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TENNESSEE
1975

Water Resources Data for Tennessee

Water Year 1975

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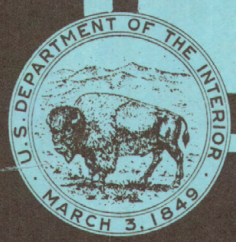

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-75-1

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 1975

1974

OCTOBER

S	M	T	W	T	F	S
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1975

JANUARY

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JUNE

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JULY

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AUGUST

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31						

SEPTEMBER

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21	22	23	24	25	26	27
28	29	30				

Water Resources Data for Tennessee

Water Year 1975

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-75-1

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

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Preface

This report was prepared by the U. S. Geological Survey in cooperation with the State of Tennessee and with other agencies by personnel of the Tennessee district of the Water Resources Division under the supervision of Stanley P. Sauer, District Chief, and L. B. Laird, Regional Hydrologist, Southeastern Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

Tennessee Department of Conservation, through the Division of Water Resources
Tennessee Department of Public Health
Tennessee Department of Transportation
Tennessee Wildlife Resources Agency
City of Franklin
City of Lawrenceburg
City of Memphis
City of Murfreesboro
Lincoln County
Metropolitan Government of Nashville and Davidson County
Tennessee Valley Authority
Corps of Engineers, U.S. Army
U.S. Department of Agriculture, Soil Conservation Service

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Nashville, Tennessee 37203

1976

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(Letters after station name designate type of data: (b), biological; (c), chemical; (m), microbiological; (s), sediment; (t), water temperature)

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED

WATER RESOURCES DATA FOR TENNESSEE, 1975

Part 1. Surface-Water Records
Part 2. Water-Quality Records
Part 3. Ground-Water Records

INTRODUCTION

Water resources data for the 1975 water year for Tennessee consist of records of stage, discharge, and water quality of streams and springs; stage, contents, and water quality of lakes and reservoirs; and water-levels and water quality of wells. This report contains discharge records for 108 gaging stations; stage only records for 1 lake gaging station; elevation and contents for 26 lakes and reservoirs: water quality for 37 gaging stations, 64 partial-record or miscellaneous flow stations and 31 wells; and water levels for 27 observation wells. Also included are data for 134 crest-stage partial-record stations and 83 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous stream and spring measurements, or as seepage investigations of discharge and water quality. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Tennessee.

Records of discharge (or stage) of streams, and contents (or stage) of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1973 in a series of water-supply papers entitled, "Ground-Water Levels in the United States."

Beginning with the 1961 water year and continuing through water year 1974, streamflow 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, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with the streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and

subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report TN-75-1." These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "PUBLICATIONS" on a subsequent page.

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, succeeded by B. R. Allison; through Division of Water Resources, Robert A. Hunt, director.

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

Tennessee Department of Transportation, Robert F. Smith, commissioner, succeeded by Eddie Shaw; 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 Wildlife Resources Agency, Harvey G. Bray, executive director.

Chickasaw Basin Authority, Robert B. James, chairman.

City of Franklin, Ed Woodard, mayor

City of Lawrenceburg, Ivan Johnston, mayor.

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

Lincoln County Utility Board, W. W. Newman, Jr., chairman.

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

Assistance in the form of funds and/or services was given by the Corps of Engineers, U.S. Army, in collecting records for 19 gaging stations, and by Tennessee Valley Authority in collecting records for 42 gaging stations, 14 temperature stations, and 28 water-quality miscellaneous sites published in this report.

The following organizations also aided in collecting records:

Aluminum Co. of America
Bowaters Southern Paper Corp.
Cities Service Co. (Copperhill, Tennessee 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 covering English units to International System of units (SI) on page 35.

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, or 1,233 cubic metres.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, non-spore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C $\pm$ 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Benthic organisms (invertebrates) are animals inhabiting the bottom of an aquatic environment. They include a number of different types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are frequently used as indicators of environmental quality because many have restricted mobility during their aquatic life phase, as well as a relatively long lifespan which allows for response to prevailing and changing water-quality conditions. Many benthic organisms inhabit specific types of environments which, if changed, result in changes in the composition of the benthic community.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per litre, used for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash weight is the weight or amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed in g/m^2 (grams per cubic metre), and periphyton and benethic organisms in g/m^2 (grams per square metre).

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediment, in the sample. Dry weight values are expressed in the same units as ash weight.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter. The organic weight is expressed in the same units as ash weight.

Wet weight is the weight of living matter plus contained water.

Cfs-days 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, or 2,447 cubic metres. It represents a runoff of approximately 0.03719 inch from 1 square mile or 0.3647 millimetre from 1 square kilometre.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Contents is the volume of water in a reservoir, lake or stream. Contents herein is that of a reservoir or lake and unless otherwise indicated, 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,cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02831 cubic metres per second.

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.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometre membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index is a numerical rating of the variety of the aquatic organisms. The greater the number of different types of organisms, the greater the diversity. The formula for diversity index is $d = -\sum \frac{ni}{n} \log_2 \frac{ni}{n}$, n is the total number of individuals.

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.

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 that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Macrophytes are large macroscopic plants in the aquatic environment. The most commonly occurring macrophytes are the rooted vascular plants that are usually arranged in zones and delineated by the extent of illumination and sedimentation. The dominant plant forms in these environmental gradients are (1) submersed rooted aquatics, (2) floating leaved, rooted aquatics, (3) emersed rooted aquatics, and (4) marginal mats. Growth of aquatic macrophytes depends on the availability of nutrients. In some waters nutrient enrichment results in excessive growth of macrophytes, and this accelerated productivity often results in a major nuisance condition and an important water-quality problem.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

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

Milligrams per litre (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micorgrams per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1, page 8. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 8.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multi-celled and are counted according to the number of contained cells per sample volume, usually millilitres (ml) or litres (l).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square metres (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millilitres (ml) or litres (l). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

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.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter or particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

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

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 litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1,000 g/ml and a specific gravity of sediment of 2.65.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distribution given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per 100 ml of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per 100 ml of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

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

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per litre of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

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 centimetre 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 litre) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). 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.

Subtrate is the physical surface upon which an organism lives.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The use of artificial subtrates simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

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.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per litre by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir. See also table for converting English Units to International Units on p. 35.

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 reference 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.

Pesticide network is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides includes insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as in insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

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 natural uranium in µg/l (micrograms per litre), radium as radium - 226 in PC/L, (pCi/l, picocuries per litre), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre (µg/l). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

A picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

DOWNSTREAM ORDER AND STATION NUMBER

Stations 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, spring, 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 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." However, the density of miscellaneous sites on some of the seepage runs, shown on pages 182 to 212, make it necessary in some cases to use nine digits in order to indicate the proper downstream order. 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.

EXPLANATION OF 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 back 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 drainge 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 headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion.

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. Also shown are tables of spring measurements and measurements made during seepage investigations.

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, figure 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 number 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 59 sites during the 1975 water year by the following agencies:

Tennessee Valley Authority:	24 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.

EXPLANATION OF 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, and microbiological quality, water temperature, and fluvial sediment. 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. Fluvial-sediment information is given for suspended-sediment discharges and concentrations.

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 litre (mg/l) and water temperatures in degrees Celsius (centigrade, °C). In waters with a density of 1,000 g/ml (grams per millilitre), parts per million and milligrams per litre 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 litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using Table 3 on page 23.

Table 3.--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 litre instead of milligrams per litre. (See "Definition of Terms," p. 6 and table for converting English Units to SI Units, p. 35).

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar; Lamar, Goerlitz, and Law; and Goerlitz and Brown. The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others.

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 through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office at the address given on the back of the title page of this report.

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water 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.

Water Year	Part 3	Part 7	Water 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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the nation's most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude, and (3) a local number that is provided for continuity with older reports and for other use as dictated by local needs.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. Mean sea level is the datum plane on which the national network of precise levels is based. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Publication of ground-water level data for the United States in Water-Supply Papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single Water-Supply Paper for each year covering the entire nation was issued (Water-Supply Papers 777, 817, 840, 815, and 886). From 1940 through 1974, separate Water-Supply Papers were issued for 6 sections of the United States. Water-level data for Tennessee are in the Water-Supply Papers listed below, each report containing one or more calendar years (January-December) of data. Data in this report are for water years 1974 (October 1, 1973 through September 30, 1974) and 1975 (October 1, 1974 through September 30, 1975).

Water-Supply Papers containing records on ground-water levels in Tennessee are listed below:

Calendar Year	WSP No.	Calendar Year	WSP No.
1927-29	638-A	1948	1127
1927-31	656	1949	1157
1932-36	817	1950	1166
1937	840	1951	1192
1938	845	1952	1222
1939	886	1953	1266
1940	907	1954	1322
1941	937	1955	1405
1942	945	1956-58	1538
1943	987	1959-63	1803
1944	1017	1964-68	1978
1945	1024	1969-73	2171
1946	1072		
1947	1097		

Information about reports and other data on ground water in Tennessee may be obtained from the district office, at the address given on the back of the title page.

HYDROLOGIC CONDITIONS

Runoff for the 1975 water year was greater than long-term averages on most streams in Tennessee. Runoff on an annual basis has been above long-term averages for three consecutive years, beginning with the extraordinarily wet 1973 water year which produced one of the greatest floods of this century over central and eastern Tennessee. Runoff amounts and trends for the 1975 water year are illustrated at three long-term gaging stations in figure 1.

Monthly rainfall amounts were above long-term monthly averages over the State for 7 months in the 1975 water year, November through March, and May and September. During these months, rainfall was from 20 percent greater to 200 percent greater than monthly averages. Monthly average runoff was excessive for 6 months of the year, October, November, January, March, May, and September. (Excessive meaning within the upper 25 percent of record for selected index stations with recorded flows for a common base period of 30 years).

Bankful stages or minor flooding of lowlands occurred in 5 months of the year, November through February, and September. On March 12-14, a major flood hit the central Tennessee area caused by 10 inches of rainfall, over 7 inches in a 24-hour period at most localities within the center of the storm area. The area most severely affected was the central Cumberland River basin which includes the Nashville Metropolitan Area. Record, or near record, stages were reached on gages in the Harpeth River and Red River basins, two major streams in the north-central part of Tennessee. From records of the U.S. Army, Corps of Engineers, Nashville District, the Cumberland River at Nashville reached a stage of 415.7 feet, mean sea level, highest since completion of the system of flood regulation dams on the Cumberland River and major tributaries. At Nashville, this flood was the maximum for flood of record, regulated. That is, if all known floods on the Cumberland River at Nashville were routed through the existing regulatory dams system, none would equal or exceed the March 1975 flood. The Corps of Engineers, estimated the frequency of that flood on the Cumberland River at Nashville at over 300 years. Frequency of peak discharges exceeded 100 years on most major natural streams in the center of the storm area.

Monthly rainfall amounts were below long-term monthly averages for 5 months, October, April, June, July, and August. Even though rainfalls were deficient for three consecutive months, June through August, base flows of most streams were not extremely low and there was no critical shortage of water for municipalities and other industrial and commercial water users. The ground water reservoirs have been highly charged over the past three years, creating a plentiful reserve of water which sustained streamflows during short-term rainfall deficient periods this water year. Runoff was not deficient in any area of the State. (Deficient meaning within the lowest 25 percent of record for selected index stations with recorded flows for a common base period of 30 years).

During the 1975 water year, natural ground-water levels across Tennessee showed seasonal fluctuations normal for the State. The highest levels generally occurred in March or April and the lowest occurred in late summer or fall. These seasonal fluctuations are caused primarily by variation in precipitation amounts and duration.

In the mountainous extreme eastern Tennessee area (Blue Ridge Physiographic Province), records from two continuous ground-water level recorders showed annual maximum and minimum ground-water levels for the 1975 water year within the extreme levels defined by the period of record for each well. The periods of record for these two observation wells are 12 and 5 years. Ground-water levels in that area of the State were about normal.

One continuous observation well in the eastern Tennessee River Valley (Valley and Ridge Province) located about 30 miles northeast of Chattanooga, also showed natural ground-water levels for that area for the 1975 water year to be about normal. Water levels were within the historical maximum-minimum extreme range defined over a 12-year period of observations.

Ground-water levels during the water year in the Cumberland Plateau area (Cumberland Plateau Province) were also about normal with no new maximum-minimum extremes recorded. The continuous observation well in that area has 12 years of record.

In the central one-third of Tennessee, (Highland Rim and Central Basin Provinces) record at several observation wells indicate higher than normal ground-water levels occurred during the 1975 water year. A new maximum level was recorded at one well in Dickson County, about 30 miles west of Nashville, for the 16 years of record at that well. The range in maximum-minimum extremes for other observation wells were comparatively small and the median point of this range was generally above the median point of the historical maximum-minimum range.

Natural ground-water levels in Western Tennessee (Gulf Coast Plain Province) were normal to slightly higher than normal at 8 observation wells outside of Shelby County. Maximum-minimum ranges were comparatively small at most locations.

Heavy ground-water pumpage in Memphis and surrounding areas in Shelby County has created a cone of depression that affects ground-water levels at the 8 network observation wells located in Shelby County. Both water table levels and artesian head in confined aquifers, which are the supply sources for the Memphis municipal water system, are recorded by observation wells. Fluctuations in artesian head and water table levels vary throughout the area based on pumping rates, location of pumping centers, artesian aquifer tapped, and location within the cone of depression. Records for 8 observation wells in Shelby County are published in Part 3 of this report. Ground-water level fluctuations at each well location can be visualized by analyzing those records.

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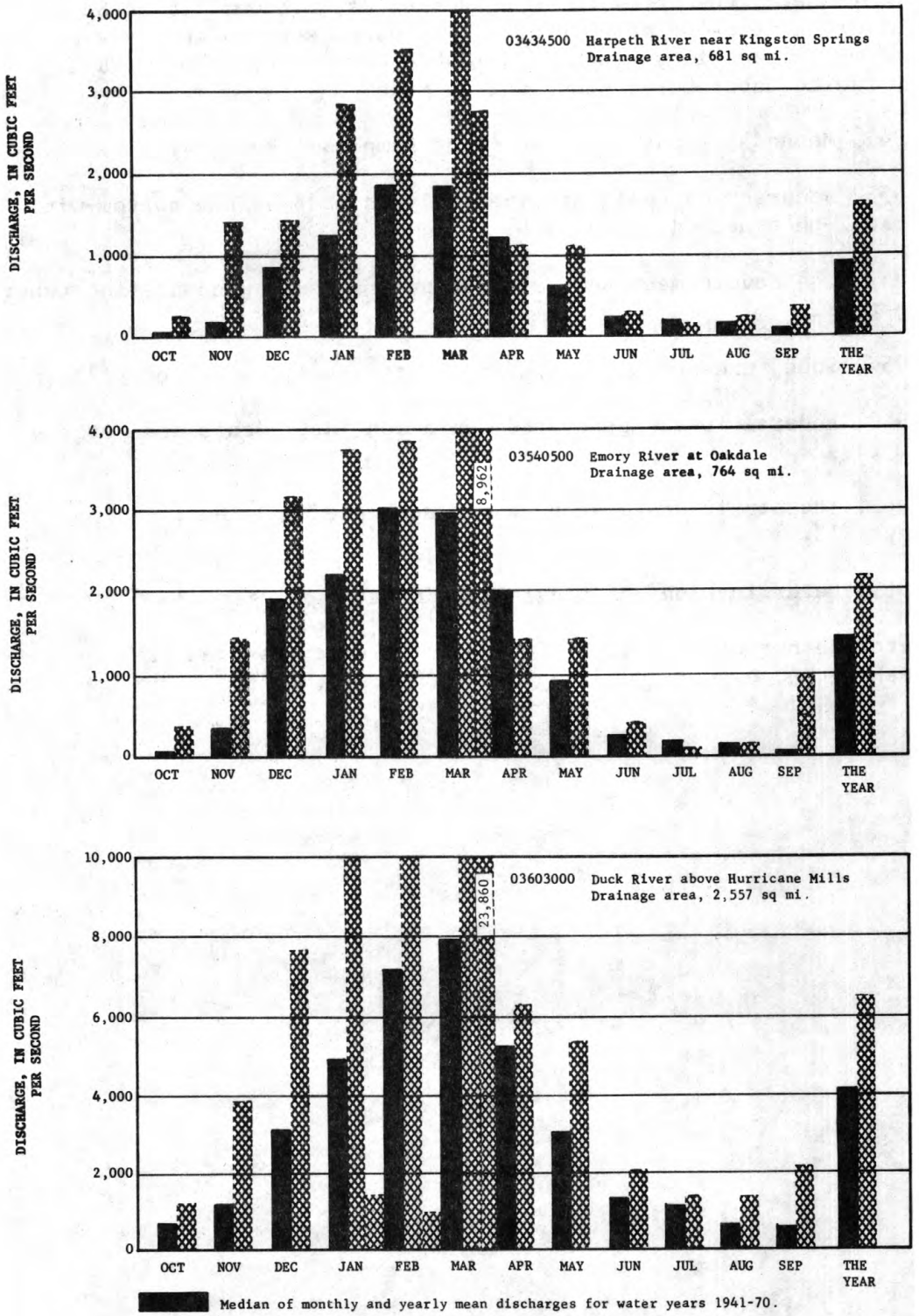

Figure 1.--Runoff during 1975 water year compared with median runoff for period 1941-70 for three representative gaging stations.

Table 4.--Factors for converting English units to International System units (SI)

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	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
Area		
acres	4047	square metres (m^2)
	.4047	*hectares (ha)
	.4047	square hectometres (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
Volume		
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm^3)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (10^6 gal)	3785	cubic metres (m^3)
	3.78×10^{-3}	cubic hectometres (hm^3)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-days $[(ft^3/s) \cdot d]$	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
Flow		
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm^3/s)
	.02832	cubic metres per second (m^3/s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm^3/s)
	6.309×10^{-5}	cubic metres per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm^3/s)
	.04381	cubic metres per second (m^3/s)
Mass		
tons (short)	.9072	tonnes (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 litre is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

PART 1. SURFACE WATER RECORDS

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.--41 years, 742 cfs (21.01 cu m/s), 26.38 in/yr (670 mm/yr).

EXTREMES.--Current year: Maximum discharge, 40,000 cfs (1,130 cu m/s) Mar. 13, gage height, 29.57 ft (9.013 m), from rating curve extended above 27,000 cfs (765 cu m/s) on basis of slope-area and contracted-opening measurements at gage height 37.91 ft (11.555 m); minimum, 0.3 cfs, estimated, (0.008 cu m/s) Sept. 10, gage height, 1.21 ft (0.369 m), result of construction upstream.
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.

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

REVISIONS (WATER YEARS).--WSP 1436: Drainage area. WRD Tenn. 1973: 1939(M), 1951(M), 1970(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	51	3800	1130	677	691	1850	500	331	96	47	17
2	117	50	2170	1180	2230	694	1340	437	284	84	49	16
3	92	49	1230	1090	2620	534	1240	349	211	78	35	15
4	74	49	900	1520	2980	450	896	374	167	98	39	14
5	64	165	736	1370	5500	429	662	327	142	291	55	12
6	56	406	625	1080	2950	402	560	270	185	227	87	15
7	51	233	631	858	1970	969	500	244	205	155	72	20
8	47	173	2150	707	1380	2990	454	304	145	119	61	17
9	42	146	1970	824	1090	1570	418	669	118	109	43	16
10	39	129	1230	906	841	1450	416	505	107	126	39	9.2
11	37	129	912	6380	807	2260	408	396	167	95	50	11
12	35	571	752	2540	3850	11800	373	317	2050	75	89	18
13	32	625	587	1620	2620	34500	323	268	1420	68	54	15
14	30	455	474	1100	1560	19800	282	237	1140	73	40	13
15	39	430	406	882	1140	3670	515	276	657	75	36	11
16	1330	369	406	835	925	2000	590	4750	1250	63	39	9.0
17	689	387	365	835	1110	1620	508	2290	683	87	111	13
18	336	741	320	968	1190	1260	485	2300	409	58	98	36
19	219	1260	282	2910	1080	1280	1460	1450	281	49	250	153
20	160	5690	271	6900	882	1310	2470	937	212	43	181	102
21	129	2570	254	2540	741	1170	1380	667	169	41	96	63
22	110	1190	236	1590	625	1490	983	516	146	40	65	55
23	96	752	216	1190	587	2060	770	399	136	37	50	245
24	87	546	200	968	3180	7520	660	291	118	43	41	2740
25	82	469	536	3350	2250	4820	1180	235	108	52	34	594
26	77	430	1110	3430	1320	1940	1540	203	292	52	30	286
27	71	344	1070	2100	965	1290	1020	319	181	49	27	181
28	65	312	6930	1160	797	987	822	222	192	39	29	135
29	61	275	3200	918	---	4860	682	211	144	30	28	108
30	56	304	1710	894	---	16100	559	688	116	26	22	87
31	54	---	1190	736	---	3600	---	434	---	33	20	---
TOTAL	4527	19300	36869	54511	47867	135516	25346	21385	11766	2511	1917	5026.2
MEAN	146	643	1189	1758	1710	4371	845	690	392	81.0	61.8	168
MAX	1330	5690	6930	6900	5500	34500	2470	4750	2050	291	250	2740
MIN	30	49	200	707	587	402	282	203	107	26	20	9.0
CFSM	.38	1.68	3.11	4.60	4.48	11.4	2.21	1.81	1.03	.21	.16	.44
IN.	.44	1.88	3.59	5.31	4.66	13.20	2.47	2.08	1.15	.24	.19	.49

CAL YR 1974 TOTAL 346,690.0 MEAN 950 MAX 26,500 MIN 12 CFSM 2.49 IN 33.76
WTR YR 1975 TOTAL 366,541.2 MEAN 1,004 MAX 34,500 MIN 9.0 CFSM 2.63 IN 35.69

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-13	0430	29.57	40,000	03-30	1000	21.78	22,400
03-24	1830	17.87	15,500				

03409500 Clear Fork near Robbins, Tenn.

LOCATION.--Lat 36°23'18", long 84°37'49", Scott County, on right bank 300 ft (90 m) downstream from Burnt Mill Bridge, 3.3 miles (5.3 km) northwest of Robbins, and at mile 3.7 (6.0 km).

DRAINAGE AREA.--272 sq mi (704 sq km).

PERIOD OF RECORD.--October 1930 to September 1971, July to September 1975. Published as Clear Fork River near Robbins, October 1951 to September 1954.

GAGE.--Water-stage recorder. Datum of gage is 1,081.46 ft (329.629 m) above mean sea level, Sandy Hook datum. Prior to Aug. 10, 1940, nonrecording gage at site 300 ft (90 m) upstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--41 years (1930-71), 465 cfs (13.17 cu m/s), 23.22 in/yr (590 mm/yr).

EXTREMES.--Maximum discharge during period July to September 1975, 7,160 cfs (203 cu m/s) Sept. 24, gage height, 9.39 ft (2.862 m); minimum, 2.5 cfs (0.070 cu m/s) Sept. 5, gage height, 1.00 ft (0.305 m).

Period of record: Maximum discharge, 34,000 cfs (963 cu m/s) Feb. 3, 1939, gage height, 18.5 ft (5.64 m) from floodmarks, site and datum then in use, from rating curve extended above 14,000 cfs (396 cu m/s) on basis of slope-area measurement of peak flow; minimum observed, 0.2 cfs (0.006 cu m/s) Sept. 19-21, 1932; minimum gage height observed, 0.28 ft (0.085 m) Oct. 1-3, 1936, site and datum then in use.

Flood of Mar. 23, 1929, reached a stage of 22.1 ft (6.74 m), former site and datum, from information by local residents. Flood of May 27, 1973, reached a stage of 18.92 ft (5.767 m), present site and datum, from floodmark; discharge, 35,700 cfs (1,010 cu m/s), from rating curve extended as explained above.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1306: 1931(M), 1936-37(M), 1943-44(M). WSP 1436: Drainage Area. WSP 1910: 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, JULY TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										26	9.0	4.6
2										21	6.8	3.7
3										21	6.3	3.1
4										26	22	2.9
5										20	109	2.7
6										18	59	3.7
7										16	51	3.9
8										14	35	3.4
9										13	32	13
10										12	23	12
11										10	18	18
12										8.9	15	26
13										8.9	14	21
14										8.9	16	15
15										8.4	20	11
16										7.8	31	8.3
17										7.8	24	9.1
18										7.2	26	105
19										9.0	23	247
20										13	26	109
21										44	31	87
22										43	23	79
23										32	17	815
24										30	14	4820
25										42	13	1260
26										35	10	572
27										34	8.0	344
28										23	6.3	234
29										16	5.6	170
30										13	6.5	131
31										12	5.4	---
TOTAL										600.9	705.9	9134.4
MEAN										19.4	22.8	304
MAX										44	109	4820
MIN										7.2	5.4	2.7
CFSM										.07	.08	1.12
IN.										.08	.10	1.25

PEAK DISCHARGE (BASE, 6,500 CFS).--Sept. 24 (0545) 7,160 cfs (9.39 ft).

CUMBERLAND RIVER BASIN

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.--33 years, 419 cfs (11.87 cu m/s), 28.17 in/yr (716 mm/yr).

EXTREMES.--Current year: Maximum discharge, 31,700 cfs (898 cu m/s) Mar. 13, gage height, 25.96 ft (7.913 m) from high-water mark; minimum, 11 cfs (0.31 cu m/s) Sept. 5, 6, 16, 17, gage height, 0.87 ft (0.265 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 fair. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	42	3,870	941	560	465	1,080	331	156	33	18	13
2	96	40	1,750	924	2,300	457	941	300	134	30	17	12
3	77	39	1,080	800	1,550	388	810	272	112	28	16	12
4	67	40	790	769	4,200	335	649	321	92	26	16	12
5	60	81	612	640	4,600	314	540	240	94	24	29	12
6	53	137	514	535	2,300	300	449	216	105	22	33	15
7	47	102	626	453	1,500	1,930	422	189	90	22	32	17
8	46	83	1,940	414	1,150	2,390	392	262	79	22	24	14
9	43	76	1,430	733	760	1,260	359	981	67	21	21	14
10	40	70	952	1,240	1,000	1,310	381	580	68	20	18	14
11	37	81	718	4,520	1,600	1,710	331	370	71	19	20	21
12	35	289	571	1,790	4,900	13,700	310	230	150	18	20	16
13	33	359	449	1,170	2,000	22,800	289	180	137	17	17	15
14	31	293	377	842	1,300	9,690	292	166	112	16	17	13
15	32	268	331	664	960	2,620	449	275	83	16	16	12
16	137	233	321	598	800	1,590	282	1,220	68	16	21	12
17	207	227	296	584	900	1,220	272	1,280	62	19	19	13
18	132	993	262	635	740	952	219	2,070	56	20	20	107
19	96	2,250	240	1,630	640	1,140	993	1,150	48	20	26	89
20	79	3,670	233	2,730	560	1,090	800	900	45	105	19	59
21	70	1,810	218	1,520	500	913	659	600	43	38	16	51
22	64	993	201	1,060	450	1,180	540	460	39	25	16	47
23	59	649	183	795	455	1,500	461	331	38	20	17	1,300
24	57	473	175	649	1,100	3,750	392	262	35	20	16	3,730
25	53	395	265	821	890	2,000	2,400	221	33	31	15	892
26	51	335	589	930	700	1,210	1,200	192	35	37	21	442
27	47	286	693	708	620	880	790	169	54	27	16	283
28	46	246	2,790	584	535	621	626	180	51	21	14	195
29	45	213	1,780	490	------	6,000	510	262	43	18	14	142
30	44	518	1,260	460	------	3,900	399	224	37	17	13	105
31	43	------	952	445	------	2,200	------	195	------	16	13	------
TOTAL	2,056	15,291	26,468	31,074	39,570	89,815	18,237	14,629	2,237	784	590	7,679
MEAN	66.3	510	854	1,002	1,413	2,897	608	472	74.6	25.3	19.0	256
MAX	207	3,670	3,870	4,520	4,900	22,800	2,400	2,070	156	105	33	3,730
MIN	31	39	175	414	450	300	219	166	33	16	13	12
CFSM	.33	2.52	4.23	4.96	7.00	14.3	3.01	2.34	.37	.13	.09	1.27
IN.	.38	2.82	4.87	5.72	7.29	16.54	3.36	2.69	.41	.14	.11	1.41

CAL YR 1974 TOTAL 213,710 MEAN 586 MAX 12,700 MIN 10 CFSM 2.90 IN 39.36
WTR YR 1975 TOTAL 248,430 MEAN 681 MAX 22,800 MIN 12 CFSM 3.37 IN 45.75

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
03-13	Unknown	[a]25.96	31,700	09-24	0100	13.39	8,920
03-29	Unknown	Unknown	Unknown				

a From high-water mark

NOTE.--No gage-height record Jan. 29 to Feb. 27, Mar. 21 to Apr. 16, May 20 to July 2.

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.--33 years, 190 cfs (5.381 cu m/s), 24.34 in/yr (618 mm/yr).

EXTREMES.--Current year: Maximum discharge, 21,000 cfs (595 cu m/s) Mar. 12, gage height, 10.59 ft (3.228 m); minimum daily, 11 cfs (0.31 cu m/s) Aug. 28-30, Sept. 9, 10, 16.
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 (0.057 cu m/s) Sept. 17, 1954, gage height, 0.50 ft (0.152 m), result of construction at mill dam upstream.
Flood of March 1929 reached a stage about equal to that of Jan. 29, 1957, from information by local resident. Flood of June 30, 1928, reached a stage 1.5 ft (0.46 m) higher than that of March 1929 at a point 12.5 miles (20.1 km) upstream, from floodmarks.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	25	415	332	216	184	566	178	73	27	15	29
2	58	25	587	351	744	169	415	154	64	25	15	18
3	49	24	359	311	564	148	374	141	57	25	14	15
4	43	26	300	272	1,460	132	289	152	52	24	25	13
5	40	44	245	252	1,550	127	248	128	54	23	29	12
6	37	53	220	220	956	121	217	114	58	23	25	12
7	35	36	211	199	633	453	191	105	53	24	25	12
8	34	31	239	171	448	539	173	132	45	24	20	13
9	33	28	289	221	358	361	160	485	41	22	17	12
10	31	25	239	555	286	524	157	272	46	22	17	11
11	29	34	211	1,870	537	651	144	196	64	20	15	11
12	28	57	180	633	2,170	9,890	128	157	111	19	14	12
13	27	82	157	414	860	13,400	118	132	108	19	13	14
14	27	66	146	315	507	4,350	118	111	92	18	12	13
15	30	61	132	262	374	1,200	188	196	70	18	14	12
16	51	57	120	243	316	720	173	508	60	17	14	11
17	53	53	108	239	312	668	164	524	52	17	16	13
18	39	99	101	237	276	532	155	555	45	17	19	60
19	35	272	96	937	247	532	530	357	40	18	28	61
20	33	613	91	1,270	214	488	471	251	37	22	26	49
21	31	778	88	606	189	412	329	191	35	24	19	51
22	30	293	85	413	171	525	255	153	33	19	16	41
23	29	229	80	328	171	537	214	127	31	17	14	488
24	29	196	79	277	464	1,660	199	109	30	29	13	1,280
25	28	171	76	299	358	1,030	1,060	95	28	52	13	265
26	28	151	91	306	269	557	630	88	29	32	12	149
27	27	136	111	259	226	407	405	77	50	22	12	101
28	27	120	289	229	200	331	315	86	41	19	11	74
29	26	111	483	211	------	2,790	254	123	35	17	11	60
30	26	205	436	222	------	2,380	209	108	30	16	11	45
31	25	------	359	206	------	933	------	81	------	18	46	------
TOTAL	1,088	4,101	6,623	12,660	15,076	46,751	8,849	6,086	1,564	689	551	2,957
MEAN	35.1	137	214	408	538	1,508	295	196	52.1	22.2	17.8	98.6
MAX	70	778	587	1,870	2,170	13,400	1,060	555	111	52	46	1,280
MIN	25	24	76	171	171	121	118	77	28	16	11	11
CFSM	.33	1.29	2.02	3.85	5.08	14.2	2.78	1.85	.49	.21	.17	.93
IN.	.38	1.44	2.32	4.44	5.29	16.41	3.11	2.14	.55	.24	.19	1.04

CAL YR 1974 TOTAL 88,097.5 MEAN 241 MAX 7,110 MIN 9.0 CFSM 2.27 IN 30.92
WTR YR 1975 TOTAL 106,995.0 MEAN 293 MAX 13,400 MIN 11 CFSM 2.76 IN 37.59

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
03-12	1715	10.59	21,000	03-29	1215	6.61	5,080

03417500 Cumberland River at Celina, Tenn.

LOCATION.--Lat 36°33'15", long 85°30'52", Clay County, on right bank at State Highway 52 bridge, 0.5 mile (0.8 km) northwest of courthouse in Celina, 600 ft (183 m) downstream from Obey River and at mile 380.9 (612.7 km).

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.

AVERAGE DISCHARGE.--53 years, 11,680 cfs (330.8 cu m/s), 21.71 in/yr (551 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum recorded discharge, 62,900 cfs (1,780 cu m/s) Mar. 13, gage height, 38.15 ft (11.628 m); minimum daily, 167 cfs (4.73 cu m/s) Aug. 3, minimum recorded gage height, 11.00 ft (3.353 m) Nov. 23.
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, 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 except those for days when discharge is below about 3,000 cfs (85.0 cu m/s), which are fair due to indefinite stage-fall-discharge relation. Records of periodic water temperatures for the current year are published in Part 2 of this report. Flow regulated by Lake Cumberland and Dale Hollow Lake (see p. 69).

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,800	5,380	11,900	14,000	26,500	20,600	50,100	42,500	10,300	3,340	3,000	701
2	10,500	4,910	12,800	22,300	30,500	21,900	49,300	41,700	8,350	4,300	460	702
3	8,240	3,760	11,800	19,500	31,700	21,500	50,100	37,500	12,800	4,680	167	4,860
4	5,850	3,350	9,420	15,500	34,200	19,800	49,600	32,000	15,800	6,850	1,350	6,210
5	3,900	4,600	9,690	15,200	38,400	14,600	49,200	31,400	18,300	1,880	2,160	4,400
6	2,900	5,050	11,100	16,200	38,900	17,500	49,000	31,300	19,700	1,280	1,630	1,330
7	4,810	6,260	12,200	16,500	37,100	16,500	48,700	29,100	17,500	2,120	276	1,370
8	11,600	5,500	13,800	13,900	37,000	17,700	48,500	22,900	13,800	7,420	549	2,020
9	13,800	3,050	16,900	14,600	37,500	19,000	48,500	22,600	11,400	8,670	1,110	3,820
10	12,500	5,580	16,000	19,400	35,300	16,500	48,600	22,600	11,700	9,480	207	4,960
11	13,800	3,120	12,500	26,200	33,900	31,000	47,800	20,000	9,970	7,930	1,690	4,060
12	12,400	6,970	10,700	25,100	36,100	55,000	46,500	16,900	8,790	5,440	3,710	3,870
13	5,210	10,400	11,300	28,700	35,900	61,900	46,100	16,900	4,920	2,890	4,670	1,180
14	2,920	9,010	13,000	29,700	34,300	57,300	45,700	14,300	3,320	951	4,300	933
15	8,500	7,710	12,000	28,200	33,500	51,800	45,200	15,200	2,230	3,310	4,010	1,230
16	11,600	7,620	13,900	22,500	33,200	48,600	44,600	17,600	4,440	6,350	839	1,530
17	9,320	4,810	14,600	19,400	33,600	50,000	44,400	14,300	10,000	8,550	318	1,880
18	7,600	8,370	15,200	18,600	32,900	50,600	44,700	9,500	15,100	7,370	2,350	1,020
19	6,530	11,300	14,200	20,000	26,900	51,400	46,700	7,880	16,300	5,170	2,630	1,660
20	6,850	12,200	11,600	27,000	20,300	51,400	47,200	12,300	13,000	2,720	2,800	1,390
21	11,200	6,250	13,100	30,900	17,000	50,900	45,000	15,600	11,400	625	2,440	850
22	12,200	4,540	16,800	32,400	19,800	50,700	43,500	17,300	7,520	1,350	4,370	611
23	8,850	5,380	15,000	30,000	21,000	50,900	43,200	19,700	3,410	1,380	2,110	3,230
24	8,660	8,110	12,100	28,800	23,800	52,200	42,900	21,800	5,310	2,810	573	16,000
25	6,750	10,900	10,300	28,800	26,700	52,100	48,500	18,800	9,950	3,620	1,200	6,930
26	5,170	16,800	13,600	27,300	22,500	50,600	52,000	10,700	10,000	4,360	3,070	4,990
27	2,320	17,200	14,900	24,600	22,300	49,900	49,500	10,800	6,980	1,270	4,520	4,370
28	3,390	15,100	8,860	23,200	21,200	50,000	46,600	14,900	4,900	2,870	4,240	782
29	3,920	10,200	7,180	24,800	------	55,200	44,500	16,000	2,060	6,860	3,900	1,380
30	5,310	6,010	6,180	25,300	------	55,600	41,000	16,500	817	4,800	3,150	2,730
31	6,680	------	7,290	25,600	------	52,600	------	15,600	------	2,340	980	------
TOTAL	241,080	229,440	379,920	714,200	842,000	1,265.3M	1,407.2M	636,180	290,067	132,986	68,779	90,999
MEAN	7,777	7,648	12,260	23,040	30,070	40,820	46,910	20,520	9,669	4,290	2,219	3,033
MAX	13,800	17,200	16,900	32,400	38,900	61,900	52,000	42,500	19,700	9,480	4,670	16,000
MIN	2,320	3,050	6,180	13,900	17,000	14,600	41,000	7,880	817	625	167	611

CAL YR 1974 TOTAL 5,920,310.00 MEAN 16,220 MAX 58,000 MIN Unknown MEAN† 15,610 CFSM† 2.14 IN.† 29.00
WTR YR 1975 TOTAL 6,298,151.00 MEAN 17,260 MAX 61,900 MIN 167 MEAN† 17,080 CFSM† 2.34 IN.† 31.73

† 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 July 1975 (discontinued). 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.--43 years (1931-74), 109 cfs (3.087 cu m/s), 18.81 in/yr (478 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,580 cfs (271 cu m/s) Mar. 13, gage height, 12.83 ft (3.911 m), from high-water mark; minimum daily, 5.8 cfs (0.16 cu m/s) Aug. 14.
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 good except those for periods of no gage-height record, which are fair. Discharge affected occasionally by change in storage in a water-supply reservoir on Carr Creek since 1964. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1974 TO JULY 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	20	685	212	101	103	322	69	38	15		
2	59	20	307	203	226	105	248	63	35	16		
3	52	20	239	197	223	87	243	62	32	14		
4	47	22	207	175	792	80	190	61	28	15		
5	43	38	183	147	812	76	160	62	29	13		
6	40	29	161	133	462	72	140	63	31	13		
7	38	25	170	117	311	675	124	65	27	13		
8	37	23	216	134	261	476	111	159	25	12		
9	35	22	200	192	233	263	103	220	22	12		
10	33	20	172	381	203	386	95	118	25	21		
11	31	37	150	990	385	367	84	93	33	13		
12	29	64	130	356	1,010	8,000	74	81	53	12		
13	28	47	107	262	472	5,100	68	72	51	12		
14	26	44	92	224	302	4,150	75	65	43	12		
15	31	42	89	196	240	981	92	146	37	10		
16	61	38	87	182	203	587	72	304	32	22		
17	40	41	76	171	205	404	67	194	29	21		
18	34	328	68	172	180	312	64	184	25	16		
19	31	620	66	264	158	317	152	144	23	13		
20	29	949	62	397	136	264	152	116	21	10		
21	27	364	60	276	127	229	109	88	19	20		
22	26	237	58	238	123	340	93	72	18	13		
23	25	182	55	208	154	271	84	61	17	9.0		
24	25	143	54	185	180	947	79	53	16	12		
25	24	131	68	205	148	554	170	48	15	15		
26	24	103	70	178	118	292	152	45	16	17		
27	23	88	111	148	106	235	110	41	29	14		
28	22	76	333	133	100	198	95	44	24	13		
29	22	66	270	124	------	1,630	84	65	19	11		
30	21	166	228	112	------	1,330	79	53	17	10		
31	21	------	197	103	------	547	------	43	------	8.0		------
TOTAL	1,052	4,005	4,971	7,015	7,971	29,378	3,691	2,954	829	427.0		
MEAN	33.9	134	160	226	285	948	123	95.3	27.6	13.8		
MAX	68	949	685	990	1,010	8,000	322	304	53	22		
MIN	21	20	54	103	100	72	64	41	15	8.0		
CFSM	.43	1.70	2.03	2.87	3.62	12.0	1.56	1.21	.35	.18		
IN.	.50	1.89	2.35	3.32	3.77	13.89	1.74	1.40	.39	.20		

CAL YR 1974 TOTAL 59,278.1 MEAN 162 MAX 4,010 MIN 8.0 CFSM 2.06 IN 28.02

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	2100	4.67	1,330	03-07	1445	4.93	1,310
01-11	0130	5.10	1,600	03-13	Unknown	[a]12.83	9,580
02-04	1745	4.79	1,400	03-24	1200	4.86	1,450
02-12	0745	4.63	1,310	03-29	0915	6.09	2,350

a From high-water mark.

NOTE.--No gage-height record Mar. 12-14, May 21 to July 1, July 18-31.

03418070 Roaring River above Gainesboro, Tenn.

LOCATION.--Lat 36°21'04", long 85°32'45", Jackson County, near left bank of downstream end of county road bridge, 1.1 miles (1.8 km) upstream from Blackburn Fork, 6.3 miles (10.1 km) east of Gainesboro, and at mile 9.1 (14.6 km).

DRAINAGE AREA.--210 sq mi (544 sq km), includes 34 sq mi (88 sq km) without surface drainage.

PERIOD OF RECORD.--October 1974 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 520.31 ft (158.590 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 22,400 cfs (634 cu m/s) Mar. 12, gage height, 21.83 ft (6.654 m) from high water mark; no flow for long periods.

