110	------
TOTAL	97,635	112,284	166,400	111,956	87,894	85,154	97,452	144,020	96,030	76,634	93,244	62,477
MEAN	3,150	3,743	5,368	3,611	3,139	2,747	3,248	4,646	3,201	2,472	3,008	2,083
MAX	4,950	6,250	8,060	6,830	6,370	7,910	7,580	7,530	7,040	4,130	5,520	4,150
MIN	845	944	1,930	744	718	735	744	2,930	1,010	720	760	933

CAL YR 1972 TOTAL 1,191,640 MEAN 3,256 MAX 8,330 MIN 76
WTR YR 1973 TOTAL 1,231,180 MEAN 3,373 MAX 8,060 MIN 718

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 (0.2 km) south of U. S. Highway 11W, 0.3 mile (0.5 km) north of Orebank, 1.0 mile (1.6 km) upstream from Gaines Branch, and 9.8 miles (15.8 km) upstream from mouth.

DRAINAGE AREA.--36.3 sq mi (94.0 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 1,232.61 ft (375.700 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 42.9 cfs (1.215 cu m/s),16.05 in/yr (408 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,480 cfs (70.2 cu m/s) Mar. 16, gage height, 7.27 ft (2.216 m) from dross line in well, from rating curve extended above 1,200 cfs (34.0 cu m/s) on basis of slope-area measurement of peak flow; minimum, 10 cfs (0.28 cu m/s) Sept. 26-29, gage height, 1.58 ft (0.482 m).

Period of record: Maximum discharge, 2,690 cfs (76.2 cu m/s), revised, July 31, 1971, gage height, 7.37 (2.246 m), from rating curve extended above 1,200 cfs (34.0 cu m/s) on basis of slope-area measurement at gage height 7.27 ft (2.216 m), discharge, 2,480 cfs (70.2 cu m/s); minimum, 3.0 cfs (0.085 cu m/s) Jan. 20, 1966, gage height, 1.30 ft (0.396 m).

Flood of May 30, 1927, reached a stage of 11.4 ft (3.47 m), discharge, about 11,000 cfs (312 cu m/s), 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)
WRD Tenn. 1971	1971	May 7, 1971	1,510	6.64
		July 31, 1971	2,690	7.37
WRD Tenn. 1972	1972	Apr. 12, 1972	1,860	6.91

REMARKS.--Records good. The Bloomingdale Utility District diverts an average of about 0.6 cfs (0.017 cu m/s) for water supply, 0.8 mile (1.3 km) above the gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	43	52	57	44	32	84	84	68	34	380	13
2	60	40	46	53	104	32	76	74	59	33	159	12
3	43	49	43	62	88	36	70	143	54	26	76	12
4	54	41	40	73	72	32	76	120	49	28	54	12
5	586	37	38	64	65	39	67	91	49	37	48	12
6	135	33	43	59	92	36	60	76	44	26	63	12
7	85	53	40	54	93	35	73	67	41	23	40	12
8	64	192	38	53	124	35	110	70	38	21	35	12
9	50	91	176	49	134	32	93	66	37	21	31	25
10	41	66	1,510	46	100	31	85	57	35	22	31	24
11	37	54	564	44	80	45	74	91	33	20	36	15
12	34	45	241	41	70	61	68	66	32	18	27	13
13	33	40	176	39	62	48	60	55	31	17	26	12
14	32	62	143	38	65	43	56	49	30	17	26	17
15	28	50	218	39	71	122	52	44	29	72	23	15
16	29	44	180	38	71	1,410	48	42	30	55	22	13
17	33	40	131	37	62	1,030	48	44	32	35	21	13
18	29	36	109	36	57	400	46	39	32	27	21	19
19	110	50	96	53	54	200	44	37	27	24	19	14
20	66	69	90	54	51	130	41	38	26	24	19	12
21	45	53	173	48	48	150	38	35	36	22	19	12
22	37	46	231	45	44	139	37	32	37	20	17	12
23	33	40	153	41	43	119	36	44	27	23	16	12
24	62	37	120	38	40	103	37	73	24	69	16	11
25	45	37	109	36	38	103	40	54	23	63	15	11
26	37	45	96	39	37	96	200	48	22	37	15	11
27	44	45	86	58	37	88	1,000	71	22	38	14	10
28	136	47	79	55	35	77	500	497	44	29	14	10
29	84	47	72	54	------	77	200	155	33	80	14	11
30	59	53	66	47	------	79	100	102	38	39	13	29
31	49	------	64	44	------	78	------	80	------	41	13	------
TOTAL	2,283	1,585	5,223	1,494	1,881	4,938	3,519	2,544	1,082	1,041	1,323	418
MEAN	73.6	52.8	168	48.2	67.2	159	117	82.1	36.1	33.6	42.7	13.9
MAX	586	192	1,510	73	134	1,410	1,000	497	68	80	380	29
MIN	28	33	38	36	35	31	36	32	22	17	13	10
CFSM	2.03	1.45	4.63	1.33	1.85	4.38	3.22	2.26	.99	.93	1.18	.38
IN.	2.34	1.62	5.35	1.53	1.93	5.06	3.61	2.61	1.11	1.07	1.36	.43

CAL YR 1972 TOTAL 25,948.6 MEAN 70.9 MAX 1,510 MIN 7.3 CFSM 1.95 IN 26.59
WTR YR 1973 TOTAL 27,331.0 MEAN 74.9 MAX 1,510 MIN 10 CFSM 2.06 IN 28.01

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-05	0930	6.28	1,120	04-27	Unknown	6.85**	1,770
12-10	1000	7.14	2,240	05-28	0730	5.68	730
03-16	0930	7.27*	2,480	08-01	1900	5.63	710

*Dross line in well
**Magnet on float tape.

03490500 Holston River at Surgoinsville, Tenn.

LOCATION.--Lat 36°28'19", long 82°50'50", Hawkins County, on right bank 1,500 ft (500 m) upstream from Surgoinsville Creek and county bridge at Surgoinsville, 9.8 miles (15.8 km) upstream from Big Creek, and at mile 118.7 (191.0 km). Records include flow of Surgoinsville Creek.

DRAINAGE AREA.--2,874 sq mi (7,444 sq km), 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 (331.763 m) above mean sea level.

AVERAGE DISCHARGE.--33 years (3,621 cfs (102.5 cu m/s), 17.11 in/yr (435 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 42,700 cfs (1,210 cu m/s) Mar. 17, gage height, 13.72 ft (4.182 m); minimum, 1,030 cfs (29.2 cu m/s), Sept. 4.
Period of record: Maximum discharge, 59,600 cfs (1,690 cu m/s) Feb. 18, 1944, gage height, 17.48 ft (5.328 m); minimum, 470 cfs (13.3 cu m/s), Oct. 21, 1941.
Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 59,300 cfs (1,680 cu m/s) Mar. 13, 1963, gage height, 17.13 ft (5.221 m).

REMARKS.--Records good. Flow partly regulated by four reservoirs (see p. 131).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15,400	4,240	4,670	7,860	3,280	3,260	4,500	8,770	10,700	3,490	5,130	3,950
2	7,140	4,000	5,800	6,220	3,970	1,560	4,020	9,870	9,800	2,490	9,060	4,070
3	4,190	4,020	4,320	6,360	9,060	1,800	5,590	7,490	7,830	4,760	8,840	1,970
4	3,930	3,910	3,320	6,600	7,990	1,680	5,730	7,860	4,040	3,850	3,900	2,330
5	9,380	2,330	4,310	6,800	6,360	1,910	7,130	8,240	4,970	3,100	1,690	4,890
6	14,300	2,250	3,770	6,650	6,340	1,980	6,280	7,490	5,590	2,850	1,760	2,570
7	8,410	3,330	5,030	7,100	7,130	2,000	3,730	6,340	6,740	2,720	2,700	1,660
8	6,290	6,320	5,140	6,190	7,550	1,980	4,630	7,460	5,100	3,780	3,400	2,020
9	5,720	9,760	5,690	6,770	9,900	1,910	5,900	6,570	5,870	2,110	3,490	1,840
10	4,650	6,630	23,200	7,160	10,200	1,970	12,000	5,870	7,250	4,270	3,420	2,620
11	4,840	4,940	37,000	8,140	7,220	1,970	9,580	7,740	6,540	3,990	3,490	4,190
12	5,970	4,920	22,600	8,170	6,600	2,280	6,420	6,130	5,340	3,240	3,330	4,440
13	4,480	3,350	15,600	9,450	4,990	2,150	2,990	6,310	5,240	3,870	1,820	3,470
14	4,480	3,860	13,000	8,080	6,160	1,890	2,920	6,080	3,590	3,190	3,850	2,770
15	4,020	5,460	12,000	3,640	6,480	2,350	3,590	5,020	3,440	2,970	4,040	1,560
16	3,160	7,280	13,800	4,420	5,590	20,000	2,970	5,850	2,920	3,700	4,140	1,560
17	3,590	6,240	13,500	5,290	6,680	40,800	4,830	4,910	2,680	6,390	5,400	1,510
18	4,330	6,020	12,300	3,660	4,020	26,700	5,100	5,320	2,530	5,790	4,700	1,360
19	4,870	5,410	9,350	2,090	3,240	13,900	5,070	3,900	2,940	5,370	3,100	1,760
20	5,800	7,190	8,870	3,310	4,520	7,990	3,700	4,760	3,280	5,850	1,680	2,350
21	4,750	7,140	9,090	2,590	3,220	7,550	2,490	3,970	3,130	5,540	4,240	2,150
22	3,270	6,990	13,700	2,130	8,870	8,460	1,640	4,700	3,220	3,350	2,530	3,970
23	2,460	7,720	15,300	3,800	3,990	8,680	2,660	5,050	2,970	3,800	2,880	2,260
24	5,250	6,630	13,200	5,340	1,950	7,250	4,520	5,130	2,470	4,910	3,920	1,140
25	6,680	4,120	9,610	4,340	1,680	6,710	3,350	7,130	1,800	4,140	5,180	1,280
26	7,110	4,670	8,770	3,970	1,590	7,550	4,140	8,940	2,790	3,510	4,760	2,130
27	5,620	3,890	8,050	4,240	1,570	5,290	11,200	6,190	4,890	3,990	7,710	2,740
28	5,910	3,740	8,580	3,310	6,130	5,210	20,000	12,600	4,240	3,330	5,870	2,740
29	4,870	4,610	8,140	3,240	------	6,540	12,100	19,200	4,020	2,880	5,430	2,740
30	4,450	5,160	6,650	5,020	------	6,740	9,190	14,300	3,350	1,760	4,240	2,880
31	4,870	------	6,830	3,660	------	5,700	------	11,600	------	3,630	4,090	------
TOTAL	180,190	156,130	331,190	165,600	156,280	215,760	177,970	230,790	139,270	118,620	129,790	76,920
MEAN	5,813	5,204	10,680	5,342	5,581	6,960	5,932	7,445	4,642	3,826	4,187	2,564
MAX	15,400	9,760	37,000	9,450	10,200	40,800	20,000	19,200	10,700	6,390	9,060	4,890
MIN	2,460	2,250	3,320	2,090	1,570	1,560	1,640	3,900	1,800	1,760	1,680	1,140

CAL YR 1972 TOTAL 2,041,816 MEAN 5,579 MAX 37,000 MIN 986 MEAN† 5,755 CFSM† 2.00 IN.† 27.26
WTR YR 1973 TOTAL 2,078,510 MEAN 5,695 MAX 40,800 MIN 1,140 MEAN† 5,609 CFSM† 1.95 IN.† 26.49

† Adjusted for change in contents in South Holston, Watauga, Boone, and Fort Patrick Henry Lakes, furnished by Tennessee Valley Authority.

03491000 Big Creek near Rogersville, Tenn.

LOCATION.--Lat 36°25'34", long 82°57'07", Hawkins County, on left bank 300 ft (90 m) upstream from county bridge, 3 miles (5 km) northeast of Rogersville, and 2.0 miles (3.2 km) upstream from mouth.

DRAINAGE AREA.--47.3 sq mi (122.5 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 1,128.9 ft (344.09 m) 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.--23 years (1941-48, 1957-73), 58.2 cfs (1.648 cu m/s), 16.71 in/yr (424 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,320 cfs (151 cu m/s) Dec. 10, gage height, 8.97 ft (2.734 m); minimum, 6.5 cfs (0.18 cu m/s) Sept. 27, 28, 29, gage height, 1.51 ft (0.460 m).
Period of record: Maximum discharge, 5,760 cfs (163 cu m/s) Mar. 12, 1963, gage height, 9.40 ft (2.865 m), from rating curve extended above 3,000 cfs (85.0 cu m/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 10.68 ft (3.255 m) Dec. 30, 1969, backwater from log jam; minimum discharge observed, 1.3 cfs (0.037 cu m/s) Sept. 23, 1955; minimum gage height, 1.32 ft (0.402 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	34	69	57	50	34	112	81	81	26	544	11
2	22	31	55	52	82	32	101	68	68	22	222	9.4
3	16	33	48	61	78	35	85	116	59	19	108	9.0
4	15	32	45	103	64	37	106	117	51	17	73	8.8
5	403	28	43	87	57	34	105	84	48	25	56	10
6	112	25	47	74	171	38	86	69	46	20	46	11
7	63	27	61	64	186	38	87	60	47	16	39	9.8
8	55	186	54	61	224	38	132	73	38	14	34	9.0
9	33	88	391	55	269	35	116	126	34	14	30	11
10	26	60	2,530	51	159	33	119	81	32	29	28	12
11	23	47	583	47	116	39	98	192	30	17	27	11
12	20	39	341	44	93	77	85	121	28	14	25	9.4
13	18	34	248	40	80	60	73	86	27	13	24	8.9
14	17	37	202	39	77	51	63	69	28	15	27	9.4
15	16	33	322	41	115	209	57	58	26	37	23	11
16	15	29	269	40	113	3,110	52	51	31	23	20	11
17	17	27	177	38	91	1,550	54	49	31	20	19	8.9
18	18	26	138	38	77	385	53	45	29	16	18	14
19	137	32	116	60	70	242	49	40	24	16	17	15
20	83	118	108	76	63	191	45	42	21	26	16	10
21	48	66	230	63	58	194	41	36	21	16	17	8.8
22	36	50	291	60	53	201	38	33	34	15	15	8.3
23	31	41	177	52	49	160	37	33	24	19	14	8.1
24	28	35	137	47	46	132	38	53	20	20	13	8.1
25	25	34	121	42	41	121	39	45	18	117	13	7.7
26	22	55	106	42	39	110	61	54	17	40	12	7.2
27	22	64	96	68	38	94	508	269	16	33	12	6.7
28	75	86	84	71	37	80	228	1,040	39	24	11	6.5
29	63	122	75	69	------	77	136	245	27	20	11	6.9
30	44	86	68	57	------	101	100	144	25	20	10	8.4
31	37	------	64	53	------	97	------	104	------	17	10	------
TOTAL	1,580	1,605	7,296	1,752	2,596	7,635	2,904	3,684	1,020	740	1,534	286.3
MEAN	51.0	53.5	235	56.5	92.7	246	96.8	119	34.0	23.9	49.5	9.54
MAX	403	186	2,530	103	269	3,110	508	1,040	81	117	544	15
MIN	15	25	43	38	37	32	37	33	16	13	10	6.5
CFSM	1.08	1.13	4.97	1.19	1.96	5.20	2.05	2.52	.72	.51	1.05	.20
IN.	1.24	1.26	5.74	1.38	2.04	6.00	2.28	2.90	.80	.58	1.21	.23

CAL YR 1972 TOTAL 33,745.4 MEAN 92.2 MAX 2,530 MIN 6.7 CFSM 1.95 IN 26.54
WTR YR 1973 TOTAL 32,632.3 MEAN 89.4 MAX 3,110 MIN 6.5 CFSM 1.89 IN 25.66

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1215	8.97	5,320	05-28	0530	5.23	1,690
03-16	2330	8.77	5,110				

03491300 Reech 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 (9.5 km) east of intersection of U. S. Highway 11W and Burem Road, 6.6 miles (10.6 km) upstream from mouth.

DRAINAGE AREA.--47.0 sq mi (121.7 sq km).

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 (337.667 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 49.3 cfs (1.396 cu m/s), 14.24 in/yr (362 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,990 cfs (84.7 cu m/s) Dec. 10, gage height, 12.70 ft (3.871 m), from magnet on float tape; minimum, 2.7 cfs (0.076 cu m/s) Sept. 3.
Period of record: Maximum discharge, 2,990 cfs (84.7 cu m/s) Dec. 10, 1972, gage height, 12.70 ft (3.871 m), from magnet on float tape; minimum, 1.1 cfs (0.031 cu m/s) Sept. 18, 1970.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	19	50	39	45	36	99	66	55	20	113	2.9
2	9.3	17	42	36	155	38	77	57	46	21	41	2.8
3	6.7	51	39	44	86	48	63	196	42	15	18	2.7
4	11	35	37	59	66	41	177	117	38	14	13	2.7
5	362	25	35	46	59	48	115	72	36	18	11	3.1
6	61	17	37	43	208	44	79	60	34	16	10	3.0
7	35	40	37	40	141	43	120	53	34	13	9.3	2.9
8	20	190	34	41	283	44	172	60	31	12	15	2.9
9	14	60	452	40	216	42	113	71	29	11	10	8.0
10	11	44	2,170	39	124	41	103	56	26	11	17	9.3
11	9.3	38	536	37	90	107	77	262	22	10	98	4.3
12	8.6	34	297	32	74	128	68	93	20	10	11	3.6
13	9.0	31	189	32	67	73	59	66	22	8.8	8.6	3.3
14	9.3	47	143	31	90	61	53	54	26	8.4	7.3	3.8
15	8.6	43	365	33	109	204	48	47	20	19	6.5	4.0
16	8.6	36	232	39	88	2,200	45	43	99	19	5.4	3.6
17	11	33	128	36	70	1,350	47	43	72	11	5.0	3.3
18	13	30	94	36	63	303	45	39	99	9.3	4.8	5.4
19	125	53	79	76	58	165	43	38	36	9.0	4.5	5.0
20	41	92	75	66	54	122	40	40	29	9.3	4.3	3.6
21	26	46	305	51	50	278	38	35	24	9.0	4.8	3.3
22	16	40	258	48	47	210	37	33	21	8.6	4.3	3.1
23	13	36	137	42	45	127	36	34	17	12	4.0	3.1
24	15	32	96	39	42	95	37	93	15	11	3.6	3.0
25	14	33	82	36	41	92	38	60	14	18	3.5	3.0
26	12	41	71	38	40	81	93	189	13	13	3.3	2.8
27	13	38	63	53	39	70	603	529	13	12	3.3	2.7
28	63	47	53	48	38	61	232	1,120	33	10	3.1	2.8
29	39	54	48	74	------	60	118	210	29	11	3.0	3.0
30	28	50	44	51	------	80	82	102	30	9.0	3.0	5.2
31	21	------	43	46	------	75	------	70	------	8.6	2.9	------
TOTAL	1,055.4	1,352	6,271	1,371	2,488	6,367	2,957	4,008	1,025	387.0	451.5	112.2
MEAN	34.0	45.1	202	44.2	88.9	205	98.6	129	34.2	12.5	14.6	3.74
MAX	362	190	2,170	76	283	2,200	603	1,120	99	21	113	9.3
MIN	6.7	17	34	31	38	36	36	33	13	8.4	2.9	2.7
CFSM	.72	.96	4.30	.94	1.89	4.36	2.10	2.74	.73	.27	.31	.08
IN.	.84	1.07	4.96	1.09	1.97	5.04	2.34	3.17	.81	.31	.36	.09

CAL YR 1972 TOTAL 26,132.5 MEAN 71.4 MAX 2,170 MIN 2.4 CFSM 1.52 IN 20.68
WTR YR 1973 TOTAL 27,845.1 MEAN 76.3 MAX 2,200 MIN 2.7 CFSM 1.62 IN 22.04

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1030	12.70*	2,990	05-28	0400	10.07	1,560
03-16	1015	12.60*	2,930				

*Magnet on float tape.

03494000 Holston River near Jefferson City, Tenn.

LOCATION.--Lat 36°10'03", long 83°30'10", Jefferson County, on left bank 500 ft (150 m) upstream from bridge on State Highway 92, 0.2 mile (0.3 km) downstream from Cherokee Dam, 2.5 miles (4.0 km) upstream from Mill Spring Creek, 3 miles (5 km) north of Jefferson City, and at mile 52.0 (83.7 km).

DRAINAGE AREA.--3,429 sq mi (8,881 sq km).

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 (274.320 m) above mean sea level. Apr. 20, 1937 to June 30, 1941, on right bank at datum 20.02 ft (6.102 m) higher.

AVERAGE DISCHARGE.--37 years, 4,291 cfs (121.5 cu m/s), 16.99 in/yr (432 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 19,600 cfs (555 cu m/s) Dec. 31, gage height, 30.04 ft (9.156 m); minimum, 46 cfs (1.30 cu m/s) Nov. 11, gage height, 19.19 ft (5.849 m); minimum daily, 56 cfs (1.59 cu m/s) Oct. 22, Mar. 4.
Period of record: Maximum discharge, 58,700 cfs (1,660 cu m/s) Aug. 15, 1940, gage height, 41.82 ft (12.747 m), present datum; minimum, 2.2 cfs (0.062 cu m/s) Dec. 8, 1941, discharge measurement; minimum daily, 2.6 cfs (0.074 cu m/s) Dec. 25, 1941.
Maximum discharge since closure of Cherokee Dam on Dec. 5, 1941, 25,900 cfs (733 cu m/s) Feb. 11, 1957, gage height, 32.19 ft (9.812 m).

REMARKS.--Records good. Flow completely regulated by five reservoirs (see p. 131).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,500	10,800	10,400	11,800	3,010	4,290	3,750	3,390	16,000	76	8,400	11,200
2	7,330	10,900	9,550	19,500	3,130	3,730	6,110	3,380	16,000	7,760	4,990	7,610
3	7,140	11,200	8,580	19,400	1,660	57	5,320	3,320	16,000	7,640	4,600	8,680
4	7,180	9,240	10,200	19,200	1,070	56	7,450	4,540	11,500	4,150	4,440	9,920
5	3,160	4,740	9,870	19,100	2,430	58	7,710	4,900	10,300	5,300	4,460	9,600
6	2,500	9,130	9,140	15,700	2,440	61	5,600	4,520	9,970	5,050	9,180	8,220
7	4,560	9,320	9,920	14,000	2,780	64	969	8,900	10,900	6,550	9,760	7,500
8	2,600	9,780	8,620	14,000	6,660	65	69	5,330	9,870	81	10,500	8,360
9	8,550	7,140	3,650	15,200	8,260	380	6,220	7,680	8,280	7,050	10,900	6,380
10	9,050	902	1,430	14,400	9,000	150	6,330	6,870	5,480	6,240	10,800	10,300
11	9,240	2,310	93	11,200	7,920	100	10,900	4,540	8,800	6,920	7,510	9,760
12	10,600	1,480	12,300	10,700	12,100	70	3,240	7,080	8,950	6,390	3,300	8,370
13	8,910	8,940	17,300	10,000	11,600	68	1,960	4,430	7,560	6,480	9,940	6,340
14	7,270	8,670	18,000	6,800	12,400	73	1,720	7,170	8,100	4,060	8,500	5,930
15	64	7,240	18,000	5,600	8,910	78	256	5,550	7,430	69	7,610	4,100
16	10,600	9,160	18,000	10,200	8,320	118	2,260	3,640	5,740	7,280	8,200	3,090
17	10,100	12,700	17,400	6,000	4,280	104	1,440	2,710	490	6,360	7,790	8,490
18	9,610	5,280	17,600	5,200	3,770	96	2,220	3,940	6,470	6,700	7,890	6,000
19	2,910	5,000	17,900	1,670	4,290	4,660	1,490	3,850	6,040	7,120	4,740	7,490
20	4,100	10,400	17,900	60	4,730	3,770	74	1,910	4,180	8,800	9,390	6,560
21	564	10,900	17,800	58	5,130	1,180	78	6,110	3,970	8,010	10,200	7,300
22	56	11,900	17,800	59	8,170	4,170	75	5,260	2,370	1,530	10,500	8,310
23	60	8,440	17,800	4,500	4,190	4,470	6,230	4,570	72	8,620	10,700	3,440
24	8,020	8,630	17,800	4,800	1,630	4,710	686	3,480	68	6,380	10,400	7,230
25	9,940	11,300	17,800	4,900	1,640	4,140	71	4,090	5,340	8,190	9,010	6,710
26	9,410	11,800	18,400	5,100	4,080	6,320	77	7,650	6,170	5,310	7,190	6,910
27	9,530	11,400	18,700	4,700	6,250	3,810	81	7,920	6,710	4,780	10,800	7,150
28	8,650	11,000	18,800	4,700	6,590	2,460	178	9,680	6,470	5,100	11,300	7,090
29	9,200	8,490	19,000	6,570	------	2,700	73	15,500	2,600	124	11,400	2,510
30	10,700	10,500	19,200	5,980	------	2,520	2,560	15,900	2,170	7,960	12,200	1,830
31	11,400	------	19,400	4,530	------	5,990	------	16,000	------	8,510	12,900	------
TOTAL	204,504	258,692	438,353	275,627	156,440	60,518	85,197	193,810	214,000	174,590	269,480	212,380
MEAN	6,597	8,623	14,140	8,891	5,587	1,952	2,840	6,252	7,133	5,632	8,693	7,079
MAX	11,400	12,700	19,400	19,500	12,400	6,320	10,900	16,000	16,000	8,800	12,900	11,200
MIN	56	902	93	58	1,070	56	69	1,910	68	69	3,300	1,830

CAL YR 1972 TOTAL 2,350,707 MEAN 6,423 MAX 19,400 MIN 56 MEAN† 6,896 CFSM† 2.01 IN.† 27.38
WTR YR 1973 TOTAL 2,543,591 MEAN 6,969 MAX 19,500 MIN 56 MEAN† 6,721 CFSM† 1.96 IN.† 26.61

† Adjusted for change in contents, in South Holston, Watauga, Boone, Fort Patrick Henry, and Cherokee Lakes, furnished by Tennessee Valley Authority.

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 (8.8 km) upstream from confluence with French Broad River.

DRAINAGE AREA.--3,747 sq mi (9,705 sq km).

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 (248.668 m) above mean sea level. Oct. 1, 1930, to June 8, 1931, non-recording gage, and June 9, 1931, to Sept. 30, 1948, water-stage recorder, at site 12 miles (19 km) upstream at datum 22.55 ft (6.873 m) higher. June 19, 1945, to Oct. 4, 1960, 300 ft (90 m) upstream at present datum.

AVERAGE DISCHARGE.--43 years, 4,583 cfs (129.8 cu m/s), 16.61 in/yr (422 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 28,200 cfs (799 cu m/s) Mar. 16, gage height, 10.45 ft (3.185 m); minimum, 335 cfs (9.49 cu m/s) Oct. 2, minimum gage height, 1.69 ft (0.515 m) June 25, 26, minimum daily discharge, 411 cfs (11.6 cu m/s) June 25.

Period of record: Maximum discharge, 62,900 cfs (1,780 cu m/s) Mar. 28, 1935, gage height, 20.20 ft (6.157 m), site and datum then in use; minimum, 44 cfs (1.25 cu m/s) Dec. 12, 21, 22, 1941, gage height, -0.58 ft (-0.177 m), site and datum then in use; minimum daily, 44 cfs (1.25 cu m/s) Dec. 21, 22, 1941.

Maximum discharge since closure of Cherokee Dam on Dec. 5, 1941, 31,400 cfs (889 cu m/s) Mar. 22, 1963, gage height, 11.20 ft (3.414 m).

Maximum stage since at least 1791, about 41 ft (12.5 m) in March 1867, from profile by Tennessee Valley Authority. Flood in 1901 reached a stage of about 32 ft (9.8 m), from reports of Tennessee Valley Authority.

REMARKS.--Records fair. Flow regulated by five reservoirs (see p. 131).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,390	9,770	9,680	13,000	4,400	5,410	6,580	3,130	17,300	2,550	9,900	11,400
2	1,740	10,600	9,770	18,300	4,800	4,730	4,670	4,050	17,100	970	8,080	8,830
3	8,010	10,800	10,300	20,000	2,730	1,480	6,150	4,780	17,000	7,900	5,640	7,690
4	6,250	10,000	8,290	20,000	2,000	580	6,320	5,240	12,500	7,540	4,940	9,760
5	7,490	8,230	10,000	19,600	1,610	707	8,030	4,950	11,100	4,710	4,760	9,760
6	3,590	6,400	9,410	17,200	3,940	560	7,460	5,170	10,500	5,850	6,370	9,020
7	2,850	9,180	10,100	13,000	3,550	500	5,120	6,080	11,200	5,670	9,650	7,330
8	4,600	9,920	9,860	13,800	5,100	500	2,210	7,780	10,400	6,820	10,400	8,470
9	4,360	8,340	9,070	16,600	8,730	470	2,410	6,840	8,530	762	10,700	8,800
10	9,150	6,370	16,400	13,400	9,410	570	6,940	7,730	7,960	6,850	10,900	7,540
11	9,410	817	6,840	12,500	8,930	828	8,120	7,780	7,690	6,970	8,560	10,200
12	9,270	2,370	6,790	10,700	11,600	910	8,260	5,600	9,130	7,090	6,760	8,590
13	9,950	3,940	18,000	10,400	11,900	707	3,490	6,580	8,320	6,970	5,670	8,170
14	7,620	8,850	19,200	11,600	12,800	580	2,180	6,010	8,230	6,730	8,800	6,320
15	6,320	8,030	20,100	5,700	10,900	2,000	1,870	6,660	8,560	4,600	8,140	6,130
16	2,930	7,920	19,400	7,870	8,960	15,800	862	5,340	8,230	530	7,540	4,460
17	10,100	12,000	18,800	8,170	8,540	12,500	2,470	4,010	7,450	7,270	7,840	4,160
18	11,200	9,770	17,600	4,950	3,920	3,980	1,820	3,700	1,020	6,970	7,720	8,740
19	7,570	4,160	18,400	5,310	5,340	4,600	2,650	3,630	7,060	7,600	7,210	5,590
20	6,860	7,050	18,400	2,430	5,750	5,360	1,800	4,120	6,670	8,440	6,470	7,570
21	1,670	12,000	19,000	762	4,250	4,780	560	2,830	4,990	8,800	9,970	7,300
22	946	10,800	19,100	886	9,500	4,530	470	6,180	5,540	8,050	10,400	7,990
23	570	10,400	18,700	1,030	5,170	5,030	652	4,860	2,430	2,530	10,500	7,630
24	1,850	9,150	18,500	5,650	3,680	5,030	5,630	5,240	600	8,650	10,400	4,350
25	8,990	8,990	18,300	5,270	2,340	5,390	1,160	3,470	411	7,600	8,950	7,090
26	10,300	11,900	18,400	5,870	2,190	7,070	1,270	4,930	5,480	8,830	7,960	7,180
27	9,270	10,600	19,100	5,190	4,420	5,750	3,740	9,950	6,910	5,690	9,650	6,880
28	8,030	11,600	19,000	4,820	10,900	3,790	2,250	14,700	7,300	5,590	11,600	7,510
29	8,730	9,560	19,300	6,080	------	3,390	1,400	16,500	6,790	5,590	11,300	7,060
30	10,200	10,300	19,300	8,430	------	3,390	1,190	17,600	3,210	795	12,300	2,990
31	11,600	------	19,800	5,750	------	4,120	------	17,600	------	8,470	12,500	------
TOTAL	204,816	259,817	474,910	294,268	177,360	115,042	107,734	213,040	239,611	183,387	271,580	224,510
MEAN	6,607	8,661	15,320	9,493	6,334	3,711	3,591	6,872	7,987	5,916	8,761	7,484
MAX	11,600	12,000	20,100	20,000	12,800	15,800	8,260	17,600	17,300	8,830	12,500	11,400
MIN	570	817	6,790	762	1,610	470	470	2,830	411	530	4,760	2,990

CAL YR 1972 TOTAL 2,511,032 MEAN 6,861 MAX 20,100 MIN 254 MEAN‡ 7,335 CFSM‡ 1.96 IN.‡ 26.64
WTR YR 1973 TOTAL 2,766,075 MEAN 7,578 MAX 20,100 MIN 411 MEAN‡ 7,331 CFSM‡ 1.96 IN.‡ 26.56

‡ Adjusted for change in contents in South Holston, Watauga, Boone, Fort Patrick Henry, and Cherokee Lakes, furnished by Tennessee Valley Authority.

03497000 Tennessee River at Knoxville, Tenn.

LOCATION.--Lat 35°57'17", long 83°51'42", Knox County, on left bank 0.7 mile (1.1 km) downstream from confluence of French Broad and Holston Rivers, 3.5 miles (5.6 km) upstream from First Creek, 3.6 miles (5.8 km) upstream from Gay Street Bridge at Knoxville, and at mile 651.4 (1,048.1 km). Records include flow of First Creek.

DRAINAGE AREA.--8,934 sq mi (23,139 sq km), 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 (243.041 m) above mean sea level. Prior to Sept. 1, 1943, nonrecording gages or water-stage recorders at several sites within 4 miles (6 km) of present site at various datums. Since Sept. 1, 1943, auxiliary water-stage recorder 6.3 miles (10.1 km) downstream from base gage at same datum.

AVERAGE DISCHARGE.--74 years, 12,950 cfs (366.7 cu m/s), unadjusted.

EXTREMES.--Current year: Maximum discharge, 79,500 cfs (2,250 cu m/s) Mar. 16, gage height, 23.39 ft (7.129 m); minimum daily discharge, 1,800 cfs (51.0 cu m/s) Mar. 7; minimum gage height, 9.73 ft (2.966 m) Jan. 16.
Period of record: Maximum discharge observed, 195,000 cfs (5,520 cu m/s) Mar. 1, 1902, gage height, 36.4 ft (11.09 m) site and datum then in use, from rating curve extended above 130,000 cfs (3,680 cu m/s); minimum daily, 1,010 cfs (28.6 cu m/s) Mar. 28, 1954, minimum gage height, -1.7 ft (-.52 m) Sept. 11, 1925, site and datum then in use.
Maximum discharge since completion of several upstream dams in Dec. 1941, 89,200 cfs (2,530 cu m/s) Mar. 12, 1963.
Maximum stage since at least 1791, 45.0 ft (13.72 m) Mar. 8, 1867, site and datum of gage at old city pumping plant, 3.2 miles (5.1 km) downstream from base gage, discharge, 290,000 cfs (8,210 cu m/s), from rating curve extended above 130,000 cfs (3,680 cu m/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,200	23,900	22,800	31,900	15,300	10,500	27,100	19,900	46,700	6,200	22,900	27,100
2	6,790	26,100	23,100	36,700	17,400	9,600	25,100	20,800	43,000	8,190	19,200	21,400
3	15,300	26,900	24,500	39,300	19,000	4,000	26,600	23,200	40,600	17,100	12,500	17,600
4	12,900	23,700	20,200	39,600	18,200	4,400	26,300	23,400	34,000	15,400	11,300	23,800
5	17,900	17,000	23,400	38,500	16,000	3,800	26,200	21,400	30,300	10,500	11,800	22,700
6	10,700	14,600	21,900	34,900	18,500	5,100	22,800	20,500	24,100	12,300	15,800	21,000
7	8,140	20,800	24,700	28,100	22,300	1,800	17,400	19,400	24,600	12,900	21,800	18,000
8	6,850	23,500	23,700	29,500	25,000	3,610	14,900	17,400	25,800	11,600	23,900	17,600
9	11,500	21,200	21,900	31,400	30,200	2,750	16,700	17,700	21,300	6,230	24,500	18,700
10	21,400	10,600	33,600	26,400	29,700	4,270	22,000	19,500	20,600	14,600	26,000	18,900
11	22,100	2,700	21,400	26,600	27,900	6,530	22,300	22,700	18,600	14,900	23,100	22,400
12	22,000	6,100	21,400	19,900	29,200	9,890	22,400	17,400	20,900	15,300	15,100	21,200
13	23,000	11,100	38,200	20,400	30,100	6,950	9,570	15,100	19,200	14,900	15,300	18,000
14	16,900	19,300	41,500	20,700	31,100	7,300	5,900	13,700	19,200	14,000	21,700	14,100
15	16,900	19,100	45,300	12,600	27,200	8,820	4,020	15,900	18,500	8,290	20,300	13,800
16	11,300	22,900	45,500	12,900	23,000	46,800	5,630	14,300	19,100	5,760	20,500	8,430
17	24,300	26,700	42,200	17,600	19,800	54,000	8,320	11,400	18,900	15,600	20,100	9,890
18	25,200	24,000	38,000	11,900	10,500	16,900	9,140	11,700	12,300	15,500	19,000	19,000
19	20,400	12,000	38,500	12,500	11,100	26,000	8,420	10,900	19,500	15,600	16,400	12,200
20	18,800	18,100	38,300	9,920	13,100	27,200	6,870	8,980	18,200	18,800	16,500	16,500
21	5,100	28,500	39,400	5,360	11,800	27,900	4,410	8,020	16,600	17,900	25,000	14,800
22	4,070	25,600	40,500	6,170	19,900	26,500	3,260	13,400	17,800	15,000	24,900	17,300
23	2,980	24,200	39,500	11,800	12,200	26,600	6,150	12,000	12,400	7,670	25,400	15,600
24	8,580	21,500	38,700	18,000	9,720	26,200	10,200	12,100	7,340	19,900	25,000	9,540
25	21,100	21,900	38,300	19,100	5,990	26,200	3,960	12,700	8,860	18,400	22,100	15,300
26	24,100	27,300	38,300	21,400	8,170	29,000	3,750	10,600	13,000	18,600	19,400	15,300
27	21,800	27,700	39,400	22,100	11,900	33,100	14,400	17,600	14,400	10,200	22,100	15,300
28	20,900	29,900	39,000	21,900	22,300	30,900	11,900	31,500	16,000	13,800	25,900	15,600
29	21,100	25,600	38,900	23,400	------	30,000	13,700	45,600	15,800	9,300	26,200	15,400
30	24,600	24,200	38,700	23,300	------	28,800	19,100	50,500	9,210	5,590	29,500	5,350
31	26,600	------	38,900	16,900	------	27,400	------	50,700	------	18,800	30,000	------
TOTAL	504,510	626,700	1,039,700	690,750	536,580	572,820	418,500	610,000	626,810	408,830	653,200	501,810
MEAN	16,270	20,890	33,540	22,280	19,160	18,480	13,950	19,680	20,890	13,190	21,070	16,730
MAX	26,600	29,900	45,500	39,600	31,100	54,000	27,100	50,700	46,700	19,900	30,000	27,100
MIN	2,980	2,700	20,200	5,360	5,990	1,800	3,260	8,020	7,340	5,590	11,300	5,350

CAL YR 1972 TOTAL 6,334,340 MEAN 17,310 MAX 45,500 MIN 2,700
WTR YR 1973 TOTAL 7,190,210 MEAN 19,700 MAX 54,000 MIN 1,800

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 (0.5 km) above Rush Branch, 0.4 mile (0.6 km) southeast of park entrance, 2.2 miles (3.5 km) southeast of Townsend, and at mile 35.3 (56.8 km).

DRAINAGE AREA.--106 sq mi (275 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 1,106.92 ft (337.389 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 289 cfs (8.184 cu m/s), 37.02 in/yr (940 mm/yr).

EXTREMES.--Current year: Maximum discharge, 16,000 cfs (453 cu m/s) Mar. 16, gage height, 12.30 ft (3.749 m); minimum, 66 cfs (1.87 cu m/s) Sept. 27, 28, gage height, 1.50 ft (0.457 m).
Period of record: Maximum discharge, 16,000 cfs (453 cu m/s) Mar. 16, 1973, gage height, 12.30 ft (3.749 m); minimum, 32 cfs (0.91 cu m/s) Oct. 30, 31, 1963, Oct. 7-10, 1970; minimum gage height, 1.26 ft (0.384 m) Sept. 17, 18, 1968.

REMARKS.--Records good. Records of water temperatures for 1972 and current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	610	225	374	263	334	202	393	550	313	202	444	85
2	370	215	347	246	1,120	202	360	451	272	191	388	79
3	271	317	325	274	696	297	334	430	246	180	308	74
4	228	253	305	365	534	271	356	361	221	166	265	83
5	1,380	228	286	301	451	301	325	315	203	156	235	100
6	702	212	338	301	507	278	297	286	246	145	212	76
7	471	256	317	282	476	282	502	263	220	137	195	71
8	351	497	290	278	762	286	720	497	191	178	196	67
9	278	388	1,560	246	816	256	616	506	190	165	192	121
10	232	342	2,410	228	633	250	528	421	166	162	809	169
11	202	305	1,860	215	507	350	451	581	158	203	809	88
12	184	271	1,120	196	427	450	403	472	299	143	451	78
13	260	249	787	209	374	317	360	403	221	126	356	111
14	212	351	633	202	523	290	325	340	297	123	301	260
15	184	290	1,090	193	572	437	301	301	383	252	260	199
16	169	267	969	181	507	8,790	282	269	1,670	225	225	130
17	181	253	685	178	447	4,500	282	256	1,280	196	206	109
18	239	239	545	190	403	1,620	309	229	782	238	196	125
19	1,020	297	461	356	360	1,030	338	213	541	334	172	116
20	667	370	437	305	329	821	309	219	483	324	175	98
21	466	309	539	278	301	877	274	193	458	248	172	90
22	365	293	666	528	278	763	253	177	427	205	143	83
23	325	267	594	447	260	661	242	184	340	205	133	81
24	313	249	518	374	246	572	228	338	288	188	125	76
25	274	263	481	321	232	550	338	269	256	358	118	74
26	246	313	432	297	228	507	594	242	230	444	113	78
27	239	271	383	313	228	481	1,940	297	219	482	109	66
28	338	325	342	297	209	432	1,940	1,340	312	379	103	67
29	290	338	317	388	------	407	1,030	690	276	303	100	76
30	260	379	293	321	------	398	706	474	220	255	96	105
31	246	------	290	297	------	422	------	368	------	252	90	------
TOTAL	11,573	8,832	19,994	8,870	12,760	27,300	15,336	11,935	11,408	7,165	7,697	3,035
MEAN	373	294	645	286	456	881	511	385	380	231	248	101
MAX	1,380	497	2,410	528	1,120	8,790	1,940	1,340	1,670	482	809	260
MIN	169	212	286	178	209	202	228	177	158	123	90	66
CFSM	3.52	2.77	6.08	2.70	4.30	8.31	4.82	3.63	3.58	2.18	2.34	.95
IN.	4.06	3.10	7.02	3.11	4.48	9.58	5.38	4.19	4.00	2.51	2.70	1.07

CAL YR 1972 TOTAL 135,695 MEAN 371 MAX 2,410 MIN 64 CFSM 3.50 IN 47.62
WTR YR 1973 TOTAL 145,905 MEAN 400 MAX 8,790 MIN 66 CFSM 3.77 IN 51.20

PEAK DISCHARGE (BASE, 3,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1715	5.95	3,450	06-16	1630	7.11	5,140
03-16	0630	12.30	16,000				

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 (1.3 km) downstream from Crooked Creek, 5.0 miles (8.0 km) east of Maryville, and at mile 17.3 (27.8 km).

DRAINAGE AREA.--269 sq mi (670 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 850.00 ft (259.080 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 536 cfs (15.18 cu m/s), 27.06 in/yr (687 mm/yr).

EXTREMES.--Current year: Maximum discharge, 26,200 cfs (742 cu m/s) Mar. 16, gage height, 22.84 ft (6.962 m); minimum, 137 cfs (3.88 cu m/s) Sept. 8.

Period of record: Maximum discharge, 32,200 cfs (912 cu m/s) Mar. 12, 1963, gage height, 24.20 ft (7.376 m), from rating curve extended above 20,000 cfs (566 cu m/s) on basis of area-velocity study and road overflow computations; minimum, 32 cfs (0.91 cu m/s) Aug. 27, 1956, minimum gage height, 6.25 ft (1.905 m) Sept. 24, 1970; minimum daily, 44 cfs (1.25 cu m/s) Sept. 19, 1954.

Flood of Feb. 25, 1875, reached a stage of 31 ft (9.4 m), discharge, 50,000 cfs (1,420 cu m/s) and flood of Apr. 1, 1896, reached a stage of 26 ft (7.9 m), discharge, 36,000 cfs (1,020 cu m/s) from reports by Tennessee Valley Authority.

REMARKS.--Records good. Diurnal fluctuations at low flow caused by small mills above station. The town of Maryville diverted an average of about 2.5 cfs (0.071 cu m/s) for municipal supply, 300 ft (90 m) above the gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,490	405	733	550	600	357	714	948	590	350	1,340	173
2	724	388	661	507	1,350	350	631	782	521	329	935	164
3	513	537	600	656	1,050	465	583	954	472	293	542	156
4	428	444	553	957	811	435	658	724	469	274	450	152
5	2,420	403	517	777	705	512	594	599	410	259	396	183
6	1,400	375	539	739	1,090	451	532	545	469	245	360	164
7	870	420	560	657	1,030	437	1,020	507	484	241	331	149
8	651	951	486	639	1,820	452	1,530	713	401	250	345	145
9	516	672	4,420	580	2,130	421	1,110	874	398	288	328	180
10	431	580	6,540	534	1,320	398	931	679	354	329	980	356
11	373	516	4,930	506	994	612	764	1,090	331	387	1,140	197
12	336	459	2,830	466	824	945	682	805	447	255	660	165
13	700	423	1,910	446	722	610	610	682	443	219	525	187
14	613	582	1,470	463	793	537	548	588	474	219	452	407
15	420	512	3,030	498	951	936	510	526	395	415	416	372
16	363	460	2,550	496	826	16,700	480	479	1,720	478	361	248
17	381	437	1,580	457	732	12,300	472	459	1,810	335	330	238
18	511	410	1,190	458	668	3,240	485	429	1,030	279	321	329
19	3,840	619	1,000	877	613	1,860	501	401	710	409	292	265
20	2,100	952	932	804	569	1,500	483	417	588	467	319	214
21	1,090	629	1,220	669	529	2,000	435	377	608	345	328	191
22	805	561	1,520	933	492	1,740	408	347	682	298	261	178
23	672	504	1,310	868	466	1,320	392	378	502	279	243	176
24	627	457	1,100	728	438	1,090	379	982	432	279	231	165
25	546	456	1,000	630	415	1,010	474	701	382	366	219	159
26	494	575	896	581	402	907	1,400	584	345	588	212	161
27	457	496	824	697	398	834	4,230	712	329	582	202	150
28	547	563	740	592	377	743	3,360	2,800	628	490	195	148
29	509	643	673	854	------	708	1,810	1,360	569	393	187	159
30	459	682	621	719	------	699	1,220	875	393	340	194	198
31	435	------	594	643	------	752	------	684	------	324	186	------
TOTAL	25,721	16,111	47,529	19,981	23,115	55,321	27,946	23,001	17,386	10,605	13,281	6,129
MEAN	830	537	1,533	645	826	1,785	932	742	580	342	428	204
MAX	3,840	952	6,540	957	2,130	16,700	4,230	2,800	1,810	588	1,340	407
MIN	336	375	486	446	377	350	379	347	329	219	186	145
CFSM	3.09	2.00	5.70	2.40	3.07	6.64	3.46	2.76	2.16	1.27	1.59	.76
IN.	3.56	2.23	6.57	2.76	3.20	7.65	3.86	3.18	2.40	1.47	1.84	.85

CAL YR 1972 TOTAL 266,954 MEAN 729 MAX 6,540 MIN 113 CFSM 2.71 IN 36.92
WTR YR 1973 TOTAL 286,126 MEAN 784 MAX 16,700 MIN 145 CFSM 2.91 IN 39.57

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	2000	15.23	9,040	03-16	1200	22.84	26,200

03518300 Little Tennessee River below Chilhowee Dam, Tennessee

LOCATION.--Lat 35°32'48", long 84°03'50", Blount County, on right bank on U. S. Highway 129, at Tallassee, 100 ft (30 m) upstream from Cochran Creek, 0.8 mile (1.3 km) downstream from Chilhowee Dam, 20 miles (32 km) south of Maryville, and at mile 32.8 (52.8 km). Records include inflow of Cochran Creek.

DRAINAGE AREA.--1,987 sq mi (5,146 sq km), including Cochran Creek.

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

GAGE.--Water-stage recorder. Datum of gage is 799.58 ft (243.712 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 4,874 cfs (138.0 cu m/s), 33.31 in/yr (846 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 41,500 cfs (1,180 cu m/s) May 28, gage height, 17.31 ft (5.276 m); minimum, 31 cfs (0.88 cu m/s) Aug. 16, gage height, 5.53 ft (1.686 m); minimum daily, 1,240 cfs (35.1 cu m/s) Sept. 2.
Period of record: Maximum discharge, 41,500 cfs (1,180 cu m/s) May 28, 1973, gage height, 17.31 ft (5.276 m); minimum, 24 cfs (0.68 cu m/s) Aug. 30, 1964, gage height, 5.49 ft (1.673 m); minimum daily, 26 cfs (0.74 cu m/s) Aug. 30, 1964.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,580	5,510	8,260	9,570	5,830	4,890	7,870	4,810	12,900	7,100	7,890	3,210
2	4,020	6,080	6,890	10,800	8,550	6,430	7,840	5,140	9,080	7,400	8,590	1,240
3	5,000	6,800	7,290	11,200	7,670	6,040	7,710	5,620	9,640	6,700	7,860	1,930
4	6,150	5,740	7,400	11,200	6,580	3,780	7,530	4,870	8,680	8,400	2,820	2,790
5	6,130	5,340	7,260	10,900	7,950	3,140	7,010	5,930	7,760	7,500	1,590	2,990
6	5,880	6,080	7,390	10,900	8,240	2,610	6,800	5,380	7,910	7,100	3,580	2,630
7	3,870	6,160	8,330	10,300	7,820	3,160	5,080	4,990	8,210	8,300	4,500	2,910
8	3,080	6,780	7,920	10,500	8,910	1,820	4,420	5,440	7,260	8,200	4,130	2,690
9	4,730	6,460	9,030	10,200	7,840	1,430	5,400	7,410	7,050	6,600	5,210	1,870
10	4,880	5,880	10,400	10,600	8,110	3,220	7,260	7,300	7,690	7,600	5,870	3,420
11	5,060	5,750	10,700	10,200	8,560	4,560	7,220	6,840	7,970	7,500	6,230	3,780
12	5,940	5,130	8,280	7,700	8,320	5,100	5,820	7,270	7,410	7,500	5,360	3,340
13	6,020	6,640	8,010	8,080	7,400	5,070	5,200	7,330	7,600	6,300	6,440	2,840
14	4,570	6,780	8,560	9,640	8,240	5,010	6,280	7,320	7,140	2,700	7,900	4,490
15	1,940	6,810	9,210	5,440	7,740	4,490	2,760	5,590	8,400	3,500	4,650	3,880
16	5,220	6,790	8,500	8,450	7,790	21,600	4,330	4,160	7,910	4,900	2,290	2,130
17	5,660	5,690	8,480	7,890	6,600	13,600	3,780	5,530	9,290	4,600	2,930	1,480
18	4,910	6,720	9,040	6,370	7,760	6,200	3,760	5,290	9,890	4,800	3,080	1,900
19	6,140	7,120	9,110	6,780	8,920	7,390	3,970	4,170	9,310	6,600	2,570	2,870
20	6,740	7,060	11,000	7,010	7,750	7,850	3,450	5,140	8,480	7,100	5,070	3,200
21	6,510	7,170	11,200	5,720	8,140	11,400	1,810	5,430	9,760	5,600	4,060	2,930
22	3,640	7,280	11,300	7,070	6,650	10,500	1,340	5,550	9,510	4,900	4,090	2,390
23	5,670	7,510	11,300	7,950	7,390	10,400	3,880	5,990	7,760	6,400	3,360	2,300
24	5,700	6,700	11,100	8,150	5,130	10,200	4,140	7,110	8,420	8,000	3,580	2,680
25	5,530	7,760	11,200	7,020	5,360	10,500	1,550	7,810	6,970	7,500	2,370	3,270
26	6,120	7,680	10,200	7,750	6,710	10,100	1,410	7,670	7,950	6,700	1,960	1,670
27	5,790	7,740	10,700	7,730	7,410	9,280	4,510	8,030	7,820	8,200	2,770	4,320
28	5,860	8,600	9,900	8,540	7,160	10,100	7,250	21,600	7,400	7,620	4,230	3,570
29	3,800	6,030	9,760	7,480	------	9,660	4,840	26,000	7,400	7,310	3,780	3,820
30	5,740	8,290	10,800	6,870	------	9,590	3,810	13,800	7,600	7,760	2,960	3,170
31	6,710	------	11,000	6,920	------	8,640	------	14,500	------	8,010	2,650	------
TOTAL	161,590	200,080	289,520	264,930	210,530	227,760	148,030	239,020	250,170	208,400	134,370	85,710
MEAN	5,213	6,669	9,339	8,546	7,519	7,347	4,934	7,710	8,339	6,723	4,335	2,857
MAX	6,740	8,600	11,300	11,200	8,920	21,600	7,870	26,000	12,900	8,400	8,590	4,490
MIN	1,940	5,130	6,890	5,440	5,130	1,430	1,340	4,160	6,970	2,700	1,590	1,240

CAL YR 1972 TOTAL 2,014,720 MEAN 5,505 MAX 11,300 MIN 1,330
WTR YR 1973 TOTAL 2,420,110 MEAN 6,630 MAX 26,000 MIN 1,240

03518500 Tellico River at Tellico Plains, Tenn.

LOCATION.--Lat 35°21'42", long 84°16'44", Monroe County, on right bank 1,300 ft (400 m) upstream from bridge on Tellico Plains-Ballplay Road, 0.4 mile (0.6 km) downstream from Laurel Creek, 0.8 mile (1.3 km) east of Tellico Plains, and at mile 28.2 (45.4 km).

DRAINAGE AREA.--118 sq mi (306 sq km).

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 (258.056 m) above mean sea level. July 20, 1925, to Sept. 30, 1927, non-recording gage at same site and datum. Oct. 1, 1927 to Sept. 30, 1930, nonrecording gage at site 0.5 mile (0.8 km) upstream at datum 8.29 ft (2.527 m) higher.

AVERAGE DISCHARGE.--48 years, 284 cfs (8.043 cu m/s),32.68 in/yr (830 mm/yr).

EXTREMES.--Current year: Maximum discharge, 19,900 cfs (564 cu m/s) Mar. 16, gage height, 14.18 ft (4.322 m) from dross line in well, from rating curve extended above 12,000 cfs (340 cu m/s) on basis of slope-area measurement of peak flow; minimum, 76 cfs (2.15 cu m/s) Sept. 27, gage height, 1.27 ft (0.387 m).
Period of record: Maximum discharge, 19,900 cfs (564 cu m/s) Mar. 16, 1973, gage height, 14.18 ft (4.322 m) from dross line in well, from rating curve extended above 12,000 cfs (340 cu m/s) on basis of slope-area measurement of peak flow, minimum, 13 cfs (0.37 cu m/s) Sept. 7, 1925, gage height, 0.25 ft (0.076 m).

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: 1927-28(M), 1936, 1940, 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	409	204	381	397	408	249	452	479	413	305	888	116
2	242	201	345	365	645	270	413	417	357	284	675	112
3	183	373	309	405	493	385	389	417	317	211	409	107
4	182	277	291	510	421	317	393	365	288	246	321	107
5	2,000	242	277	456	397	439	361	325	305	373	270	110
6	620	218	461	434	547	357	333	302	497	228	239	101
7	393	267	434	413	524	333	680	284	417	195	221	101
8	295	497	381	417	1,040	302	780	587	333	180	211	97
9	239	361	1,120	357	1,020	284	578	488	288	168	228	99
10	201	305	2,950	329	675	267	488	409	274	434	249	127
11	177	270	1,990	313	538	475	425	373	267	635	369	97
12	163	242	995	291	466	596	393	341	740	277	329	92
13	204	228	750	291	425	434	361	309	865	208	361	195
14	180	361	665	270	620	377	333	288	551	239	560	333
15	155	295	1,660	280	605	1,090	313	267	430	361	381	155
16	147	263	1,220	280	538	9,990	298	253	413	479	298	110
17	160	242	780	291	479	3,510	313	249	409	337	277	103
18	242	221	625	321	439	1,500	313	232	337	281	263	137
19	405	274	547	613	405	1,020	349	228	295	260	218	112
20	317	329	547	497	385	825	305	288	267	239	221	99
21	242	277	710	409	357	910	277	221	288	198	225	94
22	208	263	805	630	337	775	263	201	333	174	180	90
23	221	242	670	510	317	665	260	239	253	195	168	95
24	267	221	578	421	302	583	246	1,040	221	195	160	86
25	215	239	560	365	288	655	409	610	204	401	155	88
26	195	313	524	361	281	605	547	439	192	540	149	86
27	201	260	475	484	284	551	2,000	443	221	1,600	144	78
28	281	345	434	443	263	493	1,470	1,260	309	470	137	80
29	228	349	397	551	------	461	785	720	284	309	134	86
30	208	381	369	470	------	439	578	533	208	246	130	142
31	215	------	448	413	------	502	------	436	------	260	125	------
TOTAL	9,395	8,560	22,698	12,587	13,499	29,659	15,105	13,043	10,576	10,528	8,695	3,435
MEAN	303	285	732	406	482	957	504	421	353	340	280	115
MAX	2,000	497	2,950	630	1,040	9,990	2,000	1,260	865	1,600	888	333
MIN	147	201	277	270	263	249	246	201	192	168	125	78
CFSM	27.5	25.9	66.5	36.9	43.8	87.0	45.8	38.3	32.1	30.9	25.5	10.5
IN.	31.77	28.95	76.76	42.57	45.65	100.30	51.08	44.11	35.77	35.60	29.40	11.62

CAL YR 1972 TOTAL 147,428 MEAN 403 MAX 2,950 MIN 75 CFSM 36.6 IN 498.57
WTR YR 1973 TOTAL 157,780 MEAN 432 MAX 9,990 MIN 78 CFSM 39.3 IN 533.58

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-05	0430	7.84	3,770	03-16	1915	14.18*	19,900
12-10	1700	9.01	5,250				

*Dross line in well.

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 (1.6 km) upstream from Little Baker Creek, 3.4 miles (5.5 km) east of Greenback, and at mile 15.0 (24.1 km).

DRAINAGE AREA.--16.0 sq mi (41.4 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 845.01 ft (257.559 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 31.0 cfs (0.878 cu m/s), 26.31 in/yr (668 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,100 cfs (59.5 cu m/s) Mar. 16, gage height, 9.00 ft (2.743 m), from rating curve extended above 420 cfs (11.9 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 13 cfs (0.37 cu m/s) Sept. 26, 27.
Period of record: Maximum discharge, 2,100 cfs (59.5 cu m/s) Mar. 16, 1973, gage height, 9.00 ft (2.743 m), from rating curve extended above 420 cfs (11.9 cu m/s) on basis on contracted-opening measurement of peak flow; minimum, 3.1 cfs (0.088 cu m/s) Oct. 7, 8, 9, 1970.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	35	35	50	37	31	56	48	48	26	291	15
2	30	36	34	48	48	32	52	45	44	25	75	15
3	22	44	33	80	40	37	49	53	41	25	38	15
4	20	37	32	100	38	35	53	45	39	24	33	14
5	88	35	32	90	36	55	48	40	38	24	31	14
6	34	34	36	80	78	36	45	39	93	24	29	14
7	30	44	33	70	48	35	92	38	52	26	27	14
8	27	57	32	60	121	34	94	46	42	26	26	14
9	25	41	342	55	93	32	57	47	42	23	24	16
10	23	38	342	50	61	31	53	60	36	23	24	18
11	22	37	208	46	54	69	49	108	34	22	23	14
12	22	35	177	44	50	56	47	47	33	22	23	14
13	72	34	146	43	48	39	45	42	33	21	22	19
14	47	44	122	42	70	37	43	40	32	21	22	22
15	31	36	187	42	59	102	42	38	31	22	22	15
16	30	34	143	41	49	1,050	41	37	31	21	20	14
17	30	33	105	41	45	321	40	36	31	21	20	15
18	36	32	87	40	43	171	39	35	30	21	19	20
19	256	80	79	70	42	144	38	35	29	21	19	16
20	101	80	75	55	41	126	37	35	28	20	19	14
21	61	44	114	60	39	169	36	33	28	20	19	14
22	53	41	121	50	38	139	35	33	28	19	18	17
23	50	38	92	42	37	110	35	38	27	21	17	13
24	46	37	76	38	35	93	34	82	26	20	17	13
25	43	38	71	36	34	89	47	41	26	34	17	13
26	41	41	65	37	33	79	92	37	25	24	16	13
27	40	37	61	49	33	69	206	79	25	39	16	13
28	41	37	56	40	32	63	82	327	50	22	16	13
29	38	36	52	40	------	61	60	75	27	21	15	13
30	36	36	50	37	------	60	53	56	26	20	15	15
31	36	------	52	36	------	62	------	50	------	20	15	------
TOTAL	1,471	1,231	3,090	1,612	1,382	3,467	1,700	1,765	1,075	718	988	449
MEAN	47.5	41.0	99.7	52.0	49.4	112	56.7	56.9	35.8	23.2	31.9	15.0
MAX	256	80	342	100	121	1,050	206	327	93	39	291	22
MIN	20	32	32	36	32	31	34	33	25	19	15	13
CFSM	2.97	2.56	6.23	3.25	3.09	7.00	3.54	3.56	2.24	1.45	1.99	.94
IN.	3.42	2.86	7.18	3.75	3.21	8.06	3.95	4.10	2.50	1.67	2.30	1.04

CAL YR 1972 TOTAL 15,967 MEAN 43.6 MAX 342 MIN 12 CFSM 2.73 IN 37.12
WTR YR 1973 TOTAL 18,948 MEAN 51.9 MAX 1,050 MIN 13 CFSM 3.24 IN 44.05

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-19	1330	6.40	377	05-28	0330	7.22	693
12-09	1305	6.98	576	08-01	1325	6.91	544
03-16	2010	9.00	2,100				

03528000 Clinch River above Tazewell, Tenn.

LOCATION.--Lat 36°25'30", long 83°23'54", Claiborne County, on right bank 0.4 mile (0.6 km) upstream from Grissom Island, 4.6 miles (7.4 km) downstream from Big War Creek, 10 miles (16 km) east of Tazewell, and at mile 159.8 (257.1 km).

DRAINAGE AREA.--1,474 sq mi (3,818 sq km).

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 (323.30 m) above mean sea level. Apr. 1, 1919 to Sept. 30, 1927, nonrecording gage on railroad bridge 23.3 miles (37.5 km) downstream at datum 102.7 ft (31.30 m) lower. Aug. 8, 1927, to July 16, 1941, water-stage recorder at site 8.0 miles (12.9 km) downstream at datum 47.2 ft (14.39 m) lower. Water-stage recorder at present site and datum since July 29, 1935.

AVERAGE DISCHARGE.--55 years, 2,070 cfs (58.62 cu m/s), 19.07 in/yr (484 mm/yr).

EXTREMES.--Current year: Maximum discharge, 51,200 cfs (1,450 cu m/s) Mar. 17, gage height, 21.02 ft (6.407 m); minimum, 280 cfs (7.93 cu m/s) Sept. 28, 29, gage height, 0.83 ft (0.253 m).
Period of record: Maximum discharge, 56,700 cfs (1,610 cu m/s) Mar. 13, 1963, gage height, 22.27 ft (6.788 m); minimum, 108 cfs (3.06 cu m/s) Sept. 11, 1925; minimum gage height at present site and datum, 0.33 ft (0.101 m) Sept. 20, 1955.
Maximum stage known, about 24 ft (7.3 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,940	1,670	2,660	2,070	1,880	1,260	3,110	5,110	3,570	1,080	1,030	376
2	5,060	1,460	2,280	1,940	2,070	1,220	3,160	3,740	2,810	1,110	3,670	355
3	2,440	1,360	1,990	1,890	3,100	1,220	2,950	3,420	2,310	1,060	2,500	336
4	1,610	1,360	1,780	2,170	4,900	1,230	2,770	3,460	1,960	870	1,610	330
5	2,540	1,290	1,630	2,220	3,600	1,280	2,810	3,240	1,800	841	1,160	374
6	4,990	1,170	1,610	2,140	3,400	1,380	2,780	2,800	1,800	874	896	422
7	5,690	1,100	1,860	2,000	4,100	1,490	2,640	2,460	1,750	883	756	345
8	3,090	2,370	2,030	1,910	4,500	1,610	2,890	2,300	1,560	755	740	318
9	2,150	3,330	4,170	1,800	6,600	1,590	3,180	2,580	1,400	669	762	331
10	1,610	2,680	19,900	1,660	6,400	1,640	3,440	2,490	1,330	702	690	396
11	1,280	2,160	33,900	1,500	4,800	1,590	3,480	3,330	1,250	736	726	458
12	1,060	1,810	26,700	1,410	3,600	1,860	3,340	3,270	1,190	703	903	392
13	920	1,560	11,800	1,260	2,950	1,980	2,990	2,700	1,110	585	770	416
14	824	1,460	6,650	1,180	2,600	1,900	2,620	2,200	1,110	650	779	423
15	765	1,450	5,910	1,230	3,050	2,330	2,300	1,870	1,100	795	733	450
16	723	1,470	7,690	1,290	3,400	19,400	2,060	1,620	1,400	703	697	382
17	723	1,450	7,730	1,230	3,100	48,200	1,920	1,490	1,460	1,700	691	355
18	716	1,330	5,460	1,170	2,700	41,400	1,840	1,420	1,660	1,670	599	501
19	1,610	1,380	3,930	1,320	2,350	18,600	1,790	1,360	1,280	1,170	544	688
20	2,500	2,430	3,290	1,630	2,180	8,140	1,700	1,320	1,040	921	551	599
21	2,610	2,850	3,400	1,780	2,060	6,210	1,570	1,230	893	816	565	538
22	1,930	2,400	6,610	1,860	1,920	5,930	1,450	1,130	910	700	532	464
23	1,490	2,020	8,660	1,820	1,800	5,380	1,370	1,080	980	697	731	407
24	1,250	1,740	7,190	1,890	1,670	4,570	1,330	1,510	973	720	719	363
25	1,100	1,560	5,150	1,770	1,550	4,010	1,410	2,780	942	1,690	640	334
26	987	1,730	3,980	1,620	1,440	3,630	1,760	3,810	795	1,350	597	313
27	912	2,130	3,380	1,660	1,370	3,400	6,650	4,690	714	1,120	539	295
28	1,450	2,490	2,990	1,810	1,320	3,150	15,700	11,400	810	942	494	287
29	2,080	3,140	2,650	1,980	------	2,880	13,700	14,300	831	967	462	282
30	2,350	3,110	2,380	2,020	------	3,020	8,060	8,660	1,000	808	427	312
31	1,990	------	2,190	1,990	------	3,000	------	4,990	------	682	404	------
TOTAL	64,390	57,460	201,550	53,220	84,410	204,500	106,770	107,760	41,738	28,969	26,917	11,842
MEAN	2,077	1,915	6,502	1,717	3,015	6,597	3,559	3,476	1,391	934	868	395
MAX	5,940	3,330	33,900	2,220	6,600	48,200	15,700	14,300	3,570	1,700	3,670	688
MIN	716	1,100	1,610	1,170	1,320	1,220	1,330	1,080	714	585	404	282
CFSM	1.41	1.30	4.41	1.16	2.05	4.48	2.41	2.36	.94	.63	.59	.27
IN.	1.63	1.45	5.09	1.34	2.13	5.16	2.69	2.72	1.05	.73	.68	.30

CAL YR 1972 TOTAL 1,155,663 MEAN 3,158 MAX 33,900 MIN 275 CFSM 2.14 IN 29.17
WTR YR 1973 TOTAL 989,526 MEAN 2,711 MAX 48,200 MIN 282 CFSM 1.84 IN 24.97

PEAK DISCHARGE (BASE, 14,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-11	1030	16.86	35,000	04-28	1500	11.13	17,500
03-17	1630	21.02	51,200	05-29	0430	10.53	15,900

03532000 Powell River near Arthur, Tenn.

LOCATION.--Lat 36°32'30", long 83°37'49", Claiborne County, on left bank 500 ft (150 m) upstream from bridge on U. S. Highway 25E, 2.3 miles (3.7 km) east of Arthur, 2.4 miles (3.9 km) downstream from Indian Creek, and at mile 65.4 (105.2 km).

DRAINAGE AREA.--685 sq mi (1,774 sq km).

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 (318.162 m) 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 (0.610 m) higher.

AVERAGE DISCHARGE.--54 years, 1,135 cfs (32.14 cu m/s), 22.50 in/yr (572 mm/yr).

EXTREMES.--Current year: Maximum discharge, 27,600 cfs (782 cu m/s) Mar. 18, gage height, 26.38 ft (8.041 m); minimum, 195 cfs (5.22 cu m/s) Sept. 28, 29, gage height, 1.82 ft (0.555 m).
Period of record: Maximum discharge, 33,000 cfs (935 cu m/s) Jan. 9, 1946, gage height, 29.15 ft (8.885 m), present datum, from floodmark, from rating curve extended above 27,000 cfs (765 cu m/s) on basis of slope-area measurement of peak flow; minimum, 47 cfs (1.33 cu m/s) Jan. 6, 1940, result of freezeup; minimum daily, 60 cfs (1.70 cu m/s) Sept. 23, 1955; minimum gage height, 1.50 ft (0.457 m) Sept. 25, 26, 1972 (result of dredging).
Flood of Jan. 29, 1918, reached a stage of 29.2 ft (8.90 m) present datum, discharge, 33,000 cfs (935 cu m/s).

REMARKS.--Records good. Records of 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,480	626	1,990	1,150	927	671	1,770	2,520	2,260	1,120	1,690	272
2	890	590	1,550	1,050	1,060	638	1,780	1,920	1,750	1,350	3,380	265
3	478	626	1,220	1,000	1,140	646	1,690	1,880	1,470	1,230	2,810	258
4	356	685	1,030	1,280	1,200	662	1,640	1,950	1,260	1,000	1,660	251
5	1,020	715	934	1,300	1,160	923	1,620	1,780	1,100	862	1,200	230
6	1,610	631	1,310	1,190	1,300	945	1,560	1,550	1,180	881	962	217
7	1,160	595	1,710	1,100	1,910	992	1,450	1,380	1,690	850	813	240
8	670	1,310	1,900	1,040	2,660	1,070	1,550	1,330	1,610	736	728	227
9	496	2,070	3,790	971	3,490	1,270	1,620	1,620	1,230	645	641	230
10	400	1,750	13,900	908	3,420	1,520	1,560	1,800	1,050	651	622	262
11	328	1,250	20,300	847	2,520	1,360	1,630	2,440	949	769	945	282
12	282	934	13,700	794	1,910	1,670	1,600	2,510	861	688	765	293
13	268	745	5,330	745	1,570	1,810	1,480	2,190	848	635	720	282
14	254	705	3,550	685	1,440	1,600	1,340	1,770	821	542	673	282
15	230	675	3,290	669	1,590	1,930	1,200	1,480	883	550	614	296
16	217	660	4,170	687	1,760	10,800	1,110	1,280	1,100	594	562	360
17	254	613	4,180	671	1,650	24,800	1,040	1,160	1,440	808	510	360
18	262	564	3,000	646	1,470	23,600	996	1,070	1,970	773	472	356
19	770	670	2,250	725	1,320	8,190	966	1,010	1,410	625	442	336
20	1,170	1,730	1,900	887	1,210	4,440	922	939	1,060	545	433	400
21	1,010	2,160	2,050	990	1,110	3,840	861	869	894	545	432	344
22	675	1,720	4,150	1,010	1,020	3,710	812	813	820	506	404	279
23	546	1,280	6,320	1,050	944	3,110	776	755	831	657	395	251
24	492	1,000	4,600	1,050	879	2,560	761	826	820	562	376	237
25	448	843	3,010	960	818	2,220	782	1,240	702	1,000	373	224
26	428	955	2,390	899	759	2,060	822	1,320	627	1,620	368	214
27	388	1,290	2,010	926	720	1,920	2,590	1,860	598	1,420	353	204
28	432	1,770	1,760	960	694	1,720	5,840	7,600	738	1,310	354	198
29	710	2,260	1,540	1,060	------	1,580	6,160	9,900	771	981	334	201
30	856	2,500	1,370	1,030	------	1,760	3,900	5,800	1,070	862	304	300
31	720	------	1,250	978	------	1,830	------	3,140	------	1,070	288	------
TOTAL	19,300	33,922	121,454	29,258	41,651	115,847	51,828	67,702	33,813	26,387	24,623	8,151
MEAN	623	1,131	3,918	944	1,488	3,737	1,728	2,184	1,127	851	794	272
MAX	1,610	2,500	20,300	1,300	3,490	24,800	6,160	9,900	2,260	1,620	3,380	400
MIN	217	564	934	646	694	638	761	755	598	506	288	198
CFSM	.91	1.65	5.72	1.38	2.17	5.46	2.52	3.19	1.65	1.24	1.16	.40
IN.	1.05	1.84	6.60	1.59	2.26	6.29	2.81	3.68	1.84	1.43	1.34	.44

CAL YR 1972 TOTAL 628,262 MEAN 1,717 MAX 20,300 MIN 125 CFSM 2.51 IN 34.12
WTR YR 1973 TOTAL 573,936 MEAN 1,572 MAX 24,800 MIN 198 CFSM 2.29 IN 31.17

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-11	1830	22.68	21,200	05-29	1030	14.84	10,500
03-18	0330	26.38	27,600				

03533000 Clinch River below Norris Dam, Tenn.

LOCATION.--Lat 36°12'56", long 84°04'56", Anderson County, 0.5 mile (0.8 km) upstream from Clear Creek, 1.0 mile (1.6 km) downstream from Norris Dam, 1.5 miles (2.4 km) north of Norris, and at mile 78.8 (126.8 km).

DRAINAGE AREA.--2,913 sq mi (7,545 sq km).

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 (249.665 m) above mean sea level. See WSP 1306 for history of changes prior to Jan. 28, 1937.

AVERAGE DISCHARGE.--70 years, 4,295 cfs (121.6 cu m/s), 20.02 in/yr (509 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 21,600 cfs (612 cu m/s) Jan. 1, gage height, 10.18 ft (3.103 m); minimum, 36 cfs (1.02 cu m/s) Apr. 21, gage height 1.14 ft (0.347 m), minimum daily, 38 cfs (1.08 cu m/s) Apr. 21, 22.

Period of record: Maximum discharge, 87,000 cfs (2,460 cu m/s) Mar. 5, 1917, gage height, 38.5 ft (11.73 m), from graph based on gage readings, site and datum then in use, from rating curve extended above 62,000 cfs (1,760 cu m/s); minimum, and minimum daily, 1.3 cfs (0.037 cu m/s), several days in May and June, 1936, gage height, 0.62 ft (0.189 m).

Maximum discharge since closure of Norris Dam on Mar. 4, 1936, 42,500 cfs (1,200 cu m/s) Feb. 16, 1937, gage height, 17.13 ft (5.221 m).

Flood of Mar. 11, 1826, reached a stage of 43.5 ft (13.26 m), discharge, 130,000 cfs (3,680 cu m/s); floods of Feb. 24, 1862, and Mar. 31, 1886, reached a stage of 41.3 ft (12.59 m), discharge, 117,000 cfs (3,310 cu m/s); at site 19.6 miles (31.5 km) downstream at datum 42.49 ft (12.951 m) lower, from reports of Tennessee Valley Authority.

REMARKS.--Records good. Flow completely regulated by Norris Lake (see sta. 03532500). Records of chemical analyses 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	5,970	7,880	19,400	2,860	3,920	8,540	4,190	15,500	1,450	5,450	8,250
2	2,530	5,340	7,850	20,400	1,110	1,160	8,450	2,840	14,300	4,480	2,110	5,600
3	2,280	5,190	7,840	18,200	1,670	448	8,370	4,090	13,200	3,860	4,410	5,480
4	2,300	5,370	7,820	15,300	1,830	63	7,790	4,100	12,800	4,250	4,380	5,420
5	1,720	5,640	7,820	13,200	1,730	614	2,010	7,290	13,100	4,650	4,050	6,790
6	3,150	5,900	6,850	9,330	1,720	54	3,800	7,640	13,100	4,260	6,260	5,830
7	3,530	5,960	7,880	8,000	1,810	56	1,020	9,000	11,200	4,440	6,920	5,190
8	3,550	6,110	6,340	8,020	1,980	337	1,520	9,080	8,970	3,270	6,590	4,800
9	3,530	4,830	2,870	8,010	2,180	113	2,740	9,060	8,940	4,560	6,710	3,740
10	3,200	603	73	7,990	4,990	246	4,690	9,060	8,940	4,850	8,260	5,610
11	3,230	1,650	900	7,960	4,300	1,030	5,630	7,130	8,950	5,140	6,290	5,800
12	3,370	71	8,360	6,140	5,050	62	3,180	7,240	7,790	5,020	3,010	6,000
13	3,650	6,300	16,400	7,110	4,820	61	3,230	6,950	6,070	4,830	6,710	4,710
14	3,630	7,560	16,400	7,210	4,890	123	2,270	7,880	6,380	4,100	6,990	3,340
15	2,800	6,580	16,400	5,900	6,000	65	1,080	7,280	6,070	1,550	6,030	3,210
16	3,270	6,960	16,900	7,400	5,520	101	1,820	7,540	6,190	4,900	7,260	3,350
17	3,560	7,290	17,400	5,500	4,260	83	1,090	7,460	7,700	4,570	7,260	4,860
18	3,680	6,720	19,100	4,640	4,000	73	1,460	7,330	4,770	4,500	7,530	5,430
19	1,400	5,130	20,000	2,150	3,980	1,210	1,260	7,200	4,630	5,050	4,420	4,150
20	2,790	7,190	19,900	56	4,250	8,740	41	5,320	4,640	5,650	7,220	4,510
21	2,590	6,050	18,000	57	3,770	12,600	38	6,130	4,350	5,560	8,200	4,480
22	278	6,720	8,290	189	3,520	17,300	38	4,000	4,410	2,460	7,740	3,730
23	2,380	6,320	16,100	3,160	2,630	17,300	2,320	4,050	4,810	5,630	7,900	3,230
24	2,580	6,010	20,300	3,540	2,250	17,200	1,700	380	4,740	5,520	8,320	4,890
25	3,550	6,610	20,100	3,310	2,320	17,100	45	2,870	4,770	5,850	7,240	5,090
26	3,540	7,630	20,000	3,600	3,400	17,100	883	78	4,560	3,700	6,410	5,240
27	3,550	7,600	17,700	3,210	3,760	17,000	667	86	3,920	2,470	5,470	5,980
28	3,580	7,550	10,900	3,180	3,640	17,000	819	4,110	4,170	3,300	8,350	4,920
29	3,490	7,890	19,500	3,430	------	16,300	812	9,110	4,350	97	8,300	5,140
30	6,170	7,920	19,600	3,630	------	13,700	2,440	14,100	3,700	4,730	8,280	4,010
31	5,680	------	18,200	2,810	------	10,800	------	16,600	------	5,430	8,260	------
TOTAL	94,600	176,664	403,673	212,032	94,240	191,959	79,753	199,194	227,020	130,127	202,330	148,780
MEAN	3,052	5,889	13,020	6,840	3,366	6,192	2,658	6,426	7,567	4,198	6,527	4,959
MAX	6,170	7,920	20,300	20,400	6,000	17,300	8,540	16,600	15,500	5,850	8,350	8,250
MIN	42	71	73	56	1,110	54	38	78	3,700	97	2,110	3,210
(†)	+8,500	-57,000	+25,300	-86,800	+77,100	+247,300	+124,700	+79,300	-92,100	-60,800	-144,900	-125,700
MEAN‡	3,326	3,989	13,840	4,040	6,119	14,170	6,815	8,984	4,497	2,236	1,853	769
CFSM‡	1.14	1.37	4.75	1.39	2.10	4.86	2.34	3.08	1.54	.77	.64	.26
IN.‡	1.32	1.53	5.48	1.60	2.19	5.61	2.61	3.56	1.72	.89	.73	.29

CAL YR 1972 TOTAL 2,220,199 MEAN 6,066 MAX 20,300 MIN 42 MEAN‡ 6,417 CFSM‡ 2.20 IN.‡ 29.99
WTR YR 1973 TOTAL 2,160,372 MEAN 5,919 MAX 20,400 MIN 38 MEAN‡ 5,905 CFSM‡ 2.03 IN.‡ 27.52

† 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 (3.4 km) downstream from Smith Branch, 4 miles (6 km) northwest of Halls Crossroads, and at mile 16.3 (26.2 km).