REMARKS.--Records good except those below 5.0 cfs (0.14 cu m/s), which are poor. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	0	1,890	539	186	205	1,060	185	132	0		0
2	90	0	1,040	571	579	232	755	147	77	0		0
3	67	0	690	518	593	194	933	129	48	0		0
4	54	0	545	487	2,780	189	602	136	37	0		0
5	45	44	459	407	2,480	186	484	109	37	3.4		0
6	36	21	391	348	1,370	172	410	90	41	.04		0
7	30	8.8	415	296	923	1,750	366	95	30	0		0
8	26	3.0	664	291	674	1,540	316	246	23	0		0
9	21	0	600	564	531	801	277	854	17	0		0
10	16	0	462	1,010	414	1,200	261	333	19	1.5		0
11	13	36	383	3,080	788	1,300	228	215	25	.29		0
12	10	146	320	1,080	2,880	11,300	202	163	305	0		0
13	8.8	97	261	678	1,290	15,800	179	131	228	0		0
14	6.5	64	223	501	791	9,380	181	102	143	0		0
15	9.5	55	206	405	586	3,380	256	277	97	0		0
16	81	45	213	366	496	2,060	326	1,050	54	0		0
17	50	46	191	340	616	1,490	179	565	27	.71		0
18	30	1,270	173	348	526	1,040	161	480	19	0		0
19	20	2,080	167	726	444	1,140	440	369	14	0		0
20	14	2,990	157	1,270	361	970	554	283	10	0		0
21	11	1,180	145	807	297	809	351	213	9.8	0		0
22	9.1	662	134	587	248	1,180	269	161	7.7	0		0
23	7.7	442	124	455	235	1,090	228	127	5.9	0		0
24	7.5	326	115	378	333	3,110	208	104	4.3	0		0
25	6.3	285	140	445	280	2,110	529	77	3.3	21		2,700
26	3.0	234	212	413	218	1,080	539	61	2.3	.22		76
27	1.0	202	233	315	189	794	342	70	4.3	0		210
28	0	181	1,160	262	197	640	274	50	3.8	0		110
29	0	160	964	229	------	5,720	233	157	.10	0		49
30	0	295	698	216	------	4,950	206	378	0	0		20
31	0	------	550	192	------	1,900	------	167	------	0		------
TOTAL	796.4	10,872.8	13,925	18,124	21,305	77,712	11,349	7,524	1,424.50	27.16	0	3,165
MEAN	25.7	362	449	585	761	2,507	378	243	47.5	.88	0	106
MAX	123	2,990	1,890	3,080	2,880	15,800	1,060	1,050	305	21	0	2,700
MIN	0	0	115	192	186	172	161	50	0	0	0	0
CFSM	.12	1.72	2.14	2.79	3.62	11.9	1.80	1.16	.23	.004	0	.50
IN.	.14	1.93	2.47	3.21	3.77	13.77	2.01	1.33	.25	.004	0	.56

WTR YR 1975 TOTAL 166,224.86 MEAN 455 MAX 15,800 MIN 0 CFSM 2.17 IN 29.45

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-11	0030	11.43	5,470	03-24	1200	11.04	5,050
02-04	1515	11.48	5,530	03-29	1015	14.46	9,080
03-12	Unknown	[a]21.83	22,400	09-24	Unknown	Unknown	Unknown

a From floodmark.

NOTE.--No gage-height record Aug. 14 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.--51 years, 1,168 cfs (33.08 cu m/s), 24.78 in/yr (629 mm/yr).

EXTREMES.--Current year: Maximum discharge, 42,200 cfs (1,200 cu m/s) Mar. 14, gage height, 31.24 ft (9.522 m); minimum, 97 cfs (2.75 cu m/s) Oct. 15, gage height, 1.15 ft (0.351 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 good. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	126	2,440	3,060	1,300	1,270	4,540	893	689	235	161	128
2	148	126	2,700	2,680	2,890	1,410	2,970	815	589	222	156	119
3	133	126	2,000	2,350	3,290	1,280	2,410	743	512	225	151	112
4	128	131	1,550	2,860	4,430	1,110	2,010	753	447	350	156	108
5	126	167	1,310	2,610	5,880	1,030	1,720	764	402	366	231	103
6	124	222	1,150	2,220	3,970	960	1,510	713	366	261	281	103
7	121	320	1,190	1,880	3,010	1,050	1,340	1,410	350	235	213	106
8	119	281	2,380	1,670	2,360	1,510	1,220	2,640	320	213	187	108
9	117	231	2,600	2,230	1,990	1,250	1,120	2,280	324	201	170	103
10	115	204	2,050	2,460	1,710	1,250	1,070	1,850	410	204	178	101
11	112	210	1,620	10,300	1,560	1,540	1,010	1,410	834	201	170	110
12	108	238	1,360	6,400	2,140	4,580	924	1,130	2,500	187	156	124
13	103	324	1,170	3,600	1,990	32,400	849	954	1,370	187	146	119
14	103	418	1,000	2,600	1,690	37,400	795	829	863	184	141	110
15	112	382	883	2,100	1,520	16,600	795	839	679	178	148	106
16	190	343	834	1,990	1,490	6,100	789	1,850	636	167	164	106
17	244	339	795	2,040	2,920	3,530	764	1,700	584	167	173	119
18	347	839	723	1,920	2,970	2,750	694	1,830	521	161	248	141
19	281	1,660	660	2,960	2,730	2,710	1,580	1,780	439	251	210	138
20	222	4,020	617	6,690	2,210	3,240	2,710	1,410	603	512	161	133
21	190	3,730	584	4,440	1,840	2,720	1,990	1,110	402	306	146	146
22	167	2,260	548	3,060	1,560	2,580	1,540	903	347	257	138	173
23	159	1,530	508	2,370	1,430	2,830	1,290	758	306	222	133	1,340
24	151	1,150	703	1,970	2,410	7,780	1,140	660	278	313	128	9,050
25	146	939	13,200	2,260	2,680	8,940	1,100	575	264	713	126	4,090
26	141	829	10,600	3,040	2,010	4,390	1,190	617	254	347	124	1,900
27	138	728	5,440	2,460	1,610	2,840	1,060	1,190	251	254	126	1,290
28	133	645	10,400	1,970	1,410	2,240	939	873	281	222	119	996
29	131	579	7,310	1,660	------	4,870	863	1,170	320	198	117	805
30	128	674	5,260	1,550	------	15,200	819	1,320	254	181	115	669
31	126	------	3,830	1,430	------	8,990	------	789	------	170	133	------
TOTAL	4,724	23,771	87,415	90,830	67,000	186,350	42,751	36,558	16,395	7,890	5,006	22,756
MEAN	152	792	2,820	2,930	2,393	6,011	1,425	1,179	547	255	161	759
MAX	347	4,020	13,200	10,300	5,880	37,400	4,540	2,640	2,500	713	281	9,050
MIN	103	126	508	1,430	1,300	960	694	575	251	161	115	101
CFSM	.24	1.24	4.41	4.58	3.74	9.39	2.23	1.84	.85	.40	.25	1.19
IN.	.27	1.38	5.08	5.28	3.89	10.83	2.48	2.12	.95	.46	.29	1.32

CAL YR 1974 TOTAL 593,506 MEAN 1,626 MAX 36,100 MIN 103 CFSM 2.54 IN 34.50
WTR YR 1975 TOTAL 591,446 MEAN 1,620 MAX 37,400 MIN 101 CFSM 2.53 IN 34.38

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1930	19.41	18,100	03-14	0630	31.24	42,200
12-28	1400	14.90	11,800	03-24	2400	16.24	13,500
01-11	1330	15.62	12,700	03-30	1400	18.87	17,300

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.--61 years (1914-75), 3,216 cfs (91.08 cu m/s), 26.03 in/yr (661 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 116,000 cfs (3,290 cu m/s) Mar. 13, gage height, 31.26 ft (9.528 m), from dross line in well; minimum, 27 cfs (0.76 cu m/s) Nov. 1, 2, 5, gage height, 1.94 ft (0.591 m); minimum daily, 28 cfs (0.79 cu m/s) Nov. 3.
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 fair. Flow regulated by Great Falls Lake beginning Dec. 8, 1916 (see sta. 03422000). Records of periodic water temperatures for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,200	619	3,390	7,770	3,190	3,530	11,500	3,050	1,710	548	57	60
2	1,300	213	3,640	6,630	7,750	3,490	8,450	3,030	1,700	528	55	223
3	1,350	28	5,550	6,250	10,600	3,430	6,130	3,000	1,470	745	55	330
4	1,420	267	4,160	7,080	15,600	3,260	5,000	2,960	1,040	47	419	218
5	535	265	3,780	6,820	20,400	3,240	4,540	2,920	758	46	270	272
6	60	265	3,520	5,120	12,800	3,220	3,850	1,250	780	46	515	59
7	804	315	3,500	4,810	8,860	3,210	3,550	1,920	736	371	313	59
8	660	478	8,080	4,010	6,450	3,190	3,290	2,910	745	480	307	278
9	676	267	8,000	5,430	4,900	3,010	3,120	2,950	743	477	584	224
10	639	31	5,270	8,090	4,210	4,250	3,100	2,950	662	416	60	201
11	608	560	4,710	28,800	3,970	4,890	3,120	1,840	1,590	411	334	214
12	644	802	3,600	15,700	8,800	24,000	3,110	2,310	1,880	51	430	560
13	51	698	3,500	9,410	7,170	101,000	3,100	2,410	2,900	52	312	558
14	695	738	3,500	6,270	4,870	90,400	3,090	1,730	2,900	264	312	59
15	709	788	3,470	4,940	4,380	37,100	3,090	1,960	2,880	320	354	211
16	333	720	3,440	4,390	3,880	15,600	3,090	2,960	2,860	323	321	215
17	1,580	180	3,400	4,510	6,680	10,500	3,060	2,990	1,950	318	60	217
18	514	578	3,400	4,490	7,700	7,750	3,040	3,040	1,160	318	320	387
19	1,410	1,910	3,390	9,250	6,740	8,820	3,010	3,080	1,290	216	475	385
20	57	3,010	3,350	18,700	5,550	9,570	3,070	3,100	1,270	54	375	381
21	650	7,450	3,330	11,600	4,580	7,850	3,100	3,100	1,090	318	427	58
22	646	4,700	3,010	7,560	3,900	8,030	3,110	3,090	42	376	421	1,840
23	693	3,440	2,880	5,630	3,720	9,610	3,100	3,070	999	572	378	4,090
24	747	3,240	1,480	4,730	8,670	25,800	3,080	3,040	557	468	58	21,300
25	729	3,260	17,200	6,050	6,490	23,100	3,090	2,990	543	890	272	7,960
26	30	3,290	21,600	7,850	4,870	11,200	3,110	2,450	529	1,070	221	4,090
27	30	3,300	14,000	5,440	3,880	7,240	3,100	2,440	559	775	174	3,230
28	323	3,270	28,400	4,520	3,710	5,810	3,090	2,090	579	990	167	3,170
29	323	3,300	18,700	3,800	------	16,900	3,090	1,450	46	57	167	3,150
30	634	3,060	13,700	3,460	------	43,000	3,080	1,890	428	57	166	3,130
31	578	------	10,000	3,400	------	22,200	------	2,650	------	76	60	------
TOTAL	20,628	51,042	218,950	232,510	194,320	524,200	114,260	80,620	36,396	11,680	8,439	57,129
MEAN	665	1,701	7,063	7,500	6,940	16,910	3,809	2,601	1,213	377	272	1,904
MAX	1,580	7,450	28,400	28,800	20,400	101,000	11,500	3,100	2,900	1,070	584	21,300
MIN	30	28	1,480	3,400	3,190	3,010	3,010	1,250	42	46	55	58
(†)	-10,700	+5,600	+10,100	+300	+100	-100	-9,400	-6,300	+4,000	+5,400	+900	+500
MEAN‡	320	1,888	7,389	7,510	6,944	16,910	3,495	2,397	1,347	551	301	1,921
CFSM‡	.19	1.13	4.40	4.48	4.14	10.08	2.08	1.43	.80	.33	.18	1.14
IN.‡	.22	1.26	5.08	5.16	4.31	11.62	2.32	1.65	.90	.38	.21	1.28

CAL YR 1974 TOTAL 1,458,676 MEAN 3,996 MAX 85,200 MIN 28 MEAN‡ 3,997 CFSM‡ 2.38 IN.‡ 32.33
WTR YR 1975 TOTAL 1,550,174 MEAN 4,247 MAX 101,000 MIN 28 MEAN‡ 4,248 CFSM‡ 2.53 IN.‡ 34.37

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

03425000 Cumberland River at Carthage, Tenn.
(National stream-quality accounting network station)

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.--53 years, 17,550 cfs (497.0 cu m/s) 22.29 in/yr (566 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 143,000 cfs (4,050 cu m/s) Mar. 13, 14; maximum gage height, 46.95 ft (14.310 m) Mar. 14; minimum daily discharge, 1,690 cfs (47.9 cu m/s) Sept. 22; minimum gage height recorded, 6.02 ft (1.835 m) Oct. 4.
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. 69). Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11400	8190	17900	28000	39700	31700	82100	45400	17100	6670	3450	2700
2	11700	5820	24900	33900	45300	25800	83100	45200	11800	6810	2830	3230
3	10900	4470	17300	39200	47500	32700	82800	43700	14800	6600	2860	5210
4	6800	4280	15700	29100	57800	31300	81900	34800	15800	6380	2640	6660
5	5210	5780	16500	23200	69600	23200	81600	30900	20200	3860	3110	9860
6	4940	5910	17700	26700	62500	22200	80900	37800	24900	3100	4290	6250
7	5060	7450	19400	28100	57400	33000	80000	35300	27000	3960	3900	2830
8	11600	8270	23700	27200	53900	30000	78700	26500	15000	6840	2290	3150
9	16800	7520	24300	29800	54500	30300	77500	30000	10900	8860	3840	6370
10	14800	5810	22400	31900	55300	27000	75600	24500	11300	8560	2270	6110
11	18100	5840	19300	52000	52200	27800	73000	25800	11800	8400	2610	6990
12	9820	10300	17400	51300	58200	66200	70200	18600	12200	5950	5520	6160
13	6810	12600	21500	50400	59600	132000	67400	17600	9770	3830	6330	2960
14	6150	11300	19200	46900	54700	131000	61300	14300	7880	2850	4140	2390
15	11400	12700	21400	49800	51000	89100	59900	16200	4430	4240	7520	2450
16	10300	13000	20500	41900	49900	80700	58800	22100	3340	7190	4180	2470
17	10000	5850	19400	32300	50400	78700	56800	21200	12100	5730	3830	3500
18	10700	19300	20000	28600	49800	78900	54800	12900	15800	5760	3920	3440
19	9470	29100	20100	33800	43600	79400	54400	8700	19700	5210	4270	3500
20	4810	36500	19300	52200	36600	78800	57800	17600	15600	5420	4390	3210
21	12600	17400	22900	51200	26900	78600	55000	21400	13900	3180	6200	2100
22	12600	12600	21700	46800	30200	78900	49700	21200	9290	4490	4670	1690
23	11400	12600	20700	49800	31900	78400	52900	20500	5180	4000	4150	7320
24	11500	11400	21500	49700	39500	76000	50300	23900	6840	4970	3140	30400
25	11700	15600	23300	42400	40300	74500	53000	28400	9970	5100	4040	15700
26	7650	18400	24200	37900	38900	74000	61600	14100	9670	4940	5800	6500
27	3070	27600	24500	40000	36600	75300	55700	10500	7520	3210	6140	9410
28	4970	22100	25900	40800	38300	76400	51700	19800	6610	5220	6430	4530
29	7680	17500	22600	35100	---	85300	50000	20100	4220	7720	5510	2030
30	6970	10600	23100	37500	---	90500	45400	19500	3630	8750	5740	3280
31	7880	---	26300	39200	---	83700	---	20500	---	6140	4210	---
TOTAL	294790	385790	654600	1206700	1332100	2001400	1943900	749000	358250	173940	134220	172400
MEAN	9509	12860	21120	38930	47580	64560	64800	24160	11940	5611	4330	5747
MAX	18100	36500	26300	52200	69600	132000	83100	45400	27000	8860	7520	30400
MIN	3070	4280	15700	23200	26900	22200	45400	8700	3340	2850	2270	1690

CAL YR 1974 TOTAL 9,062,201 MEAN 24,830 MAX 115,000 MIN 925 MEAN† 24,140 CFSM† 2.26 IN.† 30.65
WTR YR 1975 TOTAL 9,407,090 MEAN 25,770 MAX 132,000 MIN 1,690 MEAN† 25,670 CFSM† 2.40 IN.† 32.60

† 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 (341.3 km).

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.--39 years, 18,980 cfs (537.5 cu m/s), 21.96 in/yr (558 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge 159,000 cfs (4,500 cu m/s) Mar. 13; maximum gage height 48.13 ft (14.670 m) Mar. 14; minimum daily discharge, 2,130 cfs (60.3 cu m/s) June 30; minimum gage height, 4.60 ft (1.402 m) Oct. 26.
Period of record: Maximum discharge, 173,000 cfs (4,900 cu m/s) Jan. 29, 1937; maximum gage height, 48.13 ft (14.670 m) Mar. 14, 1975; 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. 69). Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,000	8,180	16,200	24,600	40,400	38,900	98,600	43,900	21,700	2,850	3,860	3,900
2	21,600	6,650	32,700	27,600	39,800	27,400	94,900	45,800	15,400	6,140	3,510	3,060
3	17,600	4,500	28,000	35,400	45,400	31,400	89,500	47,600	14,600	5,930	2,700	6,250
4	11,700	4,200	18,300	38,200	65,200	39,400	85,100	43,400	16,300	6,560	2,240	7,610
5	4,790	5,700	21,800	32,500	78,000	25,500	83,200	38,700	19,400	3,520	4,910	9,820
6	4,730	9,420	19,000	26,300	74,200	19,100	82,500	31,400	21,300	2,220	5,590	7,290
7	5,200	7,800	22,500	31,000	66,300	30,800	82,200	30,300	28,100	3,110	4,640	3,930
8	5,740	6,400	21,400	31,900	57,500	37,800	80,000	32,600	23,000	7,270	3,250	6,810
9	10,100	7,100	31,700	31,900	54,100	38,900	78,700	46,600	14,300	8,660	3,540	6,620
10	11,800	8,800	26,700	44,100	52,500	39,800	78,500	33,000	14,600	8,540	2,940	8,010
11	17,000	8,400	23,500	57,900	58,400	30,000	73,700	25,600	10,700	8,400	3,130	7,420
12	14,800	11,200	20,700	57,400	62,300	85,500	69,600	21,800	13,600	6,750	4,850	5,440
13	7,600	14,000	22,100	53,900	62,100	139,000	69,800	23,300	14,100	3,500	6,410	2,560
14	7,200	18,600	22,100	49,800	59,400	146,000	64,200	16,200	8,450	2,900	5,610	2,280
15	12,100	9,000	23,900	45,100	52,600	131,000	59,400	26,200	4,480	2,210	5,860	3,480
16	10,800	14,500	26,600	46,800	52,200	113,000	53,300	44,800	4,060	6,420	4,410	2,820
17	13,400	11,800	23,400	43,700	52,200	107,000	55,800	37,800	10,900	4,900	2,180	2,260
18	8,800	27,500	20,600	30,700	50,600	96,300	56,000	20,500	16,900	6,890	3,990	5,690
19	5,000	41,500	19,700	32,100	45,200	80,800	56,000	15,500	18,800	5,350	6,250	3,570
20	5,540	60,100	20,800	53,600	41,600	81,500	55,800	22,700	16,300	4,780	6,070	6,460
21	9,730	42,700	22,100	54,100	34,500	82,500	54,000	28,300	10,400	4,280	5,320	4,340
22	10,300	11,000	24,400	52,400	37,900	83,500	51,300	26,800	10,500	3,000	4,970	2,210
23	13,000	11,500	21,600	49,400	44,000	86,500	49,400	24,000	6,990	8,690	7,380	10,600
24	12,300	15,600	23,600	50,900	44,100	85,900	48,500	25,400	5,780	3,510	4,620	31,600
25	12,200	16,900	23,000	45,600	42,800	84,500	51,000	28,400	10,500	6,300	7,070	26,500
26	7,200	20,500	25,400	43,100	43,100	83,000	59,600	31,500	10,400	4,620	7,900	14,500
27	4,900	28,300	24,100	41,600	40,600	78,800	60,600	18,700	9,270	5,460	5,940	7,100
28	5,900	26,200	36,700	41,500	36,500	77,200	51,300	17,800	8,010	3,850	7,310	3,780
29	7,430	21,400	33,200	40,900	------	90,500	51,400	18,700	5,110	8,830	7,740	4,220
30	7,300	16,700	27,600	41,700	------	100,000	50,500	19,300	2,130	11,100	6,140	6,210
31	7,220	------	34,300	42,100	------	98,700	------	21,500	------	8,690	4,380	------
TOTAL	314,180	496,150	757,700	1,297.8M	1,433.5M	2,290.2M	1,994.4M	908,100	386,080	175,230	154,710	216,340
MEAN	10,130	16,540	24,440	41,860	51,200	73,880	66,480	29,290	12,870	5,653	4,991	7,211
MAX	21,800	60,100	36,700	57,900	78,000	146,000	98,600	47,600	28,100	11,100	7,900	31,600
MIN	4,730	4,200	16,200	24,600	34,500	19,100	48,500	15,500	2,130	2,210	2,180	2,210

CAL YR 1974 TOTAL 10,047,910 MEAN 27,530 MAX 123,000 MIN 1,300
WTR YR 1975 TOTAL 10,424,390 MEAN 28,560 MAX 146,000 MIN 2,130

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.--13 years, 70.9 cfs (2.008 cu m/s), 24.62 in/yr (625 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,120 cfs (258 cu m/s) Mar. 12, gage height, 15.30 ft (4.663 m), from floodmarks; minimum daily, 7.2 cfs (0.20 cu m/s) Sept. 3.
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 (85.0 cu m/s) 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 (0.076 cu m/s) Oct. 30, 1963.
Maximum stage since at least 1902, that of Mar. 15, 1973.

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

REVISIONS (WATER YEARS).--WSP 1910: Drainage area. WSP 2110: 1963, 1964(M), 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	13	168	165	77	90	193	33	21	11	11	8.0
2	23	13	120	135	265	92	163	30	18	12	10	7.8
3	21	13	101	128	250	75	138	30	17	12	10	7.2
4	20	15	94	114	791	71	110	30	17	13	12	8.4
5	19	29	82	97	449	66	97	28	19	12	13	11
6	18	19	72	89	250	62	89	29	21	12	13	13
7	17	16	193	77	168	97	80	34	19	12	11	14
8	17	15	215	133	128	84	73	30	17	12	10	11
9	17	15	148	160	106	72	68	30	21	11	14	10
10	16	14	108	731	90	178	63	26	32	11	18	21
11	15	28	89	535	105	143	61	25	63	12	14	22
12	15	41	74	220	492	3,700	54	24	138	11	11	17
13	15	28	60	148	240	3,300	50	23	45	10	10	13
14	15	22	52	114	150	660	54	22	28	10	9.9	11
15	19	20	50	101	130	300	58	36	25	10	10	11
16	34	19	47	97	110	230	50	43	22	9.6	11	11
17	22	28	42	94	275	172	48	32	19	9.1	28	12
18	19	250	38	92	172	150	47	30	17	11	40	18
19	16	539	35	220	158	130	122	26	16	84	22	14
20	15	455	33	240	122	120	93	24	16	36	14	58
21	15	188	30	165	97	110	73	22	15	18	12	27
22	15	108	24	122	89	235	62	21	15	14	11	21
23	14	77	23	105	103	193	58	21	14	13	11	554
24	15	62	155	96	108	812	55	19	14	18	11	264
25	15	54	1,070	105	89	315	73	19	14	16	9.6	86
26	14	45	238	89	75	193	59	20	14	13	8.8	48
27	14	40	633	77	72	145	48	22	14	12	10	34
28	14	35	584	71	69	118	41	19	13	12	11	26
29	14	30	305	71	------	1,440	38	21	13	11	9.0	23
30	14	74	215	68	------	724	36	21	12	11	9.6	20
31	13	------	160	68	------	288	------	20	------	11	9.2	------
TOTAL	539	2,305	5,258	4,727	5,230	14,365	2,254	810	729	469.7	404.1	1,401.4
MEAN	17.4	76.8	170	152	187	463	75.1	26.1	24.3	15.2	13.0	46.7
MAX	34	539	1,070	731	791	3,700	193	43	138	84	40	554
MIN	13	13	23	68	69	62	36	19	12	9.1	8.8	7.2
CFSM	.45	1.96	4.35	3.89	4.78	11.8	1.92	.67	.62	.39	.33	1.19
IN.	.51	2.19	5.00	4.50	4.98	13.67	2.14	.77	.69	.45	.38	1.33

CAL YR 1974 TOTAL 33,423.7 MEAN 91.6 MAX 1,710 MIN 9.1 CFSM 2.34 IN 31.80
WTR YR 1975 TOTAL 38,492.2 MEAN 105 MAX 3,700 MIN 7.2 CFSM 2.69 IN 36.62

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-25	0130	11.79	3,620	03-12	Unknown	[a]15.30	9,120
01-10	1930	9.21	2,220	03-24	0645	9.79	2,460
02-12	0030	9.96	2,530	03-29	0700	13.28	5,240

[a] From floodmarks.

NOTE.--No gage-height record Mar. 12-17.

03427500 East Fork Stones River near Lascassas, Tenn.

LOCATION.--Lat 35°55'06", long 86°20'02", Rutherford County, on left bank, 100 ft (30 m) upstream from 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). Prior to Oct. 1, 1973, 100 ft (30 m) downstream at same datum.

AVERAGE DISCHARGE.--20 years (1950-58, 1963-75), 467 cfs (13.23 cu m/s), 24.21 in/yr (615 mm/yr).

EXTREMES.--Current year: Maximum discharge, 41,200 cfs (1,170 cu m/s) Mar. 13, gage height, 39.48 ft (12.034 m); minimum, 11 cfs (0.31 cu m/s) Aug. 30, 31.

Period of record: Maximum discharge, 41,200 cfs (1,170 cu m/s) Mar. 13, 1975, gage height, 39.48 ft (12.034 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 Mar. 13, 1975.

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 and State annual basic data reports indicated.

WSP	Water year	Date	Discharge	Gage height (feet)	WSP WRD	Water year	Date	Discharge	Gage height (feet)
1386, 1676, 2110	1955	Mar. 22, 1955	25,400	34.07	WSP 2110	1970	June 21, 1970	24,100	33.54
1910, 2110	1963	Mar. 12, 1963	25,800	34.22	Tenn. 1973	1973	May 27, 1973	27,400	34.83

REMARKS.--Records good. Frequent diurnal fluctuations at low flow caused by small mills above station. Records of periodic water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1910: Drainage area.
REVISED PEAK DISCHARGE.--1973: Mar. 15 (1500) 26,400 cfs (34.47 ft); May 27 (2315) 27,400 cfs (34.83 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	32	1,430	1,280	369	300	1,010	169	72	37	20	15
2	94	24	900	986	2,290	493	728	144	71	40	18	20
3	75	26	742	761	1,960	344	849	131	62	46	18	18
4	67	28	565	684	6,180	298	521	129	55	47	20	19
5	63	124	424	520	3,850	271	412	118	65	40	20	20
6	55	121	340	426	1,990	245	347	108	90	34	24	17
7	53	72	1,020	357	1,240	264	294	129	77	34	38	23
8	50	55	1,490	584	853	448	266	187	60	32	42	30
9	47	46	863	1,450	644	303	249	230	56	30	30	25
10	49	37	557	2,990	490	1,080	234	170	210	29	24	20
11	41	81	410	5,300	497	912	210	130	441	31	23	19
12	37	219	337	1,460	5,210	12,500	191	111	1,370	31	31	65
13	37	160	264	929	1,300	34,900	170	97	569	27	31	62
14	30	113	214	680	819	12,600	175	89	263	27	29	38
15	39	111	196	539	599	2,500	305	667	641	27	24	29
16	78	100	238	554	536	1,410	237	1,130	350	25	20	24
17	119	100	206	500	1,810	977	197	457	191	24	20	23
18	78	4,820	173	448	989	745	174	439	126	24	24	63
19	60	3,780	157	1,670	862	699	912	284	102	517	107	109
20	48	4,870	140	1,990	642	603	705	202	81	395	68	263
21	43	1,430	126	1,080	508	509	408	153	71	132	51	331
22	39	743	115	753	419	2,010	312	126	63	82	43	126
23	37	459	105	560	455	1,190	263	113	58	60	37	1,980
24	35	330	111	457	809	3,990	228	97	52	66	31	4,940
25	34	297	6,900	525	526	1,800	502	86	45	89	27	961
26	35	255	1,650	466	405	922	385	77	43	60	23	532
27	29	206	2,580	371	347	653	268	77	40	50	16	337
28	30	171	5,280	329	311	521	222	83	51	45	13	222
29	29	149	2,520	297	------	7,560	197	71	47	37	12	153
30	27	175	1,600	337	------	6,420	180	76	42	34	11	115
31	28	------	1,030	294	------	1,760	------	81	------	22	12	------
TOTAL	1,603	19,134	32,683	29,577	36,910	99,227	11,151	6,161	5,464	2,174	907	10,599
MEAN	51.7	638	1,054	954	1,318	3,201	372	199	182	70.1	29.3	353
MAX	119	4,870	6,900	5,300	6,180	34,900	1,010	1,130	1,370	517	107	4,940
MIN	27	24	105	294	311	245	170	71	40	22	11	15
CFSM	.20	2.44	4.02	3.64	5.03	12.2	1.42	.76	.69	.27	.11	1.35
IN.	.23	2.72	4.64	4.20	5.24	14.09	1.58	.87	.78	.31	.13	1.50

CAL YR 1974 TOTAL 232,236.6 MEAN 636 MAX 16,000 MIN 9.3 CFSM 2.43 IN 32.97
WTR YR 1975 TOTAL 255,590.0 MEAN 700 MAX 34,900 MIN 11 CFSM 2.67 IN 36.29

03427500 East Fork Stones River near Lascassas, Tenn.--Continued

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	0730	20.30	9,700	02-12	0500	21.30	10,500
12-25	1145	21.99	11,100	03-13	0730	39.48	41,200
12-28	0115	18.28	8,120	03-24	1515	17.57	7,540
01-11	0145	20.18	9,610	03-29	1730	23.50	12,300
02-04	1430	22.57	11,600	09-24	0115	21.10	10,300

03428070 West Fork Stones River at Manson Pike, at Murfreesboro, Tenn.

LOCATION.--Lat 35°51'25", long 86°24'43", Rutherford County, on right bank at upstream abutment of Manson Pike bridge, 900 ft (274 m) downstream from Lytle Creek, 1.4 miles (2.3 km) northwest of courthouse in Murfreesboro, and at mile 16.1 (25.9 km).

DRAINAGE AREA.--165 sq mi (427 sq km), includes 15 sq mi (39 sq km) without surface drainage.

PERIOD OF RECORD.--July 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 542.29 ft (165.290 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 26,200 cfs (742 cu m/s) Mar. 13, gage height, 23.22 ft (7.077 m); minimum, 0.58 cfs (0.016 cu m/s) Sept. 11, gage height, 1.21 ft (0.369 m).
Period of record: Maximum discharge, 26,200 cfs (742 cu m/s) Mar. 13, 1975, gage height, 23.22 ft (7.077 m); minimum, 0.42 cfs (0.012 cu m/s) Sept. 9, 1973, gage height, 1.18 ft (0.360 m).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	10	480	786	232	203	620	67	27	19	7.8	2.4
2	34	9.5	373	611	1,520	242	510	58	25	80	6.5	2.1
3	28	8.9	306	494	1,160	206	615	53	22	63	5.4	1.9
4	25	11	256	467	2,860	180	410	51	20	45	6.6	1.7
5	22	22	217	369	1,730	170	310	45	18	33	11	1.4
6	21	27	187	310	1,010	154	250	40	19	26	20	1.5
7	18	44	421	262	725	334	210	355	40	23	12	1.7
8	16	40	581	339	542	465	180	220	35	20	8.7	1.0
9	17	32	374	890	439	257	160	388	30	17	6.7	.90
10	18	29	277	2,020	356	520	140	193	45	19	5.9	.92
11	16	39	233	2,820	345	497	122	127	58	24	24	.69
12	14	62	207	850	1,400	6,180	112	96	52	19	17	23
13	13	89	176	613	625	19,400	99	83	270	18	11	37
14	12	76	153	484	460	6,410	103	61	92	16	9.2	19
15	14	68	148	420	377	1,420	137	384	560	15	8.5	8.5
16	24	66	185	439	375	939	140	707	260	13	8.3	5.4
17	22	71	160	376	859	766	140	286	150	11	6.9	4.9
18	23	2,350	140	332	604	578	111	268	110	10	7.8	12
19	27	2,170	126	1,140	541	537	278	174	88	9.2	19	21
20	26	2,690	114	1,130	405	454	278	127	70	160	10	54
21	23	808	105	618	329	389	161	99	57	68	6.3	64
22	20	487	95	472	281	889	125	79	51	40	4.7	57
23	18	365	86	384	320	659	103	68	45	30	3.8	585
24	17	296	162	328	475	2,040	92	59	40	25	3.2	1,610
25	15	276	5,200	370	373	825	120	50	35	25	3.0	356
26	14	236	982	322	303	531	133	42	31	21	3.0	205
27	13	202	1,490	267	269	422	98	36	28	16	2.6	147
28	12	178	3,570	243	238	370	82	33	26	13	2.7	112
29	11	154	1,700	220	------	4,000	74	31	25	11	2.8	93
30	11	159	968	221	------	3,400	72	29	22	8.6	3.2	80
31	11	------	650	207	------	1,100	------	27	------	7.0	3.1	------
TOTAL	597	11,075.4	20,122	18,804	19,153	54,537	5,985	4,336	2,351	904.8	250.7	3,510.01
MEAN	19.3	369	649	607	684	1,759	200	140	78.4	29.2	8.09	117
MAX	42	2,690	5,200	2,820	2,860	19,400	620	707	560	160	24	1,610
MIN	11	8.9	86	207	232	154	72	27	18	7.0	2.6	.69
CFSM	.12	2.24	3.93	3.68	4.15	10.7	1.21	.85	.48	.18	.05	.71
IN.	.13	2.50	4.54	4.24	4.32	12.30	1.35	.98	.53	.20	.06	.79

CAL YR 1974 TOTAL 131,406.00 MEAN 360 MAX 9,340 MIN 7.4 CFSM 2.18 IN 29.63
WTR YR 1975 TOTAL 141,625.91 MEAN 388 MAX 19,400 MIN .69 CFSM 2.35 IN 31.93

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	2200	9.91	6,220	03-13	0915	23.22	26,200
12-25	0945	13.45	9,880	03-24	1315	8.74	5,100
12-28	0115	9.12	5,470	03-29	Unknown	Unknown	Unknown
01-11	0200	10.41	6,680	09-24	0200	7.85	4,270
02-04	1730	9.25	5,600				

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. Datum of gage is 514.95 ft (156.957 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 31,000 cfs (878 cu m/s) Mar. 13, gage height, 23.80 ft (7.254 m); minimum, 6.0 cfs (0.17 cu m/s) Sept. 11.
Period of record: Maximum discharge, 31,000 cfs (878 cu m/s) Mar. 13, 1975, gage height, 23.80 ft (7.254 m); minimum, 6.0 cfs (0.17 cu m/s) Sept. 11, 1975.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	21	510	787	209	216	632	104	43	36	19	9.0
2	64	20	400	626	1,310	242	497	91	41	165	17	8.7
3	54	18	330	497	1,180	203	604	82	38	131	15	8.8
4	50	20	275	470	2,110	180	398	80	34	82	17	8.5
5	48	53	230	374	2,030	158	341	73	45	60	29	7.9
6	43	45	200	316	1,110	144	308	63	61	48	48	8.2
7	38	53	485	265	737	249	287	329	66	43	33	8.5
8	34	48	540	272	537	498	261	271	40	38	24	8.5
9	35	40	400	950	439	233	238	413	57	33	19	8.0
10	38	35	298	1,710	363	456	216	233	104	37	16	7.6
11	33	45	250	3,110	357	487	195	160	90	50	29	7.5
12	29	68	215	901	1,620	3,390	176	124	598	36	34	20
13	26	99	185	627	655	21,200	158	101	254	36	23	54
14	24	83	170	468	469	8,110	162	87	159	33	20	40
15	27	74	160	421	385	1,740	195	268	996	29	21	21
16	61	70	200	434	368	1,000	165	968	501	25	23	16
17	49	76	170	374	875	724	145	334	274	22	20	14
18	43	2,500	148	336	581	575	133	329	208	20	19	31
19	45	2,300	135	987	544	526	319	218	163	91	30	32
20	44	2,900	122	1,220	401	442	346	166	131	356	24	92
21	41	860	110	597	332	383	220	137	108	112	17	96
22	38	520	100	450	278	831	180	112	92	73	14	88
23	33	380	93	367	271	634	152	97	78	56	12	500
24	30	325	150	318	552	1,870	139	85	67	50	10	1,800
25	28	290	3,700	346	380	833	165	74	60	50	9.8	410
26	26	250	1,080	311	314	492	183	64	54	42	10	240
27	23	212	1,600	249	271	391	142	56	50	33	9.8	180
28	22	180	3,300	221	238	330	124	51	50	28	9.3	135
29	22	163	1,800	201	------	3,740	115	49	47	24	9.5	110
30	22	170	1,040	200	------	3,650	109	46	41	21	9.2	96
31	21	------	600	188	------	1,030	------	43	------	18	8.7	------
TOTAL	1,163	11,918	18,996	18,613	18,916	54,957	7,305	5,308	4,550	1,878	599.3	4,066.2
MEAN	37.5	397	613	600	676	1,773	244	171	152	60.6	19.3	136
MAX	72	2,900	3,700	3,110	2,110	21,200	632	968	996	356	48	1,800
MIN	21	18	93	188	209	144	109	43	34	18	8.7	7.5
CFSM	.21	2.24	3.46	3.39	3.82	10.0	1.38	.97	.86	.34	.11	.77
IN.	.24	2.50	3.99	3.91	3.98	11.55	1.54	1.12	.96	.39	.13	.85

CAL YR 1974 TOTAL 136,834.0 MEAN 375 MAX 10,800 MIN 12 CFSM 2.12 IN 28.76
WTR YR 1975 TOTAL 148,269.5 MEAN 406 MAX 21,200 MIN 7.5 CFSM 2.29 IN 31.16

PEAK DISCHARGE (BASE, 3,700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	Unknown	Unknown	Unknown	03-13	1300	23.80	31,000
12-25	Unknown	[a]17.3	10,100	03-24	1500	10.99	4,290
12-28	Unknown	[a]11.97	4,860	03-29	1715	16.37	8,740
01-11	0400	13.81	6,160	09-24	Unknown	Unknown	Unknown

[a] From high-water mark.

NOTE.--Faulty gage-height record Oct. 1 to Dec. 26, Sept. 24-26; no gage-height record Sept. 27-30.

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.--10 years, 458 cfs (12.97 cu m/s), 26.24 in/yr (666 mm/yr).

EXTREMES.--Current year: Maximum discharge, 63,800 cfs (1,810 cu m/s) Mar. 13, gage height, 19.18 ft (5.846 m) from rating curve extended as explained below; minimum, 14 cfs (0.40 cu m/s) Sept. 11.
Period of record: Maximum discharge, 63,800 cfs (1,810 cu m/s) Mar. 13, 1975, gage height, 19.18 ft (5.846 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. 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	42	880	1,160	333	322	1,260	185	67	62	33	16
2	119	41	751	1,010	2,050	351	1,000	169	63	204	31	17
3	107	38	616	808	1,720	301	1,090	157	60	184	28	17
4	99	41	500	752	4,200	266	782	149	56	129	29	16
5	90	71	416	597	3,180	245	668	139	58	100	43	16
6	82	91	351	493	1,880	229	577	131	79	82	67	17
7	76	101	601	412	1,340	246	509	384	84	71	54	17
8	72	93	1,040	398	1,030	795	456	396	60	64	43	16
9	68	78	711	1,290	848	355	417	745	61	58	35	16
10	65	66	534	3,100	701	614	381	401	140	53	31	17
11	60	77	435	4,800	696	880	334	264	115	72	34	17
12	58	201	374	1,650	2,920	5,680	298	208	644	57	49	17
13	53	182	315	1,200	1,330	43,900	269	167	336	55	38	54
14	51	153	272	947	981	15,800	269	143	200	52	32	45
15	54	135	258	808	795	3,250	315	262	1,300	48	32	29
16	81	128	342	792	728	2,010	288	1,340	834	44	32	22
17	94	126	300	687	1,470	1,520	252	522	432	40	30	20
18	82	3,330	258	604	1,070	1,250	230	481	318	37	31	35
19	74	2,840	230	1,430	979	1,130	559	312	242	118	38	39
20	69	4,520	209	1,880	758	974	685	234	196	388	41	93
21	63	1,650	192	1,090	626	840	413	194	166	138	32	97
22	60	1,050	177	856	522	1,370	323	167	143	95	26	103
23	57	798	166	694	488	1,250	279	146	124	77	23	284
24	55	635	166	586	850	2,610	252	128	111	67	21	2,530
25	53	604	5,680	607	598	1,440	297	110	103	70	19	721
26	49	528	1,450	545	473	961	331	96	97	60	18	394
27	46	436	1,530	438	406	782	255	86	88	50	18	264
28	45	361	4,010	379	353	662	218	82	80	45	18	205
29	46	305	2,120	338	------	5,050	202	77	77	44	19	173
30	45	309	1,570	322	------	5,360	195	74	69	35	19	153
31	43	------	1,110	302	------	1,840	------	69	------	33	18	------
TOTAL	2,150	19,030	27,564	30,975	33,325	102,283	13,404	8,018	6,403	2,632	982	5,460
MEAN	69.4	634	889	999	1,190	3,299	447	259	213	84.9	31.7	182
MAX	134	4,520	5,680	4,800	4,200	43,900	1,260	1,340	1,300	388	67	2,530
MIN	43	38	166	302	333	229	195	69	56	33	18	16
CFSM	.29	2.68	3.75	4.22	5.02	13.9	1.89	1.09	.90	.36	.13	.77
IN.	.34	2.99	4.33	4.86	5.23	16.05	2.10	1.26	1.01	.41	.15	.86

CAL YR 1974 TOTAL 215,333 MEAN 590 MAX 14,200 MIN 23 CFSM 2.49 IN 33.80
WTR YR 1975 TOTAL 252,226 MEAN 691 MAX 43,900 MIN 16 CFSM 2.92 IN 39.59

PEAK DISCHARGE (BASE, 10,000 CFS).--Mar. 13 (1500) 63,800 cfs (19.18 ft).