DRAINAGE AREA.--68.5 sq mi (177.4 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 854.91 ft (260.577 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 97.7 cfs (2.767 cu m/s), 19.37 in/yr (492 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,500 cfs (354 cu m/s) Mar. 16, gage height, 11.78 ft (3.591 m), from rating curve extended above 5,000 cfs (142 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 8.8 cfs (0.25 cu m/s), Oct. 4.
Period of record: Maximum discharge, 12,500 cfs (354 cu m/s) Mar. 16, 1973, gage height, 11.78 ft (3.591 m), from rating curve extended above 5,000 cfs (142 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 3.9 cfs (0.11 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	30	114	92	124	61	138	158	156	52	126	12
2	16	29	92	84	261	59	127	137	137	50	80	12
3	11	46	80	202	200	84	119	375	123	45	47	11
4	74	34	79	276	161	91	153	231	113	41	37	9.8
5	412	29	77	189	141	298	131	175	107	40	31	16
6	81	25	186	155	324	158	119	145	135	37	28	13
7	42	89	168	132	262	133	195	128	132	34	26	12
8	27	205	130	125	447	119	317	271	106	34	24	11
9	19	101	921	112	390	105	231	170	97	33	23	11
10	14	73	3,220	102	259	96	186	155	175	30	24	16
11	11	63	1,090	96	191	180	153	478	99	29	30	15
12	10	48	515	90	156	198	135	237	91	27	24	12
13	28	43	353	85	137	148	120	173	86	25	22	11
14	26	109	277	81	263	128	108	142	85	25	25	19
15	14	68	482	82	266	1,040	100	121	79	31	30	17
16	11	56	385	87	199	6,380	95	109	502	35	21	12
17	28	52	247	91	160	2,390	93	108	858	35	20	12
18	159	46	189	95	139	740	89	95	206	27	19	19
19	583	242	162	219	126	391	86	89	134	25	18	15
20	180	296	159	166	114	334	81	86	102	24	29	12
21	93	143	388	142	103	473	76	79	88	22	34	12
22	63	105	537	504	94	354	73	74	83	20	20	11
23	48	83	318	263	89	270	71	73	70	20	17	11
24	42	68	223	184	82	221	70	86	63	19	16	12
25	32	74	181	147	75	199	109	85	57	27	15	11
26	26	106	158	134	71	179	364	83	52	47	14	9.8
27	29	81	141	170	68	158	1,550	1,240	52	35	14	9.8
28	61	191	123	147	64	137	480	3,000	116	24	13	9.8
29	47	174	111	163	------	139	261	448	81	20	12	18
30	36	137	103	135	------	146	193	248	60	17	12	30
31	34	------	101	124	------	144	------	186	------	76	13	------
TOTAL	2,292	2,846	11,310	4,674	4,966	15,553	6,023	9,185	4,245	1,006	864	402.2
MEAN	73.9	94.9	365	151	177	502	201	296	142	32.5	27.9	13.4
MAX	583	296	3,220	504	447	6,380	1,550	3,000	858	76	126	30
MIN	10	25	77	81	64	59	70	73	52	17	12	9.8
CFSM	1.08	1.39	5.33	2.20	2.58	7.33	2.93	4.32	2.07	.47	.41	.20
IN.	1.24	1.55	6.14	2.54	2.70	8.45	3.27	4.99	2.31	.55	.47	.22

CAL YR 1972 TOTAL 51,660.6 MEAN 141 MAX 3,220 MIN 7.5 CFSM 2.06 IN 28.06
WTR YR 1973 TOTAL 63,366.2 MEAN 174 MAX 6,380 MIN 9.8 CFSM 2.54 IN 34.41

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1230	9.78	4,960	05-28	0130	9.88	4,990
03-16	1600	11.78	12,500	06-17	0100	8.95	3,000
04-27	1030	8.31	1,990				

03538225 Poplar Creek near Oak Ridge, Tenn.

LOCATION.--Lat 35°59'55", long 84°20'23", Roane County, on right bank, 1,000 ft (300 m) upstream from county road bridge, 0.4 mile (0.6 km) downstream from Indian Creek, 8.2 miles (13.2 km) southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 13.8 (22.2 km).

DRAINAGE AREA.--82.5 sq mi (213.7 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 743.50 ft (226.619 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 171 cfs (4.843 cu m/s), 28.15 in/yr (715 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,040 cfs (228 cu m/s) Dec. 10, gage height, 24.43 ft (7.446 m), from dross line in gage house; minimum, 15 cfs (0.42 cu m/s) Sept. 12.
Period of record: Maximum discharge, 8,590 cfs (243 cu m/s) Dec. 31, 1969, gage height, 24.91 ft (7.593 m) from floodmarks; minimum, 5.0 cfs (0.14 cu m/s), Oct. 27, 1963.
Flood of June 29, 1928, at site about 5.0 miles (8.0 km) upstream, drainage area, 55.9 sq mi (144.8 sq km), discharge, about 14,000 cfs (396 cu m/s) was the greatest known since at least 1900, from reports by Tennessee Valley Authority.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	130	261	164	198	81	200	227	213	140	490	20
2	36	141	216	138	495	82	180	191	172	144	294	20
3	25	278	190	310	407	174	170	771	146	116	176	19
4	111	223	212	635	282	199	200	492	126	196	126	18
5	455	178	212	405	225	849	190	308	150	210	98	18
6	126	148	785	292	383	429	180	227	895	137	80	18
7	72	242	732	227	328	303	300	188	748	103	70	17
8	49	736	414	210	574	285	500	665	313	138	61	17
9	38	384	2,330	179	613	221	400	630	219	120	53	17
10	31	254	6,300	156	396	193	290	460	174	88	94	20
11	26	194	4,700	141	278	257	226	680	139	79	97	18
12	23	154	1,100	128	221	299	197	500	121	65	61	17
13	77	136	652	123	192	241	172	300	120	56	74	17
14	65	227	491	116	444	206	150	250	138	56	159	31
15	41	182	652	123	588	1,040	136	200	103	82	81	23
16	35	164	652	127	386	5,400	129	180	688	72	57	18
17	425	153	435	121	275	5,000	125	200	398	54	46	36
18	549	132	327	122	221	1,700	122	150	209	48	41	118
19	1,500	353	275	475	194	1,000	124	120	147	45	35	29
20	611	827	267	438	169	600	112	200	348	49	44	20
21	243	400	391	305	149	800	100	160	189	41	81	18
22	160	270	677	981	135	600	92	130	158	38	40	17
23	156	205	510	550	126	450	90	250	120	38	32	21
24	234	169	359	347	115	350	90	400	100	37	29	25
25	162	198	277	256	104	300	136	300	86	359	27	17
26	128	256	233	219	98	250	492	1,000	75	682	25	17
27	119	215	200	235	93	230	2,010	3,000	127	329	23	16
28	223	312	171	198	87	210	885	4,500	356	168	21	16
29	194	333	149	199	------	200	433	2,000	159	116	21	62
30	161	317	136	167	------	210	298	500	145	86	20	76
31	147	------	174	160	------	220	------	276	------	492	21	------
TOTAL	6,288	7,911	24,480	8,247	7,776	22,379	8,729	19,455	7,082	4,384	2,577	796
MEAN	203	264	790	266	278	722	291	628	236	141	83.1	26.5
MAX	1,500	827	6,300	981	613	5,400	2,010	4,500	895	682	490	118
MIN	23	130	136	116	87	81	90	120	75	37	20	16
CFSM	2.46	3.20	9.58	3.22	3.37	8.75	3.53	7.61	2.86	1.71	1.01	.32
IN.	2.84	3.57	11.04	3.72	3.51	10.09	3.94	8.77	3.19	1.98	1.16	.36

CAL YR 1972 TOTAL 90,405.9 MEAN 247 MAX 6,300 MIN 8.6 CFSM 2.99 IN 40.76
WTR YR 1973 TOTAL 120,104.0 MEAN 329 MAX 6,300 MIN 16 CFSM 3.99 IN 54.16

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	Unknown	a24.43	8,040	04-27	1230	15.94	2,340
03-16	Unknown	a24.34	7,940	05-28	about 0300	b21.81	5,570

a Dross line in gage house.
b Magnet on float tape gage.

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 (0.5 km) north of State Highway 95, 1.7 miles (2.7 km) upstream from Bear Creek, 5.8 miles (9.3 km) southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 3.3 (5.3 km).

DRAINAGE AREA.--19.5 sq mi (50.5 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 754.16 ft (229.868 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 50.9 cfs (1.441 cu m/s), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,950 cfs (83.5 cu m/s) Dec. 10, gage height, 13.25 ft (4.039 m); minimum daily, 21 cfs (0.59 cu m/s) Oct. 3.
Period of record: Maximum discharge, 2,950 cfs (83.5 cu m/s) Dec. 10, 1972, gage height, 13.25 ft (4.039 m); minimum daily, 17 cfs (0.48 cu m/s) many days in October 1964, Oct. 3, 4, 1965, Aug. 28, 1971, and Sept. 3, 1972.
Flood of Sept. 29, 1944, the greatest known since 1900, reached a discharge of about 4,600 cfs (130 cu m/s) at site 5.1 miles (8.2 km) upstream, from report of the Tennessee Valley Authority.

REMARKS.--Records good. Flow includes effect of operations of the Atomic Energy Commission's Y-12 Plant, which may add up to 20 cfs (0.57 cu m/s), and the west end sewage treatment plant of the City of Oak Ridge, which may add up to 10 cfs (0.28 cu m/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	30	53	46	70	31	54	55	61	39	99	22
2	22	32	45	40	119	34	48	51	53	37	71	22
3	21	41	40	110	77	58	46	137	46	34	46	22
4	38	31	41	118	62	66	59	63	44	33	37	22
5	101	29	39	77	55	234	45	52	46	34	31	23
6	31	27	113	66	139	85	41	46	183	30	31	23
7	26	69	74	56	84	71	103	42	85	35	29	23
8	23	114	62	55	166	71	99	217	62	37	28	22
9	22	58	522	55	112	57	73	200	52	29	28	22
10	22	48	1,580	49	81	52	60	100	45	29	27	25
11	23	42	249	45	66	81	53	120	42	28	27	23
12	21	35	144	42	58	68	47	80	42	27	25	23
13	55	33	109	39	53	57	42	60	41	28	27	27
14	29	62	93	38	160	52	39	50	42	40	33	39
15	24	38	161	42	113	392	36	45	39	84	30	24
16	23	35	109	45	79	1,790	34	40	132	56	26	22
17	198	33	79	44	65	470	35	50	58	37	25	28
18	147	31	66	44	56	143	34	40	47	33	24	44
19	248	148	60	147	51	94	35	35	39	31	22	23
20	86	139	65	84	47	104	32	50	90	31	32	22
21	58	72	114	69	44	164	30	40	61	29	34	23
22	45	54	153	279	40	99	28	35	41	27	24	22
23	42	44	93	100	39	78	29	70	36	29	23	28
24	40	38	73	74	36	66	30	120	33	27	23	31
25	33	54	62	62	34	60	56	80	31	41	23	23
26	31	62	56	58	33	59	249	100	31	53	22	23
27	35	48	50	62	32	53	607	750	49	48	22	23
28	48	82	46	59	31	46	136	1,000	142	33	23	23
29	34	62	42	69	------	55	84	500	43	28	25	54
30	31	63	39	53	------	57	66	200	58	28	24	45
31	33	------	50	49	------	61	------	72	------	150	23	------
TOTAL	1,615	1,654	4,482	2,176	2,002	4,808	2,330	4,500	1,774	1,225	964	796
MEAN	52.1	55.1	145	70.2	71.5	155	77.7	145	59.1	39.5	31.1	26.5
MAX	248	148	1,580	279	166	1,790	607	1,000	183	150	99	54
MIN	21	27	39	38	31	31	28	35	31	27	22	22

CAL YR 1972 TOTAL 22,212 MEAN 60.7 MAX 1,580 MIN 17
WTR YR 1973 TOTAL 28,326 MEAN 77.6 MAX 1,790 MIN 21

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1115	13.25	2,950	04-27	0530	8.63	1,180
03-16	1300	12.74	2,670	05-27	2145	12.34	2,460

03539800 Obed River near Lancing, Tenn.

LOCATION.--Lat 36°04'53", long 84°40'15", Morgan County, on left bank at Alley Ford, 2.9 miles (4.7 km) southwest of Lancing, 3.0 miles (4.8 km) downstream from Clear Creek, and at mile 1.5 (2.4 km).

DRAINAGE AREA.--518 sq mi (1,342 sq km).

PERIOD OF RECORD.--October 1956 to September 1968, March to September 1973. Prior to May 1957, monthly discharge only, published in WSP 1726.

GAGE.--Water-stage recorder. Datum of gage is 891.91 ft (271.854 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 1956-68, 1,011 cfs (28.63 cu m/s), 26.50 in/yr (673 mm/yr).

EXTREMES.--March to September 1973: Maximum discharge, 105,000 cfs (2,970 cu m/s) May 27, gage height, 29.51 ft (8.995 m), dross line in gage well, 30.5 ft (9.30 m), from floodmarks, from rating curve extended above 33,000 cfs (935 cu m/s) on basis of slope-conveyance study at gage height 22.40 ft (6.828 m), and slope-area measurement of peak flow; minimum daily, 17 cfs (0.48 cu m/s) Sept. 10.
Period of record: Maximum discharge, 105,000 cfs (2,970 cu m/s) May 27, 1973, gage height, 29.51 ft (8.995 m), dross line in gage well, 30.5 ft (9.30 m), from floodmarks, from rating curve extended above 33,000 cfs (935 cu m/s) on basis of slope-conveyance study at gage height 22.40 ft (6.828 m), and slope-area measurement of peak flow; minimum, 0.4 cfs (0.011 cu m/s) Oct. 31, 1963.
Flood of Mar. 23, 1929, reached a stage of 33.9 ft (10.33 m), 35 ft (11 m) downstream from gage, from high water marks by Tennessee Valley Authority.

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

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER, 1973

DAY	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	1,610	1,560	1,630	407	1,060	30
2	520	1,380	1,260	1,350	1,070	821	26
3	700	1,150	4,950	988	756	558	24
4	1,000	1,300	4,900	724	551	425	22
5	2,000	1,550	2,870	607	1,640	360	20
6	1,900	1,320	2,000	2,950	946	330	19
7	1,800	1,490	1,530	5,020	558	290	18
8	1,900	4,410	1,340	2,760	413	240	18
9	1,800	3,300	1,300	1,790	373	210	18
10	1,700	2,440	1,040	1,240	356	200	17
11	1,880	1,860	5,220	890	614	220	19
12	3,720	1,510	3,080	701	529	250	25
13	2,550	1,250	1,950	1,720	384	320	40
14	1,900	1,010	1,400	2,370	378	460	90
15	8,780	855	1,050	1,930	847	330	130
16	36,100	732	813	2,750	1,200	290	200
17	19,700	664	672	1,810	1,070	260	270
18	6,800	614	594	1,250	657	200	370
19	3,930	614	502	788	482	160	300
20	2,920	594	502	2,240	709	130	160
21	3,680	536	462	938	515	110	100
22	3,080	502	373	607	395	90	80
23	2,360	482	319	443	515	80	65
24	1,860	449	384	395	456	70	55
25	1,660	614	694	367	1,810	65	50
26	1,660	1,320	1,100	351	4,760	55	45
27	1,500	5,650	27,000	340	5,030	50	40
28	1,300	4,800	40,000	1,380	2,490	45	43
29	1,140	2,960	7,200	890	1,380	40	42
30	1,550	2,080	3,200	475	855	37	60
31	1,520	------	2,200	------	701	33	------
TOTAL	123,450	49,046	121,465	41,694	32,847	7,789	2,396
MEAN	3,982	1,635	3,918	1,390	1,060	251	79.9
MAX	36,100	5,650	40,000	5,020	5,030	1,060	370
MIN	520	449	319	340	356	33	17
CFSM	7.69	3.16	7.56	2.68	2.05	.48	.15
IN.	8.87	3.52	8.72	2.99	2.36	.56	.17

PEAK DISCHARGE (BASE, 13,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-16	1815	20.67	45,300	05-27	Unknown	29.51*	105,000

* Dross line in gage well.

Note.--No gage-height record Aug. 16 to Sept. 30.

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 (300 m) downstream from Highway bridge, 1,100 ft (340 m) downstream from Mud Lick Creek, and at mile 18.3 (29.4 km).

DRAINAGE AREA.--764 sq mi (1,979 sq km).

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 (232.069 m) above mean sea level. Prior to Oct. 1, 1929, nonrecording gage at site 5.8 miles (9.3 km) downstream at datum 43.60 ft (13.289 m) lower, and Oct. 1, 1929, to Dec. 29, 1969, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--46 years, 1,431 cfs (40.53 cu m/s), 25.43 in/yr (646 mm/yr).

EXTREMES.--Current year: Maximum discharge, 170,000 cfs (4,810 cu m/s) May 28, gage height, 38.68 ft (11.790 m), from rating curve extended above 85,000 cfs (2,410 cu m/s) on basis of slope-area measurement of peak flow; minimum, 18 cfs (0.510 cu m/s) Sept. 11, gage height, 1.65 ft (0.503 m).
Period of record: Maximum discharge, 195,000 cfs (5,520 cu m/s) Mar. 23, 1929, gage height, about 44.3 ft (13.50 m), present site and datum, and 61.1 ft (18.62 m), site and datum then in use, from floodmarks, from rating curve extended above 85,000 cfs (2,410 cu m/s); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	944	788	2,210	1,910	1,720	625	2,110	2,070	2,090	691	1,640	40
2	477	856	1,930	1,760	3,150	585	1,860	1,660	1,760	1,440	1,240	36
3	291	3,690	1,670	1,840	3,260	809	1,570	7,090	1,330	1,160	890	31
4	288	3,110	1,570	4,200	2,560	1,440	1,680	6,900	1,030	875	672	28
5	983	2,120	1,650	3,640	2,120	2,390	2,000	3,870	827	1,780	519	26
6	889	1,580	3,050	2,760	2,690	2,390	1,720	2,610	4,030	1,280	428	25
7	572	1,900	4,760	2,210	3,910	2,060	1,960	1,990	7,120	837	348	24
8	399	7,880	3,310	1,970	6,390	2,300	5,720	2,050	3,800	623	300	21
9	297	4,540	9,780	1,670	8,180	2,240	4,570	2,030	2,400	515	251	19
10	229	2,900	44,900	1,440	4,580	1,920	3,300	1,680	1,680	446	218	19
11	183	2,130	17,000	1,280	3,070	2,240	2,480	6,360	1,270	720	240	19
12	148	1,630	8,660	1,090	2,350	5,010	2,010	4,030	1,010	725	418	23
13	174	1,340	5,900	966	1,940	3,450	1,650	2,530	1,730	528	515	50
14	285	1,650	4,690	972	2,860	2,540	1,350	1,840	2,570	394	950	90
15	215	1,820	5,330	966	6,280	11,000	1,160	1,390	2,080	816	645	117
16	194	1,580	6,080	977	4,520	52,900	1,020	1,110	3,370	1,160	471	206
17	764	1,410	4,010	1,070	3,160	27,800	932	938	2,430	1,220	340	270
18	2,860	1,220	2,900	1,300	2,460	9,080	867	830	2,270	816	273	435
19	13,000	1,360	2,310	6,000	2,050	5,060	846	710	1,310	618	218	244
20	6,640	4,770	2,200	6,020	1,730	3,810	815	700	3,760	920	184	184
21	3,140	3,660	2,890	3,730	1,490	5,650	729	658	2,370	725	154	133
22	1,940	2,660	7,290	7,270	1,280	4,440	648	530	1,540	507	135	103
23	1,430	2,070	5,120	5,350	1,110	3,260	594	489	972	593	117	84
24	1,300	1,660	3,530	3,440	989	2,540	572	799	691	677	100	69
25	1,100	1,530	2,750	2,530	872	2,230	696	1,110	533	1,650	84	60
26	926	2,270	2,230	2,060	784	2,190	2,640	1,680	416	5,550	76	50
27	816	2,330	1,890	2,370	739	2,030	8,530	40,700	391	6,910	66	44
28	867	2,210	1,610	2,260	681	1,800	6,960	63,200	2,160	3,130	56	40
29	899	2,270	1,380	2,280	------	1,620	4,100	10,800	1,500	1,750	52	40
30	819	2,160	1,210	2,070	------	1,970	2,780	4,680	903	1,150	49	76
31	762	------	1,270	1,850	------	2,000	------	2,900	------	1,140	45	------
TOTAL	43,831	71,094	165,080	79,251	76,925	169,379	67,869	179,934	59,343	41,346	11,694	2,606
MEAN	1,414	2,370	5,325	2,556	2,747	5,464	2,262	5,804	1,978	1,334	377	86.9
MAX	13,000	7,880	44,900	7,270	8,180	52,900	8,530	63,200	7,120	6,910	1,640	435
MIN	148	788	1,210	966	681	585	572	489	391	394	45	19
CFSM	1.85	3.10	6.97	3.35	3.60	7.15	2.96	7.60	2.59	1.75	.49	.11
IN.	2.13	3.46	8.04	3.86	3.75	8.25	3.30	8.76	2.89	2.01	.57	.13

CAL YR 1972 TOTAL 755,702 MEAN 2,065 MAX 44,900 MIN 21 CFSM 2.70 IN 36.80
WTR YR 1973 TOTAL 968,352 MEAN 2,653 MAX 63,200 MIN 19 CFSM 3.47 IN 47.15

PEAK DISCHARGE (BASE, 19,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1200	27.81	69,600	05-28	0030	38.68	170,000
03-16	1830	27.81	69,600				

03541300 Bitter Creek near Oakdale, Tenn.

LOCATION.--Lat 35°59'22", long 84°29'16", Morgan County, on left bank 0.2 mile (0.3 km) upstream from bridge on U. S. Highway 27, 3.9 miles (6.3 km) east of Oakdale and 0.3 mile (0.5 km) upstream from mouth.

DRAINAGE AREA.--12.6 sq mi (32.6 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 760 ft (232 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 28.1 cfs (0.796 cu m/s), 30.29 in/yr (769 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,880 cfs (138 cu m/s) May 27, gage height, 22.65 ft (6.904 m), from floodmarks, from rating curve extended above 1,300 cfs (36.8 cu m/s) on basis of slope-area measurement of peak flow; minimum, 0.10 cfs (0.003 cu m/s) Sept. 28.
Period of record: Maximum discharge, 4,880 cfs (138 cu m/s) May 27, 1973, gage height, 22.65 ft (6.904 m), from floodmarks, from rating curve extended above 1,300 cfs (36.8 cu m/s) on basis of slope-area measurement of peak flow; minimum, less than 0.1 cfs (0.003 cu m/s) several days during period September to November 1968.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.5	27	28	34	9.6	29	24	35	15	52	.92
2	5.0	16	23	28	81	10	26	20	30	12	23	.75
3	4.0	31	19	81	68	21	22	186	28	9.3	13	.60
4	18	26	20	156	45	31	33	91	26	8.8	8.0	.48
5	70	18	18	77	34	94	28	47	24	9.3	6.0	.42
6	20	13	136	49	63	67	26	31	30	6.9	4.8	.36
7	6.7	73	108	36	63	49	68	23	28	6.0	4.1	.36
8	4.1	142	72	31	135	37	97	71	26	6.4	3.7	.42
9	2.8	59	397	25	115	30	66	58	24	6.9	3.2	.30
10	1.7	32	800	22	63	26	43	50	40	5.7	3.0	.60
11	1.2	20	500	21	40	46	31	96	26	5.5	3.2	.92
12	1.1	14	200	18	30	61	26	57	22	4.6	12	.42
13	22	12	79	17	25	46	20	34	20	3.9	27	.75
14	14	19	59	16	99	34	17	23	18	3.9	62	3.9
15	8.0	15	112	17	112	368	14	17	36	4.1	22	2.1
16	5.7	14	104	17	64	1,350	13	14	140	5.2	12	.92
17	168	13	61	19	41	278	13	13	200	4.1	8.0	.60
18	213	9.9	42	22	32	94	12	10	100	3.7	6.2	1.4
19	313	49	34	137	26	51	9.3	9.9	90	3.7	4.8	.75
20	83	91	30	89	22	59	8.5	10	70	4.6	4.1	.42
21	31	49	55	64	18	112	8.0	7.7	47	3.9	3.7	.20
22	17	29	117	225	16	74	7.5	6.7	31	3.3	3.2	.18
23	14	20	76	91	15	48	8.0	15	21	5.5	2.8	.16
24	11	14	50	52	14	28	8.5	58	17	5.5	2.4	.15
25	8.0	20	36	35	12	20	12	56	14	36	2.2	.14
26	6.7	23	30	31	12	25	28	39	13	75	2.1	.13
27	8.0	22	25	31	11	26	176	800	22	77	1.7	.12
28	12	29	21	29	10	24	80	1,200	84	22	1.6	.10
29	12	29	18	30	------	26	47	100	30	11	1.4	3.7
30	10	32	17	27	------	25	32	60	16	6.7	1.4	4.1
31	10	------	26	26	------	29	------	40	------	69	1.2	------
TOTAL	1,111.0	942.4	3,312	1,547	1,300	3,198.6	1,008.8	3,267.3	1,308	444.5	305.8	26.37
MEAN	35.8	31.4	107	49.9	46.4	103	33.6	105	43.6	14.3	9.86	.88
MAX	313	142	800	225	135	1,350	176	1,200	200	77	62	4.1
MIN	1.1	8.5	17	16	10	9.6	7.5	6.7	13	3.3	1.2	.10
CFSM	2.84	2.49	8.49	3.96	3.68	8.17	2.67	8.33	3.46	1.13	.78	.07
IN.	3.28	2.78	9.78	4.57	3.84	9.44	2.98	9.65	3.86	1.31	.90	.08

CAL YR 1972 TOTAL 13,236.08 MEAN 36.2 MAX 800 MIN .18 CFSM 2.87 IN 39.08
WTR YR 1973 TOTAL 17,771.77 MEAN 48.7 MAX 1,350 MIN .10 CFSM 3.87 IN 52.47

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-19	0655	9.58	482	03-16	0850	17.67	2,400
12-10	Unknown	22.0[a]	4,300[a]	05-27	Unknown	22.65[b]	4,880

a estimated.
b from floodmarks.

03543500 Sewee Creek near Decatur, Tenn.

LOCATION.--Lat 35°34'53", long 84°44'53", Meigs County, on right bank 0.3 mile (0.5 km) downstream from bridge on State Highway 58, 0.5 mile (0.8 km) downstream from Dry Fork, 5.0 miles (8.0 km) north of Decatur, and at mile 5.7 (9.2 km).

DRAINAGE AREA.--117 sq mi (303 sq km).

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 (211.629 m) above mean sea level.

AVERAGE DISCHARGE.--39 years, 191 cfs (5.409 cu m/s), 22.17 in/yr (563 mm/yr).

EXTREMES.--Current year: Maximum discharge, 13,300 cfs (377 cu m/s) Mar. 16, gage height, 20.12 ft (6.133 m); minimum, 29 cfs (0.82 cu m/s) Sept. 25-28, gage height, 0.32 ft (0.098 m).
Period of record: Maximum discharge, 23,900 cfs (677 cu m/s) Jan. 7, 1946, gage height, 23.97 ft (7.306 m), from floodmarks, from rating curve extended above 11,300 cfs (320 cu m/s) on basis of slope-area measurement at gage height 22.81 ft (6.952 m); minimum, 11 cfs (0.31 cu m/s) Sept. 24, 1935, Jan. 7-10, Oct. 4, 5, 7, 11, 12, 14, 15, 1940; minimum gage height, 0.15 ft (0.046 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	75	187	249	344	111	343	329	209	63	348	36
2	49	79	162	214	715	117	294	286	169	62	208	35
3	41	108	144	462	474	246	262	263	143	58	128	33
4	50	98	144	836	368	346	260	233	127	58	100	37
5	213	83	139	485	321	908	231	205	122	87	86	37
6	86	79	551	400	621	431	207	185	605	60	78	36
7	65	180	418	333	462	389	341	169	431	57	76	35
8	54	313	310	315	725	549	408	1,370	296	57	70	33
9	47	182	2,240	280	615	418	324	560	234	57	65	37
10	43	144	3,840	252	444	343	286	344	195	55	61	42
11	39	129	2,390	232	358	571	245	284	167	55	65	36
12	38	107	1,250	212	306	599	225	241	176	52	59	34
13	38	102	816	191	270	400	205	209	172	49	57	39
14	38	208	634	181	554	337	185	182	134	47	84	63
15	36	137	1,430	201	505	1,090	170	161	121	49	62	42
16	36	116	948	227	376	8,840	158	147	119	49	55	35
17	36	104	583	222	315	6,040	149	138	106	47	52	43
18	56	93	442	222	274	1,270	149	130	97	47	52	64
19	1,300	460	375	736	250	792	152	124	91	47	50	38
20	316	573	343	465	228	659	138	126	105	44	47	36
21	193	289	531	380	206	1,230	126	115	87	44	44	34
22	138	225	913	1,080	186	714	119	108	89	41	41	33
23	118	178	587	550	171	496	116	145	80	41	41	32
24	106	144	434	403	152	415	114	338	75	212	41	31
25	89	171	358	334	140	421	351	185	71	802	41	29
26	76	251	309	324	134	373	1,510	137	68	147	38	29
27	78	187	261	431	129	331	2,660	205	65	636	38	29
28	104	211	227	352	120	291	854	784	83	153	37	30
29	91	203	201	375	------	274	521	336	67	101	36	38
30	75	196	181	308	------	278	394	245	64	83	36	98
31	80	------	257	278	------	354	------	200	------	470	36	------
TOTAL	3,803	5,425	21,605	11,530	9,763	29,633	11,497	8,484	4,568	3,830	2,232	1,174
MEAN	123	181	697	372	349	956	383	274	152	124	72.0	39.1
MAX	1,300	573	3,840	1,080	725	8,840	2,660	1,370	605	802	348	98
MIN	36	75	139	181	120	111	114	108	64	41	36	29
CFSM	1.05	1.55	5.96	3.18	2.98	8.17	3.27	2.34	1.30	1.06	.62	.33
IN.	1.21	1.72	6.87	3.67	3.10	9.42	3.66	2.70	1.45	1.22	.71	.37

CAL YR 1972 TOTAL 94,887 MEAN 259 MAX 3,840 MIN 24 CFSM 2.21 IN 30.17
WTR YR 1973 TOTAL 113,544 MEAN 311 MAX 8,840 MIN 29 CFSM 2.66 IN 36.10

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	2000	11.74	5,320	04-26	0500	6.77	2,420
03-16	1930	20.12	13,300	04-27	0830	8.31	3,270

03556500 Hiwassee River near McFarland, Tenn.

LOCATION.--Lat 35°10'48", long 84°26'36", Polk County, on left bank 0.2 mile (0.3 km) downstream from Smith Creek, 0.4 mile (0.6 km) downstream from Apalachia powerhouse of Tennessee Valley Authority, 2.8 miles (4.5 km) west of McFarland, and at mile 53.2 (85.6 km).

DRAINAGE AREA.--1,136 sq mi (2,942 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 830.56 ft (253.155 m) above mean sea level.

AVERAGE DISCHARGE.--31 years, 2,380 cfs (67.40 cu m/s), 28.45 in/yr (723 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 47,100 cfs (1,330 cu m/s) May 28, gage height, 15.34 ft (4.676 m), from rating curve extended as explained below; minimum, 240 cfs (6.80 cu m/s) Aug. 5, gage height, 1.80 ft (0.549 m); minimum daily, 258 cfs (7.31 cu m/s) Apr. 22.
Period of record: Maximum discharge, 47,100 cfs (1,330 cu m/s) May 28, 1973, gage height, 15.34 ft (4.676 m), from rating curve extended above 15,000 cfs (425 cu m/s) on basis of slope-area measurement at gage height 15.34 ft (4.676 m); minimum daily, 30 cfs (0.85 cu m/s) 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, 1973). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,550	2,560	2,960	7,100	2,940	2,610	2,990	1,200	6,900	2,110	3,140	2,400
2	2,550	2,570	2,910	7,000	3,000	1,370	1,990	1,160	4,450	2,530	3,230	2,030
3	2,500	2,620	2,860	6,000	2,960	1,440	1,520	1,180	4,200	3,130	3,160	2,400
4	2,550	2,600	2,870	5,200	2,920	1,380	1,510	1,520	3,140	3,120	2,550	3,030
5	2,700	2,590	2,860	4,100	2,920	1,570	1,490	1,500	3,160	3,120	2,160	2,980
6	2,600	2,580	3,050	3,500	2,990	1,440	1,480	1,480	4,330	3,050	2,450	2,990
7	2,600	2,610	3,070	3,000	3,020	1,410	1,490	1,470	8,300	2,430	3,010	3,000
8	2,600	2,800	2,950	3,500	3,330	1,380	1,260	1,640	6,480	2,050	3,050	2,380
9	2,550	2,690	3,100	3,000	3,720	1,400	1,710	1,640	3,690	2,420	3,100	1,760
10	2,550	2,640	4,080	3,000	5,150	1,350	1,630	1,610	3,200	3,020	3,140	3,070
11	2,500	2,620	3,960	3,000	5,010	1,520	1,560	1,570	3,150	3,160	2,490	3,040
12	2,550	2,620	3,230	3,000	4,930	1,750	1,530	1,560	3,240	3,070	2,170	3,040
13	2,520	2,770	3,080	3,000	4,950	1,510	1,530	1,540	3,220	3,030	2,620	3,120
14	2,530	2,990	3,010	3,000	5,110	1,450	1,170	1,530	3,750	2,450	3,260	3,310
15	2,500	2,960	4,500	3,000	5,020	1,910	1,090	1,530	5,220	2,180	3,140	2,490
16	2,510	2,910	3,200	3,000	4,000	9,780	1,090	1,520	5,430	2,600	3,070	2,010
17	2,530	2,680	3,000	2,700	2,980	6,560	1,120	1,520	7,060	3,190	3,070	2,420
18	2,580	2,940	3,500	2,870	2,910	3,770	1,100	1,520	7,050	3,060	2,470	3,080
19	2,670	2,960	4,800	3,100	2,910	3,340	1,100	1,510	4,500	3,210	1,930	3,030
20	2,590	3,000	6,200	3,060	2,910	3,190	1,080	1,570	4,160	3,200	1,940	2,990
21	2,560	2,940	7,000	2,990	2,910	3,200	284	2,150	3,190	3,190	3,020	3,000
22	2,550	2,910	7,000	3,360	2,900	3,100	258	2,720	3,220	3,170	2,990	2,480
23	2,560	2,920	7,000	3,130	2,690	3,010	1,030	2,730	2,600	3,170	2,990	2,110
24	2,580	2,890	7,000	2,990	2,690	2,970	939	3,560	2,120	3,180	2,980	2,440
25	2,540	2,830	7,000	2,930	2,700	3,040	399	4,550	2,550	3,230	2,460	3,020
26	2,540	2,880	7,000	2,920	2,690	3,010	992	5,550	3,120	3,380	2,000	3,040
27	2,540	2,840	7,000	3,040	2,680	2,980	2,190	6,260	3,130	5,620	2,390	3,010
28	2,590	2,870	7,000	2,990	2,650	2,980	1,670	27,700	3,240	2,900	2,970	3,010
29	2,570	2,880	7,000	3,050	------	2,950	1,410	19,600	3,210	2,270	2,960	2,530
30	2,570	2,920	7,000	3,000	------	2,910	1,270	13,800	2,550	2,550	3,030	2,130
31	2,560	------	7,000	2,960	------	3,020	------	8,540	------	3,130	2,970	------
TOTAL	79,390	83,590	146,190	108,490	95,590	83,300	39,882	126,930	123,560	91,920	85,910	81,340
MEAN	2,561	2,786	4,716	3,500	3,414	2,687	1,329	4,095	4,119	2,965	2,771	2,711
MAX	2,700	3,000	7,000	7,100	5,150	9,780	2,990	27,700	8,300	5,620	3,260	3,310
MIN	2,500	2,560	2,860	2,700	2,650	1,350	258	1,160	2,120	2,050	1,930	1,760

CAL YR 1972 TOTAL 939,380 MEAN 2,567 MAX 10,700 MIN 285 MEAN† 2,610 CFSM† 2.30 IN.† 31.27
WTR YR 1973 TOTAL 1,146,092 MEAN 3,140 MAX 27,700 MIN 258 MEAN† 3,194 CFSM† 2.81 IN.† 38.17

† Adjusted for change in contents in Chatuge, Hiwassee, Apalahia (North Carolina), and Nottely (Georgia) Lakes.
NOTE.--No gage-height record Dec. 15 to Jan. 17.

03560500 Davis Mill Creek at Copperhill, Tenn.

LOCATION.--Lat 34°59'43", long 84°22'56", Polk County, on right bank, 100 ft (30 m) upstream from bridge on State Highway 68, 0.4 mile (0.6 km) northwest of Louisville and Nashville Railroad station, and 0.8 mile (1.3 km) northwest of post office at Copperhill, and 0.1 mile (0.2 km) upstream from mouth.

DRAINAGE AREA.--5.16 sq mi (13.36 sq km).

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 (442.283 m) above mean sea level. July 16, 1940, to Sept. 30, 1941, water-stage recorder and sharp-crested weir at site 145 ft (44.2 m) upstream and at datum 1.58 ft (0.482 m) higher.

AVERAGE DISCHARGE.--24 years (1949-73), 44.8 cfs (1,269 cu m/s).

EXTREMES.--Current year: Maximum discharge, 585 cfs (16.6 cu m/s) July 15, gage height, 5.27 ft (1.606 m); minimum daily, 72 cfs (2.04 cu m/s) June 5.
Period of record: Maximum discharge, 3,520 cfs (99.7 cu m/s) Oct. 6, 1949, gage height, 6.02 ft (1.835 m) in gage well, 8.5 ft (2.59 m) from floodmarks, from rating curve extended above 150 cfs (4.25 cu m/s) on basis of critical-depth measurement of peak flow; minimum daily, 3.1 cfs (0.088 cu m/s) July 30, 1940.

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

REVISIONS.--WSP 1206: Drainage area. WSP 2110: 1949-65(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	93	86	83	116	91	106	124	92	98	85	125
2	109	103	88	85	110	88	103	126	91	93	77	125
3	110	103	95	93	99	96	95	114	96	91	80	125
4	118	105	96	92	99	98	92	120	80	93	80	130
5	131	105	95	90	92	98	88	120	72	93	80	130
6	122	103	99	92	103	98	96	114	105	82	80	140
7	114	106	82	93	101	101	122	118	99	81	85	150
8	112	93	85	97	105	101	114	135	93	78	80	150
9	110	103	93	90	93	99	105	124	105	82	80	178
10	105	108	101	89	98	96	105	122	118	86	80	150
11	110	110	101	89	96	108	106	116	98	88	85	150
12	114	108	95	90	96	106	105	116	93	86	150	150
13	108	114	95	84	95	106	101	114	106	81	130	150
14	112	106	95	89	99	103	101	110	101	82	120	148
15	110	86	122	90	95	124	103	110	105	98	110	148
16	114	78	84	91	95	149	105	110	105	88	105	148
17	124	99	80	91	95	114	108	114	105	89	100	148
18	142	93	81	96	95	105	112	110	96	91	120	148
19	133	91	82	101	95	92	110	122	105	90	115	132
20	112	81	84	96	93	95	105	122	99	90	110	140
21	108	84	95	106	96	89	112	120	108	90	110	148
22	106	76	93	106	101	74	116	120	98	90	110	155
23	114	77	89	99	98	86	122	142	92	90	110	140
24	112	82	84	98	95	86	124	126	93	98	115	132
25	112	91	88	98	95	84	131	112	93	101	115	125
26	110	88	85	96	95	84	133	116	101	101	115	118
27	118	86	82	96	95	103	131	133	98	131	115	95
28	105	92	81	101	92	105	122	101	99	103	120	104
29	118	85	82	101	------	99	120	89	91	84	120	110
30	112	91	85	96	------	88	124	88	88	84	120	120
31	96	------	92	98	------	108	------	91	------	84	120	------
TOTAL	3,527	2,840	2,795	2,916	2,737	3,074	3,317	3,599	2,925	2,816	3,222	4,112
MEAN	114	94.7	90.2	94.1	97.8	99.2	111	116	97.5	90.8	104	137
MAX	142	114	122	106	116	149	133	142	118	131	150	178
MIN	96	76	80	83	92	74	88	88	72	78	77	95

CAL YR 1972 TOTAL 31,136 MEAN 85.1 MAX 142 MIN 31
WTR YR 1973 TOTAL 37,880 MEAN 104 MAX 178 MIN 72

NOTE.--No gage-height record Aug. 3 to Sept. 15.

03563000 Ocoee River at Emf, Tenn.

LOCATION.--Lat 35°05'48", long 84°32'07", Polk County, on left bank 700 ft (210 m) downstream from Tennessee Valley Authority powerplant, 0.8 mile (1.3 km) upstream from former village of Emf, 2.0 miles (3.2 km) downstream from Goforth Creek and at mile 19.6 (31.5 km).

DRAINAGE AREA.--524 sq mi (1,357 sq km).

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 (255.386 m) above mean sea level.

AVERAGE DISCHARGE.--61 years, 1,238 cfs (35.06 cu m/s), 32.08 in/yr (815 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 15,700 cfs (445 cu m/s) May 27, gage height, 10.19 ft (3.106 m); minimum, 242 cfs (6.85 cu m/s) June 1, gage height, 3.19 cfs (0.972 m); minimum daily, 500 cfs (14.2 cu m/s) Nov. 5.
Period of record: Maximum discharge, 29,400 cfs (833 cu m/s) July 10, 1916, gage height, 13.7 ft (4.18 m), from rating curve extended above 17,000 cfs (481 cu m/s); minimum, 3.4 cfs (0.096 cu m/s) Sept. 20, 1962, gage height, 2.12 ft (0.646 m); minimum daily, 4.6 cfs (0.13 cu m/s) Sept. 14, 1962.
Flood of Nov. 19, 1906, discharge, 62,000 cfs (1,760 cu m/s), 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, 1973), and by powerplant above station. Prior to Oct. 1, 1970, flow regulated by Ocoee No. 3 Lake.

REVISIONS (WATER YEARS).--WSP 783: 1913-34. WSP 853: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,030	1,050	1,020	1,020	1,500	1,450	2,420	1,700	2,690	1,450	1,420	1,020
2	1,010	1,010	1,020	1,020	1,530	1,480	2,210	1,490	2,980	1,450	1,420	934
3	1,000	989	1,010	1,020	1,520	1,510	1,930	1,630	2,540	1,440	1,440	1,090
4	968	690	1,010	1,400	1,500	1,500	1,930	1,520	2,540	1,440	1,450	1,210
5	1,160	500	1,000	1,500	1,520	1,510	1,910	1,910	2,210	1,390	1,440	1,350
6	1,030	734	1,060	1,470	1,510	1,500	1,900	1,480	3,940	1,400	1,440	1,310
7	993	918	1,070	1,450	1,500	1,460	1,900	2,300	3,490	1,400	1,440	1,150
8	980	1,080	1,030	1,500	1,610	1,450	3,210	3,200	3,280	1,400	1,440	1,040
9	959	1,020	1,030	1,480	1,630	1,510	2,210	3,200	2,690	1,420	1,440	1,040
10	960	996	1,320	1,500	1,550	1,480	1,960	2,700	2,060	1,430	1,440	1,190
11	951	982	1,770	1,500	1,510	1,540	2,020	2,400	2,760	1,430	1,440	959
12	958	1,020	1,160	1,500	1,490	1,600	2,240	2,200	3,110	1,420	1,440	934
13	982	995	1,060	1,350	1,480	1,540	1,930	1,700	1,630	1,410	1,440	1,190
14	977	1,030	1,050	1,150	1,530	1,510	1,490	2,300	2,640	1,420	1,480	2,050
15	969	1,000	3,240	1,400	1,550	1,660	1,480	1,800	1,990	1,430	1,430	1,200
16	966	1,010	2,260	1,370	1,560	7,080	1,490	1,400	1,920	2,190	1,410	1,240
17	1,150	1,040	1,150	1,460	1,500	6,540	1,490	1,500	2,610	1,600	1,320	1,430
18	1,140	1,010	1,100	1,460	1,490	3,500	1,480	1,500	1,740	1,880	1,440	1,450
19	1,180	1,030	1,030	1,560	1,480	3,090	1,480	1,500	2,350	1,440	1,430	1,430
20	1,150	1,060	1,020	1,540	1,460	2,710	1,480	2,500	1,980	1,420	1,420	1,400
21	1,120	1,020	1,340	1,520	1,460	2,320	1,480	1,800	1,910	1,420	1,410	1,380
22	1,120	1,010	1,910	1,730	1,460	2,490	1,470	1,450	1,700	1,420	1,410	1,420
23	1,120	998	1,450	1,640	1,450	2,070	1,470	1,500	2,200	1,410	1,420	1,430
24	1,120	993	1,080	1,520	1,460	2,020	1,480	2,600	1,700	1,390	1,420	1,430
25	1,110	996	1,050	1,490	1,450	2,190	1,570	2,000	2,180	1,370	1,430	1,440
26	1,110	997	1,040	1,490	1,290	1,860	2,500	1,490	1,460	1,910	1,420	1,430
27	1,080	992	1,030	1,530	1,450	1,890	4,640	2,610	1,440	3,410	1,420	1,260
28	1,040	950	1,020	1,520	1,460	1,800	3,860	11,200	1,470	2,130	1,430	1,410
29	1,040	1,000	1,010	1,560	------	1,750	2,680	6,750	1,490	1,460	1,440	1,070
30	995	1,020	1,020	1,530	------	1,740	2,440	3,400	1,470	1,460	1,420	1,480
31	1,040	------	1,020	1,500	------	2,020	------	3,590	------	1,440	1,400	------
TOTAL	32,408	29,140	38,380	44,680	41,900	67,770	61,750	78,320	68,170	48,680	44,240	38,367
MEAN	1,045	971	1,238	1,441	1,496	2,186	2,058	2,526	2,272	1,570	1,427	1,279
MAX	1,180	1,080	3,240	1,730	1,630	7,080	4,640	11,200	3,940	3,410	1,480	2,050
MIN	951	500	1,000	1,020	1,290	1,450	1,470	1,400	1,440	1,370	1,320	934
(†)	-11,000	+100	+18,700	+7,200	+9,100	+9,400	+5,100	+3,300	-500	-1,300	-14,700	-13,000
MEAN‡	691	975	1,841	1,674	1,821	2,489	2,228	2,633	2,256	1,528	953	846
CFSM‡	1.32	1.86	3.51	3.19	3.48	4.75	4.25	5.02	4.31	2.92	1.82	1.61
IN.‡	1.52	2.08	4.05	3.68	3.62	5.48	4.74	5.79	4.80	3.36	2.10	1.80

CAL YR 1972 TOTAL 494,529 MEAN 1,351 MAX 4,030 MIN 500 MEAN‡ 1,327 CFSM‡ 2.53 IN.‡ 34.46
WTR YR 1973 TOTAL 593,805 MEAN 1,627 MAX 11,200 MIN 500 MEAN‡ 1,661 CFSM‡ 3.17 IN.‡ 43.02

† Change in contents, in cfs days, in Blue Ridge Lake (Georgia).
‡ 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 (0.6 km) downstream from Lake Ocoee Dam and Ocoee No. 1 powerplant of Tennessee Valley Authority at Parksville and at mile 11.5 (18.5 km).

DRAINAGE AREA.--595 sq mi (1,541 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 716.96 ft (218.529 m) above mean sea level.

AVERAGE DISCHARGE.--57 years, 1,317 cfs (37.30 cu m/s), 30.16 in/yr (764 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 15,400 cfs (436 cu m/s) Mar. 17, gage height, 15.72 ft (4.791 m); minimum, 53 cfs (1.50 cu m/s) Apr. 22, gage height, 2.75 ft (0.838 m); minimum daily, 83 cfs (2.35 cu m/s) Nov. 5.
Period of record: Maximum discharge, 21,700 cfs (615 cu m/s) Mar. 29, 1951, gage height, 20.22 ft (6.163 m); minimum daily, 10 cfs (0.28 cu m/s) Oct. 28, 1925.

REMARKS.--Records excellent. Flow regulated by Blue Ridge Lake (see sta 03558500 basic data release for Georgia, 1973), and Lake Ocoee (sta 03564000). Prior to Oct. 1, 1970, flow regulated by Ocoee No. 3 Lake.

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,560	1,000	1,180	1,090	1,510	1,540	2,650	1,830	3,500	1,440	1,340	1,400
2	1,460	1,030	1,180	1,160	1,590	1,400	2,670	1,730	3,190	1,400	1,360	1,320
3	1,020	1,040	1,080	1,250	1,620	1,510	2,460	1,960	2,910	1,390	1,690	1,290
4	1,090	645	1,280	1,590	1,530	1,650	1,900	1,950	2,780	1,390	1,870	1,050
5	1,690	83	1,290	1,760	1,640	1,710	1,390	1,900	2,680	1,410	1,770	935
6	1,640	998	1,280	1,450	1,520	1,450	1,700	1,910	2,860	1,390	1,520	1,190
7	913	1,560	1,330	1,400	1,490	1,440	1,610	1,840	3,540	1,380	1,340	1,470
8	855	1,350	1,750	1,330	1,490	1,530	2,410	1,890	3,430	1,410	1,310	1,340
9	913	1,530	1,050	1,810	1,630	1,520	2,530	2,650	2,840	1,380	1,300	1,300
10	927	1,740	1,120	1,880	1,840	1,390	2,360	2,980	2,340	1,380	1,300	1,220
11	1,020	1,100	1,290	1,930	1,860	1,410	2,510	3,100	2,460	1,400	1,320	1,140
12	1,130	1,220	2,260	1,590	1,950	1,430	2,550	3,000	2,560	1,420	1,320	1,340
13	1,020	1,130	1,910	1,560	2,650	1,820	2,610	2,800	2,520	1,390	1,290	1,320
14	985	1,190	2,150	1,510	1,720	1,920	2,470	2,300	2,480	1,390	1,840	1,590
15	927	1,260	1,840	1,460	1,670	2,460	1,860	2,200	2,460	1,420	1,910	1,430
16	1,070	1,260	2,600	1,270	1,470	5,920	1,740	1,900	2,280	2,130	1,580	1,410
17	1,340	1,310	2,580	1,430	1,740	11,500	1,050	1,600	2,290	1,990	1,350	1,430
18	1,220	982	2,620	1,350	1,640	5,100	1,140	1,600	2,270	1,970	1,310	1,580
19	1,080	1,020	2,630	1,380	1,610	3,490	1,430	1,600	2,220	1,720	1,340	1,530
20	1,480	1,050	1,820	1,650	1,630	3,100	1,450	1,600	2,280	1,400	1,320	1,500
21	1,190	1,150	1,710	1,680	1,510	2,890	1,450	3,000	2,160	1,370	1,360	1,470
22	1,170	1,310	1,980	1,580	1,490	2,860	685	2,100	2,130	1,350	1,160	1,440
23	1,140	1,260	1,660	2,040	1,630	2,800	1,390	1,600	2,050	1,370	1,750	1,420
24	1,180	2,020	1,010	2,030	1,510	2,750	1,460	2,200	2,080	1,370	2,070	1,400
25	1,190	1,210	1,230	2,160	1,440	2,800	1,460	2,790	2,050	1,380	1,860	1,410
26	1,190	983	1,160	2,250	1,420	2,800	1,910	2,060	1,980	1,910	1,720	1,430
27	1,110	1,220	1,550	1,840	1,410	2,770	4,870	2,060	1,650	4,280	1,150	1,450
28	1,190	1,300	1,580	1,790	1,730	2,080	4,920	9,600	1,440	3,170	1,160	1,410
29	837	1,400	1,490	1,510	------	2,640	4,290	9,420	1,470	1,830	1,370	1,420
30	864	1,390	1,100	1,840	------	1,610	3,140	4,790	1,450	1,780	1,290	1,430
31	1,190	------	1,060	1,620	------	1,850	------	3,980	------	1,590	1,420	------
TOTAL	35,591	35,741	49,770	50,190	45,940	81,140	66,065	85,940	72,350	51,600	45,690	41,065
MEAN	1,148	1,191	1,605	1,619	1,641	2,617	2,202	2,772	2,412	1,665	1,474	1,369
MAX	1,690	2,020	2,630	2,250	2,650	11,500	4,920	9,600	3,540	4,280	2,070	1,590
MIN	837	83	1,010	1,090	1,410	1,390	685	1,600	1,440	1,350	1,150	935

CAL YR 1972 TOTAL 552,269 MEAN 1,509 MAX 5,070 MIN 83 MEAN† 1,484 CFSM† 2.49 IN.† 33.96
WTR YR 1973 TOTAL 661,082 MEAN 1,811 MAX 11,500 MIN 83 MEAN† 1,844 CFSM† 3.10 IN.† 42.06

† Adjusted for change in contents in Blue Ridge Lake (Georgia) and Lake Ocoee.

03565000 Hiwassee River above Charleston, Tenn.

LOCATION.--Lat 35°12'33", long 84°39'31", Polk County, on right bank 0.2 mile (0.3 km) downstream from Ocoee River, 0.3 mile (0.5 km) upstream from Louisville and Nashville Railroad bridge, 2.5 miles (4.0 km) north of Benton, 15.2 miles (24.5 km) upstream from Charleston, and at mile 34.2 (55.0 km).

DRAINAGE AREA.--2,001 sq mi (5,183 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 682.86 ft (208.136 m) above mean sea level. Auxiliary water-stage recorder 1.8 miles (2.9 km) downstream.

AVERAGE DISCHARGE.--20 years, 4,126 cfs (116.8 cu m/s), 28.00 in/yr (711 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 48,000 cfs (1,360 cu m/s) May 29, estimated by runoff comparison with nearby stations; maximum gage height, 30.53 ft (9.306 m) Mar. 17 from floodmarks; minimum, 716 cfs (20.3 cu m/s) Apr. 22, gage height, 2.36 ft (0.719 m); minimum daily, 1,370 cfs (38.8 cu m/s) Apr. 22.
Period of record: Maximum discharge, 48,000 cfs (1,360 cu m/s) May 29, 1973, estimated by runoff comparison with nearby stations; maximum gage height, 30.53 ft (9.306 m) Mar. 17, 1973, from floodmarks; minimum, 312 cfs (8.84 cu m/s) Oct. 4, 1959; minimum daily, 355 cfs (10.1 cu m/s) Nov. 14, 1954.

REMARKS.--Records excellent except those above 15,000 cfs (425 cu m/s), which are good. Flow regulated by five reservoirs (see sta 03564000 and basic data releases from Georgia and North Carolina, 1973). Prior to Oct. 1, 1970, flow regulated by Ocoee No. 3 Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,780	3,640	4,450	8,810	5,200	4,840	6,200	4,500	11,500	3,750	4,860	3,860
2	4,440	3,720	4,700	8,700	5,290	3,310	5,200	4,000	8,200	4,140	5,210	3,410
3	3,780	3,900	4,260	8,950	5,230	3,550	4,500	3,500	7,950	4,700	5,160	3,740
4	3,740	3,700	4,460	7,980	5,200	3,600	4,000	3,800	6,620	4,680	4,700	4,200
5	6,560	3,030	4,640	7,610	5,130	4,070	3,270	3,900	6,420	4,840	4,170	3,980
6	5,890	3,610	4,790	6,130	5,120	3,860	3,570	3,700	7,170	4,650	4,300	4,130
7	4,230	4,250	5,370	5,440	5,190	3,360	3,860	3,700	11,800	3,960	4,570	4,550
8	3,820	4,650	4,890	5,220	5,740	3,540	5,410	3,600	10,400	3,630	4,530	4,310
9	3,750	4,790	5,250	5,490	6,860	3,420	5,480	4,500	7,610	3,970	4,540	2,770
10	3,730	4,730	7,590	5,490	7,800	3,200	4,930	4,800	6,230	4,540	4,570	4,180
11	3,760	3,980	9,570	5,630	7,610	3,510	4,870	5,000	5,990	4,830	3,970	4,250
12	3,780	4,170	8,050	4,930	7,400	4,710	4,790	4,800	6,100	4,660	3,560	4,440
13	3,770	4,030	6,590	5,300	7,960	4,180	4,740	4,700	6,360	4,570	4,160	4,560
14	3,650	4,670	6,400	4,830	7,610	4,160	4,210	4,500	6,250	3,950	5,360	5,200
15	3,440	4,660	7,700	4,580	7,770	5,320	3,690	4,200	7,860	3,850	5,300	4,080
16	3,870	4,690	8,720	4,860	6,790	19,000	3,140	4,000	7,750	4,800	4,950	3,540
17	3,890	4,190	7,410	4,860	5,800	35,000	2,800	3,800	8,690	5,530	4,550	3,940
18	4,200	4,400	6,840	4,680	5,290	21,000	2,840	3,500	9,530	5,260	3,930	4,840
19	4,130	4,460	6,840	5,360	5,230	12,000	2,720	3,310	7,130	5,240	3,380	4,710
20	4,420	5,540	8,660	5,630	5,140	9,000	2,970	3,450	7,020	4,780	3,350	4,580
21	4,040	4,920	9,640	5,550	4,810	8,020	2,650	4,790	5,720	4,710	4,460	4,560
22	4,020	4,690	11,200	6,110	5,020	7,540	1,370	5,220	5,620	4,670	4,320	3,960
23	3,910	4,700	10,000	6,340	4,730	7,150	2,200	4,510	4,900	4,670	4,530	3,580
24	3,920	5,090	9,230	5,930	4,590	6,840	2,770	6,280	4,470	4,710	5,180	3,940
25	3,930	4,580	9,320	5,820	4,810	6,950	2,710	8,080	4,790	4,700	4,390	4,500
26	4,040	4,020	8,830	5,830	4,170	6,860	4,500	7,950	5,320	5,460	3,820	4,520
27	3,830	4,580	9,230	5,820	4,480	6,600	8,000	8,000	5,050	11,100	3,790	4,540
28	3,850	4,510	9,210	5,740	4,820	5,800	7,500	30,000	4,920	8,050	4,090	4,520
29	3,660	4,630	8,820	5,480	------	6,200	6,000	38,000	4,930	4,770	4,390	4,040
30	3,640	4,750	8,780	5,770	------	5,000	5,500	20,000	4,200	4,690	4,330	3,760
31	4,010	------	8,570	5,430	------	5,400	------	14,000	------	5,070	4,480	------
TOTAL	126,480	131,280	230,010	184,300	160,790	226,990	126,390	228,090	206,500	152,930	136,900	125,190
MEAN	4,080	4,376	7,420	5,945	5,743	7,322	4,213	7,358	6,883	4,933	4,416	4,173
MAX	6,560	5,540	11,200	8,950	7,960	35,000	8,000	38,000	11,800	11,100	5,360	5,200
MIN	3,440	3,030	4,260	4,580	4,170	3,200	1,370	3,310	4,200	3,630	3,350	2,770

CAL YR 1972 TOTAL 1,695,190 MEAN 4,632 MAX 15,800 MIN 1,500
WTR YR 1973 TOTAL 2,035,850 MEAN 5,578 MAX 38,000 MIN 1,370

03565300 South Chestuee Creek near Benton, Tenn.

LOCATION.--Lat 35°10'02", long 84°42'59", Bradley County, on right bank 50 ft (15 m) downstream from relocated county highway bridge, 0.2 mile (0.3 km) downstream from Climer Branch, 2.4 miles (3.9 km) southwest of Benton Station, 2.8 miles (4.5 km) north of Ocoee, and 3.6 miles (5.8 km) west of Benton, and at mile 9.3 (15.0 km).

DRAINAGE AREA.--31.8 sq mi (82.4 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 712.14 ft (217.060 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 52.4 cfs (1.484 cu m/s), 22.38 in/yr (568 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs (340 cu m/s) Mar. 16, gage height, 12.11 ft (3.691 m), from rating curve extended above 3,200 cfs (90.6 cu m/s); minimum, 4.2 cfs (0.12 cu m/s) Sept. 13.
Period of record: Maximum discharge, 12,000 cfs (340 cu m/s) Mar. 16, 1973, gage height, 12.11 ft (3.691 m), from rating curve extended above 3,200 cfs (90.6 cu m/s); minimum, 2.1 cfs (0.059 cu m/s) Aug. 31, 1962.

REMARKS.--Records excellent except for August, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	43	81	64	26	115	56	49	21	17	6.8
2	11	29	35	62	109	56	78	49	42	21	14	6.3
3	9.0	80	31	91	73	124	65	53	37	16	12	6.0
4	11	35	31	141	59	72	60	46	33	15	11	6.0
5	258	25	31	89	52	101	54	40	47	19	11	6.5
6	42	21	217	91	84	65	50	37	436	13	10	5.8
7	25	75	114	75	66	71	251	35	172	12	10	6.5
8	20	106	70	120	283	54	176	170	69	14	10	6.5
9	16	46	107	96	172	56	91	75	57	12	10	6.3
10	14	34	440	78	99	47	71	49	46	10	9.0	6.3
11	12	28	428	70	77	222	60	41	40	10	9.0	6.3
12	11	24	140	61	64	174	55	38	38	9.0	9.0	5.8
13	11	26	104	53	61	84	50	33	161	8.5	15	34
14	11	95	114	55	347	65	47	31	51	11	30	40
15	10	46	488	62	174	366	45	28	42	24	12	10
16	9.9	34	200	62	102	5,200	43	26	37	24	10	7.3
17	11	29	107	58	77	1,010	43	25	34	21	9.0	7.3
18	99	25	83	56	66	246	43	23	29	245	8.0	35
19	80	202	73	206	59	156	43	25	26	36	8.0	12
20	37	181	73	105	53	129	39	49	23	22	7.0	8.3
21	24	69	271	80	47	142	36	28	22	16	7.0	7.0
22	20	51	397	171	43	95	34	24	21	12	7.0	6.3
23	19	41	153	89	40	81	33	26	19	13	7.0	7.3
24	18	34	106	69	36	72	33	340	17	11	7.0	6.5
25	15	47	88	58	34	98	60	69	17	10	7.0	5.8
26	14	76	73	77	32	76	123	47	15	15	7.0	5.2
27	19	47	63	128	32	66	850	136	15	25	7.0	5.8
28	44	41	54	94	28	60	165	1,130	25	18	6.3	6.1
29	26	37	48	103	------	61	91	118	21	13	6.5	80
30	21	44	45	73	------	67	68	70	15	11	7.0	123
31	21	------	118	64	------	213	------	53	------	12	7.5	------
TOTAL	954.9	1,647	4,345	2,718	2,433	9,355	2,972	2,970	1,656	719.5	307.3	482.0
MEAN	30.8	54.9	140	87.7	86.9	302	99.1	95.8	55.2	23.2	9.91	16.1
MAX	258	202	488	206	347	5,200	850	1,130	436	245	30	123
MIN	9.0	19	31	53	28	26	33	23	15	8.5	6.3	5.2
CFSM	.97	1.73	4.40	2.76	2.73	9.50	3.12	3.01	1.74	.73	.31	.51
IN.	1.12	1.93	5.08	3.18	2.85	10.94	3.48	3.47	1.94	.84	.36	.56

CAL YR 1972 TOTAL 26,101.1 MEAN 71.3 MAX 1,360 MIN 5.0 CFSM 2.24 IN 30.53
WTR YR 1973 TOTAL 30,559.7 MEAN 83.7 MAX 5,200 MIN 5.2 CFSM 2.63 IN 35.75

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	1945	6.96	808	05-28	0700	7.94	2,090
03-16	1615	12.11	12,000	06-06	1530	7.04	880
04-27	0545	7.48	1,420				

NOTE.--No gage-height record July 27 to Aug. 27.

03565500 Oostanaula Creek near Sanford, Tenn.

LOCATION.--Lat 35°19'39", long 84°42'19", McMinn County, on right bank 20 ft (6 m) downstream from highway bridge, 1.3 miles (2.1 km) southeast of Sanford, and 3.5 miles (5.6 km) northeast of Calhoun, and at mile 5.7 (9.2 km).

DRAINAGE AREA.--57.0 sq mi (147.6 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 716.51 ft (218.392 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 92.6 cfs (2.622 cu m/s), 22.06 in/yr (560 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,000 cfs (227 cu m/s) Mar. 16, gage height, 13.43 ft (4.094 m); minimum discharge, 24 cfs (0.68 cu m/s) Sept. 27-28, gage height, 2.30 ft (0.701 m).
Period of record: Maximum discharge, 8,000 cfs (227 cu m/s) Mar. 16, 1973, gage height, 13.43 ft (4.094 m); minimum discharge, 16 cfs (0.45 cu m/s) Oct. 13-28, 1954, Sept. 27, 1959; minimum gage height, 2.12 ft (0.646 m) Oct. 28, 1954, Aug. 14, 1969, Dec. 3, 5-6, 1969.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	44	65	136	135	92	187	179	101	59	62	33
2	49	42	61	118	243	93	159	160	102	58	82	32
3	40	50	58	131	209	134	147	149	90	56	53	34
4	44	53	58	225	167	142	145	147	85	56	47	34
5	189	46	57	186	151	271	148	132	83	98	45	35
6	90	44	80	160	154	188	132	123	177	62	44	35
7	57	52	102	149	183	164	161	117	317	56	43	36
8	50	106	75	144	199	152	233	124	221	55	42	37
9	45	75	158	142	272	179	176	146	141	58	40	33
10	42	61	491	131	202	143	153	113	122	54	40	30
11	37	57	760	123	177	200	139	104	110	59	39	30
12	37	53	502	116	161	371	130	99	103	52	51	29
13	35	52	257	109	150	226	124	94	147	50	45	33
14	34	76	212	106	207	182	118	90	118	49	43	65
15	32	72	330	108	266	289	113	87	99	50	40	40
16	32	59	389	115	197	4,330	109	84	92	50	38	34
17	34	55	235	113	169	5,920	107	82	89	48	38	33
18	37	53	192	110	155	1,170	106	81	85	41	37	33
19	75	102	172	168	146	708	106	80	79	44	36	31
20	79	197	162	187	137	500	102	82	77	45	36	31
21	55	101	181	148	129	441	96	78	74	44	35	30
22	47	80	329	248	121	452	92	76	72	44	34	30
23	44	72	278	215	116	289	90	76	69	43	33	29
24	44	67	207	163	110	251	89	120	67	48	34	30
25	40	66	183	147	105	248	100	115	65	42	33	30
26	39	80	166	139	101	242	133	85	63	57	37	28
27	39	72	152	181	101	211	463	113	61	166	36	25
28	50	65	138	161	97	191	781	346	67	79	36	26
29	49	63	128	166	------	178	287	254	65	53	34	28
30	43	62	120	148	------	172	210	125	60	48	32	32
31	43	------	141	134	------	182	------	106	------	49	32	------
TOTAL	1,656	2,077	6,439	4,627	4,560	18,311	5,136	3,767	3,101	1,773	1,277	986
MEAN	53.4	69.2	208	149	163	591	171	122	103	57.2	41.2	32.9
MAX	189	197	760	248	272	5,920	781	346	317	166	82	65
MIN	32	42	57	106	97	92	89	76	60	41	32	25
CFSM	.94	1.21	3.65	2.61	2.86	10.4	3.00	2.14	1.81	1.00	.72	.58
IN.	1.08	1.36	4.20	3.02	2.98	11.95	3.35	2.46	2.02	1.16	.83	.64

CAL YR 1972 TOTAL 40,755 MEAN 111 MAX 849 MIN 24 CFSM 1.95 IN 26.60
WTR YR 1973 TOTAL 53,710 MEAN 147 MAX 5,920 MIN 25 CFSM 2.58 IN 35.05

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-11	0100	5.36	788	04-28	0415	6.24	1,010
03-16	2015	13.43	8,000				

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 (80 m) upstream from Southern Railway bridge, 0.3 mile (0.5 km) upstream from bridge on U.S. Highway 11 at Charleston, and at mile 18.9 (30.4 km).

DRAINAGE AREA.--2,298 sq mi (5,952 sq km).

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 (202.863 m) above mean sea level. Prior to July 18, 1925, nonrecording gages; July 18, 1925, to Sept. 6, 1926, water-stage recorder at Southern Railway bridge, 250 ft (76.2 m) downstream at datum 1.50 ft (0.5 m) higher. Auxiliary nonrecording gages at several sites and datum used periodically.

AVERAGE DISCHARGE.--32 years, 4,780 cfs (135.4 cu m/s), 28.25 in/yr (718 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 57,000 cfs (1,610 cu m/s) Mar. 17, gage height, 29.39 ft (8.958 m); minimum daily, 2,520 cfs (71.4 cu m/s) Apr. 22; minimum gage height, 10.00 ft (3.048 m) Feb. 24.
Period of record: Maximum discharge, 57,000 cfs (1,610 cu m/s) Mar. 17, 1973, gage height, 29.39 ft (8.958 m); minimum, 260 cfs (7.36 cu m/s) Sept. 14, 1925, gage height, -1.28 ft (-0.390 m).
Maximum stage known, 34.0 ft (10.36 m), present datum, Mar. 31, 1886, discharge about 70,000 cfs (1,980 cu m/s).

REMARKS.--Records good. Some diversions above the station for industrial and municipal water supplies. Flow regulated by five reservoirs (see p. 132, and basic data releases for Georgia and North Carolina, 1973). Daily discharge figures computed using area as determined from a stage-area curve and velocity as determined from a deflection-velocity curve.

REVISIONS(WATER YEARS).--WSP 853: Drainage area. WSP 1436: 1902, 1922(M), 1928, 1936(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,600	4,250	5,460	10,400	6,450	5,800	6,000	5,340	13,800	4,520	5,240	4,190
2	5,180	4,230	5,700	10,200	6,970	4,140	5,800	4,500	9,150	4,910	5,700	3,800
3	4,500	4,580	5,170	10,600	6,860	4,820	5,400	4,710	8,900	5,120	5,730	4,120
4	4,000	4,380	5,260	9,730	6,690	4,790	4,800	4,800	7,330	5,120	5,260	4,490
5	7,420	3,530	5,510	9,300	6,440	5,330	4,000	4,660	6,710	5,400	4,670	4,330
6	7,110	3,970	5,650	7,670	6,430	5,230	4,200	4,590	8,690	5,360	4,770	4,460
7	5,340	4,600	6,860	6,860	6,460	4,610	5,000	4,510	13,600	4,660	4,960	4,860
8	4,350	5,620	5,610	6,670	7,090	4,570	6,000	4,610	12,500	4,300	4,690	4,720
9	4,390	5,580	6,080	6,990	8,580	4,570	5,800	5,260	8,890	4,590	4,710	3,220
10	4,250	5,210	8,920	6,800	9,010	4,380	5,600	5,650	6,910	4,910	4,850	4,470
11	4,210	4,800	12,000	7,050	8,810	4,590	5,400	5,450	6,640	5,200	4,500	4,490
12	4,220	4,900	9,760	6,230	8,140	6,690	5,400	5,430	6,500	5,100	3,910	4,670
13	4,220	4,560	8,350	6,730	8,660	5,840	5,400	5,210	6,970	5,050	4,660	4,680
14	4,020	5,450	8,070	5,980	8,600	5,500	5,000	4,730	6,740	4,450	5,500	5,530
15	3,630	5,580	9,300	5,630	8,500	6,320	4,500	4,510	8,210	4,490	4,700	4,560
16	4,200	5,440	11,000	6,010	8,000	31,000	3,800	4,470	8,520	5,250	4,460	4,010
17	4,180	4,980	9,290	5,960	7,000	54,000	3,500	4,140	9,530	6,070	4,530	4,330
18	4,570	5,000	8,620	5,860	6,600	38,000	3,300	4,140	11,100	5,950	4,340	5,090
19	4,610	5,310	8,100	6,610	6,200	21,000	3,200	3,990	7,870	5,790	3,770	4,980
20	4,990	7,360	9,960	6,940	6,100	14,000	3,700	4,100	7,530	5,280	3,930	4,740
21	4,490	5,270	12,200	6,870	6,040	9,000	3,500	5,080	6,350	5,130	4,970	4,790
22	4,520	5,580	14,900	7,460	6,270	8,600	2,520	5,630	6,160	4,970	4,740	4,200
23	4,520	5,720	13,500	7,740	5,740	8,200	2,870	4,890	5,460	4,930	4,850	4,040
24	4,550	5,820	11,900	7,300	5,820	7,800	3,520	6,790	5,050	5,130	5,540	4,390
25	4,490	5,440	11,500	7,120	6,080	8,000	3,530	9,190	5,300	4,980	4,730	4,740
26	4,520	5,080	10,500	7,170	5,030	7,800	3,420	8,740	5,870	5,690	4,170	4,720
27	4,320	5,450	10,800	7,240	5,560	7,600	11,800	9,350	5,590	12,100	4,260	4,710
28	4,340	5,290	10,700	7,240	6,110	7,000	12,500	20,000	5,530	9,580	4,500	4,710
29	4,380	5,550	10,100	7,080	------	7,200	9,940	37,000	5,500	5,750	4,750	4,330
30	4,210	5,670	10,100	7,220	------	6,000	7,380	28,000	4,830	5,160	4,730	4,490
31	4,410	------	9,830	6,650	------	6,400	------	16,100	------	5,540	4,820	------
TOTAL	143,740	154,200	280,700	227,310	194,240	318,780	156,780	245,570	231,730	170,480	146,940	134,860
MEAN	4,637	5,140	9,055	7,333	6,937	10,280	5,226	7,922	7,724	5,499	4,740	4,495
MAX	7,420	7,360	14,900	10,600	9,010	54,000	12,500	37,000	13,800	12,100	5,730	5,530
MIN	3,630	3,530	5,170	5,630	5,030	4,140	2,520	3,990	4,830	4,300	3,770	3,220

CAL YR 1972 TOTAL 1,949,170 MEAN 5,326 MAX 18,000 MIN 1,590
WTR YR 1973 TOTAL 2,405,330 MEAN 6,590 MAX 54,000 MIN 2,520

NOTE.--No deflection record Mar. 15 to Apr. 20.

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 (1.0 km) downstream from Southern Railway bridge, 0.9 mile (1.4 km) south of Ooltewah, 1.6 miles (2.6 km) upstream from Little Wolftever Creek, and at mile 16.1 (25.9 km).

DRAINAGE AREA.--18.8 sq mi (48.7 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 755.08 ft (230.148 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 32.8 cfs (0.929 cu m/s), 23.69 in/yr (602 mm/yr). 8 years, 29.5 cfs (0.835 cu m/s); figure published in Water Resources Data for Tennessee, 1972, in error.

EXTREMES.--Current year: Maximum discharge, 7,300 cfs (207 cu m/s) Mar. 16, gage height, 9.75 ft (2.972 m); minimum, 3.6 cfs (0.10 cu m/s) Sept. 12, 13, gage height, 0.91 ft (0.277 m).
Period of record: Maximum discharge, 7,300 cfs (207 cu m/s) Mar. 16, 1973, gage height, 9.75 ft (2.972 m); minimum, 1.8 cfs (0.051 cu m/s) part of each day Sept. 13-18, 1964, Oct. 10, 1969; minimum gage height, 0.82 ft (0.250 m) Sept. 13-18, 1964.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	13	26	80	57	14	110	45	40	15	8.7	4.3
2	6.3	21	21	55	114	73	70	37	29	15	7.4	4.2
3	5.7	29	19	110	66	105	60	37	23	14	6.5	4.3
4	26	17	19	132	48	68	50	31	19	20	6.1	4.3
5	105	13	18	79	42	59	40	25	16	200	5.9	4.3
6	17	12	263	73	67	45	35	22	389	30	6.5	4.3
7	10	49	82	61	47	54	250	27	198	20	8.0	4.2
8	8.3	46	53	108	197	40	100	90	78	18	6.1	4.2
9	7.1	26	99	73	110	327	60	46	48	17	5.7	4.1
10	6.4	20	252	57	71	125	45	32	35	16	5.7	4.4
11	6.3	16	152	51	54	342	35	27	31	35	5.3	4.2
12	6.2	13	88	41	43	163	30	25	28	20	6.3	4.0
13	6.2	28	72	36	54	97	30	19	26	17	12	973
14	6.0	49	81	36	313	73	25	16	25	15	33	183
15	6.0	26	240	36	136	258	25	16	34	15	8.6	32
16	6.3	20	106	34	82	2,860	25	16	24	15	7.0	19
17	7.0	17	69	31	60	459	25	16	21	55	6.5	17
18	31	14	55	30	51	177	50	16	16	13	6.3	57
19	18	60	49	175	42	129	40	28	16	10	6.0	21
20	11	48	49	77	36	113	30	48	16	8.8	5.7	15
21	8.9	31	198	64	31	95	27	19	16	7.7	5.3	12
22	8.2	24	160	141	27	74	25	16	15	7.2	5.1	11
23	9.1	20	88	68	24	63	25	24	15	7.1	5.1	11
24	9.3	17	64	51	21	56	25	185	15	7.8	5.0	9.9
25	8.2	37	48	41	19	98	80	59	15	22	4.6	9.3
26	7.7	42	41	83	18	68	400	38	15	16	4.7	8.7
27	27	28	34	80	17	57	110	156	15	12	4.8	9.6
28	47	27	29	68	15	51	70	357	20	8.2	4.6	10
29	22	23	24	55	------	47	60	88	16	7.2	4.6	9.5
30	16	30	23	42	------	45	50	58	16	6.7	4.6	66
31	15	------	141	37	------	200	------	42	------	11	5.1	------
TOTAL	481.7	816	2,663	2,105	1,862	6,435	2,007	1,661	1,270	681.7	216.8	1,524.8
MEAN	15.5	27.2	85.9	67.9	66.5	208	66.9	53.6	42.3	22.0	6.99	50.8
MAX	105	60	263	175	313	2,860	400	357	389	200	33	973
MIN	5.7	12	18	30	15	14	25	16	15	6.7	4.6	4.0
CFSM	.82	1.45	4.57	3.61	3.54	11.1	3.56	2.85	2.25	1.17	.37	2.70
IN.	.95	1.61	5.27	4.17	3.68	12.73	3.97	3.29	2.51	1.35	.43	3.02

CAL YR 1972 TOTAL 15,404.1 MEAN 42.1 MAX 561 MIN 4.3 CFSM 2.24 IN 30.48
WTR YR 1973 TOTAL 21,724.0 MEAN 59.5 MAX 2,860 MIN 4.0 CFSM 3.16 IN 42.99

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-09	1430	5.47	852	05-28	0130	5.58	880
03-11	1800	5.22	790	06-06	1930	5.99	997
03-16	1700	9.75	7,300	09-13	1730	7.94	2,550
04-26	Unknown	Unknown	Unknown				

NOTE.--No gage-height record Mar. 29 to May 1.

03567500 South Chickamauga Creek near Chickamauga, Tenn.

LOCATION.--Lat 35°00'50", long 85°12'27", Hamilton County, on right bank 0.3 mile (0.5 km) upstream from bridge on U.S. Highway 11, 1.5 miles (2.4 km) south of Chickamauga, 6.0 miles (9.7 km) east of the city hall in Chattanooga, and at mile 12.4 (20.0 km).

DRAINAGE AREA.--428 sq mi (1,109 sq km).

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 (198.461 m) above mean sea level. Prior to Oct. 7, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years, 693 cfs (19.63 cu m/s), 21.99 in/yr (559 mm/yr).

EXTREMES.--Current year: Maximum discharge, 30,000 cfs (850 cu m/s) Mar. 17, gage height, 21.70 ft (6.614 m); maximum gage height, 23.75 ft (7.239 m), Mar. 17, from floodmarks (backwater from Tennessee River); minimum discharge, 148 cfs (4.19 cu m/s) Oct. 16, gage height, 0.65 ft (0.198 m).
Period of record: Maximum discharge, 30,000 cfs (850 cu m/s) Mar. 17, 1973, gage height, 21.70 ft (6.614 m); maximum gage height, 23.75 ft (7.239 m), Mar. 17, 1973, from floodmarks (backwater from Tennessee River); minimum discharge, 61 cfs (1.73 cu m/s) Oct. 8, 1941; minimum gage height, 0.24 ft (0.073 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	295	415	2,620	892	400	2,570	883	823	294	298	182
2	244	292	372	1,880	1,790	533	1,910	757	754	294	300	182
3	195	368	338	1,410	1,760	2,020	1,150	694	631	291	256	176
4	231	325	327	2,070	1,220	2,130	976	637	553	285	236	174
5	1,200	281	326	1,620	973	1,550	868	562	496	294	226	174
6	442	257	1,160	1,410	979	1,190	757	514	1,110	283	226	174
7	270	383	1,150	1,360	1,030	1,160	1,230	484	2,360	265	280	171
8	224	724	711	2,300	1,490	1,310	2,940	1,300	892	256	261	172
9	200	480	845	2,730	2,290	2,620	2,220	3,090	667	252	230	172
10	186	361	1,600	1,970	1,570	4,300	1,230	1,650	553	248	232	171
11	172	317	2,980	1,340	1,160	3,920	985	889	514	269	303	174
12	167	287	2,020	1,090	958	4,830	847	1,070	544	317	356	171
13	164	288	1,220	892	868	3,740	766	814	490	252	622	1,510
14	161	740	1,130	783	2,190	2,550	688	643	496	246	634	3,650
15	158	695	2,450	751	2,580	1,960	631	559	712	283	303	1,010
16	151	428	3,300	707	1,780	12,500	589	505	1,090	329	250	389
17	164	358	2,340	630	1,230	26,500	568	466	1,040	389	234	354
18	331	322	1,230	586	1,010	16,500	565	436	718	315	228	787
19	915	511	941	1,460	882	7,600	631	448	529	274	224	664
20	413	1,070	865	1,750	780	3,200	655	1,460	619	261	216	375
21	273	692	1,780	1,170	696	1,860	553	1,520	775	300	210	305
22	233	492	3,460	2,070	626	1,320	511	763	505	254	203	336
23	222	415	2,900	2,370	581	1,070	478	601	433	312	201	356
24	216	362	1,650	2,020	539	952	484	1,580	383	308	197	312
25	204	391	1,140	1,190	500	1,090	916	928	356	661	193	274
26	192	531	928	1,160	473	1,360	1,820	649	336	1,140	189	248
27	297	461	786	1,960	449	1,070	3,530	757	322	793	186	238
28	964	392	671	1,820	428	883	2,910	4,470	322	375	184	236
29	726	363	591	1,390	------	799	1,920	5,210	334	300	180	230
30	416	386	541	1,080	------	781	1,100	2,630	308	272	178	448
31	335	------	1,840	896	------	1,670	------	1,070	------	332	178	------
TOTAL	10,532	13,267	42,007	46,485	31,724	113,368	36,998	38,039	19,665	10,744	8,014	13,815
MEAN	340	442	1,355	1,500	1,133	3,657	1,233	1,227	656	347	259	461
MAX	1,200	1,070	3,460	2,730	2,580	26,500	3,530	5,210	2,360	1,140	634	3,650
MIN	151	257	326	586	428	400	478	436	308	246	178	171
CFSM	.79	1.03	3.17	3.50	2.65	8.54	2.88	2.87	1.53	.81	.61	1.08
IN.	.92	1.15	3.65	4.04	2.76	9.85	3.22	3.31	1.71	.93	.70	1.20

CAL YR 1972 TOTAL 296,213 MEAN 809 MAX 7,030 MIN 130 CFSM 1.89 IN 25.75
WTR YR 1973 TOTAL 384,658 MEAN 1,054 MAX 26,500 MIN 151 CFSM 2.46 IN 33.43

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
03-17	0900	23.75	30,000	05-29	0430	12.08	6,100

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 (0.8 km) downstream from South Chickamauga Creek, 3.0 miles (4.8 km) downstream from Chickamauga Dam, 3.5 miles (5.6 km) upstream from Walnut Street Bridge in Chattanooga, and at mile 467.6 (752.4 km).

DRAINAGE AREA.--21,400 sq mi (55,430 sq km), 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 (189.317 m) above mean sea level. Prior to Feb. 1, 1939, nonrecording or recording gages at several sites from 7.0 miles (11.3 km) upstream from Chattanooga to Hales Bar Dam 33 miles (53 km) downstream at or within 0.2 ft (0.06 m) of present datum, except nonrecording gage at Bridgeport, Ala., 49.9 miles (80.3 km) 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 (3.5 km) downstream from base gage.

AVERAGE DISCHARGE.--99 years, 36,980 cfs (1,047 cu m/s), 23.46 in/yr (596 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 267,000 cfs (7,560 cu m/s) Mar. 17, 18; maximum gage height, 38.98 ft (11.881 m) Mar. 18; maximum gage height at Walnut Street, 36.94 ft (11.259 m) Mar. 18; minimum daily discharge, 10,600 cfs (300 cu m/s) Apr. 22; minimum gage height, 10.79 ft (3.289 m) Oct. 9.
Period of record: Maximum discharge observed, 410,000 cfs (11,600 cu m/s) Mar. 1, 1875, gage height, 53.8 ft (16.40 m), present datum, at Walnut Street, from rating curve extended above 250,000 cfs (7,080 cu m/s); minimum daily, 1,200 cfs (34.0 cu m/s) Nov. 1, 1953; minimum gage height, 0.0 ft (0.00 m) Sept. 11-14, 1881, Sept. 19, 1883.
Maximum stage known, 57.9 ft (17.65 m) Mar. 11, 1867, present datum at Walnut Street, discharge about 459,000 cfs (13,000 cu m/s).

REMARKS.--Records excellent. Flow regulated since 1936 by increasing number of reservoirs above station (see p. 131, and basic data release for adjoining states, 1973).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40,900	47,500	54,500	92,600	46,000	38,500	66,800	61,600	114,000	32,600	39,700	33,900
2	31,600	46,500	54,200	89,300	49,000	27,400	65,300	59,400	103,000	38,100	45,700	28,500
3	31,700	47,600	53,800	88,200	49,300	36,800	60,100	52,600	93,500	43,900	45,000	27,500
4	24,700	41,700	53,600	92,900	49,200	26,200	54,100	49,100	81,900	34,700	39,800	39,300
5	39,400	36,700	53,700	96,700	48,800	28,400	50,500	49,100	74,100	32,300	23,800	42,500
6	46,400	46,700	50,800	91,500	48,500	33,000	48,100	49,000	79,400	32,600	38,700	35,100
7	40,600	43,900	51,500	82,600	54,700	20,800	36,400	49,100	86,800	33,900	41,800	31,000
8	26,800	47,900	55,700	76,900	61,800	20,100	32,300	56,500	78,100	30,300	41,000	28,700
9	32,600	45,600	67,400	67,700	71,900	34,500	37,100	64,500	68,100	34,300	39,300	26,900
10	39,900	46,300	103,000	64,700	76,800	31,000	41,100	59,400	61,500	32,800	44,400	35,400
11	36,500	40,800	150,000	62,400	75,900	28,300	38,300	56,200	55,100	32,300	44,500	36,400
12	38,100	37,900	153,000	53,600	76,100	34,000	36,200	56,400	45,300	39,100	28,300	34,700
13	35,500	42,700	127,000	40,100	74,500	32,700	32,000	56,100	37,300	32,800	44,300	34,100
14	27,800	47,500	112,000	45,600	77,100	33,300	20,400	53,000	46,100	30,200	46,100	40,600
15	18,600	47,600	112,000	44,500	72,800	45,300	19,600	35,000	51,700	29,800	41,500	29,700
16	35,200	46,900	115,000	40,900	60,900	134,000	20,800	31,100	56,400	33,000	35,900	17,900
17	39,500	47,500	114,000	45,500	51,700	242,000	25,600	31,900	56,200	32,100	38,500	26,700
18	47,100	47,300	115,000	45,400	51,700	251,000	23,400	35,600	55,700	34,200	37,000	29,100
19	46,900	47,900	118,000	46,500	50,100	207,000	19,100	35,000	54,000	33,300	28,900	33,300
20	47,400	47,200	116,000	32,500	42,600	153,000	17,800	31,100	48,300	36,900	38,700	31,200
21	45,400	46,400	113,000	50,000	42,200	117,000	13,500	31,700	41,500	37,700	43,200	26,800
22	46,200	52,300	110,000	49,300	37,300	106,000	10,600	32,300	42,500	27,100	42,600	20,700
23	47,400	57,000	106,000	57,500	38,100	104,000	20,900	33,500	33,800	32,500	42,200	19,100
24	38,500	59,400	104,000	63,200	36,000	102,000	27,600	44,700	35,400	39,800	37,000	33,800
25	40,800	61,600	103,000	62,800	26,600	97,600	20,300	42,500	34,800	38,300	41,000	29,900
26	35,300	61,900	103,000	62,500	27,800	91,500	27,300	43,900	37,400	38,400	28,900	31,600
27	39,000	61,300	97,100	61,100	32,000	88,600	52,500	48,900	36,300	45,800	35,300	31,800
28	40,400	61,100	87,700	53,200	40,800	88,400	65,500	141,000	35,600	46,100	46,200	35,000
29	41,700	61,300	85,600	50,700	------	87,700	63,600	183,000	35,100	42,200	41,400	35,100
30	44,900	58,800	90,100	49,000	------	83,400	61,800	167,000	34,200	46,800	43,000	22,000
31	47,500	------	92,800	45,600	------	74,400	------	136,000	------	39,800	42,500	------
TOTAL	1,194.3M	1,484.8M	2,922.5M	1,905.0M	1,470.2M	2,497.9M	1,108.6M	1,876.2M	1,713.1M	1,113.7M	1,226.2M	928,300
MEAN	38,530	49,490	94,270	61,450	52,510	80,580	36,950	60,520	57,100	35,930	39,550	30,940
MAX	47,500	61,900	153,000	96,700	77,100	251,000	66,800	183,000	114,000	46,800	46,200	42,500
MIN	18,600	36,700	50,800	32,500	26,600	20,100	10,600	31,100	33,800	27,100	23,800	17,900

CAL YR 1972 TOTAL 16,848,100 MEAN 46,030 MAX 153,000 MIN 15,800
WTR YR 1973 TOTAL 19,440,800 MEAN 53,260 MAX 251,000 MIN 10,600

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 (1.3 km) south of Georgia-Tennessee State line and 2.3 miles (3.7 km) northeast of Flintstone, and at mile 10.3 (16.6 km).

DRAINAGE AREA.--50.6 sq mi (131.0 sq km).

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 (197.870 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 85.3 cfs (2.416 cu m/s), 22.89 in/yr (581 mm/yr).

EXTREMES.--Current year: Maximum discharge, 6,300 cfs (178 cu m/s) Mar. 16, gage height, 13.59 ft (4.142 m); minimum, 8.4 cfs (0.24 cu m/s) Sept. 11.
Period of record: Maximum discharge, 6,300 cfs (178 cu m/s) Mar. 16, 1973, gage height, 13.59 ft (4.142 m); minimum, 1.0 cfs (0.028 cu m/s) Sept. 8, 9, 1954.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by bleachery above station. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1910: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	39	76	362	151	50	307	163	109	31	46	13
2	16	35	70	235	279	81	220	136	92	31	39	12
3	12	56	65	216	233	203	180	120	78	30	35	11
4	15	49	61	263	187	161	154	103	68	24	32	11
5	55	42	58	219	159	159	125	87	60	23	29	10
6	32	36	161	202	159	140	108	77	100	21	30	9.5
7	21	48	180	181	148	227	205	70	120	18	30	9.0
8	17	119	136	241	229	215	281	128	100	24	28	8.6
9	15	84	162	207	295	639	206	122	81	22	26	8.6
10	13	66	290	172	225	580	170	84	71	21	33	8.5
11	12	55	441	148	179	742	140	75	70	27	48	8.4
12	12	46	272	127	147	870	123	77	70	22	37	9.7
13	14	41	206	108	131	367	106	65	62	19	35	65
14	15	65	198	100	397	262	92	57	67	20	31	54
15	18	61	471	104	381	267	83	51	82	21	27	30
16	20	55	456	104	258	4,760	78	46	135	19	24	23
17	21	49	259	103	200	2,080	74	43	101	44	21	20
18	59	43	192	101	166	979	82	40	78	38	21	41
19	80	90	157	247	141	406	104	42	64	27	19	30
20	40	172	139	241	121	271	91	184	85	23	18	23
21	28	120	240	191	104	220	83	100	68	21	24	20
22	22	96	363	406	93	174	77	71	81	20	18	52
23	21	74	250	295	85	146	74	60	68	19	16	116
24	21	62	200	217	75	127	74	185	56	24	15	43
25	17	65	175	173	67	143	190	147	49	119	14	33
26	15	86	150	182	63	138	524	111	43	306	14	28
27	18	79	125	296	59	120	1,170	113	40	115	13	25
28	118	74	93	242	54	109	459	522	42	69	13	23
29	82	68	81	211	------	103	273	263	43	52	13	22
30	56	75	74	174	------	98	204	175	34	44	13	26
31	46	------	505	152	------	299	------	130	------	53	13	------
TOTAL	959	2,050	6,306	6,220	4,786	15,136	6,057	3,647	2,217	1,347	775	793.3
MEAN	30.9	68.3	203	201	171	488	202	118	73.9	43.5	25.0	26.4
MAX	118	172	505	406	397	4,760	1,170	522	135	306	48	116
MIN	12	35	58	100	54	50	74	40	34	18	13	8.4
CFSM	.61	1.35	4.01	3.97	3.38	9.64	3.99	2.33	1.46	.86	.49	.52
IN.	.71	1.51	4.64	4.57	3.52	11.13	4.45	2.68	1.63	.99	.57	.58

CAL YR 1972 TOTAL 40,291.4 MEAN 110 MAX 1,260 MIN 8.2 CFSM 2.17 IN 29.62
WTR YR 1973 TOTAL 50,293.3 MEAN 138 MAX 4,760 MIN 8.4 CFSM 2.73 IN 36.97

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
03-09	1900	8.68	1,140	03-16	1945	13.59	6,300
03-11	2130	9.30	1,530	04-27	0130	9.18	1,450

03571000 Sequatchie River near Whitwell, Tenn.

LOCATION.--Lat 35°12'22", long 85°29'48", Marion County, on right bank 15 ft (5 m) downstream from county road bridge 1.5 miles (2.4 km) east of Whitwell, 3.0 miles (4.8 km) upstream from bridge on State Highway 27, 4.5 miles (7.2 km) downstream from Griffith Creek, and at mile 25.1 (40.4 km).

DRAINAGE AREA.--402 sq mi (1,041 sq km), includes 18 sq mi (47 sq km) 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 (192.856 m) above mean sea level (levels by Tennessee Valley Authority). Prior to Sept. 18, 1927, nonrecording gage at same site at datum 0.03 ft (0.009 m) higher. Sept. 18, 1927, to Sept. 30, 1930, nonrecording gage at bridge 15 ft (5 m) upstream at present datum.

AVERAGE DISCHARGE.--53 years, 733 cfs (20.76 cu m/s), 24.76 in/yr (629 mm/yr).

EXTREMES.--Current year: Maximum discharge, 29,600 cfs (838 cu m/s) Mar. 16, gage height, 17.65 ft (5.380 m); minimum, 110 cfs (3.12 cu m/s) Oct. 16, 17, gage height, 1.30 ft (0.396 m).
Period of record: Maximum discharge, 29,600 cfs (838 cu m/s) Mar. 16, 1973, gage height, 17.65 ft (5.380 m); minimum, 16 cfs (0.45 cu m/s) Sept. 6-21, 27, 28, 1925.
Floods in March 1867 reached a stage of about 19 ft (5.8 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	366	400	1,260	1,650	1,190	520	1,390	1,290	1,900	310	394	122
2	343	423	1,120	1,410	2,090	526	1,250	1,090	1,650	313	379	118
3	243	937	975	1,500	1,940	896	1,120	952	1,360	412	325	116
4	185	1,080	860	2,500	1,630	1,040	1,060	888	1,150	364	286	113
5	183	925	776	2,330	1,350	1,030	995	954	1,000	331	260	112
6	310	696	1,140	1,920	1,420	967	919	841	2,100	283	243	111
7	346	677	1,680	1,550	1,920	973	995	729	2,220	268	228	110
8	255	1,580	1,510	1,370	2,400	983	1,340	1,660	2,070	283	216	108
9	200	1,640	3,790	1,170	3,240	1,430	1,440	1,330	1,630	248	206	106
10	171	1,350	7,630	1,030	2,700	1,450	1,380	1,020	1,220	292	212	105
11	152	977	8,860	947	1,990	2,030	1,820	865	1,020	463	248	104
12	139	765	7,760	866	1,510	3,290	3,600	751	1,020	289	238	102
13	131	652	6,400	791	1,260	2,250	2,300	662	946	255	258	124
14	123	717	3,650	740	2,100	1,670	823	591	961	283	370	210
15	116	730	3,540	719	3,320	2,190	749	535	1,160	343	304	192
16	111	689	3,760	720	2,520	19,500	687	491	1,340	391	268	172
17	112	623	2,890	730	1,890	20,500	641	457	1,030	664	226	156
18	648	554	2,060	786	1,510	12,500	614	426	787	673	210	148
19	1,760	596	1,640	2,110	1,270	7,360	674	408	673	574	194	139
20	1,750	1,050	1,460	2,490	1,110	4,030	680	402	598	859	182	139
21	1,130	1,130	1,470	2,080	984	4,120	630	376	646	565	172	130
22	733	984	1,960	3,470	885	3,740	585	358	604	424	163	124
23	551	812	1,950	3,310	812	2,700	554	345	499	373	156	116
24	451	689	1,690	2,290	743	2,090	531	806	445	469	148	116
25	387	643	1,410	1,670	679	1,990	566	1,170	406	769	145	118
26	345	719	1,210	1,450	632	1,950	1,320	866	373	1,300	138	112
27	330	767	1,060	1,900	596	1,710	5,450	948	346	853	133	106
28	406	994	953	1,810	556	1,490	5,390	7,700	346	625	130	106
29	449	1,380	860	1,610	------	1,320	2,990	8,940	331	577	127	138
30	410	1,300	788	1,380	------	1,200	1,780	7,820	325	451	125	268
31	397	------	1,370	1,210	------	1,290	------	3,490	------	409	125	------
TOTAL	13,233	26,479	77,482	49,509	44,247	108,735	44,273	49,161	30,156	14,713	6,809	3,941
MEAN	427	883	2,499	1,597	1,580	3,508	1,476	1,586	1,005	475	220	131
MAX	1,760	1,640	8,860	3,470	3,320	20,500	5,450	8,940	2,220	1,300	394	268
MIN	111	400	776	719	556	520	531	345	325	248	125	102
CFSM	1.06	2.20	6.22	3.97	3.93	8.73	3.67	3.95	2.50	1.18	.55	.33
IN.	1.22	2.45	7.17	4.58	4.09	10.06	4.10	4.55	2.79	1.36	.63	.36

CAL YR 1972 TOTAL 338,119 MEAN 924 MAX 8,860 MIN 72 CFSM 2.30 IN 31.29
WTR YR 1973 TOTAL 468,738 MEAN 1,284 MAX 20,500 MIN 102 CFSM 3.19 IN 43.38

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-11	0330	14.45	9,500	04-27	2230	13.58	6,760
03-16	1800	17.65	29,600	05-28	1930	14.69	10,600

03571850 Tennessee River at South Pittsburg, Tenn.

LOCATION.--Lat 35°00'41", long 85°41'51", Marion County, on right bank at South Pittsburg Ferry landing on Tennessee State Highway 156, 0.5 mile (0.8 km) downstream from Battle Creek, 0.5 mile (0.8 km) east of South Pittsburg, 4.6 miles (7.4 km) downstream from Sequatchie River, 6.5 miles (10.5 km) downstream from Nickajack Dam, and at mile 418.2 (672.9 km).

DRAINAGE AREA.--22,640 sq mi (58,640 sq km), 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 (177.092 m) above mean sea level. Prior to Feb. 13, 1932, at site 12.9 miles (20.8 km) upstream at datum 7.85 ft (2.393 m) higher. Feb. 13, 1932, to July 17, 1966, at site 11.5 miles (18.5 km) upstream at datum 7.50 ft (2.286 m) higher. Since Jan. 27, 1939, auxiliary water-stage recorder at site 10.6 miles (17.1 km) downstream.

AVERAGE DISCHARGE.--43 years, 36,300 cfs (1,028 cu m/s), 21.77 in/yr (553 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 315,000 cfs (8,920 cu m/s) Mar. 18; gage height, 34.33 ft (10.464 m); minimum daily, 19,000 cfs (538 cu m/s) Apr. 22; minimum gage height, 12.50 ft (3.810 m) Feb. 25.
Period of record: Maximum discharge, 315,000 cfs (8,920 cu m/s) Mar. 18, 1973, gage height 34.33 ft (10.464 m); minimum daily, 2,900 cfs (82.1 cu m/s) Nov. 1, 15, 1953; minimum gage height, 1.21 ft (0.369 m) Oct. 27, 1931, site and datum used 1932-65. Maximum stage known, 44.6 ft (13.59 m) in March 1867, site and datum used 1932-65. Flood of Mar. 8, 1917, reached a stage of 37.4 ft (11.40 m), site and datum used 1932-65, discharge, 320,000 cfs (9,060 cu m/s), from rating curve extended above 225,000 cfs (6,370 cu m/s).

REMARKS.--Records fair. Since 1936, flow regulated by increasing number of reservoirs above station (see p. 131 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47,700	53,600	62,900	107,000	56,000	46,000	79,300	72,800	135,000	37,000	45,000	39,500
2	37,600	53,600	63,000	104,000	58,300	36,900	78,900	69,700	116,000	42,900	52,900	31,600
3	35,000	53,600	62,100	100,000	63,300	40,700	73,500	60,000	106,000	49,000	52,900	30,300
4	29,400	50,700	61,200	105,000	60,400	36,500	63,300	54,600	94,500	38,900	48,200	42,400
5	43,600	41,600	60,800	102,000	56,700	36,800	60,100	54,600	83,100	37,100	31,800	48,600
6	51,600	53,000	59,800	105,000	60,400	41,700	54,500	54,000	87,700	37,300	41,700	42,600
7	48,400	53,400	64,000	95,300	42,600	32,500	42,900	56,100	98,400	41,200	47,600	33,900
8	31,000	55,200	63,900	90,800	58,200	27,900	41,800	68,200	92,500	36,000	46,400	33,000
9	34,600	55,700	78,900	82,100	78,100	45,200	43,700	78,500	80,200	37,100	46,000	27,900
10	44,600	53,600	115,000	76,200	92,800	44,800	48,400	69,900	71,100	36,300	46,800	38,000
11	40,500	46,800	168,000	73,900	89,100	43,400	49,100	64,600	64,100	35,700	50,000	41,300
12	41,700	45,100	178,000	61,300	86,500	53,600	44,600	64,100	50,200	42,100	38,500	38,700
13	40,500	49,700	156,000	48,000	86,200	49,100	38,200	63,000	45,700	39,800	48,600	35,500
14	30,000	54,200	131,000	49,900	91,200	43,900	28,000	60,100	53,300	36,900	51,300	48,700
15	24,700	54,200	129,000	50,000	91,700	60,100	26,000	40,000	54,800	38,600	65,800	33,800
16	37,400	54,300	131,000	44,700	78,700	179,000	27,600	37,000	64,800	38,400	41,100	21,900
17	43,300	54,000	131,000	51,500	65,300	295,000	30,300	36,200	65,500	35,900	39,300	29,900
18	52,300	53,900	126,000	52,800	60,800	312,000	27,700	37,300	65,400	40,400	44,900	31,400
19	55,700	53,800	129,000	53,700	59,200	274,000	25,700	41,100	62,500	39,400	35,700	35,600
20	56,000	54,900	128,000	46,500	51,500	208,000	25,400	40,700	56,000	42,800	41,700	35,400
21	53,300	55,100	126,000	57,200	46,200	148,000	20,700	35,400	49,500	46,100	45,800	29,700
22	51,100	63,200	124,000	65,500	44,000	122,000	19,000	38,200	41,800	36,800	45,500	26,900
23	52,900	67,900	119,000	74,500	43,000	117,000	27,500	41,100	43,400	36,900	47,400	22,400
24	43,600	65,300	117,000	76,800	41,500	114,000	30,400	48,100	38,600	43,400	43,000	36,000
25	44,700	71,100	115,000	75,100	32,800	111,000	27,400	53,900	40,100	46,500	46,200	35,900
26	36,700	70,500	113,000	73,600	34,000	105,000	35,400	48,500	40,200	48,100	34,500	46,700
27	43,100	70,600	109,000	73,700	35,800	100,000	72,300	59,800	40,600	54,600	40,000	35,600
28	47,400	70,400	101,000	66,400	44,700	98,700	86,300	126,000	40,100	53,400	51,000	38,800
29	47,400	71,000	94,000	60,500	------	99,200	79,100	193,000	44,400	53,800	48,700	39,800
30	51,800	69,300	97,900	54,400	------	96,500	74,100	195,000	42,000	52,900	47,200	26,300
31	53,500	------	105,000	56,200	------	90,100	------	168,000	------	45,600	45,600	------
TOTAL	1,351.1M	1,719.3M	3,319.5M	2,233.6M	1,709.0M	3,108.6M	1,381.2M	2,129.5M	1,967.5M	1,300.9M	1,411.1M	1,058.1M
MEAN	43,580	57,310	107,100	72,050	61,040	100,300	46,040	68,690	65,580	41,960	45,520	35,270
MAX	56,000	71,100	178,000	107,000	92,800	312,000	86,300	195,000	135,000	54,600	65,800	48,700
MIN	24,700	41,600	59,800	44,700	32,800	27,900	19,000	35,400	38,600	35,700	31,800	21,900

CAL YR 1972 TOTAL 19,462,300 MEAN 53,180 MAX 178,000 MIN 20,200
WTR YR 1973 TOTAL 22,689,400 MEAN 62,160 MAX 312,000 MIN 19,000

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 (1.8 km) southeast of Pelham, 1.8 miles (2.9 km) upstream from Caldwell Creek, and at mile 194.2 (312.5 km).

DRAINAGE AREA.--65.6 sq mi (169.9 sq km).

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 (299.198 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 137 cfs (3.880 cu m/s), 28.36 in/yr (720 mm/yr).

EXTREMES.--Current year: Maximum discharge, 15,800 cfs (447 cu m/s) Mar. 16, gage height, 14.08 ft (4.292 m); minimum, 5.6 cfs (0.16 cu m/s) Sept. 8, 9.
Period of record: Maximum discharge, 15,800 cfs (447 cu m/s) Mar. 16, 1973, gage height, 14.08 ft (4.292 m); minimum, 1.0 cfs (0.028 cu m/s) Sept. 27, 28, 1954.
REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They superseded figures published in the water-supply papers indicated.

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)	WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
1910	1963	Mar. 12, 1963	9,050	13.17	2120	1969	Feb. 2, 1969	3,800	11.40
1910	1965	Mar. 26, 1965	3,500	a11.20	b	1971	May 13, 1971	3,240	11.03
2120	1966	May 1, 1966	3,940	11.47					

a From flood mark.
b Water Resources Data for Tennessee, 1971.

REMARKS.--Records good.

REVISIONS.--The figures of peak discharge for water years 1963, 1966, 1970, and 1971 have been revised as shown in the following table. They supersede figures published in WSP 1910, WSP 2110, and WRD Tennessee 1971.
REVISED PEAK DISCHARGE.--1963: Mar. 12 (0530) 9,050 cfs (13.17 ft); Apr. 30 (0300) 3,440 cfs (11.16 ft).
1966: Feb. 13 (1800) 3,230 cfs (11.02 ft); May 1 (1745) 3,940 cfs (11.47 ft).
1970: Apr. 24 (2100) 2,520 cfs (10.55 ft); Apr. 26 (1830) 3,470 cfs (11.18 ft).
1971: Dec. 23 (2000) 2,300 cfs (10.40 ft); May 13 (1115) 3,240 cfs (11.03 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	103	296	308	204	58	208	129	280	15	30	6.4
2	111	184	211	221	388	67	163	109	221	14	38	6.8
3	70	626	169	265	298	140	140	107	142	14	26	6.8
4	141	404	149	503	224	135	149	109	108	13	21	6.6
5	361	225	137	343	182	144	140	91	85	19	17	6.6
6	176	161	269	250	350	137	119	80	177	22	15	6.6
7	113	165	340	196	436	184	191	72	292	15	13	6.4
8	83	319	243	187	607	215	347	120	191	13	12	5.8
9	61	239	1,590	159	762	321	287	160	127	12	11	6.4
10	46	180	3,310	137	431	338	230	114	99	12	9.9	7.4
11	37	145	1,670	124	265	394	172	95	123	25	9.5	7.0
12	32	119	794	110	193	570	144	87	142	23	11	7.2
13	28	110	584	98	163	358	124	71	104	16	17	12
14	25	197	506	94	451	231	107	58	80	13	17	31
15	23	180	641	101	595	696	96	49	64	19	16	22
16	21	148	622	106	392	8,800	87	43	57	39	13	15
17	21	124	382	108	262	2,770	81	39	51	176	11	12
18	809	107	259	112	200	1,110	78	35	42	158	9.9	11
19	2,100	214	205	187	165	606	91	33	35	76	8.9	11
20	1,050	454	200	218	142	458	83	44	31	71	8.5	9.9
21	415	310	222	191	126	1,010	74	44	28	51	8.0	8.9
22	224	214	326	605	114	662	67	33	26	35	7.8	8.0
23	166	163	269	401	103	400	64	31	23	27	7.4	7.6
24	154	134	210	246	91	268	64	447	21	43	7.2	11
25	127	133	184	183	81	280	83	466	19	54	7.0	12
26	110	187	166	201	74	314	173	215	18	94	6.6	10
27	97	176	149	403	69	380	611	2,570	17	103	6.6	8.9
28	110	352	135	298	63	291	412	3,610	18	70	6.4	7.8
29	108	442	121	286	------	221	238	1,080	16	45	6.4	8.0
30	97	353	112	219	------	179	163	451	15	31	6.4	8.0
31	101	------	240	183	------	191	------	231	------	25	6.4	------
TOTAL	7,310	6,868	14,711	7,043	7,431	21,928	4,986	10,823	2,652	1,343	390.9	294.1
MEAN	236	229	475	227	265	707	166	349	88.4	43.3	12.6	9.80
MAX	2,100	626	3,310	605	762	8,800	611	3,610	292	176	38	31
MIN	21	103	112	94	63	58	64	31	15	12	6.4	5.8
CFSM	3.60	3.49	7.24	3.46	4.04	10.8	2.53	5.32	1.35	.66	.19	.15
IN.	4.15	3.89	8.34	3.99	4.21	12.43	2.83	6.14	1.50	.76	.22	.17

CAL YR 1972 TOTAL 71,971.4 MEAN 197 MAX 3,310 MIN 6.0 CFSM 3.00 IN 40.81
WTR YR 1973 TOTAL 85,780.0 MEAN 235 MAX 8,800 MIN 5.8 CFSM 3.58 IN 48.64

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-18	2330	10.39	2,530	03-16	0900	14.08	15,800
12-10	1000	11.58	4,160	05-27	2100	13.37	10,200

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 (2.7 km) northeast of Estill Springs, 2.7 miles (4.3 km) downstream from Elk River Dam, 4.0 miles (6.4 km) upstream from U.S. Highway 41A bridge, and at mile 167.3 (269.2 km).

DRAINAGE AREA.--275 sq mi (712 sq km).

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 (270.184 m) 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 (6.4 km) downstream at datum 27.33 ft (8.330 m) lower. Water-stage recorder at present site and datum since Nov. 22, 1966.

AVERAGE DISCHARGE.--53 years, 481 cfs (13.62 cu m/s), 23.75 in/yr (603 mm/yr).

EXTREMES.--Current year: Maximum discharge, 38,100 cfs (1,080 cu m/s) Mar. 16, gage height, 20.33 ft (6.197 m); minimum, 46 cfs (1.30 cu m/s) Sept. 8, gage height, 1.51 ft (0.460 m).
Period of record: Maximum discharge, 38,100 cfs (1,080 cu m/s) Mar. 16, 1973, gage height, 20.33 ft (6.197 m); minimum, 10 cfs (0.28 cu m/s) Oct. 9, 10, 1925.

REMARKS.--Records good. Flow regulated by Woods Reservoir 2.7 miles (4.3 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,120	434	975	545	795	263	900	545	1,100	210	115	51
2	630	446	755	820	1,060	316	900	486	1,400	210	121	52
3	356	1,150	805	1,050	1,040	910	700	485	900	203	121	52
4	307	1,520	567	1,440	1,030	865	650	542	800	292	125	51
5	513	1,020	567	1,520	860	730	600	444	450	625	123	49
6	650	595	750	1,540	1,130	478	600	370	500	93	117	49
7	650	486	945	1,160	1,340	391	973	318	1,600	62	113	48
8	517	531	975	1,080	2,550	491	1,200	385	1,200	66	111	47
9	276	720	2,930	840	2,830	758	1,050	440	900	71	107	48
10	124	795	12,000	536	1,790	1,090	917	574	450	71	107	51
11	195	790	8,380	536	1,090	1,730	625	524	400	75	107	49
12	205	535	3,720	536	860	1,920	622	427	500	76	107	48
13	205	422	2,570	514	695	1,390	617	281	450	78	111	54
14	205	426	2,060	455	1,730	1,080	550	281	350	286	111	61
15	205	549	2,070	455	2,130	2,470	520	243	300	338	113	65
16	170	610	2,040	455	1,510	26,100	520	71	250	352	111	67
17	68	486	1,900	451	1,280	15,900	423	106	250	780	111	65
18	1,510	426	1,330	455	865	4,960	397	231	250	2,980	107	65
19	3,280	438	875	740	770	3,060	460	269	200	1,570	103	63
20	3,410	567	1,080	845	685	2,550	468	533	160	373	97	62
21	2,040	1,000	1,060	850	650	3,860	462	381	160	270	92	59
22	930	1,040	1,270	870	487	2,470	459	186	160	263	78	59
23	645	625	1,300	1,080	419	1,710	455	163	160	258	54	61
24	571	558	985	1,330	415	1,270	304	1,370	160	283	54	61
25	495	690	920	1,490	415	941	391	1,050	160	143	54	59
26	390	705	920	1,080	415	906	723	1,000	129	283	55	62
27	386	620	750	1,230	383	1,250	1,790	5,950	84	223	55	61
28	620	960	655	1,160	305	1,100	1,200	13,900	97	370	54	61
29	625	1,180	625	996	------	856	869	4,600	99	363	55	64
30	430	1,170	541	875	------	777	597	2,800	155	198	55	65
31	434	------	550	685	------	800	------	1,800	------	111	53	------
TOTAL	22,162	21,494	56,870	27,619	29,529	83,392	20,942	40,755	13,774	11,576	2,897	1,709
MEAN	715	716	1,835	891	1,055	2,690	698	1,315	459	373	93.5	57.0
MAX	3,410	1,520	12,000	1,540	2,830	26,100	1,790	13,900	1,600	2,980	125	67
MIN	68	422	541	451	305	263	304	71	84	62	53	47
(†)	-2,000	-800	+200	-600	+100	+3,100	0	-200	+100	-200	-200	+100
MEAN‡	650	690	1,841	872	1,058	2,790	698	1,308	462	367	87.0	60.3
CFSM‡	2.36	2.51	6.69	3.17	3.85	10.1	2.54	4.76	1.68	1.33	.32	.22
IN.‡	2.73	2.80	7.72	3.65	4.01	11.7	2.83	5.48	1.88	1.54	.36	.24

CAL YR 1972 TOTAL 252,082 MEAN 689 MAX 12,000 MIN 30 MEAN‡ 689 CFSM‡ 2.51 IN.‡ 34.12
WTR YR 1973 TOTAL 332,719 MEAN 912 MAX 26,100 MIN 47 MEAN‡ 910 CFSM‡ 3.31 IN.‡ 44.94

† 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 (50 m) upstream from bridge on State Highway 50, 0.3 mile (0.5 km) downstream from Tims Ford Dam, 3.6 miles (6.0 km) north of Lexie Crossroads, 9.5 miles (15.3 km) west of Winchester, and at mile 133 (214 km).

DRAINAGE AREA.--534 sq mi (1,383 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level. Dec. 1, 1970, to May 12, 1971, water-stage recorder at site 2.4 miles (3.9 km) downstream at datum 2.26 ft (0.689 m) lower.

AVERAGE DISCHARGE.--7 years, 902 cfs (25.54 cu m/s), 22.94 in/yr (583 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 18,600 cfs (527 cu m/s) Mar. 18, 19, gage height, 60.25 ft (18.364 m); minimum, 5.5 cfs (0.16 cu m/s) Oct. 17, 18; minimum daily, 7.0 cfs (0.20 cu m/s) Oct. 17.
Period of record: Maximum discharge, 18,600 cfs (527 cu m/s) Mar. 18, 19, 1973, gage height, 60.25 ft (18.364 m); minimum, 3.2 cfs (0.091 cu m/s) Dec. 7, 8, 9, 1970; minimum daily, 3.5 cfs (0.099 cu m/s) Dec. 6, 8, 9, 1970.

REMARKS.--Records good. Flow regulated by Woods Reservoir (see sta 03579000) and Tims Ford Lake (see sta 03580740). Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,820	7.6	31	3,960	800	1,160	2,830	1,000	4,010	38	1,120	518
2	2,820	15	25	2,870	50	34	2,600	1,000	4,010	802	1,120	57
3	3,130	14	20	2,890	40	30	1,840	1,000	3,620	806	1,120	55
4	3,180	12	24	2,880	30	25	1,300	990	3,540	432	54	523
5	3,220	10	26	2,870	50	32	1,260	1,030	3,160	422	50	532
6	3,260	9.4	24	2,860	40	400	1,240	46	3,200	422	265	547
7	3,270	11	620	2,070	2,500	580	1,240	986	3,200	40	262	529
8	3,300	9.4	976	2,070	262	922	1,190	1,030	3,200	40	1,100	318
9	3,300	9.4	95	1,740	3,040	907	2,560	82	3,180	415	333	208
10	2,380	8.8	125	2,880	3,230	1,390	2,540	83	3,180	418	583	529
11	20	8.2	2,860	1,400	3,240	2,240	2,560	89	3,180	420	52	529
12	285	8.2	4,340	30	3,240	1,280	1,330	82	3,170	425	52	283
13	1,090	9.4	4,340	30	3,220	2,000	610	43	3,160	425	265	302
14	716	9.4	4,340	30	2,730	1,070	610	473	2,240	51	263	180
15	764	8.2	4,360	30	3,700	2,030	610	79	2,240	46	265	50
16	85	8.2	4,330	30	3,170	1,540	610	496	1,800	430	270	50
17	7.0	8.2	4,330	30	3,260	12,300	1,200	48	1,710	472	270	525
18	950	8.2	4,340	40	3,260	18,200	1,800	40	852	1,590	54	824
19	2,220	14	4,360	35	3,270	12,900	650	112	948	2,930	53	816
20	1,410	14	4,380	40	3,260	12,000	60	60	940	3,060	268	828
21	1,350	13	4,400	50	2,010	9,570	60	884	924	1,390	561	844
22	1,330	13	4,410	820	952	9,020	50	56	813	1,110	507	532
23	1,340	13	4,410	1,600	937	6,850	800	1,690	43	587	516	278
24	2,060	11	4,430	1,600	941	5,170	250	1,650	37	39	516	44
25	2,090	13	4,430	1,600	24	1,330	60	48	802	571	56	44
26	2,100	13	4,450	2,400	938	5,310	60	1,400	799	574	54	72
27	1,500	13	4,370	2,400	909	5,360	650	230	799	1,140	790	102
28	17	44	4,120	40	1,130	4,830	1,400	3,280	776	1,160	818	116
29	17	980	4,040	1,300	------	4,600	1,400	4,600	792	1,150	810	126
30	8.5	950	4,070	800	------	4,180	1,400	4,540	42	1,120	806	126
31	7.6	------	4,090	800	------	2,770	------	4,340	------	1,120	818	------
TOTAL	50,047.1	2,265.6	91,166	42,195	50,233	130,030	34,770	31,487	60,367	23,645	14,071	10,487
MEAN	1,614	75.5	2,941	1,361	1,794	4,195	1,159	1,016	2,012	763	454	350
MAX	3,300	980	4,450	3,960	3,700	18,200	2,830	4,600	4,010	3,060	1,120	844
MIN	7.0	7.6	20	30	24	25	50	40	37	38	50	44
CFSM	3.02	.14	5.51	2.55	3.36	7.86	2.17	1.90	3.77	1.43	.85	.66
IN.	3.49	.16	6.35	2.94	3.50	9.06	2.42	2.19	4.21	1.65	.98	.73

CAL YR 1972 TOTAL 444,115.7 MEAN 1,213 MAX 4,970 MIN 7.0 MEAN† 1,225 CFSM† 2.29 IN.† 31.22
WTR YR 1973 TOTAL 540,763.7 MEAN 1,482 MAX 18,200 MIN 7.0 MEAN† 1,683 CFSM† 3.15 IN.† 42.79

† Adjusted for change in contents in Woods Reservoir and Tims Ford Lake.

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 (0.8 km) 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 (245.471 m) above mean sea level (Tennessee Valley Authority bench mark).

EXTREMES.--Current year: Maximum discharge, 184 cfs (5.21 cu m/s) Mar. 16, gage height, 3.69 ft (1.125 m); minimum, 0.08 cfs (0.002 cu m/s) May 30, gage height, 1.14 ft (0.347 m) caused by regulation; minimum unaffected by regulation, 0.70 cfs (0.020 cu m/s), Oct. 15, 16, 17, 18, gage height, 1.31 ft (0.399 m).
Period of record: Maximum discharge, 184 cfs (5.21 cu m/s) Mar. 16, 1973, gage height, 3.69 ft (1.125 m); no flow for part of Sept. 12, 1971, caused by drainage of reservoir; minimum discharge unaffected by regulation, 0.45 cfs (0.013 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.7	2.6	2.6	4.7	2.1	4.8	4.6	4.0	1.8	1.6	.88
2	1.2	1.8	2.3	2.4	8.3	2.2	4.5	4.1	3.7	1.7	1.5	.88
3	1.1	2.2	2.2	3.0	6.8	5.7	4.3	3.9	3.3	1.6	1.4	.88
4	1.0	2.3	2.1	4.8	4.0	5.6	4.1	3.6	2.9	1.5	1.3	.88
5	.99	2.1	2.0	4.8	4.7	5.0	3.7	3.3	2.6	1.5	1.2	.88
6	.94	1.9	1.9	4.2	5.4	4.6	3.4	3.0	3.8	1.4	1.2	.85
7	.88	1.8	2.0	3.9	6.3	4.4	4.1	2.8	3.9	1.4	1.1	.82
8	.87	1.6	2.1	3.6	14	4.0	5.9	2.7	3.7	1.3	1.1	.82
9	.82	1.5	14	3.2	13	3.8	5.6	2.7	3.4	1.3	1.1	.82
10	.77	1.4	34	3.0	7.9	3.5	5.1	2.6	3.4	1.3	1.1	.82
11	.76	1.2	15	2.9	5.7	7.7	4.6	2.4	3.2	1.5	1.1	.82
12	.76	1.1	9.4	2.6	4.8	8.8	4.5	2.3	3.0	1.3	1.1	.82
13	.76	1.2	7.4	2.5	4.3	6.4	4.0	2.1	2.7	1.2	1.1	.90
14	.76	1.2	6.8	2.4	8.0	5.3	3.7	2.1	2.6	1.6	1.1	1.1
15	.75	1.1	8.2	2.4	8.7	10	3.5	2.0	2.4	2.1	1.1	1.0
16	.70	1.1	8.0	2.3	6.3	103	3.3	2.0	2.3	1.7	1.1	.96
17	.73	1.1	5.8	2.3	5.1	26	3.0	1.9	2.3	2.7	1.0	.94
18	1.3	1.1	4.8	2.3	4.5	14	2.9	1.8	2.1	2.5	1.0	.91
19	2.6	1.6	4.4	2.7	4.2	9.0	2.7	1.8	2.0	2.2	1.0	.88
20	2.1	2.3	4.2	2.6	3.8	8.1	3.8	2.0	1.9	2.0	1.0	.88
21	1.8	2.1	4.4	3.1	3.4	12	4.1	2.0	1.8	1.9	.99	.85
22	1.6	2.0	5.9	7.4	3.2	8.2	3.8	2.0	1.8	1.7	.94	.82
23	1.4	1.8	5.5	5.6	3.1	6.4	3.6	1.9	1.7	1.5	.94	.82
24	1.2	1.7	4.7	4.6	2.8	5.5	3.5	1.8	1.7	1.6	.94	.82
25	1.1	1.8	4.1	4.0	2.6	6.8	3.5	1.8	3.6	2.4	.94	.82
26	1.1	2.0	3.8	4.1	2.4	6.7	7.9	1.8	2.6	2.6	.93	.81
27	1.2	1.9	3.4	4.9	2.3	6.0	14	16	2.3	2.4	.88	.76
28	1.8	2.4	3.1	5.0	2.1	5.8	9.8	11	2.2	2.1	.88	.76
29	1.8	2.9	2.8	4.7	------	5.2	6.7	1.9	2.0	1.9	.88	.80
30	1.8	2.9	2.7	4.4	------	4.7	5.3	4.1	1.8	1.7	.88	.82
31	1.8	------	2.7	4.2	------	4.7	------	4.5	------	1.7	.88	------
TOTAL	37.99	52.8	182.3	112.5	152.4	311.2	143.7	102.5	80.7	55.1	33.28	25.82
MEAN	1.23	1.76	5.88	3.63	5.44	10.0	4.79	3.31	2.69	1.78	1.07	.86
MAX	2.6	2.9	34	7.4	14	103	14	16	4.0	2.7	1.6	1.1
MIN	.70	1.1	1.9	2.3	2.1	2.1	2.7	1.8	1.7	1.2	.88	.76

CAL YR 1972 TOTAL 1,007.63 MEAN 2.75 MAX 34 MIN .65
WTR YR 1973 TOTAL 1,290.29 MEAN 3.54 MAX 103 MIN .70

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	0145	2.80	54	03-21	0030	1.86	13
02-08	1445	2.18	20	04-27	0900	1.99	15
02-14	2000	1.80	11	05-27	1645	2.66	38
03-16	0445	3.69	184				

03582000 Elk River above Fayetteville, Tenn.

LOCATION.--Lat 35°08'04", long 86°32'23", Lincoln County, on right bank 100 ft (30 m) downstream from highway bridge, 1.8 miles (2.9 km) southeast of Fayetteville, 4.0 miles (6.4 km) upstream from Norris Creek, and at mile 93.9 (151.1 km).

DRAINAGE AREA.--827 sq mi (2,142 sq km).

PERIOD OF RECORD.--August 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 650.58 ft (198.297 m) above mean sea level.

AVERAGE DISCHARGE.--39 years, 1,409 cfs (39.90 cu m/s), 23.14 in/yr (588 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 41,600 cfs (1,180 cu m/s) Mar. 16, gage height, 28.63 ft (8.726 m); minimum, 99 cfs (2.80 cu m/s) Sept. 27, gage height, 0.96 ft (0.293 m).
Period of record: Maximum discharge, 41,600 cfs (1,180 cu m/s) Mar. 16, 1973, gage height, 28.63 ft (8.726 m); minimum, 67 cfs (1.90 cu m/s) Dec. 9, 10, 11, 1970, gage height, 0.75 ft (0.229 m).

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 since December 1970 (see sta 03580740).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,230	368	1,410	4,710	1,810	1,420	3,740	1,870	4,570	317	1,400	958
2	3,140	660	596	3,490	2,110	1,300	3,350	1,550	4,270	290	1,320	527
3	3,140	1,160	488	4,040	1,300	2,050	3,080	1,560	4,200	983	1,310	173
4	3,330	712	443	4,500	925	1,070	3,020	1,470	3,610	1,020	1,280	142
5	3,410	516	422	3,890	764	885	2,070	1,800	3,470	668	281	599
6	3,350	422	540	3,650	1,320	728	1,870	1,050	4,430	599	223	639
7	3,330	374	852	3,480	1,500	1,300	2,510	446	4,260	591	419	644
8	3,330	392	1,420	3,130	7,070	1,200	2,460	1,850	4,040	238	427	651
9	3,310	353	5,770	2,890	5,950	1,790	2,730	1,430	3,700	273	1,200	412
10	3,310	314	13,300	2,550	4,520	1,530	3,380	535	3,570	1,230	446	277
11	2,050	288	7,020	3,010	4,080	4,190	3,210	442	3,560	1,970	697	618
12	380	263	6,010	1,870	3,840	4,420	3,050	411	3,580	805	344	632
13	648	248	6,170	1,080	3,880	2,350	2,040	370	3,490	668	279	450
14	1,350	302	5,800	776	6,660	2,640	1,280	323	2,880	701	467	752
15	872	311	6,820	564	5,980	4,370	1,210	701	2,540	1,040	427	340
16	720	270	6,820	544	4,310	31,300	1,100	483	2,500	475	415	173
17	290	253	5,640	509	4,060	23,200	1,140	567	2,050	1,480	407	139
18	365	238	5,200	491	3,870	14,900	2,290	284	1,910	1,320	407	475
19	2,830	824	5,050	620	3,750	17,500	1,630	320	1,190	3,280	180	880
20	2,200	1,050	5,180	588	3,670	16,200	2,270	1,020	1,290	2,310	159	887
21	1,780	656	5,380	920	3,480	14,600	998	462	1,240	1,720	366	902
22	1,590	516	6,020	2,610	2,180	11,300	721	1,130	1,210	1,390	654	918
23	1,570	434	5,500	2,440	1,370	9,940	619	351	1,090	1,340	645	670
24	1,640	377	5,180	2,350	1,300	7,390	1,280	3,300	335	830	645	387
25	2,180	449	5,030	2,180	950	4,940	1,050	1,080	1,010	958	645	145
26	2,180	620	4,930	2,690	728	4,040	1,910	483	1,240	1,260	175	115
27	2,320	512	4,870	3,840	1,220	6,370	3,200	6,610	1,110	1,560	144	122
28	1,610	1,290	4,660	2,860	1,120	6,000	2,320	12,800	1,110	1,570	878	159
29	568	1,550	4,380	1,330	------	5,390	2,370	5,860	1,090	1,440	908	194
30	431	1,810	4,340	2,050	------	4,950	2,140	5,440	1,050	1,370	917	229
31	401	------	4,740	1,460	------	3,960	------	4,920	------	1,340	932	------
TOTAL	60,855	17,532	139,981	71,112	83,717	213,223	64,038	60,918	75,595	35,036	18,997	14,209
MEAN	1,963	584	4,516	2,294	2,990	6,878	2,135	1,965	2,520	1,130	613	474
MAX	3,410	1,810	13,300	4,710	7,070	31,300	3,740	12,800	4,570	3,280	1,400	958
MIN	290	238	422	491	728	728	619	284	335	238	144	115

CAL YR 1972 TOTAL 657,647 MEAN 1,797 MAX 13,300 MIN 114 MEAN† 1,808 CFSM† 2.19 IN.† 29.76
WTR YR 1973 TOTAL 855,213 MEAN 2,343 MAX 31,300 MIN 115 MEAN† 2,545 CFSM† 3.08 IN.† 41.77

† Adjusted for change in contents in Woods Reservoir and Tims Ford Lake.

03584000 Richland Creek near Pulaski, Tenn.

LOCATION.--Lat 35°12'51", long 87°06'05", Giles County, on right bank 1,200 ft (400 m) upstream from bridge on U.S. Highway 64, 1.0 mile (1.6 km) downstream from Weakley Creek, 4.0 miles (6.4 km) west of Pulaski, and at mile 30.1 (48.4 km).

DRAINAGE AREA.--366 sq mi (948 sq km).

PERIOD OF RECORD.--April 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 642.54 ft (195.846 m) above mean sea level.

AVERAGE DISCHARGE.--39 years, 597 cfs (16.91 cu m/s), 22.15 in/yr (563 mm/yr).

EXTREMES.--Current year: Maximum discharge, 56,300 cfs (1,590 cu m/s) Mar. 15, gage height, 25.04 ft (7.632 m); minimum, 43 cfs (1.22 cu m/s) Sept. 23, gage height, 0.77 ft (0.235 m).
Period of record: Maximum discharge, 75,000 cfs (2,120 cu m/s) Mar. 21, 1955, gage height, 27.49 ft (8.379 m), from rating curve extended above 32,000 cfs (906 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 7.9 cfs (0.22 cu m/s) Sept. 11, 1954, gage height, 0.52 ft (0.158 m).
Flood in March 1902, discharge, about 100,000 cfs (2,830 cu m/s) exceeded all known floods, including those of 1842 and 1865, from report by Tennessee Valley Authority.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	432	913	2,090	1,460	353	2,600	1,000	785	168	158	53
2	290	1,340	710	1,390	2,570	431	2,100	900	627	212	123	54
3	219	1,940	585	1,790	1,910	1,020	1,700	2,610	521	246	104	51
4	186	1,110	517	2,980	1,400	920	1,600	2,030	443	214	94	50
5	167	763	460	2,120	1,150	1,000	1,400	1,340	638	191	87	48
6	148	568	896	1,540	1,500	911	1,200	1,070	2,200	160	81	46
7	134	515	901	1,210	1,390	5,000	1,700	901	1,300	141	78	49
8	122	513	847	1,040	4,330	4,500	2,500	908	1,050	138	75	52
9	114	432	5,210	873	4,870	2,100	2,000	751	775	133	75	51
10	105	388	16,300	758	2,340	1,500	1,800	620	587	131	72	47
11	98	345	9,320	681	1,580	4,000	1,500	547	485	138	84	47
12	93	306	3,850	608	1,240	4,000	1,300	512	462	122	326	47
13	91	299	2,990	547	1,190	2,000	1,100	449	405	111	450	48
14	98	324	2,380	534	2,610	1,600	1,000	404	458	117	271	65
15	108	283	3,660	592	2,620	30,000	900	368	354	170	168	62
16	95	259	3,390	625	1,840	20,000	850	344	331	179	132	59
17	97	244	2,080	619	1,380	7,000	800	330	290	387	115	53
18	155	231	1,500	656	1,140	2,700	950	309	262	225	106	50
19	1,540	614	1,280	2,210	979	2,500	1,300	431	242	175	97	47
20	850	1,040	1,300	1,610	840	2,290	7,000	1,140	266	158	91	46
21	475	792	1,140	2,280	719	2,740	4,500	535	228	136	83	46
22	338	630	1,060	5,240	635	1,660	2,200	415	209	123	76	45
23	302	509	945	2,630	583	1,300	1,900	465	195	113	72	51
24	274	428	850	1,610	522	1,200	1,800	791	186	106	68	130
25	233	776	760	1,190	473	2,600	1,800	556	195	105	67	76
26	210	1,220	690	1,360	437	2,200	1,800	444	174	107	65	58
27	252	971	626	1,920	407	1,800	2,000	2,710	163	107	62	50
28	576	1,320	574	1,650	377	1,600	1,700	7,190	159	100	59	46
29	535	1,500	527	1,410	------	1,800	1,400	2,510	147	94	57	53
30	433	1,190	554	1,190	------	2,500	1,200	1,300	139	102	55	66
31	452	------	2,310	1,050	------	3,000	------	936	------	164	53	------
TOTAL	9,270	21,282	69,125	46,003	42,492	116,225	55,600	34,816	14,276	4,773	3,504	1,646
MEAN	299	709	2,230	1,484	1,518	3,749	1,853	1,123	476	154	113	54.9
MAX	1,540	1,940	16,300	5,240	4,870	30,000	7,000	7,190	2,200	387	450	130
MIN	91	231	460	534	377	353	800	309	139	94	53	45
CFSM	.82	1.94	6.09	4.05	4.15	10.2	5.06	3.07	1.30	.42	.31	.15
IN.	.94	2.16	7.03	4.68	4.32	11.81	5.65	3.54	1.45	.49	.36	.17

CAL YR 1972 TOTAL 256,526 MEAN 701 MAX 16,300 MIN 50 CFSM 1.92 IN 26.07
WTR YR 1973 TOTAL 419,012 MEAN 1,148 MAX 30,000 MIN 45 CFSM 3.14 IN 42.59

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	1630	20.11	24,400	04-20	Unknown	Unknown	Unknown
02-09	0300	14.34	6,140	05-28	1130	15.89	8,050
03-15	Unknown	25.04	56,300				

NOTE.--No gage-height record Mar. 7-19, Mar. 23 to May 2.

03584500 Elk River near Prospect, Tenn.

LOCATION.--Lat 35°01'39", long 86°56'52", Giles County, on right bank 50 ft (15 m) upstream from county road bridge, 1.1 miles (1.8 km) downstream from Richland Creek, 3.2 miles (5.1 km) east of Prospect, 5.4 miles (8.7 km) upstream from Ford Creek, 7.9 miles (12.7 km) upstream from Tennessee-Alabama State line, and at mile 41.5 (66.8 km).

DRAINAGE AREA.--1,784 sq mi (4,621 sq km).

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 (171.691 m) above mean sea level. July 1, 1904, to Feb. 2, 1908, and Jan. 20, 1919, to Mar. 31, 1934, nonrecording gage 11.9 miles (19.1 km) downstream at datum 13.52 ft (4.121 m) lower.

AVERAGE DISCHARGE.--57 years (1904-7, 1919-73), 3,013 cfs (85.33 cu m/s), 22.94 in/yr (583 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 117,000 cfs (3,310 cu m/s) Mar. 17, gage height, 40.12 ft (12.229 m), from rating curve extended above 63,000 cfs (1,780 cu m/s) on basis of contracted-opening measurement at gage height 38.96 ft (11.875 m); minimum, 188 cfs (5.32 cu m/s) Sept. 28-29, gage height, 1.16 ft (0.354 m).
Period of record: Maximum discharge, 117,000 cfs (3,310 cu m/s) Mar. 17, 1973, gage height, 40.12 ft (12.229 m), from rating curve extended above 63,000 cfs (1,780 cu m/s) on basis of contracted-opening measurement at gage height 38.96 ft (11.875 m); minimum, 78 cfs (2.21 cu m/s) Sept. 29, 1961 (caused by highway construction upstream).
Flood in March 1902 reached a stage of 40.9 ft (12.47 m), discharge, 130,000 cfs (3,680 cu m/s), 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 since May 1952 (see sta 03579000), and by Tims Ford Lake since December 1970 (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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,560	1,390	3,900	9,850	6,020	1,980	7,940	4,100	6,470	1,460	1,730	1,140
2	4,170	2,350	2,820	7,810	10,200	2,520	6,820	3,280	5,920	2,130	1,730	1,130
3	3,760	4,900	1,960	7,990	6,880	6,100	5,690	4,200	5,440	1,310	1,660	746
4	3,760	3,610	1,720	11,900	4,690	5,120	6,630	5,110	5,030	1,760	1,590	515
5	3,930	2,370	1,590	9,510	3,650	4,240	5,520	3,670	4,460	2,390	1,420	244
6	3,880	1,820	1,760	7,580	4,000	3,470	4,060	3,720	5,910	1,320	638	563
7	3,790	1,500	2,630	6,610	5,130	4,400	5,460	2,280	8,150	1,130	502	710
8	3,740	1,440	2,720	6,210	13,100	6,720	8,810	2,340	6,200	1,070	625	744
9	3,710	1,310	13,900	5,580	19,100	5,220	6,330	3,770	5,560	783	925	764
10	3,660	1,180	25,900	4,900	13,700	5,080	7,040	2,160	4,830	739	1,190	512
11	3,520	1,030	35,500	4,840	8,400	10,300	6,090	1,680	4,520	2,970	753	378
12	1,530	912	31,700	4,320	7,020	15,500	5,480	1,520	4,510	1,820	1,190	686
13	590	825	17,200	3,190	6,860	9,400	4,320	1,390	4,450	1,260	1,020	770
14	1,020	874	11,900	2,490	12,700	6,250	3,500	1,260	4,360	1,110	1,020	793
15	1,610	880	12,400	2,130	14,700	15,400	2,780	1,160	3,560	1,510	933	992
16	1,100	852	14,300	2,060	10,900	85,600	2,590	1,420	3,310	1,510	820	516
17	814	758	11,500	2,000	7,700	105,000	2,430	1,310	2,970	2,010	760	377
18	1,270	698	8,840	1,920	6,850	59,800	2,420	1,200	2,550	2,420	732	281
19	2,790	1,400	7,840	2,830	6,260	31,500	3,840	1,020	2,010	2,850	704	448
20	5,630	3,890	8,060	3,470	5,820	23,400	13,300	2,960	1,890	4,060	521	972
21	3,230	2,930	7,780	3,880	5,460	22,400	13,400	2,170	1,880	2,380	402	993
22	2,580	2,160	8,290	11,100	4,810	21,500	6,260	1,470	1,770	2,070	528	1,020
23	2,340	1,750	8,130	9,660	3,230	17,200	3,900	1,920	1,700	1,780	873	1,050
24	2,270	1,440	7,370	6,480	2,710	12,700	3,550	2,700	1,560	1,480	888	899
25	2,480	1,870	6,880	5,150	2,530	13,400	4,390	4,380	1,130	1,480	880	622
26	2,760	3,090	6,560	5,550	1,760	9,200	7,680	1,800	1,510	1,470	880	386
27	2,800	2,760	6,350	9,070	2,070	9,200	10,600	7,270	1,670	1,670	465	247
28	3,540	3,570	6,120	7,970	2,200	9,410	8,290	20,500	1,610	2,000	326	196
29	2,350	5,420	5,800	5,770	------	8,610	5,770	23,300	1,540	1,810	963	447
30	1,560	4,430	5,540	4,640	------	8,440	4,820	13,500	1,490	1,610	1,080	315
31	1,440	------	9,600	4,540	------	9,510	------	7,340	------	1,670	1,110	------
TOTAL	88,184	63,409	296,560	181,000	198,450	548,570	179,710	135,900	107,960	55,032	28,858	19,456
MEAN	2,845	2,114	9,566	5,839	7,088	17,700	5,990	4,384	3,599	1,775	931	649
MAX	6,560	5,420	35,500	11,900	19,100	105,000	13,400	23,300	8,150	4,060	1,730	1,140
MIN	590	698	1,590	1,920	1,760	1,980	2,420	1,020	1,130	739	326	196

CAL YR 1972 TOTAL 1,300,166 MEAN 3,552 MAX 35,500 MIN 251 MEAN† 3,564 CFSM† 2.00 IN.† 27.19
WTR YR 1973 TOTAL 1,903,089 MEAN 5,214 MAX 105,000 MIN 196 MEAN† 5,416 CFSM† 3.04 IN.† 41.21

† Adjusted for change in contents in Woods Reservoir and Tims Ford Lake.

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 (152 m) downstream from Little Shoal Creek, 0.5 mile (0.8 km) upstream from Crowson Creek, 0.9 mile (1.4 km) west of courthouse in Lawrenceburg, and at mile 55.9 (89.9 km).

DRAINAGE AREA.--55.4 sq mi (143.5 sq km).

PERIOD OF RECORD.--June 1932 to March 1934, March 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 784.41 ft (239.088 m) above mean sea level. June 7, 1932, to Mar. 31, 1934, non-recording gage at site 500 ft (152 m) downstream at datum 4.01 ft (1.222 m) lower. Mar. 22, 1967, to Sept. 30, 1970, at site 1,300 ft (396 m) downstream at datum 7.71 ft (2.350 m) lower.

AVERAGE DISCHARGE.--6 years, 101 cfs (2.860 cu m/s), 24.76 in/yr (629 mm/yr).

EXTREMES.--Current year: Maximum discharge, 15,200 cfs (430 cu m/s) Mar. 15, gage height, 18.71 ft (5.703 m), from rating curve extended as explained below; minimum daily, 23 cfs (0.65 cu m/s) Oct. 13.

Period of record: Maximum discharge, 15,200 cfs (430 cu m/s) Mar. 15, 1973, gage height, 18.71 ft (5.703 m), from rating curve extended above 6,700 cfs (190 cu m/s) on basis of computation of peak flow over dam; minimum, 16 cfs (0.45 cu m/s) Aug. 18, Oct. 28, 1969.

Maximum stage since 1846, 20.0 ft (6.10 m), present site and datum, Mar. 28, 1902, discharge, 23,000 cfs (651 cu m/s); flood of Mar. 21, 1955, reached a stage of 17.2 ft (5.24 m), present site and datum, discharge 18,000 cfs (510 cu m/s), from report of Tennessee Valley Authority.

REMARKS.--Records good. About 5 cfs (0.14 cu m/s) was diverted by Lawrenceburg water plant, some of which was returned to stream through sewage treatment plant 0.6 mile (1.0 km) downstream.

REVISIONS.--WSP 1306: Drainage area. WSP 2110: 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	66	105	239	417	85	167	118	106	56	53	37
2	70	314	95	141	290	111	134	123	90	57	46	36
3	62	147	90	523	179	149	121	585	84	58	45	35
4	59	104	86	353	150	125	143	172	82	67	45	34
5	54	89	64	212	140	108	113	139	87	58	45	33
6	52	81	157	189	362	103	100	127	392	55	45	34
7	51	151	79	173	188	1,000	393	122	122	57	44	36
8	50	125	223	166	1,260	192	219	129	112	55	44	38
9	46	97	1,360	143	335	246	175	112	90	53	44	37
10	45	88	2,570	112	172	152	134	104	83	54	42	36
11	44	81	528	106	148	1,050	113	79	98	52	159	38
12	33	77	346	101	151	258	102	64	121	50	272	36
13	23	77	395	99	280	184	91	59	81	50	102	45
14	44	82	249	105	625	601	85	56	79	52	64	66
15	50	72	854	102	294	5,910	80	63	82	53	55	48
16	44	67	265	98	198	5,140	79	60	119	115	52	40
17	44	65	185	94	157	746	76	60	91	99	50	38
18	83	65	162	120	146	440	97	57	60	58	50	36
19	215	270	215	299	141	303	227	62	61	55	50	35
20	82	132	275	141	131	329	1,560	61	62	53	48	34
21	67	101	192	884	120	230	246	54	56	46	47	34
22	62	89	137	461	115	184	179	56	56	45	47	34
23	62	82	122	201	110	181	220	80	58	46	47	33
24	53	76	113	201	105	205	189	82	56	47	47	33
25	47	257	104	223	99	675	204	57	55	46	46	35
26	45	149	101	342	95	271	216	53	58	55	43	34
27	73	109	95	233	91	209	212	1,190	60	47	40	33
28	96	261	98	203	87	179	153	252	60	47	39	32
29	66	140	77	170	------	424	136	132	56	46	39	32
30	61	120	259	133	------	232	125	110	56	63	39	38
31	83	------	807	117	------	299	------	98	------	70	38	------
TOTAL	1,958	3,634	10,408	6,684	6,586	20,321	6,089	4,516	2,673	1,765	1,827	1,110
MEAN	63.2	121	336	216	235	656	203	146	89.1	56.9	58.9	37.0
MAX	215	314	2,570	884	1,260	5,910	1,560	1,190	392	115	272	66
MIN	23	65	64	94	87	85	76	53	55	45	38	32
CFSM	1.14	2.18	6.07	3.90	4.24	11.8	3.66	2.64	1.61	1.03	1.06	.67
IN.	1.31	2.44	6.99	4.49	4.42	13.65	4.09	3.03	1.79	1.19	1.23	.75

CAL YR 1972 TOTAL 41,930 MEAN 115 MAX 2,570 MIN 23 CFSM 2.08 IN 28.16
WTR YR 1973 TOTAL 67,571 MEAN 185 MAX 5,910 MIN 23 CFSM 3.34 IN 45.37

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	0730	8.82	5,500	03-07	0745	6.38	2,880
12-31	0230	5.17	1,800	03-15	0530	18.71	15,200
01-21	1900	6.01	2,510	04-20	0315	7.38	3,920
02-08	0815	6.03	2,530	05-27	1515	6.72	3,220

NOTE.--No gage-height record Sept. 1-30.

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 (0.5 km) northeast of Westpoint, and at mile 1.2 (1.9 km).

DRAINAGE AREA.--43.0 sq mi (111.4 sq km).

PERIOD OF RECORD.--July 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft (182.947 m) above mean sea level (Tennessee State Highway Department bench mark).

AVERAGE DISCHARGE.--11 years, 76.1 cfs (2.155 cu m/s), 24.03 in/yr (610 mm/yr).

EXTREMES.--Current year: Maximum discharge, 17,900 cfs (507 cu m/s) Mar. 15, gage height, 14.74 ft (4.493 m), from rating curve extended above 4,100 cfs (116 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 11 cfs (0.31 cu m/s) Oct. 14.
Period of record: Maximum discharge, 17,900 cfs (507 cu m/s) Mar. 15, 1973, gage height, 14.74 ft (4.493 m), from rating curve extended above 4,100 cfs (116 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 8.4 cfs (0.24 cu m/s) July 28, 29, 1966.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	76	149	426	266	96	351	96	67	43	55	26
2	79	105	127	305	277	127	245	105	60	50	40	27
3	46	109	112	395	248	192	185	445	56	48	36	26
4	33	79	101	478	216	177	190	327	53	46	34	25
5	29	53	88	343	192	176	136	218	60	96	33	26
6	23	36	122	270	246	159	114	156	273	49	32	26
7	21	181	105	225	226	557	240	130	130	56	31	29
8	18	212	178	191	997	429	321	225	96	109	31	29
9	17	144	1,220	161	585	312	294	150	78	77	33	28
10	15	104	1,850	140	365	250	223	120	68	64	31	27
11	13	70	720	124	285	519	173	102	134	62	31	26
12	12	93	514	108	240	429	144	91	61	50	91	26
13	12	85	477	95	285	315	120	80	61	45	70	33
14	12	83	391	90	475	412	104	73	154	43	46	31
15	15	59	991	90	412	5,490	93	67	81	42	39	32
16	12	50	546	82	318	3,980	89	64	70	129	35	29
17	12	42	348	76	263	936	82	62	62	282	34	28
18	139	38	273	78	230	480	108	59	56	110	33	27
19	249	130	246	137	202	291	114	63	57	78	31	27
20	152	116	229	131	183	228	1,160	69	178	66	30	26
21	89	107	204	402	164	168	455	58	77	59	29	26
22	56	99	184	725	151	130	245	55	65	53	28	26
23	59	92	167	399	141	108	223	61	59	48	28	26
24	39	52	154	288	129	104	193	64	55	44	28	26
25	28	113	140	232	120	339	205	56	55	55	28	26
26	21	136	130	280	113	268	198	52	51	45	28	25
27	65	123	118	327	106	218	208	215	48	42	27	25
28	130	191	110	316	100	170	156	168	51	38	27	25
29	88	192	103	281	------	263	120	99	45	37	26	29
30	65	174	202	246	------	315	96	78	44	36	26	31
31	102	------	738	219	------	441	------	67	------	45	26	------
TOTAL	1,791	3,144	11,037	7,660	7,535	18,079	6,585	3,675	2,405	2,047	1,097	819
MEAN	57.8	105	356	247	269	583	220	119	80.2	66.0	35.4	27.3
MAX	249	212	1,850	725	997	5,490	1,160	445	273	282	91	33
MIN	12	36	88	76	100	96	82	52	44	36	26	25
CFSM	1.34	2.44	8.28	5.74	6.26	13.6	5.12	2.77	1.87	1.53	.82	.63
IN.	1.55	2.72	9.55	6.63	6.52	15.64	5.70	3.18	2.08	1.77	.95	.71

CAL YR 1972 TOTAL 41,802 MEAN 114 MAX 1,850 MIN 12 CFSM 2.65 IN 36.16
WTR YR 1973 TOTAL 65,874 MEAN 180 MAX 5,490 MIN 12 CFSM 4.19 IN 56.99

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	1300	8.71	2,690	02-08	1245	7.21	1,480
12-15	0700	6.92	1,320	03-07	0930	6.39	1,070
12-31	0315	6.03	922	03-15	0600	14.74	17,900
01-21	2045	6.24	1,010	04-20	0830	7.93	1,980

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 (122 m) downstream from Holly Creek, 1,350 ft (411 m) upstream from Louisville and Nashville Railroad bridge, 1,350 ft (411 m) northeast of Iron City Post Office, and at mile 22.0 (35.4 km).

DRAINAGE AREA.--348 sq mi (901 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 534.22 ft (162.830 m) above mean sea level. Prior to Feb. 25, 1931, nonrecording gage at railroad bridge, 1,350 ft (411 m) downstream at datum 0.85 ft (0.259 m) lower. Feb. 25, 1931, to Sept. 30, 1933, nonrecording gage at site 825 ft (251 m) downstream and Oct. 1, 1933, to Sept. 30, 1957, water-stage recorder at site 750 ft (229 m) downstream at datum 0.69 ft (0.210 m) higher.

AVERAGE DISCHARGE.--48 years, 625 cfs (17.70 cu m/s), 24.39 in/yr (620 mm/yr).

EXTREMES.--Current year: Maximum discharge, 61,900 cfs (1,750 cu m/s) Mar. 15, gage height, 25.10 ft (7.650 m); minimum, 162 cfs (4.59 cu m/s) Sept. 28, 29.

Period of record: Maximum discharge, 132,000 cfs (3,740 cu m/s) Mar. 21, 1955, gage height, 27.25 ft (8.306 m), site and datum then in use, from rating curve extended above 32,000 cfs (906 cu m/s) on basis of contracted-opening measurement at gage height 22.9 ft (6.98 m) and a slope-area measurement at gage height 27.25 ft (8.306 m); minimum, 38 cfs (1.08 cu m/s) Aug. 31, 1943.

Flood in March 1902 reached a stage about 3 ft (0.914 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	834	688	928	2,600	1,230	526	2,390	1,090	681	351	368	182
2	464	946	766	1,500	1,870	592	1,840	1,010	625	355	298	181
3	350	1,450	658	1,620	1,390	907	1,530	2,080	556	386	281	180
4	290	922	595	3,310	1,130	876	1,460	2,050	501	356	275	176
5	260	700	545	1,970	992	981	1,240	1,500	548	571	272	175
6	250	575	736	1,450	1,160	918	1,070	1,240	1,410	381	272	175
7	240	1,050	814	1,190	1,190	4,480	1,450	1,080	1,140	345	270	198
8	230	1,740	820	1,040	4,650	3,610	2,230	1,220	975	461	264	209
9	220	1,200	6,960	903	4,650	1,920	1,870	1,070	751	393	266	194
10	210	922	14,900	808	2,030	1,410	1,640	905	629	384	267	189
11	205	736	7,710	748	1,400	3,740	1,370	822	550	437	267	205
12	195	605	3,350	692	1,150	3,710	1,220	780	664	349	518	185
13	190	545	2,610	641	1,190	1,840	1,080	707	566	320	824	197
14	250	545	2,040	619	2,800	1,570	966	657	822	311	387	315
15	230	469	4,390	634	2,600	27,800	882	616	692	313	300	230
16	197	424	3,500	624	1,710	20,000	850	579	600	395	275	200
17	210	399	1,880	595	1,300	6,800	805	558	571	1,430	254	190
18	605	374	1,360	592	1,110	2,500	882	528	468	757	242	184
19	1,140	790	1,160	968	988	2,340	1,120	518	421	532	235	180
20	928	1,330	1,220	944	890	1,940	6,120	632	932	437	230	178
21	570	952	1,090	1,650	805	1,790	3,850	520	617	389	225	179
22	446	772	948	5,750	746	1,420	2,080	476	492	355	218	176
23	442	640	844	2,430	707	1,240	1,850	550	432	330	212	168
24	429	550	767	1,510	659	1,150	1,810	689	395	309	208	173
25	378	886	705	1,220	615	2,400	1,810	546	382	307	204	173
26	346	1,420	661	1,300	587	2,050	1,790	479	362	305	201	170
27	424	1,070	621	1,820	565	1,720	1,860	1,950	358	300	198	166
28	856	1,210	589	1,560	541	1,480	1,610	3,610	370	287	194	163
29	718	1,400	569	1,390	------	1,650	1,390	1,330	348	280	191	165
30	575	1,130	693	1,170	------	2,340	1,220	932	333	277	188	204
31	694	------	4,460	1,040	------	2,720	------	752	------	339	185	------
TOTAL	13,376	26,440	68,889	44,288	40,655	108,420	51,285	31,476	18,191	12,742	8,589	5,660
MEAN	431	881	2,222	1,429	1,452	3,497	1,710	1,015	606	411	277	189
MAX	1,140	1,740	14,900	5,750	4,650	27,800	6,120	3,610	1,410	1,430	824	315
MIN	190	374	545	592	541	526	805	476	333	277	185	163
CFSM	1.24	2.53	6.39	4.11	4.17	10.0	4.91	2.92	1.74	1.18	.80	.54
IN.	1.43	2.83	7.36	4.73	4.35	11.59	5.48	3.36	1.94	1.36	.92	.61

CAL YR 1972 TOTAL 281,545 MEAN 769 MAX 14,900 MIN 146 CFSM 2.21 IN 30.10
WTR YR 1973 TOTAL 430,011 MEAN 1,178 MAX 27,800 MIN 163 CFSM 3.39 IN 45.97

PEAK DISCHARGE (BASE, 6,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	1915	17.54	20,100	03-11	2230	11.26	6,890
01-22	1015	11.70	7,370	03-15	1245	25.10	61,900
02-08	2300	12.60	8,360	04-20	1730	13.70	9,930
03-07	2115	11.58	7,240				

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 (27.0 km) downstream from Pickwick Landing Dam and at mile 189.9 (305.5 km).

DRAINAGE AREA.--33,140 sq mi (85,830 sq km), 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 (91.440 m) above mean sea level, datum of 1929, unadjusted. Prior to Apr. 7, 1945, at datum 41.61 ft (12.683 m) 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 (27.0 km) upstream from base gage at same datum. Apr. 5, 1937, to Jan. 31, 1939, auxiliary nonrecording gage 4.0 miles (6.4 km) downstream and Feb. 1, 1939, to Sept. 30, 1948, water-stage recorder 4.3 miles (6.9 km) downstream from base gage at same datum.

AVERAGE DISCHARGE.--43 years, 53,670 cfs (1,520 cu m/s), 21.99 in/yr (559 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 585,000 cfs (16,600 cu m/s) Mar. 17, from Pickwick Landing Dam release furnished by Tennessee Valley Authority; maximum gage height, 96.11 ft (29.294 m) Mar. 20; minimum daily discharge, 12,400 cfs (351 cu m/s) Sept. 23; minimum gage height, 55.14 ft (16.807 m) Oct. 16.

Period of record: Maximum discharge, 585,000 cfs (16,600 cu m/s) Mar. 17, 1973, from Pickwick Landing Dam release furnished by Tennessee Valley Authority; maximum gage height, 96.11 ft (29.294 m) Mar. 20, 1973; minimum discharge 60 cfs (1.70 cu m/s) Apr. 23, 1966; minimum gage height, 41.20 ft (12.558 m), present datum, Oct. 20, 1931; minimum gage height since Kentucky Lake reached minimum pool elevation on Apr. 7, 1945, 53.40 ft (16.276 m) Jan. 12, 1948.

Maximum stage since 1867, 101.2 ft (30.846 m) Mar. 21, 1897, present datum, from floodmarks, discharge, 450,000 cfs (12,700 cu m/s), from rating curve extended above 320,000 cfs (9,060 cu m/s). Flood of Jan. 2, 1927, reached a stage of 92.7 ft (28.26 m), present datum, discharge, 349,000 cfs (9,880 cu m/s). Minimum stage since 1905, 38.8 ft (11.83 m), present datum, Sept. 8, 1925.

REMARKS.--Records poor. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other reservoirs have been built above station (see p. 131 and basic data releases for adjoining states, 1973). Flow now almost completely regulated.