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 September 1975 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

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.--20 years (1953-61, 1963-75), 97.6 cfs (2.764 cu m/s), 20.71 in/yr (526 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,980 cfs (283 cu m/s) Mar. 12, gage height, 16.52 ft (5.035 m); minimum daily, 0.87 cfs (0.025 cu m/s) July 14.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	9.4	243	181	91	81	226	48	15	2.7	2.9	5.4
2	149	9.8	153	140	332	88	171	36	13	2.0	3.2	4.3
3	131	9.8	120	123	351	64	134	35	11	2.0	2.9	4.0
4	121	25	96	104	1330	57	107	34	10	2.9	196	3.7
5	60	85	78	86	744	51	91	28	9.8	2.2	177	1.9
6	19	39	65	73	505	48	78	53	11	3.2	60	6.2
7	17	26	329	62	308	48	67	55	8.9	2.7	26	7.1
8	17	21	211	132	223	43	61	62	8.4	2.4	16	4.7
9	17	17	146	181	171	40	60	118	9.8	1.9	14	4.7
10	16	16	113	2680	136	401	55	51	16	1.3	11	4.7
11	15	74	97	812	238	179	46	38	22	1.3	9.4	4.0
12	15	118	88	368	582	5660	43	28	45	1.3	8.9	4.0
13	16	65	70	253	233	5300	38	22	15	1.5	7.5	6.2
14	18	46	53	189	175	1240	41	18	11	.87	5.4	6.2
15	28	37	97	163	140	518	44	1110	19	.91	8.0	3.4
16	73	31	101	159	136	343	37	371	13	1.3	7.5	4.0
17	44	35	78	134	386	263	32	250	8.4	1.3	5.4	4.7
18	28	863	62	129	191	205	28	167	7.1	8.4	5.0	9.8
19	21	1160	57	608	149	183	76	106	6.6	159	6.2	6.6
20	18	966	50	380	120	144	53	75	5.8	44	4.7	28
21	16	303	46	240	99	120	38	55	5.4	11	3.7	16
22	15	175	40	181	86	726	31	43	5.0	7.5	4.0	8.0
23	13	121	37	144	349	258	28	36	3.7	6.6	5.0	389
24	12	101	38	121	238	772	25	31	4.0	53	5.0	357
25	12	238	57	118	146	263	173	24	2.9	28	2.9	123
26	11	131	51	93	111	175	64	45	4.0	9.8	2.9	61
27	12	99	371	76	93	136	42	25	10	6.6	2.7	39
28	10	78	431	67	80	116	36	18	5.0	4.7	2.9	25
29	9.8	62	572	61	---	2930	34	16	4.3	4.0	2.9	17
30	11	111	311	57	---	729	78	16	2.7	3.4	4.3	14
31	12	---	214	60	---	335	---	15	---	3.4	7.5	---
TOTAL	1163.8	5072.0	4475	8175	7743	21516	2037	3029	312.8	381.18	620.8	1172.6
MEAN	37.5	169	144	264	277	694	67.9	97.7	10.4	12.3	20.0	39.1
MAX	207	1160	572	2680	1330	5660	226	1110	45	159	196	389
MIN	9.8	9.4	37	57	80	40	25	15	2.7	.87	2.7	1.9
CFSM	.59	2.64	2.25	4.13	4.33	10.8	1.06	1.53	.16	.19	.31	.61
IN.	.68	2.95	2.60	4.75	4.50	12.51	1.18	1.76	.18	.22	.36	.68

CAL YR 1974 TOTAL 54,697.02 MEAN 150 MAX 3,820 MIN .81 CFSM 2.34 IN 31.79
WTR YR 1975 TOTAL 55,698.18 MEAN 153 MAX 5,660 MIN .87 CFSM 2.39 IN 32.37

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	1655	11.31	3,680	03-12	1750	16.52	9,980
01-10	1250	13.16	5,360	03-29	1015	15.02	7,520
02-04	1215	11.21	3,610				

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 September 1975 (discontinued).

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

AVERAGE DISCHARGE.--11 years (1964-75), 16.9 cfs (0.479 cu m/s), 19.45 in/yr (494 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,500 cfs (42.5 cu m/s) Mar. 29, gage height, 7.77 ft (2.368 m); minimum daily, 0.60 cfs (0.017 cu m/s) Aug. 1, 2, 22-24.
Period of record: Maximum discharge, 1,500 cfs (42.5 cu m/s) Mar. 29, 1975, gage height, 7.77 ft (2.368 m); minimum, 0.15 cfs (0.004 cu m/s) Sept. 5, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	3.6	21	18	31	19	50	18	11	4.2	.60	.97
2	6.3	3.9	19	14	33	16	39	13	8.2	1.6	.60	.87
3	5.5	3.3	16	16	36	13	30	13	7.0	2.2	14	.87
4	5.3	13	14	13	121	13	25	8.2	5.9	1.9	22	.87
5	5.0	5.6	14	11	91	12	22	7.0	5.9	1.6	23	.97
6	4.4	3.8	12	10	54	11	17	34	11	4.2	4.2	6.4
7	4.2	3.4	39	8.7	40	16	16	27	6.4	3.7	1.9	.97
8	4.0	2.9	23	28	33	11	14	118	4.2	1.9	1.4	1.1
9	3.8	2.9	20	16	28	11	13	63	24	1.6	1.2	1.1
10	3.3	2.7	17	405	24	36	11	39	5.3	1.6	.87	1.1
11	3.3	15	16	125	50	21	9.5	28	19	1.6	.87	1.3
12	3.3	6.6	14	57	45	696	8.2	23	8.9	2.4	.78	10
13	3.2	5.6	12	40	31	618	7.0	17	4.7	1.5	.78	1.4
14	3.3	5.0	10	32	28	250	11	15	2.2	1.5	.97	1.1
15	24	4.2	21	27	24	112	7.6	70	30	1.6	.97	1.3
16	8.7	4.4	12	23	31	72	6.8	34	9.5	1.7	1.5	1.6
17	6.3	7.6	11	20	29	59	5.9	26	5.9	1.8	.69	8.2
18	5.6	76	10	20	23	54	4.7	23	2.9	1.9	1.3	10
19	5.2	277	9.1	53	21	50	29	18	2.5	74	.87	7.0
20	4.9	126	9.1	31	19	44	8.2	16	2.9	15	.69	55
21	4.4	44	8.3	27	17	40	7.6	13	3.3	5.9	.69	10
22	4.1	32	7.6	23	14	64	6.4	10	2.5	3.6	.60	6.7
23	4.1	25	6.8	21	180	45	7.0	8.9	1.9	3.5	.60	79
24	4.0	29	8.7	20	51	58	5.9	7.0	1.6	4.2	.60	60
25	3.7	25	9.1	19	35	49	18	6.4	3.3	6.4	.78	36
26	3.3	19	7.2	15	27	41	6.4	106	2.5	1.3	.87	24
27	3.3	16	23	14	21	37	3.7	46	1.9	.78	.78	18
28	3.3	14	19	12	18	52	7.0	27	1.9	.78	.78	13
29	4.4	12	25	14	---	467	4.7	20	1.9	.69	.97	10
30	4.0	27	20	11	---	117	53	15	1.5	.69	19	8.2
31	4.0	---	18	12	---	69	---	20	---	.78	1.4	---
TOTAL	159.6	815.5	471.9	1155.7	1155	3173	454.6	889.5	199.7	156.12	106.26	377.02
MEAN	5.15	27.2	15.2	37.3	41.3	102	15.2	28.7	6.66	5.04	3.43	12.6
MAX	24	277	39	405	180	696	53	118	30	74	23	79
MIN	3.2	2.7	6.8	8.7	14	11	3.7	6.4	1.5	.69	.60	.87
CFSM	.44	2.31	1.29	3.16	3.50	8.64	1.29	2.43	.56	.43	.29	1.07
IN.	.50	2.57	1.49	3.64	3.64	10.00	1.43	2.80	.63	.49	.33	1.19

CAL YR 1974 TOTAL 8,606.80 MEAN 23.6 MAX 687 MIN .90 CFSM 2.00 IN 27.13
WTR YR 1975 TOTAL 9,113.90 MEAN 25.0 MAX 696 MIN .60 CFSM 2.12 IN 28.73

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	0925	5.91	790	03-29	0430	7.77	1,500
01-10	0850	6.14	869	05-08	1540	6.27	911
02-23	1435	6.41	966	05-26	1740	6.42	963
03-12	0900	7.51	1,390	07-19	1545	6.01	823

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 April 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 401.64 ft (122.420 m) above mean sea level (Turner Engineering Company benchmark).

AVERAGE DISCHARGE.--10 years (1965-74), 70.1 cfs (1.985 cu m/s), 18.45 in/yr (469 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,200 cfs (346 cu m/s) Feb. 23, gage height, 17.06 ft (5.200 m), from rating curve extended as shown below; minimum daily, 12 cfs (0.34 cu m/s) Oct. 26, 27.
Period of record: Maximum discharge, 12,200 cfs (346 cu m/s) Feb. 23, 1975, gage height, 17.06 ft (5.200 m), from rating curve extended above 6,900 cfs (195 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 0.2 cfs (0.006 cu m/s) July 6, 1966, Sept. 15, 1968.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1974 TO APRIL 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	15	154	85	154	45	390					
2	37	14	130	73	300	35	313					
3	32	14	112	79	249	30	224					
4	27	20	92	70	865	34	166					
5	23	36	79	63	637	29	125					
6	22	23	70	61	405	50	96					
7	19	19	446	57	235	362	68					
8	18	17	257	197	160	172	49					
9	17	16	149	140	120	103	55					
10	16	16	110	2060	96	498	51					
11	15	121	92	748	172	304	44					
12	15	67	76	325	214	4500	39					
13	14	48	65	194	143	3300	37					
14	15	39	59	146	115	400	44					
15	36	34	138	120	92	250	44					
16	45	30	99	103	92	200	39					
17	25	36	79	82	146	165	36					
18	21	99	68	85	92	140	31					
19	18	827	63	457	79	130	138					
20	17	694	57	217	70	115	61					
21	15	235	53	154	63	120	55					
22	15	135	49	127	59	150	44					
23	14	96	45	112	5100	190	40					
24	14	82	51	96	420	220	66					
25	14	103	59	96	90	170	129					
26	12	76	57	73	68	140	73					
27	12	68	103	68	57	130	47					
28	13	61	125	61	51	170	47					
29	14	55	110	63	---	800	49					
30	17	149	96	59	---	3000	386					
31	15	---	82	63	---	487	---		------			------
TOTAL	632	3245	3225	6334	10344	16439	2986					
MEAN	20.4	108	104	204	369	530	99.5					
MAX	45	827	446	2060	5100	4500	390					
MIN	12	14	45	57	51	29	31					
CFSM	.40	2.09	2.02	3.95	7.15	10.3	1.93					
IN.	.46	2.34	2.33	4.57	7.46	11.85	2.15					

CAL YR 1974 TOTAL 41,545.6 MEAN 114 MAX 2,710 MIN 3.6 CFSM 2.21 IN 29.95

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-10	1040	12.96	5,160	03-12	0430	15.65	8,970
02-23	Unknown	17.06	12,200	03-29	0420	15.43	8,570

NOTE.--No gage-height record Feb. 23 to Mar. 3, Mar. 12-17.

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.--11 years, 34.0 cfs (0.963 cu m/s), 19.00 in/yr (483 mm/yr).

EXTREMES.--Current year: Maximum discharge, 6,770 cfs (192 cu m/s) Mar. 29, gage height, 13.34 ft (4.066 m); minimum daily, 0.14 cfs (0.004 cu m/s) Sept. 16.
Period of record: Maximum discharge, 6,770 cfs (192 cu m/s) Mar. 29, 1975, gage height, 13.34 ft (4.066 m); minimum daily, 0.14 cfs (0.004 cu m/s) Sept. 16, 1975.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	3.3	69	50	66	44	110	22	11	7.8	1.0	1.6
2	7.8	3.8	57	36	72	35	80	16	6.7	2.6	1.5	1.3
3	6.2	3.8	44	38	78	27	58	16	7.2	2.3	6.3	1.1
4	5.7	13	33	29	250	24	44	15	6.7	1.8	71	1.4
5	4.9	38	27	22	180	21	33	14	21	1.7	25	.61
6	4.5	9.4	22	20	150	18	27	26	9.9	2.5	6.7	.50
7	3.7	6.1	107	17	107	24	22	25	5.2	2.9	2.6	.34
8	3.7	5.6	62	82	80	16	21	145	3.9	1.7	2.3	.22
9	3.4	4.3	46	65	63	15	21	67	16	1.6	2.2	.46
10	3.4	4.3	38	1100	52	93	19	30	12	1.4	1.5	.47
11	3.1	70	29	210	100	40	15	21	8.1	1.3	1.1	.36
12	3.5	50	22	120	141	1680	14	13	11	1.2	1.1	2.6
13	2.7	26	17	88	72	1120	15	9.9	6.7	1.1	.88	1.4
14	3.0	17	14	68	58	400	17	8.1	5.2	.80	.95	1.5
15	43	12	48	57	48	209	16	162	37	.97	.94	1.1
16	48	9.4	33	49	60	153	15	71	9.2	.87	.90	.14
17	13	17	24	44	95	122	15	59	6.2	.76	1.2	1.4
18	7.5	139	20	39	57	106	14	43	5.5	.69	4.7	2.8
19	5.3	528	16	135	46	90	33	28	4.8	1.0	3.8	3.0
20	4.6	377	14	74	36	69	15	19	3.9	.99	1.9	93
21	4.6	121	11	58	31	58	15	13	3.4	.84	.79	8.5
22	4.0	80	9.4	47	27	130	14	8.8	2.2	.65	1.1	4.4
23	3.5	60	8.0	40	604	134	14	8.1	2.4	.91	.76	122
24	3.5	55	11	33	160	160	14	6.7	2.3	.90	.65	153
25	3.1	72	16	34	95	97	18	5.9	2.2	.75	.35	71
26	2.9	48	11	29	69	73	14	134	7.0	1.4	.15	30
27	2.7	38	60	26	55	65	14	38	19	.90	.42	16
28	2.7	27	67	24	44	71	13	16	6.7	.84	.25	11
29	3.3	21	74	31	---	920	13	14	3.5	.41	.16	8.1
30	4.3	57	57	23	---	273	76	9.9	2.3	.35	19	6.7
31	4.3	---	46	25	---	153	---	19	---	.35	11	---
TOTAL	227.9	1916.0	1112.4	2713	2896	6440	809	1083.4	248.2	44.28	172.20	546.00
MEAN	7.35	63.9	35.9	87.5	103	208	27.0	34.9	8.27	1.43	5.55	18.2
MAX	48	528	107	1100	604	1680	110	162	37	7.8	71	153
MIN	2.7	3.3	8.0	17	27	15	13	5.9	2.2	.35	.15	.14
CFSM	.30	2.63	1.48	3.60	4.24	8.56	1.11	1.44	.34	.06	.23	.75
IN.	.35	2.93	1.70	4.15	4.43	9.86	1.24	1.66	.38	.07	.26	.84

CAL YR 1974 TOTAL 16,726.58 MEAN 45.8 MAX 1,320 MIN .56 CFSM 1.88 IN 25.61
WTR YR 1975 TOTAL 18,208.38 MEAN 49.9 MAX 1,680 MIN .14 CFSM 2.05 IN 27.87

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	1350	6.57	1,660	03-12	0930	11.38	4,980
01-10	1645	7.03	1,900	03-29	0540	13.34	6,770
02-23	0700	7.83	2,370				

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.--14 years, 136 cfs (3.852 cu m/s), 19.00 in/yr (483 mm/yr).

EXTREMES.--Current year: Maximum discharge, 16,800 cfs (476 cu m/s) Mar. 12, gage height, 13.20 ft (4.023 m); minimum daily, 17 cfs (0.48 cu m/s) Aug. 31.
Period of record: Maximum discharge, 16,800 cfs (476 cu m/s) Mar. 12, 1975, gage height, 13.20 ft (4.023 m); minimum, 8.3 cfs (0.24 cu m/s) Oct. 6, 1970.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	44	258	208	96	175	341	219	202	27	22	19
2	160	44	221	186	455	166	262	136	94	28	24	18
3	110	44	183	188	300	136	193	110	71	29	25	20
4	75	47	150	170	805	122	156	95	61	28	58	20
5	71	68	127	131	918	112	134	80	56	28	49	19
6	64	57	110	118	575	115	118	111	58	28	45	20
7	61	50	303	102	370	1,080	110	147	52	30	31	18
8	55	47	358	283	280	535	102	797	45	29	28	18
9	51	45	238	454	225	335	103	1,000	46	28	27	19
10	49	44	175	4,150	178	937	111	289	56	27	26	223
11	47	148	141	2,010	248	640	96	169	49	22	25	97
12	45	210	120	438	307	8,680	87	124	47	25	25	48
13	45	128	94	302	235	6,220	82	98	43	25	24	38
14	44	93	81	230	200	1,990	81	82	40	24	24	29
15	53	73	112	192	176	674	82	187	41	24	40	26
16	99	64	159	162	158	425	71	330	40	24	51	23
17	66	69	124	128	192	345	69	370	36	23	43	25
18	54	109	102	123	176	313	72	195	36	24	33	33
19	49	950	96	414	152	310	173	125	34	27	35	37
20	47	1,240	87	366	126	251	106	94	34	27	29	1,100
21	46	401	79	359	112	214	87	78	33	26	24	102
22	45	244	70	201	102	295	76	66	32	25	24	54
23	45	170	66	165	2,810	264	69	61	30	24	24	53
24	45	129	62	147	1,030	382	86	56	31	76	23	298
25	46	146	83	150	448	267	145	53	30	45	22	205
26	45	114	85	123	304	198	122	52	68	31	21	104
27	43	98	94	96	241	171	98	84	62	27	21	69
28	44	85	170	88	200	241	87	54	40	26	20	52
29	44	73	190	76	------	4,450	80	103	34	25	19	44
30	45	84	180	77	------	840	231	114	29	24	18	38
31	44	------	166	74	------	472	------	284	------	23	17	------
TOTAL	1,967	5,118	4,484	11,911	11,419	31,355	3,630	5,763	1,530	879	897	2,869
MEAN	63.5	171	145	384	408	1,011	121	186	51.0	28.4	28.9	95.6
MAX	230	1,240	358	4,150	2,810	8,680	341	1,000	202	76	58	1,100
MIN	43	44	62	74	96	112	69	52	29	22	17	18
CFSM	.65	1.76	1.49	3.95	4.20	10.4	1.24	1.91	.52	.29	.30	.98
IN.	.75	1.96	1.72	4.56	4.37	12.00	1.39	2.21	.59	.34	.34	1.10

CAL YR 1974 TOTAL 81,371 MEAN 223 MAX 6,800 MIN 30 CFSM 2.29 IN 31.14
WTR YR 1975 TOTAL 81,822 MEAN 224 MAX 8,680 MIN 17 CFSM 2.30 IN 31.31

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-10	1800	10.95	9,080	03-29	1100	10.96	9,100
02-23	2115	9.27	5,300	05-08	2400	7.99	3,190
03-07	1545	7.93	3,120	09-20	0715	7.96	3,160
03-12	1115	13.20	16,800				

03432350 Harpeth River at Franklin, Tenn.

LOCATION.--Lat 35°55'14", long 86°51'56", Williamson County, on left bank 15 ft (5 m) downstream from left downstream end of State Highway 96 bridge, 0.4 mile (0.6 km) southeast of the courthouse in Franklin, and at mile 88.1 (141.8 km).

DRAINAGE AREA.--191 sq mi (495 sq km), includes 15 sq mi (39 sq km) without surface drainage.

PERIOD OF RECORD.--October 1974 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 604.42 ft (184.227 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 20,200 cfs (572 cu m/s) Mar. 13, gage height, 33.65 ft (10.257 m); minimum, 2.5 cfs (0.07 cu m/s) Sept. 3-5.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	36	470	614	256	253	780	106	50	10	12	4.2
2	84	37	440	525	896	262	628	83	43	9.5	16	3.6
3	72	38	370	459	889	214	656	76	38	8.7	14	3.2
4	66	44	310	415	3090	193	446	74	33	11	129	2.5
5	60	74	250	351	3340	177	379	65	29	12	491	2.5
6	55	180	240	314	1460	162	330	63	27	9.6	170	2.6
7	52	140	400	277	957	155	296	79	31	8.9	77	2.6
8	48	110	760	317	701	239	269	123	28	9.0	54	3.2
9	47	78	510	523	566	168	246	343	39	8.2	43	3.9
10	44	66	420	3740	463	475	231	164	95	9.5	40	3.2
11	41	80	320	6420	463	470	208	112	91	7.1	34	3.0
12	38	390	280	1430	3160	6350	191	85	134	6.8	24	5.8
13	37	280	245	894	899	18500	177	68	124	9.8	19	3.8
14	36	190	203	673	635	10900	173	61	62	11	16	3.8
15	38	136	251	574	511	2450	199	1250	68	7.7	13	3.8
16	70	115	375	539	469	1180	169	1370	248	5.9	78	3.2
17	140	110	279	461	1090	888	156	633	88	5.0	29	3.2
18	96	460	235	443	640	711	149	464	60	4.4	22	5.8
19	74	1300	212	1450	564	669	290	329	47	37	18	8.4
20	59	4100	190	1330	462	545	291	251	41	318	14	52
21	49	1350	170	787	396	467	194	200	30	102	14	59
22	47	802	150	610	338	1190	168	163	21	75	11	32
23	45	500	136	509	702	733	152	133	16	56	8.4	246
24	43	380	136	440	877	1450	133	109	14	43	7.3	879
25	41	520	997	439	497	800	527	91	12	76	6.0	411
26	39	430	607	362	394	581	237	76	13	37	5.4	263
27	37	350	611	302	330	489	172	69	14	20	4.6	190
28	36	315	1360	270	283	422	148	62	18	15	3.9	135
29	35	280	1370	250	---	4040	130	57	14	11	3.2	91
30	36	260	992	234	---	3980	123	54	12	9.0	3.9	71
31	37	---	705	221	---	1170	---	52	---	8.9	6.2	---
TOTAL	1700	13151	13994	26173	25328	60283	8248	6865	1540	962.0	1386.9	2501.3
MEAN	54.8	438	451	844	905	1945	275	221	51.3	31.0	44.7	83.4
MAX	140	4100	1370	6420	3340	18500	780	1370	248	318	491	879
MIN	35	36	136	221	256	155	123	52	12	4.4	3.2	2.5
CFSM	.29	2.29	2.36	4.42	4.74	10.2	1.44	1.16	.27	.16	.23	.44
IN.	.33	2.56	2.73	5.10	4.93	11.74	1.61	1.34	.30	.19	.27	.49

WTR YR 1975 TOTAL 162132.2 MEAN 444 MAX 18500 MIN 2.5 CFSM 2.32 IN 31.58

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-20	Unknown	Unknown	Unknown	02-12	1215	18.59	4,790
01-11	0615	23.56	7,710	03-13	0945	33.65	20,200
01-19	1915	14.30	2,960	03-29	1600	19.65	5,350
02-04	2315	20.03	5,560				

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 15 sq mi (39 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 of Corps of Engineers). Apr. 11, 1920, to Oct. 31, 1929, Jan. 1, 1932, to Sept. 30, 1933, nonrecording gage at site 2.8 miles (4.5 km) downstream at datum 7.85 ft (2.393 m) lower.

AVERAGE DISCHARGE.--55 years, 569 cfs (16.11 cu m/s) 18.94 in/yr (481 mm/yr).

EXTREMES.--Current year: Maximum discharge, 39,600 cfs (1,120 cu m/s) Mar. 13, gage height, 24.27 ft (7.398 m) from high-water mark; minimum daily, 10 cfs (0.28 cu m/s) Sept. 10.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	318	85	982	1,280	642	667	1,970	498	193	52	32	49
2	246	83	916	1,110	1,480	657	1,510	357	163	49	31	30
3	198	83	791	946	1,820	556	1,360	310	152	45	34	21
4	170	85	696	854	4,090	493	1,050	293	144	42	53	18
5	153	284	615	733	7,240	454	882	254	136	38	545	16
6	136	351	546	649	3,770	419	765	228	128	38	342	14
7	123	233	1,030	579	2,320	399	680	283	116	38	178	13
8	117	184	1,530	616	1,680	436	612	361	111	38	125	12
9	110	157	1,100	1,040	1,350	391	565	744	106	38	97	11
10	104	139	871	6,680	1,100	850	533	526	160	37	94	10
11	98	203	738	14,300	1,150	1,090	481	372	172	39	79	20
12	93	706	664	6,020	4,270	11,300	433	302	309	40	67	27
13	86	513	557	2,210	2,370	32,400	400	256	258	37	52	22
14	83	379	483	1,620	1,460	25,700	386	225	184	37	40	18
15	89	309	501	1,330	1,180	10,200	416	1,450	225	38	35	16
16	184	264	744	1,190	1,030	2,850	382	3,080	265	38	34	15
17	297	247	617	1,030	1,960	2,080	348	1,400	218	32	73	15
18	210	1,520	526	960	1,410	1,600	327	1,110	158	27	75	19
19	162	4,010	470	1,700	1,190	1,490	410	787	138	26	65	88
20	138	6,350	426	3,120	985	1,250	614	606	118	179	42	133
21	123	2,700	387	1,710	849	1,060	415	485	104	237	38	141
22	112	1,480	353	1,350	742	2,530	358	408	88	142	35	108
23	106	1,080	322	1,130	1,790	1,950	329	343	77	120	30	254
24	103	863	310	975	2,620	2,900	312	297	67	95	26	1,460
25	99	1,140	778	928	1,320	2,080	634	261	64	82	22	869
26	95	974	1,210	830	1,030	1,400	630	427	59	110	19	510
27	92	788	976	696	852	1,140	392	293	58	78	16	364
28	88	669	2,300	625	742	979	338	225	59	60	15	275
29	86	569	2,590	577	------	9,950	344	205	59	48	12	207
30	88	556	2,270	539	------	9,660	573	199	58	40	30	162
31	91	------	1,550	514	------	3,230	------	181	------	35	57	------
TOTAL	4,198	27,004	27,849	57,841	52,442	132,161	18,449	16,766	4,147	1,955	2,393	4,917
MEAN	135	900	898	1,866	1,873	4,263	615	541	138	63.1	77.2	164
MAX	318	6,350	2,590	14,300	7,240	32,400	1,970	3,080	309	237	545	1,460
MIN	83	83	310	514	642	391	312	181	58	26	12	10
CFSM	.33	2.21	2.20	4.57	4.59	10.4	1.51	1.33	.34	.15	.19	.40
IN.	.38	2.46	2.54	5.27	4.78	12.05	1.68	1.53	.38	.18	.22	.45

CAL YR 1974 TOTAL 308,503 MEAN 845 MAX 17,600 MIN 23 CFSM 2.07 IN 28.13
WTR YR 1975 TOTAL 350,122 MEAN 959 MAX 32,400 MIN 10 CFSM 2.35 IN 31.92

PEAK DISCHARGE (BASE, 7,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-11	1300	17.80	15,200	03-13	Unknown	[a]24.27	39,600
02-05	0345	12.80	8,170	03-29	2300	16.58	12,900

[a] From high-water mark in gage house.

NOTE.--No gage-height record Mar. 13, 14, Sept. 7-19.

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 15 sq mi (39 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.--51 years, 961 cfs (27.22 cu m/s), 19.16 in/yr (487 mm/yr).

EXTREMES.--Current year: Maximum discharge, 44,500 cfs (1,260 cu m/s) Mar. 13, gage height, 28.75 ft (8.763 m); minimum, 80 cfs (2.27 cu m/s) Aug. 30, Sept. 9, 10.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	652	173	1380	2090	1120	1420	3620	1630	480	154	100	155
2	479	168	1600	1830	2640	1370	2740	1010	403	158	105	130
3	377	171	1350	1630	3290	1220	2340	802	347	148	115	108
4	321	181	1210	1480	5680	1070	1940	719	314	137	1370	94
5	288	386	1080	1290	9400	971	1640	622	307	132	788	87
6	260	593	967	1150	6800	890	1430	570	300	141	950	88
7	237	455	1600	1040	4000	850	1250	729	271	152	445	89
8	218	346	2600	1140	2910	810	1110	1140	252	152	281	84
9	209	294	2000	1930	2360	821	1040	1690	329	135	246	81
10	200	262	1590	8210	1970	1420	983	1370	490	132	212	84
11	189	358	1310	17600	2010	2120	886	917	389	128	201	132
12	178	886	1190	11100	4010	20400	795	715	403	126	172	179
13	172	990	1020	3720	4740	41000	728	596	480	130	157	146
14	161	696	879	2670	2520	38300	696	515	380	121	144	116
15	212	543	930	2190	2060	21300	742	1740	393	118	132	112
16	449	450	1280	1950	1800	5690	722	4930	417	119	127	100
17	429	425	1220	1750	2700	3630	659	2890	455	116	125	100
18	419	714	1010	1630	2670	2860	634	2470	322	112	150	136
19	314	6220	887	2400	2060	2510	816	1680	265	130	145	135
20	267	9370	788	4550	1760	2160	1040	1280	235	137	139	798
21	234	5130	716	2890	1530	1860	872	1020	218	300	124	431
22	215	2580	646	2240	1350	3170	722	822	201	261	118	297
23	203	1910	585	1900	12600	4190	659	693	183	191	112	271
24	197	1560	548	1680	7920	4630	634	595	172	168	105	2410
25	191	1640	646	1610	3230	4060	703	518	160	168	99	2010
26	183	1700	1770	1490	2270	2560	1310	478	160	166	94	1020
27	180	1340	1370	1270	1850	2050	809	1060	185	166	90	743
28	180	1160	2840	1150	1600	1890	671	525	286	141	86	540
29	170	997	3390	1060	---	15200	730	490	178	123	148	411
30	179	923	3650	977	---	13800	1210	550	162	112	84	326
31	177	---	2510	934	---	6750	---	450	---	105	194	---
TOTAL	8140	42621	44562	88551	98850	210972	34131	35216	9137	4579	7358	11413
MEAN	263	1421	1437	2856	3530	6806	1138	1136	305	148	237	380
MAX	652	9370	3650	17600	12600	41000	3620	4930	490	300	1370	2410
MIN	161	168	548	934	1120	810	634	450	160	105	84	81
CFSM	.39	2.09	2.11	4.19	5.18	9.99	1.67	1.67	.45	.22	.35	.56
IN.	.44	2.33	2.43	4.84	5.40	11.52	1.86	1.92	.50	.25	.40	.62

CAL YR 1974 TOTAL 554,384 MEAN 1,519 MAX 28,100 MIN 104 CFSM 2.23 IN 30.28
WTR YR 1975 TOTAL 595,530 MEAN 1,632 MAX 41,000 MIN 81 CFSM 2.40 IN 32.53

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	2115	13.64	10,700	03-13	0700	28.75	44,500
01-11	0245	22.37	23,200	03-29	1600	23.18	25,400
02-23	1645	21.84	22,100				

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.--21 years, 23,800 cfs (674.0 cu m/s), 22.82 in/yr (580 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 204,000 cfs (5,780 cu m/s) Mar. 15, gage height, 47.55 ft (14.493 m); minimum daily, 2,020 cfs (57.2 cu m/s) Aug. 11; minimum gage height, 3.82 ft (1.164 m) Nov. 10.
Period of record: Maximum discharge, 204,000 cfs (5,780 cu m/s) Mar. 15, 1975; 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, 1.55 ft (0.472 m) Nov. 26, 1973.
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. 69), and by Cheatham Dam.

REVISIONS.--WSP 1726: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,500	7,400	24,400	37,400	48,100	43,000	129,000	52,200	24,100	3,760	4,990	3,070
2	23,500	7,230	33,700	39,800	47,500	38,800	123,000	46,200	17,000	5,700	3,990	3,300
3	22,200	4,520	43,100	40,000	54,700	33,800	115,000	48,600	15,100	7,400	2,490	6,010
4	18,600	5,600	30,300	46,500	72,100	42,200	105,000	46,600	16,300	5,390	5,020	6,680
5	5,200	8,300	29,000	43,200	100,000	36,800	97,700	42,300	16,400	3,340	8,020	9,790
6	4,600	13,500	29,500	35,600	102,000	23,400	92,700	35,300	19,700	3,000	6,910	7,040
7	7,460	10,300	29,200	35,800	83,400	30,000	91,700	30,300	24,400	3,750	6,500	3,420
8	10,800	9,600	30,500	38,400	70,400	45,800	91,300	35,700	24,600	8,000	7,870	3,330
9	11,500	9,400	42,200	39,300	61,700	43,300	86,500	57,400	19,000	8,170	5,940	6,010
10	11,600	7,510	37,600	64,300	61,300	47,100	85,600	42,300	15,800	8,160	2,380	7,300
11	15,500	10,900	31,300	104,000	64,400	41,300	79,900	30,200	12,700	7,890	2,020	6,460
12	15,200	14,000	29,600	93,400	75,800	116,000	75,600	26,100	12,500	7,220	6,560	6,200
13	7,600	13,900	29,400	74,100	70,000	176,000	72,100	25,500	17,900	3,710	5,040	5,200
14	10,400	20,100	28,500	60,200	70,400	196,000	65,300	24,900	5,400	2,630	4,690	2,700
15	14,100	19,600	27,700	57,500	64,000	202,000	64,400	20,400	6,090	2,700	4,900	2,650
16	19,900	16,100	28,300	57,000	62,600	194,000	61,400	34,000	7,880	6,520	4,420	2,430
17	15,200	15,100	28,400	58,200	62,900	180,000	58,000	49,500	10,100	4,790	5,580	2,790
18	12,300	22,500	27,900	48,100	62,100	171,000	58,900	28,500	14,400	7,760	2,810	2,640
19	9,200	52,100	26,700	42,000	58,800	147,000	60,800	19,200	19,400	3,830	7,140	4,230
20	5,200	80,100	24,000	61,100	52,300	130,000	60,100	18,500	21,000	4,140	6,620	5,800
21	13,900	65,700	25,700	67,500	46,500	117,000	58,800	25,500	12,700	5,970	4,670	4,000
22	12,500	38,700	27,500	65,000	45,900	111,000	57,200	24,900	9,170	3,440	4,680	3,120
23	15,300	21,400	26,900	63,500	104,000	111,000	55,800	25,400	6,100	4,150	5,810	12,200
24	15,800	19,400	26,500	60,200	154,000	109,000	52,500	27,000	6,200	3,350	4,620	30,900
25	15,200	20,700	27,000	56,800	109,000	108,000	54,600	26,000	10,200	6,570	4,720	25,300
26	10,100	27,500	29,300	52,500	82,600	104,000	59,400	25,000	11,100	4,570	7,240	15,500
27	5,800	33,100	34,200	49,200	68,500	97,000	64,500	26,200	8,110	4,090	6,710	6,420
28	5,900	36,500	42,400	48,400	51,000	90,200	61,600	22,300	7,820	3,770	5,630	2,850
29	8,700	32,300	47,000	46,600	------	119,000	56,300	19,100	4,500	8,200	6,140	3,260
30	7,800	27,200	39,400	46,600	------	139,000	56,700	18,500	2,910	10,500	5,130	7,480
31	7,200	------	42,400	46,000	------	136,000	------	22,800	------	6,750	4,360	------
TOTAL	382,760	670,260	979,600	1,678.2M	2,006.0M	3,178.7M	2,251.4M	976,400	398,580	169,220	163,600	208,080
MEAN	12,350	22,340	31,600	54,140	71,640	102,500	75,050	31,500	13,290	5,459	5,277	6,936
MAX	24,500	80,100	47,000	104,000	154,000	202,000	129,000	57,400	24,600	10,500	8,020	30,900
MIN	4,600	4,520	24,000	35,600	45,900	23,400	52,500	18,500	2,910	2,630	2,020	2,430

CAL YR 1974 TOTAL 12,349,757 MEAN 33,830 MAX 154,000 MIN 887
WTR YR 1975 TOTAL 13,062,800 MEAN 35,790 MAX 202,000 MIN 2,020

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 July 1975 (discontinued).

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

AVERAGE DISCHARGE.--8 years (1966-1974), 22.9 cfs (0.649 cu m/s), 20.59 in/yr (523 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,130 cfs (202 cu m/s) Mar. 12, gage height, 12.94 ft (3.944 m) from rating curve extended as shown below; minimum, 1.2 cfs (0.034 cu m/s) July 23.

Period of record: Maximum discharge, 7,130 cfs (202 cu m/s) Mar. 12, 1975, gage height, 12.94 ft (3.944 m) from rating curve extended above 3,500 cfs (99.1 cu m/s) on basis of contracted-opening and flow-over-road measurement of peak flow; 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.

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 resources data indicated.

WSP	Water year	Date	Discharge	Gage height (feet)
2110	1967	May 15, 1967	1,550	8.81
2110	1968	Apr. 4, 1968	1,440	8.58
2110	1969	June 23, 1969	5,780	12.38

WSP WRD	Water year	Date	Discharge	Gage height (feet)
WSP 2110	1970	May 11, 1970	3,420	11.07
Tenn. 1974	1974	June 1, 1974	3,280	10.95

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

REVISIONS.--Revised figures of peak discharge, in water year 1969, supersede figures published in WSP 2110; Apr. 18 (1550) 1,380 cfs (8.45 ft); June 23 (1025) 5,780 (12.38 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	11	51	29	33	25	53	43	13	2.4		
2	28	11	36	25	84	23	45	29	9.0	7.6		
3	19	11	29	28	41	19	41	21	8.1	5.1		
4	18	12	25	24	130	16	33	16	6.8	3.4		
5	16	18	23	21	120	15	27	12	7.4	3.4		
6	15	13	21	20	80	16	24	14	6.8	3.3		
7	14	12	80	19	48	180	21	20	4.8	3.4		
8	14	11	62	59	36	82	20	67	4.5	2.8		
9	13	11	38	50	30	50	41	33	5.3	2.5		
10	12	11	30	604	25	160	33	22	6.3	2.6		
11	12	48	27	162	36	108	24	15	5.8	2.4		
12	11	36	24	65	31	400	20	14	4.1	2.6		
13	10	23	21	42	25	1650	18	12	3.2	2.7		
14	10	18	19	31	23	210	20	10	3.2	2.3		
15	17	16	41	28	21	98	20	56	9.6	2.2		
16	26	14	31	25	21	72	17	36	5.9	2.7		
17	14	17	26	21	28	58	14	29	4.6	4.0		
18	12	44	23	23	22	51	12	24	4.1	2.7		
19	11	132	21	74	20	53	25	18	3.8	3.6		
20	11	244	19	47	19	39	14	16	3.7	4.5		
21	10	57	18	34	17	32	12	13	3.2	3.4		
22	10	33	17	28	16	69	11	12	3.0	2.6		
23	11	25	16	25	430	127	12	10	2.9	2.2		
24	12	23	18	23	200	88	14	9.6	2.8	7.5		
25	11	31	21	24	88	46	38	9.0	2.8	8.2		
26	11	23	18	20	50	34	21	11	3.0	4.7		
27	10	21	21	18	36	27	14	11	3.2	3.5		
28	10	19	30	17	30	54	12	9.1	3.0	3.0		
29	10	17	30	18	---	538	12	11	2.6	3.4		
30	12	30	28	17	---	122	59	9.8	2.4	2.7		
31	11	---	28	21	---	70	---	16	---	2.5		
TOTAL	431	992	892	1642	1740	4532	727	628.5	148.9	109.9		
MEAN	13.9	33.1	28.8	53.0	62.1	146	24.2	20.3	4.96	3.55		
MAX	30	244	80	604	430	1650	59	67	13	8.2		
MIN	10	11	16	17	16	15	11	9.0	2.4	2.2		
CFSM	.92	2.19	1.91	3.51	4.11	9.67	1.60	1.34	.33	.24		
IN.	1.06	2.44	2.20	4.05	4.29	11.16	1.79	1.55	.37	.27		

CAL YR 1974 TOTAL 12,262.9 MEAN 33.6 MAX 681 MIN 2.9 CFSM 2.23 IN 30.21

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-20	0400	7.34	950	03-12	Unknown	12.94	7,130
01-10	0945	9.39	1,860	03-29	0345	9.64	2,000
02-23	Unknown	Unknown	Unknown				

03435770 Sulphur Fork Red River above Springfield, Tenn.

LOCATION.--Lat 36°30'47", long 86°51'44", Robertson County, on left bank 150 ft (46 m) downstream from new bridge on State Highway 49, 1.2 miles (1.9 km) downstream from Beaver Dam Creek, 1.3 miles (2.1 km) northeast of Springfield, and at mile 30.8 (49.6 km).

DRAINAGE AREA.--65.6 sq mi (169.9 sq km), includes 9.0 sq mi (23.3 sq km) without surface drainage.

PERIOD OF RECORD.--August to September 1975.

GAGE.--Water-stage recorder. Altitude of gage is 537 ft (164 m) from topographic map.

EXTREMES.--Maximum discharge during period August to September 1975, 592 cfs (16.8 cu m/s); gage height, 4.95 ft (1.509 m); minimum daily, 4.7 cfs (0.133 cu m/s) Aug. 28, 29, Sept. 5, 8.

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

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											-	6.6
2											-	5.4
3											-	5.0
4											-	5.0
5											-	4.7
6											-	5.0
7											-	5.8
8											-	4.7
9											-	12
10											-	33
11											-	11
12											-	6.6
13											-	6.2
14											-	5.4
15											-	5.0
16											-	5.8
17											-	8.0
18											-	18
19											-	18
20											-	167
21											-	31
22											6.6	18
23											6.2	18
24											6.2	123
25											6.6	83
26											5.4	49
27											6.6	36
28											4.7	29
29					------						4.7	25
30					------						5.0	21
31		------			------		------		------		5.4	------
TOTAL											-	771.2
MEAN											-	25.7
MAX											-	167
MIN											-	4.7
CFSM											-	.39
IN.											-	.44

PEAK DISCHARGE (BASE, 1,200 CFS).--No peak above base.

NOTE.--No gage-height record Sept. 11-15.

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.--37 years, 241 cfs (6.825 cu m/s), 17.60 in/yr (447 mm/yr).

EXTREMES.--Current year: Maximum discharge, 35,400 cfs (1,000 cu m/s) Mar. 12, gage height, 30.86 ft (9.406 m), from floodmarks; minimum 12 cfs (0.34 cu m/s) Sept. 4, 5.
Period of record: Maximum discharge, 35,400 cfs (1,000 cu m/s) Mar. 12, 1975, gage height, 30.86 ft (9.406 m), from floodmarks; minimum, 1.8 cfs (0.051 cu m/s) Sept. 27, 1948.
Maximum stage known that of Mar. 12, 1975. Flood in June 1934 reached a stage of 25.1 ft (7.65 m), from floodmarks, discharge not determined. Flood in January 1937 reached a stage of about 22.6 ft (6.89 m), discharge not determined.