REVISIONS (WATER YEARS).--WSP 853: 1937, drainage area. WSP 1306: 1936 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79,900	71,600	87,000	132,000	93,200	42,600	149,000	129,000	179,000	46,800	48,100	25,500
2	69,500	54,800	86,800	136,000	97,100	47,000	148,000	128,000	170,000	48,000	46,800	26,900
3	42,500	57,000	86,500	148,000	99,600	57,900	151,000	114,000	156,000	49,400	42,500	28,000
4	38,100	64,300	86,500	154,000	99,900	70,400	127,000	85,800	133,000	42,100	53,500	43,200
5	58,300	62,000	85,900	160,000	91,400	54,000	84,800	59,500	124,000	46,200	53,800	47,700
6	51,300	61,800	83,000	161,000	82,600	67,200	70,400	67,000	124,000	53,400	40,900	49,800
7	53,300	71,000	79,000	156,000	78,700	62,000	77,700	70,000	116,000	60,100	42,400	46,900
8	37,000	82,100	79,500	153,000	102,000	49,800	84,700	71,600	108,000	59,100	42,200	35,500
9	40,100	67,600	104,000	151,000	119,000	62,200	84,900	75,600	103,000	48,400	36,700	23,700
10	48,300	66,700	140,000	146,000	118,000	82,600	73,200	78,500	103,000	39,700	40,700	31,700
11	43,800	61,600	177,000	132,000	119,000	84,800	74,200	77,300	80,600	38,900	56,500	40,500
12	40,700	57,500	190,000	108,000	122,000	87,100	60,600	74,700	52,200	40,500	51,100	36,400
13	40,400	59,800	197,000	87,100	128,000	86,200	47,900	75,000	50,700	42,500	46,700	30,700
14	37,200	59,800	204,000	69,700	152,000	93,600	42,500	71,300	62,100	54,300	52,500	46,800
15	24,400	62,600	220,000	63,200	164,000	135,000	35,300	43,100	79,700	59,600	55,900	43,000
16	35,100	61,600	227,000	62,600	159,000	354,000	46,300	40,400	80,300	54,100	44,900	17,000
17	43,200	60,000	228,000	56,500	151,000	554,000	43,300	41,100	72,700	40,000	44,400	25,000
18	51,700	58,900	224,000	58,200	134,000	493,000	40,900	29,100	71,400	42,300	58,500	25,400
19	59,900	55,100	209,000	65,800	118,000	449,000	41,600	39,500	78,000	45,800	31,500	30,700
20	59,800	55,700	197,000	70,600	89,400	406,000	42,000	53,100	79,100	46,700	42,100	33,900
21	53,000	64,700	186,000	70,700	76,100	338,000	46,800	72,600	63,400	63,200	45,900	35,300
22	52,500	76,600	177,000	104,000	69,600	292,000	46,600	72,300	68,400	55,600	33,400	27,100
23	56,300	75,500	169,000	120,000	57,600	255,000	41,700	68,400	68,300	48,300	37,800	12,400
24	59,300	80,100	150,000	119,000	56,300	226,000	56,500	48,100	57,200	39,900	41,200	24,100
25	57,900	87,600	140,000	118,000	46,100	211,000	70,200	70,500	62,900	37,200	52,700	38,100
26	51,200	87,700	140,000	119,000	43,500	180,000	70,200	71,600	41,000	41,200	36,400	39,700
27	52,400	87,000	131,000	120,000	47,900	161,000	93,800	81,600	41,500	69,700	44,200	43,500
28	58,200	88,100	120,000	115,000	40,800	147,000	117,000	131,000	51,500	62,300	42,800	45,800
29	54,900	87,800	117,000	97,000	------	141,000	122,000	159,000	47,100	61,500	42,700	35,300
30	57,500	87,700	115,000	87,700	------	139,000	127,000	179,000	54,100	57,500	35,400	22,400
31	62,100	------	122,000	87,700	------	139,000	------	181,000	------	48,700	32,100	------
TOTAL	1,569.8M	2,074.3M	4,558.2M	3,428.8M	2,755.8M	5,567.4M	2,317.1M	2,558.7M	2,578.2M	1,543.0M	1,376.3M	1,012.0M
MEAN	50,640	69,140	147,000	110,600	98,420	179,600	77,240	82,540	85,940	49,770	44,400	33,730
MAX	79,900	88,100	228,000	161,000	164,000	554,000	151,000	181,000	179,000	69,700	58,500	49,800
MIN	24,400	54,800	79,000	56,500	40,800	42,600	35,300	29,100	41,000	37,200	31,500	12,400

CAL YR 1972 TOTAL 24,724,300 MEAN 67,550 MAX 228,000 MIN 13,700 CFSM 2.04 IN 27.68
WTR YR 1973 TOTAL 31,339,600 MEAN 85,860 MAX 554,000 MIN 12,400 CFSM 2.59 IN 35.18

03596000 Duck River below Manchester, Tenn.

LOCATION.--Lat 35°28'15", long 86°07'18", Coffee County, on right bank 50 ft (15 m) downstream from Powers Bridge, 2.0 miles (3.2 km) southwest of Manchester, 3.2 miles (5.1 km) downstream from Little Duck River, 7.0 miles (11.3 km) upstream from Crumpton Creek, and at mile 265.4 (427.0 km).

DRAINAGE AREA.--107 sq mi (277 sq km).

PERIOD OF RECORD.--April 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 878.23 ft (267.685 m) above mean sea level.

AVERAGE DISCHARGE.--39 years, 182 cfs (5.154 cu m/s), 23.10 in/yr (587 mm/yr).

EXTREMES.--Current year: Maximum discharge, 38,000 cfs (1,080 cu m/s) May 27, gage height, 20.95 ft (6.386 m), from rating curve extended as explained below; minimum, 25 cfs (0.71 cu m/s) Oct. 15, gage height, 0.49 ft (0.149 m).
Period of record: Maximum discharge, 38,000 cfs (1,080 cu m/s) May 27, 1973, gage height, 20.95 ft (6.386 m), from rating curve extended above 12,000 cfs (340 cu m/s) on basis of contracted-opening measurement at gage height 15.04 ft (4.584 m), and slope-area measurements at gage heights 18.93 ft (5.770 m) and 20.95 ft (6.386 m); minimum, 8.0 cfs (0.23 cu m/s) Aug. 12, 1934.
Flood of March 1929 reached a stage of 23.2 ft (7.07 m) from floodmarks by Tennessee Valley Authority (discharge, about 50,000 cfs (1,420 cu m/s). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	133	217	269	422	91	317	210	492	55	514	31
2	39	175	179	201	956	173	231	185	310	56	149	30
3	32	338	156	312	484	1,040	194	882	197	56	97	29
4	33	219	174	586	330	519	642	615	153	123	75	29
5	32	161	205	342	265	536	428	288	131	293	65	29
6	31	129	356	275	751	349	266	209	705	98	59	29
7	29	117	384	231	628	283	460	178	768	65	56	29
8	29	143	252	218	1,930	250	829	285	324	57	52	29
9	30	131	1,830	211	1,080	649	459	271	208	59	49	29
10	27	109	6,390	190	460	367	399	177	184	67	52	29
11	27	94	1,680	174	325	663	273	147	158	117	57	29
12	27	83	974	153	269	626	224	129	142	71	62	29
13	27	83	914	135	265	336	192	111	133	55	217	58
14	27	115	662	134	1,190	264	168	97	123	100	96	75
15	26	117	934	196	986	3,920	151	87	201	201	67	61
16	27	94	761	261	486	15,000	141	80	465	356	55	41
17	41	81	389	264	315	2,900	136	78	191	511	49	38
18	1,280	75	295	231	250	875	136	73	124	346	47	35
19	2,850	189	272	547	225	581	199	80	102	279	44	33
20	612	388	339	413	205	534	885	99	93	148	42	32
21	294	235	489	347	196	862	474	84	78	98	41	32
22	178	185	845	1,140	169	472	260	71	72	77	38	31
23	138	155	439	503	153	320	216	157	67	91	38	31
24	121	132	323	318	138	256	222	1,370	62	86	37	31
25	99	152	286	246	124	518	414	415	61	852	36	31
26	84	258	252	297	115	671	1,150	206	56	688	35	30
27	86	210	236	605	107	668	1,250	14,100	54	227	34	29
28	131	284	206	390	99	381	523	4,000	76	139	33	30
29	125	327	184	481	------	300	323	643	72	95	32	37
30	105	247	172	324	------	303	252	333	58	78	32	44
31	122	------	255	276	------	323	------	227	------	176	32	------
TOTAL	6,762	5,159	21,050	10,270	12,923	35,030	11,814	25,887	5,860	5,720	2,292	1,050
MEAN	218	172	679	331	462	1,130	394	835	195	185	73.9	35.0
MAX	2,850	388	6,390	1,140	1,930	15,000	1,250	14,100	768	852	514	75
MIN	26	75	156	134	99	91	136	71	54	55	32	29
CFSM	2.04	1.61	6.35	3.09	4.32	10.6	3.68	7.80	1.82	1.73	.69	.33
IN.	2.35	1.79	7.32	3.57	4.49	12.18	4.11	9.00	2.04	1.99	.80	.37

CAL YR 1972 TOTAL 86,531 MEAN 236 MAX 6,390 MIN 26 CFSM 2.21 IN 30.08
WTR YR 1973 TOTAL 143,817 MEAN 394 MAX 15,000 MIN 26 CFSM 3.68 IN 50.00

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	0500	9.06	4,050	03-16	1030	17.78	24,700
12-10	1000	13.20	8,420	05-27	1800	20.95	38,000
02-08	1900	7.58	2,900				

03596500 Duck River at Normandy, Tenn.

LOCATION.--Lat 35°27'26", long 86°15'25", Bedford County, on right bank 50 ft (15 m) downstream from county road bridge, 0.5 mile (0.8 km) north of Normandy, 3.3 miles (5.3 km) upstream from L & N Railroad bridge, 7.5 miles (12.1 km) upstream from Garrison Fork, and at mile 246.9 (397.3 km).

DRAINAGE AREA.--208 sq mi (539 sq km).

PERIOD OF RECORD.--December 1920 to September 1931, May 1970 to May 1972 (discharge measurements only), May 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 782.65 ft (238.552 m) above mean sea level. Dec. 10, 1920, to Sept. 30, 1931, non-recording gage at present site and at datum 3.0 ft (0.91 m) higher. May 26, 1970, to May 17, 1972, operated as a low-flow partial-record station.

AVERAGE DISCHARGE.--12 years, 399 cfs (11.30 cu m/s), 26.05 in/yr (662 mm/yr).

EXTREMES.--Current year: Maximum discharge, 32,400 cfs (918 cu m/s) May 27; gage height, 18.57 ft (5.660 m) recorded; 18.84 ft (5.742 m) from floodmarks; minimum, 76 cfs (2.15 cu m/s) Oct. 12-15, 16, 17, gage height, 3.34 ft (1.018 m).
Period of record: Maximum discharge, 60,000 cfs (1,700 cu m/s) Mar. 23, 1929, gage height, 21.1 ft (6.43 m), present datum, from rating curve extended above 30,000 cfs (850 cu m/s); minimum, 15 cfs (0.42 cu m/s) caused by regulation upstream Aug. 22, 1972, gage height, 2.73 ft (0.832 m); minimum daily, 40 cfs (1.13 cu m/s) Sept. 30, 1931.

REMARKS.--Records good. Occasional regulation caused by construction of Normandy Dam, 1.7 miles (2.7 km) upstream. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1436: Drainage area, 1922-23(M), 1927, 1928(M), 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	271	443	553	658	280	768	528	875	159	584	94
2	128	296	373	475	1,510	308	629	457	889	158	374	91
3	107	424	322	496	1,240	1,320	531	671	574	156	214	88
4	98	494	306	1,020	826	1,380	870	1,360	423	165	178	86
5	98	428	337	903	637	1,080	1,130	693	364	406	159	84
6	94	346	416	665	910	934	728	487	1,050	309	149	84
7	88	290	701	562	1,460	694	725	412	1,570	186	142	86
8	85	268	534	505	2,200	604	1,480	451	913	167	136	88
9	84	269	2,180	469	2,900	791	1,160	574	563	172	132	86
10	82	253	8,520	430	1,300	932	959	432	430	159	132	86
11	78	234	4,580	395	857	941	737	365	374	188	139	84
12	76	217	1,980	370	668	1,550	597	338	333	194	137	83
13	76	208	1,620	340	580	949	518	312	306	158	202	97
14	77	216	1,450	323	1,220	685	451	290	282	233	218	156
15	77	229	1,540	345	2,150	3,400	408	272	348	364	161	147
16	76	e226	1,670	427	1,260	23,800	383	260	717	500	139	122
17	86	211	1,010	475	843	9,250	366	254	567	1,360	129	104
18	1,240	199	735	475	647	2,480	358	245	324	1,040	124	97
19	5,880	224	628	742	559	1,340	397	248	260	1,120	117	92
20	2,310	399	654	864	508	1,050	1,140	291	238	483	113	88
21	814	503	822	668	469	1,790	1,380	272	216	294	110	88
22	480	433	1,430	1,520	427	1,300	746	245	200	228	105	88
23	347	355	1,060	1,400	395	904	564	264	190	198	104	84
24	307	302	766	819	370	716	517	1,290	180	230	102	86
25	272	281	631	604	342	897	609	1,190	194	728	100	84
26	243	325	568	574	322	1,160	1,820	528	174	1,220	99	81
27	229	381	523	1,010	308	1,490	2,440	11,300	165	602	97	80
28	259	454	475	956	290	1,070	1,530	15,800	163	324	96	80
29	285	650	427	871	------	805	868	2,200	182	230	94	88
30	273	538	398	787	------	719	643	1,030	171	196	92	100
31	264	------	445	616	------	706	------	689	------	184	92	------
TOTAL	14,797	9,924	37,544	20,659	25,856	65,325	25,452	43,748	13,235	12,111	4,770	2,802
MEAN	477	331	1,211	666	923	2,107	848	1,411	441	391	154	93.4
MAX	5,880	650	8,520	1,520	2,900	23,800	2,440	15,800	1,570	1,360	584	156
MIN	76	199	306	323	290	280	358	245	163	156	92	80
CFSM	2.29	1.59	5.82	3.20	4.44	10.1	4.08	6.78	2.12	1.88	.74	.45
IN.	2.65	1.77	6.71	3.69	4.62	11.68	4.55	7.82	2.37	2.17	.85	.50

WTR YR 1973 TOTAL 276,223 MEAN 757 MAX 23,800 MIN 76 CFSM 3.64 IN 49.40

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 (0.3 km) downstream from Kelly Creek, 0.9 mile (1.4 km) east of Bell Buckle, 4.0 miles (6.4 km) northeast of Fairfield, and at mile 7.7 (12.4 km).

DRAINAGE AREA.--16.3 sq mi (42.2 sq km).

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 (250.680 m) above mean sea level. Oct. 4, 1961, to Jan. 11, 1966, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--15 years (1953-61, 1966-73) 28.9 cfs (0.818 cu m/s), 24.08 in/yr (612 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,600 cfs (159 cu m/s) Dec. 10, gage height, 10.15 ft (3.094 m), from rating extended as explained below; minimum, 0.15 cfs (0.004 cu m/s) Aug. 29, 31.
Period of record: Maximum discharge, 8,240 cfs (233 cu m/s) Mar. 21, 1955, gage height, 11.25 ft (3.429 m), from rating curve extended above 1,200 cfs (34.0 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	28	27	57	208	9.3	24	21	49	11	3.6	.19
2	10	91	20	39	107	47	19	18	18	7.4	2.8	.20
3	6.0	58	18	86	64	94	31	235	14	4.4	2.1	.20
4	4.0	34	18	67	44	51	160	52	11	4.9	1.7	.20
5	3.0	23	18	47	34	41	45	32	10	5.4	1.3	.19
6	2.0	17	112	36	202	30	31	23	254	3.3	1.1	.18
7	1.5	16	49	30	69	163	158	19	48	2.3	.89	.21
8	1.3	13	73	26	362	63	85	108	25	51	.79	.26
9	1.1	11	480	22	105	41	64	28	16	25	.64	.26
10	1.0	9.9	1,430	20	61	30	41	21	12	15	.52	.26
11	.90	8.4	241	19	41	271	30	17	17	9.9	.73	.26
12	.83	7.3	138	17	31	76	24	14	11	6.1	3.2	.24
13	1.0	7.7	186	16	43	47	19	11	7.7	4.3	3.4	84
14	1.2	8.4	103	18	190	214	16	9.8	7.6	5.7	1.5	96
15	1.1	6.6	188	39	83	1,750	14	8.5	49	289	.74	12
16	1.1	6.2	98	37	52	1,500	13	7.8	22	112	.46	5.9
17	3.2	5.9	60	34	38	500	12	7.4	12	39	.40	4.1
18	599	5.5	43	110	30	200	12	6.5	11	21	.35	2.9
19	377	126	41	335	25	80	47	7.6	7.6	16	.28	2.4
20	77	60	40	77	21	51	259	7.3	6.3	11	.24	1.8
21	37	35	51	193	18	39	55	5.6	5.3	8.0	.22	1.5
22	22	26	58	124	16	30	33	4.8	4.7	6.4	.20	1.2
23	19	19	44	65	15	25	33	200	4.0	5.1	.20	1.0
24	14	15	36	43	13	21	41	86	3.7	4.6	.20	.88
25	11	87	31	31	12	96	70	28	5.4	30	.20	.62
26	10	63	30	126	11	96	297	17	3.0	24	.19	.46
27	13	39	27	81	11	71	186	1,400	4.0	13	.18	.35
28	23	86	24	95	9.8	45	75	171	14	7.3	.17	.40
29	18	52	21	78	------	37	42	58	4.5	5.2	.17	1.3
30	16	38	20	53	------	29	28	31	3.5	4.1	.18	1.5
31	37	------	130	40	------	31	------	20	------	4.5	.16	------
TOTAL	1,327.23	1,002.9	3,855	2,061	1,915.8	5,778.3	1,964	2,675.3	660.3	755.9	28.81	220.96
MEAN	42.8	33.4	124	66.5	68.4	186	65.5	86.3	22.0	24.4	.93	7.37
MAX	599	126	1,430	335	362	1,750	297	1,400	254	289	3.6	96
MIN	.83	5.5	18	16	9.8	9.3	12	4.8	3.0	2.3	.16	.18
CFSM	2.63	2.05	7.61	4.08	4.20	11.4	4.02	5.29	1.35	1.50	.06	.45
IN.	3.03	2.29	8.80	4.70	4.37	13.19	4.48	6.11	1.51	1.73	.07	.50

CAL YR 1972 TOTAL 15,241.71 MEAN 41.6 MAX 1,430 MIN .17 CFSM 2.55 IN 34.78
WTR YR 1973 TOTAL 22,245.50 MEAN 60.9 MAX 1,750 MIN .16 CFSM 3.74 IN 50.77

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-18	0845	8.57	2,470	03-15	0405	10.12	5,530
12-10	0505	10.15	5,600	05-27	1115	9.95	5,120
01-19	0010	8.34	2,130	07-15	2125	8.29	2,060

03598000 Duck River near Shelbyville, Tenn.

LOCATION.--Lat 35°28'49", long 86°29'57", Bedford County, on right bank 150 ft (50 m) downstream from Sims Bridge, 2.1 miles (3.4 km) upstream from Sugar Creek, 2.2 miles (3.5 km) west of Shelbyville, 2.9 miles (4.7 km) downstream from Flat Creek, and at mile 216.2 (347.9 km).

DRAINAGE AREA.--481 sq mi (1,246 sq km).

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 (208.334 m) above mean sea level. Prior to Sept. 2, 1966, at datum 2.0 ft (0.6 m) higher.

AVERAGE DISCHARGE.--40 years, 809 cfs (22.91 cu m/s), 22.84 in/yr (580 mm/yr).

EXTREMES.--Current year: Maximum discharge, 44,100 cfs (1,250 cu m/s) Mar. 16, gage height, 35.88 ft (10.936 m); minimum, 104 cfs (2.95 cu m/s) Sept. 27, 28; minimum gage height, 1.94 ft (0.591 m) Oct. 16, 17.
Period of record: Maximum discharge, 62,900 cfs (1,780 cu m/s) Feb. 13, 1948, gage height, 38.40 ft (11.704 m), present datum, from floodmarks, from rating curve extended above 35,000 cfs (991 cu m/s) on basis of slope-area measurement; minimum, 5.0 cfs (0.14 cu m/s) Aug. 23, 1936; minimum daily, 20 cfs (0.57 cu m/s) Sept. 2, 1945.
Flood of March 1929 reached a stage of 39.6 ft (12.07 m) present datum, discharge, about 70,000 cfs (1,980 cu m/s), from high water profile by Tennessee Valley Authority. Flood of March 1902 reached a stage about 2.0 ft (0.610 m) higher than that of March 1929, from information by local residents.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	708	812	1,230	1,470	2,440	627	1,330	1,150	2,090	315	930	134
2	427	1,070	1,050	1,300	3,380	748	1,190	954	1,600	397	890	134
3	273	1,660	910	1,510	2,700	2,140	994	3,550	1,150	315	523	129
4	207	1,340	876	2,040	1,840	2,410	2,230	2,500	865	300	388	118
5	180	1,140	865	1,920	1,520	1,880	2,050	1,710	747	705	325	116
6	161	955	1,640	1,560	2,930	1,690	1,550	1,150	3,000	628	285	114
7	144	818	1,690	1,340	2,700	1,590	2,220	914	3,020	400	258	116
8	133	764	1,510	1,220	5,850	1,440	3,090	1,310	2,100	323	238	119
9	126	685	5,450	1,100	5,880	1,270	2,650	1,080	1,260	544	223	123
10	120	645	14,600	1,020	3,210	1,520	2,000	890	930	1,310	210	119
11	114	593	17,100	958	1,920	3,280	1,570	729	873	1,240	233	119
12	109	530	6,630	892	1,550	2,910	1,260	638	845	559	228	118
13	110	489	4,200	824	1,370	2,050	1,060	565	663	406	520	134
14	111	521	3,300	790	2,970	1,640	894	505	604	670	427	757
15	111	520	3,430	956	3,830	10,700	792	457	635	1,760	328	382
16	109	505	3,490	1,110	2,730	32,100	722	418	1,610	3,950	258	268
17	117	475	2,490	1,150	1,840	32,500	670	403	1,100	3,040	218	190
18	4,690	439	1,750	1,140	1,500	10,300	635	379	715	2,260	198	157
19	15,100	1,060	1,500	3,170	1,310	3,170	645	370	670	2,010	183	144
20	8,100	1,580	1,520	2,000	1,180	2,470	4,760	457	517	1,190	168	136
21	2,230	1,310	1,670	2,060	1,070	3,460	2,980	418	439	799	159	129
22	1,390	1,160	2,500	4,530	991	2,610	1,840	363	391	592	151	125
23	1,060	990	2,330	3,150	922	1,820	1,310	481	358	478	146	123
24	885	844	1,730	1,920	850	1,400	1,130	3,520	330	409	142	121
25	756	981	1,460	1,480	783	2,440	1,290	2,280	1,690	1,340	140	119
26	655	1,280	1,310	1,750	734	2,290	3,900	1,170	532	1,640	140	116
27	598	1,120	1,210	2,590	697	2,840	6,170	9,150	388	1,300	140	110
28	771	1,610	1,120	2,150	660	2,300	3,790	28,300	469	733	138	110
29	783	1,660	1,030	2,160	------	1,690	2,100	12,400	376	532	138	136
30	734	1,490	960	1,810	------	1,410	1,450	2,410	348	421	136	195
31	765	------	1,700	1,540	------	1,370	------	1,470	------	624	136	------
TOTAL	41,777	29,046	92,251	52,610	59,357	140,065	58,272	82,091	30,315	31,190	8,597	4,911
MEAN	1,348	968	2,976	1,697	2,120	4,518	1,942	2,648	1,011	1,006	277	164
MAX	15,100	1,660	17,100	4,530	5,880	32,500	6,170	28,300	3,020	3,950	930	757
MIN	109	439	865	790	660	627	635	363	330	300	136	110
CFSM	2.80	2.01	6.19	3.53	4.41	9.39	4.04	5.51	2.10	2.09	.58	.34
IN.	3.23	2.25	7.13	4.07	4.59	10.83	4.51	6.35	2.34	2.41	.66	.38

CAL YR 1972 TOTAL 431,226 MEAN 1,178 MAX 17,100 MIN 98 CFSM 2.45 IN 33.35
WTR YR 1973 TOTAL 630,482 MEAN 1,727 MAX 32,500 MIN 109 CFSM 3.59 IN 48.76

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	0730	24.57	16,000	03-16	2400	35.88	44,100
12-11	0330	26.84	19,700	05-28	1200	32.10	31,900

03599500 Duck River at Columbia, Tenn.

LOCATION.--Lat 35°37'05", long 87°01'56", Maury County, on right bank 4 ft (1 m) downstream from bridge on former U.S. Highway 31, 2 blocks north of public square at Columbia, 0.7 mile (1.1 km) downstream from Columbia hydroelectric plant, 2.4 miles (3.9 km) upstream from Rutherford Creek, and at mile 132.8 (213.7 km).

DRAINAGE AREA.--1,208 sq mi (3,129 sq km).

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 (163.169 m) above mean sea level. Prior to Jan. 1925, nonrecording gages near this site; all gages at datum 2.37 ft (0.722 m) higher prior to Oct. 1, 1933.

AVERAGE DISCHARGE.--57 years, 1904-8, 1920-73, 1,956 cfs (55.39 cu m/s), 21.99 in/yr (559 mm/yr).

EXTREMES.--Current year: Maximum discharge, 61,500 cfs (1,740 cu m/s) Mar. 17, gage height, 49.31 ft (15.030 m); minimum, 118 cfs (3.34 cu m/s) Sept. 7, 8, 28, 29, 30.
Period of record: Maximum discharge, 61,500 cfs (1,740 cu m/s) Mar. 17, 1973; maximum gage height, 51.75 ft (15.773 m) Feb. 14, 1948; no flow Oct. 22, 1922.
Flood of Mar. 30, 1902, reached a stage of 48.0 ft (14.63 m), present datum, discharge, 50,700 cfs (1,440 cu m/s).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,910	1,940	3,570	6,100	3,640	925	3,300	3,090	5,480	487	1,240	143
2	1,270	3,240	2,760	4,260	7,460	988	2,970	2,610	5,350	557	1,120	138
3	735	5,390	2,170	3,930	7,730	2,510	2,570	7,590	3,460	569	705	128
4	516	4,610	1,820	5,960	5,370	4,500	2,850	9,400	2,520	538	543	125
5	377	3,160	1,630	5,580	3,930	4,320	4,660	5,420	1,950	459	465	128
6	303	2,380	1,630	4,400	5,580	3,600	3,760	3,620	3,430	647	413	122
7	261	1,970	2,880	3,500	7,770	8,390	3,890	2,540	5,660	805	375	118
8	234	1,830	3,520	2,860	13,300	9,520	6,900	2,830	6,020	637	414	125
9	210	1,550	8,250	2,460	16,700	5,040	6,840	2,960	4,290	458	370	138
10	186	1,340	24,100	2,140	12,600	3,450	5,390	2,350	2,760	450	397	132
11	168	1,170	29,500	1,910	7,100	5,930	4,170	1,780	1,950	1,520	629	128
12	153	1,040	30,100	1,720	4,380	10,500	3,260	1,430	1,710	2,700	753	122
13	148	930	26,300	1,540	3,450	7,230	2,630	1,210	2,190	962	866	132
14	140	865	15,300	1,400	4,790	5,200	2,170	1,040	1,660	612	710	138
15	135	820	14,600	1,500	7,890	26,500	1,830	908	1,250	4,480	880	278
16	130	800	12,600	2,160	7,140	51,100	1,590	803	1,180	7,510	618	810
17	135	740	8,550	2,530	5,310	61,100	1,420	722	2,310	6,920	477	408
18	7,370	696	5,930	2,390	3,760	59,200	1,320	662	1,640	4,490	381	300
19	24,300	1,390	4,330	3,860	2,940	50,000	1,360	739	1,210	3,890	324	247
20	26,300	3,900	3,910	7,430	2,450	29,900	9,990	967	1,130	2,990	287	183
21	23,600	4,130	3,780	5,630	2,070	11,300	13,500	700	1,130	1,820	258	165
22	9,400	2,840	3,500	9,550	1,800	7,170	7,220	700	736	1,220	232	153
23	3,460	2,260	4,340	9,730	1,600	5,470	5,160	928	621	973	212	140
24	2,460	1,830	4,090	6,330	1,430	4,120	4,480	7,130	549	1,180	198	174
25	1,870	2,080	3,250	4,240	1,290	5,550	3,970	6,900	507	3,570	183	140
26	1,490	3,820	2,670	3,530	1,170	6,790	4,550	3,860	1,610	3,620	173	142
27	1,340	3,750	2,300	5,670	1,080	5,720	9,550	13,600	1,080	2,470	165	130
28	1,630	4,780	2,080	6,270	995	5,560	11,700	23,900	611	1,230	158	118
29	1,730	6,020	1,840	5,250	------	4,900	7,430	26,000	498	1,090	159	120
30	1,630	4,770	1,810	4,740	------	4,390	4,340	27,200	543	1,060	153	118
31	1,650	------	5,650	3,790	------	3,640	------	16,700	------	995	145	------
TOTAL	115,241	76,041	238,760	132,360	144,725	414,513	144,770	180,289	65,035	60,909	14,003	5,443
MEAN	3,717	2,535	7,702	4,270	5,169	13,370	4,826	5,816	2,168	1,965	452	181
MAX	26,300	6,020	30,100	9,730	16,700	61,100	13,500	27,200	6,020	7,510	1,240	810
MIN	130	696	1,630	1,400	995	925	1,320	662	498	450	145	118
CFSM	3.08	2.10	6.38	3.53	4.28	11.1	4.00	4.81	1.79	1.63	.37	.15
IN.	3.55	2.34	7.35	4.08	4.46	12.76	4.46	5.55	2.00	1.88	.43	.17

CAL YR 1972 TOTAL 1,009,647 MEAN 2,759 MAX 30,100 MIN 103 CFSM 2.28 IN 31.09
WTR YR 1973 TOTAL 1,592,089 MEAN 4,362 MAX 61,100 MIN 118 CFSM 3.61 IN 49.03

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1700	34.80	26,600	03-17	1500	49.31	61,500
12-11	2300	37.59	30,600	05-30	1300	35.52	27,600
02-09	1300	25.57	17,200				

03600500 Big Bigby Creek at Sandy Hook, Tenn.

LOCATION.--Lat 35°29'19", long 87°13'59", Maury County, on right bank 45 ft (14 m) west of Louisville & Nashville Railroad track, 0.2 mile (0.3 km) downstream from bridge on U.S. Highway 43, 0.4 mile (0.6 km) northeast of Sandy Hook, 0.5 mile (0.8 km) upstream from Dry Creek, 3.5 miles (5.6 km) southwest of Mount Pleasant, and at mile 17.9 (28.8 km).

DRAINAGE AREA.--17.5 sq mi (45.3 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 670.44 ft (204.350 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 26.0 cfs (0.736 cu m/s), 20.18 in/yr (513 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,700 cfs (218 cu m/s) Mar. 15, gage height, 11.55 ft (3.520 m), from rating curve extended above 1,400 cfs (39.6 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 5.2 cfs (0.15 cu m/s) Sept. 22, 23.

Period of record: Maximum discharge, 7,700 cfs (218 cu m/s) Mar. 15, 1973, gage height, 11.55 ft (3.520 m), from rating curve extended above 1,400 cfs (39.6 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 1.0 cfs (0.028 cu m/s) Sept. 10, 1958, and July 9, 1959, caused by removal of gravel from channel 0.2 mile (0.3 km) upstream; minimum natural discharge, 1.5 cfs (0.042 cu m/s) Sept. 4-7, 1954.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	36	44	120	65	46	60	48	30	11	14	6.2
2	17	43	38	96	68	55	52	49	25	11	12	6.2
3	14	43	35	100	60	67	48	134	23	11	10	6.0
4	12	37	33	124	54	65	68	79	21	11	9.3	5.9
5	11	33	31	82	51	66	54	59	22	11	8.7	5.8
6	9.9	30	32	68	85	66	49	50	57	10	8.4	5.9
7	9.2	65	30	59	74	218	110	45	35	9.8	8.3	6.3
8	8.7	61	65	52	330	117	115	185	28	10	8.0	6.2
9	8.1	48	213	48	126	84	85	74	24	10	8.1	6.0
10	7.6	41	365	44	88	72	66	55	21	10	8.2	6.0
11	7.2	35	127	40	73	144	55	47	20	10	13	6.0
12	7.2	32	98	37	66	99	50	42	20	9.2	19	5.9
13	7.2	31	115	34	75	79	45	38	18	8.9	20	6.5
14	7.2	30	104	32	101	135	41	35	20	9.1	14	7.2
15	7.2	28	288	30	89	2,020	39	33	18	12	11	6.4
16	7.2	27	109	31	75	1,410	38	32	17	17	9.7	6.2
17	7.8	26	75	29	67	237	36	31	16	15	9.1	5.8
18	119	25	61	32	62	103	38	30	15	12	8.7	5.8
19	208	66	58	40	59	74	96	80	14	11	8.3	5.7
20	59	55	56	39	56	67	457	69	16	10	7.8	5.6
21	41	44	54	100	54	58	104	46	14	9.7	7.5	5.6
22	34	38	50	107	53	51	72	39	13	9.2	7.2	5.4
23	32	34	46	63	52	46	111	39	13	8.8	7.1	7.7
24	29	31	44	50	50	46	97	39	12	9.1	7.2	8.0
25	27	53	41	44	49	102	83	34	12	10	7.7	6.2
26	25	53	40	59	48	80	91	32	12	16	7.2	5.9
27	30	46	38	65	48	67	106	436	12	12	7.2	5.7
28	37	96	36	62	47	58	78	131	12	10	6.7	5.7
29	33	68	35	57	------	76	63	57	11	13	6.5	6.1
30	31	53	70	53	------	80	54	45	11	23	6.4	6.4
31	39	------	150	50	------	72	------	32	------	22	6.2	------
TOTAL	916.5	1,308	2,581	1,847	2,125	5,960	2,461	2,145	582	361.8	292.5	184.3
MEAN	29.6	43.6	83.3	59.6	75.9	192	82.0	69.2	19.4	11.7	9.44	6.14
MAX	208	96	365	124	330	2,020	457	436	57	23	20	8.0
MIN	7.2	25	30	29	47	46	36	30	11	8.8	6.2	5.4
CFSM	1.69	2.49	4.76	3.41	4.34	11.0	4.69	3.95	1.11	.67	.54	.35
IN.	1.95	2.78	5.49	3.93	4.52	12.67	5.23	4.56	1.24	.77	.62	.39

CAL YR 1972 TOTAL 13,166.7 MEAN 36.0 MAX 569 MIN 4.3 CFSM 2.06 IN 27.99
WTR YR 1973 TOTAL 20,764.1 MEAN 56.9 MAX 2,020 MIN 5.4 CFSM 3.25 IN 44.14

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-10	0545	5.31	703	04-20	0100	5.65	970
02-08	0630	5.16	658	05-27	1000	5.88	1,060
03-15	0300	11.55	7,700				

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 (12 m) upstream from Pretty Creek, 0.2 mile (0.3 km) northwest of Vernon, 2.3 miles (3.7 km) downstream from Mill Creek, 6.5 miles (10.5 km) north of Centerville, and 8.3 miles (13.4 km) upstream from mouth.

DRAINAGE AREA.--202 sq mi (523 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 461.72 ft (140.732 m) above mean sea level. Prior to May 11, 1934, nonrecording gage; July 3, 1925, to Feb. 8, 1931, at site 350 ft (107 m) upstream at datum 3.17 ft (0.966 m) higher; Feb. 9, 1931, to May 10, 1934, at site 0.4 mile (0.6 km) downstream at datum 0.40 ft (0.122 m) higher. May 11, 1934, to Sept. 30, 1970, water-stage recorder at site 350 ft (107 m) upstream; prior to June 29, 1965, at datum 3.17 ft (0.966 m) higher, and 2.17 ft (0.661 m) higher thereafter.

AVERAGE DISCHARGE.--48 years, 298 cfs (8.439 cu m/s), 20.03 in/yr (509 mm/yr).

EXTREMES.--Current year: Maximum discharge, 13,700 cfs (388 cu m/s) Apr. 20, gage height, 15.39 ft (4.691 m); minimum, 86 cfs (2.436 cu m/s) Sept. 5, 6.

Period of record: Maximum discharge, 32,500 cfs (920 cu m/s) Dec. 21, 1926, gage height, 16.5 ft (5.03 m), site and datum then in use; minimum, 35 cfs (6.991 cu m/s) Sept. 19, 20, 1936.

Flood of March 1897 reached a stage of 17.5 ft (5.33 m), original site and datum, discharge, 37,000 cfs (1,050 cu m/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	256	639	879	726	211	623	804	832	224	240	98
2	133	416	527	679	767	239	572	766	644	297	205	95
3	128	481	452	711	660	341	535	2,140	550	187	158	90
4	124	381	407	888	562	328	551	1,350	484	205	145	90
5	120	319	366	749	505	340	498	1,010	477	214	136	90
6	114	278	423	635	1,320	332	464	833	514	187	129	93
7	110	1,400	395	552	1,190	663	527	731	455	185	124	98
8	104	1,210	990	483	3,370	670	780	677	412	180	118	103
9	100	754	6,220	414	1,900	583	794	591	384	195	115	127
10	96	580	6,240	367	1,190	499	730	582	359	185	110	127
11	92	461	2,230	333	866	943	647	544	340	187	169	105
12	94	382	1,400	302	699	936	601	491	334	180	453	98
13	98	366	1,310	276	648	738	540	448	347	174	284	376
14	103	402	1,090	261	759	688	490	414	468	180	205	640
15	100	343	2,310	259	766	3,200	457	384	355	190	172	298
16	98	314	1,630	245	664	4,700	440	364	682	318	157	235
17	107	290	1,100	236	568	3,000	414	348	424	240	145	205
18	140	266	864	236	507	2,100	431	331	358	208	139	181
19	185	449	758	268	456	1,340	1,450	319	329	180	130	169
20	268	583	701	253	408	1,160	7,480	308	329	170	124	160
21	217	497	604	384	363	981	2,100	293	301	158	118	154
22	187	433	528	1,160	333	828	1,660	285	282	148	113	142
23	189	377	453	832	314	730	1,500	328	269	140	110	133
24	182	336	405	598	288	670	1,800	350	261	145	108	130
25	168	397	366	472	265	740	1,650	291	255	160	113	124
26	158	458	336	508	249	743	2,000	273	248	260	108	118
27	169	444	305	841	233	734	1,800	1,100	246	190	103	110
28	190	1,190	285	891	222	691	1,300	947	245	160	100	108
29	183	1,040	266	1,050	------	684	1,100	682	233	208	98	110
30	175	797	311	862	------	668	1,000	563	228	365	110	108
31	215	------	1,240	721	------	657	------	508	------	310	105	----
TOTAL	4,491	15,900	35,151	17,345	20,798	31,137	34,934	19,055	11,645	6,330	4,644	4,715
MEAN	145	530	1,134	560	743	1,004	1,164	615	388	204	150	157
MAX	268	1,400	6,240	1,160	3,370	4,700	7,480	2,140	832	365	453	640
MIN	92	256	266	236	222	211	414	273	228	140	98	90
CFSM	.72	2.62	5.61	2.77	3.68	4.97	5.76	3.04	1.92	1.01	.74	.78
IN.	.83	2.93	6.47	3.19	3.83	5.73	6.43	3.51	2.14	1.17	.86	.87

CAL YR 1972 TOTAL 140,395 MEAN 384 MAX 6,240 MIN 81 CFSM 1.90 IN 25.85
WTR YR 1973 TOTAL 206,145 MEAN 565 MAX 7,480 MIN 90 CFSM 2.80 IN 37.96

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-09	0530	14.18	10,600	03-16	Unknown	13.74	9,630
02-08	1345	10.71	4,910	04-20	0615	15.39	13,700

03603000 Duck River above Hurricane Mills, Tenn.

LOCATION.--Lat 35°55'48", long 87°44'35", Humphreys County, on left bank 0.4 mile (0.6 km) downstream from Tumbling Creek, 1.3 miles (2.1 km) upstream from bridge on State Highway 13, 3.6 miles (5.8 km) southeast of Hurricane Mills, and at mile 26.0 (41.8 km).

DRAINAGE AREA.--2,557 sq mi (6,623 sq km).

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 (112.938 m) 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 (9.0 km) downstream at datum 8.80 ft (2.682 m) lower.

AVERAGE DISCHARGE.--48 years, 3,959 cfs (112.1 cu m/s), 21.03 in/yr (534 mm/yr).

EXTREMES.--Current year: Maximum discharge, 83,200 cfs (2,360 cu m/s) Mar. 18, gage height, 27.02 ft (8.236 m); minimum, 720 cfs (20.4 cu m/s) Oct. 16.
Period of record: Maximum discharge, 122,000 cfs (3,460 cu m/s) Feb. 14, 1948, gage height, 30.70 ft (9.357 m), from floodmark in gage house, present site and datum); minimum, 185 cfs (5.24 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,910	3,660	10,200	14,300	8,630	2,920	8,630	10,400	32,300	1,760	3,530	911
2	2,390	4,100	8,130	12,600	8,480	2,850	7,750	8,360	18,000	1,780	2,910	894
3	2,790	5,340	6,660	10,100	10,700	3,470	7,100	13,000	9,400	1,820	2,360	890
4	2,020	8,300	5,620	9,720	12,100	5,680	6,710	20,700	7,410	1,950	2,390	865
5	1,570	7,910	4,930	11,300	9,660	7,300	7,240	18,000	5,980	2,120	2,230	852
6	1,340	6,260	4,510	10,900	8,960	7,590	7,910	12,800	5,900	1,910	1,920	864
7	1,150	6,380	4,580	9,220	11,600	7,940	7,850	9,390	7,840	1,720	1,680	875
8	1,030	10,800	5,860	7,970	17,000	14,200	8,970	7,850	8,830	1,830	1,530	878
9	955	8,700	18,400	6,850	26,100	16,300	12,000	8,900	9,740	1,940	1,450	930
10	903	6,600	32,700	6,000	28,500	11,400	12,800	7,390	7,970	1,800	1,390	953
11	852	5,320	45,800	5,370	24,500	9,440	10,600	6,780	6,100	1,660	1,320	954
12	803	4,420	47,200	4,880	15,100	16,100	9,040	5,710	4,860	1,620	1,720	914
13	775	3,850	43,000	4,460	10,100	17,200	7,660	4,990	4,180	3,380	2,550	901
14	754	3,600	40,900	4,110	8,780	14,500	6,590	4,370	4,900	2,940	2,040	1,960
15	754	3,260	40,100	3,880	9,700	15,900	5,820	3,910	4,530	2,060	2,020	1,730
16	727	2,940	35,700	3,870	12,000	35,200	5,290	3,520	3,910	1,980	1,960	1,350
17	740	2,720	29,000	4,270	11,800	67,500	4,790	3,260	3,460	6,680	1,910	1,270
18	2,500	2,540	18,600	4,930	9,940	80,800	4,460	3,060	3,690	9,160	1,670	1,670
19	18,400	2,760	12,600	5,040	8,100	71,800	5,870	2,850	3,870	7,690	1,510	1,370
20	30,600	4,960	10,200	5,730	6,830	64,700	23,800	2,840	3,360	5,880	1,370	1,200
21	34,300	7,040	9,120	9,620	5,970	56,400	31,100	3,900	2,980	5,470	1,270	1,100
22	34,200	7,720	8,470	11,900	5,290	42,800	25,700	3,030	2,910	4,390	1,180	1,020
23	30,500	6,310	7,730	16,000	4,770	19,100	18,700	2,830	2,520	3,300	1,120	972
24	9,890	5,230	7,860	15,900	4,460	11,200	17,300	3,100	2,210	2,700	1,070	950
25	5,680	4,650	7,740	12,000	3,980	9,670	15,800	7,590	2,060	2,450	1,050	936
26	4,240	5,140	6,810	9,190	3,680	11,100	14,500	9,630	1,940	2,710	1,040	963
27	3,800	6,610	5,870	8,970	3,390	12,100	17,200	8,930	1,930	4,140	1,010	928
28	3,480	9,020	5,240	10,900	3,130	11,000	19,800	20,800	2,990	5,650	979	893
29	3,600	12,500	4,830	12,300	------	10,400	20,100	31,500	2,250	4,840	949	882
30	3,640	12,100	4,550	11,000	------	10,100	15,200	33,000	1,900	3,870	928	879
31	3,620	------	6,960	9,820	------	9,610	------	32,300	------	3,530	944	------
TOTAL	209,913	180,740	499,870	273,100	293,250	676,270	366,280	314,690	179,920	104,730	51,000	31,754
MEAN	6,771	6,025	16,120	8,810	10,470	21,820	12,210	10,150	5,997	3,378	1,645	1,058
MAX	34,300	12,500	47,200	16,000	28,500	80,800	31,100	33,000	32,300	9,160	3,530	1,960
MIN	727	2,540	4,510	3,870	3,130	2,850	4,460	2,830	1,900	1,620	928	852
CFSM	2.65	2.36	6.30	3.45	4.09	8.53	4.78	3.97	2.35	1.32	.64	.41
IN.	3.05	2.63	7.27	3.97	4.27	9.84	5.33	4.58	2.62	1.52	.74	.46

CAL YR 1972 TOTAL 1,980,261 MEAN 5,411 MAX 47,200 MIN 586 CFSM 2.12 IN 28.81
WTR YR 1973 TOTAL 3,181,517 MEAN 8,716 MAX 80,800 MIN 727 CFSM 3.41 IN 46.29

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 (0.8 km) downstream from Little Opossum Creek and bridge on State Highway 13, 1.3 miles (2.1 km) north of Flat Woods, 3.9 miles (6.3 km) upstream from Sinking Creek, and at mile 58.7 (94.4 km).

DRAINAGE AREA.--447 sq mi (1,158 sq km).

PERIOD OF RECORD.--May 1920 to current year.

GAGE.--Water-stage recorder. Datum of gage is 513.58 ft (156.539 m) above mean sea level. Prior to May 27, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--53 years, 726 cfs (20.56 cu m/s), 22.06 in/yr (560 mm/yr).

EXTREMES.--Current year: Maximum discharge, 42,000 cfs (1,190 cu m/s) Mar. 16, gage height, 26.83 ft (8.178 m); minimum, 233 cfs (6.60 cu m/s) Oct. 14.
Period of record: Maximum discharge, 90,000 cfs (2,550 cu m/s) Feb. 13, 1948, gage height, 32.0 ft (9.75 m), from high-water mark in gage house, from rating curve extended above 50,000 cfs (1,420 cu m/s) on basis of slope-area and contracted-opening measurements of peak flow and rainfall-runoff study; minimum, 65 cfs (1.84 cu m/s) 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), WRD Tenn. 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,250	935	1,500	3,510	1,270	536	2,070	1,700	1,130	382	438	302
2	1,210	1,040	1,260	2,150	1,550	602	1,770	1,420	987	402	371	298
3	855	1,420	1,090	1,720	1,490	936	1,580	3,950	866	529	327	292
4	665	1,280	1,000	2,070	1,280	999	1,680	3,820	779	1,060	307	286
5	550	1,050	900	2,090	1,140	1,010	1,720	2,310	757	832	293	285
6	462	880	840	1,720	1,350	1,020	1,440	1,780	1,120	598	283	293
7	407	2,120	771	1,500	1,680	2,020	1,410	1,520	1,570	479	275	312
8	363	4,020	935	1,360	3,860	3,600	2,310	1,490	1,140	510	270	307
9	334	2,320	6,270	1,160	6,380	2,240	2,350	1,780	980	505	284	306
10	302	1,620	12,300	1,020	3,070	1,720	2,040	1,370	825	471	303	294
11	263	1,270	9,870	931	2,040	3,600	1,730	1,190	734	551	284	297
12	248	1,040	3,970	860	1,640	6,130	1,510	1,070	680	508	488	294
13	239	960	3,060	792	1,460	2,600	1,330	960	815	415	1,120	299
14	236	955	2,850	748	1,780	1,850	1,170	880	727	385	1,060	922
15	251	825	4,280	744	2,140	11,400	1,040	810	720	436	645	506
16	257	730	5,860	738	1,820	40,100	958	752	664	1,060	469	374
17	263	650	3,100	698	1,530	25,300	889	728	615	1,070	410	334
18	740	585	2,100	660	1,330	5,790	875	701	561	880	389	316
19	4,240	750	1,720	656	1,200	2,970	1,220	674	536	648	377	307
20	3,650	1,410	1,660	774	1,070	2,270	6,000	843	642	540	375	304
21	1,750	1,340	1,560	969	950	2,140	13,900	966	653	471	364	300
22	1,250	1,140	1,430	3,020	860	1,860	11,000	741	550	425	346	295
23	995	985	1,290	3,050	791	1,560	7,000	730	493	391	335	291
24	865	855	1,140	1,980	722	1,390	4,000	771	470	362	326	302
25	750	905	1,010	1,550	670	1,610	3,300	706	452	362	318	320
26	665	1,340	932	1,380	629	2,110	3,000	644	433	392	325	311
27	655	1,340	868	1,660	594	1,860	2,800	4,530	417	477	317	292
28	895	1,830	805	1,680	564	1,670	3,100	10,900	417	384	309	286
29	955	2,320	754	1,630	------	1,570	2,600	2,910	405	329	303	283
30	860	1,850	800	1,490	------	1,980	2,100	1,760	378	317	300	295
31	910	------	2,770	1,320	------	2,120	------	1,350	------	398	303	------
TOTAL	28,335	39,765	78,695	45,630	44,860	136,563	87,892	55,756	21,516	16,569	12,314	9,903
MEAN	914	1,326	2,539	1,472	1,602	4,405	2,930	1,799	717	534	397	330
MAX	4,240	4,020	12,300	3,510	6,380	40,100	13,900	10,900	1,570	1,070	1,120	922
MIN	236	585	754	656	564	536	875	644	378	317	270	283
CFSM	2.04	2.97	5.68	3.29	3.58	9.85	6.55	4.02	1.60	1.19	.89	.74
IN.	2.36	3.31	6.55	3.80	3.73	11.36	7.31	4.64	1.79	1.38	1.02	.82

CAL YR 1972 TOTAL 335,143 MEAN 916 MAX 12,300 MIN 156 CFSM 2.05 IN 27.89
WTR YR 1973 TOTAL 577,798 MEAN 1,583 MAX 40,100 MIN 236 CFSM 3.54 IN 48.09

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-19	1900	12.33	6,000	03-12	0200	15.55	9,460
11-08	0600	10.60	4,560	03-16	0700	26.83	42,000
12-10	2300	18.69	14,000	04-21	Unknown	Unknown	Unknown
12-16	0800	12.87	6,480	05-03	1900	11.41	5,170
02-09	0400	13.74	7,340	05-28	0400	19.51	15,500

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 (46 m) south of State Highway 20, 0.1 mile (0.2 km) upstream from Edwards Branch, 7.1 miles (11.4 km) east of Linden, and 11 miles (17.7 km) northwest of Hohenwald.

DRAINAGE AREA.--10.1 sq mi (26.2 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 573 ft (174.7 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 13.7 cfs (0.388 cu m/s), 18.42 in/yr (468 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,870 cfs (138 cu m/s) Dec. 10, gage height, 9.82 ft (2.993 m), from floodmarks, from rating curve extended as explained below; minimum daily, 2.8 cfs (0.08 cu m/s) Oct. 10, 11.
Period of record: Maximum discharge, 4,870 cfs (138 cu m/s) Dec. 10, 1972, gage height, 9.82 ft (2.993 m) from floodmarks, from rating curve extended above 365 cfs (10.3 cu m/s) on basis of contracted-opening measurements at gage heights 5.30 ft (1.615 m) and 6.02 ft (1.835 m) and slope-area measurement at gage height 9.82 ft (2.993 m); minimum, 0.50 cfs (0.014 cu m/s) Feb. 14, 1968, caused by construction 0.5 mile (0.8 km) upstream.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	7.3	18	38	15	6.1	26	20	10	5.4	5.5	4.0
2	3.7	19	13	25	14	19	25	37	9.3	7.3	5.0	3.9
3	3.5	16	10	27	13	17	24	149	8.4	6.4	4.9	3.8
4	3.3	13	9.0	24	11	17	23	42	7.7	7.3	4.7	3.7
5	3.2	9.4	8.0	21	13	15	20	27	8.4	6.3	4.7	3.7
6	3.0	7.6	18	16	19	26	19	21	8.4	5.4	4.6	3.8
7	3.0	213	12	12	30	81	28	18	7.1	5.6	4.7	4.0
8	2.9	77	167	10	80	41	30	17	6.8	5.4	4.5	4.4
9	2.9	28	440	9.0	32	25	32	14	6.5	5.7	4.2	4.1
10	2.8	16	1,100	8.3	21	17	29	13	6.3	7.3	4.1	3.8
11	2.8	9.6	118	8.1	17	39	26	12	6.3	6.3	4.0	3.9
12	2.9	6.6	57	7.9	14	31	24	11	16	5.2	5.2	5.0
13	3.0	12	48	7.6	18	23	21	10	10	5.1	8.0	7.0
14	3.7	8.8	56	7.8	26	25	19	9.3	8.6	5.2	6.6	5.2
15	3.5	7.7	200	8.8	21	275	18	9.0	7.7	6.3	6.0	4.7
16	3.3	6.7	75	10	18	413	18	8.7	7.1	7.9	5.6	4.5
17	3.7	5.4	39	8.0	16	119	17	8.8	6.6	6.2	5.2	4.3
18	280	5.7	26	7.0	14	53	21	8.2	6.3	5.2	5.0	4.1
19	258	20	25	7.8	13	36	270	9.3	6.3	4.9	4.8	3.9
20	23	18	21	9.6	12	34	476	8.6	6.7	4.9	4.7	3.8
21	11	15	20	20	11	28	65	7.6	5.9	4.9	4.5	3.7
22	8.5	11	17	45	10	25	41	7.6	5.6	4.6	4.4	3.6
23	7.1	7.5	15	26	9.8	24	70	9.4	5.6	4.6	4.3	3.6
24	4.6	5.8	13	17	9.2	24	62	8.9	5.6	4.6	4.2	3.7
25	3.7	15	11	13	8.6	29	45	7.5	5.6	4.4	4.1	4.0
26	3.2	12	10	15	8.2	28	50	7.2	5.5	5.8	4.5	3.8
27	9.7	20	9.0	17	7.6	27	65	44	5.7	4.6	4.3	3.6
28	8.1	100	8.2	15	6.9	26	41	28	6.0	4.4	4.1	3.6
29	7.3	50	7.7	14	------	27	30	20	5.5	6.3	4.0	3.8
30	7.5	27	31	13	------	26	23	15	5.5	6.8	4.4	3.7
31	8.8	------	61	12	------	28	------	12	------	6.3	4.1	------
TOTAL	696.3	770.1	2,662.9	479.9	488.3	1,604.1	1,658	620.1	217.0	176.6	148.9	122.7
MEAN	22.5	25.7	85.9	15.5	17.4	51.7	55.3	20.0	7.23	5.70	4.80	4.09
MAX	280	213	1,100	45	80	413	476	149	16	7.9	8.0	7.0
MIN	2.8	5.4	7.7	7.0	6.9	6.1	17	7.2	5.5	4.4	4.0	3.6
CFSM	2.23	2.54	8.51	1.53	1.72	5.12	5.48	1.98	.72	.56	.48	.41
IN.	2.56	2.84	9.81	1.77	1.80	5.91	6.11	2.28	.80	.65	.55	.45

CAL YR 1972 TOTAL 7,500.0 MEAN 20.5 MAX 1,100 MIN 1.9 CFSM 2.03 IN 27.62
WTR YR 1973 TOTAL 9,644.9 MEAN 26.4 MAX 1,100 MIN 2.8 CFSM 2.61 IN 35.52

PEAK DISCHARGE (BASE, 750 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	0200	5.31	885	03-16	0155	5.30	880
12-10	0100	9.82	4,870	04-19	2240	7.38	2,180

NOTE.--No gage-height record Jan. 16 to Feb. 27.

03604500 Buffalo River near Lobelville, Tenn.

LOCATION.--Lat 35°48'46", long 87°47'51", Perry County, on right bank 30 ft (9 m) upstream from Standing Rock Bridge, 1.4 miles (2.3 km) downstream from bridge on State Highway 13, 3 miles (5 km) north of Lobelville, 13 miles (21 km) downstream from Cane Creek, and at mile 17.7 (28.5 km).

DRAINAGE AREA.--707 sq mi (1,831 sq km).

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 (122.840 m) above mean sea level. Nov. 1, 1927, to May 31, 1934, nonrecording gage 40 ft (12 m) downstream at same datum.

AVERAGE DISCHARGE.--46 years, 1,137 cfs (32.20 cu m/s), 21.84 in/yr (555 mm/yr).

EXTREMES.--Current year: Maximum discharge, 43,200 cfs (1,220 cu m/s) Mar. 17, gage height, 19.39 ft (5.910 m); minimum, 401 cfs (11.4 cu m/s) Sept. 29, 30.

Period of record: Maximum discharge, 100,000 cfs (2,830 cu m/s) Feb. 14, 1948, gage height, 23.76 ft (7.242 m) from high-water mark in gage house, from rating curve extended above 40,000 cfs (1,130 cu m/s) on basis of slope-area measurement of peak flow; minimum, 135 cfs (3.82 cu m/s) Aug. 18, 1953, caused by regulation upstream at unknown location; minimum discharge unaffected by regulation, 142 cfs (4.02 cu m/s) 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 (6.64 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,400	1,390	2,830	3,820	2,090	951	2,860	2,670	2,160	686	725	494
2	2,460	1,500	2,300	4,310	2,060	957	2,740	2,360	1,780	676	734	470
3	1,600	1,830	1,930	3,080	2,190	1,270	2,420	4,350	1,540	694	670	462
4	1,210	2,030	1,670	2,770	2,070	1,470	2,260	6,940	1,370	782	615	450
5	1,010	1,870	1,500	2,950	1,850	1,540	2,260	5,640	1,260	1,140	580	446
6	875	1,590	1,480	2,830	2,110	1,530	2,210	3,490	1,300	1,090	552	446
7	769	2,610	1,430	2,450	2,550	1,750	2,060	2,750	1,490	930	533	454
8	692	5,740	1,650	2,170	4,400	3,230	2,410	2,430	1,810	810	517	478
9	629	5,640	6,440	1,930	7,290	4,140	3,140	2,290	1,520	783	524	474
10	575	3,630	19,400	1,680	8,540	3,060	3,160	2,330	1,360	813	514	470
11	530	2,540	24,200	1,500	4,650	2,930	2,780	1,980	1,220	842	531	454
12	481	2,000	14,500	1,370	3,060	4,970	2,440	1,760	1,140	826	538	450
13	445	1,680	7,410	1,280	2,520	7,580	2,150	1,590	1,220	794	711	462
14	427	1,790	4,690	1,200	2,430	3,810	1,910	1,450	1,290	721	1,100	628
15	428	1,630	5,770	1,170	2,640	5,790	1,710	1,350	1,170	689	1,210	785
16	421	1,430	7,580	1,150	2,830	18,800	1,570	1,270	1,120	796	1,040	714
17	436	1,270	8,160	1,130	2,500	39,500	1,470	1,210	1,050	1,180	858	558
18	1,860	1,150	4,750	1,110	2,180	22,900	1,410	1,170	981	1,260	748	490
19	8,390	1,270	3,230	1,100	1,930	9,420	2,000	1,120	932	1,150	680	458
20	7,940	1,730	2,780	1,080	1,740	4,420	10,800	1,130	1,010	982	620	430
21	5,780	2,110	2,530	1,370	1,560	3,470	18,000	1,260	1,030	868	595	432
22	2,800	2,010	2,330	3,490	1,420	3,060	13,900	1,290	989	786	580	415
23	2,020	1,740	2,120	4,600	1,320	2,640	6,080	1,200	910	724	550	404
24	1,620	1,510	1,920	4,150	1,230	2,300	5,710	1,220	844	677	525	404
25	1,380	1,450	1,710	2,910	1,150	2,210	5,670	1,180	805	639	510	450
26	1,210	1,630	1,540	2,430	1,090	2,440	4,830	1,110	774	638	500	443
27	1,160	1,930	1,420	2,350	1,040	2,750	4,680	2,140	754	652	510	426
28	1,320	2,970	1,330	2,530	991	2,540	4,820	6,350	757	688	500	404
29	1,430	3,760	1,250	2,600	------	2,340	4,130	11,700	725	656	480	401
30	1,430	3,570	1,230	2,480	------	2,310	3,220	4,570	705	658	470	401
31	1,380	------	2,120	2,270	------	2,710	------	2,580	------	705	482	------
TOTAL	55,108	67,000	143,200	71,260	71,431	168,788	124,800	83,880	35,016	25,335	19,702	14,253
MEAN	1,778	2,233	4,619	2,299	2,551	5,445	4,160	2,706	1,167	817	636	475
MAX	8,390	5,740	24,200	4,600	8,540	39,500	18,000	11,700	2,160	1,260	1,210	785
MIN	421	1,150	1,230	1,080	991	951	1,410	1,110	705	638	470	401
CFSM	2.51	3.16	6.53	3.25	3.61	7.70	5.88	3.83	1.65	1.16	.90	.67
IN.	2.90	3.53	7.53	3.75	3.76	8.88	6.57	4.41	1.84	1.33	1.04	.75

CAL YR 1972 TOTAL 566,517 MEAN 1,548 MAX 24,200 MIN 294 CFSM 2.19 IN 29.81
WTR YR 1973 TOTAL 879,773 MEAN 2,410 MAX 39,500 MIN 401 CFSM 3.41 IN 46.29

PEAK DISCHARGE (BASE, 5,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	2100	12.89	9,710	03-13	0800	12.38	8,770
11-09	0700	10.59	6,030	03-17	0600	19.39	43,200
12-10	2100	18.71	37,400	04-21	1900	15.98	20,400
12-17	0800	12.25	8,540	05-04	1900	11.61	7,460
02-10	1000	12.53	9,030	05-29	0900	14.25	13,400

NOTE.--No gage-height record Aug. 20 to Sept. 30.

03605555 Trace Creek above Denver, Tenn.
(Prior to Jan. 1, 1973, 03605550 Trace Creek near Denver, Tenn.)

LOCATION.--Lat 36°03'08", long 87°54'27", Humphreys County, on left bank at bridge on U.S. Highway 70, 1.0 mile (1.6 km) east of Denver, 3.9 miles (6.3 km) northeast of New Johnsonville, and at mile 4.2 (6.8 km). Prior to Jan. 1, 1973, at site 1.1 miles (1.8 km) upstream.

DRAINAGE AREA.--31.9 sq mi (82.6 sq km). Prior to Jan. 1, 1973, 30.4 sq mi (78.7 sq km).

PERIOD OF RECORD.--October 1963 to current year. Published as "near Denver" prior to October 1972.

GAGE.--Water-stage recorder. Datum of gage is 377.05 ft (114.925 m) above mean sea level. Prior to Jan. 1, 1973, at site 1.1 miles (1.8 km) upstream. Oct. 22 to Nov. 6, 1963, at different datum and Nov. 7, 1963, to Dec. 31, 1972, at datum 12.47 ft (3.801 m) higher.

AVERAGE DISCHARGE.--10 years, 46.6 cfs (1.320 cu m/s), 20.08 in/yr (510 mm/yr).

EXTREMES.--Current year: Maximum discharge 3,460 cfs (98.0 cu m/s) Apr. 19, gage height, 12.43 ft (3.789 m), from rating curve extended above 2,200 cfs (62.3 cu m/s); minimum, 7.5 cfs (0.21 cu m/s).
Period of record: Maximum discharge, 3,640 cfs (103 cu m/s) May 13, 1967, gage height, 9.08 ft (2.768 m), site and datum then in use, from rating curve extended above 2,600 cfs; maximum gage height, 12.43 ft (3.789 m) Apr. 19, 1973; minimum discharge, 3.0 cfs (0.085 cu m/s) Aug. 9, 13, 1969.
Maximum stage since 1886, 14 ft (4.3 m) January 1937, discharge, 5,500 cfs (156 cu m/s) from reports of Tennessee Valley Authority.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	86	69	100	130	46	73	203	55	19	11	11
2	33	289	59	81	128	48	65	472	45	18	11	11
3	27	145	52	94	109	66	60	166	38	19	10	9.9
4	27	96	52	118	96	58	64	116	33	18	10	9.9
5	24	74	46	90	88	62	56	94	35	17	9.9	9.9
6	21	64	98	80	284	60	50	87	36	17	9.9	11
7	19	505	78	72	196	216	99	86	32	16	9.9	13
8	18	185	350	68	669	120	109	97	32	16	9.9	12
9	16	116	1,200	64	258	90	102	78	29	16	9.6	15
10	14	90	600	59	168	76	82	73	66	15	9.6	13
11	14	71	300	54	132	437	72	71	36	15	20	12
12	13	59	210	50	109	185	64	64	26	16	17	11
13	13	94	190	47	166	124	56	59	26	14	14	11
14	13	123	170	45	238	204	50	53	32	13	15	12
15	12	80	350	48	174	666	48	47	47	14	13	11
16	12	66	250	48	134	864	49	42	33	14	12	10
17	20	56	190	46	109	434	50	36	27	15	12	9.6
18	35	52	140	37	96	212	520	32	26	12	16	9.2
19	52	303	110	42	88	138	1,620	30	37	11	14	8.9
20	42	156	93	40	78	158	253	28	27	11	12	8.5
21	36	102	85	313	72	148	152	25	26	11	12	8.5
22	32	78	77	331	67	102	196	32	27	12	12	8.5
23	52	65	70	182	64	81	180	53	23	11	12	8.3
24	50	53	64	136	60	70	158	60	21	11	11	8.3
25	41	76	60	109	55	72	185	49	20	11	11	8.5
26	37	78	56	144	53	77	176	46	78	11	14	8.3
27	56	64	54	185	52	72	124	166	32	12	12	8.0
28	70	166	49	164	48	64	97	90	26	11	12	8.0
29	53	107	47	170	------	62	81	49	26	11	11	9.2
30	47	82	73	136	------	61	75	45	21	11	10	9.9
31	112	------	187	114	------	78	------	71	------	11	10	------
TOTAL	1,052	3,581	5,429	3,267	3,921	5,151	4,966	2,620	1,018	429	372.8	304.4
MEAN	33.9	119	175	105	140	166	166	84.5	33.9	13.8	12.0	10.1
MAX	112	505	1,200	331	669	864	1,620	472	78	19	20	15
MIN	12	52	46	37	48	46	48	25	20	11	9.6	8.0
CFSM	1.12	3.91	5.76	3.29	4.39	5.20	5.20	2.65	1.06	.43	.38	.32
IN.	1.29	4.38	6.64	3.81	4.57	6.01	5.79	3.06	1.19	.50	.43	.35

CAL YR 1972 TOTAL 24,883.1 MEAN 68.0 MAX 1,200 MIN 7.2 CFSM 2.24 IN 30.45
WTR YR 1973 TOTAL 32,111.2 MEAN 88.0 MAX 1,620 MIN 8.0 CFSM 2.79 IN 38.02

PEAK DISCHARGE (BASE, 1,850 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-09	Unknown	Unknown	Unknown	04-19	0445	12.43	3,460
03-15	0145	5.78	2,300				

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 (213 m) downstream from bridge on U.S. Highway 70, 0.6 mile (1.0 km) upstream from Cherry Creek, 0.9 mile (1.4 km) east of Bruceton, and at mile 31.6 (50.8 km).

DRAINAGE AREA.--205 sq mi (531 sq km).

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 380.58 ft (116.001 m) above mean sea level. Prior to Mar. 1, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 278 cfs (7.873 cu m/s), 18.42 in/yr (468 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,640 cfs (216 cu m/s) Apr. 21, gage height, 14.88 ft (4.535 m); minimum, 78 cfs (2.21 cu m/s) Oct. 12.

Period of record: Maximum discharge, 17,000 cfs (481 cu m/s) Jan. 21, 1935, gage height, 16.16 ft (4.926 m) from graph based on gage readings, from rating curve extended above 9,200 cfs (261 cu m/s); minimum, 28 cfs (0.79 cu m/s) Aug. 17-19, 22, Sept. 1, 1943.

Flood in March 1897 reached a stage of 18 ft (5.5 m), discharge, 25,000 cfs (708 cu m/s), and flood in March 1919 reached a stage of 17 ft (5.2 m), discharge, 21,000 cfs (595 cu m/s), from reports by Tennessee Valley Authority.

REMARKS.--Records good. Records of 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471	567	286	693	468	192	538	365	836	152	450	124
2	234	798	240	387	545	254	347	1,500	272	146	195	123
3	133	627	222	422	390	417	275	1,700	192	140	154	122
4	130	458	245	724	274	291	355	1,870	167	207	152	121
5	121	265	253	645	258	458	282	1,640	183	177	151	120
6	107	227	569	375	1,050	324	242	562	317	144	150	135
7	100	1,580	487	268	1,100	1,260	423	578	183	131	149	166
8	94	1,910	1,360	281	2,120	1,030	742	1,590	155	130	149	144
9	88	1,740	3,500	265	2,280	733	665	1,210	148	130	148	326
10	84	1,220	4,700	244	2,060	324	479	782	141	225	138	267
11	81	446	3,490	222	930	1,630	316	359	176	312	137	148
12	79	285	2,550	200	399	1,780	267	337	434	257	168	137
13	81	546	2,090	192	952	1,650	236	264	553	143	401	135
14	85	880	1,230	212	1,300	830	219	230	530	132	648	145
15	110	672	1,570	295	1,210	1,120	212	210	621	267	275	135
16	93	366	1,210	265	762	2,040	243	201	892	186	158	134
17	95	254	988	238	363	2,520	258	197	358	176	141	133
18	1,060	226	452	244	303	2,470	319	182	180	145	137	132
19	2,080	1,300	413	419	291	1,680	946	176	257	138	137	131
20	2,830	1,210	487	281	270	740	4,950	173	585	142	136	130
21	2,510	1,040	375	1,620	243	511	6,290	164	516	135	135	129
22	1,090	548	305	3,120	230	359	3,010	159	257	132	134	128
23	616	298	261	3,420	228	310	2,360	268	168	130	133	127
24	574	243	245	2,280	215	292	2,120	341	155	148	132	126
25	395	468	230	648	208	413	2,600	218	151	518	131	125
26	228	562	227	638	206	518	2,210	176	147	285	130	124
27	510	393	220	740	198	420	1,880	820	186	154	129	123
28	764	710	210	751	192	317	1,160	778	574	137	128	122
29	634	630	200	659	------	299	526	548	423	135	127	121
30	366	438	295	466	------	292	358	242	208	207	126	120
31	719	------	782	333	------	529	------	220	------	331	125	------
TOTAL	16,562	20,907	29,692	21,547	19,045	26,003	34,828	18,060	9,965	5,792	5,604	4,253
MEAN	534	697	958	695	680	839	1,161	583	332	187	181	142
MAX	2,830	1,910	4,700	3,420	2,280	2,520	6,290	1,870	892	518	648	326
MIN	79	226	200	192	192	192	212	159	141	130	125	120
CFSM	2.60	3.40	4.67	3.39	3.32	4.09	5.66	2.84	1.62	.91	.88	.69
IN.	3.01	3.79	5.39	3.91	3.46	4.72	6.32	3.28	1.81	1.05	1.02	.77

CAL YR 1972 TOTAL 156,569 MEAN 428 MAX 11,200 MIN 60 CFSM 2.09 IN 28.41
WTR YR 1973 TOTAL 212,258 MEAN 582 MAX 6,290 MIN 79 CFSM 2.84 IN 38.52

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-20	1715	12.93	3,050	02-08	1915	12.23	2,350
11-07	2345	11.97	2,130	03-17	2345	12.59	2,680
12-10	1630	14.00	5,150	04-21	0300	14.88	7,640
01-23	0600	13.52	3,970				

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 (1,200 m) downstream from Kentucky Dam, 2.3 miles (3.7 km) upstream from Shadie Creek, 16 miles (26 km) east of Paducah, and at mile 21.6 (34.8 km).

DRAINAGE AREA.--40,200 sq mi (104,100 sq km), 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 (87.279 m) above mean sea level. Prior to October 1939, various types of gages between 75 and 80 miles (121 and 129 km) upstream at datums from 33.16 to 34.67 ft (10.107 to 10.567 m) higher. October 1939 to September 1942, water stage recorder 16.4 miles (26.4 km) downstream at present datum. Auxiliary water stage recorder 16.4 miles (26.4 km) 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 (1,814 cu m/s), unadjusted; 8 years (1965-73, since opening of Barkley-Kentucky Canal), 62,180 cfs (1,761 cu m/s), unadjusted.

EXTREMES.--Current year: Maximum discharge, 359,000 cfs (10,200 cu m/s) Mar. 19, maximum gage height, 50.47 ft (15.383 m) Mar. 25; minimum daily, 23,900 cfs (677 cu m/s) Nov. 18; minimum gage height, 13.96 ft (4.255 m) Oct. 13.
Period of record: Maximum discharge, 500,000 cfs (14,200 cu m/s) Feb. 17, 1948; maximum gage height, 62.43 ft (19.029 m) Feb. 2, 1937, at Gilbertsville, present datum; minimum daily discharge, 60 cfs (1.70 cu m/s) May 16, 1961.
Maximum discharge since closure of Kentucky Dam on Aug. 30, 1944, 500,000 cfs (14,200 cu m/s) Feb. 17, 1948.
Maximum discharge since opening of Barkley-Kentucky Canal in June 1966, 359,000 cfs (10,200 cu m/s) Mar. 19, 1973.

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. 131 and basic data release for adjoining states, 1973). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57,600	46,800	122,000	169,000	138,000	44,300	237,000	108,000	126,000	54,500	57,400	40,100
2	43,500	41,800	122,000	169,000	135,000	45,400	215,000	113,000	123,000	59,100	57,200	27,800
3	42,200	43,200	119,000	171,000	132,000	48,100	195,000	120,000	134,000	62,600	46,700	32,000
4	42,000	42,200	117,000	173,000	132,000	54,100	190,000	129,000	141,000	57,000	45,000	40,600
5	42,800	41,300	115,000	180,000	122,000	54,500	180,000	130,000	138,000	56,500	43,700	54,600
6	42,900	41,600	110,000	180,000	111,000	53,900	162,000	128,000	150,000	55,900	44,000	44,200
7	44,800	44,500	93,200	180,000	110,000	53,000	150,000	131,000	163,000	53,800	44,700	43,800
8	39,900	46,000	97,100	180,000	122,000	50,500	146,000	133,000	173,000	53,900	45,100	39,800
9	37,900	45,200	150,000	177,000	140,000	69,000	146,000	133,000	176,000	55,000	43,800	33,700
10	37,400	45,900	182,000	171,000	139,000	86,500	138,000	138,000	165,000	56,400	43,900	38,700
11	31,800	45,400	216,000	156,000	141,000	100,000	132,000	139,000	159,000	56,600	43,100	39,100
12	32,900	45,800	225,000	134,000	143,000	113,000	129,000	142,000	150,000	54,900	43,800	33,800
13	32,700	48,100	231,000	110,000	154,000	118,000	123,000	136,000	127,000	52,200	49,500	33,100
14	31,200	67,500	233,000	98,300	165,000	104,000	122,000	136,000	105,000	54,400	54,000	39,600
15	28,000	77,800	232,000	89,100	176,000	103,000	121,000	133,000	93,900	54,600	56,200	39,300
16	33,700	71,100	232,000	69,400	187,000	167,000	117,000	128,000	93,500	52,800	46,100	33,300
17	33,300	43,600	223,000	56,000	193,000	263,000	118,000	121,000	93,200	53,400	45,800	39,800
18	38,100	23,900	211,000	55,800	190,000	325,000	115,000	112,000	91,700	53,900	46,800	33,500
19	44,500	30,400	198,000	64,200	185,000	334,000	108,000	102,000	91,500	53,300	44,700	29,500
20	46,300	53,800	194,000	72,700	167,000	291,000	101,000	99,800	91,200	54,100	45,400	28,800
21	55,100	55,000	196,000	76,000	142,000	290,000	94,600	99,100	90,200	53,700	48,400	30,800
22	57,700	63,600	197,000	115,000	109,000	291,000	95,000	95,400	78,200	54,300	44,800	31,500
23	57,700	72,900	198,000	157,000	78,500	293,000	111,000	83,600	63,800	53,800	45,900	27,500
24	53,800	79,500	196,000	165,000	54,300	293,000	130,000	73,900	61,000	49,900	43,900	32,300
25	55,600	88,900	184,000	164,000	56,300	288,000	128,000	80,400	57,900	44,100	41,300	32,600
26	56,100	91,600	188,000	163,000	55,600	278,000	105,000	88,500	57,800	48,700	41,200	38,700
27	55,400	99,800	204,000	162,000	56,500	267,000	78,600	99,000	58,000	53,900	37,300	39,300
28	56,500	112,000	198,000	159,000	46,600	264,000	68,200	112,000	58,800	54,500	40,300	39,400
29	55,600	117,000	193,000	151,000	------	260,000	70,600	118,000	57,100	55,000	42,200	45,000
30	56,400	120,000	187,000	144,000	------	260,000	102,000	133,000	54,000	55,400	42,300	45,100
31	53,600	------	175,000	141,000	------	253,000	------	146,000	------	56,400	39,900	------
TOTAL	1,397.0M	1,846.2M	5,538.3M	4,252.5M	3,580.8M	5,514.3M	3,928.0M	3,640.7M	3,221.8M	1,684.6M	1,414.4M	1,107.3M
MEAN	45,060	61,540	178,700	137,200	127,900	177,900	130,900	117,400	107,400	54,340	45,630	36,910
MAX	57,700	120,000	233,000	180,000	193,000	334,000	237,000	146,000	176,000	62,600	57,400	54,600
MIN	28,000	23,900	93,200	55,800	46,600	44,300	68,200	73,900	54,000	44,100	37,300	27,500

CAL YR 1972 TOTAL 27,236,800 MEAN 74,420 MAX 233,000 MIN 20,600
WTR YR 1973 TOTAL 37,125,900 MEAN 101,700 MAX 334,000 MIN 23,900

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 (10.5 km) north of Sevierville, and at mile 32.3 (52.0 km). Drainage area, 4,541 sq mi (11,761 sq km). 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, 734,100 cfs-days (1,796 cu hm) May 30, elevation, 1,001.44 ft (305.239 m); minimum, 116,700 cfs-days (285.6 cu hm) Jan. 13, elevation, 940.83 ft (286.765 m). Extremes for period of record: Maximum contents, 760,000 cfs-days (1,860 cu hm) July 25, 1949, elevation, 1,001.79 ft (305.346 m); minimum after first filling, 1,000 cfs-days (2.447 cu hm) Jan. 16, 1956, elevation, 883.7 ft (269.35 m), estimated.
Reservoir formed by concrete main dam and 10 saddle dams. Spillway equipped with 11 radial gates, 32 ft (10 m) high by 40 ft (12 m) wide and 8 sluice gates 10 ft (3 m) high by 5.67 ft (2 m) wide. Closure of dam was made Feb. 19, 1943; water in reservoir first reached minimum pool elevation Feb. 25, 1943. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,002.00 ft (305.410 m) top of gates is 743,600 cfs-days (1,820 cu hm), of which 703,100 cfs-days (1,720 cu hm) is controlled storage above elevation 920.00 ft (280.416 m) 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 (140 m) upstream from South Holston Dam on South Fork Holston River, 7.0 miles (11.3 km) southeast of Bristol, Virginia-Tennessee, and at mile 49.8 (80.1 km). Drainage area, 703 sq mi (1,821 sq km). 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, 335,000 cfs-days (819.7 cu hm) Apr. 29, elevation, 1,729.87 ft (527.264 m); minimum, 248,000 cfs-days (608.8 cu hm) Jan. 17, elevation, 1,705.19 ft (519.742 m). Extremes for period of record: Maximum contents, 345,200 cfs-days (844.7 cu hm) May 25, 1972, elevation, 1,732.35 ft (528.020 m); minimum after first filling, 57,700 cfs-days (140.7 cu hm) Jan. 13, 1956, elevation, 1,614.15 ft (491.993 m).
Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft (40 m) in diameter with six piers 3 ft (1 m) wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft (10 m) in diameter. Closure of dam was made Nov. 20, 1950; water in reservoir first reached minimum pool elevation Jan. 25, 1951. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,742.00 ft (530.962 m), spillway crest, is 385,200 cfs-days (942.6 cu hm), of which 324,200 cfs-days (793.3 cu hm) is controlled storage above elevation 1,616.00 ft (492.557 m), 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 (8 km) east of Elizabethton, and at mile 36.7 (59.0 km). Drainage area, 468 sq mi (1,212 sq km). 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, 293,300 cfs-days (717.7 cu hm) May 29, elevation 1,961.05 ft (597.728 m); minimum, 229,800 cfs-days (562.3 cu hm) Nov. 27, elevation 1,940.32 ft (591.410 m). Extremes for period of record: Maximum contents, 293,300 cfs-days (717.7 cu hm) May 29, 1973, elevation 1,961.05 ft (597.728 m); minimum after first filling, 25,100 cfs-days (61.42 cu hm) Jan. 13, 1956, elevation, 1,813.47 ft (552.746 m).
Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft (40 m) in diameter with six piers 3 ft (1 m) wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft (10 m) in diameter. Closure of dam was made Dec. 1, 1948; water in reservoir first reached minimum pool elevation Dec. 31, 1948. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,975.00 (601.980 m) spillway crest, is 341,300 cfs-days (835.2 cu hm), of which 315,000 cfs-days (770.8 cu hm) is controlled storage above elevation 1,815.00 ft (553.212 m) 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 (1.1 km) northeast of Spurgeon, 1.3 miles (2.1 km) downstream from Watauga River, and at mile 18.6 (29.9 km). Drainage area, 1,840 sq mi (4,766 sq km). 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, 96,100 cfs-days (235.2 cu hm) May 28, elevation 1,384.35 ft (421.950 m); minimum, 48,700 cfs-days (119.2 cu hm) Jan. 14, elevation 1,355.91 ft (413.281 m). Extremes for period of record: Maximum contents, 99,100 cfs-days (242.5 cu hm) May 19, 1964, elevation, 1,384.99 ft (422.145 m); minimum after first filling, 21,300 cfs-days (52.12 cu hm) Jan. 23, 1956 elevation, 1,327.06 ft (404.488 m).
Reservoir is formed by gravity nonoverflow type concrete dam. Spillway is equipped with five radial gates, 35 ft (11 m) high by 35 ft (11 m) wide. Storage began Dec. 16, 1952; water in reservoir first reached minimum pool elevation Jan. 5, 1953. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,385.0 ft (422.15 m) top of gates is 97,500 cfs-days (238.6 cu hm), of which 74,800 cfs-days (183.0 cu hm) is controlled storage above elevation 1,330 ft (405.4 m) 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 (0.3 km) upstream from bridge on U.S. Highway 23, 4.5 miles (7.2 km) southeast of Kingsport, and at mile 8.2 (13.2 km). Drainage area, 1,903 sq mi (4,929 sq km). 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 (33.28 cu hm) Dec. 8, elevation, 1,263.00 ft (384.962 m); minimum, 11,400 cfs-days (27.90 cu hm) Oct. 6, elevation, 1,258.00 ft (383.438 m). Extremes for period of record: Maximum contents, 14,000 cfs-days (34.26 cu hm) Feb. 11, 1954, elevation, 1,263.80 ft (385.206 m), minimum after first filling 9,300 cfs-days (22.76 cu hm) Mar. 16, 1954, elevation, 1,252.32 ft (381.707 m).
Reservoir is formed by gravity nonoverflow type concrete dam. Spillway is equipped with five radial gates, 35 ft (11 m) high by 35 ft (11 m) wide. Storage began Oct. 27, 1953; water in reservoir first reached minimum pool elevation Dec. 8, 1953. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,263 ft (385.0 m), top of gages, is 13,600 cfs-days (33.28 cu hm), of which 2,200 cfs-days (5.383 cu hm) is controlled storage above elevation 1,258 ft (383.4 m), 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 (0.5 km) upstream from bridge on State Highway 92, 2.7 miles (4.3 km) upstream from Mill Spring Creek, 2.8 miles (4.5 km) north of Jefferson City, and at mile 52.3 (84.2 km). Drainage area, 3,429 sq mi (8,881 sq km). 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, 770,500 cfs-days (1,885 cu hm) May 30, elevation 1,074.47 ft (327.498 m); minimum, 266,000 cfs-days (650.9 cu hm) Jan. 18, elevation 1,029.84 ft (313.895 m). Extremes for period of record: Maximum contents, 779,400 cfs-days (1,907 cu hm) May 11, 1944, maximum elevation, 1,074.47 ft (327.498 m) May 30, 1973; minimum after first filling 48,400 cfs-days (118.4 cu hm) Jan. 7, 1954, elevation, 980.77 ft (298.939 m).
Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with nine radial gates 32 ft (10 m) high by 40 ft (12 m) wide. Storage began Dec. 5, 1941; water in reservoir first reached minimum pool elevation Jan. 6, 1942. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,075.0 ft (327.66 m) top of gates is 778,400 cfs-days (1,905 cu hm), of which 736,200 cfs-days (1,801 cu hm) is controlled storage above elevation 980.0 ft (298.70 m) minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

Reservoirs in Tennessee River basin--Continued

03499500 FORT LOUDOUN LAKE.--Lat 35°47'30", long 84°14'35", Loudon County, at Fort Loudoun Dam on Tennessee River, 1 mile (2 km) northeast of Lenoir City, and at mile 602.3 (969.1 km). Drainage area, 9,550 sq mi (24,730 sq km). 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, 191,000 cfs-days (467.4 cu hm) Mar. 16; maximum elevation, 814.00 ft (248.107 m) Mar. 17; minimum midnight contents, 143,000 cfs-days (349.9 cu hm) Dec. 5; minimum elevation, 806.92 ft (245.949 m) Mar. 1. Extremes for period of record: Maximum elevation, 815.00 ft (248.412 m) Sept. 11, 1943, May 14, 1945; minimum after first filling, 805.54 ft (245.529 m) Jan. 18, 1954. Contents based on backwater profile.