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

REVISIONS.--WSP 1910: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	401	54	498	475	328	430	910	562	373	38	25	14
2	311	53	466	439	1,110	401	728	336	154	34	35	14
3	243	56	409	430	842	325	594	263	114	39	30	14
4	207	59	362	397	1,150	287	457	246	99	34	38	13
5	178	87	332	339	1,990	263	389	204	91	34	68	12
6	156	96	304	311	1,580	243	343	175	97	33	68	15
7	138	73	439	283	1,030	2,350	311	173	80	34	45	14
8	124	64	620	354	776	955	290	221	71	33	33	14
9	117	60	466	980	609	508	287	518	70	30	29	13
10	108	57	385	4,330	484	1,400	297	277	82	29	26	73
11	99	120	339	5,540	484	1,040	246	204	71	27	24	62
12	91	362	311	1,640	532	20,800	215	175	67	25	23	58
13	83	237	263	1,070	417	13,100	199	149	60	26	21	45
14	77	183	227	804	377	5,280	185	128	56	25	20	31
15	85	142	243	648	354	2,800	185	196	54	24	19	23
16	170	118	336	527	325	1,740	168	307	57	23	20	20
17	136	115	283	426	343	1,280	158	207	52	22	25	20
18	103	156	256	397	318	1,100	147	180	50	22	151	25
19	88	642	243	781	290	1,080	191	151	46	25	63	34
20	79	1,730	227	945	256	900	170	130	44	74	36	401
21	71	851	215	687	233	790	138	115	42	56	29	144
22	67	542	196	547	215	975	124	105	40	36	23	67
23	64	401	180	457	3,870	930	120	100	38	29	21	52
24	63	328	178	422	2,880	1,080	120	93	38	29	18	255
25	67	328	227	417	1,190	955	304	93	37	43	17	309
26	63	280	233	373	781	716	230	99	45	37	17	178
27	59	246	227	304	573	594	170	111	124	30	16	115
28	56	221	318	270	475	772	149	87	68	26	15	87
29	54	196	369	249	------	4,810	138	87	54	24	15	67
30	55	196	385	263	------	2,290	542	173	42	22	14	56
31	54	------	373	266	------	1,280	------	193	------	21	13	------
TOTAL	3,667	8,053	9,910	25,371	23,812	71,474	8,505	6,058	2,316	984	997	2,245
MEAN	118	268	320	818	850	2,306	284	195	77.2	31.7	32.2	74.8
MAX	401	1,730	620	5,540	3,870	20,800	910	562	373	74	151	401
MIN	54	53	178	249	215	243	120	87	37	21	13	12
CFSM	.63	1.44	1.72	4.40	4.57	12.4	1.53	1.05	.42	.17	.17	.40
IN.	.73	1.61	1.98	5.07	4.76	14.29	1.70	1.21	.46	.20	.20	.45

CAL YR 1974 TOTAL 172,617 MEAN 473 MAX 8,580 MIN 28 CFSM 2.54 IN 34.52
WTR YR 1975 TOTAL 163,392 MEAN 448 MAX 20,800 MIN 12 CFSM 2.41 IN 32.68

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-10	2115	18.96	10,000	03-12	Unknown	[a]30.86	35,400
02-23	1545	15.33	6,690	03-29	1600	15.87	7,110
03-07	1500	12.36	4,580				

[a] From floodmark.

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 376.25 ft (114.681 m) above mean sea level. July 13, 1961, to Oct. 9, 1963, nonrecording gage and crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 1,292 cfs (36.59 cu m/s), 18.77 in/yr (477 mm/yr).

EXTREMES.--Current year: Maximum discharge, 60,300 cfs (1,710 cu m/s) Mar. 13, gage height, 48.26 ft (14.710 m); minimum, 99 cfs (2.80 cu m/s) Sept. 9, 10.
Period of record: Maximum discharge, 60,300 cfs (1,710 cu m/s) Mar. 13, 1975, gage height, 48.26 ft (14.710 m); minimum, 54 cfs (1.53 cu m/s) Sept. 17, 18, 1964.
Maximum stage known, that of Mar. 13, 1975. Flood of Jan. 23, 1937, reached a stage of 44.4 ft (13.53 m), from flood profile of Corps of Engineers.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,960	264	1,060	2,050	1,560	2,910	6,340	7,530	1,070	227	145	160
2	1,550	262	1,600	2,320	3,380	2,680	5,020	3,800	843	212	148	143
3	1,270	260	1,520	2,160	3,740	2,340	4,280	2,760	613	208	150	127
4	1,100	262	1,370	2,130	3,600	2,070	3,620	2,380	526	204	157	117
5	974	273	1,240	1,870	6,160	1,900	3,200	2,080	489	198	200	110
6	863	295	1,150	1,640	7,390	1,740	2,930	1,830	482	198	229	107
7	772	290	1,200	1,510	5,400	3,820	2,720	1,670	446	192	382	107
8	691	273	1,770	1,520	4,040	5,610	2,550	1,570	415	188	248	106
9	633	257	1,700	3,200	3,350	3,170	2,270	1,920	390	186	196	102
10	578	251	1,400	6,340	2,840	4,000	2,750	1,640	393	178	171	123
11	526	269	1,270	20,200	2,570	6,020	2,430	1,340	379	175	160	164
12	479	613	1,190	14,600	2,570	25,300	2,120	1,200	367	167	151	148
13	443	783	1,080	6,330	2,270	56,600	1,950	1,100	348	167	150	240
14	411	598	958	4,350	2,010	41,400	1,830	1,020	331	166	140	194
15	411	492	909	3,550	1,850	21,500	1,750	1,010	315	162	133	151
16	513	418	1,090	3,080	1,710	12,400	1,660	1,400	310	155	150	132
17	567	385	1,190	2,670	1,650	9,130	1,600	1,200	308	153	166	123
18	541	393	1,050	2,420	1,600	7,210	1,530	1,040	295	153	235	124
19	439	831	970	2,780	1,450	6,310	1,780	946	278	155	323	127
20	390	3,260	926	3,720	1,320	5,410	1,870	859	271	188	173	811
21	359	2,910	867	3,010	1,220	4,490	1,530	791	262	264	155	930
22	339	1,750	811	2,570	1,150	4,460	1,400	734	255	200	141	421
23	323	1,290	753	2,270	6,910	4,800	1,340	683	246	177	132	280
24	318	1,080	721	2,100	10,100	6,610	1,320	650	237	169	127	382
25	318	986	855	2,060	10,500	6,180	2,310	613	233	231	121	867
26	310	930	1,210	1,980	5,180	4,380	3,410	582	229	266	116	884
27	298	827	1,080	1,720	3,890	3,720	2,110	594	305	212	113	650
28	288	756	1,130	1,520	3,260	4,920	1,760	556	318	182	109	475
29	280	679	1,400	1,410	------	15,500	1,590	485	326	167	257	382
30	276	633	1,680	1,330	------	19,400	2,920	609	253	157	382	323
31	273	------	1,740	1,320	------	10,100	------	594	------	150	198	------
TOTAL	18,493	22,570	36,890	109,730	110,670	306,080	73,890	45,186	11,533	5,807	5,658	9,010
MEAN	597	752	1,190	3,540	3,953	9,874	2,463	1,458	384	187	183	300
MAX	1,960	3,260	1,770	20,200	18,100	56,600	6,340	7,530	1,070	266	382	930
MIN	273	251	721	1,320	1,150	1,740	1,320	485	229	150	109	102
CFSM	.64	.80	1.27	3.79	4.23	10.6	2.63	1.56	.41	.20	.20	.32
IN.	.74	.90	1.47	4.37	4.40	12.18	2.94	1.80	.46	.23	.23	.36

CAL YR 1974 TOTAL 697,693 MEAN 1,911 MAX 30,500 MIN 25 CFSM 2.04 IN 27.76
WTR YR 1975 TOTAL 755,517 MEAN 2,070 MAX 56,600 MIN 102 CFSM 2.21 IN 30.06

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-11	1300	33.84	21,900	03-13	1400	48.26	60,300
02-24	0900	31.68	18,800	03-30	0800	33.49	21,400

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.--18 years, 181 cfs (5.126 cu m/s), 19.82 in/yr (503 mm/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 cfs (317 cu m/s) Jan. 10, gage height, 15.68 ft (4.779 m); minimum, 26 cfs (0.74 cu m/s) Sept. 8-10.
Period of record: Maximum discharge, 11,200 cfs (317 cu m/s) Jan. 10, 1975, gage height, 15.68 ft (4.779 m); minimum, 16 cfs (0.45 cu m/s) Aug. 21, 1962.

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

REVISIONS.--WSP 1706: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	62	97	230	186	356	566	274	120	55	48	31
2	127	61	102	250	452	324	482	242	110	54	49	29
3	105	59	98	287	519	282	425	224	105	52	51	28
4	95	62	95	275	672	261	380	209	100	50	65	28
5	86	64	96	239	1,020	257	350	186	97	49	65	28
6	79	58	97	216	927	255	325	199	96	60	55	30
7	74	56	93	196	651	279	300	370	94	57	49	29
8	70	51	88	218	528	245	280	442	89	52	46	26
9	67	46	92	340	446	236	260	537	87	49	45	26
10	64	46	112	2,600	387	375	240	413	93	48	42	27
11	61	52	123	3,350	385	460	220	349	92	46	39	29
12	57	54	121	836	470	5,800	207	303	116	45	38	34
13	52	54	118	606	380	6,280	185	254	97	46	36	34
14	52	54	111	513	330	2,060	174	220	88	44	36	32
15	62	53	103	410	301	986	169	221	91	42	38	29
16	80	62	98	377	280	711	157	268	91	41	41	29
17	80	82	93	318	315	586	150	310	85	40	43	30
18	76	613	96	294	270	507	147	383	82	40	43	31
19	73	582	100	474	240	472	180	297	79	42	39	31
20	69	357	101	540	205	424	169	243	75	43	38	313
21	65	241	118	474	175	405	157	207	71	43	36	134
22	63	184	145	405	152	422	150	179	69	41	33	90
23	62	144	184	395	3,520	461	147	161	68	39	33	72
24	61	127	205	324	1,510	674	152	145	66	41	33	185
25	59	114	218	327	750	578	191	135	64	43	32	269
26	58	108	190	290	552	471	186	131	63	51	32	189
27	58	103	210	247	454	433	175	130	63	46	31	136
28	58	98	218	218	399	512	172	119	97	47	30	111
29	63	95	230	196	------	2,830	168	121	66	47	31	95
30	65	95	240	177	------	1,130	258	116	58	46	31	82
31	64	------	218	167	------	722	------	117	------	45	32	------
TOTAL	2,266	3,837	4,210	15,789	16,476	29,794	7,122	7,505	2,572	1,444	1,260	2,237
MEAN	73.1	128	136	509	588	961	237	242	85.7	46.6	40.6	74.6
MAX	161	613	240	3,350	3,520	6,280	566	537	120	60	65	313
MIN	52	46	88	167	152	236	147	116	58	39	30	26
CFSM	.59	1.03	1.10	4.10	4.74	7.75	1.91	1.95	.69	.38	.33	.60
IN.	.68	1.15	1.26	4.74	4.94	8.94	2.14	2.25	.77	.43	.38	.67

CAL YR 1974 TOTAL 86,572 MEAN 237 MAX 4,010 MIN 46 CFSM 1.91 IN 25.97
WTR YR 1975 TOTAL 94,512 MEAN 259 MAX 6,280 MIN 26 CFSM 2.09 IN 28.35

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-10	2400	15.68	11,200	03-13	0500	15.19	9,850
02-23	1900	14.28	7,700	03-29	1400	13.03	5,530

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, 2,195,100 cfs-days (5,371 cu hm) Apr. 1, elevation, 730.00 ft (222.504 m); minimum, 1,101,300 cfs-days (2,695 cu hm) Aug. 30, elevation, 681.95 ft (207.858 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, 828,600 cfs-days (2,027 cu hm) Mar. 15, elevation, 660.98 ft (201.467 m); minimum, 520,300 cfs-days (1,273 cu hm) Nov. 16, elevation, 638.60 ft (194.645 m). Extremes for period of record: Maximum contents, 828,600 cfs-days (2,027 cu hm) Mar. 15, 1975, elevation, 660.98 ft (201.467 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 current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 156,700 cfs-days (383.4 cu hm) Mar. 13, elevation, 508.00 ft (154.838 m); minimum, 103,100 cfs-days (252.3 cu hm) Dec. 26, elevation, 498.96 ft (152.083 m). Extremes for period of record: Maximum contents, 156,700 cfs-days (383.4 cu hm) Mar. 13, 1975, elevation, 508.00 ft (154.838 m); minimum, after first filling to ordinary minimum pool, 96,700 cfs-days (236.6 cu hm), Apr. 18, 1974, elevation, 497.65 ft (151.684 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. Records furnished by Corps of Engineers.

03422000 GREAT FALLS LAKE.--Lat 35°48'21", long 85°38'09", Warren County, at penstock inlet on Collins River, 700 ft (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, 28,600 cfs-days (69.98 cu hm) Mar. 13, elevation, 807.65 ft (246.172 m); minimum, 9,500 cfs-days (23.25 cu hm) June 4, elevation, 784.43 ft (239.094 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, 967,100 cfs-days (2,366 cu hm), Mar. 31, elevation, 677.27 ft (206.432 m); minimum 544,400 cfs-days (1,332 cu hm) Nov. 15, elevation, 633.60 ft (193.121 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, 276,200 cfs-days (675.9 cu hm) Mar. 13, elevation, 450.11 ft (137.194 m); minimum 186,600 cfs-days (456.6 cu hm) Oct. 4, elevation, 442.68 ft (134.929 m). Extremes for period of record: Maximum contents, 276,200 cfs-days (675.9 cu hm) Mar. 13, 1975, elevation, 450.11 ft (137.194 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, 316,400 cfs-days (774.2 cu hm) Mar. 15, elevation, 503.41 ft (153.439 m); minimum, 139,800 cfs-days (342.1) cu hm) Mar. 4, elevation, 480.84 ft (146.560 m). Extremes for period of record: Maximum contents 316,400 cfs-days (774.2 cu hm) Mar. 15, 1975, elevation, 503.41 ft (153.439 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, 513,200 cfs-days (1,256 cu hm) Apr. 4, elevation, 361.45 ft (110.170 m); minimum, level pool storage, 295,700 cfs-days (723.6 cu hm) Dec. 8, elevation, 353.46 ft (107.735 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 June 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, IN FEET, AND CONTENTS, IN CFS-DAYS, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents
	03413500 Lake Cumberland			03416500 Dale Hollow Lake		
Sept. 30	689.31	1,246,700	-	642.64	570,600	-
Oct. 31	683.81	1,137,300	-109,400	639.44	530,600	-40,000
Nov. 30	691.03	1,281,800	+144,500	641.95	561,900	+31,300
Dec. 31	697.05	1,408,000	+126,200	646.36	619,100	+57,200
CAL YR 1974	-	-	-225,900	-	-	+4,000
Jan. 31	697.68	1,421,500	+13,500	649.64	663,500	+44,400
Feb. 28	694.70	1,358,100	-63,400	649.36	659,600	-3,900
Mar. 31	729.95	2,193,800	+835,700	657.04	769,200	+109,600
Apr. 30	704.24	1,565,800	-628,000	649.35	659,500	-109,700
May 31	694.25	1,348,600	-217,200	647.80	638,300	-21,200
June 30	688.52	1,230,700	-117,900	644.69	597,100	-41,200
July 31	683.75	1,136,100	-94,600	643.80	585,500	-11,600
Aug. 31	682.04	1,103,000	-33,100	641.42	555,200	-30,300
Sept. 30	686.86	1,197,500	+94,500	641.44	555,400	+200
WTR YR 1975	-	-	-49,200	-	-	-15,200
	03418400 Cordell Hull Reservoir			03422000 Great Falls Lake		
Sept. 30	504.45	133,400	-	800.29	21,000	-
Oct. 31	501.19	114,600	-18,800	785.79	10,300	-10,700
Nov. 30	500.35	110,100	-4,500	794.16	15,900	+5,600
Dec. 31	500.40	110,400	+300	805.40	26,000	+10,100
CAL YR 1974	-	-	+2,000	-	-	+100
Jan. 31	500.17	109,200	-1,200	805.69	26,300	+300
Feb. 28	499.10	103,800	-5,400	805.76	26,400	+100
Mar. 31	504.40	133,100	+29,300	805.67	26,300	-100
Apr. 30	502.92	124,200	-8,900	795.40	16,900	-9,400
May 31	504.06	131,000	+6,800	786.30	10,600	-6,300
June 30	503.85	129,700	-1,300	792.35	14,600	+4,000
July 31	503.85	129,700	0	799.13	20,000	+5,400
Aug. 31	503.48	127,500	-2,200	800.19	20,900	+900
Sept. 30	503.25	126,200	-1,300	800.73	21,400	+500
WTR YR 1975	-	-	-7,200	-	-	+400
	03424000 Center Hill Lake			03426300 Old Hickory Lake		
Sept. 30	638.14	582,700	-	445.20	213,900	-
Oct. 31	635.41	559,500	-23,200	445.57	218,200	+4,300
Nov. 30	636.65	570,000	+10,500	444.52	206,200	-12,000
Dec. 31	646.77	659,100	+89,100	443.15	191,500	-14,700
CAL YR 1974	-	-	-32,000	-	-	-20,100
Jan. 31	645.10	643,900	-15,200	443.43	194,400	+2,900
Feb. 28	641.80	614,500	-29,400	444.62	207,300	+12,900
Mar. 31	677.12	965,400	+350,900	446.33	227,200	+19,900
Apr. 30	643.98	633,900	-331,500	444.45	205,400	-21,800
May 31	643.47	629,300	-4,600	444.78	209,100	+3,700
June 30	641.52	612,100	-17,200	444.23	203,000	-6,100
July 31	641.20	609,300	-2,800	444.45	205,400	+2,400
Aug. 31	638.80	588,400	-20,900	444.57	206,800	+1,400
Sept. 30	642.08	617,000	+28,600	444.45	205,400	-1,400
WTR YR 1975	-	-	+34,300	-	-	-8,500

Reservoirs in Cumberland River basin--Continued

MONTHEND ELEVATION, IN FEET, AND CONTENTS, IN CFS-DAYS, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents
	03430050 J. Percy Priest Lake			03438210 Lake Barkley†		
Sept. 30	490.14	198,600	-	355.47	351,600	-
Oct. 31	487.19	178,300	-20,300	354.64	322,900	-28,700
Nov. 30	486.98	176,900	-1,400	354.03	317,700	-5,200
Dec. 31	485.32	166,100	-10,800	355.20	359,200	+41,500
CAL YR 1974	-	-	-14,300	-	-	-30,400
Jan. 31	481.61	144,100	-22,000	354.02	331,000	-28,200
Feb. 28	480.95	140,400	-3,700	355.64	372,500	+41,500
Mar. 31	494.10	228,700	+88,300	361.14	653,500	+281,000
Apr. 30	490.48	201,100	-27,600	358.15	457,400	-196,100
May 31	489.50	194,100	-7,000	358.76	439,800	-17,600
June 30	490.00	197,600	+3,500	357.78	401,100	-38,700
July 31	490.15	198,700	+1,100	356.80	376,100	-25,000
Aug. 31	489.41	193,500	-5,200	355.82	351,900	-24,200
Sept. 30	489.99	197,500	+4,000	355.04	331,700	-20,200
WTR YR 1975	-	-	-1,100	-	-	-19,900

† 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, 200 ft (60 m) upstream 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.--57 years (1903-5, 1920-75), 2,955 cfs (83.69 cu m/s), 21.60 in/yr (549 mm/yr).

EXTREMES.--Current year: Maximum discharge, 49,200 cfs (1,390 cu m/s) Mar. 14, gage height, 15.70 ft (4.785 m); minimum, 1,130 cfs (32.0 cu m/s), Sept. 6, 7, gage height, 1.66 ft (0.506 m); minimum daily, 1,130 cfs (32.0 cu m/s), Sept. 6.
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 ft (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.
The highest known flood occurred Mar. 7, 1867, reaching a stage of 24 ft (7.3 m), present datum; flood of Feb. 28, 1902, reached a stage of 23.0 ft (7.01 m), present datum; and that of July 17, 1916, 22.5 ft (6.86 m), present datum, from reports of Tennessee Valley Authority. Estimated discharges for these floods are 110,000 cfs (3,120 cu m/s); 101,000 cfs (2,860 cu m/s); and 97,000 cfs (2,750 cu m/s), respectively.

REMARKS.--Records good. Diurnal fluctuation during low flow caused by powerplants above station. Records of chemical analyses and periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,890	1,390	3,530	3,630	3,430	5,350	12,200	2,930	6,280	1,990	2,420	1,360
2	1,720	1,360	4,610	3,250	4,390	5,060	10,300	3,050	7,030	1,930	2,030	1,480
3	1,600	1,350	3,340	2,880	6,430	4,540	8,640	2,990	6,090	2,020	1,810	1,270
4	1,560	1,360	2,680	2,900	6,480	4,140	7,280	3,530	4,660	1,960	2,010	1,180
5	1,550	1,380	2,410	3,050	8,860	3,960	6,450	3,400	3,800	2,240	1,890	1,170
6	1,480	1,410	2,250	2,870	10,400	3,810	5,900	3,030	3,570	1,910	3,230	1,130
7	1,450	1,440	2,150	2,600	8,340	3,920	5,520	2,840	3,260	2,020	3,550	1,240
8	1,440	1,410	2,420	2,480	6,380	7,930	5,200	2,820	3,010	2,650	3,070	1,420
9	1,420	1,330	4,270	2,390	5,380	6,200	4,950	3,650	2,800	2,190	2,380	1,540
10	1,610	1,320	3,790	2,360	4,710	5,190	4,830	3,550	2,710	1,990	2,120	1,540
11	1,410	1,300	3,010	5,570	4,330	5,270	4,610	3,200	2,990	2,340	2,000	1,510
12	1,360	1,380	2,610	6,780	4,260	5,430	4,380	3,030	3,800	2,190	1,830	1,540
13	1,330	1,600	2,440	12,300	5,670	19,700	4,130	3,930	4,610	2,240	1,700	1,890
14	1,320	1,650	2,320	10,200	4,780	37,700	3,950	3,630	3,780	1,870	1,630	1,630
15	1,320	1,650	2,180	7,170	4,160	25,300	3,950	3,160	3,200	1,800	1,620	1,360
16	1,920	1,800	2,180	5,110	3,900	16,700	3,980	4,880	2,930	1,870	2,270	1,220
17	3,250	1,760	2,510	4,260	4,830	12,900	3,780	7,050	2,740	1,870	2,000	1,180
18	2,860	1,780	2,370	3,710	5,510	9,900	3,650	7,970	2,650	1,940	2,290	1,680
19	2,200	3,020	2,150	3,490	6,230	8,380	3,630	11,000	2,650	1,850	1,940	5,800
20	1,850	7,390	2,060	5,070	5,890	9,620	3,670	10,200	2,560	1,850	1,600	4,770
21	1,780	6,850	1,970	5,750	5,160	8,790	3,400	8,720	2,620	2,320	1,570	3,000
22	1,710	3,970	1,950	4,550	4,520	7,570	3,260	6,240	2,580	2,200	1,540	2,330
23	1,320	2,690	1,840	3,910	4,190	7,460	3,180	4,380	2,320	1,940	1,430	4,840
24	1,550	2,140	1,780	3,550	7,480	9,430	3,140	3,930	2,220	1,790	1,330	14,700
25	1,530	1,860	4,390	7,000	11,400	15,500	3,180	3,630	2,140	1,910	1,420	10,400
26	1,500	2,000	6,340	11,200	9,790	10,800	3,340	3,420	2,090	1,820	1,380	8,820
27	1,480	1,780	4,090	7,300	8,670	8,250	3,100	3,870	2,220	1,930	1,330	8,130
28	1,440	1,670	8,620	5,300	6,480	6,900	2,950	3,440	2,090	1,940	1,510	5,990
29	1,420	1,650	7,590	4,460	------	6,500	2,930	3,360	2,040	2,510	1,620	3,430
30	1,420	1,540	4,970	4,080	------	25,200	2,950	3,440	2,010	1,880	1,540	2,880
31	1,410	------	4,110	3,690	------	16,700	------	4,200	------	2,170	1,400	------
TOTAL	51,100	63,230	102,930	152,860	172,050	324,100	142,430	138,470	97,450	63,130	59,460	100,430
MEAN	1,648	2,108	3,320	4,931	6,145	10,450	4,748	4,467	3,248	2,036	1,918	3,348
MAX	3,250	7,390	8,620	12,300	11,400	37,700	12,200	11,000	7,030	2,650	3,550	14,700
MIN	1,320	1,300	1,780	2,360	3,430	3,810	2,930	2,820	2,010	1,790	1,330	1,130
CFSM	.89	1.13	1.79	2.65	3.31	5.62	2.56	2.40	1.75	1.10	1.03	1.80
IN.	1.02	1.27	2.06	3.06	3.44	6.49	2.85	2.77	1.95	1.26	1.19	2.01

CAL YR 1974 TOTAL 1,458,960 MEAN 3,997 MAX 24,300 MIN 1,300 CFSM 2.15 IN 29.21
WTR YR 1975 TOTAL 1,467,640 MEAN 4,021 MAX 37,700 MIN 1,130 CFSM 2.16 IN 29.38

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-14	1100	15.70	49,200	03-30	1230	13.86	39,000
03-24	2300	10.03	22,600	09-24	1000	9.04	19,100

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.--9 years, 29.8 cfs (0.844 cu m/s), 39.70 in/yr (1,008 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,010 cfs (28.6 cu m/s) May 8, gage height, 3.37 ft (1.027 m); minimum, 1.9 cfs (0.054 cu m/s) July 5, 6.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	14	54	41	44	35	87	20	26	2.1	2.3	4.0
2	21	14	45	40	73	32	69	22	20	3.0	6.7	3.8
3	19	13	40	37	83	30	61	26	19	2.5	11	3.5
4	18	13	36	39	100	28	53	28	17	2.1	6.6	3.3
5	17	15	33	38	108	26	47	25	16	2.1	7.8	3.1
6	17	13	31	38	89	26	42	23	16	5.5	30	3.8
7	16	12	33	35	72	50	39	23	14	3.4	26	5.2
8	15	12	44	34	62	62	37	109	13	2.8	16	4.0
9	15	12	44	39	57	45	34	227	11	2.4	14	2.9
10	14	11	38	37	51	43	36	88	12	3.4	13	2.7
11	14	11	34	53	50	42	31	56	11	19	11	4.5
12	13	14	32	60	63	77	29	46	14	15	8.5	7.5
13	13	13	30	75	60	175	28	40	11	7.0	6.8	30
14	12	12	27	58	56	220	26	35	9.8	4.5	5.3	15
15	13	12	27	50	51	111	25	33	9.0	3.5	28	11
16	52	11	28	43	50	81	23	35	8.6	2.9	41	8.1
17	36	12	26	39	50	65	22	30	7.7	7.8	25	7.3
18	31	13	24	37	50	56	21	45	6.7	8.7	27	13
19	26	24	23	39	52	59	33	42	6.0	7.3	47	13
20	21	137	22	54	50	61	35	35	6.5	10	30	11
21	19	89	21	51	47	52	30	31	7.1	7.6	22	8.8
22	18	56	19	44	44	54	29	27	5.2	5.8	17	19
23	17	45	18	40	44	53	27	24	4.4	4.8	14	121
24	16	39	21	37	98	78	26	22	3.8	5.6	12	90
25	15	38	169	196	63	79	28	20	3.4	5.0	9.6	45
26	15	32	52	142	47	60	26	20	3.1	4.1	7.4	32
27	15	30	50	85	40	52	23	18	3.0	2.7	6.9	24
28	14	28	122	69	36	47	22	21	2.8	2.3	6.2	20
29	14	26	67	59	------	50	21	22	2.6	2.3	4.8	17
30	14	42	52	53	------	208	20	19	2.3	2.3	4.2	15
31	14	------	45	47	------	120	------	19	------	2.3	4.0	------
TOTAL	576	813	1,307	1,709	1,690	2,177	1,030	1,231	292.0	159.8	471.1	548.5
MEAN	18.6	27.1	42.2	55.1	60.4	70.2	34.3	39.7	9.73	5.15	15.2	18.3
MAX	52	137	169	196	108	220	87	227	26	19	47	121
MIN	12	11	18	34	36	26	20	18	2.3	2.1	2.3	2.7
CFSM	1.82	2.66	4.14	5.40	5.92	6.88	3.36	3.89	.95	.50	1.49	1.79
IN.	2.10	2.97	4.77	6.23	6.16	7.94	3.76	4.49	1.06	.58	1.72	2.00

CAL YR 1974 TOTAL 13,212.0 MEAN 36.2 MAX 234 MIN 11 CFSM 3.55 IN 48.18
WTR YR 1975 TOTAL 12,004.4 MEAN 32.9 MAX 227 MIN 2.1 CFSM 3.23 IN 43.78

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	0545	2.18	313	03-14	0140	2.47	447
01-25	0955	2.30	366	05-08	2340	3.37	1,010

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.--58 years, 1,251 cfs (35.43 cu m/s).

EXTREMES.--Current year: Maximum discharge, 29,000 cfs (821 cu m/s) Mar. 30, gage height, 15.04 ft (4.584 m); minimum, 65 cfs (1.84 cu m/s) Sept. 2, 3, gage height, 1.87 ft (0.570 m); minimum daily, 68 cfs (1.93 cu m/s) Sept. 2.
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 August 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. 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. Records of chemical analyses and periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	325	803	2,600	1,680	2,560	5,160	1,160	1,140	176	74	72
2	425	121	1,520	2,080	2,830	2,560	4,000	890	1,310	546	341	68
3	854	169	2,370	1,400	3,250	2,470	3,820	280	1,230	702	360	303
4	516	365	1,420	891	3,330	2,420	3,390	380	1,320	443	439	743
5	142	416	1,210	1,910	3,550	2,400	3,050	1,000	1,170	484	927	606
6	111	293	692	1,840	3,340	2,380	2,790	1,360	1,340	567	1,190	247
7	106	536	550	1,530	3,000	2,930	2,560	1,380	737	589	445	87
8	147	820	508	1,220	2,790	3,710	2,500	1,380	205	820	797	516
9	394	371	1,300	612	2,680	2,920	2,460	4,300	567	760	471	703
10	398	296	1,880	1,060	2,580	2,850	2,450	1,610	1,170	650	255	261
11	451	598	1,580	2,090	2,480	2,500	2,410	957	1,490	937	566	162
12	351	595	1,410	2,590	2,950	3,130	2,370	1,150	1,090	701	971	597
13	130	566	1,210	4,160	2,820	7,180	2,330	1,530	904	536	1,260	369
14	460	518	970	3,110	2,660	17,600	2,310	1,130	416	891	331	144
15	515	630	735	2,770	2,120	7,510	1,850	1,590	357	1,270	256	98
16	1,500	352	1,170	2,600	1,930	4,960	1,500	2,370	477	661	389	84
17	1,060	175	1,370	2,500	1,850	4,000	1,270	987	672	807	290	224
18	1,110	705	1,020	2,440	2,060	3,320	1,110	1,200	720	337	215	1,100
19	497	834	1,020	1,970	2,640	3,310	1,140	2,190	267	450	531	1,510
20	617	3,770	752	2,450	2,610	3,240	1,140	1,780	418	316	464	1,680
21	1,210	3,220	639	2,460	2,540	2,830	1,130	1,750	228	1,070	348	680
22	1,790	1,400	1,050	2,060	2,480	2,890	1,970	1,680	194	1,200	336	1,060
23	1,030	978	625	1,500	2,100	2,910	1,290	1,390	225	891	311	2,690
24	954	645	547	1,440	3,400	4,560	1,530	1,030	388	1,060	224	4,350
25	905	839	4,070	4,470	3,080	6,240	1,410	1,110	669	550	503	2,840
26	387	1,370	2,950	4,090	2,810	3,910	491	1,000	760	892	1,020	2,390
27	126	1,320	2,400	3,130	2,680	3,210	278	1,190	434	320	862	1,880
28	179	882	5,340	2,730	2,590	2,820	1,090	982	255	294	531	1,220
29	200	545	3,470	2,610	------	2,770	1,490	432	462	693	240	1,490
30	565	517	2,850	2,310	------	18,400	1,500	896	287	351	417	1,760
31	509	------	2,510	2,500	------	7,720	------	1,140	------	162	230	------
TOTAL	17,975	24,171	49,941	71,123	74,830	142,210	61,789	41,224	20,902	20,126	15,594	29,934
MEAN	580	806	1,611	2,294	2,673	4,587	2,060	1,330	697	649	503	998
MAX	1,790	3,770	5,340	4,470	3,550	18,400	5,160	4,300	1,490	1,270	1,260	4,350
MIN	106	121	508	612	1,680	2,380	278	280	194	162	74	68

CAL YR 1974 TOTAL 590,867 MEAN 1,619 MAX 11,200 MIN 106
WTR YR 1975 TOTAL 569,819 MEAN 1,561 MAX 18,400 MIN 68

PEAK DISCHARGE (BASE, 7,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1200	7.73	7,580	03-24	2315	9.62	12,100
01-25	1400	8.09	8,410	03-30	1000	15.04	29,000
03-14	0615	14.16	25,900				

TENNESSEE RIVER BASIN

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.--56 years (1919-75), 1,348 cfs (38.18 cu m/s), 22.74 in/yr (578 mm/yr).

EXTREMES.--Current year: Maximum discharge, 26,300 cfs (742 cu m/s) Mar. 14, gage height, 8.85 ft (2.697 m); minimum, 361 cfs (10.2 cu m/s) Sept. 16, 17, gage height, 1.16 ft (0.354 m).
Period of record: Maximum discharge, 120,000 cfs (3,400 cu m/s) May 21, 1901, gage height, 24 ft (7.3 m), present site and datum, from rating curve extended above 48,000 cfs (1,360 cu m/s) on basis of slope-area measurement at gage height 18.57 ft (5.660 m); 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.

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

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	700	586	1,530	2,400	1,680	1,990	4,750	1,190	3,130	819	670	550
2	672	577	1,340	2,130	2,140	1,920	3,780	1,280	2,650	776	569	558
3	651	571	1,150	1,870	2,710	1,680	3,540	1,220	1,890	725	562	435
4	647	568	1,030	2,030	2,490	1,550	3,020	1,620	1,590	731	639	401
5	650	584	996	1,990	4,420	1,530	2,670	1,470	1,410	898	694	386
6	648	612	955	1,740	5,630	1,460	2,460	1,270	1,570	802	1,620	381
7	638	585	995	1,580	4,120	1,630	2,290	1,200	1,460	949	1,360	451
8	630	555	1,490	1,440	3,170	3,190	2,160	1,200	1,200	1,390	847	657
9	618	550	4,600	1,370	2,680	2,390	2,040	1,610	1,100	1,110	694	535
10	607	546	3,890	1,300	2,300	2,230	1,980	1,730	1,120	895	636	441
11	597	540	1,990	3,060	2,100	2,500	1,890	1,530	1,610	795	633	412
12	590	622	1,280	2,860	2,570	3,690	1,820	1,380	2,340	788	597	431
13	586	678	1,260	4,530	2,780	12,300	1,680	1,440	2,240	785	548	535
14	581	634	1,250	3,400	2,350	20,800	1,590	1,300	1,640	704	518	466
15	587	685	1,240	2,560	2,070	8,740	1,640	1,210	1,380	672	504	407
16	1,300	651	1,440	2,200	2,030	5,300	1,590	2,010	1,420	672	620	372
17	1,830	638	1,620	1,920	2,430	4,230	1,500	2,070	1,230	741	590	385
18	1,010	1,080	1,390	1,730	2,430	3,500	1,450	2,620	1,140	762	557	3,440
19	831	1,790	1,230	1,680	2,520	4,170	1,460	3,120	1,300	749	522	3,220
20	757	4,840	1,160	2,340	2,300	4,450	1,490	2,250	1,190	831	463	1,270
21	712	3,820	1,070	2,420	2,060	3,740	1,340	1,820	1,090	1,230	453	859
22	683	2,170	1,020	2,000	1,870	3,450	1,280	1,570	997	889	480	730
23	664	1,630	948	1,800	1,820	3,580	1,250	1,410	946	816	477	1,410
24	655	1,350	926	1,670	3,540	5,130	1,250	1,320	906	983	443	9,670
25	648	1,270	2,260	3,950	3,780	7,470	1,350	1,210	871	1,270	450	3,200
26	642	1,170	3,670	4,990	2,730	4,430	1,470	1,130	882	933	432	1,950
27	630	1,030	2,470	3,120	2,350	3,540	1,270	1,310	910	737	409	1,420
28	617	967	5,860	2,490	2,140	3,060	1,220	1,120	943	651	638	1,160
29	607	906	5,060	2,150	------	3,030	1,190	1,210	1,060	603	793	984
30	600	918	3,450	1,970	------	14,000	1,170	2,050	1,030	568	498	896
31	595	------	2,830	1,770	------	7,360	------	1,860	------	562	447	------
TOTAL	22,183	33,123	61,400	72,460	75,210	148,040	57,590	48,730	42,245	25,836	19,363	38,012
MEAN	716	1,104	1,981	2,337	2,686	4,775	1,920	1,572	1,408	833	625	1,267
MAX	1,830	4,840	5,860	4,990	5,630	20,800	4,750	3,120	3,130	1,390	1,620	9,670
MIN	581	540	926	1,300	1,680	1,460	1,170	1,120	871	562	409	372
CFSM	.89	1.37	2.46	2.90	3.34	5.93	2.39	1.95	1.75	1.03	.78	1.57
IN.	1.03	1.53	2.84	3.35	3.48	6.84	2.66	2.25	1.95	1.19	.89	1.76

CAL YR 1974 TOTAL 706,514 MEAN 1,936 MAX 16,300 MIN 540 CFSM 2.41 IN 32.65
WTR YR 1975 TOTAL 644,192 MEAN 1,765 MAX 20,800 MIN 372 CFSM 2.19 IN 29.77

PEAK DISCHARGE (BASE, 9,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-14	0700	8.85	26,300	03-30	1200	7.73	20,800
03-24	2330	5.88	12,400	09-24	0830	7.69	20,600

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.--55 years, 573 cfs (16.23 cu m/s), 22.04 in/yr (560 mm/yr).

EXTREMES.--Current year: Maximum discharge, 19,300 cfs (547 cu m/s) Mar. 14, gage height, 9.80 ft (2.987 m); minimum, 72 cfs (2.04 cu m/s) Sept. 5, 6, gage height, 1.04 ft (0.317 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), discharge, 55,000 cfs (1,560 cu m/s); that of Apr. 1, 1896, 16.8 ft (5.12 m), discharge, 46,000 cfs (1,300 cu m/s); and that of Mar. 7, 1867, 16.5 ft (5.03 m), discharge, 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 periodic 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	125	1420	1120	623	670	1870	328	669	134	113	108
2	162	122	928	990	1860	740	1390	363	462	126	109	98
3	152	122	650	870	2330	585	1740	334	349	138	119	88
4	148	119	520	1140	2110	526	1230	409	301	120	167	81
5	145	170	445	990	2600	497	1000	340	271	146	194	76
6	138	207	394	827	2120	468	864	310	289	210	1080	80
7	134	145	378	685	1490	2040	763	299	294	246	714	144
8	128	131	822	596	1140	3210	686	304	235	174	481	139
9	125	125	833	580	971	1530	628	2660	214	152	303	112
10	122	122	635	520	812	1400	627	1200	216	160	249	95
11	119	122	527	1700	775	1360	573	757	232	184	234	120
12	116	182	469	1440	1800	1960	512	590	311	173	191	115
13	113	198	412	2370	1420	8530	467	530	322	144	164	313
14	110	170	367	1400	1020	10500	445	440	243	126	148	221
15	119	239	340	1010	829	2800	455	443	212	119	137	153
16	1060	178	391	805	832	1950	425	975	199	129	145	126
17	626	194	356	657	1270	1610	402	646	183	129	147	117
18	340	340	322	589	1160	1280	387	576	169	183	185	300
19	263	1130	304	753	1150	1500	544	674	158	273	234	348
20	220	3080	288	2600	953	1540	701	511	157	226	206	224
21	198	1470	274	1770	804	1190	516	432	193	169	162	180
22	182	748	259	1180	690	1460	458	383	486	157	226	166
23	170	511	244	927	653	1600	432	347	237	142	181	1230
24	162	403	241	797	2550	2730	415	327	187	451	149	1610
25	155	401	6440	6270	1430	2490	451	297	177	266	131	607
26	152	365	2710	3100	1030	1550	449	303	241	192	116	379
27	145	308	2100	1660	838	1180	388	435	214	153	137	287
28	138	282	7820	1200	721	985	373	330	186	133	221	233
29	134	256	2770	966	---	1200	358	429	158	119	197	199
30	131	297	1780	834	---	10400	348	357	154	142	127	174
31	128	---	1300	704	---	3040	---	331	---	138	111	---
TOTAL	6213	12262	36739	41050	35981	72521	19897	16660	7719	5354	7078	8123
MEAN	200	409	1185	1324	1285	2339	663	537	257	173	228	271
MAX	1060	3080	7820	6270	2600	10500	1870	2660	669	451	1080	1610
MIN	110	119	241	520	623	468	348	297	154	119	109	76
CFSM	.57	1.16	3.36	3.75	3.64	6.63	1.88	1.52	.73	.49	.65	.77
IN.	.65	1.29	3.87	4.33	3.79	7.64	2.10	1.76	.81	.56	.75	.86

CAL YR 1974 TOTAL 296,995 MEAN 814 MAX 7,820 MIN 110 CFSM 2.31 IN 31.30
WTR YR 1975 TOTAL 269,597 MEAN 739 MAX 10,500 MIN 76 CFSM 2.09 IN 28.41

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1130	7.59	11,900	03-14	0530	9.80	19,300
12-28	1130	6.92	9,950	03-30	0800	9.51	18,300
01-25	1430	8.12	13,500				

03470500 French Broad River near Knoxville, Tenn.
(National stream-quality accounting network station)

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.--30 years, 7,871 cfs (222.9 cu m/s), 20.95 in/yr (532 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 40,200 cfs (1,138 cu m/s) Mar. 30, elevation, 827.25 ft (252.146 m); minimum, 230 cfs (6.51 cu m/s) Sept. 1, elevation, 814.07 ft (248.129 m); minimum daily, 682 cfs (19.3 cu m/s) Sept. 22.
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 good. Flow regulated by Douglas Lake (see sta. 03468500), 24.6 miles (39.6 km) upstream. 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,520	6,480	3,650	14,300	17,600	11,400	23,700	7,870	3,750	13,000	9,540	830
2	9,360	5,740	2,280	14,900	20,400	12,300	27,400	5,970	7,540	12,000	7,020	7,820
3	9,930	4,340	5,000	14,300	21,500	11,700	28,800	6,610	8,670	11,000	3,120	11,600
4	7,750	5,940	6,840	16,500	20,300	12,000	26,100	5,980	9,410	11,000	5,760	10,900
5	7,840	6,250	9,570	15,600	19,300	11,000	22,900	8,920	9,810	9,000	8,280	10,500
6	3,850	6,820	9,470	17,200	20,000	11,100	22,600	8,410	11,600	8,000	9,990	6,750
7	6,590	4,830	8,690	17,100	19,200	7,300	22,500	8,080	5,980	10,000	7,860	2,270
8	7,970	3,550	10,300	17,300	18,700	16,800	22,300	7,970	6,350	12,000	4,520	4,420
9	7,130	3,530	12,400	17,100	18,400	6,920	21,200	6,950	12,100	11,000	5,160	10,000
10	6,390	4,470	13,500	15,000	17,700	7,840	19,700	3,090	12,800	9,000	2,790	7,930
11	6,650	3,210	14,200	9,560	15,000	11,400	19,500	1,860	13,800	10,000	4,690	6,880
12	3,640	5,240	11,200	11,900	15,000	14,900	16,100	5,530	9,190	12,000	9,890	5,090
13	1,590	4,960	14,000	12,400	14,400	15,900	13,200	6,600	4,580	8,000	10,000	3,730
14	3,070	5,150	14,600	8,850	14,400	16,600	13,200	7,180	2,640	10,000	10,500	1,980
15	6,190	5,350	13,200	5,170	11,300	5,440	10,800	6,050	3,590	11,200	10,700	1,610
16	7,350	4,680	12,900	8,350	11,500	11,300	13,100	5,200	4,510	12,800	8,360	8,820
17	6,920	3,980	14,100	13,100	12,200	19,300	11,800	3,590	9,840	12,300	3,010	7,470
18	5,270	2,140	12,700	16,600	14,900	20,300	14,100	1,520	9,720	14,400	4,230	6,490
19	3,280	4,420	12,500	18,200	13,100	20,300	10,500	4,400	11,200	9,480	9,720	6,130
20	4,890	4,660	9,770	19,600	11,700	21,700	10,300	2,920	11,400	6,040	9,460	3,480
21	6,490	2,710	9,940	16,000	10,200	24,200	7,720	8,860	12,700	8,770	9,910	2,050
22	8,100	1,430	6,050	15,500	11,800	23,400	6,200	9,770	10,100	9,600	9,930	682
23	8,710	835	3,200	17,500	11,500	25,100	8,080	11,000	12,700	9,340	6,780	1,370
24	6,840	1,440	1,290	17,400	15,900	25,300	5,550	10,500	10,100	11,000	3,750	3,800
25	5,990	1,540	6,940	20,600	13,600	24,900	2,900	7,890	11,000	11,100	6,980	1,890
26	5,600	6,000	6,510	22,500	11,900	25,900	2,520	7,290	12,000	9,430	10,400	2,700
27	5,770	7,470	2,580	17,400	10,600	26,100	2,030	8,490	12,000	4,150	9,900	2,510
28	6,160	5,410	14,100	17,400	11,100	26,000	8,080	5,750	12,000	7,420	9,900	2,660
29	7,370	6,020	11,600	18,100	------	24,500	6,890	5,890	10,000	9,290	7,420	3,920
30	6,500	7,800	10,300	17,600	------	32,700	6,580	5,810	11,000	9,600	9,200	8,120
31	5,490	------	12,200	17,200	------	20,500	------	3,920	------	9,950	4,940	------
TOTAL	198,200	136,395	295,580	480,230	423,200	544,100	426,350	199,870	282,080	311,870	233,710	154,402
MEAN	6,394	4,547	9,535	15,490	15,110	17,550	14,210	6,447	9,403	10,060	7,539	5,147
MAX	9,930	7,800	14,600	22,500	21,500	32,700	28,800	11,000	13,800	14,400	10,700	11,600
MIN	1,590	835	1,290	5,170	10,200	5,440	2,030	1,520	2,640	4,150	2,790	682
(†)	-91,000	+23,300	+8,700	-42,400	+15,400	+350,200	-54,000	+100,200	-89,900	-174,100	-111,900	+25,900
MEAN‡	3,458	5,323	9,815	14,120	15,660	28,850	12,410	9,680	6,406	4,444	3,929	6,010
CFSM‡	.68	1.04	1.92	2.77	3.07	5.66	2.43	1.90	1.26	.87	.77	1.18
IN.‡	.78	1.16	2.22	3.19	3.20	6.52	2.71	2.19	1.40	1.00	.89	1.31

CAL YR 1974 TOTAL 3,886,355 MEAN 10,650 MAX 29,600 MIN 835 MEAN‡ 10,610 CFSM‡ 2.08 IN.‡ 28.24
WTR YR 1975 TOTAL 3,685,987 MEAN 10,100 MAX 32,700 MIN 682 MEAN‡ 9,990 CFSM‡ 1.96 IN.‡ 26.58

† 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.

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.--33 years, 739 cfs (20.93 cu m/s), 21.31 in/yr (541 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,610 cfs (102 cu m/s) May 8, gage height, 35.93 ft (10.951 m); minimum, 17 cfs (0.48 cu m/s) Oct. 24, gage height, 31.17 ft (9.501 m); minimum daily, 21 cfs (0.59 cu m/s) Oct. 20.
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 fair. Flow completely regulated by Watauga Lake since Dec. 1, 1948 (see sta. 03483500). Low-flow regulated by Wilbur Lake during period of record. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,060	1,030	1,140	626	803	1,860	1,580	1,600	1,280	1,350	1,060	1,690
2	1,580	387	1,520	1,000	1,240	1,060	1,800	1,540	1,710	1,250	706	1,560
3	2,460	51	824	185	1,530	1,830	2,520	113	1,640	1,310	84	1,660
4	1,570	404	1,030	309	1,450	2,380	1,950	50	1,730	70	1,570	1,640
5	40	366	818	108	1,250	2,130	1,970	1,320	1,670	567	1,150	1,170
6	35	865	380	543	1,110	1,490	1,480	1,680	1,730	63	1,030	96
7	980	1,750	38	437	1,060	1,140	1,880	1,900	1,460	1,170	167	234
8	740	730	831	95	1,450	1,070	1,800	2,060	1,280	1,270	486	1,420
9	835	1,560	1,330	51	1,240	1,320	1,460	1,760	1,650	1,690	130	1,750
10	941	738	717	250	1,500	957	1,340	1,570	1,710	1,780	61	1,080
11	971	1,040	618	168	1,300	858	1,420	1,380	1,790	1,130	1,560	1,020
12	52	805	50	1,060	1,390	722	1,270	1,820	1,710	1,280	1,910	134
13	49	1,820	358	1,280	1,260	1,080	878	1,630	1,440	74	1,790	49
14	855	1,850	141	1,990	1,180	55	1,320	1,710	1,340	1,860	1,740	47
15	730	1,380	41	1,460	1,240	539	738	1,780	816	1,580	1,900	450
16	433	1,000	834	1,100	1,090	1,110	715	1,830	1,610	2,000	1,330	742
17	199	78	1,180	926	1,020	1,850	979	1,450	1,690	1,650	53	583
18	257	863	706	225	1,260	2,000	1,630	58	1,810	1,470	1,070	621
19	22	526	652	48	924	2,090	630	1,640	1,900	1,080	1,590	920
20	21	637	55	1,000	932	1,390	497	1,770	1,730	67	1,610	94
21	781	1,690	47	928	812	1,510	1,040	1,610	1,410	1,380	1,890	41
22	812	1,630	47	682	147	1,360	532	1,570	561	1,130	1,790	38
23	309	1,340	184	622	560	1,190	1,470	1,780	1,490	1,460	1,600	81
24	493	1,740	41	414	1,780	1,130	418	1,740	1,360	1,580	1,670	37
25	321	2,250	41	1,160	1,840	999	683	1,240	1,420	1,390	1,680	37
26	175	2,120	1,350	44	1,630	1,890	480	1,580	1,340	1,060	1,660	37
27	456	2,660	241	778	1,390	1,930	634	1,710	1,450	725	1,640	37
28	37	1,690	361	44	1,280	2,620	1,470	1,790	930	1,400	1,430	38
29	320	970	311	98	------	2,760	1,030	1,620	1,160	1,540	1,240	387
30	282	506	51	205	------	1,280	1,740	1,720	1,570	1,410	1,350	311
31	281	------	120	44	------	1,520	------	1,350	------	1,070	648	------
TOTAL	18,097	34,476	16,057	17,880	33,668	45,120	37,354	46,371	44,387	36,856	37,595	18,004
MEAN	584	1,149	518	577	1,202	1,455	1,245	1,496	1,480	1,189	1,213	600
MAX	2,460	2,660	1,520	1,990	1,840	2,760	2,520	2,060	1,900	2,000	1,910	1,750
MIN	21	51	38	44	147	55	418	50	561	63	53	37
(†)	-6,000	-17,600	+25,400	+22,200	+7,900	+38,100	-8,800	-17,100	-21,200	-23,800	-27,800	-1,900
MEAN‡	390	563	1,337	1,293	1,485	2,685	952	944	773	421	316	537
CFSM‡	.83	1.20	2.84	2.75	3.15	5.70	2.02	2.00	1.64	.89	.67	1.14
IN.‡	.96	1.33	3.27	3.16	3.28	6.57	2.25	2.31	1.83	1.03	.77	1.27

CAL YR 1974 TOTAL 436,735 MEAN 1,197 MAX 3,100 MIN 21 MEAN‡ 1,137 CFSM‡ 2.41 IN.‡ 32.78
WTR YR 1975 TOTAL 385,865 MEAN 1,057 MAX 2,760 MIN 21 MEAN‡ 973 CFSM‡ 2.07 IN.‡ 28.05

† 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.

NOTE: No gage-height record Apr. 5 to May 7.

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.--60 years (1911-16, 1920-75), 223 cfs (6.315 cu m/s), 22.10 in/yr (561 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,920 cfs (139 cu m/s) Mar. 14, gage height, 5.80 ft (1,768 m); minimum, 60 cfs (1.70 cu m/s) Sept. 6, gage height, 0.59 ft (0.180 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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	103	599	494	314	285	841	224	537	114	92	100
2	113	102	376	467	457	280	653	227	391	109	90	76
3	109	101	294	412	455	245	598	216	296	102	96	68
4	110	100	248	460	516	242	483	297	250	167	131	65
5	110	109	226	401	869	235	426	248	221	152	157	63
6	108	109	222	365	1,020	231	388	226	277	176	274	64
7	106	100	233	329	739	405	362	221	224	148	172	79
8	106	97	495	298	559	568	339	226	196	220	136	98
9	104	97	507	280	470	429	323	368	180	750	117	76
10	101	95	370	259	399	418	336	396	194	328	111	68
11	98	94	305	477	384	470	307	341	217	223	115	65
12	97	143	275	415	482	625	299	296	267	248	104	79
13	97	136	260	547	446	2,180	272	272	276	187	99	127
14	96	129	251	464	405	3,130	262	239	214	155	98	80
15	105	146	243	391	367	1,370	279	231	189	138	95	69
16	363	124	278	343	373	873	256	301	192	129	121	65
17	233	132	256	301	370	703	248	272	170	169	101	78
18	170	339	234	281	349	571	239	352	155	154	104	246
19	152	373	220	299	353	723	266	742	158	221	89	163
20	140	935	211	507	326	873	274	545	146	205	83	106
21	131	698	201	457	305	696	238	397	150	221	79	89
22	125	413	191	395	287	655	227	322	135	166	96	84
23	120	305	181	354	280	600	223	297	128	144	83	167
24	118	252	183	328	472	945	222	279	121	181	77	464
25	116	247	494	938	411	1,080	315	238	120	218	75	195
26	113	219	484	900	350	726	286	215	127	161	71	144
27	112	196	486	606	319	566	249	204	190	136	93	121
28	108	186	1,620	452	299	479	239	201	168	121	101	109
29	107	173	1,050	393	------	525	233	276	148	109	77	100
30	105	204	688	363	------	2,450	223	292	130	100	69	94
31	104	------	521	322	------	1,310	------	264	------	94	77	------
TOTAL	3,893	6,457	12,202	13,298	12,376	24,888	9,906	9,225	6,167	5,746	3,283	3,402
MEAN	126	215	394	429	442	803	330	298	206	185	106	113
MAX	363	935	1,620	938	1,020	3,130	841	742	537	750	274	464
MIN	96	94	181	259	280	231	222	201	120	94	69	63
CFSM	.92	1.57	2.88	3.13	3.23	5.86	2.41	2.18	1.50	1.35	.77	.82
IN.	1.06	1.75	3.31	3.61	3.36	6.76	2.69	2.50	1.67	1.56	.89	.92

CAL YR 1974 TOTAL 130,670 MEAN 358 MAX 2,940 MIN 93 CFSM 2.61 IN 35.48
WTR YR 1975 TOTAL 110,843 MEAN 304 MAX 3,130 MIN 63 CFSM 2.22 IN 30.10

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	1115	3.71	1,990	03-24	1645	3.54	1,810
03-14	0515	5.80	4,920	03-30	0900	5.00	3,620

03486000 Watauga River at Elizabethton, Tenn.

LOCATION.--Lat 36°21'21", long 82°12'26", 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.--45 years (1925-48, 1953-75), 1,088 cfs (30.81 cu m/s) 21.35 in/yr (542 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 10,600 cfs (300 cu m/s) Mar. 30, gage height, 9.57 ft (2.917 m); minimum, 123 cfs (3.48 cu m/s) Sept. 15, gage height, 2.00 ft (0.610 m); minimum daily, 153 cfs (4.33 cu m/s) Sept. 14, 22.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	952	1,180	2,020	1,210	1,030	2,220	2,880	1,970	2,020	1,580	1,090	1,730
2	1,760	522	2,050	1,940	2,050	1,490	2,840	2,040	2,050	1,370	804	1,670
3	2,580	204	1,260	931	2,460	2,250	3,460	639	2,040	1,470	409	1,830
4	2,000	509	1,450	1,010	2,350	2,640	2,900	479	2,100	491	1,530	1,750
5	246	498	1,120	716	2,690	2,480	2,880	1,530	2,020	717	1,540	1,390
6	188	1,010	893	895	2,720	2,030	2,090	2,950	2,240	312	1,370	319
7	803	1,900	365	1,140	2,370	1,550	2,560	2,290	1,780	1,120	402	296
8	787	876	1,350	537	2,260	1,920	2,450	2,450	1,560	1,540	604	1,390
9	979	1,690	2,220	461	2,000	1,970	2,000	2,410	1,930	2,490	319	1,840
10	918	918	1,530	616	2,210	1,620	1,840	2,200	2,000	1,730	194	1,270
11	1,240	1,140	1,090	741	1,980	1,570	1,920	1,910	2,110	1,510	1,420	1,030
12	218	1,010	471	1,500	2,350	1,760	1,690	2,300	2,120	1,550	2,060	476
13	183	2,040	737	2,120	1,870	4,800	1,410	2,040	1,890	453	2,010	217
14	773	2,090	522	2,760	2,070	5,140	1,560	2,090	1,660	1,840	1,800	153
15	943	1,560	402	2,070	1,740	2,660	1,190	2,150	1,010	1,770	2,050	347
16	1,070	1,250	1,060	1,630	1,740	2,390	1,020	2,280	1,880	2,200	1,730	864
17	526	256	1,590	1,570	1,720	2,800	1,330	1,900	1,960	1,920	236	807
18	493	1,640	1,180	645	1,620	2,890	1,910	704	2,050	1,630	1,030	792
19	234	1,100	974	468	1,580	3,180	1,300	2,480	2,180	1,390	1,610	1,190
20	215	2,100	415	1,610	1,570	2,650	866	2,590	2,020	438	1,930	321
21	918	2,810	329	1,830	1,290	2,540	1,160	2,220	1,520	1,490	1,840	157
22	987	2,590	312	1,320	680	2,370	1,050	2,070	1,040	1,260	2,030	153
23	513	1,620	415	1,170	1,000	1,980	1,470	2,300	1,540	1,660	1,530	293
24	650	2,130	310	913	2,130	2,390	1,040	2,220	1,470	1,820	1,800	543
25	480	2,590	652	2,360	2,460	2,420	1,390	1,630	1,620	1,790	1,840	266
26	288	2,560	1,940	1,630	2,110	2,870	1,230	1,850	1,540	1,420	1,700	208
27	495	2,990	1,030	1,650	1,830	2,670	1,010	2,040	1,810	768	1,780	185
28	337	2,280	3,550	806	1,700	3,220	2,140	2,110	1,110	1,530	1,670	171
29	314	1,240	2,130	662	------	3,530	1,440	2,000	1,300	1,700	1,330	426
30	553	578	1,160	623	------	6,720	2,110	2,170	1,870	1,570	1,610	485
31	417	------	951	596	------	3,940	------	1,890	------	1,330	613	------
TOTAL	23,060	44,881	35,478	38,130	53,580	84,660	54,136	61,902	53,440	43,859	41,881	22,569
MEAN	744	1,496	1,144	1,230	1,914	2,731	1,805	1,997	1,781	1,415	1,351	752
MAX	2,580	2,990	3,550	2,760	2,720	6,720	3,460	2,950	2,240	2,490	2,060	1,840
MIN	183	204	310	461	680	1,490	866	479	1,010	312	194	153
(†)	-6,000	-17,600	+25,400	+22,200	+7,900	+38,100	-8,800	-17,100	-21,200	-23,800	-27,800	-1,900
MEAN‡	550	909	1,964	1,946	2,196	3,960	1,511	1,445	1,075	647	454	689
CFSM‡	.79	1.31	2.84	2.81	3.17	5.72	2.18	2.09	1.55	.93	.66	1.00
IN.‡	.92	1.47	3.27	3.24	3.30	6.60	2.44	2.41	1.73	1.08	.76	1.11

CAL YR 1974 TOTAL 642,532 MEAN 1,760 MAX 7,380 MIN 183 MEAN‡ 1,701 CFSM‡ 2.46 IN.‡ 33.37
WTR YR 1975 TOTAL 557,576 MEAN 1,528 MAX 6,720 MIN 153 MEAN‡ 1,444 CFSM‡ 2.09 IN.‡ 28.32

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

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 BR, 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.--50 years, 2,613 cfs (74.00 cu m/s), 18.34 in/yr (466 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 14,400 cfs (408 cu m/s) Mar. 30; minimum daily, 762 cfs (21.6 cu m/s) Sept. 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. 142). 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,920	2,330	3,890	3,900	5,940	5,910	9,340	5,840	956	3,340	4,060	1,140
2	2,960	1,900	5,550	5,340	6,930	2,770	8,570	5,610	4,270	3,940	2,920	2,080
3	3,870	909	4,470	3,630	7,950	3,640	8,410	4,650	4,210	3,990	1,570	4,290
4	2,760	1,640	2,810	3,890	6,370	3,430	8,230	1,850	3,010	2,300	5,620	4,160
5	1,370	1,650	2,960	4,160	5,660	3,970	7,190	4,450	4,440	1,510	2,430	4,030
6	1,300	2,480	2,520	3,950	5,940	3,980	4,680	5,200	6,040	814	2,220	2,770
7	2,870	4,560	1,090	2,940	5,860	2,370	5,400	5,880	3,090	1,980	2,870	822
8	2,610	2,440	3,410	2,760	7,570	2,230	5,600	5,990	2,070	4,170	2,780	2,020
9	3,040	4,310	5,480	2,740	6,490	3,350	6,650	6,900	2,540	4,140	1,090	3,160
10	3,280	3,110	4,140	2,820	6,810	3,120	6,290	6,660	3,160	4,360	829	3,930
11	2,710	1,620	2,260	2,840	4,430	2,570	5,330	3,470	3,340	4,120	3,860	4,540
12	927	2,770	1,240	3,160	5,120	3,470	5,450	5,710	4,050	4,420	5,350	3,770
13	936	4,450	2,520	4,260	5,480	6,780	4,360	4,820	3,790	1,760	4,750	812
14	1,940	4,550	870	7,410	5,230	10,400	5,440	5,500	4,430	6,410	1,630	816
15	2,680	3,590	845	5,260	6,730	8,640	3,380	4,370	3,620	3,040	1,500	1,800
16	2,390	2,350	2,350	4,410	5,620	6,060	3,300	2,770	3,890	3,160	3,180	2,510
17	1,620	903	3,300	4,420	5,500	8,200	3,000	3,400	3,680	3,640	949	2,770
18	2,690	2,700	3,760	3,110	6,740	8,970	5,690	1,520	4,570	3,830	3,330	3,100
19	1,010	2,850	3,630	960	4,570	8,770	3,070	3,680	4,410	2,960	4,160	3,860
20	1,480	1,470	2,740	3,130	3,400	5,430	1,570	2,670	4,570	1,630	4,440	2,060
21	3,200	4,310	2,320	5,450	5,130	5,520	2,700	3,750	4,450	1,740	5,540	823
22	3,110	6,270	1,410	4,080	4,350	6,460	1,900	5,250	2,670	2,800	5,120	3,440
23	894	4,920	1,550	3,910	3,680	7,220	4,660	3,290	3,190	3,680	5,530	5,410
24	904	4,560	2,000	2,540	6,260	8,480	2,620	1,420	4,330	3,760	2,790	2,470
25	995	6,220	2,400	4,690	5,470	6,190	3,180	1,220	4,630	5,100	3,880	762
26	925	7,610	5,290	6,320	3,760	6,790	2,910	2,740	4,100	4,230	4,320	786
27	1,480	8,250	3,040	5,550	3,340	6,210	3,050	5,130	3,010	1,420	2,580	1,190
28	1,350	2,390	6,340	4,310	3,700	6,950	4,540	5,230	3,040	3,820	1,010	791
29	1,170	2,350	4,670	3,520	------	7,930	3,270	2,580	1,240	3,360	1,520	1,860
30	1,200	2,710	3,190	4,660	------	11,500	5,280	3,740	3,550	3,210	1,580	2,140
31	917	------	3,390	3,880	------	9,480	------	2,730	------	3,290	774	------
TOTAL	60,508	102,172	95,435	124,000	154,030	186,790	145,060	128,020	108,346	101,924	94,182	74,112
MEAN	1,952	3,406	3,079	4,000	5,501	6,025	4,835	4,130	3,612	3,288	3,038	2,470
MAX	3,870	8,250	6,340	7,410	7,950	11,500	9,340	6,900	6,040	6,410	5,620	5,410
MIN	894	903	845	960	3,340	2,230	1,570	1,220	956	814	774	762

CAL YR 1974 TOTAL 1,560,141 MEAN 4,274 MAX 10,400 MIN 807 MEAN† 4,171 CFSM† 2.16 IN.† 29.26
WTR YR 1975 TOTAL 1,374,579 MEAN 3,766 MAX 11,500 MIN 762 MEAN† 3,631 CFSM† 1.88 IN.† 25.48

† Adjusted for change in contents in South Holston, Watauga, Boone, and Fort Patrick Henry Lakes.

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

Discharge, in cubic feet per second, in main channel only,
Water Year October 1974 to September 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,840	2,090	3,500	3,420	5,020	4,940	7,660	4,940	933	2,950	3,630	1,120
2	2,800	1,750	4,780	4,550	5,750	2,460	7,080	4,770	3,740	3,440	2,660	1,980
3	3,590	890	4,080	3,280	6,590	3,150	6,930	4,010	3,690	3,450	1,520	3,770
4	2,590	1,570	2,610	3,480	5,370	3,210	6,820	1,770	2,750	2,080	4,810	3,640
5	1,320	1,560	2,790	3,770	4,780	3,490	6,040	3,850	3,910	1,470	2,300	3,470
6	1,250	2,350	2,410	3,520	5,060	3,520	4,150	4,380	5,170	800	2,100	2,490
7	2,730	4,020	1,070	2,660	5,040	2,200	4,700	4,970	2,780	1,850	2,630	809
8	2,430	2,290	2,970	2,570	6,310	2,020	4,850	5,050	1,970	3,620	2,620	1,880
9	2,810	3,700	4,700	2,460	5,500	3,020	5,630	5,690	2,320	3,610	1,070	2,820
10	2,870	2,740	3,710	2,560	5,730	2,830	5,330	5,630	2,880	3,790	817	3,430
11	2,480	1,510	2,150	2,610	3,880	2,360	4,550	3,100	3,030	3,610	3,290	3,900
12	910	2,400	1,220	2,880	4,430	2,990	4,730	4,800	3,520	3,810	4,470	3,460
13	920	3,820	2,420	3,750	4,720	5,480	3,840	4,120	3,330	1,620	4,000	799
14	1,870	3,940	854	6,200	4,550	8,430	4,630	4,640	3,860	5,410	1,570	804
15	2,540	3,110	833	4,510	5,680	7,160	3,020	3,790	3,200	2,800	1,430	1,750
16	2,130	2,050	2,250	3,860	4,830	5,170	2,940	2,520	3,420	2,940	2,740	2,340
17	1,570	890	2,990	3,790	4,740	6,770	2,660	3,060	3,190	3,290	930	2,540
18	2,510	2,330	3,370	2,740	5,690	7,380	4,760	1,460	3,890	3,470	2,880	2,810
19	990	2,550	3,290	930	4,060	7,230	2,780	3,230	3,800	2,720	3,540	3,400
20	1,420	1,340	2,510	2,690	3,090	4,630	1,470	2,430	3,930	1,540	3,770	1,970
21	2,770	3,750	2,200	4,680	4,480	4,790	2,460	3,290	3,850	1,680	4,650	810
22	2,670	5,180	1,340	3,650	3,740	5,420	1,770	4,460	2,360	2,560	4,340	3,030
23	880	4,120	1,500	3,480	3,230	6,070	3,980	2,940	2,830	3,280	4,640	4,580
24	890	3,800	1,940	2,360	5,220	6,970	2,420	1,390	3,710	3,360	2,080	2,310
25	980	5,110	2,300	3,940	4,580	5,220	2,810	1,190	4,010	4,400	3,300	750
26	910	6,430	4,550	5,260	3,340	5,740	2,620	2,510	3,630	3,710	3,670	775
27	1,450	6,960	2,710	4,740	3,060	5,280	2,790	4,350	2,720	1,380	2,300	1,160
28	1,320	2,120	5,130	3,790	3,410	5,870	3,990	4,460	2,740	3,370	988	778
29	1,150	2,220	4,010	3,160	------	6,580	3,000	2,400	1,210	3,020	1,480	1,810
30	1,170	2,520	2,890	4,040	------	8,790	4,510	3,260	3,090	2,940	1,530	2,030
31	900	------	3,140	3,440	------	7,740	------	2,520	------	3,010	761	------
TOTAL	56,660	89,110	86,217	108,770	131,880	156,910	124,920	110,980	95,463	90,980	82,516	67,215
MEAN	1,828	2,970	2,781	3,509	4,710	5,062	4,164	3,580	3,182	2,935	2,662	2,241
MAX	3,590	6,960	5,130	6,200	6,590	8,790	7,660	5,690	5,170	5,410	4,810	4,580
MIN	880	890	833	930	3,060	2,020	1,470	1,190	933	800	761	750

CAL YR 1974 TOTAL 1,369,455 MEAN 3,752 MAX 8,480 MIN 799
WTR YR 1975 TOTAL 1,201,621 MEAN 3,292 MAX 8,790 MIN 750

03487550 Reedy Creek at Orebank, Tenn.

LOCATION.--Lat 36°33'42", long 82°27'36", Sullivan County, on left bank, 50 ft (15 m) upstream from 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. Prior to Mar. 4, 1975, at site 50 ft (15 m) downstream.

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. Prior to Mar. 4, 1975, at site 50 ft (15 m) downstream at same datum.

AVERAGE DISCHARGE.--12 years, 47.4 cfs (1.342 cu m/s) 17.73 in/yr (450 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,930 cfs (83.0 cu m/s) Mar. 30, gage height, 8.98 ft (2.737 m), from rating curve extended above 1,300 cfs (36.8 cu m/s); minimum, 8.3 cfs (0.24 cu m/s) Oct. 10, 11, gage height, 1.60 ft (0.488 m).
Period of record: Maximum discharge, 2,930 cfs (83.0 cu m/s) Mar. 30, 1975, gage height, 8.98 ft (2.737 m), from rating curve extended above 1,300 cfs (36.8 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.

REMARKS.--Records fair. 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) upstream from the gage. Records of periodic water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Tenn. 1973: 1971(P), 1972(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	11	22	94	56	43	222	42	76	25	15	16
2	9.8	10	23	77	298	43	178	39	33	24	15	15
3	9.4	9.8	21	65	148	38	183	37	27	23	20	14
4	9.8	9.8	23	68	207	35	146	56	25	28	25	14
5	9.4	12	21	56	333	33	125	44	30	24	52	13
6	9.0	11	20	50	189	32	110	37	54	24	134	19
7	9.0	9.8	20	44	139	122	100	37	33	23	30	21
8	8.7	9.8	28	40	110	144	90	40	28	22	22	15
9	8.7	9.0	28	38	94	83	90	100	25	22	19	14
10	8.7	9.0	24	35	79	102	92	79	29	20	17	14
11	8.3	9.0	22	94	86	154	78	50	27	20	17	14
12	8.7	15	21	100	164	275	70	37	147	19	16	128
13	9.4	12	19	144	124	552	64	32	83	18	15	51
14	10	12	17	90	96	984	60	30	50	18	20	26
15	18	18	16	68	81	301	59	40	40	18	26	21
16	144	13	23	56	76	198	55	129	43	17	18	19
17	53	12	21	46	71	167	53	76	33	17	23	20
18	29	17	19	45	64	134	50	49	40	25	24	99
19	24	30	18	103	76	162	62	44	39	17	21	50
20	19	180	17	284	64	157	58	38	53	19	17	32
21	16	78	17	141	57	129	51	30	141	17	16	27
22	15	41	15	99	53	145	47	28	201	16	15	56
23	14	30	15	80	51	144	46	27	65	16	14	216
24	13	24	14	69	66	193	45	25	43	51	14	151
25	13	23	40	358	54	179	71	24	36	62	13	78
26	12	20	38	192	48	129	66	23	104	24	12	53
27	12	18	95	119	45	105	54	23	53	20	56	42
28	12	17	586	93	43	91	50	22	36	18	50	36
29	11	15	155	79	---	258	47	25	31	17	21	32
30	11	15	93	68	---	1450	47	26	27	16	18	29
31	11	---	86	59	---	341	---	25	---	16	17	---
TOTAL	555.9	700.2	1577	2954	2972	6923	2469	1314	1652	696	792	1335
MEAN	17.9	23.3	50.9	95.3	106	223	82.3	42.4	55.1	22.5	25.5	44.5
MAX	144	180	586	358	333	1450	222	129	201	62	134	216
MIN	8.3	9.0	14	35	43	32	45	22	25	16	12	13
CFSM	.49	.64	1.40	2.63	2.92	6.14	2.27	1.17	1.52	.62	.70	1.23
IN.	.57	.72	1.62	3.03	3.05	7.09	2.53	1.35	1.69	.71	.81	1.37

CAL YR 1974 TOTAL 24,835.4 MEAN 68.0 MAX 1,450 MIN 8.3 CFSM 1.87 IN 25.45
WTR YR 1975 TOTAL 23,940.1 MEAN 65.6 MAX 1,450 MIN 8.3 CFSM 1.81 IN 24.53

PEAK DISCHARGE (BASE, 750 CFS, REVISED)

NOTE.--No gage height record June 1 to Aug. 6.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	1030	6.18	1,020	06-22	0100	7.45*	1,060*
03-14	0615	8.54	2,180	06-26	1700	6.77*	751*
03-30	0630	8.98	2,930				

*Estimated from record at former location.

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.--35 years, 3,753 cfs (106.3 cu m/s), 17.73 in/yr (450 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 41,100 cfs (1,160 cu m/s) Mar. 30, gage height, 13.37 ft (4.075 m); minimum, 886 cfs (25.1 cu m/s), Aug. 29.
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. 142). 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,570	1,010	2,550	6,060	6,270	5,570	17,600	7,100	3,180	4,510	3,420	973
2	2,410	2,590	5,970	8,130	10,700	6,150	13,400	6,980	3,670	4,230	3,850	1,410
3	3,980	2,050	5,510	6,380	14,500	4,760	12,700	7,680	5,880	4,480	2,920	3,310
4	3,710	1,010	4,100	6,380	12,500	3,890	11,600	5,620	5,380	4,250	3,150	4,810
5	1,710	1,760	3,540	5,770	12,900	5,130	10,900	5,160	4,680	2,660	4,630	4,340
6	1,860	2,400	3,050	5,660	12,500	5,420	7,570	7,250	6,960	2,150	4,270	4,040
7	2,010	4,190	1,400	5,500	12,300	3,750	6,680	8,230	4,800	1,440	2,850	2,550
8	3,240	3,440	1,650	3,000	13,000	5,840	7,970	7,290	3,880	3,590	3,630	1,040
9	2,360	4,080	5,940	4,400	9,850	6,570	7,550	9,170	2,960	5,510	2,830	2,700
10	3,300	4,140	7,190	2,900	9,860	5,710	8,480	9,820	3,450	5,370	1,360	3,900
11	3,120	2,250	3,030	4,880	7,270	6,870	6,510	6,340	4,080	5,150	1,800	4,220
12	2,440	1,820	2,480	5,310	8,640	7,750	7,730	6,660	4,890	5,070	5,900	5,480
13	1,010	6,310	2,820	7,860	12,300	17,600	6,190	6,950	5,280	3,970	6,190	3,990
14	1,300	4,070	2,140	11,100	10,100	29,200	5,650	6,580	5,880	4,420	3,400	2,130
15	2,410	4,250	1,450	8,880	9,790	29,900	4,990	7,280	5,070	5,320	2,150	1,660
16	4,210	4,850	2,190	5,720	8,310	16,000	5,060	6,940	4,860	3,950	2,110	2,470
17	2,860	1,180	3,340	6,480	7,780	12,100	3,990	6,820	4,450	4,090	3,630	3,010
18	3,100	1,160	5,480	5,730	8,930	12,600	4,590	4,980	4,770	4,220	2,090	3,510
19	2,300	4,580	4,000	2,770	6,940	12,400	5,930	5,240	6,410	3,850	4,520	4,810
20	1,610	3,170	4,610	7,910	5,830	11,100	3,770	5,480	5,030	2,830	5,680	4,830
21	3,660	6,310	3,190	11,800	5,780	11,600	3,150	4,710	5,900	2,260	5,430	2,850
22	3,550	10,700	2,570	8,020	6,210	10,500	3,340	6,310	7,640	2,260	5,370	2,280
23	1,410	6,230	2,070	6,650	4,770	11,200	3,600	6,080	3,790	3,560	6,100	7,190
24	1,070	5,270	1,850	5,550	7,610	13,300	4,790	3,320	4,600	4,320	4,440	10,300
25	1,050	7,190	2,700	8,640	9,890	12,200	4,350	2,440	5,730	5,100	3,490	6,130
26	1,120	8,650	5,160	15,600	5,060	12,000	5,460	2,850	5,470	5,930	4,090	3,010
27	1,200	7,700	7,100	12,400	4,780	8,440	5,590	4,270	4,510	3,150	4,270	2,300
28	1,450	5,530	11,000	8,360	5,380	9,710	6,350	6,500	4,130	2,430	1,910	2,000
29	1,450	2,420	15,600	6,000	------	11,200	5,640	5,680	3,110	4,040	1,180	2,020
30	1,260	2,350	9,290	6,950	------	33,900	5,390	3,690	2,290	3,900	1,710	2,410
31	1,260	------	5,910	6,640	------	32,600	------	4,030	------	3,660	1,750	------
TOTAL	69,990	122,660	138,880	217,430	249,750	374,960	206,520	187,450	142,730	121,670	110,120	105,673
MEAN	2,258	4,089	4,480	7,014	8,920	12,100	6,884	6,047	4,758	3,925	3,552	3,522
MAX	4,210	10,700	15,600	15,600	14,500	33,900	17,600	9,820	7,640	5,930	6,190	10,300
MIN	1,010	1,010	1,400	2,770	4,770	3,750	3,150	2,440	2,290	1,440	1,180	973

CAL YR 1974 TOTAL 2,195,700 MEAN 6,016 MAX 26,300 MIN 1,010 MEAN† 5,912 CFSM† 2.06 IN.† 27.92
WTR YR 1975 TOTAL 2,047,833 MEAN 5,611 MAX 33,900 MIN 973 MEAN† 5,476 CFSM† 1.91 IN.† 25.86

† Adjusted for change in contents in South Holston, Watauga, Boone, and Fort Patrick Henry Lakes.

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 road 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.--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.--25 years (1941-48, 1957-75), 61.1 cfs (1.730 cu m/s), 17.54 in/yr (446 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,040 cfs (114 cu m/s) Mar. 30, gage height, 7.69 ft (2.344 m); minimum, 4.5 cfs (0.13 cu m/s) July 31, Aug. 3, gage height, 1.43 ft (0.436 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.1	26	90	74	67	243	56	54	12	5.1	26
2	7.9	7.9	40	84	335	64	184	49	42	12	5.1	16
3	7.2	7.8	31	72	221	54	160	45	35	13	5.1	9.3
4	6.7	7.6	26	99	237	49	125	65	31	12	6.0	7.4
5	6.9	9.1	23	90	405	46	105	50	30	13	7.5	6.6
6	7.1	12	21	71	251	43	91	42	38	12	22	6.8
7	7.0	10	20	59	180	181	81	38	28	13	14	11
8	6.8	8.8	22	50	139	241	72	38	26	12	8.9	9.5
9	6.6	8.1	23	47	115	124	68	186	23	11	7.4	7.3
10	6.6	7.7	20	42	94	131	96	87	23	11	7.1	6.5
11	6.5	7.7	19	209	90	248	78	99	25	11	7.2	6.2
12	6.3	10	19	189	272	537	67	61	128	9.8	7.1	7.5
13	6.3	16	18	310	185	1,170	59	53	81	9.0	6.8	11
14	6.4	14	16	155	132	1,070	54	44	42	8.8	7.2	8.3
15	8.0	18	15	107	105	376	55	42	32	8.8	13	6.6
16	116	18	16	83	95	242	50	554	32	9.0	11	6.0
17	46	15	16	66	88	201	48	189	27	8.3	53	6.1
18	24	16	15	60	78	164	45	330	26	8.0	127	8.3
19	17	36	14	129	72	169	87	256	23	7.9	83	13
20	14	354	14	477	64	159	143	146	22	7.6	27	9.1
21	12	130	13	231	57	136	85	104	30	7.5	18	7.5
22	11	55	13	157	52	173	66	82	24	7.3	14	9.3
23	10	35	12	122	51	193	57	68	21	7.0	11	148
24	9.9	27	12	101	287	322	53	61	19	7.4	10	87
25	9.6	24	18	769	172	276	364	52	17	9.3	8.9	37
26	9.2	22	35	344	110	170	224	46	16	7.8	8.1	24
27	8.8	18	84	188	87	132	125	41	16	6.9	7.5	19
28	8.5	17	613	142	75	111	94	37	15	6.3	7.0	15
29	8.2	15	216	114	------	505	76	41	14	5.9	6.8	13
30	8.1	15	124	102	------	1,910	63	108	13	5.6	6.4	12
31	7.9	------	93	84	------	391	------	48	------	5.1	6.7	------
TOTAL	425.8	949.8	1,647	4,843	4,123	9,655	3,118	3,118	953	285.3	534.9	560.3
MEAN	13.7	31.7	53.1	156	147	311	104	101	31.8	9.20	17.3	18.7
MAX	116	354	613	769	405	1,910	364	554	128	13	127	148
MIN	6.3	7.6	12	42	51	43	45	37	13	5.1	5.1	6.0
CFSM	.29	.67	1.12	3.30	3.11	6.58	2.20	2.14	.67	.19	.37	.40
IN.	.33	.75	1.30	3.81	3.24	7.59	2.45	2.45	.75	.22	.42	.44

CAL YR 1974 TOTAL 33,015.9 MEAN 90.5 MAX 2,860 MIN 6.3 CFSM 1.91 IN 25.97
WTR YR 1975 TOTAL 30,213.1 MEAN 82.8 MAX 1,910 MIN 5.1 CFSM 1.75 IN 23.76

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-25	1445	5.30	1,750	03-30	0630	7.69	4,040
03-12	2300	5.11	1,590				

03491300 Beech Creek at Kepler, Tenn.

LOCATION.--Lat 36°24'06", long 82°53'09", Hawkins County, on upstream right wingwall of county road bridge, at Kepler, 5.9 miles (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.--10 years, 54.1 cfs (1.532 cu m/s), 15.63 in/yr (397 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,480 cfs (98.6 cu m/s) Mar. 30, gage height, 13.38 ft (4.078 m), from rating curve extended above 1,300 cfs (37 cu m/s); minimum, 2.9 cfs (0.082 cu m/s) Sept. 5, 6.
Period of record: Maximum discharge, 3,480 cfs (98.6 cu m/s) Mar. 30, 1975, gage height, 13.38 ft (4.078 m), from rating curve extended above 1,300 cfs (37 cu m/s); minimum observed, 0.97 cfs (0.027 cu m/s) Sept. 17, 1964.
Flood of Mar. 12, 1963, reached a stage of 14.6 ft (4.45 m), from floodmarks.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	7.3	20	86	51	53	162	46	54	14	3.3	5.8
2	5.0	7.2	22	71	443	51	116	39	25	13	3.5	4.4
3	4.6	7.0	18	59	177	42	149	41	19	12	3.6	3.7
4	4.6	7.0	16	92	282	38	100	109	17	12	4.8	3.4
5	5.0	8.7	14	66	411	35	83	60	18	11	5.5	3.1
6	5.0	9.1	13	54	195	33	73	43	63	10	24	3.3
7	5.0	7.9	13	44	123	148	66	39	22	9.0	9.1	6.0
8	5.0	7.4	17	38	92	129	59	51	17	8.4	6.4	4.9
9	6.7	7.1	16	35	78	76	54	287	15	8.1	5.3	4.0
10	4.8	7.0	14	37	65	158	73	104	16	7.7	5.2	3.6
11	4.9	7.1	13	178	65	204	56	169	17	7.4	5.7	3.4
12	5.0	11	13	194	190	557	49	81	47	6.8	5.5	5.0
13	5.4	11	12	245	106	1,050	44	59	29	6.3	6.8	7.7
14	6.0	11	11	108	81	1,230	42	45	18	6.1	5.2	4.8
15	8.1	18	11	78	68	255	42	52	15	6.6	4.6	4.0
16	71	13	13	64	73	153	39	306	17	6.8	4.7	3.6
17	24	12	13	50	70	136	37	117	13	6.1	5.1	3.7
18	12	15	13	48	65	103	35	166	16	5.8	14	11
19	10	32	12	132	85	108	66	132	17	5.6	12	9.1
20	9.0	271	12	506	68	99	88	79	23	5.3	11	5.7
21	8.4	65	11	178	59	83	55	59	93	5.3	6.1	4.8
22	8.3	28	11	105	53	122	47	46	72	5.1	5.0	11
23	8.1	19	10	81	51	110	44	39	27	4.7	4.6	81
24	8.0	15	9.9	69	231	353	42	34	23	4.6	4.2	36
25	8.0	14	116	653	107	221	159	29	21	4.9	4.0	13
26	7.9	13	60	254	76	120	128	26	20	5.0	3.7	8.7
27	7.7	11	235	123	65	94	75	23	19	4.4	3.7	7.1
28	7.3	11	738	90	58	81	64	21	18	4.1	7.0	6.1
29	7.3	9.9	174	75	------	473	55	24	16	3.8	4.7	5.6
30	7.3	10	93	68	------	2,010	49	34	15	3.6	3.7	5.3
31	7.3	------	80	57	------	293	------	23	------	3.3	3.6	------
TOTAL	292.0	672.7	1,823.9	3,938	3,488	8,618	2,151	2,383	802	216.8	195.6	278.8
MEAN	9.42	22.4	58.8	127	125	278	71.7	76.9	26.7	6.99	6.31	9.29
MAX	71	271	738	653	443	2,010	162	306	93	14	24	81
MIN	4.6	7.0	9.9	35	51	33	35	21	13	3.3	3.3	3.1
CFSM	.20	.48	1.25	2.70	2.66	5.91	1.53	1.64	.57	.15	.13	.20
IN.	.23	.53	1.44	3.12	2.76	6.82	1.70	1.89	.63	.17	.15	.22

CAL YR 1974 TOTAL 25,969.4 MEAN 71.1 MAX 1,220 MIN 4.6 CFSM 1.51 IN 20.55
WTR YR 1975 TOTAL 24,859.8 MEAN 68.1 MAX 2,010 MIN 3.1 CFSM 1.45 IN 19.68

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-14	0745	11.25	2,100	03-30	0600	13.38	3,480

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.--45 years, 4,716 cfs (133.6 cu m/s), 17.09 in/yr (434 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 27,600 cfs (782 cu m/s) Mar. 30, gage height, 9.93 ft (3.027 m); minimum, 132 cfs (3.74 cu m/s) Sept. 26, gage height, 1.59 ft (0.485 m); minimum daily discharge, 266 cfs (7.53 cu m/s) Sept. 26.