Reservoir formed by concrete dam with earth embankment. Spillway equipped with 14 radial gates 32 ft (10 m) high by 40 ft (12 m) wide. Closure of dam was made Aug. 2, 1943; water in reservoir first reached ordinary minimum pool elevation Sept. 4, 1943. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 815.00 ft (248.412 m) top of gates is 198,100 cfs-days (484.8 cu hm), of which 55,900 cfs-days (136.8 cu hm) is controlled flood storage above elevation 807.00 ft (245.974 m) minimum navigation pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03518200 CHILHOWEE LAKE.--Lat 35°32'43", long 84°03'02", Monroe County, at Chilhowee Dam on Little Tennessee River, 2.4 miles (3.9 km) southwest of Chilhowee, 2.6 miles (4.2 km) upstream from Citico Creek, 10.1 miles (16.2 km) downstream from Calderwood Dam, and at mile 33.6 (54.1 km). Drainage area, 1,977 sq mi (5,120 sq km). 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, 25,400 cfs-days (62.15 cu hm) May 28, elevation 874.60 ft (266.578 m); minimum, 21,800 cfs-days (53.34 cu hm) Jan. 14, elevation 870.47 ft (265.319 m). Extremes for period of record: Maximum contents, 25,400 cfs-days (62.15 cu hm) May 28, 1973, elevation 874.60 ft (266.578 m); minimum after first filling, 18,100 cfs-days (44.29 cu hm) May 18, 1963, elevation, 865.94 ft (263.938 m).

Reservoir is formed by concrete dam with rockfill and abutments. Spillway controlled by six radial gates 38 ft (12 m) high by 35 ft (11 m) wide. Closure of dam was made June 9, 1957. Storage above spillway crest, elevation, 836.0 ft (254.81 m) began Aug. 1, 1957; water in reservoir first reached minimum pool elevation Aug. 9, 1957. Total capacity at elevation 874.0 ft (266.40 m), top of gates is 24,800 cfs-days (60.68 cu hm), of which 3,400 cfs-days (8.320 cu hm) is controlled storage above elevation 870.0 ft (265.18 m) 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 (4.0 km) northwest of Norris, and at mile 79.8 (128.4 km). Drainage area, 2,912 sq mi (7,542 sq km). Period of record, June 1935 to current year. Water-stage recorder. Datum of gage is 0.11 ft (.034 m) above mean sea level. Gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 1,100,100 cfs-days (2,692 cu hm) May 30, elevation 1,024.21 ft (312.179 m); minimum, 540,800 cfs-days (1,323 cu hm) Jan. 18, elevation 984.81 ft (300.170 m). Extremes for period of record: Maximum contents, 1,236,700 cfs-days (3,026 cu hm) Feb. 11, 1937, elevation 1,031.21 ft (314.313 m); minimum after first filling, 75,500 cfs-days (184.7 cu hm) Jan. 24, 1956, elevation, 909.46 ft (277.203 m).

Reservoir is formed by concrete gravity dam with three drum gates 100 ft (30 m) wide by 14 ft (4 m) 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. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,034.1 ft (315.19 m) top of gates, is 1,286,600 cfs-days (3,148 cu hm), of which 1,140,400 cfs-days (2,791 cu hm) is controlled storage above elevation 930.11 ft (283.498 m) 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", Loudon-Roane County line, 9 miles (14 km) southwest of Oak Ridge, 19 miles (31 km) west of Knoxville, at river mile 23.1 (37.2 km) and 57 miles (92 km) below Norris Dam. Drainage area, 3,343 sq mi (8,658 sq km). Period of record, August 1962 to current year. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 64,900 cfs-days (158.8 cu hm), Mar. 16, elevation 796.45 ft (242.758 m); minimum, 48,000 cfs-days (117.4 cu hm), Jan. 27, elevation 790.25 ft (240.868 m). Extremes for period of record: Maximum contents, 64,900 cfs-days (158.8 cu hm), Mar. 16, 1973, elevation 796.45 ft (242.758 m); minimum after first filling, 3,900 cfs-days (9.543 cu hm) Apr. 13, 1963, elevation 754.81 ft (230.066 m).

Reservoir is formed by concrete gravity dam. Spillway is equipped with three radial gates, each 42 ft (13 m) high by 40 ft (12 m) wide. Dam completed and storage began in May 1963. Revised capacity table put into use Jan. 1, 1971. Total capacity of elevation 796 ft (242.6 m) top of gates, is 63,500 cfs-days (155.4 cu hm), of which 16,100 cfs-days (39.40 cu hm) is controlled storage above elevation 790.0 ft (240.79 m) minimum pool. Reservoir is used for navigation, 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 (10.4 km) southeast of Spring City, 72.4 miles (116.5 km) downstream from Fort Loudoun Dam, and at mile 529.9 (852.6 km). Drainage area, 17,310 sq mi (44,830 sq km), 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, 613,000 cfs-days (1,500 cu hm) Mar. 17; maximum elevation, 745.40 ft (227.198 m) Mar. 17; minimum midnight contents, 405,000 cfs-days (991.0 cu hm) Mar. 9; minimum elevation, 734.82 ft (223.973 m) Jan. 8. Extremes for period of record: Maximum elevation, 745.40 ft (227.198 m) Mar. 17, 1973; minimum after first filling, 733.44 ft (223.552 m) Mar. 20, 1945. Contents based on backwater profile.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with 20 radial gates 32 ft (10 m) high by 40 ft (12 m) wide, also one 2-section leaf trashway gate 16.3 ft (5 m) high by 24 ft (7 m) 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. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 745.0 ft (227.08 m) top of gates is 592,400 cfs-days (1,445 cu hm), of which 191,100 cfs-days (467.6 cu hm) is controlled flood storage above elevation 735.0 ft (224.03 m) 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 (22.2 km) east of Cleveland, and at mile 11.9 (19.1 km). Drainage area, 595 sq mi (1,541 sq km). 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 (2.100 m) above mean sea level. Gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents observed, 45,100 cfs-days (110.4 cu hm), Mar. 16, elevation 839.1 ft (255.76 m); minimum observed, 33,600 cfs-days (82.22 cu hm) Jan. 14, elevation 826.7 ft (251.98 m). Extremes for period of record: Maximum midnight contents observed, 53,300 cfs-days (130.4 cu hm) July 9, 1916; maximum midnight elevation observed, 840.2 ft (256.09 m) Feb. 10, 1946; minimum contents observed, 27,300 cfs-days (66.80 cu hm) Jan. 27, 1956, elevation, 817.7 ft (249.23 m); minimum midnight elevation observed, 814.8 ft (248.35 m) Dec. 14, 1934.

Reservoir is formed by concrete dam with 347 ft (110 m) of spillway. Spillway is equipped with four floodgates 6 ft (2 m) high by 20 ft (6 m) wide and 265 ft (80 m) of flashboards about 5.7 ft (2 m) high. Crest of spillway is 1.0 ft (0.3 m) lower under gates. Dam completed and storage began in 1911. Capacity of reservoir has been considerably reduced by silting. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 837.55 ft (255.285 m), about top of flashboards is 43,500 cfs-days (106.4 cu hm), of which 16,900 cfs-days (41.35 cu hm) is controlled above elevation 816.9 ft (248.99 m), minimum pool. Reservoir is used for power. Records furnished by Tennessee Valley Authority.

Reservoirs in Tennessee River basin--Continued

03566500 CHICKAMAUGA LAKE.--Lat 35°06'07", long 85°13'42", Hamilton County, at Chickamauga Dam on Tennessee River, 5.8 miles (9.3 km) northeast of Chattanooga, 58.9 miles (94.8 km) downstream from Watts Bar Dam, and at mile 471.0 (757.8 km). Drainage area, 20,790 sq mi (53,850 sq km), 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, 435,000 cfs-days (1,064 cu hm) Mar. 17; maximum elevation, 686.10 ft (209.123 m) Mar. 18; minimum midnight contents, 203,000 cfs-days (496.7 cu hm) Mar. 3; minimum elevation, 675.00 ft (205.740 m) Jan. 12. Extremes for period of record: Maximum elevation, 686.10 ft (209.123 m) Mar. 18, 1973; minimum, after first filling, 673.27 ft (205.213 m) 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 gages 40.44 ft (12 m) high by 40 ft (12 m) wide. Storage began Feb. 6, 1940; water in reservoir first reached minimum navigation pool elevation Mar. 10, 1940. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 685.44 ft (208.922 m) top of gates, is 372,600 cfs-days (911.8 cu hm), of which 175,000 cfs-days (428.2 cu hm) is controlled flood storage above elevation 675.0 ft (205.74 m), 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 (8 km) south of Jasper, 2 miles (3 km) upstream from Sequatchie River, 46.3 miles (74.5 km) downstream from Chickamauga Dam, and at mile 424.7 (683.3 km). Drainage area, 21,870 sq mi (56,640 sq km), 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, 199,000 cfs-days (487.0 cu hm) Mar. 17; maximum elevation, 634.15 ft (193.289 m) Mar. 2; minimum midnight contents, 114,000 cfs-days (279.0 cu hm) Oct. 15; minimum elevation, 631.90 ft (192.603 m) Oct. 9. Extremes for period of record: Maximum elevation, 634.99 ft (193.545 m) Apr. 19, 1969; minimum after first filling, 630.82 ft (192.274 m) 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 (181.36 m) is equipped with 10 radial gates, each 40 ft (12 m) by 40 ft (12 m). A trash gate, 5.5 ft (2 m) high by 15 ft (5 m) wide, is located between the spillway and powerhouse. Dam was completed and storage began on Dec. 14, 1967. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 635.0 ft (193.55 m) top of gates, is 127,200 cfs-days (311.3 cu hm), of which 16,200 cfs-days (39.64 cu hm) is useful controlled storage above elevation 632.0 ft (192.63 m), ordinary minimum. Reservoir is used for navigation and power. Records furnished by Tennessee Valley Authority.

03579000 WOODS RESERVOIR.--Lat 35°17'54", long 86°05'48", Franklin County, at Elk River Dam on Elk River, 1.2 miles (1.9 km) upstream from Spring Creek, 2.5 miles (4.0 km) northeast of Estill Springs, 6.8 miles (10.9 km) upstream from bridge on U. S. Highway 41-A, and at mile 170.0 (273.5 km). Drainage area, 263 sq mi (681 sq km). 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, 41,800 cfs-days (102.3 cu hm) Mar. 16, elevation 960.77 ft (292.843 m); minimum, 36,200 cfs-days (88.58 cu hm) Jan. 9, elevation 957.87 ft (291.959 m). Extremes for period of record: Maximum contents, 42,300 cfs-days (103.5 cu hm) Apr. 21, 22, 1956, elevation, 960.98 ft (292.907 m); minimum after first filling, 26,300 cfs-days (64.36 cu hm) Nov. 8-11, 1953, elevation, 951.93 ft (290.148 m).

Reservoir is formed by concrete gravity and earthfill type dam with riprapped embankments. Spillway equipped with three radial gates, 24 ft (7 m) high by 50 ft (15 m) wide and two sluice gates 6 ft (2 m) by 4 ft (1 m) wide. Closure of dam was made May 1, 1952; water in reservoir first reached minimum pool elevation Feb. 6, 1953. Total capacity at elevation 962.0 ft (293.22 m), surcharge pool, is 44,400 cfs-days (108.6 cu hm), of which 9,900 cfs-days (24.22 cu hm) is controlled storage above elevation 957.0 ft (291.69 m), 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 (0.6 km) upstream from bridge on State Highway 50, 9.5 miles (15.3 km) west of Winchester, and at mile 133.4 (214.6 km). Drainage area, 529 sq mi (1,370 sq km). 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, 296,300 cfs-days (725.0 cu hm) Mar. 17 elevation 893.24 ft (272.260 m); minimum, 154,000 cfs-days (376.8 cu hm) Oct. 15 elevation 862.24 ft (262.811 m). Extremes for period of record: Maximum contents, 296,300 cfs-days (725.0 cu hm) Mar. 17, 1973, elevation 893.24 ft (272.260 m); minimum after first filling 154,000 cfs-days (376.8 cu hm) Oct. 15, 1972, elevation 862.24 ft (262.811 m).

Reservoir formed by concrete with compacted rockfill impervious earth core embankments. Spillway equipped with three radial gates 42 ft (13 m) high by 40 ft (12 m) 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 at elevation 895 ft (272.8 m) top of gates, is 306,500 cfs-days (750.0 cu hm), of which 160,300 cfs-days (392.2 cu hm) is controlled storage above elevation 860 ft (262.1 m), 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 (2.4 km) north of town of Pickwick Dam, 6.1 miles (9.8 km) upstream from Lick Creek, 52.7 miles (84.8 km) downstream from Wilson Dam, and at mile 206.7 (332.6 km). Drainage area, 32,820 sq mi (85,000 sq km), 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, 625,000 cfs-days (1,529 cu hm) Mar. 17; maximum elevation, 418.48 ft (127.553 m) Mar. 18; minimum midnight contents, 359,000 cfs-days (878.5 cu hm) Feb. 25; minimum elevation, 408.03 ft (124.368 m) Feb. 26. Extremes for period of record: Maximum elevation, 419.49 ft (127.860 m) Mar. 30, 1944; minimum after first filling, 407.12 ft (124.090 m) 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 (12 m) high by 40 ft (12 m) 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. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 418.0 ft (127.41 m), top of gates, is 557,100 cfs-days (1,363 cu hm), of which 210,200 cfs-days (514.4 cu hm) is controlled flood storage above elevation 408.0 ft (124.36 m) minimum navigation pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

Reservoirs in Tennessee River basin--Continued

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 (36.0 km). Drainage area, 40,200 sq mi (104,100 sq km), 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, 2,955,000 cfs-days (7,231 cu hm) Mar. 22; maximum elevation, 369.01 ft (112.474 m) Mar. 28; minimum midnight contents, 1,029,000 cfs-days (2,518 cu hm) Oct. 9; minimum elevation, 353.75 ft (107.823 m) Feb. 8. Extremes for period of record: Maximum elevation, 369.01 ft (112.474 m) Mar. 28, 1973; minimum after first filling, 348.02 ft (106.076 m) Mar. 11, 1961. Contents based on backwater profile.

Reservoir is formed by concrete dam with 24 lift gates 50 ft (15 m) high by 40 ft (12 m) wide. Storage began Aug. 16, 1944, and final closure was Aug. 30, 1944. Water in reservoir reached minimum pool elevation Apr. 7, 1945. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 375.0 ft (114.30 m) top of gates is 3,090,000 cfs-days (7,561 cu hm), of which 2,020,700 cfs-days (4,945 cu hm) is controlled storage above 354.0 ft (107.90 m) 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 (2.82 km) long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 miles (3.5 km) 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 (3.181 cu hm), of which 900 cfs-days (2.202 cu hm) is controlled storage.

03517900 CALDERWOOD LAKE on Little Tennessee River at Calderwood, Tenn., with a total capacity of 20,800 cfs-days (50.90 cu hm) of which 2,060 cfs-days (5.041 cu hm) is controlled storage.

03562500 OCOEE NO. 3 LAKE on Ocoee River at Ocoee No. 3 Dam, 5.0 miles (8.0 km) west of Ducktown, Tenn., with a total capacity of 2,040 cfs-days (4.992 cu hm), of which 1,900 cfs-days (4.649 cu hm) 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 1972 TO SEPTEMBER 1973

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.....	969.34	330,800	-	1,717.72	290,400	-	1,942.90	237,200	-
Oct. 31.....	967.70	315,000	-15,800	1,715.17	281,600	-8,800	1,943.64	239,300	+2,100
Nov. 30.....	955.10	207,300	-107,700	1,709.83	263,700	-17,900	1,940.90	231,400	-7,900
Dec. 31.....	952.35	187,500	-19,800	1,714.56	279,500	+15,800	1,945.07	243,400	+12,000
CAL YR 1972	-	-	+66,900	-	-	+49,700	-	-	+13,100
Jan. 31.....	944.50	137,000	-50,500	1,706.77	253,800	-25,700	1,943.77	239,700	-3,700
Feb. 28.....	950.88	177,300	+40,300	1,708.27	258,600	+4,800	1,944.03	240,400	+700
Mar. 31.....	984.04	492,200	+314,900	1,726.15	320,500	+61,900	1,959.37	287,900	+47,500
Apr. 30.....	994.72	631,200	+139,000	1,729.70	334,300	+13,800	1,959.79	289,200	+1,300
May 31.....	1,000.89	724,800	+93,600	1,727.76	326,600	-7,700	1,960.35	291,000	+1,800
June 30.....	996.14	651,100	-73,700	1,725.85	319,400	-7,200	1,955.07	274,100	-16,900
July 31.....	993.20	610,600	-40,500	1,723.66	311,400	-8,000	1,949.68	257,200	-16,900
Aug. 31.....	979.96	443,700	-166,900	1,717.32	289,000	-22,400	1,942.10	234,900	-22,300
Sept. 30.....	965.48	294,500	-149,200	1,709.30	262,000	-27,000	1,942.30	235,500	+600
WTR YR 1973	-	-	-36,300	-	-	-28,400	-	-	-1,700
	03486800 Boone Lake			03487000 Fort Patrick Henry Lake			03493500 Cherokee Lake		
Sept. 30.....	1,378.08	83,100	-	1,260.26	12,400	-	1,052.64	479,700	-
Oct. 31.....	1,372.06	72,200	-10,900	1,259.45	12,000	-400	1,052.33	476,200	-3,500
Nov. 30.....	1,364.65	60,100	-12,100	1,259.67	12,100	+100	1,044.55	393,400	-82,800
Dec. 31.....	1,357.79	51,000	-9,100	1,261.47	12,900	+800	1,041.15	361,300	-32,100
CAL YR 1972	-	-	+1,700	-	-	+100	-	-	+108,800
Jan. 31.....	1,358.83	52,200	+1,200	1,259.99	12,300	-600	1,031.42	278,200	-83,100
Feb. 28.....	1,364.79	60,300	+8,100	1,261.64	13,000	+700	1,034.67	304,600	+26,400
Mar. 31.....	1,375.71	78,600	+18,300	1,260.14	12,300	-700	1,058.16	545,600	+241,000
Apr. 30.....	1,381.10	89,100	+10,500	1,260.44	12,500	+200	1,068.28	680,400	+134,800
May 31.....	1,383.15	93,500	+4,400	1,259.76	12,200	-300	1,074.25	767,200	+86,800
June 30.....	1,382.88	92,900	-600	1,261.24	12,800	+600	1,070.60	713,600	-53,600
July 31.....	1,382.44	92,000	-900	1,262.19	13,200	+400	1,067.48	669,100	-44,500
Aug. 31.....	1,380.48	87,900	-4,100	1,261.46	12,900	-300	1,058.49	549,700	-119,400
Sept. 30.....	1,377.58	82,100	-5,800	1,260.16	12,300	-600	1,047.23	420,600	-129,100
WTR YR	-	-	-1,000	-	-	-100	-	-	-59,100
	03499500 Fort Loudoun Lake‡			03518200 Chilhowee Lake			03532500 Norris Lake		
Sept. 30.....	812.36	175,000	-	873.54	24,400	-	996.31	676,000	-
Oct. 31.....	812.31	176,000	+1,000	872.58	23,600	-800	996.98	684,500	+8,500
Nov. 30.....	807.77	146,000	-30,000	873.04	24,000	+400	992.39	627,500	-57,000
Dec. 31.....	807.59	146,000	0	872.78	23,800	-200	994.46	652,800	+25,300
CAL YR 1972	-	-	+2,000	-	-	-400	-	-	+128,600
Jan. 31.....	807.60	147,000	+1,000	872.39	23,400	-400	987.10	566,000	-86,800
Feb. 28.....	807.59	146,000	-1,000	873.71	24,600	+1,200	993.67	643,100	+77,100
Mar. 31.....	807.85	149,000	+3,000	872.98	23,900	-700	1,011.60	890,400	+247,300
Apr. 30.....	812.69	181,000	+32,000	872.07	23,200	-700	1,019.32	1,015,100	+124,700
May 31.....	811.96	177,000	-4,000	873.73	24,600	+1,400	1,023.89	1,094,400	+79,300
June 30.....	812.50	180,000	+3,000	871.88	23,000	-1,600	1,018.56	1,002,300	-92,100
July 31.....	812.08	177,000	-3,000	872.78	23,800	+800	1,014.85	941,500	-60,800
Aug. 31.....	812.50	180,000	+3,000	873.55	24,400	+600	1,005.27	796,600	-144,900
Sept. 30.....	812.00	176,000	-4,000	873.36	24,300	-100	995.91	670,900	-125,700
WTR YR 1973	-	-	+1,000	-	-	-100	-	-	-5,100

‡ Contents based on backwater profile.

Reservoirs in Tennessee River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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.....	792.21	52,900	-	741.03	491,000	-	835.9	41,900	-
Oct. 31.....	792.48	53,600	+700	738.18	440,000	-51,000	835.2	41,200	-700
Nov. 30.....	794.14	58,000	+4,400	736.42	410,000	-30,000	831.1	37,300	-3,900
Dec. 31.....	792.23	52,900	-5,100	735.32	396,000	-14,000	828.0	34,600	-2,700
CAL YR 1972	-	-	-1,400	-	-	-1,000	-	-	0
Jan. 31.....	792.96	54,800	+1,900	735.60	418,000	+22,000	828.2	34,800	+200
Feb. 28.....	793.40	56,000	+1,200	735.55	416,000	-2,000	828.5	35,100	+300
Mar. 31.....	793.33	55,800	-200	737.20	445,000	+29,000	831.6	37,800	+2,700
Apr. 30.....	793.11	55,200	-600	742.06	532,000	+87,000	835.3	41,300	+3,500
May 31.....	794.22	58,300	+3,100	742.52	549,000	+17,000	835.3	41,300	0
June 30.....	793.83	57,200	-1,100	740.70	505,000	-44,000	833.6	39,700	-1,600
July 31.....	793.45	56,100	-1,100	740.08	496,000	-9,000	834.7	40,700	+1,000
Aug. 31.....	793.49	56,200	+100	740.96	511,000	+15,000	835.5	41,500	+800
Sept. 30.....	792.61	53,900	-2,300	740.75	505,000	-6,000	831.3	41,300	-200
WTR YR 1973	-	-	+1,000	-	-	+14,000	-	-	-600
	03566500 Chickamauga Lake‡			03570520 Nickajack Lake‡			03579000 Woods Reservoir		
Sept. 30.....	680.67	273,000	-	632.07	117,000	-	959.63	39,500	-
Oct. 31.....	678.20	239,000	-34,000	633.67	125,000	+8,000	958.58	37,500	-2,000
Nov. 30.....	676.22	215,000	-24,000	632.17	119,000	-6,000	958.17	36,700	-800
Dec. 31.....	675.56	212,000	-3,000	632.28	127,000	+8,000	958.25	36,900	+200
CAL YR 1972	-	-	+2,000	-	-	+6,000	-	-	+200
Jan. 31.....	675.72	210,000	-2,000	633.34	123,000	-4,000	957.95	36,300	-600
Feb. 28.....	675.55	215,000	+5,000	633.78	125,000	+2,000	958.02	36,400	+100
Mar. 31.....	677.30	238,000	+23,000	632.17	121,000	-4,000	959.60	39,500	+3,100
Apr. 30.....	682.37	319,000	+81,000	632.39	121,000	0	959.59	39,500	0
May 31.....	683.62	350,000	+31,000	632.26	134,000	+13,000	959.50	39,300	-200
June 30.....	682.42	316,000	-34,000	633.30	121,000	-13,000	959.56	39,400	+100
July 31.....	681.28	298,000	-18,000	633.57	123,000	+2,000	959.48	39,200	-200
Aug. 31.....	679.95	275,000	-23,000	633.78	124,000	+1,000	959.36	39,000	-200
Sept. 30.....	680.75	286,000	+11,000	632.20	115,000	-9,000	959.42	39,100	+100
WTR YR 1973	-	-	+13,000	-	-	-2,000	-	-	-400
	03580740 Tims Ford Lake			03593000 Pickwick Lake‡			03609000 Kentucky Lake‡		
Sept. 30.....	868.71	178,400	-	411.22	408,000	-	355.11	1,107,000	-
Oct. 31.....	863.92	160,100	-18,300	409.98	379,000	-29,000	354.71	1,073,000	-34,000
Nov. 30.....	872.57	194,000	+33,900	409.80	382,000	+3,000	357.60	1,297,000	+224,000
Dec. 31.....	874.22	201,000	+7,000	409.02	379,000	-3,000	355.37	1,223,000	-74,000
CAL YR 1972	-	-	+4,000	-	-	+19,000	-	-	+197,000
Jan. 31.....	876.20	209,600	+8,600	409.09	377,000	-2,000	354.80	1,177,000	-46,000
Feb. 28.....	877.27	214,300	+4,700	408.46	360,000	-17,000	354.34	1,094,000	-83,000
Mar. 31.....	883.59	244,400	+30,100	413.79	474,000	+114,000	367.75	2,400,000	+1,306,000
Apr. 30.....	885.77	255,500	+11,100	415.94	517,000	+43,000	366.68	2,198,000	-202,000
May 31.....	892.27	290,700	+35,200	416.10	528,000	+11,000	362.51	1,919,000	-279,000
June 30.....	887.08	262,300	-28,400	413.32	452,000	-76,000	358.25	1,374,000	-545,000
July 31.....	887.24	263,200	+900	412.30	431,000	-21,000	356.62	1,266,000	-108,000
Aug. 31.....	885.97	256,500	-6,700	412.12	428,000	-3,000	356.18	1,210,000	-56,000
Sept. 30.....	885.18	252,400	-4,100	410.90	402,000	-26,000	355.09	1,132,000	-78,000
WTR YR 1973	-	-	+74,000	-	-	-6,000	-	-	+25,000

‡ 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 (0.5 km) southwest of Huntingdon, 0.6 mile (1.0 km) downstream from Brier Creek, and 5.6 miles (9.0 km) upstream from mouth.

DRAINAGE AREA.--55.5 sq mi. (143.7 sq km).

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 (111.008 m) above sea level (Tennessee State Highway Department bench mark). Dec. 21, 1945, to Oct. 3, 1962, nonrecording gage at site 30 ft (9.1 m) downstream at same datum; Jan. 6, 1954, to Oct. 3, 1962, crest-stage gage at same site at datum 1.17 ft (0.356 m) higher.

AVERAGE DISCHARGE.--11 years, 103 cfs (2.917 cu m/s), 25.20 in/yr (640 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,450 cfs (126 cu m/s) Apr. 20, gage height, 12.35 ft (3.764 m); minimum, 29 cfs (0.82 cu m/s) Aug. 22.
Period of record: Maximum discharge, 8,350 cfs (236 cu m/s) Sept. 9, 1970, gage height, 13.96 ft (4.255 m) from rating curve extended above 3,600 cfs (102 cu m/s) on basis of contracted opening measurement of peak flow; minimum, 19 cfs (0.54 cu m/s) May 17, 1965.

REMARKS.--Records fair.

REVISIONS(WATER YEARS).--WSP 1920: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	280	84	170	160	100	120	145	405	40	72	31
2	54	396	71	95	130	590	95	706	208	39	39	32
3	69	341	68	130	100	260	75	698	68	40	36	31
4	119	108	93	210	80	95	88	234	55	42	34	32
5	72	80	86	160	65	350	74	92	69	50	33	33
6	53	97	358	100	290	200	68	80	61	39	33	52
7	46	740	187	75	250	130	197	209	51	38	32	43
8	43	1,160	880	85	630	1,000	324	493	48	38	36	39
9	40	342	2,960	80	520	660	200	278	46	42	39	50
10	38	110	1,300	75	300	190	129	90	44	63	33	34
11	38	80	653	70	150	110	92	83	121	69	32	34
12	38	65	296	60	90	80	83	74	226	38	36	38
13	42	263	484	55	200	100	72	59	75	36	40	36
14	53	433	311	65	700	500	67	52	73	39	114	38
15	52	135	470	75	400	1,100	65	48	53	41	41	34
16	41	80	377	65	125	1,800	72	47	48	38	35	32
17	42	66	113	55	90	900	71	46	45	38	34	32
18	875	70	90	60	84	600	152	44	43	35	33	32
19	2,030	673	145	120	84	320	560	43	88	60	32	33
20	574	758	144	65	80	170	3,110	42	68	83	32	34
21	109	204	105	370	73	130	856	40	48	36	31	40
22	72	99	87	1,700	70	95	359	42	44	35	30	34
23	146	78	79	1,100	70	75	823	78	41	45	31	32
24	80	68	76	470	64	70	570	63	40	71	31	32
25	64	260	72	160	62	150	338	47	40	92	33	32
26	59	218	68	120	62	120	318	42	40	41	32	31
27	247	108	64	180	60	100	343	322	55	38	31	32
28	324	330	60	200	66	85	135	310	98	36	31	38
29	112	169	57	160	------	75	92	82	44	35	31	70
30	95	101	100	110	------	70	78	61	41	96	31	37
31	442	------	220	70	------	150	------	94	------	94	32	------
TOTAL	6,271	7,912	10,158	6,510	5,055	10,375	9,626	4,744	2,386	1,527	1,160	1,098
MEAN	202	264	328	210	181	335	321	153	79.5	49.3	37.4	36.6
MAX	2,030	1,160	2,960	1,700	700	1,800	3,110	706	405	96	114	70
MIN	38	65	57	55	60	70	65	40	40	35	30	31
CFSM	3.64	4.76	5.91	3.78	3.26	6.04	5.78	2.76	1.43	.89	.67	.66
IN.	4.20	5.30	6.81	4.36	3.39	6.95	6.45	3.18	1.60	1.02	.78	.74

CAL YR 1972 TOTAL 57,152 MEAN 156 MAX 3,220 MIN 25 CFSM 2.81 IN 38.31
WTR YR 1973 TOTAL 66,822 MEAN 183 MAX 3,110 MIN 30 CFSM 3.30 IN 44.79

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-19	0230	11.40	2,650	04-20	0945	12.35	4,450
12-09	0530	12.08	3,910				

07024500 South Fork Obion River near Greenfield, Tenn.

LOCATION.--Lat 36°07'05", long 88°48'39", Weakley County, on left bank 75 ft (23 m) downstream from bridge on U.S. Highway 45E, 1.1 miles (1.8 km) downstream from Mosley Branch, 2.5 miles (4.0 km) south of Greenfield, and 9.7 miles (15.6 km) upstream from confluence with Middle Fork.

DRAINAGE AREA.--383 sq mi (992 sq km).

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 300.36 ft (91.550 m) above mean sea level. Prior to June 22, 1939, nonrecording gage at site 75 ft (23 m) upstream at same datum.

AVERAGE DISCHARGE.--44 years, 564 cfs (15.97 cu m/s), 20.00 in/yr (508 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 cfs (357 cu m/s) Dec. 10, gage height, 16.95 ft (5.166 m); minimum 137 cfs (3.88 cu m/s) Sept. 4.
Period of record: Maximum discharge, 25,600 cfs (725 cu m/s) Jan. 22, 1937, gage height, 17.82 ft (5.432 m), from floodmarks, from rating curve extended above 14,000 cfs (396 cu m/s); minimum, 61 cfs (1.73 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,480	976	898	950	1,360	296	908	1,130	1,510	210	373	145
2	1,680	1,250	738	1,010	1,200	307	764	1,980	1,120	190	414	141
3	1,770	1,210	597	1,090	1,010	355	608	2,130	1,070	180	354	140
4	1,490	1,240	563	1,130	906	402	558	2,300	1,170	244	259	138
5	866	1,210	507	994	712	419	480	2,430	970	623	214	147
6	512	1,110	886	1,010	1,220	486	435	2,080	606	715	187	167
7	366	1,830	774	902	1,330	1,360	590	1,790	495	355	175	239
8	285	1,910	2,300	722	2,110	1,320	848	1,600	374	241	170	245
9	234	1,890	5,350	588	3,070	1,390	992	1,300	289	363	169	224
10	205	2,130	9,940	522	3,530	1,520	1,080	1,200	250	377	174	214
11	192	2,410	11,000	466	3,190	2,090	1,020	1,060	273	560	183	199
12	188	2,280	6,250	414	2,520	2,000	784	728	461	500	302	179
13	188	1,990	4,540	376	2,030	1,730	565	525	588	354	293	170
14	188	1,690	3,750	379	2,060	1,650	448	421	476	258	520	192
15	198	1,300	2,820	466	2,100	1,580	381	342	406	210	403	190
16	203	1,120	2,440	489	2,380	1,740	358	291	380	190	328	178
17	200	1,010	2,060	505	2,380	2,570	363	247	294	180	249	165
18	1,060	790	1,740	511	1,840	3,830	872	250	246	175	200	156
19	1,370	1,580	1,510	536	1,160	3,830	1,760	240	398	170	177	152
20	1,480	1,640	1,170	511	669	3,170	4,750	226	320	178	164	413
21	1,930	1,590	912	1,870	525	2,300	6,300	217	235	251	156	471
22	2,520	1,670	784	4,120	454	1,670	7,460	212	210	323	149	218
23	2,550	1,760	667	5,350	413	1,350	5,580	291	200	453	146	183
24	1,940	1,620	583	5,710	382	898	3,900	341	195	334	144	173
25	1,030	1,370	523	4,210	360	734	3,130	365	190	284	143	193
26	531	1,080	480	2,910	341	794	2,790	376	185	293	143	176
27	770	926	446	2,180	323	822	2,380	1,100	230	249	143	170
28	684	1,040	429	1,800	307	812	1,830	1,370	310	206	142	219
29	631	998	408	1,730	------	814	1,590	1,480	400	184	140	294
30	682	970	686	1,610	------	878	1,290	1,650	260	257	141	319
31	1,120	------	1,040	1,430	------	1,030	------	1,690	------	298	161	------
TOTAL	28,543	43,590	66,791	46,491	39,882	44,147	54,814	31,362	14,111	9,405	6,916	6,210
MEAN	921	1,453	2,155	1,500	1,424	1,424	1,827	1,012	470	303	223	207
MAX	2,550	2,410	11,000	5,710	3,530	3,830	7,460	2,430	1,510	715	520	471
MIN	188	790	408	376	307	296	358	212	185	170	140	138
CFSM	2.40	3.79	5.63	3.92	3.72	3.72	4.77	2.64	1.23	.79	.58	.54
IN.	2.77	4.23	6.49	4.52	3.87	4.29	5.32	3.05	1.37	.91	.67	.60

CAL YR 1972 TOTAL 305,556 MEAN 835 MAX 11,000 MIN 119 CFSM 2.18 IN 29.68
WTR YR 1973 TOTAL 392,262 MEAN 1,075 MAX 11,000 MIN 138 CFSM 2.81 IN 38.10

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	2100	16.95	12,600	03-18	1800	15.60	4,000
01-24	0400	16.14	6,000	04-22	1400	16.43	7,870
02-10	0400	15.45	3,620				

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 (0.8 km) upstream from Richland Creek, 0.6 mile (1.0 km) south of Obion, and 14.5 miles (23.3 km) downstream from North Fork.

DRAINAGE AREA.--1,852 sq mi (4,797 sq km).

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 (75.127 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1932, nonrecording gage at present site at datum 5.00 ft (1.524 m) 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 (4.572 m) higher.

AVERAGE DISCHARGE.--36 years (1929-58, 1966-73), 2,586 cfs (73.24 cu m/s), 18.96 in/yr (482 mm/yr).

EXTREMES.--Current year: Maximum discharge, 39,900 cfs (1,130 cu m/s) Apr. 24, gage height, 33.49 ft (10.208 m); minimum, 492 cfs (13.9 cu m/s) Sept. 5.
Period of record: Maximum discharge, 99,500 cfs (2,820 cu m/s) Jan. 24, 1937, gage height, 40.4 ft (12.31 m), present datum; minimum, under conditions of no backwater, 230 cfs (6.51 cu m/s) Oct. 7-9, 12, 1943; minimum daily discharge, 15 cfs (0.42 cu m/s), backwater from Mississippi River, Feb. 4, 1937; reverse flow of 57 cfs (1.61 cu m/s) measured by current meter on that date.

REMARKS.--Records fair.

COOPERATION.--Twenty-four 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,500	10,400	2,260	6,470	5,650	1,200	5,700	6,450	5,780	1,120	1,860	665
2	3,000	8,350	2,000	4,300	5,640	1,590	3,050	16,100	3,330	1,120	1,260	573
3	2,360	7,400	1,750	4,420	4,400	1,860	2,650	18,600	2,750	975	1,020	551
4	2,140	4,950	3,230	8,950	3,850	1,910	2,600	19,000	2,450	925	875	546
5	2,060	3,950	4,360	6,620	3,450	1,950	2,550	12,400	2,000	1,240	765	542
6	1,550	3,200	7,180	4,660	3,350	1,950	2,500	9,450	1,750	1,570	690	555
7	1,100	7,960	7,760	3,570	5,370	4,630	2,500	8,600	1,650	1,300	660	1,030
8	889	11,900	13,200	2,920	11,900	6,820	6,710	10,600	1,500	995	645	1,150
9	763	10,700	21,900	2,580	13,500	5,010	6,300	9,400	1,400	1,160	620	885
10	653	6,600	28,500	2,280	13,000	3,690	3,700	6,800	1,350	1,370	640	1,090
11	589	5,350	32,300	2,060	11,600	12,100	3,250	5,200	2,000	1,540	640	795
12	561	4,550	35,800	1,880	9,840	14,700	2,630	4,000	4,890	1,100	1,720	665
13	559	5,780	37,800	1,780	9,290	13,000	2,500	2,900	5,450	955	2,550	615
14	590	10,000	34,300	1,650	12,300	11,000	2,400	2,150	3,890	830	4,420	615
15	607	6,300	27,000	1,930	13,700	9,230	2,350	1,700	2,760	785	3,760	660
16	606	5,000	21,100	2,250	13,200	11,900	3,040	1,450	2,050	800	2,330	620
17	593	3,750	14,200	2,150	12,400	13,900	3,480	1,350	1,630	815	1,300	582
18	2,610	2,880	9,600	2,100	7,300	14,300	8,480	1,250	1,390	830	945	551
19	5,190	5,790	6,950	2,880	4,900	13,100	13,400	1,200	1,990	800	805	542
20	4,680	10,200	6,400	2,500	3,100	12,700	18,000	1,150	5,670	795	730	625
21	4,360	6,600	4,850	7,720	2,250	13,100	20,200	1,100	4,190	910	680	1,790
22	3,750	4,700	4,050	15,300	1,650	11,100	25,000	1,050	2,280	875	645	885
23	2,590	4,100	3,700	16,500	1,400	8,000	33,500	4,840	1,440	1,930	620	645
24	2,460	3,650	3,450	17,700	1,350	5,400	38,800	11,000	1,210	1,500	605	582
25	2,440	3,650	3,200	19,100	1,300	3,850	38,500	8,900	1,110	1,350	600	573
26	2,120	5,260	2,950	19,100	1,250	3,350	34,200	5,350	1,060	1,920	587	655
27	2,520	4,040	2,700	16,400	1,230	2,750	28,300	7,960	1,040	1,580	582	573
28	4,340	3,020	2,540	13,000	1,210	2,700	17,800	10,300	1,800	1,030	578	600
29	2,440	3,100	2,310	12,500	------	2,650	11,000	7,600	1,530	815	569	695
30	1,720	2,520	2,800	9,600	------	5,050	7,950	4,650	1,210	950	690	950
31	8,070	------	8,160	6,650	------	6,530	------	3,350	------	2,070	1,230	------
TOTAL	72,410	175,650	358,300	221,520	179,380	221,020	353,040	205,850	72,550	35,955	35,621	21,805
MEAN	2,336	5,855	11,560	7,146	6,406	7,130	11,770	6,640	2,418	1,160	1,149	727
MAX	8,070	11,900	37,800	19,100	13,700	14,700	38,800	19,000	5,780	2,070	4,420	1,790
MIN	559	2,520	1,750	1,650	1,210	1,200	2,350	1,050	1,040	785	569	542
CFSM	1.26	3.16	6.24	3.86	3.46	3.85	6.36	3.59	1.31	.63	.62	.39
IN.	1.45	3.53	7.20	4.45	3.60	4.44	7.09	4.13	1.46	.72	.72	.44

CAL YR 1972 TOTAL 1,334,996 MEAN 3,648 MAX 37,800 MIN 473 CFSM 1.97 IN 26.82
WTR YR 1973 TOTAL 1,953,101 MEAN 5,351 MAX 38,800 MIN 542 CFSM 2.89 IN 39.23

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 (0.6 km) east of Blue Bank, 0.8 mile (1.3 km) west of the spillway and 3.3 miles (5.3 km) southeast of Tiptonville.

DRAINAGE AREA.--240 sq mi (622 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 270.22 ft (82.363 m) above mean sea level.

EXTREMES.--Current year: Maximum gage height, 15.65 ft (4.770 m), from recorded range in stage, about Apr. 26; minimum, 11.32 ft (3.450 m) Sept. 26.
Period of record: Maximum gage height, 15.65 ft (4.770 m), from recorded range in stage, about Apr. 26, 1973; minimum, 11.32 ft (3.450 m) Sept. 26, 1973.
Flood of January 1937 reached a stage of about 17.0 ft (5.19 m), at spillway, present datum, from information by local resident.

REMARKS.--Records good.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.99	12.50	12.29	12.39	12.24	12.31	12.29		13.00	12.00	11.78	11.52
2	11.99	12.54	12.30	12.33	12.34	12.35	12.38		12.86	12.00	11.75	11.50
3	11.97	12.55	12.39	12.27	12.43	12.38	12.45		12.75	11.98	11.72	11.50
4	11.97	12.48	12.41	12.27	12.42	12.40	12.37		12.61	11.99	11.70	11.49
5	11.96	12.39	12.55	12.30	12.40	12.37	12.28		12.51	11.97	11.67	11.50
6	12.01	12.33	12.37	12.33	12.40	12.32	12.23		12.43	11.94	11.65	11.50
7	11.97	12.37	12.25	12.33	12.43	12.38	12.35		12.31	11.91	11.63	11.50
8	11.96	12.39	12.73	12.27	12.52	12.38	12.33		12.26	11.90	11.59	11.49
9	11.97	12.32	13.15	12.23	12.44	12.33	12.16		12.23	11.95	11.62	11.50
10	11.91	12.26	13.30	12.18	12.36	12.52	12.36		12.19	11.97	11.68	11.48
11	11.89	12.18	13.31	12.13	12.27	12.60	12.31	14.47	12.23	11.98	11.67	11.45
12	11.91	12.09	13.26	12.09	12.19	12.62	12.40	14.40	12.25	11.94	11.69	11.45
13	11.91	12.10	13.27	12.05	12.24	12.60	12.36	14.24	12.30	11.91	11.75	11.45
14	11.97	12.08	13.24	12.03	12.27	12.79	12.32	14.10	12.32	11.89	11.77	11.45
15	11.92	12.11	13.17	12.05	12.34	12.77	12.23	13.92	12.29	11.88	11.76	11.44
16	11.92	12.21	13.10	12.09	12.36	12.60	12.34	13.80	12.24	11.87	11.75	11.40
17	11.95	12.24	12.97	12.09	12.30	12.72	12.40	13.64	12.20	11.85	11.75	11.40
18	12.17	12.32	12.88	12.12	12.27	12.68	12.54	13.44	12.16	11.83	11.73	11.36
19	12.10	12.31	12.83	12.20	12.25	12.60	13.08	13.35	12.20	11.88	11.72	11.34
20	12.08	12.25	12.77	12.28	12.26	12.59	13.76	13.22	12.23	11.85	11.73	11.40
21	12.06	12.23	12.72	12.43	12.31	12.51	14.02	13.07	12.22	11.83	11.72	11.40
22	12.15	12.20	12.59	12.51	12.21	12.41	14.29	13.03	12.20	11.85	11.68	11.39
23	12.19	12.16	12.52	12.60	12.27	12.34	14.77	13.21	12.14	11.83	11.62	11.39
24	12.20	12.18	12.51	12.58	12.29	12.29	14.95	13.27	12.08	11.84	11.58	11.37
25	12.19	12.22	12.45	12.52	12.30	12.26	15.07	13.29	12.08	11.86	11.57	11.37
26	12.20	12.19	12.42	12.48	12.37	12.36		13.17	12.06	11.85	11.57	11.35
27	12.28	12.32	12.35	12.40	12.35	12.32		13.24	12.06	11.83	11.57	11.35
28	12.28	12.33	12.31	12.52	12.32	12.27		13.25	12.05	11.82	11.54	11.37
29	12.30	12.36	12.14	12.38		12.27		13.23	12.03	11.79	11.56	11.37
30	12.39	12.30	12.29	12.30	------	12.27		13.15	12.01	11.79	11.55	11.35
31	12.45	------	12.34	12.22	------	12.21	------	13.10	------	11.80	11.54	------
MAX	12.45	12.55	13.31	12.60	12.52	12.62	15.65*	Unknown	13.00	12.00	11.78	11.52
MIN	11.89	12.08	12.14	12.03	12.19	12.21	12.16	13.03	12.01	11.79	11.54	11.34

* From recorded range in stage.
NOTE.--No gage height record Apr. 26 to May 10.

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 (6 m) downstream from bridge on U.S. Highway 45, 0.6 mile (1.0 km) downstream from Meridian Creek, and 1.4 miles (2.3 km) south of the post office in Jackson.

DRAINAGE AREA.--495 sq mi (1,282 sq km).

PERIOD OF RECORD.--July 1929 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 330.76 ft (100.816 m) above mean sea level. Prior to Feb. 4, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 705 cfs (19.97 cu m/s), 19.34 in/yr (491 mm/yr).

EXTREMES.--Current year: Maximum discharge, 31,200 cfs (884 cu m/s) Apr. 21, gage height, 22.28 ft (6.791 m); minimum, 139 cfs (3.94 cu m/s) Aug. 29, 30.
Period of record: Maximum discharge, 43,600 cfs (1,230 cu m/s) Jan. 21, 1935, gage height, 24.0 ft (7.32 m), from floodmarks, from rating curve extended above 16,000 cfs (453 cu m/s); minimum, 67 cfs (1.90 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,830	1,550	1,350	2,390	2,210	468	2,140	1,010	841	495	293	177
2	1,070	2,150	865	1,850	2,170	510	1,800	3,010	682	408	229	159
3	582	1,810	655	2,040	1,440	1,140	1,560	3,620	563	372	193	153
4	425	1,260	595	2,850	1,270	892	1,120	3,610	448	1,020	177	148
5	360	1,130	564	1,800	946	940	889	2,970	568	626	170	145
6	315	853	1,320	1,650	3,020	820	721	2,160	955	352	164	341
7	283	3,080	1,020	1,200	3,330	3,060	1,350	2,150	515	274	160	289
8	261	3,900	2,040	997	3,850	3,150	2,060	3,220	418	291	156	223
9	243	3,530	5,080	904	4,280	2,300	1,740	2,700	365	272	227	520
10	228	2,770	9,400	832	3,640	1,620	1,510	1,590	330	348	176	279
11	213	2,010	15,000	718	3,180	2,930	1,100	1,160	310	445	220	203
12	203	994	15,200	619	2,140	3,250	853	1,080	601	321	227	187
13	197	1,340	8,680	563	2,080	2,820	700	772	706	248	508	190
14	203	1,960	5,120	592	2,910	2,440	610	610	808	229	303	230
15	284	1,090	4,380	856	2,100	3,110	568	523	513	265	283	206
16	337	1,030	4,000	730	1,590	4,070	646	473	418	1,030	212	187
17	289	718	3,340	649	1,120	5,280	856	479	360	923	191	176
18	1,490	537	2,810	613	859	5,830	1,230	431	318	608	180	167
19	3,490	2,530	2,110	697	787	4,380	2,910	413	403	410	171	163
20	3,820	2,700	1,640	570	706	3,470	16,700	727	1,030	313	169	167
21	3,160	1,600	1,290	3,050	634	2,210	29,300	535	430	245	159	169
22	1,290	1,330	1,070	6,500	586	1,260	16,100	402	316	214	150	167
23	1,840	817	883	7,420	568	1,060	8,640	629	286	191	146	163
24	1,160	540	775	5,600	550	924	7,530	667	274	182	146	164
25	663	1,550	709	3,900	523	1,280	6,180	655	266	311	145	198
26	485	1,470	676	3,160	508	1,510	4,460	465	250	287	145	180
27	1,390	1,060	637	2,460	493	1,300	3,640	1,970	286	229	146	166
28	1,760	2,630	592	2,300	478	1,110	2,760	2,740	1,330	196	142	225
29	1,040	2,000	555	2,220	------	1,030	1,530	2,070	502	180	139	425
30	885	1,510	1,360	1,500	------	1,180	1,100	2,160	502	173	160	230
31	2,490	------	3,140	1,190	------	2,520	------	1,590	------	203	219	------
TOTAL	32,286	51,449	96,856	62,420	47,968	67,864	122,303	46,591	15,594	11,661	6,106	6,397
MEAN	1,041	1,715	3,124	2,014	1,713	2,189	4,077	1,503	520	376	197	213
MAX	3,820	3,900	15,200	7,420	4,280	5,830	29,300	3,620	1,330	1,030	508	520
MIN	197	537	555	563	478	468	568	402	250	173	139	145
CFSM	2.10	3.46	6.31	4.07	3.46	4.42	8.24	3.04	1.05	.76	.40	.43
IN.	2.43	3.87	7.28	4.69	3.60	5.10	9.19	3. 0	1.17	.88	.46	.48

CAL YR 1972 TOTAL 352,451 MEAN 963 MAX 15,200 MIN 111 CFSM 1.95 IN 26.49
WTR YR 1973 TOTAL 567,495 MEAN 1,555 MAX 29,300 MIN 139 CFSM 3.14 IN 42.65

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-11	2200	20.34	18,000	03-18	0700	17.91	6,220
01-23	0900	18.38	7,630	04-21	0700	22.28	31,200

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 (9 m) downstream from bridge on State Highway 54, 0.7 mile (1.1 km) downstream from Cypress Creek, 3.0 miles (4.8 km) upstream from Buck Creek, 5 miles (8.0 km) north of Alamo, and at mile 14.7 (23.7 km).

DRAINAGE AREA.--369 sq mi (956 sq km).

PERIOD OF RECORD.--July 1929 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 288.17 ft (87.834 m) above mean sea level. Prior to June 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 521 cfs (14.8 cu m/s), 19.17 in/yr (487 mm/yr).

EXTREMES.--Current year: Maximum discharge, 11,600 cfs (329 cu m/s) Apr. 20, gage height, 15.88 ft (4.840 m); minimum, 128 cfs (3.62 cu m/s) several days in September.
Period of record: Maximum discharge, 34,300 cfs (971 cu m/s) Jan. 30, 1956, gage height, 16.70 ft (5.090 m), from rating curve extended above 7,200 cfs (204 cu m/s) on basis of contracted-opening measurement of peak flow; minimum observed, 68 cfs (1.93 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,480	534	449	1,030	1,590	223	622	636	245	204	195	148
2	699	1,500	334	804	1,540	233	541	2,060	240	212	169	145
3	334	915	284	913	816	279	374	2,340	231	176	161	143
4	334	678	285	1,630	536	308	341	1,970	209	212	151	141
5	214	477	284	900	391	326	309	1,460	237	237	148	140
6	183	401	1,390	784	2,860	330	290	1,090	208	187	148	280
7	169	3,250	716	501	4,250	2,000	439	1,280	194	326	147	734
8	162	4,400	2,950	405	4,450	2,720	938	1,830	182	290	145	296
9	157	4,000	7,120	380	3,900	1,910	954	1,110	178	171	145	178
10	152	2,830	7,640	348	3,220	918	718	979	174	238	151	157
11	146	1,460	6,420	310	2,640	2,500	510	940	352	329	147	161
12	144	595	5,760	280	1,520	2,830	376	704	1,200	173	147	139
13	143	1,040	5,340	260	1,870	1,530	316	421	1,100	162	154	139
14	153	1,170	4,200	280	3,130	1,120	280	342	2,660	154	175	143
15	159	704	3,800	445	2,860	1,740	258	297	2,030	152	168	145
16	153	593	3,010	365	1,830	2,950	282	274	711	165	158	139
17	154	400	1,850	341	843	3,440	279	259	395	174	151	133
18	2,070	315	940	315	509	3,100	816	248	256	165	149	130
19	4,540	2,680	708	379	410	2,540	2,760	238	1,020	159	146	128
20	4,500	3,480	674	336	357	2,220	8,440	232	3,640	156	144	128
21	3,720	1,770	528	2,500	324	838	8,600	227	2,010	155	143	131
22	3,280	940	445	6,070	298	595	5,580	219	578	152	142	133
23	2,060	544	370	5,460	282	477	4,920	258	289	149	140	130
24	595	363	330	3,900	268	411	3,720	315	219	148	139	128
25	421	1,130	302	3,400	255	517	2,920	266	197	157	139	135
26	304	823	285	2,640	244	754	2,600	243	185	163	139	158
27	1,190	630	272	1,880	236	607	2,500	1,620	227	161	139	144
28	1,140	1,050	266	1,710	227	509	1,790	2,230	617	159	139	138
29	554	609	257	1,580	------	664	843	1,000	297	169	140	214
30	464	615	648	850	------	624	528	548	269	153	141	229
31	963	------	1,990	586	------	1,060	------	307	------	156	149	------
TOTAL	31,737	39,896	59,847	41,582	41,656	40,273	53,844	25,943	20,350	5,764	4,649	5,287
MEAN	1,024	1,330	1,931	1,341	1,488	1,299	1,795	837	678	186	150	176
MAX	4,540	4,400	7,640	6,070	4,450	3,440	8,600	2,340	3,640	329	195	734
MIN	143	315	257	260	227	223	258	219	174	148	139	128
CFSM	2.78	3.60	5.23	3.63	4.03	3.52	4.86	2.27	1.84	.50	.41	.48
IN.	3.20	4.02	6.03	4.19	4.20	4.06	5.43	2.62	2.05	.58	.47	.53

CAL YR 1972 TOTAL 274,842 MEAN 751 MAX 7,640 MIN 101 CFSM 2.04 IN 27.71
WTR YR 1973 TOTAL 370,828 MEAN 1,016 MAX 8,600 MIN 128 CFSM 2.75 IN 37.38

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-10	0200	15.47	7,960	04-20	2200	15.88	11,600
01-22	1600	15.31	6,770				

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 (76 m) upstream from Illinois Central Railroad bridge, 0.6 mile (1.0 km) downstream from Spring Creek, and 1.5 miles (2.4 km) northeast of Bolivar.

DRAINAGE AREA.--1,480 sq mi (3,833 sq km).

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 323.49 ft (98.600 m) above 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.--44 years, 2,296 cfs (65.02 cu m/s), 21.07 in/yr (535 mm/yr).

EXTREMES.--Current year: Maximum discharge, 61,600 cfs (1,740 cu m/s) Mar. 18, gage height, 21.66 ft (6.602 m), from rating curve extended above 32,000 cfs (906 cu m/s); minimum, 344 cfs (9.74 cu m/s) Oct. 18.
Period of record: Maximum discharge, 61,600 cfs (1,740 cu m/s) Mar. 18, 1973, gage height, 21.66 ft (6.602 m), from rating curve extended above 32,000 cfs (906 cu m/s); minimum, 78 cfs (2.21 cu m/s) Sept. 2, 1943.

REMARKS.--Records poor.

REVISIONS(WATER YEARS).--WSP 1211: 1937. WSP 1920: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,020	2,710	5,800	3,500	7,870	1,950	6,130	9,300	6,050	2,060	748	495
2	2,230	3,090	5,500	3,430	7,840	1,800	6,130	8,780	6,110	1,830	717	490
3	2,050	3,420	5,250	3,510	7,260	1,960	6,340	9,380	5,910	1,630	678	600
4	1,710	3,400	4,900	4,290	6,680	2,330	6,820	8,320	5,230	1,470	630	590
5	1,400	3,340	4,480	4,450	6,200	2,540	7,020	7,380	4,600	1,320	590	560
6	1,100	3,190	4,330	4,670	5,850	2,710	6,710	6,900	3,920	1,120	560	565
7	834	5,790	3,850	4,850	5,520	4,580	6,590	7,650	2,900	1,020	550	631
8	659	7,660	4,170	5,320	6,880	4,750	6,520	8,180	2,150	920	540	600
9	555	8,160	7,500	5,740	7,290	4,720	6,230	7,590	1,800	852	550	558
10	478	7,800	16,700	5,910	6,800	4,370	5,790	6,880	1,580	857	580	520
11	425	11,200	17,100	5,840	6,450	5,650	5,390	5,950	1,390	907	560	502
12	402	11,900	17,900	5,550	6,780	6,100	5,080	5,650	1,250	885	540	481
13	376	11,200	19,600	5,180	7,620	6,130	4,870	5,180	1,270	861	540	459
14	355	10,300	18,700	4,770	9,020	6,100	4,660	4,700	1,420	786	729	452
15	358	8,730	19,700	4,340	8,780	8,080	4,440	4,250	1,560	737	1,290	450
16	377	7,770	17,600	3,930	8,580	16,200	4,290	3,670	1,640	923	1,660	445
17	367	6,900	15,500	3,460	8,510	37,900	4,190	2,730	1,660	1,410	1,830	439
18	352	6,350	14,100	2,940	9,580	59,300	4,390	2,090	1,570	1,620	1,780	421
19	412	6,620	12,700	2,490	9,220	51,200	4,980	1,800	1,360	1,690	1,320	403
20	474	6,650	11,200	2,180	8,380	37,900	17,200	1,860	1,150	1,590	817	389
21	586	6,320	9,790	4,920	7,420	25,400	15,100	2,010	1,030	1,250	660	378
22	573	5,900	8,470	9,880	6,650	16,300	11,900	2,090	936	1,030	590	373
23	627	5,500	7,380	8,640	5,940	12,000	14,600	2,050	866	875	570	366
24	723	5,120	6,630	8,040	5,240	9,380	15,800	2,240	813	762	560	376
25	934	5,380	5,930	9,690	4,570	8,180	15,000	2,550	765	716	540	384
26	907	5,580	5,300	10,700	3,960	7,240	13,800	2,740	727	677	530	376
27	1,020	5,400	4,650	10,600	3,130	6,650	14,100	4,750	721	661	520	380
28	1,570	6,050	4,080	10,400	2,370	6,180	13,600	8,110	898	640	510	398
29	1,900	6,020	3,460	9,780	------	5,940	12,200	7,660	1,600	630	505	463
30	2,120	5,980	3,000	8,700	------	5,760	10,600	6,860	2,110	867	500	465
31	2,610	------	3,790	7,870	------	6,170	------	6,300	------	821	500	------
TOTAL	30,504	193,430	289,060	185,570	190,390	375,470	260,470	165,600	64,986	33,417	23,194	14,009
MEAN	984	6,448	9,325	5,986	6,800	12,110	8,682	5,342	2,166	1,078	748	467
MAX	2,610	11,900	19,700	10,700	9,580	59,300	17,200	9,380	6,110	2,060	1,830	631
MIN	352	2,710	3,000	2,180	2,370	1,800	4,190	1,800	721	630	500	366
CFSM	.66	4.36	6.30	4.04	4.59	8.18	5.87	3.61	1.46	.73	.51	.32
IN.	.77	4.86	7.27	4.66	4.79	9.44	6.55	4.16	1.63	.84	.58	.35

CAL YR 1972 TOTAL 994,426 MEAN 2,717 MAX 19,700 MIN 262 CFSM 1.84 IN 25.00
WTR YR 1973 TOTAL 1,826,100 MEAN 5,003 MAX 59,300 MIN 352 CFSM 3.38 IN 45.90

PEAK DISCHARGE (BASE, 8,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-11	1900	16.36	12,600	03-18	1300	21.66	61,600
12-13	1200	17.87	20,500	04-20	1100	18.00	21,500
01-26	1500	16.02	11,100	05-28	1700	15.58	9,220
02-18	1900	15.74	9,860				

07030240 Loosahatchie River near Arlington, Tenn.

LOCATION.--Lat 35°18'37", long 89°38'23", Shelby County, on left bank 20 ft (6 m) downstream from bridge on U.S. Highways 70 and 79, 1.5 miles (2.4 km) upstream from Beaver Creek, 1.5 miles (2.4 km) northeast of Arlington, and at mile 32.9 (52.9 km).

DRAINAGE AREA.--262 sq mi (679 sq km).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 248 ft (76 m), from topographic map.

REMARKS.--Complete records for the 1973 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.

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 (3.4 km) north of Germantown, 3.6 miles (5.8 km) downstream from Grays Creek, 6.4 miles (10.3 km) upstream from Fletcher Creek, and at mile 18.9 (30.4 km).

DRAINAGE AREA.--699 sq mi (1,810 sq km).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 235.76 ft (71.860 m) above mean sea level (levels by Soil Conservation Service).

EXTREMES.--Current year: Maximum discharge, 18,100 cfs (513 cu m/s) Apr. 22, gage height, 23.04 ft (7.023 m); minimum, 206 cfs (5.83 cu m/s) Oct. 18.
Period of record: Maximum discharge, 18,100 cfs (513 cu m/s) Apr. 22, 1973, gage height, 23.04 ft (7.023 m); minimum, 190 cfs (5.38 cu m/s) Sept. 15, 16, 1972.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	812	540	1,480	1,590	1,350	483	1,150	1,790	2,030	355	312	304
2	748	1,220	1,430	1,580	1,700	566	1,190	3,820	1,460	355	308	306
3	584	632	1,230	2,370	1,250	760	1,160	3,640	884	351	307	313
4	490	528	1,000	2,140	1,000	824	1,020	2,970	614	380	308	320
5	416	476	768	1,900	900	856	940	2,470	512	395	305	335
6	357	636	1,910	1,690	850	948	836	2,070	461	378	302	360
7	309	5,120	1,110	1,470	1,950	2,890	876	3,280	430	353	302	375
8	278	2,560	3,550	1,380	3,100	2,550	1,040	2,720	413	336	303	369
9	248	3,690	5,360	1,290	3,750	3,330	1,200	3,340	416	332	302	365
10	240	2,880	11,900	1,030	3,200	3,120	1,100	2,890	413	332	307	359
11	232	3,100	13,400	796	2,600	4,420	968	2,290	400	340	316	353
12	224	3,450	13,600	673	2,100	4,450	868	1,740	389	338	350	335
13	218	3,110	9,880	603	3,650	3,270	780	1,190	389	328	624	334
14	220	2,340	6,340	568	4,100	2,710	684	840	409	340	1,090	329
15	218	1,620	6,170	558	3,800	2,830	600	669	418	353	411	329
16	216	1,120	5,040	533	3,000	4,650	642	590	483	374	361	327
17	212	912	4,580	539	2,200	5,800	579	548	539	467	351	322
18	212	884	3,850	638	2,120	8,340	1,330	512	530	432	350	320
19	224	2,410	3,200	928	1,860	6,860	1,980	483	466	530	358	316
20	226	1,660	2,600	642	1,320	4,370	9,860	464	413	420	350	321
21	232	1,570	2,050	5,180	872	2,840	16,300	451	378	393	335	322
22	230	1,220	1,530	5,260	704	2,010	15,100	446	357	380	321	317
23	230	1,010	1,150	7,980	632	1,410	13,900	501	340	353	309	316
24	236	884	948	7,730	587	1,040	11,700	515	332	409	304	315
25	238	1,450	848	5,850	554	1,140	10,500	496	322	863	302	316
26	240	1,400	764	4,050	533	984	8,950	475	317	706	298	315
27	272	1,350	684	2,820	512	912	5,500	2,020	313	387	296	314
28	290	1,390	621	2,600	499	868	4,100	1,660	319	347	298	315
29	288	1,430	575	1,950	------	852	2,870	2,260	321	330	298	314
30	412	1,490	1,250	1,350	------	872	2,170	2,960	326	333	296	314
31	796	------	1,720	1,000	------	1,510	------	2,780	------	334	298	------
TOTAL	10,148	52,082	110,538	68,688	50,693	78,465	119,893	52,880	15,394	12,324	10,972	9,850
MEAN	327	1,736	3,566	2,216	1,810	2,531	3,996	1,706	513	398	354	328
MAX	812	5,120	13,600	7,980	4,100	8,340	16,300	3,820	2,030	863	1,090	375
MIN	212	476	575	533	499	483	579	446	313	328	296	304
CFSM	.47	2.48	5.10	3.17	2.59	3.62	5.72	2.44	.73	.57	.51	.47
IN.	.54	2.77	5.88	3.66	2.70	4.18	6.38	2.81	.82	.66	.58	.52

CAL YR 1972 TOTAL 325,610 MEAN 890 MAX 13,600 MIN 196 CFSM 1.27 IN 17.33
WTR YR 1973 TOTAL 591,927 MEAN 1,622 MAX 16,300 MIN 212 CFSM 2.32 IN 31.50

PEAK DISCHARGE (BASE, 3,000 CFS)

Date	Time	G. H.	Discharge	Date	Time	G. H.	Discharge
11-07	1045	15.46	7,460	03-11	0730	13.85	5,760
11-19	1015	10.74	3,120	03-18	1445	17.15	9,180
12-06	0745	10.96	3,270	04-22	0045	23.04	18,100
12-11	1615	21.03	14,600	05-02	0715	13.23	5,210
01-03	1930	11.74	3,890	05-07	1500	12.87	4,880
01-21	1915	16.59	8,510	05-27	1330	11.33	3,560
03-07	0445	12.12	4,210	05-30	2145	10.91	3,240

07032000 Mississippi River at Memphis, Tenn.

LOCATION.--Lat 35°07'37", long 90°04'25", Shelby County, on left bank 50 ft (15 m) downstream from Harahan Bridge at Memphis, 1.3 mi (2.1 km) downstream from Beale Street gage, 3.5 mi (5.6 km) downstream from Wolf River, 70 mi (113 km) upstream from St. Francis River, and at mile 734.8 (1,182.3 km).

DRAINAGE AREA.--932,800 sq mi (2,416,000 sq km), 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 (305 m) downstream, and since December 1934 at water-stage recorder at present site, in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 183.91 ft (56.056 m) above mean sea level. Prior to Apr. 16, 1934, Beale Street nonrecording gage 1.3 mi (2.1 km) upstream at present datum. Apr. 16 to Dec. 21, 1934, nonrecording gage 1,000 ft (305 m) downstream at present datum.

AVERAGE DISCHARGE.--39 years, 453,700 cfs (12,850 cu m/s), 328,700,000 acre-ft/yr (405 cu km/yr).

EXTREMES.--Current year: Maximum discharge, 1,150,000 cfs (32,600 cu m/s) May 1-6; maximum gage height, 32.78 ft (9.991 m) May 3; minimum discharge, 181,000 cfs (5,130 cu m/s) Oct. 24, gage height, -1.33 ft (-0.405 m).
Period of record: Maximum discharge, 1,980,000 cfs (56,100 cu m/s) Feb. 8, 1937; maximum gage height, 48.69 ft (14.841 m) Feb. 10, 1937; minimum discharge, 79,200 cfs (2,240 cu m/s) Aug. 26, 1936; minimum gage height, -5.35 ft (-1.631 m) Jan. 24, 1956.
Maximum stage prior to 1937, 46.55 ft (14.188 m) Apr. 9, 1913, at Beale Street gage or about 45.2 ft (13.78 m) at present site.

REMARKS.--Records good. Flow regulated by many locks, dams, and reservoirs upstream. Records for 1973 water year not available for inclusion in this report.

COOPERATION.--Records furnished by Corps of Engineers.

DISCHARGE, IN THOUSANDS OF 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	239	259	247	420	580	624	690	1,150	440	429	370	290
2	242	252	253	408	583	673	668	1,150	404	474	376	287
3	244	244	265	398	586	717	643	1,150	375	512	379	288
4	245	232	276	410	584	761	629	1,150	363	518	388	288
5	241	228	291	452	579	807	603	1,150	358	549	394	281
6	231	235	315	527	573	845	579	1,150	355	557	398	275
7	220	244	342	585	558	877	556	1,140	344	552	403	270
8	215	254	353	619	537	902	539	1,140	335	536	401	267
9	216	271	369	643	520	922	521	1,130	327	509	397	268
10	222	287	390	663	504	943	509	1,110	317	478	398	264
11	224	296	407	680	488	946	508	1,070	304	446	418	264
12	217	297	451	696	472	943	521	1,030	298	418	431	264
13	213	292	510	720	458	940	550	992	294	400	416	261
14	212	286	561	738	427	935	585	956	287	392	390	257
15	206	280	594	747	401	923	628	922	281	387	376	261
16	202	272	624	748	375	914	677	889	279	383	366	264
17	204	267	637	745	370	897	736	860	282	384	363	267
18	209	267	649	737	381	883	808	842	291	380	364	274
19	207	268	662	726	411	868	867	823	303	374	362	384
20	201	265	680	711	464	851	904	805	322	374	355	303
21	197	264	690	694	520	830	929	785	348	378	356	330
22	192	263	690	662	563	811	944	764	376	380	354	350
23	186	260	669	623	580	791	962	738	389	374	357	361
24	190	257	634	577	583	768	985	707	389	363	353	357
25	199	260	562	545	571	745	1,010	665	386	360	358	344
26	204	264	550	522	567	720	1,030	621	377	302	302	335
27	206	265	515	515	567	702	1,060	583	370	355	305	326
28	210	267	492	530	573	691	1,090	547	372	335	342	316
29	229	264	468	548	591	691	1,120	512	380	330	310	317
30	246	253	452	562	------	696	1,130	488	395	335	301	331
31	257	------	453	572	------	698	------	465	------	350	294	------
TOTAL	6,726	7,913	15,051	18,723	14,966	25,314	22,981	27,484	10,341	12,914	11,377	8,944
MEAN	217	264	486	604	516	817	766	887	345	417	367	298
MAX	257	297	690	748	591	946	1,130	1,150	440	557	431	384
MIN	186	228	247	398	370	624	508	465	279	302	294	257
AC-FT	13,340	15,700	29,850	37,140	29,690	50,210	45,580	54,510	20,510	25,610	22,570	17,740

CAL YR 1971 TOTAL 161,616 MEAN 443 MAX 1,190 MIN 186.0 AC-FT 320,600
WTR YR 1972 TOTAL 182,734 MEAN 499 MAX 1,150 MIN 186.0 AC-FT 362,500

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 (4.2 km) south of Germantown, and 17.3 miles (27.8 km) upstream from mouth.

DRAINAGE AREA.--68.4 sq mi (177.2 sq km).

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 (80.138 m) above mean sea level (levels by Soil Conservation Service).

EXTREMES.--Current year: Maximum discharge, 8,260 cfs (234 cu m/s), Apr. 20, gage height, 25.08 ft (7.644 m); no flow Sept. 19. Period of record: Maximum discharge, 8,260 cfs (234 cu m/s) Apr. 20, 1973, gage height, 25.08 ft (7.644 m); no flow at times most years.

REMARKS.--Records poor.

REVISIONS.--WRD Tenn. 1962: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	19	2.3	60	672	6.6	56	16	.95	.26	2.7	.78
2	1.8	456	.6	22	169	268	19	1,450	.80	.22	.85	.50
3	1.2	14	.3	885	41	82	13	657	.59	.25	.64	.50
4	.90	3.4	.2	368	21	26	12	151	.46	.30	.57	.43
5	.90	1.7	.6	80	15	28	10	41	.39	.52	.50	.78
6	.83	940	642	74	18	1,010	9.0	25	.32	.27	.36	5.0
7	.77	2,270	41	39	128	1,090	232	1,230	.32	.13	.22	4.0
8	.51	253	2,260	32	2,040	136	142	831	.32	.15	.43	1.6
9	.23	42	1,990	22	331	30	232	99	2.2	.15	.43	.64
10	.17	14	3,760	19	39	537	46	22	.66	.18	1.6	.50
11	.11	5.0	780	15	21	1,570	16	14	.32	.86	1.4	.29
12	1.4	2.9	789	20	17	187	11	14	.46	.66	283	.36
13	2.0	464	819	8.5	387	36	6.6	7.0	98	.39	549	.77
14	.77	160	583	9.5	513	502	5.0	4.2	65	.32	558	.29
15	.64	28	1,510	23	133	1,190	4.3	3.2	5.8	.27	15	.12
16	.23	14	260	18	28	1,210	54	2.8	.86	222	4.8	.06
17	.13	10	65	14	16	380	14	2.4	.30	27	2.7	.03
18	.25	172	39	235	13	62	735	2.2	.27	2.5	2.5	.02
19	2.4	1,240	145	128	12	27	723	1.9	.20	680	2.2	0
20	1.1	160	130	30	11	18	4,080	1.9	.20	34	1.9	.02
21	.44	20	58	3,380	11	12	439	1.6	.20	5.6	1.7	.15
22	.23	10	39	885	10	7.8	306	1.3	.15	2.3	1.6	.14
23	.25	4.7	28	148	10	5.8	2,840	3.2	.15	2.8	1.7	.12
24	.38	2.7	22	65	8.6	181	1,570	2.4	.13	145	1.9	.11
25	.21	768	18	39	7.8	163	729	1.0	.22	320	1.9	.07
26	.15	154	15	530	7.8	51	136	.86	.08	6.2	2.0	.12
27	32	21	14	250	8.2	23	175	846	.12	2.5	2.0	.09
28	4.5	364	12	750	7.0	16	51	148	.28	1.1	4.8	.29
29	1.5	50	11	238	------	15	25	11	.25	.71	2.5	.29
30	304	10	912	88	------	13	17	3.3	.23	.50	3.6	.12
31	178	------	492	56	------	436	------	1.7	------	.43	.78	------
TOTAL	540.30	7,673.4	15,438.0	8,531.0	4,695.4	9,319.2	12,707.9	5,595.96	180.23	1,457.57	1,453.28	18.19
MEAN	17.4	256	498	275	168	301	424	181	6.01	47.0	46.9	.61
MAX	304	2,270	3,760	3,380	2,040	1,570	4,080	1,450	98	680	558	5.0
MIN	.11	1.7	.20	8.5	7.0	5.8	4.3	.86	.08	.13	.22	0
CFSM	.25	3.74	7.28	4.02	2.46	4.40	6.20	2.65	.09	.69	.69	.009
IN.	.29	4.17	8.40	4.64	2.55	5.07	6.91	3.04	.10	.79	.79	.009

CAL YR 1972 TOTAL 37,302.09 MEAN 102 MAX 3,760 MIN 0 CFSM 1.49 IN 20.29
WTR YR 1973 TOTAL 67,610.43 MEAN 185 MAX 4,080 MIN 0 CFSM 2.70 IN 36.77

PEAK DISCHARGE (BASE, 2,500 CFS) (Revised)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-07	Unknown	15.40	3,160	03-06	2115	16.69	3,710
12-10	0400	23.43	7,260	03-11	0115	16.81	3,760
12-15	0115	14.27	2,710	04-20	0115	25.08	8,260
01-21	1215	22.35	6,610	04-23	1000	20.05	5,330
02-08	0500	17.04	3,870	05-07	1315	14.82	2,930

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 the 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 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Cumberland River Basin						
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 1970-73	9- 6-73	16
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 1970-73	9- 5-73	4.1
Tennessee River Basin						
03566410	Wolftever Creek at Collegedale, Tenn.	Lat 35°03'00", long 85°03'15", Hamilton County, at bridge on Edgeman Road, at mouth of Wilkerson Branch and just above sewage treatment plant at Collegedale.	18.1	1961, 1964-70, 1973	9-10-73	3.1
03566430	Little Wolftever Creek at Ooltewah, Tenn.	Lat 35°04'42", long 85°03'36", Hamilton County, at bridge on Ooltewah-Ringgold Road, 0.4 mile north of Ooltewah.	10.8	1964-71, 1973	9-10-73	1.3
03566450	Long Savannah Creek near Snow Hill, Tenn.	Lat 35°10'37", long 85°02'15", Hamilton County, at bridge on Mahan Gap Road, 0.3 mile downstream from Wolfe Branch and 0.45 mile southeast of Snow Hill School.	28.3	1964-71, 1973	9-10-73	3.2
03566625	North Chickamauga Creek near Hixson, Tenn.	Lat 35°10'03", long 85°13'19", Hamilton County, at bridge on county road, 2.0 miles northeast of Hixson.	108	1954, 1964-68, 1971, 1973	9-10-73	15

a Previously published as "above Linton."