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. 142). Records of periodic water temperatures for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,800	5,280	3,900	1,200	14,500	6,370	6,260	6,710	1,600	11,200	10,100	3,110
2	7,100	4,890	1,090	8,560	18,300	7,920	12,800	6,160	2,490	9,040	8,950	6,320
3	7,620	5,030	2,160	5,430	18,300	8,600	12,900	7,580	6,240	8,660	7,620	11,600
4	7,350	4,650	3,340	7,140	17,900	6,390	12,600	8,150	6,310	8,230	7,230	11,000
5	7,380	6,110	5,850	6,590	15,400	7,290	12,500	8,070	7,300	6,140	9,630	10,700
6	5,970	6,950	4,050	8,820	14,100	8,090	12,400	7,200	9,080	6,170	9,290	8,880
7	5,970	6,530	3,800	9,020	14,100	3,720	12,300	7,060	7,060	6,260	8,880	6,740
8	6,950	4,470	2,650	8,000	14,300	5,560	12,200	7,100	3,640	10,000	8,230	2,350
9	6,360	4,620	9,030	7,740	14,200	8,220	12,200	5,290	8,160	10,700	8,230	9,530
10	5,590	4,890	7,840	7,510	14,100	1,210	12,100	3,130	9,030	6,620	5,140	8,470
11	5,710	4,970	5,010	8,730	14,100	1,170	12,100	6,610	9,950	5,680	3,920	7,950
12	5,910	6,470	5,760	9,120	14,300	2,690	11,500	6,650	8,830	10,400	9,670	7,920
13	3,250	6,890	6,730	9,640	14,100	9,160	10,100	5,450	6,570	7,010	10,200	5,940
14	2,640	6,050	8,710	8,110	11,800	9,520	8,400	6,050	2,690	5,730	9,150	4,070
15	7,650	6,170	8,470	5,670	10,800	3,480	8,130	6,200	2,260	8,910	9,920	1,820
16	8,540	5,710	9,350	3,230	11,100	2,210	8,890	5,210	2,270	9,810	9,390	7,320
17	7,320	4,320	10,300	7,940	10,500	6,220	8,890	3,380	7,800	9,670	7,200	9,010
18	4,240	3,800	10,300	7,690	14,100	7,300	8,860	1,540	8,260	11,000	3,610	8,570
19	4,270	4,970	10,300	9,550	9,620	5,300	8,250	1,450	8,380	9,530	9,320	8,100
20	3,750	3,660	10,500	7,410	9,790	5,910	8,370	3,630	10,000	7,980	9,850	5,480
21	4,090	1,080	9,350	12,400	7,210	5,350	5,860	5,430	10,800	7,650	9,350	2,200
22	6,650	930	9,090	7,750	8,340	6,080	4,230	6,450	8,470	9,850	8,850	2,370
23	8,170	792	9,100	10,300	7,280	9,620	5,450	8,410	10,600	10,600	8,290	3,500
24	5,110	672	3,300	14,200	10,800	9,350	5,650	9,390	8,730	10,800	4,940	1,040
25	5,170	627	1,330	13,400	13,800	10,100	2,020	8,540	8,540	10,900	4,600	521
26	4,270	4,220	863	13,300	6,090	7,980	1,690	6,190	10,500	9,420	10,100	266
27	4,040	4,920	2,390	13,600	6,860	9,310	786	5,500	12,100	7,590	9,320	3,110
28	4,520	3,590	2,830	13,700	5,560	9,290	2,280	7,370	9,920	6,860	8,600	551
29	5,140	3,430	1,860	14,300	------	11,000	6,870	4,730	8,540	9,770	9,010	562
30	5,850	4,020	1,230	14,600	------	17,300	5,650	4,860	8,850	9,880	9,530	4,040
31	5,310	------	973	14,700	------	11,100	------	4,160	------	10,500	8,730	------
TOTAL	178,890	130,711	171,456	289,350	341,350	222,810	252,236	183,650	224,970	272,560	256,850	163,040
MEAN	5,771	4,357	5,531	9,334	12,190	7,187	8,408	5,924	7,499	8,792	8,285	5,435
MAX	8,540	6,950	10,500	14,700	18,300	17,300	12,900	9,390	12,100	11,200	10,200	11,600
MIN	2,640	627	863	1,200	5,560	1,170	786	1,450	1,600	5,680	3,610	266

CAL YR 1974 TOTAL 2,778,010 MEAN 7,611 MAX 26,600 MIN 627 MEAN† 7,356 CFSM† 1.96 IN.† 26.65
WTR YR 1975 TOTAL 2,687,873 MEAN 7,364 MAX 18,300 MIN 266 MEAN† 6,869 CFSM† 1.83 IN.† 24.88

† Adjusted for change in contents in South Holston, Watauga, Boone, Fort Patrick Henry, and Cherokee Lakes.

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.--76 years, 13,100 cfs (371.0 cu m/s), unadjusted.

EXTREMES.--Current year: Maximum discharge, 58,500 cfs (1,660 cu m/s) Mar. 30, gage height, 19.38 ft (5.907 m); minimum daily discharge, 1,600 cfs (45.3 cu m/s) Nov. 23; minimum gage height, 10.12 ft (3.085 m) Dec. 25.
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 (-0.52 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 since 1941 by an increasing number of reservoirs above station (see p. 142). Records of water temperatures (at auxiliary gage, station 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,000	12,400	9,590	15,100	33,300	18,000	30,300	15,100	5,270	24,300	20,900	4,000
2	17,000	11,900	3,440	21,200	40,000	20,800	41,800	12,500	10,100	22,300	18,600	14,000
3	18,400	10,300	6,610	20,500	41,800	19,400	44,000	14,400	15,800	20,600	14,000	23,000
4	16,500	11,300	9,570	23,700	40,600	18,400	40,900	14,900	16,200	19,700	11,600	22,200
5	15,400	14,200	14,200	23,000	36,800	18,400	36,900	17,400	18,000	15,100	18,500	21,400
6	11,500	15,300	13,300	25,000	36,100	20,100	36,200	16,100	20,800	14,500	20,400	17,800
7	12,300	13,400	12,800	26,900	35,000	12,500	35,900	16,000	16,400	15,600	19,000	9,680
8	16,000	9,660	11,400	25,800	34,600	18,900	35,700	16,000	10,300	22,900	13,900	6,600
9	14,700	8,580	19,500	24,900	34,300	19,900	34,300	13,500	18,000	23,300	15,200	18,700
10	13,200	10,700	19,700	23,400	33,600	10,100	32,000	5,960	28,700	16,400	8,000	17,200
11	13,200	8,620	19,100	18,700	29,800	12,300	31,800	8,270	25,500	14,600	10,000	10,000
12	10,800	12,800	16,500	19,600	30,600	16,500	27,400	12,700	19,900	23,900	18,000	14,000
13	5,120	13,200	19,700	22,700	30,000	25,200	23,000	12,400	14,600	16,000	20,000	11,000
14	5,720	12,600	22,300	17,800	26,100	26,800	20,800	14,100	6,010	14,900	20,000	7,000
15	14,700	12,700	20,800	13,000	23,900	9,220	19,800	13,300	4,400	21,300	20,000	4,000
16	17,100	11,200	21,100	11,400	22,000	13,600	21,800	11,800	6,840	22,800	18,000	13,000
17	16,200	9,100	24,900	18,800	21,600	23,900	20,900	6,950	17,500	22,400	12,000	16,000
18	10,300	6,780	22,000	23,900	30,000	27,600	22,600	2,430	18,900	25,600	8,000	16,000
19	7,520	10,600	22,500	27,700	23,700	25,500	19,600	5,020	20,000	20,500	16,000	15,000
20	9,030	7,800	21,400	28,700	21,700	27,500	20,000	7,000	21,300	16,700	20,000	11,000
21	11,600	3,800	18,100	29,000	17,800	30,300	14,500	13,100	23,900	15,800	20,000	6,000
22	14,500	2,400	16,200	21,800	17,500	30,000	10,800	16,100	20,700	20,400	19,000	4,000
23	19,000	1,600	13,300	28,600	20,100	36,500	13,000	19,400	22,400	20,600	16,000	4,000
24	13,000	2,100	5,630	32,100	25,800	36,600	12,800	20,200	21,200	22,300	10,000	5,000
25	12,600	2,100	6,060	34,900	29,900	37,300	4,950	18,300	19,500	22,800	11,000	3,000
26	11,200	10,700	8,320	37,000	17,500	35,500	3,200	13,800	22,500	20,500	18,000	3,000
27	10,300	12,000	4,830	32,300	18,200	37,300	2,540	14,600	23,700	14,500	20,000	5,000
28	11,800	10,100	12,800	31,800	15,100	37,300	9,560	14,600	22,500	12,900	19,000	4,000
29	13,200	9,700	14,900	33,500	------	37,500	15,000	11,000	19,100	19,900	17,000	4,000
30	13,900	11,000	12,100	33,300	------	52,300	12,800	11,500	19,400	19,900	18,000	10,000
31	12,200	------	13,200	33,000	------	33,300	------	8,300	------	21,000	15,000	------
TOTAL	403,990	288,640	455,850	779,100	787,400	788,520	694,850	396,730	529,420	604,000	505,100	319,580
MEAN	13,030	9,621	14,700	25,130	28,120	25,440	23,160	12,800	17,650	19,480	16,290	10,650
MAX	19,000	15,300	24,900	37,000	41,800	52,300	44,000	20,200	28,700	25,600	20,900	23,000
MIN	5,120	1,600	3,440	11,400	15,100	9,220	2,540	2,430	4,400	12,900	8,000	3,000

CAL YR 1974 TOTAL 6,880,250 MEAN 18,850 MAX 55,200 MIN 1,600
WTR YR 1975 TOTAL 6,553,180 MEAN 17,950 MAX 52,300 MIN 1,600

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) 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.--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.--12 years, 298 cfs (8.439 cu m/s) 38.18 in/yr (970 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,130 cfs (230 cu m/s) Mar. 30, gage height, 8.83 ft (2.691 m); minimum, 52 cfs (1.41 cu m/s) Sept. 6, 12, gage height, 1.41 ft (0.430 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 the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	70	684	680	347	383	898	163	347	68	80	77
2	88	68	487	640	496	351	662	160	248	128	78	70
3	85	75	370	600	571	307	622	160	210	92	80	63
4	83	75	305	620	667	282	480	170	187	81	129	59
5	83	160	271	520	969	266	422	160	170	138	167	56
6	81	130	249	460	810	256	379	150	182	127	336	62
7	78	105	301	400	628	796	347	160	152	125	219	126
8	76	90	632	343	506	1060	317	150	134	93	317	85
9	74	85	605	328	441	656	299	160	123	116	219	67
10	72	85	466	307	383	583	303	150	120	100	201	60
11	69	85	388	588	367	538	272	140	122	103	179	56
12	69	130	342	543	436	829	250	140	151	89	147	66
13	67	115	301	703	391	2120	234	150	142	76	116	132
14	67	115	263	527	363	3260	225	140	115	70	113	78
15	74	130	267	446	339	1320	228	180	103	66	125	66
16	417	100	298	387	395	863	210	400	101	66	169	59
17	225	111	263	339	506	673	204	265	94	82	114	59
18	149	193	242	325	583	554	193	261	86	83	180	164
19	128	528	235	395	639	673	256	265	81	118	576	114
20	111	1290	218	863	543	679	266	228	87	123	266	88
21	105	732	206	650	460	588	225	208	112	157	208	83
22	100	461	190	517	399	633	216	193	134	96	181	93
23	94	342	178	441	387	594	207	222	90	104	151	331
24	90	278	187	395	1250	1060	201	198	82	393	151	496
25	87	267	2400	3240	790	1060	225	176	75	248	126	262
26	87	225	1050	1550	583	727	207	192	121	169	110	204
27	85	199	800	863	480	571	190	183	148	131	108	171
28	85	184	2300	633	408	475	187	170	92	109	112	146
29	80	169	1150	511	---	784	179	192	82	99	94	120
30	75	321	850	446	---	4620	182	182	74	121	81	113
31	70	---	700	383	---	1500	---	181	---	93	76	---
TOTAL	3148	6918	17198	19643	15137	29061	9086	5849	3965	3664	5209	3626
MEAN	102	231	555	634	541	937	303	189	132	118	168	121
MAX	417	1290	2400	3240	1250	4620	898	400	347	393	576	496
MIN	67	68	178	307	339	256	179	140	74	66	76	56
CFSM	.96	2.18	5.24	5.98	5.10	8.84	2.86	1.78	1.25	1.11	1.58	1.14
IN.	1.10	2.43	6.04	6.89	5.31	10.20	3.19	2.05	1.39	1.29	1.83	1.27

CAL YR 1974 TOTAL 131,239 MEAN 360 MAX 2,400 MIN 67 CFSM 3.40 IN 46.06
WTR YR 1975 TOTAL 122,504 MEAN 336 MAX 4,620 MIN 56 CFSM 3.17 IN 42.99

PEAK DISCHARGE (BASE, 3,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	Unknown	7.03*	5,010	03-14	0215	7.62	5,950
12-28	Unknown	5.73*	3,160	03-30	0315	8.83	8,130
01-25	1100	8.49	7,490				

*From crest stage gage.

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 (697 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.--24 years, 547 cfs (15.49 cu m/s), 27.61 in/yr (701 mm/yr).

EXTREMES.--Current year: Maximum discharge, 16,100 cfs (456 cu m/s) Mar. 30, gage height, 19.49 ft (5.941 m); minimum, 80 cfs (2.27 cu m/s) Sept. 13; minimum gage height, 6.32 ft (1.926 m), Sept. 6, 13.
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 April 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) upstream from the gage. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	122	1,060	1,060	648	689	1,750	322	435	121	122	117
2	132	119	753	963	1,250	724	1,270	323	360	143	113	109
3	127	118	588	868	1,520	588	1,920	316	296	197	118	100
4	125	116	492	1,220	1,650	538	1,200	339	265	133	156	93
5	125	214	431	992	2,240	514	947	303	246	177	199	89
6	123	232	392	827	1,760	484	810	286	268	282	544	90
7	120	160	380	701	1,290	1,350	718	291	238	237	356	142
8	118	146	697	624	1,020	2,480	650	290	213	165	406	131
9	115	138	792	610	894	1,250	600	302	197	160	312	106
10	113	134	633	549	775	1,200	594	294	196	177	272	94
11	110	133	531	1,110	753	1,140	541	268	204	167	259	90
12	109	186	476	1,060	1,420	1,470	491	266	234	149	205	85
13	108	184	418	1,620	1,030	6,510	456	298	233	135	182	135
14	105	170	373	1,070	834	7,650	435	257	194	123	170	125
15	111	234	346	841	731	2,640	446	281	178	118	158	98
16	635	182	394	715	782	1,730	411	737	175	114	224	88
17	390	204	354	615	1,230	1,520	390	458	166	124	181	89
18	242	288	330	578	1,110	1,150	375	422	156	131	171	143
19	199	977	313	704	1,180	1,310	631	462	147	156	604	171
20	176	3,570	298	2,370	987	1,260	719	372	143	155	355	127
21	163	1,480	282	1,540	849	1,080	499	330	185	204	258	114
22	154	756	264	1,050	739	1,240	448	301	201	153	230	121
23	148	550	248	858	689	1,210	419	297	165	133	194	452
24	144	446	253	760	1,980	2,260	400	311	146	376	185	562
25	141	425	4,580	5,700	1,400	2,230	428	268	136	352	168	337
26	137	383	2,340	3,170	1,020	1,370	424	282	172	222	152	248
27	134	329	1,610	1,640	841	1,060	372	296	230	178	151	202
28	129	302	5,810	1,190	739	887	360	255	164	154	158	175
29	126	275	2,570	956	------	1,210	348	278	142	138	144	156
30	124	285	1,530	834	------	9,700	342	270	130	150	124	141
31	123	------	1,130	717	------	3,090	------	256	------	138	117	------
TOTAL	4,944	12,858	30,668	37,512	31,361	61,534	19,394	10,031	6,215	5,362	6,988	4,730
MEAN	159	429	989	1,210	1,120	1,985	646	324	207	173	225	158
MAX	635	3,570	5,810	5,700	2,240	9,700	1,920	737	435	376	604	562
MIN	105	116	248	549	648	484	342	255	130	114	113	85
CFSM	.59	1.59	3.68	4.50	4.16	7.38	2.40	1.20	.77	.64	.84	.59
IN.	.68	1.78	4.24	5.19	4.34	8.51	2.68	1.39	.86	.74	.97	.65

CAL YR 1974 TOTAL 259,914 MEAN 712 MAX 5,810 MIN 105 CFSM 2.65 IN 35.94
WTR YR 1975 TOTAL 231,597 MEAN 635 MAX 9,700 MIN 85 CFSM 2.36 IN 32.03

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1300	14.09	7,560	03-14	0700	17.24	11,900
12-28	1000	13.63	6,980	03-30	0900	19.49	16,100
01-25	1530	16.98	11,500				

03518300 Little Tennessee River below Chilhowee Dam, Tenn.

LOCATION.--Lat 35°32'48", long 84°03'50", Blount County, on right bank on U. S. Highway 129, at Tallassee, 100 ft (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.--17 years, 5,026 cfs (142.3 cu m/s), 34.35 in/yr (872 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 33,400 cfs (946 cu m/s) Mar. 30, gage height, 15.94 ft (4.859 m); minimum, 20 cfs (0.57 cu m/s) Oct. 4, gage height, 5.46 ft (1.664 m); minimum daily, 1,260 cfs (35.7 cu m/s) Nov. 23, Sept. 14.
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, 20 cfs (0.57 cu m/s) Oct. 4, 1974, gage height, 5.46 ft (1.664 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 Water Resources Data for North Carolina, 1975). 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,080	5,510	3,120	2,370	3,520	10,700	11,100	5,980	5,240	6,370	5,910	3,980
2	4,710	3,480	5,350	4,390	7,050	10,400	11,000	4,620	6,480	4,630	4,510	5,840
3	6,640	2,820	2,500	2,370	8,030	8,580	11,300	4,630	4,120	4,620	1,320	6,320
4	4,870	4,500	4,520	3,220	8,710	9,470	11,000	4,360	5,600	6,370	5,940	6,190
5	5,640	5,240	4,880	2,630	7,700	10,400	10,100	5,090	4,070	5,740	5,510	5,160
6	4,420	5,800	4,740	2,950	8,400	8,920	8,930	5,530	4,290	4,870	5,250	3,720
7	6,620	5,120	3,790	2,870	7,240	6,980	10,200	4,740	4,350	6,120	3,790	2,550
8	5,970	6,260	4,370	2,150	7,500	9,300	10,000	5,040	4,690	5,780	4,810	5,320
9	6,200	6,640	6,570	3,010	8,190	6,460	9,770	4,460	5,060	6,160	3,420	5,580
10	5,560	5,860	6,230	3,500	7,460	8,540	10,200	4,650	5,760	7,380	1,860	4,950
11	4,940	5,360	4,900	2,920	8,690	8,410	9,820	5,460	4,930	6,910	6,620	5,000
12	4,330	6,720	4,170	5,950	9,040	7,290	6,770	4,760	4,930	6,020	5,710	4,560
13	3,970	6,500	4,890	6,300	9,380	8,880	7,810	4,880	5,030	3,570	5,100	2,840
14	2,900	5,380	4,900	6,840	10,300	9,550	8,400	6,030	4,730	4,840	5,750	1,260
15	5,200	4,890	4,770	5,510	11,100	4,210	6,970	4,300	4,840	5,750	5,550	3,910
16	4,560	6,110	6,020	6,150	10,400	4,110	7,250	4,670	5,230	7,410	3,990	3,420
17	3,530	4,840	6,840	6,320	6,270	7,320	7,130	5,860	4,660	7,370	1,600	3,510
18	1,440	5,640	5,700	4,450	10,400	8,940	7,170	3,120	3,840	6,980	5,790	3,540
19	3,320	5,690	6,300	4,860	11,100	8,020	7,870	4,760	6,660	6,660	6,170	3,860
20	4,780	4,980	5,010	8,090	10,700	7,060	6,880	5,210	5,920	4,150	5,390	1,770
21	5,200	3,960	7,230	5,590	10,600	8,020	7,610	5,040	5,140	8,090	5,370	1,850
22	4,180	2,950	5,410	5,960	9,710	7,980	7,490	4,720	5,660	4,850	5,580	4,720
23	5,000	1,260	6,580	4,590	10,900	7,720	7,400	4,100	4,290	5,780	4,750	4,490
24	4,940	1,730	2,660	5,150	11,300	8,030	7,530	5,410	5,950	6,360	4,770	1,280
25	3,550	4,880	4,330	9,580	10,700	9,400	4,500	5,740	4,810	6,630	6,000	2,000
26	5,050	6,670	4,660	7,150	10,800	9,250	5,490	4,200	4,530	6,590	5,890	1,360
27	5,460	6,920	2,160	5,290	10,800	11,100	5,080	5,430	3,960	3,760	5,190	3,120
28	6,260	5,660	8,460	8,300	10,400	10,600	5,440	4,960	4,860	7,760	5,100	1,440
29	5,250	5,240	1,700	7,650	------	10,800	4,980	3,850	4,910	6,260	4,520	4,210
30	5,960	6,020	1,940	6,470	------	20,300	4,970	4,520	5,020	5,680	5,400	3,520
31	6,300	------	1,360	6,330	------	11,100	------	5,050	------	6,030	3,740	------
TOTAL	153,830	152,630	146,060	158,910	256,390	277,840	240,160	151,170	149,560	185,490	150,300	111,270
MEAN	4,962	5,088	4,712	5,126	9,157	8,963	8,005	4,876	4,985	5,984	4,848	3,709
MAX	7,080	6,920	8,460	9,580	11,300	20,300	11,300	6,030	6,660	8,090	6,620	6,320
MIN	1,440	1,260	1,360	2,150	3,520	4,110	4,500	3,120	3,840	3,570	1,320	1,260

CAL YR 1974 TOTAL 2,320,100 MEAN 6,356 MAX 16,200 MIN 1,260
WTR YR 1975 TOTAL 2,133,610 MEAN 5,846 MAX 20,300 MIN 1,260

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.--50 years, 286 cfs (8.100 cu m/s), 32.91 in/yr (836 mm/yr). 49 years, 285 cfs (8.071 cu m/s); figure published in Water Resources Data for Tennessee, 1974, in error.

EXTREMES.--Current year: Maximum discharge, 16,200 cfs (459 cu m/s) Mar. 30, gage height, 13.21 ft (4.026 m), from rating curve extended above 12,000 cfs (340 cu m/s) on basis of slope-area measurement at gage height 14.18 ft (4.322 m); minimum, 44 cfs (1.25 cu m/s) Oct. 10-13.

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).

Flood in May 1840, reached a stage of 15 ft (4.6 m), discharge, about 21,500 cfs (609 cu m/s), from reports of Tennessee Valley Authority.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	53	514	517	325	464	1,160	224	276	84	82	107
2	47	53	270	439	571	433	909	206	152	143	72	77
3	46	53	192	441	759	370	848	205	130	108	66	71
4	46	54	159	726	843	343	674	217	122	89	130	67
5	47	182	144	551	1,230	331	601	190	125	117	147	64
6	47	96	135	432	939	318	536	180	157	90	1,120	67
7	47	71	160	355	672	375	501	256	198	93	505	147
8	46	65	473	310	543	468	462	241	128	92	305	174
9	45	63	358	305	484	384	423	207	114	87	192	85
10	45	61	250	274	419	439	427	192	129	78	550	75
11	44	62	202	550	396	538	385	179	133	82	448	86
12	44	114	189	520	503	664	349	175	167	75	269	77
13	45	83	164	669	428	1,340	361	181	150	70	199	85
14	45	80	146	448	385	2,910	321	161	118	65	164	71
15	48	99	147	361	348	1,180	337	229	108	146	141	69
16	286	79	181	314	471	863	298	453	170	75	162	66
17	100	81	144	274	685	760	284	265	116	70	134	74
18	68	107	130	258	934	669	266	230	105	68	177	130
19	60	266	127	292	986	879	340	209	100	68	156	96
20	58	669	122	793	670	818	266	184	97	85	117	78
21	57	313	117	565	533	709	284	170	138	180	105	72
22	56	177	109	432	459	750	266	161	151	88	101	90
23	56	132	105	366	460	704	248	152	99	78	96	317
24	55	109	114	334	1,950	1,340	242	145	94	361	92	280
25	55	109	691	3,380	925	1,190	291	137	92	120	87	160
26	55	101	487	1,230	649	823	266	138	154	88	83	130
27	56	90	438	696	552	694	238	140	197	82	88	114
28	55	85	2,380	537	489	625	232	128	112	70	106	101
29	54	82	929	455	------	1,720	225	137	98	68	86	96
30	54	208	708	420	------	6,790	249	150	89	116	75	90
31	54	------	567	358	------	1,840	------	140	------	123	105	------
TOTAL	1,869	3,797	10,852	17,602	18,608	31,731	12,289	5,982	4,019	3,159	6,160	3,216
MEAN	60.3	127	350	568	665	1,024	410	193	134	102	199	107
MAX	286	669	2,380	3,380	1,950	6,790	1,160	453	276	361	1,120	317
MIN	44	53	105	258	325	318	225	128	89	65	66	64
CFSM	.51	1.08	2.97	4.81	5.64	8.68	3.47	1.64	1.14	.86	1.69	.91
IN.	.59	1.20	3.42	5.55	5.87	10.00	3.87	1.89	1.27	1.00	1.94	1.01

CAL YR 1974 TOTAL 113,460 MEAN 311 MAX 2,380 MIN 44 CFSM 2.64 IN 35.77
WTR YR 1975 TOTAL 119,284 MEAN 327 MAX 6,790 MIN 44 CFSM 2.77 IN 37.60

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-25	1000	10.69	8,580	03-30	0230	13.21	16,200
03-14	0145	9.84	6,710				

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 June 1975 (discontinued as a continuous record station; converted to a crest-stage partial-record station).

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

AVERAGE DISCHARGE.--9 years (1966-74), 33.0 cfs (0.935 cu m/s), 28.01 in/yr (711 mm/yr).

EXTREMES.--Maximum recorded discharge during period October 1974 to June 1975, 849 cfs (24.0 cu m/s) Mar. 14, gage height, 7.46 ft (2.274 m), but may have been higher during period of missing record on Mar. 30; minimum, 10 cfs (0.28 cu m/s) Nov. 11, 14.
Period of record: Maximum discharge, 2,900 cfs (82.1 cu m/s) May 30, 1974, gage height, 9.70 ft (2.957 m), from rating curve extended above 420 cfs (11.9 cu m/s) on basis of contracted-opening measurements of peak flow; minimum, 3.1 cfs (0.088 cu m/s) Oct. 7, 8, 9, 1970.

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

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1974 TO JUNE 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	32	73	53	51	200	36	23			
2	13	12	25	63	100	52	160	35	21			
3	12	12	23	62	96	45	120	35	21			
4	12	12	21	89	114	42	100	34	20			
5	12	14	19	65	184	41	85	33	20			
6	12	12	19	59	130	39	77	32	21			
7	11	12	19	56	96	86	69	35	20			
8	11	11	24	54	80	76	64	33	20			
9	11	11	21	54	74	47	62	33	19			
10	11	11	20	51	65	62	60	31	20			
11	11	11	19	122	75	55	56	30	20			
12	11	13	18	113	149	104	53	30	20			
13	12	11	17	124	85	445	50	29	19			
14	13	11	16	77	71	397	49	28	18			
15	14	13	16	66	64	182	51	37	18			
16	35	11	17	61	77	157	47	49	18			
17	30	11	16	56	152	149	45	31	18			
18	25	13	15	54	88	114	44	30	17			
19	20	98	15	62	77	135	137	28	17			
20	17	194	14	135	66	105	79	26	17			
21	16	58	14	79	60	87	54	26	17			
22	15	37	13	65	57	108	49	25	17			
23	14	30	13	59	55	89	47	25	16			
24	14	27	18	56	115	169	45	24	16			
25	13	26	356	227	62	122	50	23	16			
26	13	23	95	123	55	83	44	24	17			
27	13	21	105	86	52	76	41	23	18			
28	13	19	250	74	49	69	40	23	16			
29	13	18	149	66	---	200	38	23	15			
30	13	21	104	62	---	400	38	22	15			
31	13	---	83	57	---	300	---	23	---			
TOTAL	456	786	1586	2450	2401	4087	2054	916	550			
MEAN	15	26	51	79	86	132	68	30	18			
MAX	35	194	356	227	184	445	200	49	23			
MIN	11	11	13	51	49	39	38	22	15			
CFSM	.94	1.63	3.19	4.94	5.38	8.25	4.25	1.88	1.13			
IN.	1.06	1.83	3.69	5.70	5.58	9.50	4.78	2.13	1.28			

CAL YR 1974 TOTAL 18,051 MEAN 49.5 MAX 640 MIN 11 CFSM 3.09 IN 41.97

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	0635	6.96	611	03-14	0135	7.46	849
01-25	1035	6.22	356	03-30	Unknown	Unknown	Unknown

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.--57 years, 2,103 cfs (59.56 cu m/s), 19.37 in/yr (492 mm/yr).

EXTREMES.--Current year: Maximum discharge, 38,900 cfs (1,100 cu m/s) Mar. 31, gage height, 17.92 ft (5.462 m); minimum, 242 cfs (6.85 cu m/s) Oct. 14, 15, gage height, 0.74 ft (0.226 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 February 1862, present site and datum, from information by local resident; discharge, about 66,000 cfs (1,870 cu m/s).

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	352	1,400	4,570	2,990	2,020	22,100	2,260	1,680	955	318	278
2	315	343	1,380	4,340	4,120	1,890	8,840	3,350	1,610	787	301	358
3	293	334	1,580	4,070	7,770	1,750	5,880	5,120	1,680	684	295	429
4	275	327	1,400	3,940	8,660	1,600	4,640	4,540	1,450	610	312	338
5	266	355	1,200	3,510	9,100	1,460	3,780	5,030	1,260	588	327	288
6	262	375	1,100	2,940	9,960	1,370	3,060	3,810	1,220	589	360	297
7	258	391	1,030	2,480	9,510	1,590	2,660	2,940	1,200	676	882	329
8	257	409	1,020	2,140	7,710	4,510	2,390	2,540	1,170	776	1,890	370
9	256	377	1,200	1,920	5,540	6,110	2,180	3,180	1,000	766	1,220	334
10	254	357	2,640	1,750	4,310	5,100	2,220	2,780	900	904	838	331
11	254	348	2,500	2,880	3,580	5,240	2,090	2,420	875	768	667	314
12	250	419	1,880	4,130	5,750	8,420	1,940	2,200	1,290	649	554	330
13	246	474	1,540	6,120	9,770	20,300	1,780	2,050	1,520	580	495	1,520
14	245	484	1,340	5,980	8,410	28,500	1,630	2,000	1,150	566	464	2,160
15	253	545	1,330	4,760	5,940	27,800	1,570	1,890	1,030	515	447	1,240
16	990	608	1,380	3,550	4,440	21,500	1,530	3,400	1,020	478	471	805
17	2,550	614	1,330	2,850	3,770	10,000	1,490	4,980	935	570	525	601
18	2,260	650	1,460	2,430	3,290	6,850	1,410	6,960	850	561	507	520
19	1,510	854	1,560	2,770	2,920	5,590	1,590	9,740	880	593	940	867
20	1,050	3,540	1,360	7,550	2,600	5,280	2,380	6,910	1,010	649	734	1,030
21	785	6,230	1,170	11,500	2,330	7,780	2,500	4,280	988	620	565	1,040
22	645	4,660	1,070	8,410	2,090	7,400	2,290	3,160	1,050	526	476	1,040
23	559	2,730	987	5,510	1,920	6,380	2,010	2,530	1,140	510	417	2,040
24	505	1,820	917	4,240	2,870	7,750	1,820	2,170	951	490	385	6,870
25	471	1,390	958	5,150	3,820	12,100	2,760	2,570	851	441	349	7,340
26	445	1,140	1,140	11,800	3,070	9,130	4,210	2,440	755	419	338	4,120
27	423	970	1,700	11,400	2,580	5,870	4,600	1,970	788	556	316	2,350
28	400	859	6,450	7,040	2,240	4,420	3,660	1,720	1,000	453	296	1,670
29	383	786	10,600	4,790	------	5,440	2,880	1,590	1,860	398	282	1,280
30	372	764	9,680	3,990	------	25,600	2,440	1,770	1,300	362	271	1,030
31	361	------	5,620	3,440	------	36,900	------	1,640	------	337	259	------
TOTAL	17,733	33,505	69,922	151,950	141,060	295,650	104,330	103,940	34,413	18,376	16,501	41,519
MEAN	572	1,117	2,256	4,902	5,038	9,537	3,478	3,353	1,147	593	532	1,384
MAX	2,550	6,230	10,600	11,800	9,960	36,900	22,100	9,740	1,860	955	1,890	7,340
MIN	245	327	917	1,750	1,920	1,370	1,410	1,590	755	337	259	278
CFSM	.39	.76	1.53	3.33	3.42	6.47	2.36	2.27	.78	.40	.36	.94
IN.	.45	.85	1.76	3.83	3.56	7.46	2.63	2.62	.87	.46	.42	1.05

CAL YR 1974 TOTAL 1,026,666 MEAN 2,813 MAX 34,100 MIN 245 CFSM 1.91 IN 25.91
WTR YR 1975 TOTAL 1,028,899 MEAN 2,819 MAX 36,900 MIN 245 CFSM 1.91 IN 25.97

PEAK DISCHARGE (BASE, 14,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-14	0800	15.39	30,100	03-31	0600	17.92	38,900

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.--56 years, 1,154 cfs (32.68 cu m/s), 22.88 in/yr (581 mm/yr).

EXTREMES.--Current year: Maximum discharge, 24,900 cfs (705 cu m/s) Mar. 14, gage height, 24.91 ft (7.593 m); minimum, 111 cfs (3.14 cu m/s) Sept. 6, gage height, 1.32 ft (0.402 m), result of dredging.
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, 1.32 ft (0.402 m) Sept. 6, 1975, result of dredging.
Flood in March 1826 reached a stage of 29.5 ft (8.99 m) present datum, discharge, 34,000 cfs (963 cu m/s), and 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, except August and September, which are fair. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	234	1,540	2,460	1,520	1,280	8,140	1,240	982	440	160	145
2	224	228	1,640	2,820	2,060	1,170	4,170	1,260	914	389	155	136
3	208	221	1,290	2,640	3,510	1,050	2,980	2,700	805	360	160	128
4	196	251	1,040	2,400	3,890	957	2,360	2,030	650	344	155	122
5	192	322	885	2,160	4,860	840	1,910	2,070	588	316	150	120
6	192	297	790	1,800	5,940	777	1,610	1,850	588	328	160	122
7	190	405	731	1,550	4,600	839	1,430	1,490	585	355	155	195
8	189	372	907	1,360	3,300	1,960	1,290	1,250	695	306	150	162
9	189	297	1,000	1,210	2,510	3,420	1,190	1,280	564	296	155	156
10	189	259	1,060	1,100	2,040	2,370	1,160	1,420	508	329	160	150
11	187	239	1,020	1,610	1,740	2,620	1,150	1,290	510	288	150	145
12	186	392	909	2,190	3,380	5,010	1,070	1,080	697	259	155	145
13	186	514	815	2,970	5,480	14,400	950	973	724	244	160	192
14	186	589	734	2,930	4,420	23,300	892	936	750	231	155	428
15	187	560	660	2,200	2,930	17,300	878	864	621	238	155	380
16	816	546	685	1,760	2,250	8,720	872	1,180	780	247	150	240
17	1,930	534	729	1,480	1,930	4,730	883	1,580	985	295	150	198
18	1,560	522	735	1,300	1,760	3,690	841	2,090	842	330	210	189
19	949	750	678	1,460	1,550	2,980	1,010	6,830	731	276	205	174
20	681	2,520	633	3,560	1,380	2,660	1,640	6,060	617	325	220	168
21	539	3,720	593	6,250	1,230	2,330	2,000	2,790	613	262	237	211
22	450	3,380	555	4,210	1,100	2,160	1,620	1,900	731	230	198	220
23	392	1,830	514	2,780	1,020	2,350	1,340	1,470	664	220	183	275
24	352	1,240	479	2,150	1,480	4,920	1,180	1,230	596	235	162	458
25	327	958	485	2,450	2,090	7,730	1,450	1,310	486	214	153	815
26	307	785	553	4,500	2,070	6,560	2,750	1,080	437	208	148	635
27	290	670	744	5,120	1,670	3,690	3,000	970	540	193	150	408
28	273	574	3,050	3,110	1,430	2,600	2,100	895	716	186	171	305
29	260	505	5,600	2,310	------	3,580	1,670	783	661	180	159	251
30	250	493	4,660	1,930	------	11,400	1,410	778	524	170	145	217
31	241	------	2,700	1,740	------	15,600	------	831	------	165	150	------
TOTAL	12,573	24,207	38,414	77,510	73,140	162,993	54,946	53,510	20,104	8,459	5,126	7,490
MEAN	406	807	1,239	2,500	2,612	5,258	1,832	1,726	670	273	165	250
MAX	1,930	3,720	5,600	6,250	5,940	23,300	8,140	6,830	985	440	237	815
MIN	186	221	479	1,100	1,020	777	841	778	437	165	145	120
CFSM	.59	1.18	1.81	3.65	3.81	7.68	2.67	2.52	.98	.40	.24	.37
IN.	.68	1.31	2.09	4.21	3.97	8.85	2.98	2.91	1.09	.46	.28	.41

CAL YR 1974 TOTAL 571,451 MEAN 1,566 MAX 21,200 MIN 186 CFSM 2.29 IN 31.03
WTR YR 1975 TOTAL 538,472 MEAN 1,475 MAX 23,300 MIN 120 CFSM 2.15 IN 29.24

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-14	0900	24.91	24,900	03-31	1300	19.68	16,600

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.--18 years, 104 cfs (2.945 cu m/s), 20.62 in/yr (524 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,940 cfs (140 cu m/s) Mar. 30, gage height, 9.86 ft (3.005 m); minimum, 7.2 cfs (.20 cu m/s) Sept. 4, 5, 6.
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, 2.5 cfs (.071 cu m/s) Aug. 12, 1974, caused by regulation upstream of unknown origin.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	12	391	157	102	107	342	57	66	20	13	8.2
2	16	9.8	186	135	493	101	248	54	44	19	11	7.8
3	15	9.8	127	127	320	87	212	49	37	19	11	7.7
4	14	8.9	99	166	332	78	169	52	33	18	12	7.4
5	14	63	81	136	497	73	146	46	37	17	12	7.4
6	14	39	67	119	343	67	129	42	111	19	12	7.6
7	13	21	70	103	248	153	118	43	49	23	11	9.1
8	12	16	146	93	192	152	109	51	38	33	11	9.8
9	11	13	118	88	162	115	103	174	33	21	10	9.9
10	11	12	92	96	135	185	99	82	56	19	11	9.1
11	11	14	78	304	126	229	90	69	65	17	13	8.8
12	11	48	70	297	350	1,100	82	63	334	16	11	8.7
13	11	38	55	418	224	2,880	76	66	157	15	10	10
14	11	37	44	226	176	2,840	72	49	108	15	9.6	10
15	13	68	39	167	148	786	74	48	75	31	9.2	9.4
16	323	47	52	135	152	380	67	515	71	23	10	9.4
17	119	41	41	110	278	280	64	180	51	17	12	11
18	69	53	33	105	209	217	61	122	43	16	12	17
19	46	176	29	291	174	195	92	95	37	15	12	14
20	35	476	26	474	143	165	86	75	34	14	10	11
21	28	181	23	279	123	142	70	64	33	14	9.3	9.6
22	25	102	19	200	109	196	65	55	36	14	8.9	10
23	22	71	16	161	106	177	61	50	31	13	8.6	42
24	21	52	16	140	363	802	59	46	27	13	8.6	57
25	19	45	181	588	198	461	123	41	25	15	8.1	19
26	18	35	133	343	151	242	103	38	24	14	8.0	13
27	16	25	224	212	128	188	84	37	24	13	7.9	11
28	15	20	989	165	115	160	76	34	38	13	8.6	10
29	14	15	351	141	------	1,010	69	32	24	12	8.8	9.5
30	13	104	213	135	------	3,060	63	99	21	14	11	8.9
31	12	------	163	112	------	749	------	71	------	19	8.8	------
TOTAL	991	1,852.5	4,172	6,223	6,097	17,377	3,212	2,499	1,762	541	319.4	383.3
MEAN	32.0	61.8	135	201	218	561	107	80.6	58.7	17.5	10.3	12.8
MAX	323	476	989	588	497	3,060	342	515	334	33	13	57
MIN	11	8.9	16	88	102	67	59	32	21	12	7.9	7.4
CFSM	.47	.90	1.97	2.93	3.18	8.19	1.56	1.18	.86	.26	.15	.19
IN.	.54	1.01	2.27	3.38	3.31	9.44	1.74	1.36	.96	.29	.17	.21

CAL YR 1974 TOTAL 53,986.9 MEAN 148 MAX 3,100 MIN 5.4 CFSM 2.16 IN 29.32
WTR YR 1975 TOTAL 45,429.2 MEAN 124 MAX 3,060 MIN 7.4 CFSM 1.81 IN 24.67

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-14	0600	9.57	4,260	03-30	0600	9.86	4,940

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.--15 years, 180 cfs (5.098 cu m/s), 29.63 in/yr (753 mm/yr).