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 1973

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‡ 1951-73	3-16-73	15.39	11,100
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	1955-73	3-16-73	8.32	2,620
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	1967-73	12- 8-72	5.25	168
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	1967-73	3-15-73	3.49	496
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‡ 1955-73	5-27-73	17.24	(†)
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	1955-73	5-27-73	12.26	(†)
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.	a7.98	1955-73	3-21-55	4.61	b875
					2- -56	4.15	b768
					11-18-57	3.51	b613
					2-14-59	3.50	b610
					5- -60	4.08	b750
					3- 8-61	3.05	b490
					4-15-65	3.95	b721
					2-11-66	2.59	b360
					3- 6-67	5.04	b964
					3-12-68	3.54	b621
					6-23-69	5.49	b1,050
					4- 2-70	4.56	b861
					7-30-71	5.59	b1,060
					7-29-72	1.95	b165
					12-10-72	4.61	875
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	1955-73	5-27-73	7.06	405
03418900	Raccoon Creek near Old Winesap, Tenn.	Lat 35°47'12", long 85°08'40", Cumberland County, at culvert under county road, 1.2 miles southeast of Old Winesap.	1.52	1973	5-27-73	11.69	(†)
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	1967-73	5-27-73	5.60	(†)
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	1967-73	5-27-73	6.95	46
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	1967-73	5-27-73	7.41	(†)
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‡ 1958-73	3-16-73	15.34	24,400

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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	1955-73	12-10-72	5.02	1,180
03421100	Sink tributary at McMinnville, Tenn.	Lat 35°41'47", long 85°46'47", Warren County, at culvert under State Highway 56 at northwest city limits of McMinnville.	.47	1955-73	5-27-73	4.95	262
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	1955-73	12-10-73	13.31	9,750
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‡ 1962-73	5-27-73	7.16	3,540
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	1955-73	5-27-73	6.67	930
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, 1959-73	5-27-73	4.60	257
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‡ 1962-73	5-27-73	8.92	(†)
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‡ 1962-73	5-27-73	10.43	12,200
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	1966-73	5-27-73	7.60	140
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	1966-73	5-27-73	9.07	3,020
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, 1965-73	3-16-73	d11.56	3,860
03430400	Mill Creek at 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	1965-73	12- 4-72	7.50	4,800
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	1965-73	12-10-72	11.70	5,300
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	1965-73	5-27-73	4.70	1,300
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	1966-73	7- 1-73	9.05	(†)
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	1965-73	12-10-72, 4-19-73	4.40	(†)
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	1965-73	12-10-73	13.30	9,080

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
03431080	Sims Branch at Elm Hill Pike, near Donelson, Tenn.	Lat 36°09'09", long 86°41'02", Davidson County, at bridge on McGavock Pike, 1.5 miles southwest of intersection of Donelson Pike and Lebanon Road (U.S. Highway 70) in Donelson.	3.98	1965-73	7- 1-73	12.02	(†)
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	1965-73	11- 7-72	6.20	(†)
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	1965-73	6-13-73	Unknown	(†)
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	1965-73	6-13-73	3.40	(†)
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, 500 ft west of 100-Oaks Shopping Center, and 4.0 miles southeast of State capitol in Nashville.	1.58	1965-72	6-13-73	5.10	(†)
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	1965-73	6-13-73	8.10	2,900
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	1965-73	3-15-73	5.60	(†)
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	1965-73	4-19-73	7.60	(†)
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	1965-73	7-22-73	6.50	(†)
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	1965-73	4-19-73	7.50	(†)
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	1965-73	7- 1-73	9.70	3,440
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 NW of Bordeaux.	5.29	1965-73	7-22-73	7.30	(†)
03431630	Richland Creek at Lynwood 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	1965-73	11- 7-72	2.95	(†)
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	1965-73	12- 9-72	4.20	(†)
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	1965-73	4-19-73	5.90	(†)

See footnotes at end of table p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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	1965-73	4-19-73	3.45	(†)
03431670	Richland Creek at Fransworth Drive, at Belle Meade, Tenn.e/	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	1965-73	4-19-73	7.50	(†)
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	1965-73	8-13-73	3.40	(†)
03432500	West Harpeth River near Leipers Fork, Tenn.	Lat 35°53'56", long 86°58'01", Williamson County, at bridge on former State Highway 96, 1.8 miles east of Leipers Fork.	66.9	1955-61‡ 1962-73	12-10-72	13.94	10,400
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	1967-73	12- 8-72	4.45	(†)
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	1967-73	12- 8-72	8.01	1,240
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	1966-73	12- 8-72	5.45	(†)
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	1967-73	6-19-73	4.69	(†)
		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	1967-73	3-16-73	6.05	(†)
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	1967-73	3-16-73	14.82	(†)
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‡	3-16-73	4.70	634
03465800	Muddy Fork at Fairview, Tenn.	Lat 36°18'52", long 82°32'38", Washington County, at bridge on State Highway 81, 0.7 mile west of Fairview.	9.86	1955-73	3-16-73	5.78	(†)
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‡ 1959-73	3-17-73	22.85	59,100
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	1967-73	3-16-73	6.06	(†)
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	1954-73	3-16-73	17.69	16,200
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	1954-73	3-16-73	18.83	7,600

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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.	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‡ 1954-73	3-16-73	13.16	11,000
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, 1963-73	3-16-73	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‡ 1959-73	3-16-73	6.49	3,930
03486225	Powder Branch near Johnson City, Tenn.	Lat 36°19'03", long 82°16'40", Carter County, at culvert under county road, 4.0 miles east of Johnson City, 4.3 miles southwest of Elizabethton, and at mile 0.2.	4.88	1973	4-25-73	13.90	563
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	1955-73	3-16-73	6.05	200
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	1955-73	3-16-73	4.36	120
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	1954-73	3-16-73	10.68	2,030
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	1966-73	3-16-73	7.07	549
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	1966-73	8-16-73	6.17	(†)
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	1966-73	3-16-73	5.92	304
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	1966-73	3-16-73	7.55	(†)
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	1954-73	3-16-73	14.90	4,400
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	1954-73	3-16-73	13.33	4,500
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 ‡ 1955-73	5-27-73	7.56	4,810
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‡ 1955-73	3-16-73	8.15	860
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	1967-73	12-10-72	5.27	(†)
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	1967-73	12-10-72	9.51	2,780
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	1967-73	3-16-73	8.08	860

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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	1962-73	12-10-72	7.81	1,930
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	1954-73	12-10-72	18.54	(†)
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‡ 1965-73	12-10-72	6.97	705
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‡ 1969-73	5-27-73	25.53	19,900
03538600	Obed River at Crossville, Tenn.	Lat 35°57'27", long 85°03'00", Cumberland County, at bridge on former U.S. Highway 70-S, 0.5 mile southwest of junction of U.S. Highways 70-S and 70-N, 1.5 miles northwest of Crossville (description revised).	12.0	1955-73	5-27-73	10.07	1,470
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	1968-73	5-27-73	11.52	(†)
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	1967-73	5-27-73	14.81	(†)
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	1967-73	5-27-73	11.53	(†)
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	1967-73	5-27-73	8.60	3,300
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	1967-73	12-10-72	8.40	835
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‡ 1956-73	5-27-73	26.60	62,500
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‡ 1955-73	5-27-73	16.99	(†)
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‡ 1956-73	3-16-73	9.94	10,500
03561900	Belcher Creek near Ducktown, Tenn.	Lat 35°04'27", long 84°23'09", Polk County, at culvert under State Highway 68, 2.8 miles north of Ducktown.	1.37	1967-73	5-27-73	2.86	(†)
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	1955-73	3-16-73	9.32	4,300
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	1950-73	3-16-73	17.50	9,900
03570800	Little Brush Creek near Dunlap, Tenn.	Lat 35°24'15", long 85°23'18", Sequatchie County, at bridge on former State Highway 8, 1.5 miles north of Dunlap.	15.4	1959-73	3-16-73	10.3	3,480

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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	1955-73	3-16-73	8.01	234
03571800	Battle Creek near Monteagle, Tenn.	Lat 35°08'03", long 85°46'15", Marion County, at bridge on former U.S. Highways 41 and 64, 9.2 miles southeast of Monteagle.	50.4	1955-73	3-16-73	10.64	8,000
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	1955-73	3-17-73	8.11	1,330
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‡ 1960-73	3-17-73	14.46	5,660
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	1955-73	3-17-73	7.48	(†)
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	1955-73	3-17-73	10.84	(†)
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‡ 1969-73	5-27-73	15.08	13,700
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	1955-73	12-10-72	5.31	40
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	1954-73	3-16-73	12.57	16,000
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	1955-73	5-27-73	6.83	3,940
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‡ 1969-73	3-16-73	15.41	9,550
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	1955-73	3-15-73	4.42	213
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‡ 1955-73	3-15-73	17.5	(†)

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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	1955-73	1-28-57 11- -57 3- 8-61 2-27-62 3-11-63 4- 6-64 3-29-65 2-13-66 3- 6-67 5-16-68 12-30-69 2-21-71 7-28-72 4-19-73	3.46 4.52 5.18 6.99 4.85 6.02 6.70 2.65 5.91 5.32 6.69 2.91 2.20 6.42	b615 b1,150 b1,600 b4,200 b1,350 b2,550 b3,600 b370 b2,350 b1,730 b3,590 b445 b267 3,100
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	1955-73	4-19-73	3.38	(†)
03597000	Garrison Fork at Fairfield, Tenn.	Lat 35°33'59", 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‡ 1970-73	5-27-73	19.56	15,600
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	1966-73	3-15-73	12.64	3,220
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	1966-73	3-15-73	9.22	4,630
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	1966-73	12-10-72	3.57	415
03597550	Muse Branch near Bell Buckle, Tenn.	Lat 35°34'03", long 86°19'28", Bedford County, at bridge on county road, 2.3 miles southeast of Bell Buckle.	1.86	1966-73	5-27-73	4.99	756
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	1955-73	3-15-73	6.24	5,380
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	1954-73	3-16-73	13.95	9,670
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.	0.63	1955-73	5-27-73	5.64	335
03600000	Rutherford Creek near Carters Creek, Tenn.	Lat 35°40'23", long 86°58'42", Maury County, at bridge on county road, 2.5 miles south of Neapolis, 3.2 miles south of town of Carters Creek.	68.8	1954-58‡ 1959-73	3-15-73	19.05	(†)
03602100	Moss Spring Hollow at 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	1955-73	12-10-72	4.73	(†)
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 1960-73	3-17-73	7.59	(†)
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	1967-73	12-10-72	4.90	157
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	1967-73	12-10-72	4.30	(†)

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973-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					
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	1967-73	12- 9-72	6.80	(†)
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	1955-73	12-10-72	11.38	14,000
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	1955-73	3-15-73	2.33	(†)
		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	1955-73	3-18-73	11.84	(†)
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	1955-73	3-18-73	4.33	(†)
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	1967-73	4-19-73	14.22	(†)
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	1967-73	4-19-73	10.39	(†)
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	1967-73	4-19-73	12.24	1,870
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, 1959-73	4-19-73	7.79	620
07028700	Cain Creek near Trenton, Tenn.	Lat 35°57'56", long 88°57'14", Gibson County, at bridge on U.S. Highway 54, 1.6 miles southwest of Trenton.	14.4	1954-73	4-19-73	11.75	2,820
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 below Griffin Creek, 4.6 miles northeast of Spring Creek, and at mile 44.9.	88.2	1954-57, 1959-73	1-21-73	12.37	16,200
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	1967-73	4-19-73	14.78	(†)
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	1967-73	4-19-73	17.03	(†)
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	1967-73	4-19-73	16.13	(†)
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	1967-73	4-19-73	15.10	5,400
07029050	Nash Creek near Tigrett, Tenn.	Lat 35°57'38", long 89°17'07", Dyer County, at bridge on former State Highway 20, 2.3 miles west of Tigrett.	7.23	1955-73	4-21-73	9.90	(†)
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	1955-73	12- 9-72	17.59	(†)

See footnotes at end of table, p. 158.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		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, 1959-73	4-20-73	16.16	4,510

† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Includes 3.21 sq mi without surface drainage.
b Not previously published.
c Published as Bybee Branch prior to 1961.
d Furnished by Corps of Engineers, Nashville District.
e Published as at Dunham Springs Road prior to 1969.
f Published as West Fork prior to 1966.
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 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Cumberland River basin						
Overall Creek 03428410	West Fork Stones River	Lat 35°54'56", long 86°27'35", Rutherford County, at bridge on U.S. Highways 41 and 70S, 5.7 miles southeast of Smyrna, Tenn.	51.3	1972	3-16-73	5,180
Town Branch 03434610	Jones Creek to Harpeth River	Lat 36°10'39", long 87°20'11", Dickson County, at county road bridge (old State Highway 47 bridge), 2000 ft upstream from Matlock Branch, and 1700 ft east of intersection of State Highways 48 and 49 at Charlotte.	2.05		9- 5-73	*.07
Tennessee River basin						
Nolichucky River 03467900	French Broad River	Lat 36°07'47", long 83°13'12", Hamblen County, at county road bridge (Hale Bridge), 2 miles SW of Lowland, Tenn., and at mile 5.3.	1,711	1966	6- 7-73	2,850
Watauga River 03486650	South Fork Holston River	Lat 36°23'02", long 82°19'11", Washington County, at county road bridge (Gibson Bridge) at lower end of Sayler Island, 4.7 miles northeast of Johnson City, Tenn., and at mile 15.6.	797		6- 7-73	3,900
South Fork Holston River 03487640	Holston River	Lat 36°32'59", long 82°35'29", Sullivan County, at county road bridge (Ridgefields Bridge) just below sluice channel at Kingsport, Tenn., and at mile 1.2.	2,047		6- 7-73	10,900
Holston River 03490900	Tennessee River	Lat 36°25'05", long 86°56'02", Hawkins County, at county road bridge (Jenkins Bridge), 0.8 mile upstream from Big Creek, 3.4 miles east of Rogersville, Tenn., and at mile 109.9.	2,899		6- 7-73	6,650
Emory River 03538297	Clinch River	Lat 36°07'40", long 84°37'00", Morgan County, at bridge on U.S. Highway 27, 300 ft upstream from Rock Creek, 2.0 miles northwest of Wartburg, and at mile 35.6.	49.2		5-28-73	†15,500
Big Bigby Creek 03601100	Duck River	Lat 35°32'43", long 87°14'05", Maury County, at county road bridge (Needmore Bridge), at Needmore, 1.2 miles downstream from West Fork, and 1.7 miles west of Mount Pleasant, Tenn.	48.3	1969, 1972	9- 6-73	*12

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 (0.3 km) downstream from West Prong Little Pigeon River, 0.6 mile (1.0 km) north of intersection of U. S. Highway 441 and State Highway 66 in Sevierville, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--353 sq mi (914 sq km).

PERIOD OF RECORD.--Water temperatures: November 1968 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 30.0°C July 4, 13, Sept. 2; minimum, 2.0°C several days during winter period.

Period of record:
Water temperatures: Maximum, 34.0°C July 5, 19, 1969; minimum, freezing point, Jan. 7-10, 1969, Jan. 20, 21, 1971.

REMARKS.--Missing record, July 21 to Aug. 14. Miscellaneous samples of chemical data published for the water year 1968, 1970.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.5	16.5	14.5	8.0	8.0	11.5	10.0	7.0	5.0	9.5	6.5
2	16.5	15.0	16.5	15.0	8.0	6.5	11.0	8.5	9.5	7.0	9.0	6.5
3	18.0	15.5	18.0	16.0	8.0	6.5	8.5	8.0	9.0	6.5	10.0	8.5
4	17.0	16.5	17.0	15.5	8.5	7.0	9.5	8.0	6.5	5.5	11.0	10.0
5	17.0	16.5	15.5	13.5	9.0	7.0	9.5	8.5	8.0	6.5	13.5	10.5
6	16.5	16.0	14.5	11.5	10.5	9.0	9.0	8.0	8.0	7.0	13.0	11.0
7	17.0	16.5	13.5	11.5	10.0	6.5	8.0	4.5	9.0	8.0	13.0	11.5
8	16.5	15.5	13.0	12.0	6.5	5.5	4.5	3.5	9.0	8.0	15.5	12.0
9	16.5	15.0	12.0	11.0	10.0	6.0	5.0	4.0	8.5	6.0	15.5	14.0
10	17.0	15.0	12.0	11.0	11.5	10.0	4.5	3.5	6.0	4.5	15.0	13.5
11	18.0	15.5	13.5	11.0	11.5	9.5	4.0	3.0	5.0	4.0	14.5	14.0
12	18.0	15.5	13.5	11.0	10.0	9.5	4.0	2.0	5.0	4.0	14.0	12.0
13	19.0	16.5	13.0	11.0	10.5	10.0	3.5	2.0	5.5	4.5	14.0	12.0
14	19.0	17.0	13.5	12.0	10.5	10.0	3.5	2.0	6.5	5.5	16.0	13.0
15	20.0	16.5	13.0	10.0	10.5	10.0	4.5	2.0	7.0	6.0	14.5	14.0
16	17.0	16.0	10.0	9.0	10.0	5.0	5.5	4.5	6.5	4.0	14.0	12.0
17	18.5	16.5	9.0	9.0	5.0	3.5	5.5	4.5	4.0	2.0	12.0	9.0
18	18.0	15.5	10.0	9.0	3.5	2.0	6.5	5.0	3.5	2.0	9.5	8.0
19	15.5	13.5	10.0	9.0	5.5	3.5	8.0	6.0	4.5	2.0	10.0	8.0
20	13.5	11.5	10.5	10.0	8.5	5.0	8.0	6.0	4.5	3.5	10.5	10.0
21	12.0	11.0	10.0	9.5	8.5	8.5	6.0	5.5	6.0	3.5	10.0	9.0
22	13.0	11.5	9.5	8.5	9.0	8.5	8.0	6.0	6.0	4.0	9.5	7.0
23	13.5	13.0	8.5	7.0	9.0	9.0	8.0	7.0	6.5	4.5	9.5	8.5
24	15.0	13.5	8.5	6.0	9.0	9.0	8.0	6.5	8.0	5.0	10.0	9.0
25	14.5	13.5	7.0	6.0	9.0	9.0	6.5	5.5	7.0	5.0	12.0	10.0
26	14.5	12.0	8.5	6.5	9.0	7.0	5.5	5.5	8.5	5.5	12.0	11.0
27	12.0	12.0	8.5	7.0	7.0	6.5	7.0	5.5	8.0	7.0	11.5	10.5
28	13.5	12.0	9.0	8.0	6.5	5.0	8.0	7.0	9.5	7.0	12.0	11.0
29	13.5	13.5	9.0	8.0	7.0	6.5	8.0	5.0	---	---	12.0	11.0
30	15.0	13.5	8.5	8.0	9.0	7.0	5.5	4.0	---	---	13.0	11.0
31	14.5	14.0	---	---	11.5	9.0	5.0	4.5	---	---	15.0	13.0
MONTH	20.0	11.0	18.0	6.0	11.5	2.0	11.5	2.0	9.5	2.0	16.0	6.5

03470000 LITTLE PIGEON RIVER AT SEVIERVILLE.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	14.5	15.5	13.5	20.0	18.5	24.5	21.0	---	---	29.5	23.0
2	15.0	13.0	15.5	15.5	21.5	18.5	28.0	21.5	---	---	30.0	23.0
3	14.5	12.0	15.5	15.0	24.5	20.0	29.5	24.0	---	---	29.0	23.5
4	13.5	11.5	15.5	14.0	24.0	20.0	30.0	25.0	---	---	29.0	23.5
5	11.5	10.0	15.5	14.0	23.0	20.0	29.0	24.5	---	---	29.0	23.5
6	12.0	9.5	14.5	13.5	23.0	20.5	28.0	23.5	---	---	29.0	23.5
7	11.5	10.5	16.5	13.5	24.0	20.0	28.0	24.0	---	---	29.0	24.0
8	10.5	10.0	16.5	15.0	26.0	21.5	28.5	24.5	---	---	29.0	24.0
9	10.0	9.0	16.0	14.5	23.5	22.0	28.5	24.5	---	---	26.5	23.5
10	10.0	6.5	16.5	15.0	26.0	21.5	28.0	24.5	---	---	22.0	21.0
11	8.5	6.0	16.5	15.5	28.5	23.5	27.0	24.5	---	---	25.0	21.5
12	9.5	8.0	16.0	15.0	26.5	24.5	29.0	24.0	---	---	26.5	21.0
13	10.5	9.0	16.0	15.0	26.0	23.5	30.0	23.5	---	---	23.0	21.0
14	11.5	9.0	16.5	15.0	28.0	23.5	29.0	24.5	---	---	21.0	20.0
15	13.5	10.0	18.0	15.5	29.5	24.5	28.0	24.5	26.0	22.0	21.0	19.5
16	12.0	11.5	17.0	14.5	26.0	21.5	28.0	24.0	26.0	22.0	23.5	20.0
17	12.0	11.0	17.0	14.5	22.0	20.5	29.0	24.5	23.5	22.0	24.0	20.0
18	13.5	11.5	16.5	13.5	23.5	21.0	28.0	25.0	25.5	21.0	20.5	18.5
19	15.0	12.0	17.0	14.0	25.5	23.0	26.5	24.5	26.5	21.5	20.0	18.0
20	16.5	14.5	18.0	15.5	24.5	23.0	26.5	24.0	24.5	22.0	23.0	18.0
21	18.5	15.0	20.0	15.5	23.5	21.5	---	---	24.5	21.5	24.0	19.0
22	18.0	16.0	20.0	15.0	22.0	21.0	---	---	25.0	21.0	25.0	19.5
23	16.5	15.5	20.0	16.5	24.0	21.0	---	---	26.5	20.0	25.0	20.5
24	18.0	15.5	18.0	17.0	25.0	21.0	---	---	27.0	21.0	26.0	20.5
25	17.0	16.5	18.5	16.0	25.5	21.5	---	---	28.5	22.0	26.0	21.0
26	16.5	15.0	19.5	17.0	26.5	21.5	---	---	28.5	22.0	27.0	21.0
27	15.0	11.0	17.0	15.5	25.0	23.0	---	---	28.5	23.0	23.0	21.5
28	11.5	10.5	16.5	15.0	23.5	21.5	---	---	29.0	23.5	25.0	21.0
29	13.0	10.5	17.0	15.5	23.5	21.0	---	---	29.5	24.0	25.5	21.5
30	13.5	12.0	18.5	16.5	23.5	21.5	---	---	29.0	24.0	26.5	23.0
31	---	---	19.0	18.0	---	---	---	---	29.0	24.0	---	---
MONTH	18.5	6.0	20.0	13.5	29.5	18.5	---	---	---	---	30.0	18.0

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 (90 m) upstream from Williams Island, 2.5 miles (4.0 km) east of Doeville, and at mile 6.47 (10.41 km).

DRAINAGE AREA.--110 sq mi (285 sq km).

PERIOD OF RECORD.--Water temperatures: September 1971 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 25.5°C July 9; minimum, freezing point, several days during winter period.

Period of record:
Water temperatures: Maximum, 27.0°C July 20, 1972; minimum, freezing point, several days during winter period.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	10.0	13.5	10.5	5.0	3.0	10.5	8.5	6.0	3.5	8.5	4.5
2	14.5	10.0	14.0	10.0	5.5	2.0	8.5	6.0	8.5	6.0	8.5	4.0
3	15.0	10.5	15.0	13.0	6.5	3.0	6.0	5.5	6.0	3.0	11.0	8.5
4	15.0	13.0	14.0	10.0	8.0	5.5	9.0	6.0	5.5	2.0	13.0	9.0
5	15.5	13.0	11.0	8.5	10.5	6.5	8.5	6.0	7.0	3.0	14.0	10.0
6	15.0	13.0	9.5	6.0	11.5	10.0	6.0	4.0	6.0	4.5	13.0	10.5
7	14.5	13.5	10.0	8.0	10.0	7.0	4.0	1.0	8.5	5.0	13.0	10.5
8	14.5	10.5	10.0	7.0	8.5	5.5	1.5	0.0	7.0	4.5	15.5	11.5
9	14.5	11.0	10.0	6.5	11.0	8.5	1.5	1.0	4.5	1.5	14.0	11.5
10	13.5	9.0	10.5	6.5	11.5	10.5	1.5	0.0	1.5	0.5	13.5	11.5
11	13.0	8.5	10.5	8.0	10.5	10.0	1.0	0.0	2.0	0.0	13.0	11.5
12	13.5	11.5	9.5	5.5	11.5	9.5	0.0	0.0	3.5	0.0	14.0	9.5
13	16.0	13.5	11.0	6.5	11.0	10.0	1.0	0.0	5.0	1.5	13.5	8.0
14	16.0	13.5	11.5	9.0	11.5	10.5	0.0	0.0	6.5	4.5	15.0	9.0
15	15.5	13.0	9.0	4.0	11.0	8.0	2.0	0.0	6.0	2.0	14.5	12.0
16	14.0	10.5	5.5	3.0	8.0	1.0	5.0	1.5	2.0	0.0	12.0	10.5
17	16.0	11.5	6.0	5.0	2.0	0.0	4.5	1.0	0.5	0.0	11.0	4.5
18	15.0	11.5	6.5	5.0	3.5	1.5	5.5	2.0	1.5	0.0	8.5	4.0
19	11.5	8.0	7.0	6.5	6.0	1.5	6.5	5.0	3.5	0.0	9.5	4.0
20	8.5	3.5	7.0	6.0	8.5	6.0	5.5	3.5	1.5	0.5	8.5	5.5
21	9.0	4.5	6.0	5.0	8.5	7.0	5.0	3.0	4.0	1.0	8.5	5.0
22	10.5	6.0	5.0	4.0	9.0	8.5	8.5	5.0	3.5	0.0	7.0	4.5
23	11.0	9.0	4.0	3.0	9.0	8.0	7.0	5.0	4.5	0.5	9.5	3.0
24	15.0	11.5	3.5	1.0	9.0	7.0	6.0	3.0	6.0	1.0	10.5	3.5
25	14.5	9.5	5.0	2.0	9.0	6.5	5.0	1.0	6.5	2.0	10.0	7.0
26	10.5	7.0	5.5	3.5	6.5	4.0	5.0	2.0	7.0	5.0	10.0	8.5
27	9.5	7.0	6.0	3.0	4.0	3.0	6.0	5.0	7.0	5.5	10.0	8.5
28	11.5	9.0	6.0	5.0	5.0	3.0	6.5	5.5	9.5	5.0	11.0	7.0
29	11.5	9.5	5.5	4.0	6.0	4.0	6.0	0.5	---	---	10.0	8.5
30	12.0	9.0	5.0	4.5	9.5	6.0	1.5	0.0	---	---	13.5	8.0
31	11.5	10.5	---	---	11.5	9.5	3.5	0.0	---	---	14.0	11.5
MONTH	16.0	3.5	15.0	1.0	11.5	0.0	10.5	0.0	9.5	0.0	15.5	3.0

03482100 ROAN CREEK NEAR DOEVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	12.0	18.0	11.5	18.0	13.0	20.5	18.5	21.5	20.5	25.0	22.0
2	14.0	9.5	18.0	13.5	18.5	14.0	24.0	19.5	24.0	20.5	25.0	23.0
3	12.0	8.0	16.0	13.0	18.5	15.5	24.5	21.5	23.5	21.5	25.0	22.0
4	11.5	9.0	15.5	9.5	20.0	15.5	24.0	22.0	23.0	21.5	24.5	22.0
5	9.0	5.5	15.5	9.0	20.0	16.5	23.5	21.0	23.5	22.0	24.0	22.0
6	12.0	5.5	14.0	9.0	19.5	17.0	24.0	20.0	23.0	21.0	23.5	21.5
7	10.0	8.0	16.0	10.5	20.0	16.0	24.5	21.0	24.0	21.0	23.5	21.5
8	8.0	7.0	16.5	13.5	21.0	17.0	24.5	21.5	25.0	22.0	23.5	21.5
9	9.5	6.0	18.0	13.0	21.5	19.5	25.5	23.0	24.5	21.5	23.0	21.5
10	6.0	2.0	19.0	13.5	22.0	19.0	24.0	22.0	25.0	23.0	21.5	20.5
11	6.0	1.5	19.0	13.5	23.0	19.5	24.0	21.0	24.5	22.0	20.5	20.0
12	8.0	3.5	18.5	13.5	22.0	18.5	24.0	19.5	24.0	23.0	20.5	19.5
13	8.0	5.0	17.0	11.0	20.5	19.5	24.5	19.0	24.0	23.0	20.5	19.5
14	10.5	3.5	18.0	11.5	23.0	19.0	23.5	20.5	23.5	22.0	20.0	19.5
15	13.0	6.0	17.0	13.0	21.5	20.0	22.0	20.5	23.5	22.0	19.5	19.0
16	12.0	9.0	16.5	10.5	20.5	19.0	23.0	20.5	22.0	20.5	20.0	18.5
17	11.5	11.0	15.5	11.0	23.0	18.5	24.0	20.5	22.0	21.0	20.0	19.0
18	12.0	11.0	15.5	8.5	23.5	19.5	24.0	20.5	22.0	21.0	19.5	19.0
19	14.0	11.5	16.0	10.5	23.0	20.0	22.0	20.5	22.0	21.0	19.0	16.0
20	15.5	10.5	16.0	12.0	21.5	20.0	23.0	20.5	22.0	21.0	18.5	17.0
21	19.0	12.0	19.0	12.0	21.0	19.5	23.5	20.5	21.0	19.5	18.5	17.0
22	17.0	14.0	19.5	13.5	21.0	19.0	25.0	21.0	20.0	18.5	18.5	16.0
23	15.5	14.0	19.5	15.5	22.0	19.0	24.0	22.0	21.0	19.5	20.0	18.5
24	18.5	14.0	19.0	15.5	21.5	18.5	23.5	21.0	21.0	19.0	20.5	19.0
25	16.0	14.5	20.5	15.0	23.0	18.5	22.0	20.0	22.0	20.5	20.5	19.5
26	16.0	13.5	20.0	16.0	22.0	19.0	20.0	18.5	23.5	20.5	20.0	19.0
27	14.0	8.5	19.0	16.0	21.5	19.0	21.0	19.0	24.0	21.5	20.5	19.5
28	10.0	7.0	18.0	13.5	21.5	19.0	23.5	19.5	24.0	22.0	21.0	20.0
29	14.0	6.0	18.0	13.0	21.0	18.5	24.0	20.5	25.0	23.0	21.0	20.5
30	14.5	8.5	18.5	13.0	21.0	18.5	23.0	20.5	25.0	23.5	20.5	20.0
31	---	---	19.0	14.5	---	---	21.5	20.5	25.0	23.5	---	---
MONTH	19.0	1.5	20.5	8.5	23.5	13.0	25.5	18.5	25.0	18.5	25.0	16.0

03484800 DOE RIVER AT HAMPTON, TENN.

LOCATION.--Lat 36°17'16", long 82°10'33", Carter County, on left bank, 500 ft (150 m) above Laurel Branch, 1,300 ft (400 m) downstream from old U. S. Highway 19E Bridge, at Hampton, and at mile 7.2 (11.6 km).

DRAINAGE AREA.--100 sq mi (259 sq km).

PERIOD OF RECORD.--Water temperatures: April 1968 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 26.0°C July 9, Aug. 9; minimum, freezing point on several days during winter period.

Period of record:
Water temperatures: Maximum, 28.0°C Aug. 8, 1968; minimum, freezing point on several days during winter period.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	11.0	15.0	12.0	5.5	3.5	11.0	8.5	8.0	4.0	9.0	5.0
2	15.5	10.0	15.5	12.0	6.0	3.0	8.5	6.5	9.5	8.0	9.0	4.5
3	16.5	11.0	16.5	14.5	6.5	3.5	8.5	6.0	8.0	4.5	10.5	8.5
4	17.0	12.0	15.0	11.5	8.0	6.0	10.0	8.5	6.5	4.0	14.0	7.0
5	16.5	15.0	13.0	9.0	10.5	7.0	8.5	7.0	8.0	4.5	13.5	10.5
6	15.5	15.0	12.0	8.0	12.0	9.5	7.0	4.5	7.0	5.5	14.0	10.0
7	16.0	14.0	11.5	9.0	9.5	6.5	4.5	2.0	9.0	6.5	14.0	11.0
8	16.0	13.0	11.5	8.5	10.0	6.5	3.0	1.5	8.0	5.0	15.5	13.0
9	16.0	12.0	10.5	8.5	11.5	10.0	3.0	1.5	5.0	2.0	15.0	11.5
10	15.5	11.0	11.5	8.5	12.0	10.5	3.0	1.0	2.0	1.0	15.5	11.0
11	15.5	10.5	11.0	9.0	10.5	10.0	1.5	1.0	2.0	0.0	13.5	11.5
12	15.5	13.0	11.0	7.0	11.5	9.5	1.5	1.0	3.5	0.5	15.0	10.5
13	18.0	14.5	11.5	8.0	11.0	10.5	2.0	0.5	5.5	3.0	14.0	9.0
14	18.0	14.5	12.0	9.5	11.0	10.5	2.0	1.0	7.0	5.0	16.0	10.0
15	18.0	13.0	9.5	5.0	11.5	6.0	1.5	1.0	6.0	3.0	14.5	11.5
16	14.0	11.5	6.5	4.0	6.0	0.0	4.0	1.0	3.0	0.5	12.0	10.5
17	18.5	14.0	6.5	5.5	1.0	0.0	4.5	1.0	1.0	0.5	11.0	4.5
18	14.0	13.0	7.0	5.0	2.0	0.0	6.0	2.0	2.0	0.5	9.0	4.5
19	13.5	8.0	8.0	6.5	5.0	1.0	6.0	4.5	4.0	0.5	10.0	4.5
20	10.5	6.5	7.0	5.5	8.0	5.0	6.0	4.0	2.0	1.0	9.0	6.0
21	11.0	6.5	6.5	4.5	8.0	6.5	6.0	3.5	4.5	1.5	9.0	5.5
22	13.0	8.0	4.5	3.5	8.5	8.0	8.5	6.0	4.0	0.5	8.0	5.0
23	14.0	10.5	4.5	3.0	8.5	8.0	7.0	5.5	5.0	1.0	10.0	3.5
24	16.0	13.5	4.5	1.5	9.0	7.0	5.5	4.0	6.5	1.5	11.0	4.0
25	13.5	10.0	5.5	1.5	8.0	6.0	5.5	3.0	7.0	3.0	10.5	8.0
26	12.0	9.0	5.5	4.0	6.0	4.0	6.0	3.5	8.0	6.0	10.5	8.5
27	10.5	8.5	5.5	3.0	5.0	3.5	6.5	6.0	8.0	6.5	10.5	8.5
28	12.0	10.5	6.5	5.0	5.5	3.0	7.0	6.0	9.5	6.0	11.5	8.0
29	13.0	11.0	6.0	4.5	7.0	4.0	6.0	1.0	---	---	10.5	8.5
30	14.5	10.5	5.5	4.5	10.0	7.0	2.0	0.5	---	---	14.5	8.5
31	13.5	12.0	---	---	12.0	9.5	4.0	0.5	---	---	15.0	11.5
MONTH	18.5	6.5	16.5	1.5	12.0	0.0	11.0	0.5	9.5	0.0	16.0	3.5

03484800 DOE RIVER AT HAMPTON, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	14.5	16.5	12.0	18.5	14.5	21.5	18.0	21.5	20.5	25.0	20.0
2	15.5	11.0	16.5	14.0	19.5	15.5	23.5	19.0	24.5	20.5	24.5	20.5
3	14.0	9.5	14.5	13.5	20.0	16.0	24.5	20.0	24.0	21.0	24.5	19.5
4	13.5	10.5	15.0	10.5	21.0	16.5	23.0	20.5	24.5	20.0	24.0	20.0
5	10.0	7.0	14.5	9.5	20.5	17.0	23.0	20.0	24.0	20.0	24.5	20.0
6	14.0	7.0	13.0	10.0	19.5	18.0	23.5	18.5	24.0	20.5	24.0	19.5
7	11.0	9.5	15.5	11.5	21.0	17.0	23.5	19.5	25.5	20.5	23.5	20.0
8	9.0	9.0	17.0	14.0	21.0	17.0	24.5	20.0	25.0	20.0	24.0	20.0
9	10.5	7.0	17.0	15.0	21.5	18.5	26.0	21.0	26.0	20.5	21.5	20.5
10	7.0	3.5	18.5	13.5	23.5	18.5	25.5	21.5	24.0	20.0	22.0	20.0
11	7.0	3.0	17.0	14.0	23.5	19.0	24.0	20.5	23.0	19.0	21.5	19.5
12	9.0	4.5	15.5	13.5	22.0	19.0	24.0	19.0	23.5	20.5	22.0	18.5
13	9.0	6.0	16.0	11.5	21.0	19.5	24.5	18.0	23.5	21.0	20.0	18.0
14	11.5	4.5	16.0	11.0	23.5	19.0	23.5	19.5	23.5	20.5	19.5	19.0
15	14.5	8.0	16.0	13.0	21.5	19.0	23.5	20.5	21.0	19.5	20.5	18.0
16	14.0	10.5	15.5	10.0	19.5	18.5	23.0	20.0	23.5	18.5	21.5	18.0
17	13.5	13.5	13.0	10.5	22.0	18.5	25.0	20.0	21.0	19.5	20.5	16.5
18	14.0	13.5	14.5	9.0	23.0	19.0	23.5	19.5	22.0	19.5	19.0	16.0
19	15.5	14.0	14.0	10.5	21.5	19.0	22.0	20.0	22.0	18.5	19.0	14.5
20	17.0	13.0	15.5	13.5	23.5	19.5	23.5	19.5	20.5	19.0	20.0	15.5
21	20.5	14.5	17.0	13.0	21.5	19.5	24.5	20.0	19.0	18.0	19.0	16.0
22	19.0	16.0	18.5	13.0	21.5	19.0	25.5	20.5	20.5	18.0	20.0	16.0
23	17.0	16.0	18.5	15.5	23.5	19.0	24.5	21.0	20.5	17.0	21.5	18.0
24	20.0	16.0	16.5	15.5	23.0	18.0	22.0	20.5	21.5	17.0	22.0	18.0
25	18.0	16.5	18.5	14.5	23.5	18.0	23.0	21.0	23.5	19.0	21.5	18.5
26	18.0	15.5	18.0	14.5	22.0	18.5	22.0	20.0	24.0	19.0	21.5	18.0
27	15.5	10.0	16.5	15.0	21.5	18.5	23.5	20.0	24.0	19.5	22.0	18.0
28	11.0	9.0	18.5	16.0	20.5	18.5	24.5	19.5	24.5	20.0	22.0	18.0
29	15.5	8.0	17.0	14.5	21.0	18.0	24.5	20.0	25.0	21.0	21.5	19.0
30	16.0	10.0	19.5	14.5	19.0	18.0	24.5	20.0	25.0	21.0	21.5	19.5
31	---	---	18.5	15.0	---	---	22.0	20.5	24.5	20.5	---	---
MONTH	20.5	3.0	19.5	9.0	23.5	14.5	26.0	18.0	26.0	17.0	25.0	14.5

03491000 BIG CREEK NEAR ROGERSVILLE, TENN.

LOCATION.--Lat 36°25'34", long 82°57'07", Hawkins County, temperature recorder at gaging station on left bank 300 ft (90 m) upstream from county bridge, 2.0 miles (3.2 km) upstream from mouth, and 3 miles (5 km) northeast of Rogersville.

DRAINAGE AREA.--47.3 sq mi (122.5 sq km).

PERIOD OF RECORD.--Water temperatures: October 1971 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 25.5°C several days between Aug. 30 and Sept. 6; minimum, 2.0°C Jan. 13, 14, 15.

Period of record:
Water temperatures: Maximum, 26.5°C sometime between July 25 and Aug. 6, 1972; minimum, 2.0°C Jan. 13, 14, 15, 1973.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	15.0	14.0	13.0	8.0	6.5	8.0	6.5	6.0	5.5	9.5	8.5
2	15.0	14.0	14.0	13.0	8.0	6.5	6.5	6.5	8.0	6.5	9.5	8.5
3	14.5	14.0	14.5	13.5	7.0	6.0	6.5	5.5	8.0	7.0	10.5	9.5
4	14.0	14.0	14.0	13.0	8.0	6.5	6.0	5.5	7.0	6.5	13.0	10.5
5	14.0	14.0	13.0	11.5	9.0	8.0	6.0	6.0	8.0	7.0	14.5	12.0
6	14.5	14.0	12.0	10.0	9.5	9.0	6.0	5.5	8.0	7.0	14.0	12.0
7	14.5	14.0	11.0	11.0	9.0	8.0	5.5	4.5	8.0	8.0	13.5	12.0
8	14.0	13.5	11.0	10.5	8.0	8.0	5.0	4.0	8.0	7.0	15.5	13.0
9	13.5	13.0	11.0	10.5	9.0	8.0	4.5	4.5	7.0	6.5	15.5	13.5
10	13.5	12.0	11.0	11.0	10.0	9.0	4.5	3.5	7.0	6.5	15.0	13.5
11	14.0	13.0	11.5	11.0	10.0	9.5	4.0	3.0	7.0	6.5	15.0	14.0
12	14.5	13.5	11.0	10.5	9.5	9.5	3.5	3.0	6.5	6.0	14.0	13.5
13	15.5	14.5	11.0	10.0	9.5	9.5	3.0	2.0	7.0	6.0	14.0	13.0
14	15.5	14.5	12.0	11.0	9.5	9.5	2.0	2.0	8.0	7.0	15.0	13.0
15	15.5	14.5	11.5	10.0	9.5	9.0	3.0	2.0	8.0	7.0	14.5	13.5
16	14.5	13.5	11.0	10.0	9.0	6.5	3.5	3.0	7.0	6.0	13.5	12.0
17	15.5	13.5	10.0	9.5	6.5	5.5	4.0	3.5	6.0	5.5	13.0	10.5
18	14.5	13.5	9.5	9.5	6.0	5.5	4.0	4.0	6.0	6.0	10.5	10.0
19	14.0	12.0	9.5	9.0	6.0	5.5	5.5	4.5	6.5	6.0	11.0	10.0
20	13.5	11.5	9.0	9.0	6.5	6.0	5.0	4.5	6.5	6.5	11.0	10.5
21	12.0	11.0	9.5	9.0	7.0	6.5	4.5	4.5	6.5	6.0	10.5	10.0
22	12.0	11.0	9.5	8.0	8.0	7.0	6.0	5.0	6.5	6.0	10.5	9.5
23	13.0	11.5	8.5	7.0	7.0	7.0	6.0	5.5	6.5	6.0	10.5	9.5
24	13.5	13.0	8.5	6.5	7.0	7.0	6.0	5.5	7.0	6.0	11.5	10.0
25	13.5	12.0	8.0	6.5	7.0	7.0	6.0	5.5	8.0	6.5	11.5	11.0
26	13.0	11.5	7.0	6.5	7.0	6.0	6.0	5.0	9.0	8.0	11.5	11.5
27	12.0	11.0	7.0	6.5	6.0	5.5	6.0	6.0	9.5	9.0	12.0	11.0
28	12.0	11.5	7.0	7.0	5.5	5.0	6.0	6.0	10.0	9.0	12.0	11.0
29	13.0	12.0	8.0	7.0	5.5	5.0	6.0	5.5	---	---	12.0	11.5
30	13.5	13.0	8.0	7.0	6.0	5.5	6.5	6.0	---	---	13.0	11.0
31	13.0	13.0	---	---	8.0	6.5	6.0	5.5	---	---	14.5	12.0
MONTH	17.0	11.0	14.5	6.5	10.0	5.0	8.0	2.0	10.0	5.5	15.5	8.5

03491000 BIG CREEK NEAR ROGERSVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.5	16.0	13.5	18.0	15.5	19.5	19.0	22.0	20.0	25.5	22.0
2	14.0	12.0	15.5	15.0	18.5	16.0	21.0	18.5	20.0	19.5	25.5	22.0
3	13.0	11.5	15.5	14.0	20.0	18.0	22.0	20.0	19.5	19.0	25.0	21.5
4	12.0	11.5	14.5	13.5	21.0	18.5	22.0	21.0	20.0	19.0	25.0	21.0
5	11.5	10.5	14.5	13.0	21.0	19.5	22.0	21.0	20.5	19.0	25.5	23.0
6	12.0	10.0	14.0	13.0	21.0	19.5	23.0	20.0	21.0	19.5	25.5	23.5
7	11.5	11.0	15.0	14.0	21.0	19.0	23.5	21.0	21.0	19.5	25.0	23.5
8	11.0	10.5	16.0	15.0	22.0	19.5	24.0	21.5	21.5	19.5	24.5	23.0
9	11.0	10.0	16.0	14.5	23.0	20.0	24.5	21.5	21.5	19.5	24.0	23.5
10	10.5	9.5	16.5	15.0	23.5	20.5	23.5	21.0	21.5	20.0	24.5	23.0
11	10.0	8.5	16.0	15.0	23.5	21.0	23.5	21.0	20.5	19.0	23.5	22.0
12	10.5	9.0	15.5	15.0	23.5	21.5	23.0	20.0	20.5	19.5	23.0	20.5
13	10.5	9.5	16.0	14.5	23.5	21.5	23.0	19.0	21.5	20.0	21.5	20.0
14	12.0	9.5	16.5	15.0	23.5	21.0	22.0	20.5	21.5	21.0	21.0	20.5
15	13.5	10.0	16.5	15.0	23.5	21.0	21.0	20.0	21.0	20.0	21.0	20.0
16	13.0	11.5	16.5	14.5	23.0	21.0	21.0	20.5	21.5	19.5	21.5	19.0
17	12.0	11.5	16.0	15.0	23.5	21.0	22.0	20.0	21.0	20.0	21.0	19.0
18	13.5	12.0	15.5	14.0	23.5	21.0	21.5	20.5	22.0	20.0	20.0	19.5
19	15.0	13.0	15.5	14.5	23.5	21.0	22.0	20.5	21.5	20.0	19.5	17.0
20	16.5	14.0	16.0	14.5	23.5	22.0	22.0	20.5	21.0	20.0	19.5	17.0
21	19.5	14.5	17.0	15.0	23.0	21.5	23.0	21.0	21.0	19.5	19.5	18.0
22	18.5	15.5	17.0	15.0	22.0	20.5	23.5	21.0	21.0	19.5	21.0	18.5
23	17.0	15.5	19.5	16.0	22.0	20.0	23.0	21.0	20.5	18.5	21.0	19.0
24	18.5	15.5	19.0	17.0	21.5	19.5	23.5	21.0	21.0	19.0	22.0	19.5
25	17.0	16.0	19.0	16.0	22.0	19.0	23.5	21.0	23.0	20.0	22.0	20.0
26	16.5	15.5	19.0	17.0	23.0	19.5	21.0	20.5	24.0	20.5	22.0	19.5
27	15.5	13.5	18.0	16.0	22.0	20.0	22.0	20.5	24.5	21.0	21.5	19.0
28	13.5	12.0	16.5	15.5	20.5	19.0	23.5	21.0	24.5	22.0	21.5	19.5
29	13.5	12.0	15.5	15.5	20.5	18.5	24.0	21.0	25.0	23.0	22.0	20.0
30	14.0	13.0	16.0	15.5	19.5	18.5	24.0	21.5	25.5	23.0	21.0	20.5
31	---	---	16.5	15.5	---	---	23.5	22.0	25.5	23.0	---	---
MONTH	19.5	8.5	19.5	13.0	23.5	15.5	24.5	18.5	25.5	18.5	25.5	17.0

03491500 HOLSTON RIVER NEAR ROGERSVILLE, TENN.

LOCATION.--Lat 36°22'13", long 82°59'58", Hawkins County, temperature recorder at site of former gaging station, 0.4 mile (0.6 km) upstream from Southern Railway bridge, 0.5 mile (0.8 km) downstream from Dodson Creek, 0,8 mile (1.3 km) upstream from bridge on State Highways 66 and 70, 3 miles (5 km) south of Rogersville, and at mile 104.2 (167.7 km).

DRAINAGE AREA.--3,035 sq mi (7,860 sq km).

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1973.

EXTREMES.--1971-72:
Water temperatures: Maximum, 28.5°C Sept. 25; minimum, 3.0°C Jan. 17.

EXTREMES.--1972-73:
Water temperatures: Maximum, 29.5°C (estimated) sometime between Sept. 15-30; minimum, 4.0°C Feb. 11, 12, 17, 18.

Period of record:
Water temperatures: Maximum, 32.0°C July 6, 1969; minimum, 0.5°C Jan. 9, 1970.

REMARKS.--Missing record Aug. 15 to Sept. 7, 1973, estimated range in temperature, 20.0°C to 29.0°C; Sept. 15-30, 1973, estimated range in temperature, 20.0°C to 29.5°C. Records furnished by Tennessee Valley Authority.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	20.0	19.0	17.0	9.5	8.5	9.5	9.0	6.0	5.5	9.0	8.0
2	22.0	19.5	19.5	18.5	9.0	8.0	9.0	8.0	6.0	5.5	9.0	8.5
3	22.0	20.0	19.5	17.0	8.5	6.0	8.5	8.0	7.0	5.5	9.5	8.0
4	26.0	21.0	17.0	14.5	8.5	6.5	8.5	8.5	5.5	4.0	8.0	7.0
5	24.5	21.0	14.5	14.0	9.0	8.5	9.0	8.0	4.0	3.5	8.5	7.0
6	22.0	21.0	14.0	13.5	9.5	9.0	8.0	6.0	4.5	4.0	7.0	7.0
7	21.0	19.5	14.5	13.0	11.0	9.5	6.5	6.0	4.5	4.5	8.5	7.0
8	20.0	18.0	13.0	12.0	13.0	11.0	6.0	5.0	5.0	4.0	9.0	8.0
9	19.0	18.0	13.0	12.0	11.5	10.5	6.0	5.0	5.0	4.5	8.5	8.0
10	18.0	16.0	13.0	11.5	11.5	10.0	8.5	6.0	5.5	4.5	9.0	8.0
11	18.0	15.5	13.0	12.0	12.0	11.5	9.0	8.5	7.0	5.0	9.5	8.5
12	18.0	15.5	13.0	12.0	11.5	10.0	9.5	9.0	6.5	6.0	10.5	9.0
13	18.0	16.5	14.0	12.0	11.0	10.0	9.5	9.0	6.5	5.5	11.5	10.0
14	18.5	16.5	16.0	13.0	11.0	10.5	9.5	8.0	6.0	5.5	13.5	11.5
15	18.0	17.0	18.0	13.5	11.5	10.5	8.0	5.0	6.5	5.5	13.0	11.0
16	19.0	17.0	14.5	13.5	12.0	11.5	5.0	4.0	6.0	5.5	11.5	11.0
17	19.5	18.0	15.5	14.0	12.0	10.0	4.0	3.0	6.0	6.0	11.0	10.0
18	19.5	18.0	18.5	14.5	10.5	8.5	4.5	3.5	6.0	5.5	10.0	8.5
19	20.0	18.0	15.0	13.5	8.5	8.0	5.5	4.5	5.5	4.0	10.5	8.5
20	20.0	18.5	14.0	12.0	9.0	8.0	6.5	5.5	4.5	3.5	12.0	9.0
21	18.5	17.0	12.0	10.5	10.0	9.0	8.5	6.5	4.5	4.0	14.0	11.0
22	18.0	16.5	10.5	9.5	10.0	9.0	8.5	8.5	6.0	4.5	14.0	12.0
23	17.0	16.5	9.5	8.5	9.0	8.0	9.0	8.5	6.0	5.5	13.0	11.0
24	18.0	17.0	9.5	8.5	9.0	8.0	10.5	9.0	6.0	5.5	11.0	9.0
25	18.5	17.0	9.0	8.5	10.0	9.0	11.0	9.5	7.0	6.0	9.0	8.0
26	18.0	16.5	10.0	8.0	10.5	10.0	9.5	8.5	7.0	7.0	9.0	8.0
27	16.5	16.0	9.0	8.5	11.0	10.0	8.5	7.0	7.0	6.5	9.5	8.5
28	17.0	16.0	10.5	9.0	11.0	10.0	8.0	7.0	7.0	6.5	10.0	9.0
29	18.0	16.5	11.5	10.0	10.5	10.0	8.0	6.5	8.0	6.5	10.5	9.0
30	18.0	16.5	10.0	9.0	10.0	9.5	7.0	7.0	---	---	12.0	10.5
31	18.0	17.0	---	---	10.5	9.5	7.0	6.0	---	---	11.5	10.0
MONTH	26.0	15.5	19.5	8.0	13.0	6.0	11.0	3.0	8.0	3.5	14.0	7.0

03491500 HOLSTON RIVER NEAR ROGERSVILLE, TENN.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	21.0	18.5	18.5	16.0	22.0	19.5	23.0	20.5	24.5	20.0
2	10.0	9.5	22.0	19.0	20.0	17.0	22.0	20.0	24.0	20.0	24.0	20.5
3	10.5	9.0	22.0	16.0	20.0	19.0	23.0	20.5	24.5	20.5	25.0	22.0
4	11.0	10.0	16.0	15.0	21.5	19.5	23.5	21.5	24.0	20.5	26.0	24.0
5	11.5	10.0	16.0	14.0	23.0	20.0	23.0	21.0	23.5	20.5	26.0	24.5
6	13.0	10.0	16.0	14.5	23.0	20.5	22.0	20.0	23.5	21.5	27.0	24.0
7	13.5	11.5	18.0	15.5	23.0	18.0	21.5	19.5	26.0	21.5	27.0	21.5
8	14.0	10.5	19.0	17.0	22.0	19.0	21.0	19.5	26.5	23.5	27.0	20.5
9	10.5	9.5	18.5	16.0	23.0	19.0	21.5	20.0	26.0	21.5	25.0	19.0
10	10.5	10.0	18.0	16.0	23.5	19.5	24.0	20.5	24.5	21.0	24.5	19.0
11	11.0	10.0	18.5	16.5	22.0	18.5	25.0	21.0	23.5	21.0	26.0	23.0
12	11.0	10.0	19.5	17.0	21.0	19.0	25.0	20.0	24.5	23.0	26.5	20.0
13	12.0	11.0	19.5	18.5	22.0	19.5	23.5	21.0	25.0	24.0	24.5	20.5
14	13.0	12.0	19.0	17.0	23.0	20.5	24.5	21.0	26.5	24.0	24.5	20.0
15	14.0	13.0	21.0	18.0	23.5	21.0	23.5	21.5	26.5	23.5	21.0	19.0
16	14.0	13.0	21.5	19.5	24.5	23.0	24.5	23.0	26.5	22.0	21.0	19.0
17	14.5	13.5	21.0	19.0	25.0	22.0	26.5	23.5	25.0	22.0	21.0	19.5
18	14.5	13.5	21.0	19.0	24.0	21.0	26.0	23.0	25.0	20.0	25.5	21.0
19	15.0	14.5	20.0	17.0	24.5	21.5	24.5	21.0	25.5	21.5	25.0	20.5
20	15.5	14.5	19.0	17.0	23.5	21.0	25.0	20.0	25.0	21.5	25.0	21.0
21	16.5	14.5	18.5	16.5	21.5	18.5	26.0	21.0	24.5	22.0	25.0	20.0
22	15.5	14.0	20.5	17.0	18.5	16.5	25.5	22.0	25.0	21.0	25.5	20.0
23	17.0	13.5	22.0	19.5	18.0	16.0	26.5	23.5	24.5	20.0	23.5	20.0
24	19.0	15.5	20.0	18.0	17.0	16.0	26.0	24.5	23.0	20.0	25.5	22.0
25	18.0	13.5	20.0	18.0	19.0	16.5	26.0	24.0	23.0	20.0	28.5	24.0
26	14.5	13.0	20.0	19.0	20.5	18.0	25.5	24.0	23.0	19.5	27.0	21.0
27	16.0	13.0	20.0	17.0	21.5	20.0	25.5	24.0	24.0	19.5	27.0	20.5
28	16.0	14.0	19.0	17.0	23.5	20.0	25.5	22.0	27.0	24.0	21.5	19.5
29	16.5	14.5	20.5	18.5	22.0	19.5	24.0	23.0	27.0	21.0	21.5	19.0
30	18.5	15.5	21.0	19.0	22.0	19.0	24.0	21.0	27.0	21.0	20.5	17.0
31	---	---	21.5	17.0	---	---	24.0	22.0	26.0	20.0	---	---
MONTH	19.0	9.0	22.0	14.0	25.0	16.0	26.5	19.5	27.0	19.5	28.5	17.0

03491500 HOLSTON RIVER NEAR ROGERSVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.5	15.5	14.5	9.0	8.0	10.0	9.5	6.0	4.5	9.0	7.0
2	15.5	15.0	15.5	14.5	8.5	8.0	9.5	9.0	8.0	6.0	9.0	7.0
3	16.5	15.5	16.0	15.0	9.0	8.0	9.0	8.5	7.0	6.0	10.0	9.0
4	17.0	16.0	16.0	15.5	8.5	8.0	9.0	8.5	6.0	6.0	12.0	9.0
5	17.0	16.5	15.5	14.0	10.0	8.0	8.5	8.0	7.0	6.0	14.5	11.5
6	16.5	15.5	15.5	13.5	11.0	10.0	8.0	6.5	8.0	7.0	15.0	13.5
7	16.0	15.5	14.5	13.5	11.0	9.5	6.5	5.0	8.0	6.5	15.5	15.0
8	16.5	15.5	14.5	13.0	9.5	9.0	5.0	4.5	8.0	7.0	16.0	14.5
9	17.0	16.0	13.0	12.0	10.0	9.0	5.5	5.0	7.0	5.0	17.0	15.5
10	16.5	16.0	13.0	12.0	10.5	10.0	5.5	5.0	5.0	4.5	18.0	16.0
11	16.5	16.0	13.5	12.0	10.5	10.0	5.5	4.5	4.5	4.0	16.5	16.0
12	17.0	16.5	14.0	13.0	10.0	9.5	5.0	4.5	5.0	4.0	16.0	15.0
13	18.0	16.5	13.5	13.0	10.0	10.0	5.0	4.5	5.5	5.0	16.0	14.5
14	19.0	18.0	14.0	13.5	11.0	10.0	5.0	4.5	6.5	5.5	16.5	14.5
15	19.0	18.0	14.0	11.5	13.0	10.0	5.5	5.0	6.5	6.0	16.0	15.5
16	20.0	16.5	11.5	10.5	10.0	6.0	6.0	5.0	6.0	4.5	16.0	11.5
17	18.5	16.0	11.5	10.5	6.0	5.5	6.5	5.5	4.5	4.0	11.5	9.0
18	17.0	16.5	11.0	10.5	5.5	5.5	6.0	5.5	5.5	4.0	9.0	8.0
19	17.0	14.5	11.5	11.0	6.0	5.5	8.0	6.0	6.0	4.5	8.5	7.0
20	14.5	13.5	11.5	10.5	8.0	6.0	8.0	6.5	5.5	5.0	9.0	8.5
21	14.0	13.0	11.0	10.0	8.5	8.0	7.0	6.5	6.0	4.5	9.0	8.0
22	14.0	13.5	10.5	9.5	9.0	8.5	8.0	6.5	6.0	4.5	9.0	8.0
23	15.5	14.0	10.0	9.5	9.0	9.0	8.0	6.5	6.0	5.0	9.5	8.5
24	15.5	14.5	9.5	9.0	9.0	9.0	8.5	6.5	7.0	5.0	10.0	9.0
25	15.5	15.0	9.5	8.5	9.0	9.0	7.0	6.0	8.0	6.0	11.0	10.0
26	15.0	14.5	9.5	8.5	9.0	8.0	6.5	6.0	8.5	7.0	11.0	10.5
27	14.5	14.0	9.0	8.5	8.0	7.0	6.5	6.5	9.5	8.5	11.0	10.5
28	14.5	13.5	9.0	8.5	7.0	6.5	8.0	6.5	10.5	9.0	11.5	11.0
29	14.5	14.0	9.0	9.0	7.0	7.0	6.5	5.5	---	---	11.5	11.0
30	14.0	14.0	9.0	8.5	8.5	7.0	6.0	5.0	---	---	11.5	11.0
31	14.5	14.0	---	---	10.0	8.5	5.0	4.5	---	---	13.5	11.5
MONTH	20.0	13.0	16.0	8.5	13.0	5.5	10.0	4.5	10.5	4.0	18.0	7.0

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.5	14.5	13.0	16.5	15.5	23.5	21.0	28.0	21.5	---	---
2	14.5	13.5	14.5	14.0	17.0	16.0	23.0	21.0	23.0	20.5	---	---
3	14.5	13.5	15.0	13.5	18.5	16.5	25.0	22.0	21.5	20.5	---	---
4	14.0	13.5	15.0	14.0	20.5	18.5	26.5	22.0	22.0	20.0	---	---
5	13.5	10.5	14.5	14.5	23.5	20.5	25.5	22.0	22.0	21.5	---	---
6	11.5	10.5	14.5	13.5	21.5	18.0	24.0	22.0	24.5	21.5	---	---
7	12.0	11.5	15.0	13.5	20.0	18.0	25.5	24.0	27.0	24.5	---	---
8	11.5	11.0	16.0	14.5	21.5	18.5	28.0	24.5	28.5	25.5	28.0	22.0
9	12.0	11.0	16.0	15.0	22.0	19.0	26.5	26.0	27.0	25.0	28.0	23.5
10	11.5	9.0	18.0	16.0	20.0	18.5	29.0	24.0	27.0	23.5	28.0	23.0
11	9.5	8.5	17.0	15.5	20.5	18.5	29.0	23.5	25.0	24.0	25.0	21.5
12	10.0	9.5	16.5	15.5	21.5	18.5	26.0	23.0	25.0	24.0	23.0	20.0
13	11.0	9.5	17.0	15.0	21.0	19.5	25.5	23.0	27.0	24.5	22.0	19.5
14	14.5	10.0	16.5	15.5	20.5	18.0	25.5	24.0	28.5	23.5	22.0	19.5
15	15.0	10.5	18.0	16.0	22.0	19.0	26.0	24.0	---	---	---	---
16	17.0	13.0	18.0	15.5	23.0	21.0	26.0	24.0	---	---	---	---
17	15.5	13.0	17.0	15.5	23.0	21.5	25.5	23.0	---	---	---	---
18	16.0	13.5	17.0	15.0	23.0	22.0	26.0	21.5	---	---	---	---
19	17.0	13.5	16.5	15.5	24.5	23.0	25.0	22.0	---	---	---	---
20	18.5	14.0	18.0	15.0	25.0	24.0	25.5	21.5	---	---	---	---
21	19.5	14.5	18.5	16.0	24.5	22.0	24.5	21.5	---	---	---	---
22	20.0	19.0	19.0	18.0	23.5	22.0	23.5	21.0	---	---	---	---
23	20.5	18.5	18.5	17.0	23.5	22.0	25.5	23.0	---	---	---	---
24	20.0	18.5	18.5	18.0	23.5	23.0	25.5	24.0	---	---	---	---
25	19.0	15.5	18.5	17.0	24.0	23.5	25.5	23.0	---	---	---	---
26	19.0	17.0	18.5	16.5	25.5	23.5	25.0	22.0	---	---	---	---
27	17.0	13.5	18.0	15.5	26.5	23.5	25.5	21.5	---	---	---	---
28	13.5	11.5	18.0	15.5	24.5	19.5	24.5	23.5	---	---	---	---
29	13.5	10.5	17.0	15.5	22.0	20.5	26.0	24.5	---	---	---	---
30	13.5	12.0	16.0	15.5	23.5	21.0	25.5	25.0	---	---	---	---
31	---	---	16.5	15.5	---	---	28.5	24.5	---	---	---	---
MONTH	20.5	8.5	19.0	13.0	26.5	15.5	29.0	21.0	---	---	---	---

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 (11.3 km) downstream from confluence of French Broad and Holston Rivers, near auxiliary gage for gaging station 03497000, and at mile 645.1 (1038.0 km).

DRAINAGE AREA.--8,963 sq mi (23,214 sq km).

PERIOD OF RECORD.--Water temperatures: December 1969 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 26.0°C Sept. 7, 8, 9; minimum, 5.0°C on several days during the winter period.

Period of record:
Water temperatures: Maximum, 29.0°C sometime between Aug. 3-6, 1970; minimum, 1.0°C Jan. 21, 1970.

REMARKS.--Missing record Nov. 2-29, estimated range in temperature, 11.0°C to 18.0°C; Sept. 1-4, estimated range in temperature, 25.0°C to 25.5°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 (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	21.0	18.5	18.5	11.0	10.0	9.0	8.5	6.5	6.0	8.0	6.5
2	21.0	18.5	---	---	11.0	10.0	9.0	8.5	8.0	6.5	7.0	6.0
3	23.0	19.5	---	---	11.0	10.0	8.5	8.5	8.0	6.0	9.0	6.5
4	23.0	23.0	---	---	11.5	10.5	9.0	8.5	6.5	6.0	9.0	7.0
5	23.0	22.0	---	---	11.5	10.5	9.0	8.5	7.0	6.0	10.0	8.5
6	22.0	19.5	---	---	11.5	10.0	8.5	8.0	8.0	6.5	11.0	10.0
7	20.5	19.5	---	---	10.0	9.0	8.0	6.5	7.0	6.5	11.0	10.5
8	20.5	19.5	---	---	10.0	9.5	7.0	6.5	7.0	6.0	13.5	10.5
9	21.0	20.5	---	---	10.5	10.0	7.0	6.5	6.5	5.5	12.0	10.5
10	21.5	21.0	---	---	13.0	10.5	6.5	6.0	5.5	5.5	15.5	12.0
11	21.5	21.5	---	---	13.0	11.0	6.5	6.0	5.5	5.0	13.5	10.5
12	21.5	21.5	---	---	11.5	10.5	6.5	5.5	6.0	5.5	10.5	9.5
13	21.5	21.5	---	---	10.5	10.0	6.0	5.0	6.5	6.0	11.5	10.0
14	22.0	21.5	---	---	10.0	10.0	6.0	5.0	6.5	6.5	10.5	10.0
15	21.5	21.5	---	---	10.0	10.0	6.5	6.0	6.5	6.0	12.0	10.0
16	21.5	20.5	---	---	10.0	8.0	7.0	6.0	6.0	5.0	13.5	11.5
17	20.5	20.5	---	---	8.5	7.0	6.5	5.5	5.5	5.0	13.0	10.5
18	20.5	19.5	---	---	8.5	8.0	7.0	6.0	5.5	5.0	10.5	9.5
19	19.5	18.0	---	---	9.0	8.5	8.0	6.5	5.5	5.0	10.5	8.5
20	18.0	15.0	---	---	9.5	9.0	7.0	6.5	6.0	5.5	11.0	10.5
21	17.0	16.0	---	---	9.5	9.5	7.0	6.5	6.0	5.5	11.0	10.0
22	17.0	17.0	---	---	9.5	9.5	8.0	6.5	6.0	5.5	10.5	9.5
23	17.0	17.0	---	---	9.5	9.5	8.0	6.5	6.0	5.5	11.0	10.0
24	17.0	15.5	---	---	9.5	9.5	7.0	6.0	6.5	6.0	11.5	11.0
25	18.5	16.5	---	---	9.5	9.0	6.0	5.5	8.0	6.0	11.5	11.5
26	18.5	18.5	---	---	9.0	8.5	6.0	5.5	8.0	6.5	12.0	11.5
27	18.5	18.5	---	---	8.5	8.0	6.0	6.0	8.0	7.0	11.5	11.0
28	18.5	18.5	---	---	8.5	8.0	6.5	6.0	7.0	6.5	11.5	11.5
29	18.5	18.5	---	---	9.0	8.5	6.5	6.0	---	---	11.5	11.5
30	18.5	18.5	11.5	11.0	9.5	9.0	6.0	5.5	---	---	12.0	11.5
31	18.5	18.5	---	---	9.5	9.0	6.0	6.0	---	---	12.0	12.0
MONTH	24.0	15.0	---	---	13.0	7.0	9.0	5.0	8.0	5.0	15.5	6.0

03497100 TENNESSEE RIVER BELOW KNOXVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.0	14.0	13.0	15.0	15.0	21.0	20.5	21.5	20.5	---	---
2	13.0	11.5	14.0	13.5	15.5	15.0	23.0	21.0	21.5	21.0	---	---
3	12.0	11.0	14.0	13.5	15.5	15.5	23.5	20.0	23.0	21.0	---	---
4	12.0	11.5	13.5	13.0	16.5	15.5	21.5	19.5	23.0	21.5	---	---
5	11.5	10.5	13.0	13.0	16.5	16.5	21.5	19.5	23.0	21.5	25.5	25.5
6	11.5	10.5	13.0	13.0	16.5	16.5	21.5	20.5	23.5	22.0	25.5	25.5
7	12.0	11.5	13.0	13.0	16.5	16.0	21.5	20.0	23.0	21.0	26.0	25.5
8	11.5	11.0	13.0	13.0	17.0	16.5	21.5	21.0	22.0	21.5	26.0	25.5
9	11.5	11.0	14.5	13.0	17.0	17.0	21.5	20.5	22.0	21.5	26.0	25.5
10	11.0	9.5	14.5	14.5	18.0	17.0	23.5	20.5	23.0	21.5	25.5	25.5
11	10.5	9.5	14.5	14.5	18.5	18.0	21.5	20.0	23.0	21.5	25.5	25.5
12	11.0	10.5	14.5	14.5	18.5	18.0	21.5	20.0	23.5	22.0	25.5	25.5
13	12.0	10.5	14.5	14.5	19.0	17.0	21.5	20.0	23.5	21.5	25.5	25.5
14	12.0	11.0	14.5	14.0	20.0	18.0	21.5	20.0	23.0	21.5	25.5	25.0
15	13.0	11.0	14.5	14.5	20.0	18.5	21.0	20.0	23.0	21.5	25.5	25.0
16	14.0	13.0	14.5	14.0	20.0	18.5	21.0	20.5	23.5	22.0	25.5	25.5
17	14.0	13.5	14.5	14.0	20.0	19.0	23.0	20.0	23.5	22.0	25.5	25.5
18	13.5	13.0	14.5	14.0	21.0	19.0	21.5	20.0	23.0	22.0	25.5	24.5
19	14.0	13.0	14.5	14.0	22.0	19.5	21.5	20.5	24.0	23.0	24.5	24.0
20	15.0	14.0	15.0	14.5	20.5	19.5	21.5	20.5	24.0	23.0	24.5	24.0
21	16.0	14.5	15.0	15.0	20.0	19.5	21.5	20.5	23.5	23.0	25.0	24.5
22	16.0	15.5	16.0	15.0	20.0	20.0	22.0	21.0	23.5	23.5	25.0	25.0
23	16.0	15.5	15.5	15.5	20.5	19.5	24.0	20.5	24.0	23.5	25.5	25.0
24	17.0	15.5	15.5	15.5	21.5	20.0	24.0	20.5	24.5	24.0	25.5	25.5
25	15.5	14.0	15.5	15.5	23.0	20.5	22.0	20.5	25.0	24.0	25.5	25.5
26	15.0	14.5	16.5	15.5	24.0	21.0	21.0	20.0	25.0	24.5	25.5	25.5
27	15.5	15.0	16.5	15.5	21.5	19.5	22.0	21.0	25.5	24.5	25.5	25.5
28	15.5	13.0	16.5	15.5	20.5	19.0	23.5	21.0	25.0	24.5	25.5	25.5
29	13.0	12.0	16.5	15.0	20.5	19.5	23.5	22.0	25.0	25.0	25.5	25.5
30	13.0	13.0	15.0	15.0	21.5	19.5	24.0	23.0	25.0	25.0	25.5	25.5
31	---	---	15.0	15.0	---	---	25.0	20.5	25.0	25.0	---	---
MONTH	17.0	9.5	16.5	13.0	24.0	15.0	25.0	19.5	25.5	20.5	26.0	24.0

03497300 LITTLE RIVER ABOVE TOWNSEND, TENN.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°39'52", long 83°42'41", Blount County, temperature recorder at gaging station on left bank along State Highway 73, in Great Smoky Mountains National Park, 0.3 mile (0.5 km) upstream from Rush Branch, 0.4 mile (0.6 km) southeast of Park entrance, 2.2 miles (3.5 km) southeast of Townsend, and at mile 35.3 (56.8 km).

DRAINAGE AREA.--106 sq mi (275 sq km).

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1973.

EXTREMES, 1971-72:
Water temperatures: Maximum, 20.5°C, several days between July 24 and Aug. 28; minimum, 1.5°C Jan. 16, 17, 18, but may have been lower during period of missing record Feb. 2 to Mar. 5.

EXTREMES, 1972-73:
Water temperatures: Maximum, 21.5°C July 13, 14, Sept. 7, 8, 9, 10; minimum, 1.5°C Jan. 12, 13, 14, 15.

Period of record:
Water temperatures: Maximum, 26.0°C June 23, 1964, July 3, 1970; minimum, freezing point several times during winter period in 1965, 1966, 1969, and 1971.