EXTREMES.--Current year: Maximum discharge, 6,100 cfs (173 cu m/s) Mar. 14, gage height, 21.79 ft (6.642 m); minimum, 7.9 cfs (0.22 cu m/s) Sept. 5.
Period of record: Maximum discharge, 9,780 cfs (277 cu m/s) Nov. 28, 1973, gage height, 27.1 ft (8.26 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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	20	580	289	184	219	523	101	70	29	16	9.8
2	18	20	312	244	775	207	375	92	45	28	15	9.3
3	16	19	181	253	656	160	339	81	35	31	14	8.7
4	16	19	128	352	672	135	254	81	31	27	18	8.6
5	16	82	103	308	1,110	130	217	71	45	35	35	8.3
6	15	58	88	260	683	127	190	64	85	51	33	8.9
7	14	36	116	218	463	252	165	71	43	53	20	11
8	14	30	331	192	350	344	143	77	33	41	16	11
9	13	26	257	200	290	263	131	95	28	51	32	10
10	13	23	172	220	239	352	129	66	68	31	29	9.8
11	13	25	133	715	221	464	125	54	294	27	23	9.5
12	12	58	115	488	482	991	116	49	1,280	23	15	9.9
13	13	46	91	481	387	5,140	105	53	685	23	13	9.8
14	13	40	75	358	309	5,370	100	44	250	21	11	9.9
15	17	50	68	285	258	1,790	125	61	172	20	11	9.2
16	148	42	75	236	259	605	105	333	253	19	12	9.5
17	60	41	63	194	488	447	96	179	135	18	15	12
18	38	45	55	195	419	351	89	136	110	17	25	50
19	31	156	52	423	336	351	201	98	91	16	45	34
20	28	645	49	1,020	269	291	241	68	80	21	18	14
21	26	269	46	458	226	260	187	50	69	21	14	12
22	25	141	43	335	196	329	142	40	88	17	12	12
23	24	95	41	270	206	320	129	35	64	16	11	111
24	24	73	44	234	1,030	1,930	126	31	52	27	11	376
25	23	64	437	1,260	535	1,790	204	29	54	40	11	67
26	22	55	296	937	342	495	181	29	68	27	10	39
27	22	47	483	419	272	356	137	30	47	16	9.9	29
28	21	43	1,920	316	233	288	129	35	41	15	11	23
29	21	39	769	268	------	1,070	123	73	37	15	12	19
30	21	86	419	242	------	4,940	111	102	32	15	11	17
31	20	------	321	203	------	1,830	------	58	------	17	11	------
TOTAL	779	2,393	7,863	11,873	11,890	31,597	5,238	2,386	4,385	808	539.9	968.2
MEAN	25.1	79.8	254	383	425	1,019	175	77.0	146	26.1	17.4	32.3
MAX	148	645	1,920	1,260	1,110	5,370	523	333	1,280	53	45	376
MIN	12	19	41	192	184	127	89	29	28	15	9.9	8.3
CFSM	.30	.97	3.08	4.64	5.15	12.4	2.12	.93	1.77	.32	.21	.39
IN.	.35	1.08	3.55	5.35	5.36	14.25	2.36	1.08	1.98	.36	.24	.44

CAL YR 1974 TOTAL 70,795.0 MEAN 194 MAX 3,850 MIN 9.2 CFSM 2.35 IN 31.92
WTR YR 1975 TOTAL 80,720.1 MEAN 221 MAX 5,370 MIN 8.3 CFSM 2.68 IN 36.40

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	1130	14.69	2,160	03-24	2200	17.38	3,350
01-25	1900	14.08	1,940	03-30	1130	21.38	5,810
03-14	0500	21.79	6,100	06-12	1930	14.46	2,080

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.--15 years, 52.8 cfs (1.495 cu m/s), unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,510 cfs (42.8 cu m/s) Mar. 30, gage height, 9.85 ft (3.002 m); minimum daily, 18 cfs (0.51 cu m/s) several days in October and Sept. 14, 15.
Period of record: Maximum discharge, 4,100 cfs (116 cu m/s) Nov. 28, 1973, on basis of runoff comparisons with nearby stations, gage height, 16.0 ft (4.88 m) from floodmarks, backwater from low steel on bridge; minimum daily, 15 cfs (0.42 cu m/s) July 6, 1974.
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). Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	21	153	62	44	53	98	28	41	23	21	19
2	25	21	58	51	171	49	77	27	23	20	20	19
3	20	20	46	59	130	41	85	26	22	20	20	19
4	18	20	38	86	193	38	61	27	22	20	38	19
5	18	34	34	61	235	35	54	24	22	20	21	20
6	18	26	31	53	127	32	49	25	37	31	23	20
7	18	20	44	47	90	70	46	38	22	24	21	36
8	18	20	86	42	71	90	43	30	20	22	20	20
9	18	20	51	44	62	80	40	36	20	23	19	21
10	18	19	42	53	54	100	38	26	45	21	43	21
11	18	21	36	162	52	200	36	24	83	21	25	19
12	18	36	33	122	160	400	34	24	380	20	21	20
13	18	22	30	116	81	900	31	23	83	20	21	19
14	18	25	27	77	66	950	31	23	55	20	21	18
15	22	27	25	62	57	400	45	29	59	22	20	18
16	97	21	28	53	64	200	32	75	93	20	21	19
17	28	22	24	46	154	85	30	38	44	20	22	28
18	23	23	25	48	86	76	30	31	36	22	26	78
19	21	73	24	110	70	79	65	27	32	19	34	25
20	20	126	23	135	59	65	47	25	30	24	21	21
21	20	48	22	83	52	58	38	24	27	26	21	19
22	20	34	21	66	47	97	34	24	28	21	21	23
23	20	28	21	56	51	73	29	23	23	20	20	85
24	20	25	19	51	236	297	35	22	23	25	20	148
25	20	27	185	455	91	138	59	21	23	23	20	32
26	20	24	68	139	68	85	38	21	34	26	20	25
27	19	23	128	84	58	69	32	22	23	19	20	22
28	20	21	341	67	52	59	32	22	22	19	20	20
29	20	20	125	59	------	193	31	22	21	20	20	19
30	21	54	85	58	------	769	31	46	19	21	19	19
31	21	------	70	48	------	155	------	27	------	33	19	------
TOTAL	710	921	1,943	2,655	2,681	5,936	1,331	880	1,412	685	698	891
MEAN	22.9	30.7	62.7	85.6	95.8	191	44.4	28.4	47.1	22.1	22.5	29.7
MAX	97	126	341	455	236	950	98	75	380	33	43	148
MIN	18	19	19	42	44	32	29	21	19	19	19	18
CFSM	1.17	1.57	3.22	4.39	4.91	9.79	2.28	1.46	2.42	1.13	1.15	1.52
IN.	1.35	1.76	3.71	5.06	5.11	11.32	2.54	1.68	2.69	1.31	1.33	1.70

CAL YR 1974 TOTAL 21,320 MEAN 58.4 MAX 913 MIN 15 CFSM 2.99 IN 40.67
WTR YR 1975 TOTAL 20,743 MEAN 56.8 MAX 950 MIN 18 CFSM 2.91 IN 39.57

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-25	1330	7.60	942	06-12	1730	7.20	856
03-30	0615	9.85	1,510				

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 1973 to current year. 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.--14 years, (1956-68, 1973-75), 1,080 cfs (30.57 cu m/s), 28.32 in/yr (719 mm/yr).

EXTREMES.--Current year: Maximum discharge, 55,400 cfs (1,570 cu m/s) Mar. 13, gage height, 22.71 ft (6.922 m), 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 at gage height 29.51 ft (8.995 m); minimum, 5.4 cfs (0.15 cu m/s) Sept. 16, 17, gage height, 0.69 ft (0.210 m).
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	111	5,910	2,340	1,120	1,100	3,780	523	174	78	41	20
2	203	104	4,110	1,910	2,880	1,170	2,620	439	171	64	40	17
3	157	100	2,560	1,630	4,380	984	2,100	374	150	59	34	15
4	126	96	1,920	1,920	6,400	832	1,620	345	131	62	35	12
5	106	142	1,550	1,780	9,550	757	1,230	321	106	54	118	11
6	93	376	1,300	1,500	5,480	696	987	274	111	55	170	9.8
7	84	353	1,210	1,260	3,770	1,960	814	258	198	49	142	9.2
8	76	286	3,400	1,090	2,740	4,690	686	357	152	44	117	9.0
9	69	242	3,210	1,660	2,160	2,690	593	461	108	41	85	7.9
10	63	208	2,240	2,380	1,720	2,420	541	429	95	38	70	7.1
11	58	197	1,700	13,200	1,440	3,900	483	343	115	36	90	7.4
12	54	464	1,430	5,560	4,250	13,100	415	288	486	33	88	10
13	50	819	1,180	3,500	3,930	44,800	373	248	1,020	31	65	9.4
14	47	658	968	2,580	2,580	26,000	350	221	555	30	53	7.7
15	46	587	841	2,060	1,950	8,000	468	238	364	28	56	6.5
16	1,430	547	813	1,790	1,640	5,000	509	5,560	345	26	63	5.5
17	1,660	548	748	1,720	2,460	3,000	416	3,970	319	30	52	7.2
18	935	991	666	1,750	2,730	2,300	1,520	4,070	231	37	48	59
19	602	2,650	603	4,500	2,380	2,420	563	2,570	172	43	199	480
20	435	7,110	590	8,420	1,890	2,640	1,720	1,650	135	81	160	246
21	342	4,570	592	4,440	1,530	2,140	1,350	1,120	109	55	95	157
22	278	2,500	543	2,980	1,250	2,440	1,070	775	101	42	68	130
23	237	1,640	492	2,310	1,110	3,500	881	558	102	42	54	1,850
24	211	1,210	472	1,870	3,570	8,280	762	410	79	54	44	12,800
25	193	992	3,770	2,440	2,980	7,280	927	316	65	45	37	3,890
26	176	863	4,280	3,090	2,020	3,740	1,430	254	61	70	32	1,920
27	161	723	3,280	2,250	1,560	2,540	1,130	278	62	55	29	1,190
28	148	623	8,640	1,810	1,290	1,910	919	253	179	43	30	798
29	136	523	5,840	1,540	------	6,750	757	204	146	36	29	565
30	127	551	4,260	1,440	------	19,000	619	190	104	31	25	416
31	117	------	3,010	1,250	------	6,780	------	175	------	30	22	------
TOTAL	8,686	30,784	72,128	87,970	80,760	192,819	31,633	27,472	6,146	1,422	2,191	24,672.7
MEAN	280	1,026	2,327	2,838	2,884	6,220	1,054	886	205	45.9	70.7	822
MAX	1,660	7,110	8,640	13,200	9,550	44,800	3,780	5,560	1,020	81	199	12,800
MIN	46	96	472	1,090	1,110	696	350	175	61	26	22	5.5
CFSM	.54	1.98	4.49	5.48	5.57	12.0	2.03	1.71	.40	.09	.14	1.59
IN.	.62	2.21	5.18	6.32	5.80	13.85	2.27	1.97	.44	.10	.16	1.77

CAL YR 1974 TOTAL 489,728.1 MEAN 1,342 MAX 28,600 MIN 5.9 CFSM 2.59 IN 35.17
WTR YR 1975 TOTAL 566,683.7 MEAN 1,553 MAX 44,800 MIN 5.5 CFSM 3.00 IN 40.70

PEAK DISCHARGE (BASE, 13,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	0515	14.14	21,300	03-30	0445	15.85	27,000
03-13	0730	22.71	55,400	09-24	0330	14.34	21,900
03-24	1700	12.10	15,400				

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.--48 years, 1,461 cfs (41.38 cu m/s), 25.96 in/yr (659 mm/yr).

EXTREMES.--Current year: Maximum discharge, 87,200 cfs (2,470 cu m/s) Mar. 13, gage height, 30.46 ft (9.284 m); minimum, 9.6 cfs (0.27 cu m/s) Sept. 16, 17, gage height, 1.42 ft (0.433 m).
Period of record: Maximum discharge, 195,000 cfs (5,520 cu m/s) Mar. 23, 1929, gage height, 41.2 ft (12.56 m), present site and datum, and 61.1 ft (18.62 m), site and datum then in use, from floodmarks and flood profile, from rating curve extended above 85,000 cfs (2,410 cu m/s), confirmed by slope-area measurement of May 28, 1973, flood at gage height 38.68 ft (11.790 m); 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. Records of chemical analyses and periodic water temperatures for the current water year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	173	7,840	3,070	1,520	1,580	5,030	1,320	337	137	57	37
2	363	164	5,580	2,510	3,820	1,620	3,410	1,280	315	104	56	32
3	281	157	3,400	2,190	5,930	1,400	2,690	993	272	93	50	26
4	226	152	2,520	2,720	8,140	1,210	2,080	1,150	228	84	41	23
5	190	242	2,040	2,590	13,000	1,120	1,620	1,250	192	84	58	19
6	166	521	1,720	2,160	7,400	1,050	1,350	1,320	261	91	286	17
7	148	563	1,640	1,790	5,050	2,490	1,160	837	269	114	253	17
8	132	470	4,270	1,550	3,600	7,000	1,020	561	263	85	188	16
9	118	404	4,300	2,140	2,820	3,830	905	696	188	79	149	15
10	106	349	2,960	3,030	2,230	3,320	837	699	179	67	121	14
11	97	329	2,250	17,200	1,880	5,220	768	580	520	60	151	12
12	88	693	1,880	7,460	4,920	16,900	679	492	1,690	51	149	11
13	81	1,210	1,550	4,590	5,230	70,400	605	429	1,820	45	121	11
14	72	1,020	1,310	3,270	3,430	40,000	577	378	1,080	40	99	11
15	67	920	1,160	2,600	2,590	11,000	723	412	720	35	111	11
16	1,340	842	1,120	2,250	2,190	5,830	823	7,330	682	28	297	11
17	2,040	830	1,050	2,140	3,230	4,210	700	5,410	601	23	181	12
18	1,230	1,180	943	2,140	3,750	3,200	656	6,100	446	23	137	37
19	859	3,210	860	4,840	3,210	3,270	825	3,530	337	36	567	474
20	649	10,600	821	11,300	2,560	3,350	2,220	2,200	263	73	427	412
21	520	6,210	825	5,820	2,070	2,800	1,910	1,510	211	161	263	261
22	428	3,320	768	3,820	1,710	3,030	1,540	1,110	177	82	181	216
23	368	2,160	712	2,930	1,540	4,570	1,300	843	169	61	139	1,630
24	328	1,620	687	2,380	5,310	11,700	1,150	645	148	137	120	15,400
25	300	1,360	4,670	3,960	4,460	10,300	1,330	511	118	220	93	4,780
26	277	1,210	5,780	4,730	2,930	5,070	1,960	466	151	120	85	2,370
27	253	1,050	4,690	3,230	2,240	3,360	1,630	507	169	118	67	1,530
28	232	930	13,400	2,510	1,830	2,520	1,370	442	206	81	57	1,110
29	215	806	8,220	2,110	------	9,490	1,180	370	253	57	56	843
30	199	850	5,680	1,920	------	27,600	1,180	462	179	47	51	668
31	186	------	3,940	1,680	------	9,380	------	363	------	57	43	------
TOTAL	12,035	43,545	98,586	116,630	108,590	277,820	43,228	44,196	12,444	2,493	4,654	30,026
MEAN	388	1,452	3,180	3,762	3,878	8,962	1,441	1,426	415	80.4	150	1,001
MAX	2,040	10,600	13,400	17,200	13,000	70,400	5,030	7,330	1,820	220	567	15,400
MIN	67	152	687	1,550	1,520	1,050	577	363	118	23	41	11
CFSM	.51	1.90	4.16	4.92	5.08	11.7	1.89	1.87	.54	.11	.20	1.31
IN.	.59	2.12	4.80	5.68	5.29	13.53	2.10	2.15	.61	.12	.23	1.46

CAL YR 1974 TOTAL 695,346.0 MEAN 1,905 MAX 44,000 MIN 9.2 CFSM 2.49 IN 33.86
WTR YR 1975 TOTAL 794,247.0 MEAN 2,176 MAX 70,400 MIN 11 CFSM 2.85 IN 38.67

PEAK DISCHARGE (BASE, 19,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	0630	19.01	27,000	03-30	0700	22.13	39,800
03-13	0900	30.46	87,200	09-24	0430	18.40	25,200
03-24	1830	17.15	21,000				

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, 0.3 mile (0.5 km) upstream from mouth, and 3.9 miles (6.3 km) east of Oakdale.

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

PERIOD OF RECORD.--April 1967 to June 1975 (discontinued).

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

AVERAGE DISCHARGE.--7 years (1967-74), 30.7 cfs (0.869 cu m/s); 33.09 in/yr (840 mm/yr).

EXTREMES.--Maximum discharge during period October 1974 to June 1975, 2,270 cfs (64.3 cu m/s) Mar. 13, gage height, 17.06 ft (5.200 m) from rating curve extended above 1,300 cfs (36.8 cu m/s) on basis of slope-area measurement at gage height 22.65 ft (6.904 m); minimum, 0.7 cfs (0.02 cu m/s) Oct. 14, 15.
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) September to November 1968, and Oct. 18, 1973.

REMARKS.--Records fair except those below 2 cfs, which are poor. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1974 TO JUNE 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	1.4	95	38	19	25	62	14	13			
2	2.7	1.3	54	30	85	21	45	12	7.5			
3	1.9	1.3	37	32	90	16	36	10	4.7			
4	1.6	1.2	28	42	129	14	28	9.7	4.2			
5	1.4	8.1	24	41	155	13	24	7.7	7.7			
6	1.1	3.6	19	35	82	12	20	6.7	10			
7	.98	2.5	29	27	52	65	18	11	4.7			
8	1.1	2.2	75	25	39	81	15	8.6	3.3			
9	1.0	1.9	54	27	31	50	13	7.0	2.7			
10	.95	1.7	36	53	24	60	12	5.6	7.0			
11	.82	2.7	27	165	21	77	11	4.7	56			
12	.81	12	21	79	42	410	9.4	4.4	149			
13	.81	9.6	15	56	39	1400	8.2	4.0	61			
14	.84	10	12	43	34	521	8.2	3.5	34			
15	1.8	9.3	12	35	28	106	16	22	25			
16	33	8.4	12	28	30	64	9.4	107	22			
17	13	9.9	12	23	78	47	8.9	63	14			
18	8.2	12	12	26	62	39	8.9	65	9.7			
19	6.0	62	12	60	45	44	28	41	7.0			
20	4.8	115	12	104	35	41	35	26	6.0			
21	4.2	52	12	61	27	38	30	17	5.1			
22	4.4	30	11	43	22	43	25	12	3.8			
23	2.2	19	9.7	33	27	40	21	11	3.5			
24	2.1	13	10	28	109	435	19	7.5	2.8			
25	1.9	12	129	142	63	132	34	5.6	2.8			
26	1.8	10	67	88	42	62	35	4.9	2.7			
27	1.8	7.5	122	50	33	44	31	5.1	2.5			
28	1.6	6.2	300	37	26	34	27	3.8	2.8			
29	1.5	5.3	110	31	---	283	21	21	2.2			
30	1.5	25	63	26	---	665	17	19	1.8			
31	1.4	---	46	22	---	111	---	9.7	---			
TOTAL	111.01	456.1	1477.7	1530	1469	4993	676.0	549.5	478.5			
MEAN	3.58	15.2	47.7	49.4	52.5	161	22.5	17.7	16.0			
MAX	33	115	300	165	155	1400	62	107	149			
MIN	.81	1.2	9.7	22	19	12	8.2	3.5	1.8			
CFSM	.28	1.21	3.79	3.92	4.17	12.8	1.79	1.40	1.27			
IN.	.33	1.35	4.36	4.52	4.34	14.74	2.00	1.62	1.41			

CAL YR 1974 TOTAL 11,623.91 MEAN 31.8 MAX 761 MIN .23 CFSM 2.52 IN. 34.31

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	0655	9.57	416	03-24	0945	12.41	891
03-13	0350	17.06	2,270	03-30	0235	15.13	1,620

03543005 Tennessee River at Watts Bar Dam (Tailwater), Tenn.
(National stream-quality accounting network station)

LOCATION.--Lat 35°37'13", long 84°47'00", Rhea County, on right bank in powerhouse at Watts Bar Dam, 6.5 miles (10.4 km) southeast of Spring City, at mile 529.9 (852.6 km).

DRAINAGE AREA.--17,310 sq mi (44,830 sq km), approximately.

PERIOD OF RECORD.--February 1934 to February 1940 (published as "at Breedenton"), October 1974 to September 1975. Equivalent record for period January 1942 to December 1974 published in annual reports of Tennessee Valley Authority entitled "Operation of TVA Reservoirs."

GAGE.--Water stage recorder. Datum of gage is at mean sea level. Prior to March 1940 at site 6.7 miles downstream at datum 666.22 ft higher.

AVERAGE DISCHARGE.--6 years (1934-39, 1974-75), 29,740 cfs (842.2 cu m/s) unadjusted.

EXTREMES.--Current year: Maximum daily discharge, 136,000 cfs (3,850 cu m/s) Mar. 14; minimum daily, 5,500 cfs (156 cu m/s) Sept. 28.
Period of record: Maximum daily discharge, 202,000 cfs (5,720 cu m/s) Mar. 28, 1936; minimum daily, 4,200 cfs (119 cu m/s) Jan. 29, 30, 1940.

REMARKS.--Flow regulated since 1936 by many reservoirs above station (see p.142 and Water Resources Data for North Carolina and Georgia, 1975). Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by Tennessee Valley Authority.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29,300	28,100	25,500	40,900	60,300	41,400	110,000	26,300	17,600	34,200	28,900	22,200
2	30,100	23,600	22,800	40,800	60,300	43,400	99,800	27,600	26,200	28,700	35,200	25,900
3	31,000	20,300	20,700	34,600	72,000	46,900	99,100	28,800	27,300	30,100	34,400	29,300
4	28,800	24,900	27,900	41,600	83,700	37,600	89,600	29,100	27,300	28,100	24,300	28,400
5	24,200	25,300	31,900	45,400	85,400	36,800	79,200	29,000	27,600	38,500	29,300	25,500
6	18,800	27,800	35,600	44,000	78,900	35,900	78,900	28,300	25,300	33,900	28,300	27,300
7	29,000	30,200	32,300	36,000	70,600	33,400	78,500	27,500	22,100	33,800	28,700	17,100
8	26,500	29,100	27,700	42,000	67,600	37,100	78,200	28,000	20,100	31,600	27,200	19,300
9	27,000	23,900	38,300	40,300	67,500	46,600	65,000	24,600	35,500	32,000	33,000	29,700
10	26,300	19,300	39,100	37,100	67,300	45,500	52,400	26,900	38,200	30,200	23,200	26,800
11	26,800	28,100	36,100	37,200	62,400	36,800	47,800	25,100	41,000	24,200	24,200	26,500
12	20,100	27,900	31,800	36,900	62,500	45,400	46,000	25,600	32,900	40,000	29,600	25,400
13	10,800	28,900	38,100	46,700	66,200	95,200	33,900	26,700	30,000	35,800	30,900	16,900
14	19,300	26,700	32,400	42,600	66,600	136,000	40,000	27,200	26,000	30,600	29,600	9,100
15	25,500	26,300	36,800	45,800	65,100	104,000	38,800	27,500	28,100	29,900	24,400	17,300
16	27,400	24,900	39,700	46,200	64,700	80,500	38,700	29,800	27,900	28,600	36,400	22,700
17	25,300	22,300	36,300	46,100	62,000	69,500	39,000	30,100	23,300	32,900	27,200	22,900
18	21,900	23,900	37,800	46,000	60,000	69,000	37,400	28,100	29,700	35,200	25,900	21,300
19	26,000	30,200	37,500	45,900	60,300	68,800	37,500	25,400	31,400	41,800	27,800	28,500
20	19,800	29,000	37,900	54,200	57,200	68,900	37,300	27,400	36,300	35,600	28,200	16,400
21	30,000	23,600	35,700	62,200	54,200	72,000	30,000	31,600	45,600	32,200	25,200	8,400
22	32,200	27,900	32,800	59,200	49,700	74,900	27,300	35,000	44,800	33,700	28,200	19,700
23	27,700	22,800	29,400	56,500	42,200	75,000	26,200	34,800	34,200	30,400	34,300	21,000
24	21,800	19,800	23,800	53,600	51,500	82,000	26,100	35,300	31,000	31,900	27,200	25,900
25	18,900	13,700	20,800	58,600	57,100	85,500	26,300	32,900	31,100	32,100	18,300	20,300
26	18,700	26,600	27,600	65,400	59,000	87,600	13,300	25,300	34,000	46,100	30,100	9,700
27	19,300	26,400	25,300	65,900	57,100	88,900	12,100	28,600	35,600	36,400	27,400	9,000
28	26,300	24,400	40,200	65,600	49,800	91,900	27,400	22,000	45,300	30,000	27,400	5,500
29	26,400	25,600	46,100	65,500	------	94,800	26,800	29,000	41,500	30,100	31,000	18,000
30	25,000	24,600	46,500	65,400	------	114,000	26,400	24,600	35,700	28,800	37,700	20,000
31	26,400	------	45,900	65,100	------	124,000	------	22,900	------	28,200	25,200	------
TOTAL	766,600	756,100	1,040.3M	1,533.3M	1,761.2M	2,169.3M	1,469.0M	871,000	952,600	1,015.6M	888,700	616,000
MEAN	24,730	25,200	33,560	49,460	62,900	69,980	48,970	28,100	31,750	32,760	28,670	20,530
MAX	32,200	30,200	46,500	65,900	85,400	136,000	110,000	35,300	45,600	46,100	37,700	29,700
MIN	10,800	13,700	20,700	34,600	42,200	33,400	12,100	22,000	17,600	24,200	18,300	5,500

CAL YR 1974 TOTAL 14,887,600 MEAN 40,790 MAX 142,700 MIN 10,300
WTR YR 1975 TOTAL 13,839,700 MEAN 37,920 MAX 136,000 MIN 5,500

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.--41 years, 195 cfs (5.522 cu m/s), 22.63 in/yr (575 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,750 cfs (248 cu m/s) Mar. 14, gage height, 16.21 ft (4.941 m); minimum, 18 cfs (0.51 cu m/s) Oct. 30, 31, gage height, 0.26 ft (0.079 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 good. Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	26	277	321	209	287	695	101	154	42	30	22
2	25	26	155	253	458	279	516	94	85	101	30	22
3	25	24	108	254	529	219	663	91	74	53	30	22
4	25	24	86	472	823	195	419	90	69	47	28	20
5	25	29	74	346	1,110	183	357	85	64	45	28	20
6	25	29	66	287	756	166	310	82	66	45	37	32
7	25	27	105	247	513	224	279	107	64	45	32	74
8	25	25	333	236	402	325	252	102	60	50	28	28
9	24	25	203	242	342	214	232	85	57	50	28	24
10	25	24	139	290	283	263	222	79	65	42	35	24
11	24	26	115	1,350	263	313	200	74	107	42	40	24
12	24	34	105	729	413	468	179	77	433	40	30	24
13	24	30	90	800	302	3,870	162	83	163	40	28	24
14	24	28	78	482	263	6,220	155	70	102	37	28	22
15	29	30	73	388	238	1,240	158	246	85	37	28	22
16	86	28	80	336	253	788	142	408	98	35	28	22
17	51	28	73	339	683	588	132	470	74	37	53	32
18	36	29	66	338	452	465	124	448	66	35	40	84
19	32	141	61	366	390	686	262	269	62	35	30	45
20	30	396	59	517	317	513	233	197	59	37	28	32
21	26	153	57	395	272	423	172	155	74	37	26	28
22	27	84	53	366	233	479	153	129	60	35	26	28
23	28	68	50	310	355	426	142	111	55	32	24	332
24	28	57	124	255	1,570	1,690	138	98	53	70	24	1,070
25	27	52	1,790	1,570	641	1,020	181	88	50	53	24	149
26	25	48	582	844	439	541	154	104	50	37	22	91
27	26	44	465	482	365	426	127	89	87	35	22	73
28	26	41	1,290	380	310	358	119	79	53	32	22	61
29	23	37	726	313	------	781	115	76	47	30	22	51
30	19	47	507	283	------	4,780	111	113	45	40	22	46
31	22	------	384	233	------	1,130	------	91	------	32	22	------
TOTAL	887	1,660	8,374	14,024	13,184	29,560	7,104	4,391	2,581	1,328	895	2,548
MEAN	28.6	55.3	270	452	471	954	237	142	86.0	42.8	28.9	84.9
MAX	86	396	1,790	1,570	1,570	6,220	695	470	433	101	53	1,070
MIN	19	24	50	233	209	166	111	70	45	30	22	20
CFSM	.24	.47	2.31	3.86	4.03	8.15	2.03	1.21	.74	.37	.25	.73
IN.	.28	.53	2.66	4.46	4.19	9.40	2.26	1.40	.82	.42	.28	.81

CAL YR 1974 TOTAL 97,789 MEAN 268 MAX 6,400 MIN 19 CFSM 2.29 IN 31.09
WTR YR 1975 TOTAL 86,536 MEAN 237 MAX 6,220 MIN 19 CFSM 2.03 IN 27.51

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1530	6.45	2,270	03-24	1930	6.92	2,570
01-25	1600	6.45	2,270	03-30	about 1200	13.41	6,510
03-14	0630	16.21	8,750				

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.--33 years, 2,425 cfs (68.68 cu m/s), 28.99 in/yr (736 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 12,100 cfs (343 cu m/s) Mar. 30, gage height, 7.44 ft (2.268 m); minimum, 140 cfs (3.96 cu m/s) Oct. 12, 13, 14, Nov. 10, 11, 24, 25, July 10, 13, gage height, 1.52 ft (0.463 m); minimum daily, 322 cfs (9.12 cu m/s) May 10.
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 of peak flow; minimum daily, 30 cfs (0.85 cu m/s) estimated Sept. 18-20, 1955.

REMARKS.--Records excellent. Flow regulated by four reservoirs (see Water Resources Data for North Carolina and Georgia, 1975). Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,500	2,580	2,880	1,710	3,150	4,450	3,670	1,890	2,050	3,020	2,860	2,500
2	2,490	2,580	2,720	2,320	3,410	4,520	3,530	2,620	2,390	3,030	2,300	2,860
3	2,510	2,540	2,590	2,070	3,820	4,510	4,030	2,620	1,760	3,000	1,780	2,840
4	2,500	2,510	2,580	2,140	5,560	4,140	5,890	2,640	2,950	2,970	2,360	2,830
5	2,360	2,530	2,560	2,680	7,480	3,200	5,680	1,930	1,720	2,380	3,150	2,810
6	1,900	2,580	2,580	2,680	8,160	3,160	5,810	1,390	1,700	1,890	3,080	2,150
7	2,020	2,570	2,600	2,670	8,570	3,180	5,810	1,870	2,520	2,370	2,970	1,650
8	2,540	2,540	2,670	2,630	8,610	3,220	5,780	2,990	2,100	2,980	2,990	1,900
9	2,530	2,530	2,690	2,650	8,450	3,170	5,420	3,030	2,430	2,980	2,370	2,850
10	2,570	1,920	2,640	2,650	8,380	3,210	4,470	322	3,020	2,070	2,250	2,840
11	2,530	1,800	2,620	2,960	7,550	2,680	4,290	569	3,040	2,990	2,570	2,840
12	1,780	2,590	2,620	2,880	7,070	3,430	3,210	3,030	3,050	2,300	2,940	2,840
13	1,770	2,560	2,600	2,970	6,710	2,190	3,150	3,070	3,020	1,960	2,900	2,200
14	2,030	2,580	2,600	3,280	5,080	2,340	3,150	3,040	2,440	2,360	2,890	1,720
15	2,550	2,600	2,600	3,240	3,660	858	3,160	3,080	2,030	2,960	2,870	2,110
16	2,700	2,560	2,640	3,200	3,800	645	3,150	3,210	3,010	2,950	2,470	1,570
17	2,570	2,550	2,610	3,160	4,060	3,210	3,120	3,090	1,930	2,880	2,040	1,820
18	2,590	2,560	2,590	3,150	4,950	3,320	3,100	1,860	3,020	2,970	2,420	1,850
19	2,580	2,610	2,570	3,170	6,580	3,420	3,170	2,090	3,030	3,030	2,910	2,970
20	2,610	1,810	2,580	3,410	6,650	3,390	3,180	3,030	3,050	1,990	2,890	2,460
21	2,410	1,260	2,570	3,330	6,500	3,320	2,110	3,000	3,020	3,040	2,870	1,730
22	2,550	2,480	2,510	3,240	6,440	3,310	1,390	2,990	2,080	2,930	2,860	2,350
23	2,290	2,140	2,570	3,190	6,420	3,280	1,460	3,000	3,040	2,910	2,160	2,230
24	2,550	516	1,560	3,190	7,470	3,710	1,460	2,510	3,020	3,020	1,690	1,350
25	2,560	1,940	352	5,820	6,940	3,750	1,480	1,980	3,040	2,950	2,310	1,130
26	2,590	2,650	668	3,890	6,460	3,440	1,470	2,450	3,090	2,910	2,800	853
27	2,620	2,980	1,050	3,410	6,230	3,330	1,450	3,020	3,070	1,930	2,790	1,900
28	2,610	2,530	2,180	3,290	5,410	3,280	1,460	2,980	2,420	2,890	2,810	1,140
29	2,600	2,450	1,090	3,230	------	3,990	1,470	2,980	1,990	2,870	2,810	1,610
30	2,590	2,630	1,250	3,210	------	8,380	1,360	2,990	2,390	2,860	2,430	1,450
31	2,600	------	1,190	3,190	------	4,150	------	2,410	------	2,860	2,400	------
TOTAL	75,600	70,676	69,530	94,610	173,570	106,183	97,880	77,681	77,420	84,250	80,940	63,353
MEAN	2,439	2,356	2,243	3,052	6,199	3,425	3,263	2,506	2,581	2,718	2,611	2,112
MAX	2,700	2,980	2,880	5,820	8,610	8,380	5,890	3,210	3,090	3,040	3,150	2,970
MIN	1,770	516	352	1,710	3,150	645	1,360	322	1,700	1,890	1,690	853

CAL YR 1974 TOTAL 1,152,116 MEAN 3,156 MAX 11,000 MIN 352 MEAN† 3,045 CFSM† 2.68 IN.† 36.39
WTR YR 1975 TOTAL 1,071,693 MEAN 2,936 MAX 8,610 MIN 322 MEAN† 2,826 CFSM† 2.49 IN.† 33.77

† Adjusted for change in contents in Chatuge, Hiwassee, Apalachia (North Carolina), and Nottely (Georgia) Lakes.

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, 0.1 mile (0.2 km) upstream from mouth, 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.

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 modified V-notch wier 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.--26 years (1949-75), 50.4 cfs (1.427 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,080 cfs (30.6 cu m/s) July 1, gage height, 5.63 ft (1.716 m); minimum daily, 89 cfs (2.52 cu m/s) June 9.
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 except October to February, which are poor. Flow is predominately result of water withdrawn from Ocoee River upstream from Davis Mill Creek that is used in operations of the Cities Service Company plant and is discharged into Davis Mill Creek.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	125	160	110	120	157	124	130	116	178	120	134
2	135	135	150	100	140	152	146	137	113	143	120	132
3	135	140	120	100	130	143	138	137	106	134	120	132
4	130	140	120	120	130	147	124	132	99	141	140	131
5	130	150	120	110	150	124	124	123	100	138	138	131
6	130	125	120	100	130	138	127	120	113	141	147	131
7	125	120	120	100	120	135	138	121	109	134	141	219
8	120	120	140	100	120	131	131	113	107	128	134	137
9	120	130	130	100	110	141	138	116	89	128	132	127
10	125	130	120	100	110	144	134	120	101	134	167	134
11	125	130	120	100	100	146	121	116	106	134	147	134
12	125	150	120	100	110	154	110	127	102	113	135	134
13	125	130	120	120	100	195	110	127	105	141	140	125
14	125	120	120	110	90	151	118	130	106	149	134	135
15	125	130	120	100	90	137	118	150	104	157	134	134
16	135	120	130	100	100	134	117	130	105	154	130	127
17	125	120	120	100	120	134	118	125	106	130	128	135
18	120	125	120	100	110	107	101	125	102	125	134	141
19	120	135	120	100	140	114	101	120	122	120	137	138
20	130	160	120	110	130	104	127	120	118	150	124	137
21	125	140	120	100	110	93	121	115	140	130	120	132
22	120	120	120	100	90	102	125	115	120	130	120	129
23	120	120	120	100	120	104	113	110	113	125	118	146
24	120	120	120	100	150	129	124	121	106	125	120	135
25	120	120	150	170	144	107	120	158	104	130	121	131
26	120	120	130	150	140	109	135	138	113	120	124	131
27	125	120	120	130	141	97	138	111	116	120	117	132
28	120	120	150	120	141	110	141	102	125	120	124	137
29	120	130	130	120	---	240	96	99	134	120	118	143
30	125	130	130	120	---	154	110	106	144	120	125	143
31	125	---	120	120	---	138	---	114	---	120	134	---
TOTAL	3880	3875	3920	3410	3386	4171	3688	3808	3344	4132	4043	4107
MEAN	125	129	126	110	121	135	123	123	111	133	130	137
MAX	135	160	160	170	150	240	146	158	144	178	167	219
MIN	120	120	120	100	90	93	96	99	89	113	117	125

CAL YR 1974 TOTAL 42,630 MEAN 117 MAX 205 MIN 37
WTR YR 1975 TOTAL 45,764 MEAN 125 MAX 240 MIN 89

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.--63 years, 1,246 cfs (35.29 cu m/s), 32.29 in/yr (820 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 13,100 cfs (371 cu m/s) Mar. 30, gage height, 9.49 ft (2.893 m); minimum, 119 cfs (3.37 cu m/s) Nov. 23, gage height, 2.87 cfs (0.875 m); minimum daily, 577 cfs (16.34 cu m/s) Oct. 9.
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 in Water Resources Data for Georgia, 1975), Ocoee No. 3 Lake (see sta 03562500), and by powerplant above station. Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,030	1,030	1,420	1,050	1,200	1,210	3,890	1,470	1,490	1,460	964	975
2	1,040	1,030	1,110	1,050	1,500	998	3,640	1,460	1,470	1,710	955	968
3	1,050	1,030	1,030	1,060	1,600	1,220	3,530	1,450	1,470	1,430	944	954
4	1,030	1,030	1,030	1,170	1,800	1,160	3,330	1,440	1,460	985	941	978
5	1,010	1,050	1,020	1,110	3,800	1,110	3,150	1,440	1,470	962	968	983
6	1,020	1,030	1,010	1,100	2,100	1,100	2,670	1,390	1,720	964	992	985
7	998	1,030	1,020	1,100	1,700	1,110	2,900	1,030	1,660	960	991	1,650
8	687	1,030	1,060	1,040	1,600	1,130	2,860	1,030	1,490	954	1,000	1,950
9	577	1,020	1,060	1,050	1,600	1,110	2,870	1,040	1,460	955	1,090	959
10	630	1,020	1,030	1,100	1,550	1,120	3,020	1,030	1,460	948	1,590	970
11	780	1,030	1,010	1,240	1,550	1,340	2,510	1,030	1,470	953	1,160	977
12	1,160	1,040	1,000	1,140	1,500	2,300	1,140	1,020	1,500	961	1,000	847
13	1,000	1,030	995	1,570	1,500	3,300	1,130	1,030	1,480	963	992	956
14	985	1,030	1,010	1,080	1,400	5,400	1,260	1,020	1,470	962	977	959
15	989	1,020	1,020	1,010	1,100	2,200	2,060	1,110	1,470	959	972	1,020
16	993	1,020	1,020	998	1,500	2,700	2,100	2,680	1,470	952	971	960
17	993	1,020	1,010	1,000	2,200	3,000	1,870	1,220	1,450	954	976	955
18	1,010	1,020	1,030	904	3,500	2,400	1,920	1,180	1,440	955	977	1,210
19	1,020	1,060	863	1,010	2,500	2,350	1,690	1,780	1,440	968	994	1,010
20	1,010	1,300	1,040	1,140	1,650	2,890	1,310	1,160	1,460	976	968	898
21	1,010	1,010	1,110	1,120	1,200	2,270	1,820	1,470	1,460	1,410	962	1,020
22	1,020	618	1,120	1,160	1,250	2,380	1,070	1,460	1,520	993	966	1,150
23	971	800	1,000	1,010	1,300	2,370	1,030	1,450	1,450	971	962	1,280
24	1,020	1,010	988	1,020	3,700	2,840	1,210	1,440	1,470	974	962	1,360
25	1,030	640	1,230	4,780	1,850	3,600	1,690	1,450	1,430	963	962	1,040
26	1,010	971	1,080	2,090	1,470	2,930	1,730	1,520	1,440	962	962	1,030
27	1,040	999	1,080	1,040	1,230	2,470	1,460	1,550	1,470	955	964	1,030
28	1,040	1,000	1,560	1,080	1,210	2,710	1,700	1,480	1,500	949	961	1,030
29	1,050	977	1,210	1,060	------	4,040	1,280	1,480	1,490	956	962	1,040
30	1,040	1,080	1,150	1,200	------	9,830	1,490	1,500	1,480	951	956	1,020
31	1,030	------	1,070	1,200	------	3,840	------	1,470	------	975	980	------
TOTAL	30,273	29,975	33,386	38,682	50,060	78,428	63,330	42,280	44,510	31,990	31,021	32,164
MEAN	977	999	1,077	1,248	1,788	2,530	2,111	1,364	1,484	1,032	1,001	1,072
MAX	1,160	1,300	1,560	4,780	3,800	9,830	3,890	2,680	1,720	1,710	1,590	1,950
MIN	577	618	863	904	1,100	998	1,030	1,020	1,430	948	941	847
(†)	-14,900	-11,000	-3,100	+11,800	+29,000	+18,900	-2,500	+200	-13,200	-6,600	-7,500	-4,600
MEAN‡	495	632	977	1,628	2,824	3,140	2,028	1,370	1,043	819	759	919
CFSM‡	.94	1.21	1.86	3.11	5.39	5.99	3.87	2.61	1.99	1.56	1.45	1.75
IN.‡	1.09	1.35	2.15	3.58	5.61	6.91	4.32	3.01	2.22	1.80	1.67	1.96

CAL YR 1974 TOTAL 555,319 MEAN 1,521 MAX 5,070 MIN 577 MEAN‡ 1,483 CFSM‡ 2.83 IN.‡ 38.42
WTR YR 1975 TOTAL 506,099 MEAN 1,387 MAX 9,830 MIN 577 MEAN‡ 1,377 CFSM‡ 2.63 IN.‡ 35.67

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

03564500 Ocoee River at Parksville, Tenn.

LOCATION.--Lat 35°05'48", long 84°39'15", Polk County, on right bank 0.4 mile (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.--59 years, 1,329 cfs (37.64 cu m/s), 30.33 in/yr (770 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 13,000 cfs (368 cu m/s) Mar. 30, gage height, 14.03 ft (4.276 m); minimum, 53 cfs (150 cu m/s) Sept. 16, gage height, 2.75 ft (0.838 m); minimum daily, 89 cfs (2.52 cu m/s) Nov. 10.
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.
Flood of Nov. 19, 1906, discharge, 65,000 cfs (1,840 cu m/s) was the greatest known flood since at least 1840, from reports by Tennessee Valley Authority.