REMARKS.--Missing record October 14-26, 1971, February 2 to March 5, 1972. Miscellaneous samples of chemical data published for the water years, 1964-71.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	15.5	15.0	7.0	6.0	10.0	8.5	4.0	3.5	---	---
2	19.0	18.5	16.0	15.5	6.0	5.5	8.5	8.5	---	---	---	---
3	19.0	18.0	16.0	14.5	5.5	5.5	8.5	8.5	---	---	---	---
4	18.5	18.0	14.5	11.5	6.0	5.5	9.0	8.5	---	---	---	---
5	18.5	18.0	11.5	9.5	8.0	6.0	9.0	8.0	---	---	---	---
6	18.0	17.0	10.0	9.5	9.0	8.0	8.0	6.5	---	---	4.5	3.5
7	17.0	16.0	10.5	10.0	9.5	9.0	6.5	5.5	---	---	5.5	4.0
8	16.0	14.0	10.0	8.0	9.5	9.5	5.5	5.5	---	---	5.5	5.5
9	14.0	14.0	8.0	8.0	9.5	9.5	6.5	5.0	---	---	5.5	4.0
10	14.0	14.0	8.0	8.0	11.0	9.5	8.5	6.5	---	---	5.0	4.0
11	14.0	12.0	8.0	8.0	11.0	10.5	9.0	8.5	---	---	6.0	4.5
12	12.0	12.0	8.0	8.0	10.5	10.5	8.5	8.0	---	---	8.0	6.0
13	13.0	12.0	9.0	8.0	10.5	10.5	9.0	8.0	---	---	8.5	8.0
14	---	---	9.5	8.5	10.5	10.5	8.0	7.0	---	---	8.5	8.5
15	---	---	10.0	9.5	12.0	10.5	7.0	4.5	---	---	8.5	7.0
16	---	---	10.5	10.0	13.0	12.0	4.5	1.5	---	---	8.0	7.0
17	---	---	10.5	10.5	13.0	11.0	1.5	1.5	---	---	8.0	6.5
18	---	---	10.5	10.5	11.0	7.0	2.0	1.5	---	---	6.5	6.0
19	---	---	11.0	10.5	7.0	6.0	4.5	2.0	---	---	8.0	6.0
20	---	---	11.0	10.0	8.5	6.0	6.5	4.5	---	---	8.5	6.5
21	---	---	10.0	9.0	9.0	8.5	8.0	6.5	---	---	8.5	8.5
22	---	---	9.0	6.5	9.0	9.0	8.0	8.0	---	---	8.5	8.5
23	---	---	6.5	5.5	9.0	8.0	8.0	8.0	---	---	8.5	7.0
24	---	---	5.5	5.5	8.5	8.0	8.5	8.0	---	---	7.0	5.0
25	---	---	5.5	5.5	9.0	8.5	8.5	7.0	---	---	5.0	4.0
26	---	---	5.5	5.5	9.0	9.0	7.0	5.0	---	---	5.0	4.0
27	13.5	13.5	5.5	5.5	9.0	9.0	5.0	5.0	---	---	5.5	5.0
28	14.5	13.5	6.0	5.5	10.0	9.0	6.0	4.0	---	---	8.5	5.5
29	14.5	14.0	8.0	5.5	10.0	9.5	6.0	6.0	---	---	9.0	8.5
30	14.5	14.5	8.0	7.0	10.0	9.5	6.0	5.5	---	---	9.0	8.0
31	15.0	14.5	---	---	10.0	10.0	5.5	4.0	---	---	8.0	7.0
MONTH	---	---	16.0	5.5	13.0	5.5	10.0	1.5	---	---	9.0	3.5

03497300 LITTLE RIVER ABOVE TOWNSEND, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	14.0	13.5	14.5	13.0	17.0	16.0	18.5	18.0	19.0	19.0
2	6.5	6.0	14.0	13.5	14.5	13.5	17.0	16.5	18.0	18.0	19.0	19.0
3	6.5	5.0	14.0	13.5	15.5	14.5	18.0	17.0	19.0	18.0	19.5	19.0
4	6.5	6.5	13.5	13.0	15.5	15.0	18.0	17.0	19.0	18.5	19.0	19.0
5	7.0	5.5	13.0	11.0	18.0	15.5	17.0	15.5	19.0	19.0	19.0	18.5
6	10.0	7.0	12.0	11.5	18.0	17.0	15.5	14.5	19.5	19.0	18.5	17.0
7	11.5	10.0	13.5	12.0	18.0	17.0	15.0	14.5	20.0	19.5	18.0	17.0
8	11.5	9.5	13.0	12.0	18.0	16.5	15.5	14.5	20.0	19.0	18.0	17.0
9	9.5	7.0	12.0	12.0	18.0	17.0	15.5	15.5	19.5	19.0	18.5	18.0
10	9.5	8.5	12.0	11.5	18.0	17.0	16.5	15.5	19.0	19.0	18.5	18.5
11	9.5	9.5	12.0	11.0	17.0	15.0	17.0	16.5	19.0	19.0	18.5	18.5
12	13.0	9.5	13.5	12.0	16.5	15.5	18.5	17.0	19.5	19.0	19.0	18.5
13	15.0	13.0	13.5	13.5	17.0	16.5	18.5	18.0	19.5	19.0	19.0	18.5
14	15.5	15.0	13.5	13.0	19.0	16.5	18.5	18.0	19.5	19.0	19.0	18.5
15	16.0	15.0	14.0	13.5	20.0	18.0	18.5	18.0	20.0	19.5	19.5	19.0
16	16.5	15.5	14.0	13.5	20.0	19.5	18.5	18.5	20.0	19.5	19.5	19.5
17	16.5	14.5	13.5	13.5	19.5	18.5	18.5	18.5	20.5	20.0	19.5	19.5
18	15.5	13.5	14.0	13.5	19.0	18.0	18.5	18.0	20.5	20.0	19.5	19.0
19	16.0	14.5	14.0	13.5	19.0	18.5	19.0	18.5	20.5	20.5	19.0	18.5
20	16.5	15.5	13.5	13.5	18.5	18.0	19.0	18.5	20.5	20.0	18.5	18.5
21	16.5	16.0	13.5	13.5	18.0	16.5	19.5	18.5	20.0	19.5	18.5	18.0
22	16.5	14.5	14.0	13.5	16.5	16.0	19.5	19.5	20.0	19.5	18.0	18.0
23	14.5	13.0	14.0	13.5	17.0	15.0	19.5	19.0	20.0	19.5	18.0	18.0
24	14.0	13.5	14.5	13.5	16.5	15.0	20.5	19.5	19.5	19.5	18.5	18.0
25	13.5	11.5	15.0	14.0	17.0	15.5	20.5	20.0	19.5	19.5	18.5	18.0
26	11.5	10.0	15.0	14.5	18.5	16.5	20.0	19.5	20.0	19.5	18.5	18.5
27	11.0	10.0	14.5	14.5	19.0	18.0	20.0	20.0	20.5	20.0	18.5	18.5
28	11.5	10.5	14.5	14.5	19.5	17.0	20.0	19.5	20.5	19.5	18.5	18.0
29	13.0	11.0	14.5	14.5	17.0	17.0	19.5	19.0	19.5	19.0	18.0	18.0
30	13.5	13.0	14.5	14.5	17.0	16.5	19.0	18.0	19.5	19.0	18.0	14.5
31	---	---	14.5	14.5	---	---	18.0	18.0	19.5	19.0	---	---
MONTH	16.5	5.0	15.0	11.0	20.0	13.0	20.5	14.5	20.5	18.0	19.5	14.5

03497300 LITTLE RIVER ABOVE TOWNSEND, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.0	14.0	13.5	7.0	6.5	9.5	8.5	8.0	4.0	7.0	6.5
2	12.0	11.5	15.5	14.0	6.5	6.5	8.5	7.0	8.5	8.0	8.0	6.5
3	12.0	11.5	15.5	15.0	7.0	6.5	8.0	7.0	8.0	6.0	9.0	8.0
4	12.0	12.0	15.0	14.0	8.5	7.0	8.5	8.0	6.0	5.0	10.0	9.0
5	13.5	12.0	14.0	12.0	11.0	8.5	8.5	8.0	6.0	5.0	11.0	10.0
6	13.5	13.0	12.0	11.0	11.5	11.0	8.0	6.5	6.5	6.0	11.0	11.0
7	13.5	13.5	12.0	11.0	11.0	8.5	6.5	4.0	7.0	6.5	12.0	11.0
8	13.5	13.0	12.0	11.5	10.0	8.5	4.0	4.0	7.0	6.5	13.5	12.0
9	13.0	11.5	11.5	10.0	11.5	10.0	4.0	4.0	6.5	5.0	13.5	13.0
10	13.0	12.0	11.0	10.0	11.5	11.0	4.0	3.0	5.0	4.0	13.0	13.0
11	13.5	13.0	11.0	11.0	11.0	11.0	3.0	2.0	4.0	3.0	13.0	13.0
12	14.0	13.5	11.0	11.0	11.5	11.0	2.0	1.5	3.5	3.0	13.0	11.5
13	15.0	14.0	12.0	11.0	11.5	11.5	1.5	1.5	4.0	3.5	13.0	11.0
14	15.0	14.5	13.0	12.0	11.5	11.0	1.5	1.5	6.0	4.0	14.0	11.5
15	14.5	14.5	12.0	10.0	11.5	10.0	3.0	1.5	6.0	5.5	14.0	13.5
16	15.0	14.5	10.0	9.0	10.0	5.0	3.0	3.0	5.5	4.0	13.5	12.0
17	15.5	14.5	9.0	9.0	5.0	4.0	3.5	3.0	4.0	3.0	12.0	9.0
18	15.5	15.0	9.0	9.0	4.0	4.0	5.0	3.5	3.0	2.0	9.0	8.5
19	15.0	12.0	9.5	9.0	5.5	4.0	6.5	5.5	3.5	2.0	9.0	8.0
20	12.0	10.5	9.5	9.5	7.0	5.5	6.5	6.0	3.5	3.5	10.0	9.0
21	10.5	10.5	9.5	9.0	8.0	7.0	6.0	6.0	4.5	3.5	10.0	8.5
22	11.5	10.5	9.0	8.0	8.5	8.0	8.0	6.5	5.0	4.5	8.5	7.0
23	14.0	11.5	8.0	7.0	8.0	8.0	8.0	8.0	4.5	4.5	9.0	7.0
24	14.0	14.0	7.0	6.0	8.0	8.0	8.0	6.5	5.0	4.5	10.0	8.5
25	14.0	13.0	6.5	6.0	8.0	8.0	6.5	5.5	6.0	5.0	11.5	10.0
26	13.0	11.0	6.5	6.5	8.0	6.0	6.5	5.5	7.0	6.0	11.5	11.0
27	11.5	11.0	6.5	6.5	6.0	5.0	6.5	6.5	7.0	7.0	11.0	10.5
28	13.0	11.5	8.0	6.5	5.0	4.5	6.5	6.5	7.0	7.0	11.5	10.5
29	13.0	13.0	8.0	7.0	5.5	4.5	6.5	5.0	---	---	11.5	11.0
30	13.0	13.0	7.0	7.0	8.0	5.0	5.0	3.5	---	---	13.0	11.0
31	13.5	13.0	---	---	9.5	8.0	4.0	3.5	---	---	14.5	13.0
MONTH	15.5	10.5	15.5	6.0	11.5	4.0	9.5	1.5	8.5	2.0	14.5	6.5

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.0	14.0	12.0	16.0	16.0	19.0	18.5	19.0	18.5	21.0	20.0
2	14.5	13.0	14.0	14.0	17.0	16.0	20.5	19.0	18.5	18.5	21.0	20.5
3	13.0	12.0	14.0	14.0	18.0	17.0	20.5	20.0	18.5	18.5	21.0	20.5
4	13.0	12.0	14.0	12.0	18.5	18.0	20.0	20.0	18.5	18.5	21.0	21.0
5	12.0	10.5	13.5	11.0	18.5	18.5	20.0	20.0	19.0	18.5	21.0	20.5
6	11.0	9.5	12.0	11.5	18.5	18.5	20.0	19.5	19.0	18.5	21.0	20.5
7	11.0	10.5	13.0	11.5	18.5	18.0	20.5	20.0	19.0	18.5	21.5	21.0
8	11.0	10.5	14.0	13.0	19.0	18.0	20.5	20.5	19.5	19.0	21.5	21.0
9	10.5	9.5	14.5	14.0	19.0	19.0	20.5	19.5	19.5	19.0	21.5	21.5
10	10.5	8.0	15.0	14.5	19.5	19.0	20.5	20.5	19.0	18.0	21.5	20.0
11	8.0	6.5	15.0	14.5	20.0	19.5	21.0	20.0	18.0	16.5	21.0	20.5
12	9.0	8.0	15.0	15.0	20.0	19.0	21.0	20.0	17.0	17.0	21.0	20.0
13	9.5	8.5	15.0	13.5	19.5	19.0	21.5	20.0	18.0	17.0	20.5	19.5
14	10.0	8.5	14.0	13.0	19.5	19.0	21.5	21.0	18.0	18.0	19.5	19.0
15	11.5	9.5	14.0	13.5	20.0	19.0	21.0	20.5	19.0	18.0	19.0	18.5
16	11.5	11.0	14.0	12.0	19.0	17.0	20.5	20.0	19.0	18.0	19.0	18.5
17	11.0	11.0	13.5	13.0	17.0	16.5	20.5	20.0	19.0	18.5	19.0	18.5
18	12.0	11.0	13.5	11.5	18.0	17.0	20.5	20.5	19.5	18.5	19.0	18.0
19	14.5	12.0	13.5	12.0	18.5	18.0	20.5	20.0	19.5	18.5	18.0	16.0
20	15.5	14.5	14.0	13.5	18.5	18.0	20.0	19.5	19.5	19.0	17.0	16.0
21	16.5	15.0	14.5	13.5	18.0	18.0	20.5	19.5	19.5	19.0	18.0	16.5
22	16.5	16.0	15.0	14.0	18.0	18.0	20.5	20.0	19.5	19.0	18.5	18.0
23	16.0	16.0	15.0	14.5	19.0	18.0	20.5	20.5	19.5	18.5	19.5	18.5
24	16.0	16.0	15.0	15.0	19.0	17.0	20.5	20.0	19.5	18.5	19.0	18.5
25	16.0	16.0	15.5	15.0	19.0	18.0	20.0	19.5	20.0	19.0	19.0	18.5
26	16.0	14.5	16.5	15.5	19.5	18.5	19.5	19.0	20.0	19.0	19.0	18.0
27	14.5	11.5	16.5	16.5	19.5	19.0	19.0	18.5	20.0	19.5	19.0	18.5
28	11.5	10.5	16.5	16.0	19.0	19.0	19.5	18.5	20.5	20.0	19.0	18.5
29	11.5	10.0	16.5	15.5	19.5	18.5	19.5	19.0	20.5	20.0	19.0	18.5
30	12.0	11.0	16.0	15.5	19.5	19.0	19.5	19.0	20.5	20.5	19.5	19.0
31	---	---	16.0	15.5	---	---	19.5	19.0	20.5	20.5	---	---
MONTH	16.5	6.5	16.5	11.0	20.0	16.0	21.5	18.5	20.5	16.5	21.5	16.0

03518300 LITTLE TENNESSEE RIVER BELOW CHILHOWEE DAM, TENN.

LOCATION.--Lat 35°32'48", long 84°03'50", Blount County, temperature recorder at gaging station on right bank, on U. S. Highway 129 at Tallassee, 100 ft (30 m) upstream from Cochran Creek, 0.6 mile (1.0 km) downstream from Chilhowee Dam, 20 miles (32 km) south of Maryville, and at mile 33.0 (53.1 km).

DRAINAGE AREA.--1,987 sq mi (5,146 sq km), including Cochran Creek.

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 20.0°C several days during September; minimum, 4.5°C Feb. 16, 17.

Period of record:
Water temperatures: Maximum, 28.0°C Aug. 29, 1964; minimum, 2.5°C Feb. 27, 1970.

REMARKS.--Missing record Aug. 2-28. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
27...	1400	6570	6.5	90	2.2	.5	1.0	.7	--	9	2.0	1.5
NOV.												
10...	1315	6510	5.3	50	2.4	.5	1.2	.7	--	6	4.1	2.0
DEC.												
05...	1400	7010	5.7	30	2.2	.6	1.5	.6	--	6	2.1	1.5
JAN.												
03...	1345	11200	5.9	40	1.6	.1	1.7	.7	--	6	3.7	2.0
FEB.												
01...	1415	6950	6.5	30	1.8	.7	1.3	1.2	--	5	2.5	1.5
MAR.												
01...	1130	4710	5.6	50	1.8	.6	1.3	.7	--	6	7.2	1.0
APR.												
26...	1430	1480	5.3	50	2.0	.7	1.5	1.0	--	6	1.6	1.5
MAY												
22...	1420	6700	6.0	<50	2.0	.5	1.2	.8	<200	7	2.0	2.0
JUNE												
28...	1000	1330	6.1	50	2.0	.6	1.0	.9	<200	5	<1.0	2.0
JULY												
27...	1040	8710	5.7	<50	2.0	.5	1.0	.9	<200	4	1.0	2.0
AUG.												
31...	1415	3140	5.7	80	1.0	.6	1.5	1.6	300	7	2.0	2.0

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
OCT.												
27...	22	8	28	6.2	16.0	2	7	.07	.23	.05	<.01	.50
NOV.												
10...	18	8	26	6.3	16.0	5	5	.03	.09	.03	<.01	.80
DEC.												
05...	23	8	28	6.3	12.5	0	5	.01	.02	.01	<.01	<.01
JAN.												
03...	18	7	23	6.5	5.5	3	5	.08	.01	.14	.01	.60
FEB.												
01...	18	8	26	6.1	9.0	3	4	.30	<.01	.12	<.01	.50
MAR.												
01...	18	7	22	6.4	8.5	4	5	.03	<.03	.16	<.01	.40
APR.												
26...	29	8	29	6.1	14.5	5	5	<.03	.05	.04	<.01	.40
MAY												
22...	10	7	22	6.2	15.5	5	6	.04	.14	.01	<.01	.40
JUNE												
28...	30	7	21	6.2	14.5	10	4	.06	.05	.01	<.01	.50
JULY												
27...	20	7	24	6.3	16.5	5	3	.09	.05	.01	<.01	.50
AUG.												
31...	20	5	23	6.6	20.0	15	6	.04	.50	.06	<.01	.40

03518300 LITTLE TENNESSEE RIVER BELOW CHILHOWEE DAM, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	15.5	16.0	15.0	11.5	11.0	9.5	9.0	6.5	6.0	8.0	6.0
2	18.5	15.0	16.5	15.5	11.5	11.0	9.5	9.0	6.5	6.5	6.5	6.0
3	17.0	15.0	16.0	15.5	11.0	10.5	9.0	9.0	6.5	6.0	8.0	6.0
4	16.0	15.5	16.5	15.5	11.0	10.5	9.0	9.0	7.0	6.0	8.5	6.0
5	16.0	15.5	16.0	14.5	11.0	10.5	9.0	9.0	6.5	6.0	8.5	6.5
6	16.0	15.0	16.0	15.0	11.0	10.5	9.0	8.5	6.5	6.0	9.5	6.5
7	16.0	15.0	15.0	15.0	11.0	10.5	8.5	8.0	7.0	6.5	10.0	8.0
8	17.0	14.0	15.0	14.5	10.5	10.5	8.0	8.0	6.5	6.5	11.0	8.0
9	16.5	14.5	15.0	14.5	10.5	10.5	8.0	8.0	6.5	6.0	10.0	8.0
10	16.5	15.0	14.5	14.0	10.5	10.5	8.0	7.0	6.0	5.5	10.0	8.0
11	16.5	15.0	14.5	14.0	10.5	10.5	7.0	7.0	6.0	5.5	9.0	8.0
12	16.5	15.5	14.5	13.5	10.5	10.5	7.0	6.0	5.5	5.5	9.5	7.0
13	16.0	15.5	14.5	14.0	10.5	10.5	6.5	6.0	5.5	5.5	10.0	7.0
14	16.5	15.0	14.5	14.0	10.5	10.5	6.5	6.5	5.5	5.5	9.5	8.5
15	17.0	15.0	14.0	14.0	10.5	10.0	7.0	6.5	5.5	5.5	9.5	8.5
16	15.5	15.0	14.0	13.5	10.0	9.5	8.0	6.5	5.5	4.5	10.0	9.5
17	16.5	15.5	13.5	13.5	9.5	9.0	8.0	7.0	5.5	4.5	9.5	8.0
18	16.0	15.5	13.5	13.5	9.0	8.5	8.5	7.0	5.5	5.0	9.5	8.0
19	15.5	15.5	13.5	13.5	9.0	8.5	8.0	8.0	5.5	5.0	9.0	8.0
20	16.0	15.0	13.5	13.0	9.0	8.5	8.5	7.0	5.5	5.5	8.5	8.0
21	15.0	14.0	13.0	13.0	9.5	9.0	8.5	7.0	5.5	5.0	8.5	8.5
22	16.0	13.5	13.0	13.0	9.5	9.5	8.5	8.0	6.5	5.0	8.5	8.0
23	15.0	14.5	13.0	12.0	10.0	9.5	8.5	8.0	6.0	5.5	8.0	7.0
24	15.0	14.5	13.0	12.0	10.0	10.0	8.5	8.0	7.0	5.0	8.0	7.0
25	14.5	14.0	12.0	12.0	10.0	10.0	8.5	8.0	8.0	5.5	8.0	7.0
26	15.5	14.5	12.0	11.5	10.0	9.5	8.0	8.0	7.0	6.0	8.0	7.0
27	14.5	14.0	12.0	11.5	9.5	9.0	8.0	8.0	6.0	6.0	7.0	7.0
28	14.5	14.5	12.0	11.5	9.0	9.0	8.0	8.0	7.0	6.0	8.0	7.0
29	14.5	14.5	12.0	11.0	9.0	8.5	8.0	7.0	---	---	8.0	7.0
30	15.5	14.5	11.5	11.5	9.0	8.5	7.0	6.5	---	---	8.0	7.0
31	15.5	15.0	---	---	9.0	9.0	6.5	6.0	---	---	9.0	8.0
MONTH	18.5	13.5	16.5	11.0	11.5	8.5	9.5	6.0	8.0	4.5	11.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	13.0	10.0	13.0	13.0	13.0	12.0	15.0	14.5	19.5	18.0
2	8.5	8.0	11.5	10.5	13.0	12.0	13.0	12.0	---	---	19.5	18.0
3	8.5	8.0	11.0	11.0	12.0	12.0	13.0	12.0	---	---	20.0	18.0
4	8.5	8.0	12.0	10.5	12.0	11.5	13.0	12.0	---	---	20.0	18.5
5	8.0	8.0	12.0	10.5	12.0	11.5	13.0	12.0	---	---	20.0	18.5
6	9.0	7.0	11.5	10.5	11.5	11.5	13.0	12.0	---	---	20.0	18.5
7	8.0	8.0	11.5	10.5	11.5	11.5	13.0	12.0	---	---	20.0	18.5
8	8.0	7.0	11.5	11.0	11.5	11.5	13.0	12.0	---	---	20.0	18.5
9	8.5	6.5	11.0	10.5	12.0	11.5	13.0	13.0	---	---	19.5	18.5
10	7.0	6.5	11.5	11.0	11.5	11.0	13.0	13.0	---	---	20.0	18.5
11	8.0	6.5	11.5	11.0	11.0	11.0	13.0	13.0	---	---	20.0	18.5
12	7.0	5.5	11.0	10.5	11.5	11.0	13.0	13.0	---	---	20.0	18.5
13	8.0	5.5	11.0	10.5	11.5	11.5	13.0	13.0	---	---	19.0	18.5
14	8.5	6.5	11.0	10.5	11.5	11.5	13.5	13.0	---	---	19.0	18.5
15	9.5	6.0	12.0	10.0	11.5	11.5	13.5	13.0	---	---	19.5	18.5
16	8.5	8.0	11.5	10.0	11.5	11.5	13.5	13.0	---	---	19.5	18.0
17	8.5	8.0	11.0	10.5	11.5	11.5	13.5	13.5	---	---	19.0	18.0
18	9.5	8.5	11.0	10.0	11.5	11.5	14.0	13.5	---	---	18.5	18.0
19	11.0	9.0	11.5	10.0	11.5	11.5	14.0	13.5	---	---	19.5	18.0
20	11.0	9.5	11.5	10.5	11.5	11.5	14.0	14.0	---	---	19.5	18.0
21	11.5	9.5	11.5	10.5	11.5	11.5	14.5	14.0	---	---	19.5	18.0
22	11.0	9.5	11.5	11.0	11.5	11.5	14.5	14.0	---	---	19.0	18.0
23	11.0	10.0	11.5	11.0	11.5	11.5	14.5	14.0	---	---	19.5	18.0
24	11.0	9.5	11.0	11.0	11.5	11.5	14.5	14.5	---	---	20.0	18.0
25	11.0	10.0	11.0	11.0	12.0	11.5	14.5	14.5	---	---	19.5	18.5
26	11.0	10.0	11.5	11.0	12.0	11.5	14.5	14.5	---	---	20.0	18.5
27	11.0	10.0	11.5	11.0	12.0	12.0	14.5	14.5	---	---	19.5	18.5
28	11.5	10.0	11.5	11.0	12.0	12.0	14.5	14.5	---	---	20.0	19.0
29	13.5	10.0	12.0	11.0	13.0	12.0	14.5	14.5	19.0	18.0	20.0	19.0
30	11.5	10.0	11.5	11.0	13.0	12.0	15.0	14.5	19.5	18.0	20.0	19.0
31	---	---	13.0	11.5	---	---	15.0	14.5	19.5	18.0	---	---
MONTH	13.5	5.5	13.0	10.0	13.0	11.0	15.0	12.0	---	---	20.0	18.0

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 (400 m) upstream from bridge on Tellico Plains-Ballplay Road, 0.4 mile (0.6 km) downstream from Laurel Creek, 0.8 mile (1.3 km) east of Tellico Plains, and at mile 28.2 (45.4 km).

DRAINAGE AREA.--118 sq mi (306 sq km).

PERIOD OF RECORD.--Water temperatures: July 1964 to March 1972, January to September, 1973.

EXTREMES.--January to September 1973:
Water temperatures: Maximum, 26.5°C Sept. 1; minimum, 1.0°C Feb. 18.

Period of record:
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 years 1969, 1970. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
05...	1230	1920	4.6	130	1.8	.5	.9	.5	--	6	3.7	1.5
NOV.												
10...	1200	305	5.8	110	2.0	.4	1.4	.5	--	8	2.9	1.0
DEC.												
05...	1200	274	5.5	120	1.8	.5	1.2	1.0	--	8	2.7	1.5
FEB.												
01...	1300	381	5.9	20	1.4	.2	1.0	.4	--	5	1.9	1.0
MAR.												
01...	1245	249	5.4	20	1.2	.5	1.0	.4	--	6	2.1	1.0
MAY												
22...	1230	204	5.6	<50	2.0	.4	1.4	.7	<200	9	1.0	2.0
JUNE												
28...	1130	381	6.5	<50	2.0	.5	1.0	.8	<200	20	2.0	2.0
JULY												
27...	1200	1260	5.8	80	2.0	.8	1.0	1.0	<200	5	1.0	2.0
AUG.												
31...	1155	120	6.5	<50	1.0	.6	1.1	.7	<200	12	1.0	2.0

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
OCT.												
05...	22	6	19	6.0	16.0	7	5	.27	.38	.02	<.01	.05
NOV.												
10...	15	6	21	6.6	--	5	7	.03	.06	.02	<.01	<.05
DEC.												
05...	17	6	20	6.5	--	5	7	--	--	--	--	--
FEB.												
01...	11	5	18	6.5	9.0	4	4	.11	<.01	.02	<.01	<.01
MAR.												
01...	9	5	20	6.6	9.0	5	5	.03	.05	.01	<.01	<.05
MAY												
22...	20	7	26	6.5	18.0	5	7	.03	.11	.01	<.01	<.05
JUNE												
28...	30	7	24	6.8	14.5	5	16	.03	.14	.01	<.01	.06
JULY												
27...	20	8	22	6.5	20.0	15	4	.12	.03	.01	<.01	.10
AUG.												
31...	20	5	23	6.9	23.0	5	10	<.03	.05	.01	<.01	<.05

03518500 TELLICO RIVER AT TELLICO PLAINS, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER, JANUARY TO SEPTEMBER, 1973

	JANUARY		FEBRUARY		MARCH			JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	DAY	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.5	4.5	9.5	6.5	16	---	---	5.5	3.0	13.5	13.0
2	---	---	10.0	9.5	9.5	8.0	17	---	---	3.0	1.5	13.0	8.5
3	---	---	9.5	6.0	11.5	9.5	18	---	---	3.0	1.0	9.5	8.0
4	---	---	6.5	4.5	13.0	10.0	19	---	---	5.0	3.0	10.0	7.0
5	---	---	8.0	5.5	14.0	11.0	20	---	---	4.5	4.0	11.0	9.5
6	---	---	9.0	7.0	13.5	12.0	21	---	---	6.0	4.0	10.5	7.0
7	---	---	9.5	8.5	16.0	13.5	22	---	---	6.0	3.5	9.0	6.5
8	---	---	9.0	6.5	16.5	14.0	23	---	---	6.0	3.0	9.5	7.0
9	---	---	6.5	4.5	15.5	14.5	24	---	---	7.0	4.0	11.0	8.5
10	---	---	4.5	3.5	16.0	14.0	25	---	---	7.0	5.0	12.0	10.5
11	---	---	3.5	2.0	15.0	13.5	26	---	---	9.5	7.0	11.5	10.5
12	---	---	4.0	2.0	14.5	11.5	27	8.5	8.0	9.0	8.0	11.5	10.0
13	---	---	5.0	4.0	13.5	11.0	28	8.5	8.0	10.0	7.0	13.0	10.5
14	---	---	8.0	5.0	16.5	13.0	29	8.0	4.0	---	---	12.0	11.0
15	---	---	8.0	5.5	15.5	13.5	30	4.0	2.0	---	---	14.5	11.0
							31	4.5	3.0	---	---	15.5	14.0
							MONTH	---	---	10.0	1.0	16.5	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.5	17.0	13.0	18.5	16.0	21.0	19.5	21.0	20.0	26.5	21.0
2	15.0	13.0	17.0	15.5	19.5	16.0	23.5	19.0	22.0	19.5	26.0	21.0
3	15.0	11.5	16.0	14.0	21.0	17.0	25.0	20.5	21.5	19.5	26.0	20.5
4	14.0	11.5	16.0	12.0	23.0	19.0	24.5	21.0	22.0	19.5	25.5	21.0
5	11.5	9.5	15.0	11.0	21.0	18.5	23.5	20.0	23.5	19.5	25.0	21.0
6	13.0	8.5	13.5	11.5	19.0	18.0	25.0	20.0	22.0	20.0	25.0	21.0
7	11.5	11.0	15.5	12.0	20.0	16.5	23.5	21.0	23.5	20.0	25.0	21.5
8	11.5	10.5	16.5	15.0	21.5	18.0	23.5	20.5	24.0	20.5	26.0	21.5
9	11.0	9.5	18.5	15.0	22.0	19.5	25.5	20.5	24.5	20.5	25.0	22.0
10	10.0	6.5	18.5	14.5	23.0	19.0	25.5	20.0	24.5	21.0	25.0	22.0
11	9.5	5.5	18.5	16.0	23.0	19.5	23.0	19.5	24.0	19.5	25.0	21.5
12	10.0	6.5	17.0	15.0	20.5	18.5	24.0	20.0	23.0	21.0	25.0	20.0
13	12.0	8.5	17.0	13.5	19.5	17.0	24.5	19.5	21.5	20.0	22.0	19.0
14	12.0	8.0	17.0	13.5	20.0	18.0	23.5	21.0	21.0	20.0	20.5	19.0
15	14.0	9.5	17.0	13.5	20.5	18.5	24.0	20.5	23.0	19.5	23.0	19.0
16	13.0	12.0	16.5	12.0	20.5	18.5	21.5	20.0	23.0	19.5	23.5	19.0
17	13.0	12.0	16.0	13.5	21.5	18.5	23.0	20.0	20.5	19.5	21.5	19.5
18	14.0	13.0	16.0	11.5	23.0	19.5	23.0	20.5	23.0	19.5	20.0	18.0
19	18.0	14.0	16.0	13.0	23.5	19.5	23.5	20.5	24.0	19.5	20.5	16.0
20	19.0	15.0	16.5	14.0	22.0	20.0	24.5	20.5	23.0	20.0	20.5	15.5
21	20.0	16.0	19.0	14.0	23.0	19.5	25.0	21.0	23.0	19.5	21.5	16.5
22	18.5	16.5	19.0	14.5	21.5	19.0	25.5	21.5	23.5	19.5	21.5	18.0
23	17.0	16.0	19.0	16.0	23.0	19.0	24.5	21.5	24.0	19.0	24.0	19.0
24	18.0	15.5	16.5	15.0	23.0	19.0	25.5	21.0	24.0	19.0	24.0	19.5
25	16.5	16.0	16.5	14.5	23.5	19.5	23.0	20.5	24.5	20.0	23.5	19.5
26	17.0	15.5	18.0	15.5	24.0	19.5	23.0	20.0	25.0	20.5	23.5	19.5
27	15.5	11.5	18.0	16.5	21.5	20.0	21.5	19.5	25.5	21.0	21.5	20.0
28	12.0	10.5	18.5	16.0	21.0	19.5	23.0	19.5	25.5	21.0	23.0	20.0
29	13.5	9.5	18.0	15.5	23.0	18.5	24.5	20.5	25.5	21.0	23.0	20.0
30	14.5	11.5	18.5	15.0	21.5	19.5	24.5	20.5	26.0	21.5	23.0	20.5
31	---	---	18.5	15.0	---	---	23.0	21.5	26.0	21.5	---	---
MONTH	20.0	5.5	19.0	11.0	24.0	16.0	25.5	19.0	26.0	19.0	26.5	15.5

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 (0.6 km) upstream from Grissom Island, 4.6 miles (7.4 km) downstream from Big War Creek, 10 miles (16 km) east of Tazewell, and at mile 159.8 (257.1 km).

DRAINAGE AREA.--1,474 sq mi (3,818 sq km).

PERIOD OF RECORD.--Water temperatures: April 1971 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 30.0°C Aug. 29, 30, 31; minimum, 1.0°C Jan. 13, 14.

Period of record:
Water temperatures: Maximum, 30.0°C July 22, 23, 24, 1972, Aug. 29, 30, 31, 1973; minimum, 1.0°C Jan. 13, 14, 1973.

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, 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV.												
02...	1130	1460	4.1	60	39	11	3.0	2.1	--	148	18	4.5
JAN.												
16...	1615	1300	4.7	30	38	12	4.0	1.5	--	144	22	4.5
MAR.												
08...	1100	1630	1.8	50	34	10	6.5	2.5	--	134	20	7.0
JULY												
10...	1000	709	2.8	<50	34	13	4.8	2.5	<200	150	24	5.0
SEP.												
05...	1310	331	2.1	<50	30	13	5.0	2.6	<200	120	22	5.0

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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.												
02...	161	140	260	7.5	16.0	--	121	.21	.11	.04	<.01	.70
JAN.												
16...	213	140	255	7.8	3.0	3	118	.06	.09	<.01	.01	.80
MAR.												
08...	159	130	238	7.2	15.0	5	110	.04	.32	.02	<.01	.20
JULY												
10...	170	140	290	8.2	26.5	10	123	.09	.14	.01	<.01	.40
SEP.												
05...	130	130	260	7.8	26.5	5	98	.15	.19	.03	<.01	--

03528000 CLINCH RIVER ABOVE TAZEWELL, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	18.0	14.5	13.0	8.0	6.5	9.5	8.5	5.0	4.5	8.5	7.0
2	18.0	16.0	14.5	13.0	7.0	6.0	9.5	9.0	6.0	5.0	9.0	8.0
3	17.0	15.0	15.5	14.0	6.5	6.0	9.0	9.0	6.0	6.0	9.0	8.5
4	16.5	16.0	15.5	14.5	7.0	6.0	9.0	9.0	6.5	6.0	10.5	9.0
5	17.0	16.0	15.0	13.5	8.0	7.0	9.0	8.5	7.0	6.5	11.5	10.5
6	16.5	16.0	14.0	13.0	9.0	8.0	9.0	8.0	7.0	7.0	13.0	11.5
7	16.0	15.5	14.0	13.0	9.0	8.5	8.0	6.0	8.0	7.0	13.5	13.0
8	16.5	15.5	13.5	12.0	9.0	8.5	6.0	5.0	8.0	7.0	14.5	13.0
9	17.0	15.5	13.0	11.5	10.5	9.0	5.0	4.5	7.0	6.0	15.0	14.5
10	16.5	15.5	12.0	11.5	11.5	10.5	4.5	3.5	6.0	5.0	15.5	15.0
11	17.0	15.0	13.0	11.5	12.0	11.5	3.5	2.0	5.0	4.0	15.5	15.5
12	17.0	15.5	12.0	11.0	12.0	11.0	2.0	1.5	4.0	3.5	15.5	14.5
13	18.5	16.5	12.0	11.0	11.0	11.0	1.5	1.0	4.0	3.5	15.0	14.5
14	18.5	16.5	13.0	11.5	11.5	11.0	1.5	1.0	5.0	4.0	15.0	14.5
15	19.0	17.0	12.0	10.5	11.5	11.0	1.5	1.5	5.5	5.0	15.0	15.0
16	17.0	16.5	10.5	10.0	11.5	9.0	2.0	1.5	5.5	5.0	15.0	13.0
17	18.5	16.5	10.0	9.5	9.0	6.5	3.5	2.0	4.5	4.0	13.0	11.5
18	16.5	15.5	10.0	9.0	6.5	5.0	3.5	3.0	4.0	3.5	11.5	9.5
19	16.0	13.5	9.5	9.0	5.0	4.5	4.5	3.5	4.0	3.5	9.5	9.0
20	13.5	12.0	9.5	9.5	5.5	5.0	5.0	4.5	4.0	3.5	9.5	9.5
21	12.0	11.0	9.5	9.0	7.0	5.5	5.5	4.5	4.0	3.5	9.5	9.0
22	12.0	11.0	9.0	8.5	9.0	7.0	6.0	5.5	4.0	3.5	9.5	9.0
23	12.0	11.0	8.5	6.5	9.5	9.0	7.0	6.0	4.5	3.5	9.5	9.0
24	13.0	11.5	7.0	6.0	10.0	9.5	7.0	6.5	5.0	4.0	10.0	9.5
25	13.5	12.0	6.5	6.0	10.0	10.0	6.5	6.0	5.5	5.0	10.5	9.5
26	14.0	12.0	6.5	6.0	10.0	9.5	6.0	5.5	6.0	5.5	11.5	10.5
27	13.0	12.0	6.5	6.0	9.5	8.5	6.0	5.5	6.5	6.0	11.5	11.0
28	13.0	12.0	7.0	6.5	8.5	7.0	6.5	6.0	8.0	6.5	12.0	11.0
29	13.5	13.0	8.0	7.0	7.0	7.0	6.0	5.5	---	---	12.0	11.5
30	14.0	13.0	8.0	7.0	8.0	7.0	5.5	4.5	---	---	12.0	11.5
31	14.0	13.0	---	---	8.5	8.0	5.0	4.5	---	---	14.0	12.0
MONTH	20.5	11.0	15.5	6.0	12.0	4.5	9.5	1.0	8.0	3.5	15.5	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.5	15.0	13.5	19.5	18.0	24.5	23.0	24.5	23.0	28.5	24.0
2	15.0	14.0	15.5	15.0	20.5	19.0	25.0	22.0	23.5	21.5	28.5	24.0
3	14.5	14.0	16.5	15.0	22.0	19.5	25.5	24.0	22.0	21.0	28.5	24.0
4	14.5	13.5	16.5	15.0	23.0	21.0	25.5	24.5	24.0	21.5	28.0	24.0
5	13.5	11.5	16.5	15.5	23.5	21.0	26.5	24.5	25.5	23.0	27.0	24.5
6	13.0	11.0	15.5	15.0	22.0	21.5	28.5	25.0	26.5	24.0	26.0	24.5
7	12.0	11.5	15.5	14.5	23.5	21.0	29.0	25.5	27.0	24.5	26.5	24.0
8	11.5	11.0	16.5	15.0	24.5	21.5	29.0	26.0	27.0	24.5	25.5	23.5
9	11.5	10.5	18.5	16.0	24.5	23.0	29.5	26.0	28.0	25.0	24.0	21.0
10	10.5	9.0	19.0	18.0	26.0	23.0	29.0	27.0	26.5	25.0	25.0	20.0
11	9.5	8.5	18.5	18.0	26.5	24.0	29.0	26.5	26.5	24.5	24.5	20.0
12	10.0	9.0	18.5	17.0	26.0	24.5	29.0	25.5	26.5	25.0	25.0	19.5
13	10.5	9.5	18.5	16.5	25.5	24.5	29.0	25.0	26.0	24.5	21.5	19.0
14	11.0	9.0	18.5	16.5	26.0	24.0	28.5	26.0	26.0	24.5	22.0	19.5
15	12.0	10.0	19.0	16.5	26.0	24.5	26.5	25.0	25.5	23.5	24.0	19.5
16	12.0	11.5	19.0	16.0	25.5	24.0	26.0	25.0	26.0	23.5	24.5	19.0
17	13.0	12.0	18.5	16.5	25.0	23.5	27.0	25.0	25.0	24.0	23.5	20.0
18	13.5	12.0	18.5	16.0	25.5	24.0	26.5	25.0	26.5	24.0	23.0	19.5
19	15.0	13.0	18.0	16.0	26.5	23.5	26.5	25.0	26.5	24.0	22.0	19.5
20	16.0	14.0	18.5	16.5	26.5	24.5	27.0	25.0	25.0	24.0	21.0	16.5
21	18.5	15.5	19.5	16.5	26.5	24.5	28.0	25.0	26.5	24.0	21.5	18.0
22	18.5	17.0	19.5	17.0	26.5	24.5	28.0	25.5	25.5	24.0	22.0	19.0
23	18.5	17.0	21.0	18.5	26.0	24.0	28.0	26.0	25.5	23.0	23.0	19.5
24	19.0	17.0	20.5	19.5	26.5	23.5	28.5	26.0	25.5	23.5	24.0	20.0
25	18.5	18.0	20.0	19.0	27.0	24.0	28.0	26.0	27.0	24.0	24.0	20.0
26	18.5	17.0	19.5	19.0	27.0	24.0	24.5	23.5	28.0	24.5	24.0	19.5
27	17.0	14.0	19.0	16.5	26.0	24.5	24.5	23.5	29.0	25.5	23.0	19.5
28	14.0	12.0	17.0	16.0	25.5	24.0	25.0	23.5	29.0	26.0	23.5	20.0
29	12.0	11.5	17.0	16.5	26.0	23.5	26.0	24.0	30.0	26.5	23.5	20.5
30	13.5	12.0	18.0	16.5	24.5	23.0	26.0	25.5	30.0	27.0	23.0	20.0
31	---	---	18.5	17.0	---	---	25.5	23.5	30.0	27.0	---	---
MONTH	19.0	8.5	21.0	13.5	27.0	18.0	29.5	22.0	30.0	21.0	28.5	16.5

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 (150 m) upstream from bridge on U. S. Highway 25E, 2.3 miles (3.7 km) east of Arthur, 2.4 miles (3.9 km) downstream from Indian Creek, and at mile 65.4 (105.2 km).

DRAINAGE AREA.--685 sq mi (1,774 sq km).

PERIOD OF RECORD.--Water temperatures: April 1971 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 26.5°C Aug. 29, 30, 31, Sept. 1, 2, 3; minimum, freezing point, Jan. 13.

Period of record:
Water temperatures: Maximum, 29.0°C July 20, 22, 23, 24, 1972; minimum, freezing point, Jan. 16, 1972. Jan 13, 1973.

REMARKS.--Water temperatures August 1962 to February 1966 are published in reports of Tennessee Valley Authority. Miscellaneous samples of chemical data published for the water year 1972. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	18.0	15.0	13.5	8.5	8.0	10.0	9.5	6.5	5.0	9.0	7.0
2	18.0	16.5	15.0	14.5	8.0	7.0	9.5	9.0	8.0	6.5	9.0	8.0
3	18.5	16.0	15.5	14.5	8.0	7.0	9.0	8.5	8.0	6.5	10.0	9.0
4	17.0	16.5	15.0	14.0	8.5	8.0	9.5	9.0	8.0	6.0	11.5	9.5
5	17.0	16.0	14.0	13.0	9.5	8.5	9.5	8.5	8.0	6.5	13.0	11.0
6	16.5	16.0	13.5	12.0	10.5	9.5	8.5	7.0	8.5	8.0	13.5	11.5
7	16.5	16.0	13.0	12.0	10.0	9.0	7.0	5.5	9.0	8.0	13.5	13.5
8	16.5	15.5	13.0	11.5	9.5	9.0	5.5	5.0	9.0	8.0	14.5	13.5
9	16.5	15.5	12.0	11.5	11.0	9.5	5.0	4.0	8.0	6.5	15.0	14.0
10	16.5	14.5	12.0	11.5	12.0	11.0	4.5	3.5	6.5	5.5	15.5	14.0
11	16.5	15.0	12.0	11.5	12.0	11.5	3.5	2.0	5.5	4.5	15.0	14.0
12	17.0	15.5	11.5	11.0	11.5	11.0	3.0	1.0	5.5	4.0	14.5	13.5
13	18.5	16.5	12.0	11.0	11.5	11.0	2.0	0.0	6.0	5.0	14.5	13.0
14	18.5	17.0	13.0	11.5	11.5	11.0	3.0	0.5	7.0	6.0	14.5	13.5
15	18.5	16.5	11.5	9.5	11.5	11.0	3.5	2.0	7.0	6.5	14.5	14.0
16	16.5	15.5	9.5	9.0	11.0	8.0	4.5	3.0	6.5	5.5	14.0	13.0
17	17.0	15.5	9.5	9.0	8.0	6.0	5.0	3.5	5.5	4.5	13.0	11.0
18	16.0	15.0	9.5	8.5	6.0	5.0	5.5	4.0	5.0	3.5	11.0	10.0
19	15.0	12.0	10.0	9.0	5.5	4.5	6.5	5.5	5.5	4.0	10.0	9.5
20	13.0	11.5	10.0	9.5	7.0	5.5	6.5	5.5	5.0	4.5	10.5	10.0
21	11.5	11.0	10.0	9.5	9.0	7.0	7.0	6.0	5.5	4.5	10.5	9.5
22	12.0	11.0	9.5	8.5	10.5	9.0	8.5	7.0	5.5	4.5	10.5	9.5
23	12.0	11.5	8.5	8.0	10.5	10.0	8.5	8.0	6.0	5.0	10.5	9.0
24	13.5	12.0	8.0	6.5	10.5	10.0	8.0	7.0	7.0	5.5	11.0	9.5
25	13.0	11.5	7.0	6.5	10.5	10.0	7.0	6.5	7.0	6.0	11.5	11.0
26	13.0	11.5	7.0	6.5	10.0	9.0	6.5	6.5	8.0	6.5	12.0	11.5
27	12.0	11.5	8.0	6.5	9.0	8.5	7.0	6.5	8.5	8.0	12.0	11.5
28	13.0	12.0	8.5	8.0	8.5	7.0	8.0	7.0	9.0	8.0	12.0	11.5
29	13.0	12.0	9.0	8.0	8.5	7.0	7.0	5.0	---	---	12.0	11.5
30	13.5	12.0	9.0	8.5	9.0	8.0	5.5	4.5	---	---	13.5	11.5
31	13.5	13.5	---	---	10.0	9.0	5.5	4.5	---	---	14.0	13.0
MONTH	18.5	11.0	15.5	6.5	12.0	4.5	10.0	0.0	9.0	3.5	15.5	7.0

03532000 POWELL RIVER NEAR ARTHUR, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.5	14.5	13.0	18.0	16.0	21.0	20.5	21.0	20.0	26.5	24.0
2	15.0	13.5	15.0	14.5	18.5	17.0	21.5	20.0	20.0	19.0	26.5	24.0
3	14.5	13.5	15.5	14.5	20.0	18.0	22.0	21.0	20.0	18.5	26.5	24.0
4	14.5	13.0	15.5	14.0	20.5	19.0	22.0	21.5	20.5	19.0	26.0	24.0
5	13.0	11.0	15.5	13.5	20.5	20.0	23.5	21.5	21.0	19.5	25.5	24.0
6	13.0	10.5	15.0	13.5	20.5	19.5	23.5	21.5	22.0	20.5	25.0	23.5
7	13.0	11.5	15.0	14.0	20.0	19.0	24.0	22.0	23.0	21.5	25.0	23.5
8	11.5	11.0	15.5	14.5	20.5	19.0	24.5	23.0	23.5	21.5	24.5	23.0
9	11.5	10.5	16.5	15.5	21.0	20.0	25.5	23.0	24.5	22.0	24.0	22.0
10	10.5	9.0	17.0	15.5	21.5	20.5	25.0	24.0	24.0	23.0	24.0	21.5
11	10.0	8.5	16.5	15.5	23.5	21.0	25.0	23.5	23.0	20.5	23.0	21.5
12	10.5	9.0	16.0	15.5	23.0	22.0	25.0	23.0	23.0	21.5	23.0	20.5
13	10.5	9.0	16.0	15.0	22.0	21.5	25.0	22.0	23.0	21.5	21.5	20.5
14	11.0	9.0	16.0	14.5	23.5	21.0	24.0	23.0	23.0	22.0	20.5	20.0
15	13.0	10.0	16.0	14.5	23.5	22.0	24.0	23.0	22.0	21.0	21.0	19.5
16	13.0	12.0	16.0	14.5	23.0	20.0	24.0	23.0	23.0	21.0	21.5	19.5
17	13.0	12.0	16.0	15.0	21.5	20.0	24.5	23.0	23.0	21.5	20.5	19.5
18	14.0	13.0	15.5	14.0	22.0	20.5	24.5	23.5	23.5	21.5	20.0	18.5
19	15.0	13.5	15.5	15.0	22.0	20.5	24.5	23.5	24.0	21.5	20.0	17.0
20	16.0	14.5	16.5	15.5	22.0	21.0	25.0	23.5	23.0	22.0	19.5	17.0
21	18.0	15.5	18.0	15.5	23.0	22.0	24.5	23.5	23.5	21.0	20.0	18.5
22	18.0	17.0	17.0	16.0	23.5	21.5	25.0	23.5	22.0	21.0	20.5	19.0
23	18.0	17.0	19.0	16.5	24.0	21.5	24.0	22.0	22.0	20.0	21.0	19.5
24	18.5	17.0	18.5	18.0	24.0	22.0	25.0	23.0	22.0	20.5	22.0	20.0
25	18.5	17.0	19.5	18.0	24.5	22.0	24.5	23.0	24.0	21.0	22.0	20.0
26	18.0	16.5	19.0	18.5	24.5	22.0	23.0	20.5	24.5	21.5	22.0	19.5
27	16.5	13.5	19.0	15.5	23.5	21.0	21.0	20.5	25.5	23.0	21.0	19.5
28	13.5	11.5	16.0	15.5	22.0	20.5	21.5	20.5	25.5	23.5	21.5	20.0
29	11.5	11.0	16.0	15.0	22.0	20.5	23.0	21.0	26.5	24.0	21.5	20.5
30	13.0	11.5	16.0	15.5	21.0	20.5	23.0	22.0	26.5	24.5	21.0	20.0
31	---	---	16.5	15.0	---	---	22.0	20.5	26.5	24.5	---	---
MONTH	18.5	8.5	19.5	13.0	24.5	16.0	25.5	20.0	26.5	18.5	26.5	17.0

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 (3.4 km) downstream from Smith Branch, 4.0 miles (6.4 km) northwest of Halls Crossroads, and at mile 16.3 (26.2 km).

DRAINAGE AREA.--68.5 sq mi (177.4 sq km).

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 24.5°C several days during August and September; minimum, 2.0°C Feb. 17, 18, 19.

Period of record:
Water temperatures: Maximum, 27.0°C Aug, 7, 8, 9, 10, 1968; minimum, freezing point several days during January 1969, February 1971.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.0	14.5	13.5	8.0	8.0	11.0	10.5	5.0	3.5	6.5	6.5
2	14.0	13.5	14.5	14.5	8.0	6.5	10.5	9.5	7.0	5.0	6.5	6.5
3	13.5	13.5	15.0	14.5	6.5	6.5	9.5	9.0	7.0	6.5	8.5	6.5
4	14.0	13.5	15.0	14.5	8.5	6.5	9.5	9.0	6.5	5.5	10.0	8.5
5	14.5	14.0	14.5	12.0	10.0	8.5	9.5	9.5	6.0	5.5	11.0	10.0
6	14.5	14.5	12.0	11.0	11.0	10.0	9.5	9.0	6.0	5.5	11.0	11.0
7	15.0	14.5	12.0	11.0	10.5	9.0	9.0	6.0	6.5	6.0	11.0	11.0
8	15.0	14.0	11.5	11.5	9.0	9.0	6.5	5.5	7.0	6.0	13.0	11.0
9	14.0	14.0	11.5	11.0	11.0	9.0	5.5	5.5	6.0	4.5	13.5	13.0
10	14.0	13.5	11.0	11.0	12.0	11.0	5.5	4.5	4.5	4.0	13.5	13.5
11	13.5	13.5	11.0	11.0	11.5	11.0	4.5	4.0	4.0	3.5	13.5	13.5
12	14.0	13.5	11.0	10.5	11.0	11.0	4.5	3.5	3.5	3.5	13.5	12.0
13	15.0	14.0	10.5	10.5	11.0	11.0	3.5	3.0	4.0	3.5	13.0	11.0
14	15.5	15.0	11.5	10.5	11.0	11.0	3.0	3.0	4.5	3.5	14.0	11.5
15	15.5	15.5	11.5	10.0	11.0	11.0	4.5	3.0	5.0	4.5	14.0	13.0
16	15.5	15.0	10.0	8.5	11.0	9.0	4.0	3.5	5.0	4.0	13.0	11.5
17	15.5	15.0	8.5	8.5	7.0	5.5	4.0	4.0	4.0	2.0	11.5	9.5
18	15.5	15.0	8.5	8.5	6.0	5.5	5.0	4.0	2.0	2.0	9.5	9.0
19	15.0	14.5	9.5	8.5	6.0	5.5	6.5	4.5	4.0	2.0	10.0	9.0
20	14.5	12.0	10.0	9.5	9.0	6.0	6.5	6.0	4.0	4.0	10.0	9.5
21	12.0	11.5	10.0	10.0	9.5	9.0	6.0	6.0	4.0	4.0	10.0	9.0
22	11.5	11.5	10.0	9.0	10.5	10.0	8.0	6.0	4.0	4.0	9.0	8.0
23	13.0	11.5	9.0	8.5	10.5	10.5	8.0	8.0	4.0	4.0	9.5	9.0
24	13.0	12.0	8.5	6.5	11.0	10.5	8.0	7.0	5.0	4.0	10.5	9.5
25	13.0	13.0	6.5	6.5	11.0	11.0	7.0	6.0	5.0	5.0	11.0	10.5
26	13.0	13.0	6.5	6.5	11.0	10.0	6.0	6.0	6.5	5.0	11.0	11.0
27	13.0	13.0	6.5	6.5	10.0	9.0	6.0	5.5	6.5	6.5	11.0	11.0
28	13.0	13.0	8.5	6.5	9.0	8.0	6.5	6.0	6.5	6.5	11.0	10.5
29	13.5	13.0	8.5	8.0	8.0	8.0	6.5	5.0	---	---	11.0	10.5
30	13.5	13.5	8.0	8.0	9.0	8.0	5.0	3.0	---	---	11.5	10.5
31	13.5	13.0	---	---	11.0	9.0	3.5	3.5	---	---	13.5	11.5
MONTH	16.5	11.5	15.0	6.5	12.0	5.5	11.0	3.0	7.0	2.0	14.0	6.5

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	13.5	14.0	11.5	16.5	15.5	20.0	19.5	23.5	23.0	24.5	24.5
2	13.5	12.0	14.0	14.0	17.0	16.5	20.5	20.0	23.5	23.0	24.5	24.0
3	12.0	11.5	14.0	14.0	18.0	17.0	21.5	20.5	23.0	23.0	24.5	24.0
4	11.5	11.5	14.0	12.0	19.0	18.0	22.0	21.5	23.0	23.0	24.0	24.0
5	11.5	10.0	12.0	11.5	19.0	19.0	23.0	22.0	23.0	23.0	24.0	24.0
6	10.5	9.0	11.5	11.5	19.0	19.0	23.0	22.0	23.0	23.0	24.5	24.0
7	10.5	10.5	13.0	11.5	19.0	19.0	22.0	22.0	23.0	23.0	24.5	24.0
8	10.5	10.5	14.5	13.0	19.0	19.0	22.0	22.0	23.5	23.0	24.0	24.0
9	10.5	10.0	14.5	14.5	20.0	19.0	23.0	22.0	24.0	23.5	24.0	24.0
10	10.0	8.0	14.5	14.5	20.0	20.0	23.0	23.0	24.0	24.0	24.0	24.0
11	8.5	6.5	14.5	14.5	20.5	20.0	23.0	23.0	24.0	23.5	24.0	23.5
12	9.0	8.0	14.5	14.0	20.5	20.5	23.0	22.0	24.0	23.5	23.5	22.0
13	9.5	9.0	14.0	13.5	20.5	20.5	22.0	21.5	24.0	24.0	22.0	21.5
14	10.0	9.0	13.5	13.5	20.5	20.5	21.5	21.5	24.0	24.0	21.5	21.0
15	11.5	10.0	13.5	13.5	21.0	20.5	21.5	21.0	24.0	23.5	21.0	21.0
16	11.5	11.5	13.5	13.5	21.5	21.0	21.5	21.5	23.5	23.0	21.0	21.0
17	11.5	11.5	13.5	13.5	21.5	20.0	21.5	21.0	23.0	23.0	21.0	20.5
18	12.0	11.5	13.5	13.0	20.0	19.5	22.0	21.5	23.5	23.0	21.0	20.0
19	13.5	12.0	13.5	13.0	20.0	19.5	22.0	22.0	23.5	23.5	20.0	18.0
20	16.0	13.5	14.5	13.5	20.0	20.0	23.0	22.0	23.5	23.5	18.0	17.0
21	17.0	16.0	15.0	14.5	20.5	20.0	23.0	23.0	23.5	23.0	19.0	18.0
22	17.0	17.0	15.0	14.5	20.0	20.0	23.5	23.0	23.0	22.0	19.5	19.0
23	17.0	16.5	16.0	15.0	20.0	20.0	23.5	23.5	22.0	21.0	20.5	19.5
24	16.5	16.0	16.0	16.0	20.0	20.0	24.0	23.5	21.0	21.0	21.0	20.5
25	16.0	16.0	16.5	16.0	20.0	20.0	24.0	23.5	22.0	21.0	21.0	21.0
26	16.0	14.5	18.0	16.5	20.0	19.5	24.0	23.5	22.0	21.5	21.0	21.0
27	14.5	11.5	18.0	17.0	20.0	20.0	23.5	23.0	23.0	22.0	21.0	21.0
28	11.5	10.0	18.0	16.5	20.0	20.0	23.0	23.0	23.5	23.0	21.0	21.0
29	11.5	10.0	18.0	15.5	20.0	19.5	23.5	23.0	24.5	23.5	21.0	21.0
30	11.5	11.5	15.5	15.5	19.5	19.5	24.0	23.5	24.5	24.5	21.0	21.0
31	---	---	15.5	15.5	---	---	23.5	23.5	24.5	24.5	---	---
MONTH	17.0	6.5	18.0	11.5	21.5	15.5	24.0	19.5	24.5	21.0	24.5	17.0

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 (2.7 km) northeast of Estill Springs, 2.7 miles (4.3 km) downstream from Elk River Dam, 4.0 miles (6.4 km) upstream from U. S. Highway 41-A bridge, and at mile 167.3 (269.2 km).

DRAINAGE AREA.--275 sq mi (712 sq km).

PERIOD OF RECORD.--Water temperatures: July 1971 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 34.0°C Sept. 8; minimum, 6.5°C Jan. 16, 19, Feb. 19, Mar. 3.

Period of record:
Water temperatures: Maximum, 34.0°C Sept. 8, 1973; minimum, 5.5°C Feb. 9, 1972.

REMARKS.--Missing record Oct. 2-3, estimated range in temperature, 20.5°C to 22.0°C; Oct. 30-31, estimated range in temperature 16.5°C to 18.5°C; Nov. 27-30, estimated range in temperature, 11.0°C to 13.0°C; Dec. 2-4, estimated range in temperature, 10.0°C to 11.0°C; Mar. 28 to Apr. 3, estimated range in temperature, 14.0°C to 15.5°C; June 27 to July 6, estimated range in temperature 24.5°C to 33.0°C; July 17-27, estimated range in temperature, 20.0°C to 31.0°C; Aug. 3-30. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	21.0	17.0	15.5	13.5	10.5	12.0	10.5	10.0	9.0	11.0	9.5
2	---	---	18.0	16.0	---	---	11.5	10.0	10.0	9.0	11.0	8.5
3	---	---	18.5	16.5	---	---	11.5	11.0	10.5	10.0	9.0	6.5
4	22.0	21.5	19.0	16.5	---	---	12.0	9.5	11.0	8.0	9.5	8.0
5	23.0	20.5	19.5	15.5	11.0	10.0	13.0	11.0	10.0	8.0	9.5	8.0
6	23.5	20.5	18.5	16.0	13.5	10.5	13.0	11.5	10.0	8.0	10.5	8.5
7	23.0	21.0	18.5	17.0	14.0	11.5	11.5	11.0	11.0	8.0	10.5	8.5
8	23.0	20.0	18.5	16.5	12.0	11.5	11.5	11.0	11.0	9.5	10.5	8.5
9	23.0	20.0	19.0	15.0	13.5	11.5	11.5	10.5	11.5	10.5	10.5	8.5
10	21.0	19.5	18.0	16.0	13.5	11.0	11.0	10.0	11.0	9.5	10.5	9.5
11	21.0	20.0	18.0	17.0	15.0	13.5	10.5	9.5	11.0	8.0	12.0	10.0
12	21.5	19.5	18.0	14.5	14.0	11.0	10.0	9.0	11.0	9.0	14.0	10.0
13	21.5	20.0	17.0	15.5	15.0	12.0	10.5	8.0	10.0	9.0	14.5	10.0
14	21.5	20.0	17.0	16.0	15.0	14.0	10.0	8.0	10.0	8.0	13.0	10.5
15	21.0	20.0	17.0	15.5	14.5	14.0	9.5	8.5	9.5	8.5	15.5	11.5
16	21.5	20.0	17.0	15.5	15.0	13.0	10.0	6.5	10.0	9.5	18.0	15.5
17	21.0	19.5	16.5	15.5	15.0	11.0	9.5	7.0	10.5	8.0	18.0	16.5
18	23.0	20.0	16.5	15.0	14.5	10.0	9.0	7.0	10.0	7.0	18.0	14.5
19	23.0	21.5	15.5	14.5	13.5	10.5	10.0	6.5	10.0	6.5	17.0	12.0
20	23.0	19.5	15.5	14.5	11.5	10.5	10.5	7.0	9.5	8.5	15.0	14.0
21	21.5	18.5	15.0	14.0	12.0	11.0	10.0	8.5	10.0	7.0	16.0	14.0
22	19.5	16.5	15.0	14.0	13.0	11.5	9.5	8.0	9.5	8.0	16.5	13.5
23	18.0	16.5	15.0	13.5	12.0	11.5	10.5	8.0	9.5	7.0	16.0	11.5
24	18.0	17.0	15.0	11.5	12.0	11.0	11.0	7.0	10.0	7.0	15.0	12.0
25	18.0	16.5	14.0	12.0	12.0	11.0	11.0	7.0	10.0	8.0	15.0	13.0
26	18.0	16.0	13.5	12.0	12.0	11.0	10.5	9.0	9.5	8.0	15.5	13.5
27	17.0	16.0	---	---	12.0	9.5	10.5	9.5	10.5	9.0	15.5	14.0
28	18.0	16.5	---	---	12.0	8.5	10.5	10.0	10.5	9.0	---	---
29	18.0	17.0	---	---	11.0	9.5	11.0	10.0	---	---	---	---
30	---	---	---	---	11.0	9.5	11.5	8.5	---	---	---	---
31	---	---	---	---	11.5	9.5	11.0	9.0	---	---	---	---
MONTH	23.5	16.0	19.5	11.5	15.0	8.5	13.0	6.5	11.5	6.5	18.0	6.5

03579100 ELK RIVER NEAR ESTILL SPRINGS, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.5	15.5	21.5	18.5	---	---	28.5	26.0	28.0	24.5
2	---	---	18.0	16.0	21.5	18.5	---	---	28.0	26.0	28.5	24.0
3	---	---	18.5	16.0	21.0	18.5	---	---	---	---	32.0	23.5
4	16.5	15.0	19.0	16.5	21.5	19.0	---	---	---	---	31.5	23.0
5	16.5	15.5	19.0	16.0	21.0	18.5	---	---	---	---	27.0	24.0
6	17.0	14.0	18.5	16.5	21.5	19.0	---	---	---	---	25.5	24.0
7	16.5	15.5	18.0	17.0	21.5	18.5	28.0	25.0	---	---	26.0	24.0
8	16.5	14.5	19.0	16.5	21.0	18.5	26.0	24.5	---	---	34.0	24.0
9	16.0	15.5	19.0	16.0	21.5	19.0	26.5	24.5	---	---	29.5	24.5
10	16.0	15.5	19.5	16.5	23.0	18.5	27.0	24.5	---	---	26.0	24.5
11	16.5	14.0	19.5	17.0	24.0	18.5	27.0	25.0	---	---	26.0	24.0
12	16.0	13.5	19.5	17.0	23.0	19.5	29.0	24.0	---	---	28.5	21.5
13	16.0	14.0	19.5	17.0	24.0	21.0	30.0	24.0	---	---	24.5	23.5
14	16.0	12.0	19.5	17.0	25.5	21.0	26.5	20.5	---	---	25.0	23.5
15	15.5	13.0	20.0	18.0	24.0	21.0	28.0	20.0	---	---	25.0	23.5
16	15.0	13.5	21.5	15.5	24.5	22.0	27.0	21.0	---	---	26.5	23.0
17	15.0	14.0	21.0	17.0	25.5	21.5	---	---	---	---	24.5	22.0
18	15.0	14.0	19.5	17.0	30.5	23.0	---	---	---	---	25.0	23.0
19	15.0	14.0	19.0	18.0	28.5	25.0	---	---	---	---	24.5	21.0
20	16.0	14.0	19.5	17.0	27.0	25.0	---	---	---	---	24.5	21.0
21	15.5	14.0	20.0	16.5	27.0	25.5	---	---	---	---	26.5	22.0
22	15.5	14.5	20.0	18.0	28.0	25.5	---	---	---	---	29.0	23.5
23	16.0	14.5	20.5	18.0	28.0	25.5	---	---	---	---	29.5	23.0
24	16.0	15.0	21.0	18.0	27.0	25.5	---	---	---	---	28.5	22.0
25	16.0	14.5	20.5	17.0	28.0	25.0	---	---	---	---	28.0	23.5
26	16.0	15.0	20.5	17.0	28.0	25.5	---	---	---	---	25.5	24.0
27	18.0	15.5	22.0	19.0	---	---	---	---	---	---	25.5	24.0
28	18.5	15.5	23.0	20.0	---	---	30.5	22.0	---	---	25.5	24.0
29	18.5	15.5	23.5	19.5	---	---	27.0	22.0	---	---	25.5	24.0
30	18.0	15.5	22.0	19.0	---	---	26.0	22.0	---	---	25.0	24.0
31	---	---	22.0	18.5	---	---	27.0	26.0	30.0	25.0	---	---
MONTH	18.5	12.0	23.5	15.5	30.5	18.5	---	---	---	---	34.0	21.0

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 (50 m) upstream from bridge on State Highway 50, 0.3 mile (0.5 km) downstream from Tims Ford Dam, 3.6 miles (5.8 km) north of Lexie Crossroads, 9.5 miles (15.3 km) west of Winchester, and at mile 133 (214 km).

DRAINAGE AREA.--534 sq mi (1,383 sq km).

PERIOD OF RECORD.--Water temperatures: May 1971 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 23.0°C Oct. 19, July 3; minimum, 5.0°C Nov. 27.

Period of record:
Water temperatures: Maximum, 25.0°C June 24, 25, 1971, July 23, 1972; minimum, 3.5°C Feb. 19, 1972.

REMARKS.--Missing record Dec. 9-12, estimated range in temperature, 9.5°C to 14.5°C. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV.												
28...	1300	80	2.3	70	35	8.3	5.2	1.8	--	89	48	5.5
JAN.												
23...	1055	1500	2.1	10	24	4.0	2.2	1.2	--	77	9.5	4.5
MAR.												
30...	1100	4030	2.8	0	23	3.6	1.8	1.1	--	73	7.0	3.5
MAY												
22...	1235	30	5.3	80	27	3.3	1.6	1.2	<200	85	8.0	3.0
JULY												
27...	1040	30	5.2	140	32	4.7	2.5	1.8	<200	100	21	4.0
SEP.												
25...	1245	272	5.5	400	28	3.6	1.5	1.5	<200	110	8.0	4.0

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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.												
28...	169	120	260	7.4	13.0	3	73	.14	.20	.11	.01	.80
JAN.												
23...	95	76	150	7.2	8.0	5	63	.12	.15	.03	<.01	.50
MAR.												
30...	81	73	150	7.0	10.0	5	60	.09	.04	.04	<.01	.60
MAY												
22...	100	81	170	7.4	15.5	5	70	.06	<.03	.02	<.01	.50
JULY												
27...	130	99	230	7.1	18.5	5	82	.21	.10	.46	<.01	.20
SEP.												
25...	100	85	150	7.3	18.0	5	90	.28	.20	.48	<.01	.07

03580750 ELK RIVER BELOW TIMS FORD DAM, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	20.0	18.5	14.0	10.5	10.5	10.0	10.0	8.0	9.5	6.0
2	19.5	18.5	20.0	19.5	14.5	10.5	11.0	10.0	10.0	8.5	9.0	6.5
3	19.5	18.5	19.5	18.0	13.5	11.0	11.0	10.5	8.5	7.0	11.0	7.0
4	19.5	19.5	19.0	17.0	14.0	11.5	10.5	10.0	10.0	6.5	9.0	7.0
5	20.0	19.5	18.0	15.5	15.5	12.0	10.5	10.0	11.5	8.0	11.0	7.0
6	20.0	19.5	19.0	15.5	14.0	8.0	10.5	9.5	13.0	8.5	13.5	7.0
7	21.0	20.0	15.5	13.5	13.0	7.0	10.0	8.5	9.5	8.0	11.0	6.5
8	21.0	20.0	17.0	10.5	13.0	11.0	10.0	9.0	9.5	8.5	9.5	7.0
9	21.0	20.5	16.5	9.5	---	---	10.0	8.0	8.5	7.0	10.0	7.0
10	21.5	20.5	15.0	10.5	---	---	9.5	6.5	8.5	8.0	9.5	7.0
11	21.0	19.5	13.0	9.5	---	---	9.5	7.0	8.0	7.0	10.5	7.0
12	20.5	19.0	16.5	8.5	---	---	9.5	5.5	8.0	8.0	8.5	7.0
13	20.5	19.0	15.5	11.0	12.0	11.5	9.5	5.5	8.5	8.0	8.5	7.0
14	20.5	20.0	15.0	10.0	12.0	12.0	10.0	6.0	8.5	8.0	10.5	7.0
15	20.5	19.5	10.0	6.0	12.0	11.5	11.5	7.0	8.0	8.0	14.5	8.0
16	20.5	19.0	9.0	6.0	12.0	11.5	11.0	6.5	8.0	7.0	15.0	8.0
17	21.5	19.5	10.5	6.5	11.5	11.5	10.5	7.0	8.0	6.5	10.0	8.0
18	21.5	19.5	9.0	6.0	11.5	11.0	11.0	8.5	7.0	6.5	10.0	9.0
19	23.0	21.5	10.5	8.5	11.5	10.5	11.5	8.5	7.0	6.5	10.0	7.0
20	21.5	20.0	9.5	7.0	11.5	11.0	10.5	7.0	7.0	7.0	9.0	8.5
21	21.0	20.0	10.5	6.5	11.5	11.0	9.0	8.0	8.0	6.5	9.0	8.5
22	20.5	20.0	9.5	8.5	11.5	11.5	10.5	8.0	8.5	6.5	9.0	8.5
23	20.5	20.0	10.5	6.5	11.5	11.0	9.0	8.0	8.5	6.0	9.5	8.5
24	21.0	20.0	11.0	6.0	11.0	11.0	9.0	7.0	8.5	6.0	10.5	9.0
25	21.0	20.5	8.5	7.0	11.0	11.0	9.0	7.0	10.5	6.5	14.5	8.5
26	21.0	20.0	8.5	5.5	11.0	11.0	8.5	8.5	8.5	6.5	10.5	10.0
27	20.5	20.0	10.5	5.0	11.0	10.5	8.5	8.5	8.0	6.0	10.0	10.0
28	20.0	18.5	13.5	9.0	10.5	10.0	9.0	7.0	9.5	6.0	10.0	9.5
29	18.5	18.5	14.0	8.5	10.5	10.0	8.5	6.5	---	---	10.5	10.0
30	18.5	17.0	14.0	11.0	10.5	10.0	9.5	6.5	---	---	10.5	9.5
31	19.0	18.0	---	---	10.5	10.0	9.0	7.0	---	---	13.0	8.0
MONTH	23.0	17.0	20.0	5.0	15.5	7.0	11.5	5.5	13.0	6.0	15.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	8.5	15.5	9.0	13.0	12.0	15.0	13.0	18.0	12.0	17.0	13.0
2	11.5	8.5	14.5	9.0	13.0	12.0	19.5	12.0	18.0	12.0	15.0	13.5
3	13.5	8.5	15.5	9.5	13.0	12.0	23.0	12.0	18.0	12.0	15.5	13.0
4	13.5	9.5	16.5	9.5	13.0	12.0	21.5	12.0	15.5	13.5	20.0	13.5
5	12.0	9.0	14.5	9.5	13.0	12.0	22.0	13.0	15.0	13.0	20.0	14.0
6	13.0	9.0	13.5	11.5	13.0	13.0	22.0	12.0	19.5	13.0	17.0	14.5
7	11.5	8.5	14.5	9.0	13.5	13.0	14.5	13.0	19.0	12.0	19.5	14.0
8	14.0	8.5	14.5	9.0	13.5	13.0	14.5	13.0	14.5	11.5	16.5	14.0
9	11.0	8.5	16.0	10.0	13.5	13.0	20.5	12.0	19.5	12.0	16.0	14.0
10	10.5	9.0	16.5	9.0	13.5	13.0	20.5	12.0	20.0	13.0	21.0	14.5
11	10.5	9.0	15.0	9.0	13.5	13.0	21.5	13.0	15.0	13.0	18.5	14.0
12	13.5	8.5	16.0	9.0	14.0	13.5	22.0	12.0	15.5	13.0	19.5	14.0
13	14.0	9.0	16.0	11.5	14.0	13.5	20.5	12.0	18.5	13.0	20.0	14.0
14	14.5	8.0	17.0	9.0	14.0	12.0	17.0	13.0	20.0	13.0	20.0	14.0
15	15.0	8.5	17.0	9.5	14.0	11.5	15.0	13.0	19.5	12.0	17.0	14.5
16	13.0	8.5	16.5	9.5	14.0	11.5	15.5	12.0	19.5	12.0	16.5	14.0
17	13.5	8.5	17.0	9.5	15.5	11.5	18.5	12.0	15.5	12.0	18.5	14.0
18	13.0	9.0	17.0	10.5	22.0	13.0	15.5	12.0	15.0	13.0	17.0	15.0
19	15.5	8.5	16.0	9.5	20.0	12.0	14.0	13.5	15.0	13.0	21.5	15.0
20	17.0	13.0	16.5	13.5	21.5	13.0	17.0	12.0	20.0	12.0	20.5	15.0
21	17.0	12.0	17.0	9.5	21.0	12.0	18.5	12.0	16.5	13.0	20.0	14.5
22	14.0	13.0	16.5	10.5	21.5	12.0	18.5	12.0	20.5	13.5	21.5	15.0
23	14.0	8.5	14.5	9.5	15.5	13.5	20.0	13.0	19.5	13.5	21.5	15.0
24	15.5	9.0	16.0	11.0	15.5	12.0	21.0	13.0	19.0	13.0	18.5	16.0
25	14.5	8.5	16.5	13.0	22.0	13.0	20.0	12.0	15.5	13.5	18.5	16.0
26	14.0	13.0	14.5	9.0	22.0	12.0	20.5	13.0	15.5	13.5	18.5	16.0
27	14.0	9.0	18.5	10.0	21.5	12.0	19.0	13.0	19.0	13.0	16.0	15.5
28	13.5	9.0	11.5	11.0	22.0	13.0	15.0	12.0	19.5	12.0	16.5	15.5
29	14.5	9.0	12.0	11.0	21.5	13.0	15.0	12.0	18.5	12.0	16.0	15.5
30	14.0	9.0	13.0	11.5	15.0	13.0	15.5	13.0	18.0	12.0	16.0	15.5
31	---	---	13.0	11.5	---	---	16.0	13.0	18.0	13.0	---	---
MONTH	17.0	8.0	18.5	9.0	22.0	11.5	23.0	12.0	20.5	11.5	21.5	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 (1.0 km).

DRAINAGE AREA.--106 sq mi (275 sq km).

PERIOD OF RECORD.--Water temperatures: March 1968 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 27.0°C July 23, 24; minimum, 0.5°C Jan. 11.

Period of record:
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 (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	20.5	19.0	8.5	6.5	11.5	9.0	10.5	7.0	9.5	6.0
2	19.5	16.0	20.5	19.5	8.5	6.0	10.5	8.0	11.5	10.0	10.5	9.0
3	19.5	17.0	19.0	16.5	9.0	8.0	10.5	9.5	10.0	8.0	13.0	10.5
4	19.5	19.0	17.0	16.0	11.5	9.0	9.5	7.0	8.5	6.0	13.0	11.5
5	21.0	19.0	16.0	14.0	14.5	11.5	7.0	4.5	10.5	8.0	14.0	12.0
6	21.0	19.0	15.0	13.0	14.5	10.0	4.5	4.0	12.0	10.0	15.0	13.0
7	20.5	19.5	15.5	15.0	10.0	7.0	4.5	3.5	12.0	10.5	17.0	15.0
8	19.5	17.0	15.0	14.0	11.5	7.0	4.0	3.0	11.5	7.0	16.0	14.0
9	19.0	17.0	13.5	11.5	13.0	11.5	4.0	3.0	7.0	6.0	18.0	15.0
10	19.0	17.0	14.0	12.0	13.0	10.0	3.0	1.0	6.0	5.0	17.0	16.5
11	19.5	18.0	13.5	13.0	10.0	9.0	2.0	0.5	6.0	4.5	16.5	15.5
12	20.5	18.0	13.0	10.5	13.5	9.5	4.0	1.0	6.5	5.5	15.5	12.0
13	21.5	19.5	14.0	11.5	14.0	11.0	5.5	4.0	6.5	6.0	15.5	13.5
14	22.0	20.5	14.0	11.5	11.0	10.5	6.5	5.0	10.0	6.0	18.0	15.5
15	21.5	20.0	11.5	9.5	10.5	9.0	8.5	6.5	10.0	7.0	8.0	15.0
16	20.0	18.5	9.5	8.5	8.5	6.5	8.5	6.5	7.0	5.0	15.0	13.0
17	21.0	19.5	8.5	7.0	6.5	5.0	9.0	8.0	5.5	4.0	12.0	9.5
18	20.0	19.0	7.0	6.5	5.5	4.0	11.5	9.0	6.0	3.5	11.0	9.0
19	19.0	15.0	11.0	7.0	9.0	5.5	12.0	10.0	8.0	4.5	11.5	10.0
20	15.0	13.5	11.0	10.0	11.0	9.0	9.0	7.0	7.0	6.0	14.5	11.5
21	15.0	13.0	10.0	9.5	11.5	10.5	8.5	8.0	6.5	4.5	12.0	11.0
22	17.0	15.0	9.5	9.0	10.5	9.0	10.5	8.0	7.0	4.5	12.0	10.0
23	18.5	17.0	9.0	7.0	9.5	9.0	10.5	8.5	8.5	5.5	13.5	10.0
24	18.5	16.5	7.0	5.0	9.0	8.5	9.0	7.0	9.5	6.0	14.0	10.5
25	16.5	15.0	8.0	6.0	8.5	8.0	8.5	6.0	10.0	8.0	14.0	10.5
26	15.0	13.5	9.0	8.0	8.0	6.0	9.5	8.0	10.5	9.0	13.0	12.0
27	16.0	14.5	9.5	8.0	6.5	5.5	10.0	9.5	9.5	7.0	13.5	12.0
28	16.5	16.0	10.0	9.0	6.5	4.5	10.0	8.5	8.5	6.5	14.5	12.0
29	17.0	16.5	9.5	8.5	8.5	6.5	8.5	5.5	---	---	14.0	13.0
30	17.0	15.5	9.5	8.5	12.0	8.5	6.0	4.0	---	---	14.5	13.0
31	19.0	17.0	---	---	12.0	11.0	7.0	5.5	---	---	16.5	14.5
MONTH	22.0	13.0	20.5	5.0	14.5	4.0	12.0	0.5	12.0	3.5	18.0	6.0

03582600 CANE CREEK NEAR FAYETTEVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	13.5	18.5	16.5	20.5	18.0	24.5	22.0	25.0	23.5	24.5	20.0
2	15.5	13.0	18.5	16.5	21.0	19.0	24.0	21.5	24.5	23.0	25.0	23.0
3	16.0	13.5	18.0	15.5	23.0	20.0	24.0	21.5	24.0	21.0	25.0	22.0
4	15.0	11.5	16.0	14.5	23.0	21.0	24.5	23.0	24.0	21.0	24.5	21.5
5	12.0	10.5	16.5	13.5	23.0	21.0	24.5	23.0	24.0	21.0	25.0	23.0
6	13.5	9.5	16.0	14.5	21.5	20.5	25.0	23.0	24.0	21.0	24.5	23.0
7	13.5	11.5	16.5	15.5	21.0	22.0	25.0	24.0	25.0	21.5	24.0	23.0
8	14.5	11.0	19.0	16.5	21.5	19.0	25.0	23.5	25.5	23.0	25.0	23.0
9	14.0	10.5	20.0	17.0	23.0	20.0	25.0	23.5	26.0	23.5	25.5	24.0
10	10.5	8.0	20.0	18.0	23.5	21.0	25.5	24.0	26.0	24.0	25.5	24.0
11	11.0	6.5	20.5	19.0	23.5	21.5	24.0	22.0	26.5	24.0	25.0	23.5
12	14.0	9.5	19.5	17.0	23.5	21.5	23.0	20.5	26.0	23.5	23.5	21.0
13	14.0	10.5	18.5	16.0	23.5	21.0	24.5	21.0	25.5	24.0	23.0	21.5
14	14.5	10.0	18.0	15.0	23.5	21.5	24.5	24.0	25.5	23.5	23.5	21.0
15	16.0	12.0	17.0	15.0	24.0	22.0	24.0	23.0	25.0	23.0	23.5	22.0
16	16.0	15.5	17.0	14.0	24.5	22.0	23.0	21.5	25.0	22.0	23.5	21.0
17	16.5	15.5	18.0	15.0	25.0	23.5	23.0	21.0	24.5	23.0	23.0	21.0
18	17.0	15.5	17.0	14.0	25.0	23.5	24.0	21.0	25.0	22.0	21.5	18.5
19	19.0	16.0	17.0	15.5	24.5	23.0	25.0	22.0	25.0	22.0	19.0	15.5
20	19.5	16.0	18.0	15.5	23.5	21.5	25.0	23.5	25.5	22.0	19.5	16.0
21	18.5	15.5	19.0	16.0	23.5	22.0	26.0	24.0	24.0	20.5	21.0	18.0
22	18.5	16.5	19.5	16.5	23.5	21.0	26.5	24.5	23.0	20.0	21.5	19.0
23	17.0	16.5	20.0	18.5	23.0	20.5	27.0	25.5	23.0	19.5	22.0	20.5
24	18.0	15.5	19.0	17.0	23.0	20.0	27.0	25.5	24.5	20.5	23.0	20.5
25	18.5	16.5	20.0	17.0	23.5	20.5	26.5	25.5	24.5	21.5	23.0	20.5
26	16.5	15.0	21.0	18.5	24.0	21.5	26.0	24.5	24.5	20.5	23.5	20.5
27	15.5	13.0	20.5	19.5	24.0	22.0	26.5	24.0	24.5	20.5	23.5	21.5
28	15.0	12.0	19.5	17.0	24.0	22.0	26.0	24.0	25.0	20.5	24.5	21.5
29	15.5	12.0	19.0	16.5	23.0	20.5	26.5	24.0	25.0	21.0	24.0	22.0
30	16.5	14.5	19.0	16.0	23.5	21.0	25.5	24.5	25.0	20.5	23.5	22.0
31	---	---	19.0	16.5	---	---	25.0	24.0	24.5	20.0	---	---
MONTH	19.5	6.5	21.0	13.5	25.0	18.0	27.0	20.5	26.5	19.5	25.5	15.5

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 (400 m) upstream from bridge on U. S. Highway 64, 1.0 mile (1.6 km) downstream from Weakley Creek, 4.0 miles (6.4 km) west of Pulaski, and at mile 30.1 (48.4 km).

DRAINAGE AREA.--366 sq mi (948 sq km).

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1967, March 1968 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 23.5°C several days in July and August; minimum, 3.5°C Jan. 12.

Period of record:
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 (DEG. C) OF WATER , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.0	17.0	16.0	10.0	9.0	11.5	9.5	10.5	9.0	10.0	8.0
2	16.5	14.0	17.0	15.5	10.0	8.5	9.5	9.0	10.5	9.0	10.5	10.0
3	16.5	14.5	15.5	14.5	11.0	9.0	9.5	9.0	9.0	8.0	12.0	10.5
4	16.5	16.0	14.5	13.5	13.0	11.0	10.0	9.0	9.5	8.0	12.0	11.0
5	18.0	16.0	14.0	12.0	15.0	13.0	10.5	9.5	11.0	9.5	14.0	11.5
6	18.0	16.0	14.0	12.0	13.5	10.0	10.0	9.0	12.0	11.0	14.5	12.0
7	17.0	16.5	14.5	13.5	10.5	8.5	9.0	7.0	11.5	10.5	15.5	14.0
8	16.5	14.5	14.0	12.0	10.0	8.5	7.0	5.5	11.0	6.5	14.5	11.5
9	16.0	14.5	13.0	11.0	13.0	10.0	6.0	5.5	7.0	6.0	15.0	13.5
10	16.0	14.5	13.5	11.5	14.0	11.0	5.5	5.0	7.0	6.0	15.0	14.0
11	16.5	15.0	13.0	11.5	10.5	9.0	5.0	4.0	8.0	6.0	15.5	14.5
12	17.0	15.5	13.0	11.0	12.0	9.0	5.0	3.5	8.0	7.0	15.0	13.0
13	18.5	16.5	13.5	11.5	13.0	11.0	6.0	4.0	8.0	7.0	14.5	12.0
14	18.5	18.0	13.5	11.0	13.5	11.0	7.0	5.5	9.0	7.0	15.5	14.5
15	18.5	16.0	11.0	9.5	11.0	10.5	8.0	5.5	9.0	7.0	15.5	13.5
16	16.5	15.5	9.5	9.0	10.5	8.5	8.5	6.5	7.0	6.0	13.5	11.0
17	18.0	16.5	9.0	8.5	8.5	7.0	10.5	8.0	6.5	5.5	11.0	9.5
18	16.5	15.5	9.0	8.0	8.0	6.5	11.0	10.0	7.0	5.5	11.5	9.0
19	15.5	12.0	10.0	9.0	8.0	6.0	10.5	9.0	9.0	6.0	13.0	10.5
20	13.0	11.5	9.5	9.5	10.0	8.0	9.5	8.5	8.5	7.0	14.0	13.0
21	13.0	11.5	9.5	9.0	11.0	10.0	10.0	9.0	8.5	6.0	13.5	11.0
22	15.0	12.0	9.5	9.0	11.0	10.0	10.0	9.0	8.5	6.0	12.0	10.5
23	16.0	15.0	9.0	8.0	10.0	9.5	10.0	8.5	9.5	6.5	13.0	10.5
24	15.5	14.0	8.5	6.5	9.5	9.0	9.5	8.0	10.0	7.0	13.0	11.5
25	14.0	13.0	8.5	7.0	9.5	9.0	9.5	9.0	10.0	8.5	12.0	11.0
26	13.5	11.5	9.0	8.5	9.0	8.5	9.5	9.0	10.5	9.0	12.0	11.5
27	14.0	13.0	10.5	8.5	8.5	6.5	9.5	9.5	10.0	8.0	12.0	11.0
28	14.5	14.0	10.5	9.5	8.0	6.5	9.5	7.0	9.5	7.0	13.5	11.0
29	14.5	14.0	9.5	9.0	8.5	6.5	7.0	5.5	---	---	13.5	13.0
30	14.5	13.5	9.5	9.0	9.5	8.5	7.0	6.5	---	---	13.5	12.0
31	16.0	14.5	---	---	11.5	9.5	9.0	7.0	---	---	15.0	13.5
MONTH	18.5	11.5	17.0	6.5	15.0	6.0	11.5	3.5	12.0	5.5	15.5	8.0

03584000 RICHLAND CREEK NEAR PULASKI, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.0	16.5	15.5	19.0	16.5	21.0	20.0	22.0	21.0	23.0	21.0
2	14.5	11.5	16.5	15.5	19.5	18.0	20.5	19.5	21.5	20.5	23.0	21.0
3	14.5	13.5	16.5	15.5	20.5	18.5	21.5	20.0	21.0	19.5	23.0	20.5
4	14.0	11.5	15.5	14.0	20.5	19.5	21.5	20.5	21.0	19.5	23.0	20.5
5	11.5	10.5	15.0	13.5	20.5	19.0	23.0	20.5	21.0	19.5	23.0	21.0
6	13.0	10.0	14.5	14.0	19.5	18.0	22.0	21.0	21.0	20.0	22.0	21.0
7	12.0	11.0	15.0	14.0	18.5	18.0	21.5	20.5	21.5	20.0	21.5	20.5
8	13.0	11.0	18.0	15.0	19.5	18.0	21.5	20.5	22.0	21.0	23.0	20.5
9	12.0	10.5	18.5	16.0	20.0	18.5	22.0	20.5	23.0	21.0	23.0	21.5
10	10.5	9.0	18.5	16.0	20.5	19.0	22.0	21.0	23.5	21.5	23.0	21.5
11	10.5	8.5	18.0	16.5	20.5	19.0	22.0	21.0	23.5	22.0	22.0	21.0
12	13.5	10.0	17.0	16.0	20.0	19.5	21.5	20.0	22.0	21.0	21.0	19.5
13	13.5	11.0	16.5	15.0	20.0	19.0	21.5	20.0	22.0	21.0	20.5	20.0
14	14.0	10.5	16.0	14.5	20.5	19.5	21.5	21.0	22.0	20.5	21.0	19.5
15	15.0	11.5	15.5	14.0	20.5	19.5	21.5	20.5	21.5	20.5	21.0	20.5
16	15.0	14.5	15.5	13.5	21.5	19.5	21.5	20.0	21.5	20.0	21.0	19.5
17	15.0	14.0	16.0	14.5	21.5	20.0	21.0	20.0	21.5	20.0	20.5	19.5
18	15.0	14.5	15.5	13.5	21.5	20.0	21.5	20.0	21.5	20.0	20.0	18.0
19	16.0	14.5	15.5	14.0	21.5	20.5	22.0	20.5	21.5	20.5	18.0	16.0
20	18.0	15.0	16.5	14.0	21.0	19.5	22.0	21.0	22.0	20.5	18.5	16.0
21	17.0	15.5	17.0	15.0	21.0	20.0	23.0	21.5	21.5	20.5	19.5	17.0
22	16.0	15.0	18.0	15.5	20.5	19.5	23.5	22.0	21.0	19.5	20.0	18.0
23	15.5	15.0	18.5	16.5	20.5	19.0	23.5	22.0	20.5	19.0	20.0	19.0
24	15.5	15.0	18.5	17.0	20.5	18.5	23.5	23.0	21.0	19.5	20.5	19.0
25	16.5	15.0	18.5	16.5	21.0	19.0	23.5	22.0	21.5	20.0	21.0	19.5
26	16.0	14.0	19.5	18.0	21.0	20.0	23.5	22.0	22.0	20.5	20.5	19.5
27	14.0	13.0	19.0	18.0	21.5	20.5	23.5	21.5	23.0	21.0	21.0	20.0
28	14.0	12.0	18.5	16.5	21.5	20.0	23.5	21.5	23.5	21.0	21.5	20.5
29	15.0	13.0	16.5	16.0	20.5	19.5	23.5	22.0	23.5	21.5	21.0	20.5
30	16.0	14.5	17.0	16.0	20.5	20.0	22.0	21.5	23.0	21.5	21.0	20.0
31	---	---	18.0	16.0	---	---	21.5	20.5	23.0	21.0	---	---
MONTH	18.0	8.5	19.5	13.5	21.5	16.5	23.5	19.5	23.5	19.0	23.0	16.0

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 (5.3 km) upstream from railroad bridge, and at mile 246.9 (397.3 km).

DRAINAGE AREA.--208 sq mi (539 sq km).

PERIOD OF RECORD.--Water temperatures: April 1968 to March 1972, December 1972 to September 1973.

EXTREMES, December 1972 to September 1973:
Water temperatures: Maximum, 24.5°C July 23, 24, 29; minimum, 4.5°C Jan. 12, 13, 14, 15.

Period of record:
Water temperatures: Maximum, 27.0°C July 15, 16, 1970; minimum, freezing point, Jan. 8-11, 1970.

TEMPERATURE (DEG. C) OF WATER, DECEMBER 1972 TO SEPTEMBER 1973

	DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	11.0	10.0	9.5	7.0	9.5	9.0
2	---	---	10.0	9.5	9.5	9.5	10.0	9.5
3	---	---	9.5	9.0	9.5	9.0	11.0	10.0
4	---	---	9.5	9.5	9.0	8.0	11.0	10.5
5	12.0	11.5	9.5	9.5	9.5	8.5	12.0	11.0
6	13.0	11.0	9.5	8.5	10.5	9.5	13.0	12.0
7	11.0	9.0	8.5	6.0	11.0	10.5	14.0	13.0
8	10.5	9.5	6.0	6.0	11.0	9.0	14.0	13.5
9	11.5	10.5	6.0	5.5	9.0	6.5	15.0	13.5
10	13.0	11.5	5.5	5.0	6.5	5.5	15.0	15.0
11	12.0	10.0	5.5	5.0	6.5	5.5	15.0	14.5
12	11.0	10.0	5.0	4.5	6.5	6.0	14.5	14.0
13	11.0	11.0	4.5	4.5	6.5	6.5	14.5	13.5
14	11.0	10.5	4.5	4.5	8.0	6.5	15.0	14.0
15	10.5	9.5	5.5	4.5	8.0	7.0	15.0	14.0
16	9.5	7.0	6.5	5.5	7.0	6.5	14.5	13.5
17	7.0	6.5	6.5	6.0	6.5	5.5	13.5	10.0
18	6.5	6.0	9.0	6.5	6.0	5.5	10.0	9.0
19	8.0	6.5	10.0	9.0	8.0	6.0	10.5	9.5
20	10.0	8.0	9.5	9.0	8.0	7.0	11.0	10.5
21	10.0	10.0	9.0	9.0	7.0	6.5	11.0	10.5
22	10.0	10.0	9.5	9.0	7.0	6.5	10.5	10.0
23	10.0	9.5	9.5	9.0	8.0	7.0	11.0	10.0
24	9.5	9.5	9.0	9.0	9.0	8.0	12.0	11.0
25	9.5	9.5	9.0	8.0	9.0	9.0	13.0	11.5
26	9.5	9.0	9.0	9.0	10.0	9.0	13.0	12.0
27	9.0	8.5	9.5	9.0	9.5	9.0	12.0	11.5
28	8.5	8.0	9.5	9.0	9.0	9.0	12.0	11.5
29	9.0	8.5	9.0	7.0	---	---	12.0	12.0
30	10.5	9.0	7.0	6.5	---	---	13.5	12.0
31	11.0	10.5	7.0	6.5	---	---	14.5	13.5
MONTH	13.0	6.0	11.0	4.5	11.0	5.5	15.0	9.0

03596500 DUCK RIVER AT NORMANDY, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER, DECEMBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.5	16.0	15.0	18.5	17.0	22.0	21.5	23.0	22.0	23.5	23.0
2	14.5	13.5	16.0	16.0	19.5	18.0	22.0	21.0	22.0	22.0	23.5	23.0
3	14.0	14.0	16.0	16.0	19.5	18.5	23.5	21.5	22.0	21.5	24.0	23.0
4	14.0	13.0	16.0	15.5	20.0	19.0	24.0	22.0	22.0	21.0	24.0	23.0
5	13.0	11.5	15.5	14.5	20.5	20.0	23.5	22.0	22.0	21.0	23.5	23.0
6	11.5	11.0	15.5	14.5	20.0	20.0	24.0	23.0	22.0	21.0	23.5	23.0
7	12.0	12.0	15.0	15.0	20.0	20.0	24.0	23.5	23.0	21.0	23.0	23.0
8	12.0	11.0	16.5	15.5	21.0	20.0	23.5	23.0	23.5	21.5	23.5	22.0
9	12.0	11.0	18.0	16.5	21.0	20.0	23.5	22.0	23.5	22.0	23.5	22.0
10	11.0	9.5	18.0	17.0	21.0	20.0	23.5	22.0	23.5	22.0	23.5	23.0
11	10.0	9.0	18.0	18.0	21.0	20.5	23.5	22.0	24.0	22.0	23.5	22.0
12	11.0	9.5	18.0	17.0	21.0	20.5	23.5	22.0	24.0	23.0	22.0	21.0
13	11.5	10.5	17.0	16.5	21.0	20.5	23.5	22.0	23.5	23.0	21.5	20.5
14	12.0	11.0	16.5	16.0	21.0	20.5	23.5	22.0	23.5	23.0	20.5	20.5
15	13.5	11.5	16.5	16.0	21.0	21.0	22.0	21.0	23.5	23.0	20.5	20.5
16	14.0	13.5	16.5	15.5	21.5	20.5	22.0	21.5	23.5	22.0	21.5	20.5
17	14.0	14.0	16.5	15.5	22.0	21.0	21.5	21.0	23.5	22.0	21.5	20.5
18	14.5	14.0	16.5	15.5	22.0	21.5	22.0	21.0	23.0	21.5	21.0	20.0
19	15.5	14.5	16.0	15.5	22.0	21.5	23.5	22.0	23.5	21.5	20.0	19.0
20	16.5	15.5	16.5	15.5	22.0	21.5	23.5	22.0	24.0	22.0	19.5	18.5
21	18.0	16.5	17.0	16.5	22.0	21.5	23.5	22.0	24.0	22.0	19.5	19.0
22	18.0	17.0	18.0	16.5	22.0	21.5	24.0	23.0	23.5	21.5	20.0	19.0
23	16.5	16.0	18.0	18.0	22.0	21.0	24.5	23.5	22.0	21.0	20.0	20.0
24	16.5	16.0	18.0	16.5	22.0	20.5	24.5	24.0	22.0	21.0	20.5	20.0
25	17.0	16.5	18.0	17.0	22.0	20.5	24.0	23.5	23.0	21.5	21.0	20.5
26	17.0	16.0	19.0	18.0	23.0	21.0	24.0	23.0	23.5	21.5	21.5	20.5
27	16.0	14.5	19.0	18.0	23.0	21.5	24.0	23.5	23.5	22.0	21.0	20.5
28	14.5	14.0	18.5	18.0	22.0	21.0	24.0	23.0	24.0	22.0	21.0	20.5
29	15.0	13.5	18.5	18.0	22.0	21.0	24.5	23.5	24.0	23.0	21.0	21.0
30	15.5	14.5	18.0	16.5	22.0	21.0	24.0	23.5	24.0	23.0	21.0	20.5
31	---	---	18.0	16.5	---	---	23.5	23.0	24.0	23.5	---	---
MONTH	18.0	9.0	19.0	14.5	23.0	17.0	24.5	21.0	24.0	21.0	24.0	18.5

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 (0.8 km) downstream from Little Opossum Creek and bridge on State Highway 13, 1.3 miles (2.1 km) north of Flat Woods, 3.9 miles (6.3 km) upstream from Sinking Creek, and at mile 58.7 (94.4 km).

DRAINAGE AREA.--447 sq mi (1,158 sq km).

PERIOD OF RECORD.--Water temperatures: June 1964 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 28.0°C July 24, 25; minimum, 1.0°C Jan. 13.

Period of record:
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 1967-72.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
JAN. 15...	1200	745	6.6	70	40	11	1.6	1.6	.7	1.3
APR. 10...	1100	2060	5.9	50	10	8.6	1.4	1.4	1.0	1.3
JUNE 25...	1100	453	5.5	50	0	13	1.6	1.1	.6	1.7

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
JAN. 15...	.00	.20	.90	80	7.1	4.5	2	12.5	96	.3
APR. 10...	--	.20	.80	71	7.4	9.0	2	--	--	--
JUNE 25...	.03	.10	--	86	7.5	23.0	2	8.2	94	--

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (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)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	PHOS-PHATE (PO4) (MG/L)
JAN. 15...	.2	58	54	34	0	34	6	28	13	--
APR. 10...	.0	45	40	28	0	28	4	23	6.0	--
JUNE 25...	.0	53	49	44	0	39	3	36	3.4	.60

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED URANIUM (U) (UG/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/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)
JUNE 25...	1230	453	.02	.05	<.6	1.1	1.4	48	.5	<.4	<.4	7

PESTICIDES

The sample taken at 1230 hours June 25 was analyzed for the following insecticides or herbicides: Aldrin, DDD, DDE, DDT, dieldrin, endrin, heptachlor, heptachlor epoxide, lindane, chlordane, PCB, diazinon, malathion, methyl parathion, parathion, 2,4-D, silvex, and 2,4,5-T; and for total organic carbon. Concentration of pesticides was reported as 0.00 UG/L in all instances, and concentration of total organic carbon was reported as 5.0 MG/L.

A bottom deposit sample taken at the same time was analyzed for: Aldrin, DDD, DDE, DDT, dieldrin, endrin, heptachlor, heptachlor epoxide, lindane, chlordane, and PCB. In all instances, reported concentration was 0.00 UG/KG.

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.5	18.0	16.0	8.5	8.0	9.0	8.0	9.0	6.0	9.0	8.0
2	17.0	15.5	18.0	17.0	8.5	8.0	8.0	7.0	9.5	9.0	10.0	9.0
3	17.0	16.5	17.0	15.5	9.5	8.5	8.0	7.0	9.0	8.0	11.5	10.0
4	18.0	17.0	15.5	14.0	11.0	9.5	8.0	8.0	8.0	6.5	11.0	10.5
5	19.0	18.0	14.0	13.0	13.0	11.0	8.0	8.0	9.0	7.0	12.0	10.5
6	19.0	18.0	13.5	12.0	13.0	10.5	8.0	6.5	10.0	9.0	14.0	11.5
7	19.0	18.0	14.0	13.5	10.5	8.5	6.5	4.5	10.5	10.0	14.5	13.5
8	18.0	16.5	14.0	13.5	9.5	8.5	4.5	4.0	10.5	8.5	14.0	13.0
9	18.0	16.0	13.5	13.0	10.5	9.5	4.0	3.5	8.5	6.0	14.0	13.0
10	17.0	16.0	13.0	13.0	11.0	10.0	3.5	3.0	6.0	5.5	14.5	13.5
11	18.0	16.5	13.0	13.0	10.0	8.5	3.0	2.0	5.5	5.5	15.0	14.5
12	18.5	17.0	13.0	12.0	10.5	8.5	2.0	1.5	6.0	5.5	14.5	13.5
13	19.5	18.0	13.5	12.0	10.5	10.0	1.5	1.0	6.0	6.0	14.0	13.0
14	19.5	19.0	13.5	11.5	10.0	9.0	3.0	1.5	7.0	6.0	15.5	14.0
15	19.5	18.5	11.5	10.0	9.0	8.0	4.0	2.0	7.0	6.5	15.0	14.5
16	18.5	17.0	10.0	9.0	8.0	6.0	5.0	4.0	6.5	5.5	15.0	13.0
17	19.0	18.0	9.0	8.5	6.0	5.5	5.5	5.0	5.5	4.5	13.0	10.5
18	18.5	15.5	8.5	8.5	5.5	5.0	8.0	5.5	5.0	4.0	10.5	9.5
19	15.5	14.0	9.0	8.5	8.0	5.5	8.5	8.0	6.0	4.5	12.0	10.0
20	13.5	13.0	9.0	9.0	9.0	8.0	8.0	7.0	6.5	6.0	14.0	12.0
21	14.0	13.0	9.0	9.0	9.5	9.0	8.0	7.0	6.5	5.5	13.0	12.0
22	15.0	13.5	9.0	8.5	9.0	8.5	8.0	7.0	6.0	5.5	12.0	11.0
23	16.0	15.0	8.5	7.0	8.5	8.0	8.0	7.0	7.0	6.0	12.0	10.5
24	16.0	14.5	7.0	6.5	8.0	7.0	7.0	6.5	8.5	6.5	13.0	11.5
25	14.5	13.0	8.0	7.0	7.0	7.0	6.5	6.0	9.0	8.0	12.0	11.5
26	13.5	13.0	8.0	8.0	7.0	6.0	7.0	6.5	9.5	9.0	12.0	11.5
27	14.0	13.5	9.0	8.0	6.0	5.5	8.0	7.0	9.5	8.0	11.5	11.5
28	14.5	14.0	9.5	8.5	6.0	5.5	8.0	7.0	9.0	7.0	13.0	11.0
29	14.5	14.5	8.5	8.5	7.0	6.0	7.0	5.5	---	---	13.5	13.0
30	14.5	14.5	8.5	8.0	9.0	7.0	5.5	4.5	---	---	14.5	13.5
31	16.0	14.5	---	---	9.5	9.0	6.0	5.0	---	---	15.5	14.5
MONTH	19.5	13.0	18.0	6.5	13.0	5.0	9.0	1.0	10.5	4.0	15.5	8.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	14.0	16.0	16.0	20.0	18.5	23.5	23.0	25.5	24.0	25.5	24.0
2	14.5	13.0	16.5	16.0	20.5	19.5	24.0	21.5	24.5	23.5	25.5	24.0
3	14.5	14.0	16.5	15.5	22.0	20.0	25.5	24.0	24.5	23.0	25.5	23.5
4	14.5	13.0	15.5	15.0	23.0	21.0	25.0	23.5	24.5	22.0	25.5	23.5
5	13.0	11.5	15.5	14.5	22.0	21.5	25.0	23.5	24.5	22.0	25.5	24.0
6	13.0	10.5	15.5	15.0	21.5	21.0	25.0	23.5	25.0	23.0	25.5	24.5
7	13.0	12.0	15.5	14.5	21.0	20.0	25.0	23.5	25.5	23.0	24.5	23.5
8	13.0	11.5	17.0	15.5	21.5	20.0	24.5	23.5	26.0	24.0	25.0	23.5
9	12.0	11.5	19.0	16.5	22.0	20.5	24.5	23.5	25.0	24.0	25.5	24.0
10	11.0	9.5	19.0	17.0	23.5	21.5	25.0	23.5	26.0	24.5	25.5	24.5
11	10.0	8.5	19.0	18.0	24.0	22.0	25.5	24.0	26.0	25.0	25.5	24.0
12	13.0	10.0	18.0	17.0	23.0	22.0	25.0	23.0	24.5	24.0	24.0	22.0
13	13.5	11.5	18.0	16.5	23.5	21.5	25.0	23.0	24.5	24.0	24.0	22.0
14	13.5	11.5	17.0	16.0	23.5	21.5	25.0	24.0	24.5	23.5	23.0	21.5
15	14.5	13.0	16.5	15.5	23.5	22.0	25.0	23.5	24.0	23.5	23.0	21.5
16	15.0	14.5	16.5	15.0	24.5	22.0	24.0	22.0	24.0	23.0	23.0	21.5
17	15.5	15.0	17.0	16.0	25.0	23.0	23.0	21.5	24.0	23.0	23.0	21.0
18	15.5	15.0	17.0	15.5	25.5	23.5	24.0	22.0	24.0	23.0	23.0	20.5
19	16.0	14.5	18.0	16.0	25.5	23.5	24.5	23.5	24.0	23.5	20.5	18.5
20	16.0	14.5	18.5	16.5	25.0	23.0	25.5	23.5	24.5	23.5	19.5	19.0
21	17.0	16.0	19.0	17.0	24.5	23.5	26.0	24.0	24.0	23.5	21.0	19.5
22	16.5	16.0	19.0	18.0	23.5	22.0	27.0	25.0	23.5	22.0	22.0	20.0
23	16.0	15.5	19.5	18.5	23.5	21.5	27.0	25.5	23.0	21.5	23.0	21.0
24	15.5	15.5	20.0	19.0	23.5	20.5	28.0	25.5	23.5	22.0	23.0	21.5
25	16.0	15.0	20.5	19.0	24.5	23.5	28.0	26.0	24.0	23.0	23.0	21.5
26	16.0	14.5	21.5	19.5	24.5	23.5	27.0	25.5	24.5	23.5	22.0	21.0
27	14.5	13.5	20.5	18.0	25.5	24.0	26.5	25.0	25.5	24.0	23.5	22.0
28	14.0	13.0	18.0	17.0	25.5	23.5	27.0	24.5	26.0	24.0	23.5	22.0
29	15.0	13.5	18.0	17.0	23.5	22.0	27.0	25.0	26.0	24.5	23.5	23.0
30	16.5	14.5	19.0	17.0	23.5	23.5	26.0	25.0	25.5	24.5	23.0	22.0
31	---	---	19.0	18.0	---	---	25.5	24.5	25.5	24.0	---	---
MONTH	17.0	8.5	21.5	14.5	25.5	18.5	28.0	21.5	26.0	21.5	25.5	18.5

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 (210 m) downstream from bridge on U. S. Highway 70, 0.6 mile (1.0 km) upstream from Cherry Creek, 0.9 mile (1.4 km) east of Bruceton, and at mile 31.6 (50.8 km).

DRAINAGE AREA.--205 sq mi (531 sq km).

PERIOD OF RECORD.--Water temperatures: October 1970 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 26.0°C July 25, 26; minimum, 1.5°C Dec. 17, Jan. 12, 13.

Period of record:
Water temperatures: Maximum, 26.0°C, July 25, 26, 1973; minimum, 1.0°C Feb. 10, 14, 1971.

REMARKS.--Missing record Apr. 25-28, estimated range in temperature 12.0°C to 19.0°C. Miscellaneous samples of chemical data published for the water years 1968, 1970-72. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	14.5	18.5	15.5	8.0	6.0	9.0	6.0	10.5	7.0	10.0	7.0
2	15.5	14.0	19.0	17.0	9.0	7.0	6.5	6.0	11.0	9.0	11.0	10.0
3	16.0	14.5	17.0	15.0	10.5	9.0	9.0	6.5	9.0	8.0	12.0	11.0
4	18.0	16.0	15.0	13.0	11.5	10.0	9.0	7.0	8.0	7.0	12.0	11.0
5	18.5	17.0	13.0	11.0	13.0	11.0	7.0	6.0	10.0	8.0	13.5	11.0
6	18.5	17.0	14.0	11.0	13.5	9.0	6.0	5.0	10.0	9.0	14.5	12.0
7	18.0	16.0	14.5	13.5	9.0	5.5	5.0	3.0	9.5	8.5	16.0	13.5
8	16.0	14.5	14.0	12.0	8.5	6.0	3.5	3.0	9.5	6.5	16.0	13.5
9	16.0	14.5	13.0	11.0	8.5	8.0	4.0	3.5	6.5	4.5	17.0	15.0
10	16.0	14.0	13.0	11.5	8.0	6.5	4.0	3.5	4.5	3.0	16.5	16.0
11	17.0	15.0	13.0	12.0	7.0	5.5	3.5	2.0	5.0	3.0	18.0	15.0
12	18.0	16.0	13.0	11.0	8.5	4.5	3.0	1.5	5.5	4.5	17.0	15.0
13	18.5	18.0	14.0	12.0	8.5	8.0	3.5	1.5	6.0	5.0	17.0	15.0
14	18.5	17.0	14.0	11.0	8.0	6.5	4.5	3.0	6.5	5.5	17.0	16.5
15	17.0	15.5	12.0	10.5	6.5	5.0	5.0	4.0	6.5	5.0	16.5	15.0
16	17.0	15.5	10.5	9.5	5.0	3.5	5.5	4.0	5.0	4.5	15.0	13.0
17	18.0	15.5	9.5	9.0	3.5	1.5	7.0	5.0	4.5	3.0	13.0	10.5
18	15.5	13.5	9.5	9.5	4.0	2.0	10.0	7.0	5.0	3.0	11.0	9.0
19	13.5	13.0	10.0	9.5	6.5	4.0	9.5	9.0	6.5	4.5	14.0	10.0
20	13.0	11.5	9.5	8.5	7.0	6.0	9.0	7.0	8.0	6.0	14.5	13.5
21	13.0	11.5	9.5	8.5	8.0	7.0	8.5	6.5	8.0	5.5	13.5	11.5
22	15.5	13.0	9.0	8.5	8.0	7.0	8.0	8.0	7.0	5.5	13.0	10.5
23	16.5	15.5	9.0	8.0	7.0	6.5	8.0	6.5	9.0	6.0	13.5	10.5
24	16.0	13.0	8.0	6.0	7.0	6.5	6.5	5.0	9.5	6.5	14.0	12.0
25	13.0	11.5	8.0	7.0	7.0	6.5	7.0	5.0	10.0	8.5	13.5	12.0
26	12.0	11.0	8.0	8.0	6.5	5.5	8.0	7.0	11.0	10.0	12.0	11.5
27	14.0	12.0	9.0	8.0	5.5	4.5	8.5	8.0	10.0	8.0	12.0	11.5
28	14.0	14.0	9.0	8.5	6.5	5.0	8.5	6.0	9.0	6.0	14.0	11.5
29	14.0	13.5	8.0	6.0	9.0	6.5	6.0	4.5	---	---	15.5	14.0
30	14.5	14.0	7.0	7.0	10.5	9.0	5.0	3.5	---	---	16.0	15.0
31	15.5	14.5	---	---	10.5	9.0	7.0	5.0	---	---	18.0	15.5
MONTH	18.5	11.0	19.0	6.0	13.5	1.5	10.0	1.5	11.0	3.0	18.0	7.0

03606500 BIG SANDY RIVER AT BRUCETON, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.0	18.0	16.0	19.5	15.5	22.0	21.0	24.0	23.5	22.0	21.0
2	15.0	13.0	20.0	16.5	20.0	18.5	23.5	21.0	24.0	22.0	22.0	21.0
3	15.0	13.5	20.0	18.0	21.0	19.5	24.0	23.0	22.0	19.0	21.5	21.0
4	14.5	12.0	19.0	17.0	21.5	20.0	24.0	23.0	20.5	19.0	21.5	21.0
5	12.0	10.5	19.0	16.0	21.5	20.5	23.5	22.0	20.5	19.0	21.5	21.0
6	13.5	10.0	18.5	16.5	21.0	20.0	23.5	22.0	20.5	19.0	21.5	21.0
7	13.5	11.5	18.0	16.0	20.0	19.0	23.0	22.0	21.0	19.5	21.5	21.0
8	13.5	10.5	19.0	16.5	20.5	19.5	23.5	22.0	21.5	20.5	22.0	20.5
9	13.5	10.0	20.5	17.0	21.5	20.0	23.5	23.0	22.0	21.0	24.0	21.5
10	10.5	8.5	20.5	18.5	22.0	20.0	24.0	22.0	23.0	21.5	24.0	23.0
11	10.5	6.5	19.5	17.0	22.0	20.5	24.0	23.0	22.0	21.5	23.0	21.0
12	13.5	9.5	17.0	16.5	22.0	20.5	23.5	22.0	21.5	21.5	21.0	20.0
13	14.0	11.0	16.5	15.5	23.5	21.5	22.0	21.0	23.5	21.5	21.0	20.5
14	14.0	10.5	16.0	15.0	24.0	21.5	23.5	21.5	23.5	21.5	21.0	20.0
15	15.5	12.0	15.5	14.5	24.5	23.0	24.0	23.0	23.0	21.0	21.0	20.0
16	16.0	15.5	15.5	13.5	25.0	23.5	24.0	22.0	21.0	20.5	20.5	19.0
17	16.0	15.0	16.0	15.0	24.5	23.0	23.0	21.5	21.5	20.5	20.0	19.0
18	16.0	15.5	15.5	14.0	23.5	22.0	23.5	22.0	21.5	20.0	19.5	16.0
19	16.5	15.5	17.0	15.0	23.0	22.0	23.5	22.0	21.5	20.5	16.5	15.0
20	17.0	15.5	18.5	16.0	24.0	22.0	24.0	22.0	22.0	20.5	18.0	16.0
21	18.5	17.0	18.0	16.0	23.5	22.0	24.5	23.5	21.5	20.0	19.5	18.0
22	18.5	17.0	19.0	16.5	22.0	20.5	25.0	24.0	20.0	19.0	20.5	19.0
23	18.5	17.0	18.5	18.0	21.0	19.5	25.0	24.0	20.0	18.5	20.5	19.0
24	18.0	17.0	19.0	18.5	20.5	19.5	25.0	24.0	20.5	19.0	21.0	20.0
25	---	---	19.5	18.5	21.5	20.0	26.0	24.5	21.0	20.0	21.0	20.0
26	---	---	20.0	18.5	22.0	21.0	26.0	25.0	21.5	20.0	21.0	20.0
27	---	---	20.0	19.0	22.0	21.0	25.0	24.0	21.5	20.5	21.0	20.5
28	---	---	20.0	18.5	23.0	21.0	24.0	23.0	22.0	21.0	21.5	20.5
29	15.0	13.5	18.5	18.0	22.0	21.0	24.0	23.0	22.0	21.0	21.5	21.0
30	17.0	15.0	19.0	18.0	21.5	21.5	24.5	23.0	21.5	20.5	21.0	20.0
31	---	---	18.5	17.0	---	---	24.5	23.5	21.5	20.5	---	---
MONTH	18.5	6.5	20.5	13.5	25.0	15.5	26.0	21.0	24.0	18.5	24.0	15.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03476500 - S F HOLSTON RIVER BELOW SOUTH HOLSTON DAM, TENN (LAT 36 31 25 LONG 082 05 50)												
NOV., 1972												
08...	0915	1250	5.1	30	25	8.0	2.1	1.5	--	104	9.3	3.5
JAN., 1973												
16...	1215	1830	3.0	60	22	7.3	1.8	2.4	--	92	8.0	3.5
MAR.												
14...	1045	6.2	4.1	100	28	6.3	1.3	1.0	--	103	9.3	3.5
JULY												
26...	1000	2290	3.7	<50	23	6.2	2.1	2.2	<200	85	6.0	3.0
SEP.												
06...	1320	8.5	3.3	<50	22	6.1	2.7	1.6	<200	90	5.0	4.0
03476520 - SOUTH FORK HOLSTON RIVER NEAR BRISTOL, TENN (LAT 36 30 55 LONG 082 08 08)												
NOV., 1972												
29...	1005	--	3.8	40	29	6.9	1.8	1.6	--	104	7.8	4.0
JAN., 1973												
23...	1300	--	4.0	40	25	6.1	1.7	1.7	--	94	6.4	3.5
MAR.												
28...	1600	--	5.1	60	47	10	1.9	1.0	--	171	7.4	4.5
MAY												
22...	1330	--	3.0	60	26	6.7	2.1	1.9	<200	100	6.0	5.0
JULY												
11...	1530	--	3.3	<50	25	6.5	2.2	2.3	<200	99	6.0	4.0
SEP.												
18...	1600	--	3.7	<50	23	6.3	2.0	1.8	<200	90	8.0	4.0
03483950 - WATAUGA RIVER BELOW WATAUGA DAM, TENN (LAT 36 19 48 LONG 082 07 34)												
OCT., 1972												
12...	1640	--	5.0	60	7.6	2.7	1.4	1.5	--	12	16	3.5
NOV.												
15...	1305	--	4.0	20	9.0	2.7	2.7	1.5	--	35	6.0	4.5
JAN., 1973												
17...	1145	--	5.3	80	9.2	2.2	1.7	1.2	--	34	4.1	3.0
MAR.												
14...	1450	--	4.9	10	7.6	3.3	1.9	1.2	--	90	4.9	3.5
MAY												
24...	1310	--	5.4	60	7.0	2.9	2.2	1.5	<200	28	5.0	4.0
JULY												
26...	1055	--	5.1	<50	10	3.0	2.8	1.9	<200	29	5.0	4.0
SEP.												
14...	1345	--	5.5	<50	6.0	3.3	2.0	1.6	<200	37	6.0	4.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	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)
03476500 - S F HOLSTON RIVER BELOW SOUTH HOLSTON DAM, TENN (LAT 36 31 25 LONG 082 05 50)												
NOV., 1972												
08...	109	96	182	7.2	13.0	5	85	.05	.10	.04	<.01	.70
JAN., 1973												
16...	90	86	170	7.4	8.0	5	75	.05	.15	<.01	<.01	.60
MAR.												
14...	99	96	--	7.4	--	--	84	.03	.08	<.01	<.01	.70
JULY												
26...	70	83	180	7.5	9.5	5	70	.08	.13	.02	<.01	.80
SEP.												
06...	100	80	26	8.6	--	5	74	.03	.25	<.01	<.01	.50
03476520 - SOUTH FORK HOLSTON RIVER NEAR BRISTOL, TENN (LAT 36 30 55 LONG 082 08 08)												
NOV., 1972												
29...	116	100	185	7.5	11.0	2	85	.04	.14	.02	.01	.60
JAN., 1973												
23...	94	88	183	7.7	7.0	3	77	.06	.03	.01	<.01	.70
MAR.												
28...	164	160	255	7.8	13.0	5	140	.09	<.03	.01	<.01	1.6
MAY												
22...	100	92	180	8.3	8.5	5	82	.03	.04	<.01	<.01	.40
JULY												
11...	100	89	180	8.0	11.0	5	81	.03	.09	.01	<.01	.80
SEP.												
18...	80	83	180	7.3	20.0	5	74	.03	.13	.02	<.01	.70
03483950 - WATAUGA RIVER BELOW WATAUGA DAM, TENN (LAT 36 19 48 LONG 082 07 34)												
OCT., 1972												
12...	60	30	72	6.9	10.0	5	10	.13	.09	<.01	<.01	.60
NOV.												
15...	53	34	85	6.7	12.0	5	29	.04	.60	.03	<.01	.40
JAN., 1973												
17...	44	32	75	6.8	7.0	5	28	.05	.11	<.01	<.01	.50
MAR.												
14...	37	32	102	7.5	6.5	5	74	.16	.08	.01	<.01	.30
MAY												
24...	40	29	71	7.1	8.0	5	23	.03	.04	<.01	<.01	.50
JULY												
26...	20	37	76	6.8	9.0	5	24	.03	.12	.04	<.01	.60
SEP.												
14...	50	29	80	7.0	13.5	5	30	.03	.14	.01	<.01	.60

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03486300 - WATAUGA RIVER NEAR RIOVISTA, TN. (LAT 36 20 45 LONG 082 17 00)												
OCT., 1972												
31...	1100	--	5.9	60	13	5.1	12	1.3	--	38	45	4.5
NOV.												
30...	1010	--	6.0	20	12	4.6	12	1.3	--	48	33	3.0
DEC.												
21...	1320	--	5.8	0	11	3.4	5.0	1.1	--	40	13	3.0
JAN., 1973												
12...	1340	--	5.7	20	11	3.0	5.5	1.3	--	37	14	5.0
FEB.												
21...	1045	--	5.7	30	16	3.9	10	1.2	--	38	38	4.0
MAR.												
07...	1550	--	7.1	50	17	4.9	18	1.2	--	48	47	3.5
APR.												
17...	0955	--	5.9	40	14	4.5	10	1.6	--	48	24	3.0
MAY												
29...	1315	--	5.8	290	9.0	3.0	3.7	1.6	<200	34	8.0	3.0
JUNE												
15...	1110	--	6.0	<50	16	4.4	9.2	1.7	<200	52	26	4.0
JULY												
31...	1105	--	5.5	60	12	4.1	10	2.0	<200	44	27	4.0
AUG.												
08...	1435	--	8.1	<50	16	4.8	18	2.1	<200	56	36	5.0
SEP.												
27...	1410	--	6.5	<50	12	4.4	23	2.2	<200	41	48	5.0
03491530 - HOLSTON RIVER NEAR BULLS GAP, TENN (LAT 36 22 26 LONG 083 00 46)												
DEC., 1972												
13...	1030	--	5.1	140	31	5.3	5.2	1.6	--	108	16	8.0
FEB., 1973												
07...	1055	--	5.3	110	33	7.5	8.1	1.7	--	108	19	14
APR.												
24...	1300	--	1.9	110	40	11	21	2.2	--	112	34	38
JUNE												
27...	1545	--	4.4	<50	30	7.4	12	3.1	<200	100	26	14
AUG.												
15...	1445	--	5.4	<50	29	7.2	14	4.0	<200	99	24	16
03494550 - HOLSTON RIVER AT INDIAN CAVE, TENN (LAT 36 09 35 LONG 083 36 01)												
NOV., 1972												
27...	1420	--	2.3	30	31	8.0	13	2.1	--	101	23	22
JAN., 1973												
29...	1330	--	5.6	30	34	9.4	6.0	1.7	--	124	15	9.5
MAR.												
12...	1450	--	3.3	50	42	16	3.3	1.5	--	190	3.9	6.5
MAY												
24...	1505	--	4.1	<50	33	9.6	8.8	2.5	<200	120	14	12
JULY												
18...	1345	--	4.9	<50	34	14	5.1	2.0	<200	150	12	8.0
SEP.												
13...	1555	--	4.0	<50	32	7.9	10	2.4	<200	110	19	14
03519500 - LITTLE TENNESSEE RIVER AT MCGHEE, TENN (LAT 35 36 16 LONG 084 12 43)												
DEC., 1972												
05...	1340	--	6.0	50	8.4	1.8	1.7	.1	--	28	4.7	2.0
FEB., 1973												
07...	1200	--	5.2	80	2.6	.7	1.2	.7	--	8	2.9	1.5
APR.												
02...	1315	--	5.6	40	2.8	1.0	1.5	1.0	--	10	2.3	2.0
JUNE												
12...	1400	--	5.8	390	3.0	.7	1.3	.9	<200	12	4.0	2.0
AUG.												
02...	1430	--	6.5	480	4.0	.9	1.0	1.5	700	18	2.0	2.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
03486300 - WATAUGA RIVER NEAR RIOVISTA, TN. (LAT 36 20 45 LONG 082 17 00)												
OCT., 1972												
31...	111	54	160	6.8	13.5	5	31	.17	.45	1.3	.01	.70
NOV.												
30...	102	48	160	6.9	9.0	5	39	--	--	--	--	--
DEC.												
21...	69	41	105	7.1	--	5	33	.08	.23	.39	<.01	.60
JAN., 1973												
12...	69	40	118	7.2	6.0	5	30	.06	<.01	.45	<.01	.50
FEB.												
21...	108	52	182	6.5	6.0	3	31	.09	<.10	2.0	.10	.80
MAR.												
07...	135	63	192	6.5	--	5	39	--	--	--	--	--
APR.												
17...	87	54	150	7.3	11.5	5	39	.06	<.03	.78	<.01	.70
MAY												
29...	60	35	90	7.1	12.0	5	28	.08	.06	.21	<.01	.50
JUNE												
15...	100	58	170	7.2	14.0	10	43	.09	.02	.29	<.01	.70
JULY												
31...	90	47	160	6.8	13.5	5	36	.12	.11	.58	<.01	.80
AUG.												
08...	140	14	210	7.3	19.0	5	46	.14	.28	.68	.01	.80
SEP.												
27...	140	48	230	7.0	19.0	5	34	.16	2.4	2.1	.03	.70
03491530 - HOLSTON RIVER NEAR BULLS GAP, TENN (LAT 36 22 26 LONG 083 00 46)												
DEC., 1972												
13...	147	100	215	7.7	11.0	5	89	.38	.57	.14	<.01	1.1
FEB., 1973												
07...	143	110	250	7.2	8.0	5	89	.24	.40	.27	.01	.90
APR.												
24...	227	140	332	7.3	18.5	10	92	.27	.27	.66	.02	.80
JUNE												
27...	160	110	270	7.0	25.5	15	82	.57	1.2	.79	.04	.80
AUG.												
15...	130	100	270	7.2	26.5	5	81	.45	.58	.41	.01	.80
03494550 - HOLSTON RIVER AT INDIAN CAVE, TENN (LAT 36 09 35 LONG 083 36 01)												
NOV., 1972												
27...	160	110	247	7.5	13.5	5	83	.12	.25	<.01	.02	.80
JAN., 1973												
29...	160	120	260	7.5	7.0	5	102	--	--	--	--	--
MAR.												
12...	166	120	178	8.1	15.5	3	156	.03	.17	<.01	<.01	.70
MAY												
24...	150	120	280	7.7	13.5	5	98	.09	.08	.01	<.01	1.2
JULY												
18...	160	140	300	7.9	19.0	5	123	.15	.09	.01	<.01	1.0
SEP.												
13...	150	110	270	7.3	24.0	10	90	.17	.23	.25	.06	.60
03519500 - LITTLE TENNESSEE RIVER AT MCGHEE, TENN (LAT 35 36 16 LONG 084 12 43)												
DEC., 1972												
05...	45	28	62	6.7	13.0	4	23	.05	.07	.09	.01	.50
FEB., 1973												
07...	22	11	30	6.3	8.0	4	7	.02	.08	.10	<.01	.40
APR.												
02...	18	11	28	6.2	10.0	5	8	.04	.02	.10	<.01	.40
JUNE												
12...	20	10	32	7.0	13.5	10	10	<.03	.05	.01	<.01	.40
AUG.												
02...	10	14	36	6.8	19.0	25	15	.15	.17	.01	<.01	.50

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03527620 - CLINCH RIVER AT KYLES FORD, TENN (TVA) (LAT 36 34 10 LONG 083 02 29)												
NOV., 1972												
17...	1100	--	2.3	60	36	10	3.7	1.5	--	135	19	4.0
JAN., 1973												
24...	1200	--	2.9	40	34	11	3.7	1.3	--	129	21	4.0
MAR.												
13...	1100	--	.8	70	30	9.0	3.2	2.2	--	117	20	3.5
MAY												
14...	1300	--	3.4	<50	31	8.2	3.9	1.8	<200	120	18	4.0
JULY												
20...	1000	--	5.4	<50	36	8.8	2.9	2.6	<200	130	21	4.0
SEP.												
11...	1350	--	2.9	<50	38	16	5.4	2.8	<200	150	26	6.0
03532180 - OLLIS CREEK NEAR LA FOLLETTE, TENN (LAT 36 22 07 LONG 084 11 05)												
DEC., 1972												
28...	1400	--	5.5	310	14	18	2.5	1.5	--	0	120	3.0
FEB., 1973												
20...	1600	--	5.6	320	11	15	2.1	1.0	--	0	73	2.5
JUNE												
25...	1500	--	6.6	<50	8.0	6.1	2.1	1.4	<200	2	58	2.0
AUG.												
10...	1520	--	6.3	<50	8.0	6.9	2.5	1.8	<200	4	58	2.0
03533000 - CLINCH RIVER BELOW NORRIS DAM, TENN. (LAT 36 12 56 LONG 084 04 56.01)												
NOV., 1972												
15...	1215	6010	2.2	20	33	9.5	2.8	1.5	--	123	20	3.0
JAN., 1973												
16...	0945	7040	4.1	10	32	7.5	2.2	1.3	--	144	14	3.0
MAR.												
29...	1100	17000	3.1	60	31	9.1	2.3	1.6	--	114	15	3.0
MAY												
15...	1145	6640	5.2	50	30	8.0	2.5	1.5	<200	110	15	3.0
JULY												
20...	1100	8470	6.4	<50	29	7.8	2.2	2.0	<200	110	16	2.0
03533098 - CLEAR CREEK NEAR ANDERSONVILLE, TN. (LAT 36 12 58 LONG 084 03 00)												
JULY, 1973												
13...	1415	--	6.7	<50	28	13	.6	1.2	<200	150	2.0	2.0
03533102 - CLEAR CREEK AT NORRIS, TN. (LAT 36 12 48 LONG 084 03 38)												
JULY, 1973												
13...	--	--	6.5	<50	27	14	.6	1.0	<200	150	2.0	2.0
SEP.												
07...	0900	--	7.3	<50	31	16	1.4	1.0	<200	150	3.0	3.0
03534100 - CLINCH RIVER NEAR CLINTON, TN. (LAT 36 07 22 LONG 084 06 52)												
NOV., 1972												
15...	1300	--	3.3	60	33	9.5	2.8	1.5	--	126	20	3.0
JAN., 1973												
16...	0915	--	3.5	30	31	7.9	2.7	1.5	--	112	15	3.0
MAR.												
29...	1030	--	4.5	40	31	9.2	2.6	1.6	--	115	15	3.0
MAY												
15...	1215	--	4.2	<50	30	8.0	2.7	1.7	<200	110	14	3.0
JULY												
20...	0930	--	4.5	<50	29	7.9	2.4	1.8	<200	110	16	2.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	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)
03527620 - CLINCH RIVER AT KYLES FORD, TENN (TVA) (LAT 36 34 10 LONG 083 02 29)												
NOV., 1972												
17...	148	130	235	8.0	9.0	5	111	.06	.18	.01	<.01	.30
JAN., 1973												
24...	134	130	250	8.0	7.0	0	106	.07	<.01	.03	<.01	.60
MAR.												
13...	132	110	222	7.5	14.0	5	96	.16	.21	<.01	<.01	.30
MAY												
14...	130	110	230	8.2	19.5	5	98	.09	.20	.01	<.01	.30
JULY												
20...	160	130	280	7.8	25.0	10	107	.15	.15	.05	<.01	1.0
SEP.												
11...	150	160	300	7.5	24.5	5	123	.10	.19	.02	<.01	.20
03532180 - OLLIS CREEK NEAR LA FOLLETTE, TENN (LAT 36 22 07 LONG 084 11 05)												
DEC., 1972												
28...	190	110	268	4.4	4.0	3	0	.04	<.01	.10	.03	.10
FEB., 1973												
20...	115	87	182	4.5	6.0	3	0	.03	<.03	.05	<.01	.10
JUNE												
25...	90	45	120	6.6	17.0	5	2	<.03	<.03	.02	<.01	.08
AUG.												
10...	120	48	140	6.4	25.0	5	3	.03	.16	.02	<.01	.05
03533000 - CLINCH RIVER BELOW NORRIS DAM, TENN. (LAT 36 12 56 LONG 084 04 56.01)												
NOV., 1972												
15...	140	120	220	7.6	--	5	101	.04	.12	.02	<.01	.40
JAN., 1973												
16...	122	110	215	7.4	8.0	4	118	.06	.14	<.01	.01	.60
MAR.												
29...	120	110	228	7.3	9.0	5	94	.09	.11	.01	<.01	.60
MAY												
15...	150	110	220	7.6	13.5	5	90	.03	.26	.02	<.01	.60
JULY												
20...	130	100	240	7.3	12.0	10	90	<.03	.06	<.01	<.01	.70
03533098 - CLEAR CREEK NEAR ANDERSONVILLE, TN. (LAT 36 12 58 LONG 084 03 00)												
JULY, 1973												
13...	140	120	240	7.8	17.0	5	123	.03	.06	<.01	<.01	.50
03533102 - CLEAR CREEK AT NORRIS, TN. (LAT 36 12 48 LONG 084 03 38)												
JULY, 1973												
13...	140	120	240	8.1	18.0	5	123	.03	.06	<.01	<.01	.30
SEP.												
07...	120	140	250	7.8	18.0	5	123	.12	.05	.01	<.01	.30
03534100 - CLINCH RIVER NEAR CLINTON, TN. (LAT 36 07 22 LONG 084 06 52)												
NOV., 1972												
15...	138	120	222	7.7	14.0	5	103	.06	.19	.02	<.01	.40
JAN., 1973												
16...	131	110	215	7.4	7.0	5	92	.07	.15	<.01	.01	.60
MAR.												
29...	125	110	225	7.5	9.0	5	94	.03	.08	.01	<.01	.60
MAY												
15...	160	110	220	7.7	13.0	5	90	.03	.11	.01	<.01	.60
JULY												
20...	130	100	240	7.4	12.0	10	90	.03	.12	<.01	<.01	.60

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03534900 - CLINCH RIVER AT EDGEMOOR, TENN (TVA) (LAT 36 01 32 LONG 084 10 03)												
OCT., 1972												
19...	1115	--	4.1	60	34	9.3	2.0	1.3	--	126	13	2.5
NOV.												
16...	1230	--	3.4	30	34	9.4	3.0	1.5	--	127	20	3.0
JAN., 1973												
11...	1210	--	2.4	20	29	9.2	2.7	1.7	--	113	17	3.0
MAR.												
15...	1130	--	3.3	50	29	7.3	3.0	1.5	--	104	18	3.0
MAY												
17...	1345	--	4.0	<50	31	8.2	2.6	1.5	<200	110	15	4.0
JUNE												
21...	1330	--	4.4	<50	28	7.2	2.4	1.5	<200	100	14	1.0
AUG.												
16...	1130	--	7.3	<50	30	8.3	2.8	1.8	<200	110	15	3.0
03535915 - CLINCH RIVER NEAR EATON CROSSROADS, TENN (LAT 35 53 14 LONG 084 19 28)												
APR., 1973												
18...	1430	--	3.6	30	33	8.7	2.9	1.6	--	122	14	3.5
JULY												
19...	1310	--	4.2	110	29	8.1	2.4	1.9	<200	110	20	4.0
SEP.												
03...	1100	--	4.4	<50	31	8.4	2.4	2.0	<200	120	15	4.0
03555700 - HIWASSEE RIVER AT APALACHIA, TENN (LAT 35 10 05 LONG 084 19 01)												
NOV., 1972												
21...	0930	--	7.7	70	2.0	.7	1.2	.7	--	8	2.9	1.5
JAN., 1973												
15...	1015	--	6.1	20	1.8	.5	1.2	1.0	--	6	3.3	2.0
MAR.												
20...	1915	--	5.8	40	1.6	.5	1.0	.9	--	13	2.5	3.0
MAY												
09...	--	--	8.1	60	2.0	.4	1.4	.9	<200	7	1.0	2.0
JULY												
13...	1545	--	7.4	120	2.0	.5	1.4	1.1	<200	7	1.0	2.0
SEP.												
13...	1400	--	8.0	160	4.0	.9	1.5	1.4	<200	12	18	2.0
03556500 - HIWASSEE RIVER NEAR MCFARLAND, TENN (LAT 35 10 48 LONG 084 26 36)												
NOV., 1972												
26...	1440	2900	5.5	30	2.0	1.0	1.2	.1	--	10	2.9	1.5
JAN., 1973												
15...	1240	2650	4.7	20	2.2	.5	1.1	1.0	--	8	2.5	2.0
MAR.												
20...	1330	3200	5.8	100	2.4	.4	1.1	.9	--	8	3.7	2.0
MAY												
09...	--	1640	7.0	150	3.0	.6	1.3	.9	<200	10	4.0	2.0
JULY												
13...	1425	3020	5.6	110	3.0	.8	1.4	1.2	<200	9	2.0	3.0
SEP.												
13...	1210	3050	6.4	70	2.0	.9	1.3	1.1	<200	10	3.0	2.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
03534900 - CLINCH RIVER AT EDGEMOOR, TENN (TVA) (LAT 36 01 32 LONG 084 10 03)												
OCT., 1972												
19...	144	120	227	7.6	16.5	5	103	.07	.23	.05	<.01	.50
NOV.												
16...	132	120	230	7.4	15.5	5	104	.07	.21	.03	<.01	.40
JAN., 1973												
11...	121	110	205	7.6	7.0	4	93	.06	.10	.02	.01	.50
MAR.												
15...	128	100	200	7.4	18.5	5	85	.21	.22	.02	<.01	.30
MAY												
17...	120	110	220	8.3	12.0	5	90	.03	.06	.03	<.01	.60
JUNE												
21...	120	100	220	7.8	15.0	5	82	<.03	<.03	.02	<.01	.60
AUG.												
16...	110	110	220	7.5	15.0	5	90	.06	.10	.02	<.01	.60
03535915 - CLINCH RIVER NEAR EATON CROSSROADS, TENN (LAT 35 53 14 LONG 084 19 28)												
APR., 1973												
18...	128	120	160	7.5	12.0	5	100	.04	.04	.02	<.01	.50
JULY												
19...	130	110	230	7.9	18.5	5	90	.03	.20	.04	<.01	.60
SEP.												
03...	120	110	240	7.7	20.5	20	98	.03	.16	.02	<.01	.50
03555700 - HIWASSEE RIVER AT APALACHIA, TENN (LAT 35 10 05 LONG 084 19 01)												
NOV., 1972												
21...	20	8	27	6.3	8.0	5	7	.02	.03	.02	<.01	<.01
JAN., 1973												
15...	16	6	21	6.4	4.0	5	5	.04	<.01	.02	.01	<.01
MAR.												
20...	13	6	20	6.8	13.5	5	11	.03	.05	.01	<.01	<.05
MAY												
09...	20	7	21	6.5	18.0	15	6	.04	.20	.02	<.01	<.05
JULY												
13...	30	7	21	7.0	26.5	15	6	.04	.09	<.01	<.01	<.05
SEP.												
13...	50	14	60	6.4	20.5	10	10	.03	.13	.02	<.01	.09
03556500 - HIWASSEE RIVER NEAR MCFARLAND, TENN (LAT 35 10 48 LONG 084 26 36)												
NOV., 1972												
26...	23	9	27	6.4	14.0	5	8	.27	.26	.09	.01	.30
JAN., 1973												
15...	21	8	25	6.6	5.5	5	7	.05	.05	.03	<.01	.10
MAR.												
20...	14	8	23	6.4	6.5	5	7	.03	.11	.01	<.01	<.07
MAY												
09...	30	10	28	6.7	16.0	5	8	.06	.07	.02	<.01	.08
JULY												
13...	40	11	27	6.8	17.0	10	7	.06	.19	.01	<.01	.20
SEP.												
13...	20	9	30	6.5	19.5	5	8	<.03	.10	.02	<.01	.20

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03557050 - HIWASSEE RIVER NEAR WETMORE, TENN (LAT 35 14 24 LONG 084 33 49)												
NOV., 1972												
21...	1050	--	5.5	40	2.2	1.1	1.2	.7	--	10	2.9	1.5
JAN., 1973												
15...	1200	--	5.9	60	2.2	.8	1.1	1.0	--	8	2.5	1.5
MAR.												
20...	1300	--	5.0	50	5.8	1.3	1.3	.8	--	20	3.9	2.0
MAY												
09...	--	--	6.4	50	3.0	.7	1.2	.8	<200	12	3.0	2.0
JULY												
13...	1350	--	5.4	230	2.0	.7	1.2	1.2	<200	9	2.0	3.0
SEP.												
13...	1130	--	6.2	<50	2.0	.8	1.3	1.1	<200	11	2.0	2.0
03561400 - OCOEE R NR COPPERHILL, TENN. (LAT 35 00 13 LONG 084 24 22.01)												
NOV., 1972												
13...	1245	--	5.0	540	26	2.7	3.7	1.1	--	47	32	6.5
JAN., 1973												
15...	1130	--	4.5	2400	12	2.3	1.6	1.0	--	9	35	1.0
MAR.												
06...	1100	--	3.9	320	26	5.3	2.2	.7	--	66	38	1.0
MAY												
09...	--	--	7.4	380	11	.9	1.6	1.0	<200	17	21	2.0
JULY												
20...	1100	--	6.4	<50	22	1.6	2.2	1.9	<200	9	65	6.0
SEP.												
14...	1100	--	6.3	780	25	1.8	4.0	2.5	<200	5	56	15
03566405 - TENNESSEE RIVER NR HARRISON BAY STATE PK, TN. (LAT 35 12 43 LONG 085 05 18)												
OCT., 1972												
12...	1000	--	5.2	80	18	5.0	7.2	1.5	--	66	15	10
NOV.												
28...	0950	--	4.5	90	20	5.7	6.7	1.5	--	65	16	9.5
DEC.												
19...	1010	--	3.2	80	17	4.0	4.7	1.5	--	52	15	6.0
JAN., 1973												
10...	1100	--	4.7	90	18	3.6	4.3	1.2	--	60	12	6.5
FEB.												
16...	0850	--	6.1	180	16	3.2	4.2	1.2	--	48	11	6.0
MAR.												
29...	0930	--	4.5	240	14	3.3	2.7	1.5	--	48	10	4.0
APR.												
19...	1000	--	4.9	60	17	4.5	4.0	1.1	--	59	12	5.0
MAY												
23...	1125	--	5.0	220	18	4.1	4.0	1.6	<200	60	10	6.0
JUNE												
15...	1410	--	5.1	90	18	3.9	3.7	1.5	200	59	11	6.0
JULY												
19...	1035	--	5.3	380	17	3.7	4.2	2.1	<200	57	12	6.0
AUG.												
14...	1000	--	6.3	110	16	3.8	4.4	2.0	<200	61	11	6.0
SEP.												
27...	1305	--	5.8	50	21	4.8	6.9	2.1	<200	73	12	8.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
03557050 - HIWASSEE RIVER NEAR WETMORE, TENN (LAT 35 14 24 LONG 084 33 49)												
NOV., 1972												
21...	24	10	27	6.4	11.5	5	8	.03	.25	.05	<.01	.07
JAN., 1973												
15...	17	9	26	6.6	5.5	5	7	.06	.24	.02	<.01	.10
MAR.												
20...	23	20	48	6.8	7.0	5	16	.06	.11	.01	<.01	.10
MAY												
09...	50	10	27	6.5	13.0	5	10	.03	.04	<.01	<.01	.10
JULY												
13...	40	8	33	6.9	17.0	10	7	.04	.33	.03	<.01	.20
SEP.												
13...	20	8	30	6.7	20.0	5	9	.10	.06	.02	<.01	.20
03561400 - OCOEE R NR COPPERHILL, TENN. (LAT 35 00 13 LONG 084 24 22.01)												
NOV., 1972												
13...	100	76	152	7.6	15.5	5	39	.40	.38	1.4	.01	.10
JAN., 1973												
15...	57	40	110	5.9	7.0	2	7	.06	.10	.20	<.01	.10
MAR.												
06...	145	87	210	7.3	11.0	3	54	.06	<.03	2.6	<.01	.20
MAY												
09...	70	31	84	6.5	14.0	5	14	.03	<.03	.07	<.01	.10
JULY												
20...	100	61	200	6.5	16.5	5	7	.03	.65	.95	<.01	.10
SEP.												
14...	140	70	210	7.6	--	5	4	.20	.30	.10	<.01	.20
03566405 - TENNESSEE RIVER NR HARRISON BAY STATE PK, TN. (LAT 35 12 43 LONG 085 05 18)												
OCT., 1972												
12...	110	66	182	7.1	22.0	5	54	.23	.20	.02	.01	.40
NOV.												
28...	104	72	180	7.2	12.0	5	53	--	--	--	--	--
DEC.												
19...	87	60	140	7.4	8.0	20	43	.16	.33	.06	<.01	.40
JAN., 1973												
10...	73	61	140	7.5	8.0	5	49	.11	.13	.06	.01	.40
FEB.												
16...	69	52	112	7.1	8.0	5	39	.09	.13	.01	<.01	.40
MAR.												
29...	76	48	135	7.0	13.5	25	39	.15	<.03	.04	<.01	.40
APR.												
19...	81	61	141	7.2	16.0	20	48	.09	.03	.06	<.01	.50
MAY												
23...	80	62	140	7.2	18.0	5	49	.12	.05	.04	<.01	.40
JUNE												
15...	80	61	140	7.4	13.5	10	48	.12	.10	.04	<.01	.50
JULY												
19...	80	58	150	7.4	25.0	10	47	.09	.07	.08	<.01	.40
AUG.												
14...	110	56	150	7.1	25.5	10	50	.08	.15	.03	<.01	.40
SEP.												
27...	100	72	180	7.3	26.0	5	60	.09	.16	.02	<.01	.30

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03568500 - CHATTANOOGA CREEK NEAR FLINTSTONE, GA (LAT 34 58 20 LONG 085 19 40) B/												
NOV., 1972												
22...	1325	86	5.1	110	16	3.1	2.7	1.5	--	48	13	4.5
JAN., 1973												
16...	0955	103	5.0	20	19	3.2	3.3	1.2	--	54	18	4.0
MAR.												
29...	1350	102	4.7	100	20	4.0	1.7	.9	--	57	17	3.0
JULY												
16...	0940	18	5.2	100	30	6.4	4.0	1.9	<200	110	19	4.0
SEP.												
11...	0830	9.0	6.0	<50	35	8.0	7.0	1.9	<200	130	10	5.0

DATE	DIS-SOLVED 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)
03571850 - TENNESSEE RIVER AT SOUTH PITTSBURG, TN. (LAT 35 00 41 LONG 085 41 51) A/						
OCT.						
19...	.04	--	<1.7	<.6	3.0	3.6
NOV.						
16...	.11	.03	1.7	.6	3.1	4.0
DEC.						
20...	.05	.03	<.9	--	3.8	4.8
JAN.						
22...	.05	.03	.9	--	2.1	2.6
FEB.						
22...	.09	.02	4.3	--	4.1	5.2
MAR.						
27...	.03	.03	<1.1	--	2.6	3.2
APR.						
19...	.15	.03	1.2	--	2.7	3.4
MAY						
21...	.08	.03	<1.1	--	2.8	3.6
JUNE						
21...	.06	.01	1.1	--	7.6	9.5
JULY						
24...	.07	.03	<.8	--	5.8	7.3
AUG.						
21...	.08	.02	<1.3	--	2.9	3.6
SEP.						
21...	.17	.02	3.2	--	2.8	3.6

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03594422 - BEECH RIVER AT ST HWY 104, NR LEXINGTON TN (TVA) (LAT 35 37 44 LONG 088 23 11) B/												
NOV., 1972												
27...	0920	60	7.8	500	4.4	1.3	2.7	1.0	--	17	5.6	4.5
JAN., 1973												
17...	1300	56	5.0	470	4.2	1.4	3.4	1.3	--	14	7.0	4.5
MAR.												
28...	1425	72	58	580	3.6	1.4	2.6	1.1	--	16	4.3	3.0
MAY												
18...	1040	25	7.8	230	4.0	1.2	2.6	1.2	<200	17	4.0	4.0
JULY												
26...	1300	370	5.8	1400	6.0	1.7	2.3	2.7	<200	22	2.0	3.0
SEP.												
12...	1130	--	9.3	820	3.0	1.5	3.3	1.6	<200	17	5.0	4.0

A/ Analyses by U. S. Geological Survey

B/ Analyses furnished by Tennessee Valley Authority

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
03568500 - CHATTANOOGA CREEK NEAR FLINTSTONE, GA (LAT 34 58 20 LONG 085 19 40) B/												
NOV., 1972												
22...	77	53	118	7.2	8.5	5	39	.04	.17	.01	<.01	.50
JAN., 1973												
16...	78	60	137	7.3	9.0	5	44	.29	<.01	<.01	<.01	.30
MAR.												
29...	78	66	147	7.6	12.0	3	47	.03	<.03	.02	<.01	.30
JULY												
16...	130	100	220	7.5	21.5	10	90	.26	.21	.07	<.01	.30
SEP.												
11...	150	120	26	7.5	21.5	5	107	.57	.16	.04	<.01	.30

DATE	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)
03571850 - TENNESSEE RIVER AT SOUTH PITTSBURG, TN. (LAT 35 00 41 LONG 085 41 51) A/						
OCT.						
19...	150	1.9	.6	1.0	1.2	23
NOV.						
16...	110	.7	.2	<.4	.4	10
DEC.						
20...	87	2.1	--	2.3	2.7	40
JAN.						
22...	87	1.4	--	1.0	1.2	26
FEB.						
22...	78	.5	--	<.4	<.4	8
MAR.						
27...	82	2.9	--	2.1	2.4	36
APR.						
19...	79	<.4	--	<.5	<.5	7
MAY						
21...	85	.6	--	1.0	1.1	17
JUNE						
21...	85	1.1	--	.7	.8	14
JULY						
24...	85	.4	--	.5	.5	8
AUG.						
21...	88	.4	--	<.4	.4	8
SEP.						
21...	110	<.4	--	<.4	<.4	4

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
03594422 - BEECH RIVER AT ST HWY 104, NR LEXINGTON TN (TVA) (LAT 35 37 44 LONG 088 23 11) B/												
NOV., 1972												
27...	44	16	56	6.9	8.0	5	14	.27	.26	.09	.01	.30
JAN., 1973												
17...	38	16	57	6.1	8.0	7	11	1.0	.47	.30	<.10	.30
MAR.												
28...	33	15	47	6.3	16.5	10	13	.20	.21	.03	<.01	.30
MAY												
18...	30	15	51	6.8	16.5	15	14	.15	.21	.03	<.01	.40
JULY												
26...	20	22	55	6.3	24.0	25	18	.24	.18	.66	<.01	.10
SEP.												
12...	40	14	53	6.7	23.0	35	14	.51	.27	.03	<.01	.40

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 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03594435 - PINEY CREEK AT HWY 104 NR LEXINGTON, TENN (TVA) (LAT 35 35 47 LONG 088 22 04)												
NOV., 1972												
27...	0935	24	9.4	200	2.8	1.2	1.8	.7	--	9	5.8	4.0
JAN., 1973												
17...	1330	28	6.3	140	2.2	1.1	1.3	1.0	--	8	4.3	2.5
MAR.												
28...	1445	38	6.2	140	2.2	1.0	1.3	1.4	--	6	6.2	2.0
MAY												
18...	1110	10	7.5	180	2.0	.8	1.2	.9	<200	10	4.0	3.0
JULY												
26...	--	13	7.6	570	3.0	1.2	1.8	1.4	400	12	4.0	3.0
SEP.												
12...	1105	--	8.0	420	2.0	1.3	1.4	1.2	300	15	4.0	3.0
03594449 - DRY CREEK AT REDBUD LAKE NEAR CHESTERFIELD TENN (LAT 35 41 08 LONG 088 15 34)												
NOV., 1972												
29...	1020	--	2.0	150	4.4	1.3	1.2	.8	--	6	12	2.5
JAN., 1973												
17...	0930	--	3.5	60	3.6	1.3	1.1	1.2	--	6	11	2.0
MAR.												
28...	0925	--	.7	240	3.4	1.2	1.1	1.2	--	6	10	2.0
MAY												
18...	0930	--	.2	240	4.0	.9	1.2	1.2	<200	7	9.0	3.0
JULY												
26...	1335	.30	4.1	<50	5.0	1.2	1.0	1.3	<200	10	8.0	3.0
SEP.												
12...	1000	--	5.5	<50	3.0	1.4	1.0	1.3	<200	17	8.0	3.0
03594473 - BIG CREEK AT DOGWOOD LAKE NEAR DARDEN TENN (TVA) (LAT 35 41 53 LONG 088 14 26)												
NOV., 1972												
29...	1000	--	2.7	100	4.8	1.4	1.2	1.5	--	12	11	2.0
JAN., 1973												
17...	0910	--	3.5	70	3.8	1.4	1.5	1.2	--	8	12	1.5
MAR.												
28...	0945	--	3.2	220	3.6	1.6	1.5	1.1	--	6	12	1.5
MAY												
18...	0900	--	4.0	1100	4.0	1.1	1.2	1.3	600	5	13	3.0
JULY												
26...	1355	1.1	3.8	90	5.0	1.3	1.1	1.3	<200	10	8.0	2.0
SEP.												
12...	0935	--	4.8	<50	3.0	1.4	1.0	1.2	<200	12	10	2.0
03600350 - DUCK RIVER NEAR SANTA FE, TN. (LAT 35 40 21 LONG 087 07 43)												
OCT., 1972												
12...	1130	--	5.9	90	51	5.8	7.5	3.1	--	157	25	7.0
DEC.												
04...	0900	--	6.4	80	60	7.5	2.7	1.6	--	186	17	5.0
MAY , 1973												
23...	1000	--	3.8	50	63	4.1	4.5	1.8	<200	150	15	6.0
JULY												
18...	1230	--	5.2	<50	37	3.0	1.4	2.8	<200	110	9.0	3.0
SEP.												
26...	1300	--	6.0	<50	38	3.6	9.3	3.3	<200	110	25	7.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
03594435 - PINEY CREEK AT HWY 104 NR LEXINGTON, TENN (TVA) (LAT 35 35 47 LONG 088 22 04)												
NOV., 1972												
27...	43	12	38	6.7	8.5	5	7	.04	.19	.03	.01	.20
JAN., 1973												
17...	25	10	31	6.4	6.5	5	7	.08	.10	.04	<.01	.10
MAR.												
28...	23	10	31	6.3	16.0	5	5	.08	.08	.04	<.01	.10
MAY												
18...	20	8	29	6.6	16.0	15	8	.06	.12	.04	<.01	.10
JULY												
26...	20	12	36	6.5	25.5	15	10	.09	.29	.04	<.01	.10
SEP.												
12...	20	10	32	6.5	22.0	25	12	.12	.18	.04	<.01	.09
03594449 - DRY CREEK AT REDBUD LAKE NEAR CHESTERFIELD TENN (LAT 35 41 08 LONG 088 15 34)												
NOV., 1972												
29...	42	16	48	5.7	--	5	5	.10	.37	.19	<.01	.30
JAN., 1973												
17...	33	14	42	6.1	3.0	15	5	11	.21	.03	<.01	.30
MAR.												
28...	25	14	39	5.8	13.5	5	5	.10	.14	.01	<.01	<.05
MAY												
18...	20	14	40	7.0	20.5	15	6	.06	.21	.01	<.01	<.05
JULY												
26...	30	15	48	6.7	31.0	15	8	.12	.61	.02	<.01	<.05
SEP.												
12...	30	13	44	6.4	27.0	5	14	.15	.57	.06	<.01	<.05
03594473 - BIG CREEK AT DOGWOOD LAKE NEAR DARDEN TENN (TVA) (LAT 35 41 53 LONG 088 14 26)												
NOV., 1972												
29...	39	18	52	6.2	7.0	5	10	.09	.20	.07	<.01	.07
JAN., 1973												
17...	43	16	45	6.2	--	10	7	.08	.19	.03	<.01	.10
MAR.												
28...	32	16	46	5.7	14.5	25	5	.12	.15	.03	<.01	.10
MAY												
18...	30	15	43	6.6	20.0	40	4	.09	.15	.03	<.01	.08
JULY												
26...	30	18	46	6.7	30.5	5	8	.06	.22	.04	<.01	<.05
SEP.												
12...	20	13	44	6.2	27.0	5	10	.12	.23	<.01	<.01	<.05
03600350 - DUCK RIVER NEAR SANTA FE, TN. (LAT 35 40 21 LONG 087 07 43)												
OCT., 1972												
12...	204	150	300	7.2	18.0	6	129	1.4	.26	.23	.02	.80
DEC.												
04...	210	180	310	7.8	10.0	2	153	--	--	--	--	--
MAY , 1973												
23...	160	170	300	7.6	20.0	5	123	.99	.63	.21	.01	.70
JULY												
18...	120	100	210	7.4	23.0	20	90	1.8	.69	.03	<.01	.60
SEP.												
26...	160	110	270	7.6	24.0	10	90	1.9	.39	.24	.03	.80

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	TOTAL ALUM-INUM (AL) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
03600400 - DUCK RIVER AT WILLIAMSPORT, TENN. (LAT 35 41 40 LONG 087 13 14)												
OCT., 1972												
12...	1155	--	6.0	70	49	4.0	7.1	2.5	--	155	21	7.0
DEC.												
04...	0930	--	6.3	90	59	7.2	2.6	1.1	--	185	16	5.5
MAY , 1973												
23...	1020	--	3.9	<50	46	3.8	4.4	1.9	<200	150	15	6.0
JULY												
18...	1315	--	5.1	100	36	3.2	1.2	2.8	300	110	8.0	3.0
SEP.												
26...	1320	--	5.8	50	43	4.0	8.6	2.7	<200	120	23	7.0
03601500 - BIG BIGBY CREEK AT CROSS BRIDGES, TENN. (LAT 35 37 04 LONG 087 12 34)												
OCT., 1972												
12...	1110	--	7.4	100	58	7.8	7.5	5.1	--	170	21	20
DEC.												
04...	0845	--	6.8	160	56	7.4	4.1	2.2	--	158	22	14
MAY , 1973												
23...	0930	--	7.0	<50	45	4.0	4.1	2.5	<200	120	18	10
JULY												
18...	1200	--	7.6	<50	59	4.2	6.3	4.3	<200	120	14	24
SEP.												
26...	1230	--	8.7	<50	64	5.1	11	7.4	<200	120	19	41
03601600 - DUCK RIVER NEAR SHADY GROVE, TN. (LAT 35 48 09 LONG 087 15 55)												
OCT., 1972												
12...	1215	--	5.7	180	51	6.1	5.7	2.7	--	158	20	9.0
DEC.												
04...	0945	--	5.9	60	59	7.0	2.7	1.5	--	180	16	5.5
MAY , 1973												
23...	1045	--	4.4	<50	55	3.8	3.6	2.0	<200	150	15	6.0
JULY												
18...	1340	--	4.8	<50	32	2.4	1.2	2.7	<200	100	8.0	3.0
SEP.												
26...	1340	--	5.8	<50	42	4.1	9.5	3.0	<200	120	21	7.0
03602000 - DUCK RIVER AT CENTERVILLE, TENN. (LAT 35 47 16 LONG 087 27 56)												
OCT., 1972												
12...	1245	--	4.5	100	50	4.1	2.0	1.3	--	162	6.2	4.0
DEC.												
04...	1030	--	6.2	70	53	6.3	2.3	1.5	--	163	16	4.5
MAY , 1973												
23...	1115	--	5.0	<50	41	3.8	3.0	1.6	<200	120	12	5.0
JULY												
18...	1415	--	6.4	<50	33	3.0	1.1	2.5	<200	92	8.0	4.0
SEP.												
26...	1415	--	6.1	50	34	3.9	4.2	1.8	<200	100	12	7.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TENNESSEE RIVER BASIN

(Analyses furnished by Tennessee Valley Authority)

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	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)
03600400 - DUCK RIVER AT WILLIAMSPORT, TENN. (LAT 35 41 40 LONG 087 13 14)												
OCT., 1972												
12...	190	140	285	7.6	19.0	5	127	1.3	.29	.05	.02	.90
DEC.												
04...	205	180	312	7.7	10.0	2	152	.84	.32	.05	.01	1.0
MAY , 1973												
23...	170	130	290	7.5	20.0	5	123	1.0	.06	.09	.01	.60
JULY												
18...	150	100	200	7.2	23.0	20	90	1.5	.63	.03	<.01	.60
SEP.												
26...	160	120	280	8.2	25.0	5	98	1.8	.23	.04	.02	.80
03601500 - BIG BIGBY CREEK AT CROSS BRIDGES, TENN. (LAT 35 37 04 LONG 087 12 34)												
OCT., 1972												
12...	234	180	337	8.0	17.0	5	139	1.3	.29	.05	.02	.90
DEC.												
04...	209	170	325	8.0	12.0	2	130	2.9	.37	.04	.01	1.0
MAY , 1973												
23...	170	130	290	7.8	18.0	5	98	2.2	.05	.07	<.01	.50
JULY												
18...	220	160	320	7.6	23.5	10	98	4.6	.13	.02	<.01	.60
SEP.												
26...	260	180	400	7.6	22.0	5	98	.70	.15	.03	<.01	.30
03601600 - DUCK RIVER NEAR SHADY GROVE, TN. (LAT 35 48 09 LONG 087 15 55)												
OCT., 1972												
12...	186	150	285	8.0	18.5	5	130	1.7	.45	.03	.01	.70
DEC.												
04...	208	180	320	7.6	10.5	2	148	.97	.30	.04	.01	1.0
MAY , 1973												
23...	150	150	280	7.5	19.5	5	123	1.2	.28	.08	.01	.70
JULY												
18...	100	90	190	7.2	23.0	20	82	1.2	.43	.03	<.01	.50
SEP.												
26...	170	120	290	7.5	25.0	5	98	2.1	.44	.04	<.01	.80
03602000 - DUCK RIVER AT CENTERVILLE, TENN. (LAT 35 47 16 LONG 087 27 56)												
OCT., 1972												
12...	158	140	250	7.9	19.5	3	133	.38	.05	.01	<.01	.20
DEC.												
04...	182	160	282	7.4	10.5	2	134	--	--	--	--	--
MAY , 1973												
23...	140	120	250	7.7	20.0	5	98	.81	.08	.04	<.01	.50
JULY												
18...	90	95	180	7.2	23.5	25	75	1.4	.52	.02	<.01	.50
SEP.												
26...	130	100	220	7.7	25.0	5	82	1.2	.20	.02	<.01	.30

☆ G. P. O. 1974 — 740-998 / 642, REGION NO. 4

U. S. DEPARTMENT OF THE INTERIOR
Geological Survey
Room 144, Federal Office Building
Nashville, Tennessee 37203