REMARKS.--Records good. Flow regulated by Blue Ridge, Lake (see sta 03558500 in Water Resources Data for Georgia, 1975), Ocoee No. 3 Lake (see sta 03562500) and Lake Ocoee (sta 03564000). Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,050	1,060	1,450	1,400	617	1,360	4,990	1,450	1,770	1,600	1,030	940
2	950	1,130	1,330	1,470	853	1,310	4,430	1,410	1,690	1,600	1,000	1,020
3	1,050	1,090	1,190	1,050	1,970	1,410	4,200	1,810	1,240	2,100	954	1,050
4	950	1,050	1,060	999	2,800	1,350	3,860	1,190	1,260	1,850	1,090	975
5	1,000	967	1,410	1,190	2,820	1,350	3,680	1,190	1,300	1,150	839	880
6	1,050	1,660	1,480	1,310	2,710	1,290	3,450	1,330	1,450	1,100	864	1,050
7	1,100	1,790	1,420	1,470	2,770	1,050	3,260	1,500	2,460	1,050	963	1,140
8	700	1,780	1,430	1,250	2,780	1,080	3,190	1,110	1,840	1,000	1,120	2,590
9	800	1,270	1,130	1,170	2,050	1,440	3,160	1,070	1,600	1,200	1,050	1,810
10	650	89	1,200	1,120	1,990	1,250	3,030	747	1,550	1,150	1,580	1,000
11	603	1,560	1,300	1,250	1,640	1,820	3,190	832	1,700	1,000	1,850	1,020
12	789	1,220	1,070	1,360	1,530	2,610	2,850	810	1,700	1,000	545	857
13	1,020	1,490	1,060	1,500	1,440	2,880	2,830	1,450	1,900	900	1,260	1,040
14	912	1,390	896	1,570	2,270	3,180	2,020	1,320	1,650	1,100	1,500	909
15	949	1,020	987	1,810	1,370	3,310	2,400	1,630	1,800	1,100	1,220	997
16	1,270	1,010	973	1,600	1,090	3,160	2,310	2,320	1,600	1,150	1,180	985
17	1,350	1,030	1,050	1,560	2,800	3,120	2,200	1,830	1,600	1,050	893	1,110
18	1,190	1,010	1,260	1,200	2,190	3,120	2,140	1,840	1,700	900	1,130	1,080
19	1,160	1,080	1,320	1,150	2,780	2,800	2,030	1,040	1,700	1,100	968	1,100
20	1,040	1,110	1,440	1,080	2,780	3,020	1,100	1,610	1,400	1,150	898	1,000
21	975	1,630	1,360	1,630	2,370	2,940	1,860	1,430	1,650	1,400	822	868
22	963	1,290	1,020	1,050	2,680	2,850	1,230	1,230	2,100	1,350	897	1,600
23	895	770	1,040	1,140	1,200	2,890	799	1,510	1,450	1,350	1,070	2,610
24	878	624	1,100	1,270	2,480	2,810	425	1,270	1,750	900	1,090	2,260
25	914	709	1,100	1,720	2,800	3,570	93	1,690	2,000	1,620	1,060	1,160
26	862	1,060	1,130	2,720	2,750	3,720	92	1,560	1,700	1,110	974	954
27	820	1,120	1,810	2,630	1,800	3,370	2,130	1,500	1,800	955	1,070	1,020
28	828	1,110	1,720	2,690	1,360	3,160	1,790	1,850	1,650	1,040	955	1,010
29	1,210	957	1,800	2,740	------	3,270	1,300	1,660	1,700	1,090	913	947
30	2,030	783	1,770	2,750	------	10,200	1,250	1,630	1,650	980	933	1,040
31	1,200	------	1,460	1,980	------	7,080	------	2,130	------	1,010	1,010	------
TOTAL	31,158	33,859	39,766	48,829	58,690	87,770	71,289	44,949	50,360	37,055	32,728	36,022
MEAN	1,005	1,129	1,283	1,575	2,096	2,831	2,376	1,450	1,679	1,195	1,056	1,201
MAX	2,030	1,790	1,810	2,750	2,820	10,200	4,990	2,320	2,460	2,100	1,850	2,610
MIN	603	89	896	999	617	1,050	92	747	1,240	900	545	857

CAL YR 1974 TOTAL 611,433 MEAN 1,675 MAX 4,960 MIN 89 MEAN† 1,619 CFSM† 2.72 IN.† 36.94
WTR YR 1975 TOTAL 572,475 MEAN 1,568 MAX 10,200 MIN 89 MEAN† 1,558 CFSM† 2.62 IN.† 35.55

† Adjusted for change in contents in Blue Ridge Lake (Georgia) and Lake Ocoee.
NOTE.--No gage-height record June 9 to July 25.

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.--22 years, 4,226 cfs (119.7 cu m/s), 28.68 in/yr (728 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 32,000 cfs (906 cu m/s) Mar. 30, gage height, 23.20 ft (7.071 m) from floodmarks; minimum, 444 cfs (12.6 cu m/s) Sept. 16, gage height, 1.76 ft (0.536 m); minimum daily, 1,240 cfs (35.1 cu m/s) May 11.
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 good. Flow regulated by six reservoirs above station (see sta 03562500 and 03564000 and Water Resources Data for Georgia and North Carolina, 1975). Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3600	3720	4870	3370	4690	6420	10400	3140	4040	4670	3940	3630
2	3510	3810	4430	4200	4630	6360	9200	4320	4380	4760	3400	3940
3	3610	3640	4190	4000	6700	6470	10200	4790	3290	5200	2730	3940
4	3600	3550	3960	4030	9090	6350	12200	4090	4350	4310	3510	3890
5	3480	3610	4060	4640	11400	5090	10600	3870	3150	3560	4210	3650
6	2860	4330	4560	4690	11800	5270	10200	2820	3310	3160	4030	3400
7	3170	4520	4050	4630	11500	4580	10000	3140	5440	3550	4130	2530
8	3260	4250	4360	4480	11200	4570	9800	4500	4240	4070	4270	4420
9	3280	4130	4270	4240	10300	5140	9400	4750	4160	4200	3510	4900
10	3380	2260	4300	4140	9980	4950	8200	2040	4670	3150	3710	3910
11	3180	3070	4090	5910	9220	5560	8200	1240	4990	4080	5030	3950
12	2660	3870	3870	5570	8580	6630	6700	3440	5150	3470	3650	3940
13	2470	4080	3880	6480	8560	8050	6600	4540	4930	2750	4340	3130
14	2950	4200	3640	6080	8050	12700	5800	4660	4220	3430	4220	2570
15	3390	3880	3680	5920	5690	9010	6200	4860	3680	4160	4270	2910
16	4110	3790	3620	5480	5510	6430	5790	5900	5020	4120	3640	2480
17	4080	3510	3720	5250	8180	7240	5790	5430	3460	4020	3010	2760
18	3980	3380	4210	5130	8310	7790	5630	5080	4820	3960	3660	2950
19	3830	4090	3760	4710	10700	7700	5800	2700	4740	4140	4030	4120
20	3610	4080	4150	5080	10000	7810	4900	4870	4720	3090	3830	3740
21	3710	2870	4150	6190	9280	7400	5010	4680	4500	4550	3710	2710
22	3380	3970	3790	4870	9020	7210	3000	4540	4200	4300	3800	3540
23	3470	3510	3670	4930	8170	7200	2730	4760	4600	4260	3330	6050
24	3250	1510	3310	4790	10400	7540	2190	3950	4800	4180	2630	5330
25	3420	2160	2010	11100	10500	8710	1890	3790	5000	4130	3330	2690
26	3610	4010	2400	10500	9630	8210	1900	4330	4870	4140	3880	2360
27	3360	3880	3250	7790	8750	7600	3320	4700	4740	2810	3890	2230
28	3490	4350	5880	7160	7410	7150	3600	5090	4070	4090	3880	2800
29	3760	3450	5200	6830	---	8560	3110	4920	3710	4000	3680	2100
30	4670	3150	4000	6650	---	29000	2960	4830	4160	3910	3390	2320
31	3920	---	3500	5730	---	15200	---	4820	---	3940	3180	---
TOTAL	108050	108630	122830	174570	247250	247900	191320	130590	131410	122160	115820	102890
MEAN	3485	3621	3962	5631	8830	7997	6377	4213	4380	3941	3736	3430
MAX	4670	4520	5880	11100	11800	29000	12200	5900	5440	5200	5030	6050
MIN	2470	1510	2010	3370	4630	4570	1890	1240	3150	2750	2630	2100

CAL YR 1974 TOTAL 1,904,320 MEAN 5,217 MAX 17,300 MIN 1,510
WTR YR 1975 TOTAL 1,803,420 MEAN 4,941 MAX 29,000 MIN 1,240

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 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.--18 years, 53.8 cfs (1,524 cu m/s), 22.97 in/yr (583 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,230 cfs (120 cu m/s) Mar. 30, gage height, 9.13 ft (2.783 m); minimum, 2.4 cfs (0.068 cu m/s) Oct. 14.
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) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 2.1 cfs (0.059 cu m/s) Aug. 31, 1963.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.5	100	55	41	90	161	20	14	6.4	4.7	21
2	3.1	4.7	28	37	226	117	120	18	10	6.1	4.9	5.8
3	2.9	4.6	17	66	241	79	116	19	9.4	6.2	4.0	4.8
4	3.1	7.9	13	162	278	67	86	20	8.6	5.9	4.2	4.4
5	3.3	21	11	90	378	57	73	17	8.5	5.6	5.4	4.1
6	3.4	10	10	59	183	49	65	16	11	5.7	16	4.2
7	3.2	7.1	39	42	120	55	58	22	12	6.3	5.6	37
8	3.4	6.0	126	34	93	66	52	19	8.9	10	4.6	34
9	3.4	5.7	39	37	83	46	51	17	8.8	31	4.5	8.7
10	3.3	5.4	22	54	70	59	60	16	9.6	6.7	114	7.1
11	3.3	6.5	17	259	63	91	49	15	19	5.8	20	6.7
12	3.3	12	15	266	114	194	40	14	22	5.2	9.0	6.3
13	3.3	8.0	13	227	77	491	35	14	11	4.8	6.8	5.9
14	2.9	7.2	11	115	65	1,180	30	13	9.0	4.6	5.9	5.6
15	3.1	11	12	88	57	200	30	15	8.4	4.5	7.3	5.5
16	18	8.1	17	71	183	149	30	21	8.4	4.3	6.4	5.4
17	9.5	7.3	13	55	376	150	29	26	7.7	4.1	5.4	6.6
18	5.9	6.9	11	50	468	120	27	25	7.3	4.1	8.3	42
19	4.8	33	11	78	323	299	55	16	8.0	4.0	5.6	13
20	4.2	65	9.1	193	136	154	61	13	19	4.2	5.1	9.1
21	4.3	16	8.8	119	102	112	39	12	14	4.1	4.7	12
22	4.4	10	8.5	88	84	128	31	12	13	3.9	4.5	34
23	4.4	8.2	8.5	70	87	106	28	11	8.2	4.1	4.3	563
24	4.6	7.3	11	63	519	224	27	10	7.4	5.9	4.2	684
25	4.7	7.9	105	1,070	150	136	40	10	7.0	5.6	4.1	43
26	4.6	7.6	61	248	103	93	36	12	14	4.2	4.0	26
27	4.6	6.7	55	112	92	78	26	11	8.8	3.8	4.1	19
28	4.5	6.1	240	84	78	69	23	10	7.5	3.6	5.7	17
29	4.5	5.5	188	67	------	497	21	11	7.1	6.1	4.3	15
30	4.5	28	128	58	------	2,180	22	12	6.6	15	4.1	43
31	4.6	------	81	47	------	293	------	11	------	5.2	5.5	------
TOTAL	140.3	345.2	1,428.9	4,064	4,790	7,629	1,521	478	314.2	197.0	297.2	1,693.2
MEAN	4.53	11.5	46.1	131	171	246	50.7	15.4	10.5	6.35	9.59	56.4
MAX	18	65	240	1,070	519	2,180	161	26	22	31	114	684
MIN	2.9	4.5	8.5	34	41	46	21	10	6.6	3.6	4.0	4.1
CFSM	.14	.36	1.45	4.12	5.38	7.74	1.59	.48	.33	.20	.30	1.77
IN.	.16	.40	1.67	4.75	5.60	8.92	1.78	.56	.37	.23	.35	1.98

CAL YR 1974 TOTAL 20,171.2 MEAN 55.3 MAX 755 MIN 2.8 CFSM 1.74 IN 23.60
WTR YR 1975 TOTAL 22,898.0 MEAN 62.7 MAX 2,180 MIN 2.9 CFSM 1.97 IN 26.79

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-25	1345	7.86	1,850	03-14	0400	8.04	2,180
02-18	2045	6.93	856	03-30	0615	9.13	4,230
02-24	0730	6.88	816	09-24	0045	8.10	2,270

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.--21 years, 96.3 cfs (2.727 cu m/s), 22.94 in/yr (583 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,170 cfs (61.5 cu m/s) Mar. 14, gage height, 8.90 ft (2.713 m); minimum, 25 cfs (0.71 cu m/s) Sept. 4, 5, 6, gage height, 2.31 ft (0.704 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, 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, Dec. 3, 5-6, 1969.

REMARKS.--Records good except for periods of no gage-height record, which are fair. Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	29	202	176	135	150	401	90	64	50	33	28
2	30	28	127	156	140	213	285	87	60	65	31	27
3	30	27	89	140	170	156	518	86	56	60	31	28
4	30	28	76	183	220	133	708	89	53	55	32	26
5	30	32	70	172	336	124	293	84	52	50	42	26
6	30	39	65	142	297	122	244	80	52	50	44	28
7	30	41	65	129	229	113	215	103	79	50	39	36
8	30	29	130	120	193	148	196	101	55	55	34	45
9	28	28	250	133	176	127	183	84	53	70	32	33
10	28	28	85	142	164	127	173	80	52	55	33	29
11	28	29	78	336	150	168	164	78	66	50	36	38
12	28	34	74	297	154	160	152	78	86	50	33	36
13	28	34	70	333	176	482	143	79	60	45	31	30
14	29	31	65	236	140	1,760	135	71	54	45	30	29
15	29	36	62	183	131	1,020	135	72	53	45	30	29
16	58	36	64	162	142	430	127	86	53	40	31	29
17	64	33	60	146	261	378	122	95	49	40	33	29
18	39	33	55	133	275	295	116	96	46	40	45	51
19	34	76	53	133	245	297	143	83	44	40	35	68
20	32	321	52	202	191	312	233	72	45	45	30	36
21	32	247	51	195	168	238	149	69	75	45	30	31
22	33	95	50	156	152	240	126	67	60	40	30	32
23	39	75	49	140	148	263	116	62	55	35	29	156
24	33	67	52	131	254	252	111	61	55	75	28	543
25	29	62	280	423	256	280	116	61	55	55	31	271
26	31	59	381	640	176	206	124	60	50	50	30	71
27	30	52	168	270	158	180	106	62	90	45	28	57
28	30	50	365	200	148	168	99	59	60	40	37	52
29	31	48	494	174	------	243	95	61	55	32	30	49
30	29	61	273	164	------	1,300	93	83	50	31	29	45
31	29	------	206	148	------	1,060	------	64	------	32	27	------
TOTAL	1,012	1,788	4,161	6,295	5,385	11,145	5,821	2,403	1,737	1,480	1,014	1,988
MEAN	32.6	59.6	134	203	192	360	194	77.5	57.9	47.7	32.7	66.3
MAX	64	321	494	640	336	1,760	708	103	90	75	45	543
MIN	28	27	49	120	131	113	93	59	44	31	27	26
CFSM	.57	1.05	2.35	3.56	3.37	6.32	3.40	1.36	1.02	.84	.57	1.16
IN.	.66	1.17	2.72	4.11	3.51	7.27	3.80	1.57	1.13	.97	.66	1.30

CAL YR 1974 TOTAL 49,247 MEAN 135 MAX 1,070 MIN 27 CFSM 2.37 IN 32.14
WTR YR 1975 TOTAL 44,229 MEAN 121 MAX 1,760 MIN 26 CFSM 2.12 IN 28.87

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-26	1400	5.16	715	04-04	0415	5.83	908
03-14	1815	8.90	2,170	09-23	1845	5.31	764
03-30	2100	8.12	1,630				

NOTE.--No gage-height record June 20 to July 29.

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.--34 years, 4,846 cfs (137.2 cu m/s), 28.64 in/yr (727 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 37,100 cfs (1,050 cu m/s) Mar. 30, gage height, 22.83 ft (6.959 m); minimum daily, 1,960 cfs (55.5 cu m/s) May 11; minimum gage height, 9.92 ft (3.024 m) Dec. 15.
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. 143, and Water Resources Data for Georgia and North Carolina, 1975). Daily discharge figures computed using area as determined from a stage-area curve and velocity as determined from a deflection-velocity curve. Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,480	3,710	5,240	4,420	6,230	7,930	12,200	3,600	4,520	4,330	3,810	3,560
2	3,390	3,890	5,170	4,980	5,460	8,120	10,400	4,550	4,620	4,450	3,350	3,870
3	3,450	3,700	4,890	4,620	7,890	8,250	12,000	4,920	3,680	5,010	2,730	3,980
4	3,520	3,600	4,470	4,710	10,100	7,780	14,600	4,410	4,280	4,200	3,440	3,940
5	3,320	3,720	4,390	5,700	11,500	6,680	11,600	4,220	3,220	3,410	4,000	3,710
6	2,950	4,350	4,980	5,350	12,300	6,750	11,000	3,220	3,200	3,130	3,830	3,170
7	3,240	4,480	4,090	5,270	12,800	5,730	10,800	3,510	5,190	3,480	4,050	2,590
8	3,310	4,350	5,330	4,880	12,500	5,940	10,600	4,730	4,120	3,980	4,120	4,200
9	3,350	4,320	5,240	4,840	11,600	6,480	10,000	5,060	3,880	4,090	3,440	4,590
10	3,460	2,500	4,960	4,740	11,300	6,050	9,000	2,760	4,220	3,250	3,430	3,850
11	3,230	2,960	4,450	6,410	10,200	7,040	8,800	1,960	4,480	3,960	4,910	3,780
12	2,760	4,000	4,420	6,030	9,480	8,050	7,300	3,530	4,660	3,350	3,690	3,890
13	2,700	4,220	4,440	7,330	9,830	9,850	7,100	4,750	4,450	2,840	4,140	3,050
14	3,120	4,090	4,100	6,830	9,330	15,300	6,300	4,820	3,960	3,300	4,010	2,670
15	3,310	4,080	3,900	6,380	7,250	11,600	6,400	4,940	3,490	3,910	4,170	2,850
16	3,970	4,000	3,910	6,040	6,790	8,670	6,140	5,810	4,600	4,030	3,390	2,720
17	4,200	3,550	4,210	5,890	9,460	9,800	6,020	5,430	3,490	4,060	3,020	2,920
18	4,010	3,400	4,590	5,670	9,910	9,200	5,950	5,460	4,540	3,900	3,480	3,090
19	3,880	4,420	4,030	5,250	12,800	10,000	6,020	3,410	4,420	3,840	3,820	4,260
20	3,500	4,890	4,450	6,180	12,000	9,400	5,560	5,210	4,460	3,130	3,830	3,770
21	3,740	3,730	4,490	6,940	11,100	8,600	5,550	4,940	4,130	4,220	3,720	2,940
22	3,330	4,410	4,280	5,700	10,400	8,600	3,600	4,800	3,940	4,110	3,830	3,330
23	3,480	4,110	3,960	5,680	9,840	8,600	3,350	4,930	4,370	4,180	3,360	6,120
24	3,320	2,450	3,730	5,520	11,400	9,600	2,720	4,220	4,270	4,100	2,710	7,540
25	3,520	2,450	2,760	11,500	12,300	10,000	2,480	4,130	4,600	4,060	3,330	3,780
26	3,690	4,210	3,320	12,700	11,400	9,200	2,450	4,520	4,610	3,910	3,880	3,130
27	3,340	3,910	3,850	8,730	10,400	8,600	3,560	4,930	4,560	2,850	3,900	2,440
28	3,500	4,870	6,970	8,110	8,990	8,200	4,010	5,150	3,900	4,030	3,940	3,080
29	3,670	3,640	6,720	7,830	------	11,400	3,630	4,920	3,380	3,860	3,760	2,250
30	4,730	3,090	5,370	7,670	------	31,500	3,500	4,940	3,860	3,860	3,320	2,620
31	3,960	------	4,930	6,870	------	33,500	------	4,980	------	3,740	3,110	------
TOTAL	108,430	115,100	141,640	198,770	284,560	316,420	212,640	138,760	125,100	118,570	113,520	107,690
MEAN	3,498	3,837	4,569	6,412	10,160	10,210	7,088	4,476	4,170	3,825	3,662	3,590
MAX	4,730	4,890	6,970	12,700	12,800	33,500	14,600	5,810	5,190	5,010	4,910	7,540
MIN	2,700	2,450	2,760	4,420	5,460	5,730	2,450	1,960	3,200	2,840	2,710	2,250

CAL YR 1974 TOTAL 2,163,960 MEAN 5,929 MAX 20,000 MIN 2,450
WTR YR 1975 TOTAL 1,981,200 MEAN 5,428 MAX 33,500 MIN 1,960

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.--11 years, 33.8 cfs (0.957 cu m/s), 24.42 in/yr (620 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,560 cfs (101 cu m/s) Sept. 23, gage height, 8.48 ft (2.585 m); minimum, 3.1 cfs (0.088 cu m/s) Oct. 30, 31; minimum gage height, 0.55 ft (0.168 m) Aug. 27, 29, 30, Sept. 3, 4, 5, 6.
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, 0.55 ft (0.168 m) Aug. 27, 29, 30, Sept. 3, 4, 5, 6, 1975.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.7	47	29	26	37	84	9.8	38	6.8	5.1	5.1
2	4.0	3.7	20	22	132	34	61	9.3	13	6.4	4.5	4.8
3	4.0	3.7	15	31	124	26	67	11	11	6.1	4.8	4.5
4	4.0	3.7	13	58	167	24	42	11	9.6	5.8	5.4	4.5
5	4.0	27	11	34	164	22	35	9.3	9.1	5.4	26	4.5
6	4.3	7.6	11	26	100	21	30	9.8	9.4	8.0	20	4.8
7	4.3	6.2	27	22	67	24	27	16	8.5	6.1	7.6	70
8	4.3	5.9	43	22	51	21	25	12	7.7	6.1	7.2	12
9	4.3	5.2	22	24	44	18	26	13	7.4	6.4	6.1	7.2
10	4.3	5.2	17	121	36	24	27	9.9	8.8	5.4	33	6.4
11	4.3	6.6	15	256	33	48	22	8.9	48	5.4	12	8.8
12	4.0	8.0	14	161	79	86	18	8.5	29	4.8	8.0	6.1
13	4.3	6.2	12	112	42	416	17	8.2	13	4.8	6.8	5.1
14	4.9	6.9	11	64	35	525	18	7.8	10	4.8	6.1	5.1
15	5.9	7.6	12	48	31	118	18	48	9.6	5.1	6.1	5.1
16	14	6.2	12	38	105	100	16	29	9.3	4.5	6.1	5.1
17	5.2	6.2	11	31	167	89	14	60	8.2	4.5	5.8	30
18	4.0	6.2	10	28	261	78	14	30	7.6	4.5	5.8	251
19	4.0	33	10	46	135	145	22	18	7.3	4.2	5.4	24
20	4.3	27	9.8	81	79	81	18	14	8.9	4.5	5.4	15
21	4.3	13	9.4	49	56	59	14	12	8.1	4.5	5.4	12
22	4.3	9.8	9.0	38	45	86	13	11	7.1	4.5	5.1	14
23	4.3	8.7	8.7	33	92	56	13	9.8	6.7	12	4.5	786
24	4.3	8.0	13	33	135	110	13	9.0	6.4	11	4.8	456
25	4.3	8.3	48	449	67	64	16	8.5	6.2	6.8	4.8	57
26	4.0	8.0	26	109	47	45	13	10	20	5.8	4.8	32
27	4.0	7.6	29	66	45	38	12	12	20	5.4	4.5	23
28	3.7	6.9	74	48	37	32	11	33	17	5.1	4.5	17
29	3.7	6.9	96	40	---	432	11	22	8.0	4.8	4.5	14
30	3.7	48	52	33	---	866	10	15	7.2	4.5	4.8	12
31	3.7	---	37	28	---	135	---	12	---	4.5	5.8	---
TOTAL	140.4	311.0	744.9	2180	2402	3860	727	497.8	380.1	178.5	240.7	1902.1
MEAN	4.53	10.4	24.0	70.3	85.8	125	24.2	16.1	12.7	5.76	7.76	63.4
MAX	14	48	96	449	261	866	84	60	48	12	33	786
MIN	3.7	3.7	8.7	22	26	18	10	7.8	6.2	4.2	4.5	4.5
CFSM	.24	.55	1.28	3.74	4.56	6.65	1.29	.86	.68	.31	.41	3.37
IN.	.28	.62	1.47	4.31	4.75	7.64	1.44	.99	.75	.35	.48	3.76

CAL YR 1974 TOTAL 10,877.4 MEAN 29.8 MAX 532 MIN 3.7 CFSM 1.59 IN 21.52
WTR YR 1975 TOTAL 13,564.5 MEAN 37.2 MAX 866 MIN 3.7 CFSM 1.98 IN 26.84

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	0215	5.60	885	03-30	0515	7.42	1,930
01-25	0945	5.88	972	09-23	2200	8.48	3,560
03-14	0200	7.09	1,580				

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.--47 years, 699 cfs (19.80 cu m/s), 22.18 in/yr (563 mm/yr).

EXTREMES.--Current year: Maximum discharge, 13,200 cfs (374 cu m/s) Sept. 24, gage height, 15.59 ft(4.752 m); minimum, 120 cfs (3.40 cu m/s) Dec. 23, gage height, 0.54 ft (0.165 m) caused by unnatural conditions.
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 fair. Some diurnal fluctuation at low flow caused by small mills upstream. Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEAR).--WSP 823: Drainage area. WSP 853: 1937. WSP 1386: 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	135	1,280	912	632	808	4,260	302	310	185	168	223
2	150	136	762	705	1,660	760	1,900	285	315	186	165	170
3	150	133	404	600	2,460	648	1,460	285	246	181	154	152
4	148	133	352	1,000	2,810	572	1,300	288	227	186	159	148
5	149	232	313	925	3,630	533	964	277	224	182	238	143
6	150	181	246	630	3,440	500	828	263	216	183	351	144
7	152	161	425	562	2,140	485	732	313	218	187	184	493
8	152	145	906	492	1,280	497	656	533	215	195	349	742
9	153	134	741	582	1,020	455	614	542	203	194	179	255
10	151	130	390	711	864	449	636	443	210	187	204	186
11	151	147	280	4,120	748	605	593	340	398	175	727	210
12	149	171	240	4,140	1,070	1,160	530	303	1,080	172	506	178
13	148	178	210	3,750	964	2,460	485	283	513	165	243	163
14	150	167	184	2,340	720	8,350	464	265	331	161	200	158
15	157	162	178	1,210	620	8,980	467	290	296	161	217	151
16	220	155	187	931	1,200	4,480	446	914	387	160	198	147
17	195	150	184	775	3,190	2,280	416	718	402	155	188	176
18	175	150	167	658	4,150	1,420	398	1,100	287	154	170	2,540
19	162	296	157	642	5,800	2,440	410	609	264	155	161	1,190
20	154	546	150	955	4,460	2,870	473	437	265	155	158	399
21	146	505	142	909	2,580	2,000	410	360	250	172	154	290
22	142	281	135	705	1,250	1,440	372	320	223	183	149	305
23	142	209	125	670	1,170	1,440	358	293	209	182	148	2,190
24	141	185	171	703	2,880	1,440	350	272	198	229	144	10,800
25	141	181	829	3,820	2,520	2,220	358	255	191	219	144	9,450
26	141	178	1,560	6,760	1,350	1,340	375	248	187	175	144	3,090
27	138	174	879	4,290	1,040	976	345	414	196	163	146	906
28	136	163	1,070	2,020	928	832	322	305	194	155	149	645
29	134	159	1,450	1,170	------	2,330	310	340	195	150	148	517
30	134	410	2,140	944	------	9,540	305	350	203	148	270	455
31	134	------	1,380	736	------	10,100	------	305	------	150	308	------
TOTAL	4,696	6,087	17,637	49,367	56,576	74,410	21,537	12,252	8,653	5,405	6,823	36,616
MEAN	151	203	569	1,592	2,021	2,400	718	395	288	174	220	1,221
MAX	220	546	2,140	6,760	5,800	10,100	4,260	1,100	1,080	229	727	10,800
MIN	134	130	125	492	620	449	305	248	187	148	144	143
CFSM	.35	.47	1.33	3.72	4.72	5.61	1.68	.92	.67	.41	.51	2.85
IN.	.41	.53	1.53	4.29	4.92	6.47	1.87	1.06	.75	.47	.59	3.18

CAL YR 1974 TOTAL 255,612 MEAN 700 MAX 5,120 MIN 125 CFSM 1.64 IN 22.22
WTR YR 1975 TOTAL 300,059 MEAN 822 MAX 10,800 MIN 125 CFSM 1.92 IN 26.08

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-26	1030	12.56	7,440	03-31	0400	15.06	12,100
02-19	1600	11.72	6,130	09-24	2400	15.59	13,200
03-15	0230	14.32	10,600				

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 at same datum.

AVERAGE DISCHARGE.--101 years, 37,220 cfs (1,054 cu m/s), 23.62 in/yr (600 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 148,000 cfs (4,190 cu m/s) Mar. 14; maximum gage height, 27.52 ft (8.388 m) Mar. 14; maximum gage height at Walnut Street, 25.72 ft (7.839 m) Mar. 14; minimum daily discharge, 13,300 cfs (377 cu m/s) Sept. 28; minimum gage height, 10.20 ft (3.109 m) Sept. 14.

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. 142 , and Water Resources Data for adjoining states, 1975). Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,500	28,300	26,300	60,000	71,200	58,200	143,000	32,700	32,500	40,200	37,600	23,200
2	31,500	28,700	30,800	52,900	66,000	57,900	140,000	32,400	32,900	41,400	33,700	30,100
3	31,000	28,900	30,700	46,800	78,700	50,000	135,000	33,100	33,400	42,900	27,300	40,500
4	29,700	30,600	36,500	50,500	92,700	47,200	123,000	33,400	33,400	30,700	32,200	38,600
5	29,000	31,800	42,600	55,800	101,000	43,300	107,000	32,900	31,800	34,700	34,000	33,300
6	23,700	31,800	41,900	51,500	102,000	42,100	98,100	32,700	31,200	30,800	32,800	19,900
7	32,100	31,900	41,800	46,600	92,600	45,000	92,800	32,900	26,900	41,800	37,100	21,000
8	29,900	31,300	42,800	46,500	87,300	44,000	87,600	33,200	26,300	43,400	34,200	22,400
9	33,700	24,900	42,900	46,700	86,200	49,200	81,700	31,000	39,300	40,700	27,900	31,400
10	33,600	26,500	43,700	47,000	85,400	52,200	67,500	33,000	43,800	36,300	15,800	37,000
11	33,300	32,900	42,300	46,800	78,200	56,000	54,400	32,700	41,800	28,100	27,100	33,600
12	24,700	32,300	44,600	46,700	75,600	62,000	48,000	32,800	39,300	35,500	38,100	31,300
13	17,700	31,500	42,500	56,700	77,900	90,000	42,200	32,100	37,800	32,400	42,400	26,100
14	26,500	31,300	42,700	60,600	77,800	140,000	39,900	32,800	37,700	33,500	38,400	14,500
15	26,700	31,600	32,600	60,400	77,100	142,000	44,700	32,500	37,700	31,700	31,100	20,300
16	29,200	31,300	43,200	61,800	74,700	129,000	44,400	32,500	36,200	43,000	27,900	24,400
17	30,900	30,800	42,800	61,100	75,500	110,000	43,300	31,000	37,200	41,900	24,700	28,300
18	30,500	32,200	41,800	60,700	76,900	102,000	46,300	42,900	38,000	36,900	26,100	28,000
19	31,200	27,200	43,300	60,100	78,600	101,000	44,300	46,300	39,100	35,100	31,900	40,000
20	20,300	31,400	42,000	62,600	77,300	99,100	42,800	45,600	40,400	26,300	37,800	24,200
21	31,400	30,100	38,900	68,100	75,000	92,600	38,400	37,600	40,600	35,400	35,500	14,600
22	31,800	30,100	31,400	68,100	68,600	87,300	32,400	35,800	41,500	43,400	39,200	20,500
23	31,300	31,100	37,500	67,700	58,900	87,700	29,700	37,600	34,400	42,100	32,300	36,700
24	31,100	30,900	28,500	63,100	65,600	91,700	28,300	38,900	38,600	41,000	24,600	63,900
25	31,900	32,300	31,000	70,900	74,700	99,200	32,200	32,700	39,000	35,300	27,800	54,700
26	27,300	31,300	32,900	84,500	73,100	102,000	16,400	32,600	43,200	42,000	33,500	21,300
27	23,400	30,300	33,900	84,700	72,700	108,000	15,400	32,100	45,300	39,400	32,200	13,400
28	32,100	30,300	46,300	83,100	65,600	111,000	26,300	32,000	40,500	38,300	31,300	13,300
29	30,100	30,600	54,100	81,100	------	112,000	33,300	31,200	27,900	32,900	33,600	16,800
30	30,000	31,500	62,500	79,800	------	131,000	33,100	32,300	40,500	33,600	34,300	24,300
31	29,400	------	61,400	78,700	------	143,000	------	32,100	------	33,700	18,500	------
TOTAL	908,500	915,700	1,256.2M	1,911.6M	2,186.9M	2,685.7M	1,811.5M	1,063.4M	1,108.2M	1,144.4M	980,900	847,600
MEAN	29,310	30,520	40,520	61,660	78,100	86,640	60,380	34,300	36,940	36,920	31,640	28,250
MAX	33,700	32,900	62,500	84,700	102,000	143,000	143,000	46,300	45,300	43,400	42,400	63,900
MIN	17,700	24,900	26,300	46,500	58,900	42,100	15,400	31,000	26,300	26,300	15,800	13,300

CAL YR 1974 TOTAL 18,102,700 MEAN 49,600 MAX 163,000 MIN 8,200
WTR YR 1975 TOTAL 16,820,600 MEAN 46,080 MAX 143,000 MIN 13,300

M Expressed in thousands.

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.--55 years, 745 cfs (21.10 cu m/s), 25.17 in/yr (639 mm/yr).

EXTREMES.--Current year: Maximum discharge, 17,600 cfs (498 cu m/s) Mar. 14, gage height, 15.93 ft (4.855 m); minimum, 47 cfs (1.33 cu m/s) Oct. 14; minimum gage height, 0.95 ft (0.290 m) Sept. 10, 16, 17.
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 good. Prior to 1950 some diurnal fluctuation caused by small mills above station. Records of chemical analyses, periodic water temperatures, and specific conductance for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	71	1600	1810	876	910	5300	534	444	181	95	66
2	81	69	1520	1410	855	886	2910	480	398	189	90	64
3	75	70	1190	1200	1200	802	2520	450	346	185	90	60
4	71	68	836	1260	1820	731	1780	447	311	178	102	58
5	68	75	663	1290	2510	683	1410	416	287	181	120	57
6	65	82	572	1160	2860	642	1210	386	286	178	127	70
7	63	85	558	1020	2520	615	1070	425	311	170	119	75
8	59	86	935	910	1750	834	961	618	274	165	119	61
9	59	87	1140	903	1340	842	877	592	258	161	109	59
10	57	90	1030	1140	1110	857	824	519	249	147	120	58
11	56	90	828	5410	1000	965	755	454	321	137	105	81
12	54	95	693	5140	1140	1300	684	406	679	131	100	74
13	55	97	588	3360	1120	6700	630	382	925	128	95	68
14	54	108	510	2090	1060	16100	592	356	749	123	90	61
15	62	127	453	1500	948	11400	572	365	550	119	111	58
16	143	133	418	1260	935	7300	549	586	493	122	117	57
17	163	127	381	1150	1520	3730	523	940	422	123	131	61
18	197	129	345	1100	1960	2370	501	1720	364	116	119	96
19	187	370	318	1270	1860	2810	552	1490	319	112	108	158
20	149	2130	298	2320	1500	3220	834	1140	292	120	102	214
21	121	1540	280	2370	1250	2550	808	845	275	128	95	186
22	106	1090	263	1840	1070	2020	712	672	266	164	89	146
23	98	731	249	1380	998	1860	635	566	246	128	85	675
24	92	516	296	1160	1730	3710	591	492	231	125	83	3110
25	88	417	3510	2270	1730	5960	574	437	219	123	80	1810
26	83	347	6030	2790	1420	4090	596	394	210	117	78	1240
27	80	302	4230	2080	1170	2410	562	532	203	130	74	763
28	77	273	4020	1530	1000	1640	532	496	197	123	72	502
29	74	250	4440	1250	---	2250	504	436	192	109	70	400
30	72	292	3990	1100	---	6850	535	620	189	103	66	336
31	72	---	2660	980	---	7330	---	507	---	99	65	---
TOTAL	2763	9947	44844	55453	40252	104367	31103	18703	10506	4315	3026	10724
MEAN	89.1	332	1447	1789	1438	3367	1037	603	350	139	97.6	357
MAX	197	2130	6030	5410	2860	16100	5300	1720	925	189	131	3110
MIN	54	68	249	903	855	615	501	356	189	99	65	57
CFSM	.22	.83	3.60	4.45	3.58	8.38	2.58	1.50	.87	.35	.24	.89
IN.	.26	.92	4.15	5.13	3.72	9.66	2.88	1.73	.97	.40	.28	.99

CAL YR 1974 TOTAL 372,422 MEAN 1,020 MAX 13,200 MIN 54 CFSM 2.54 IN 34.46
WTR YR 1975 TOTAL 336,003 MEAN 921 MAX 16,100 MIN 54 CFSM 2.29 IN 31.09

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1000	13.33	6,320	03-25	0800	13.33	6,320
01-11	2130	13.41	6,470	03-30	2300	14.10	8,440
03-14	0730	15.93	17,600				

03571850 Tennessee River at South Pittsburg, Tenn.
(National stream-quality accounting network station)

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.--45 years, 37,260 cfs (1,055 cu m/s), 22.35 in/yr (568 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 189,000 cfs (5,350 cu m/s) Mar. 14, gage height, 27.72 ft (8.449 m); minimum daily, 14,000 cfs (396 cu m/s) Sept. 28; minimum gage height, 10.84 ft (3.304 m) Sept. 22.
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. 142 and Water Resources Data for adjoining states). Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 853: Drainage area. WSP 973: 1942. WSP 1306: 1936 (monthly runoff). WSP 1386: 1932-34.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38,300	33,200	34,300	70,000	85,500	67,200	167,000	37,700	37,600	45,500	42,200	27,600
2	36,500	32,100	38,600	60,000	76,500	68,200	160,000	37,600	37,500	45,000	42,900	33,900
3	34,600	33,400	40,000	55,000	88,400	61,000	154,000	35,500	37,200	47,300	34,500	45,200
4	34,200	33,900	45,000	64,100	100,000	50,600	143,000	37,800	37,300	38,600	36,700	42,300
5	32,900	35,700	50,000	68,000	111,000	50,900	124,000	37,700	37,700	42,000	39,600	41,600
6	28,400	35,800	50,000	60,200	117,000	50,100	110,000	37,700	37,500	37,900	38,500	28,300
7	35,800	36,000	45,000	53,700	112,000	50,800	106,000	37,200	30,900	44,000	41,200	25,000
8	33,900	36,100	50,000	56,500	101,000	51,000	98,300	37,300	30,700	46,500	41,000	28,300
9	37,400	28,600	50,000	57,300	98,800	60,000	96,000	37,900	44,300	44,000	38,500	33,200
10	38,400	32,100	50,000	58,600	96,800	63,300	81,600	37,900	48,900	39,700	25,400	41,400
11	37,700	35,600	50,000	70,500	91,700	64,100	62,900	37,600	49,600	33,800	29,600	42,600
12	31,300	36,400	50,000	62,300	85,500	75,200	53,700	37,700	46,700	40,000	40,500	36,200
13	23,000	36,600	50,000	75,500	90,000	110,000	50,600	37,400	44,000	41,000	47,100	32,700
14	31,800	36,200	50,000	76,200	89,700	180,000	46,800	37,000	43,200	37,700	44,200	17,800
15	28,900	35,700	45,000	71,000	88,400	182,000	49,400	37,100	44,100	37,100	37,100	24,200
16	33,900	35,800	50,000	72,100	86,500	165,000	50,400	37,600	44,300	44,500	35,300	29,800
17	35,800	35,100	50,000	71,100	89,500	140,000	50,500	38,600	41,600	45,400	33,400	32,500
18	35,300	35,300	45,000	69,900	93,800	119,000	50,800	49,700	42,100	45,700	32,300	34,600
19	35,800	36,700	50,000	70,500	95,300	117,000	51,800	57,700	45,900	42,800	35,100	46,900
20	21,600	40,000	50,000	74,300	93,900	117,000	51,600	53,000	45,900	31,300	41,300	29,700
21	32,000	40,200	45,000	81,000	88,200	111,000	43,900	46,100	48,000	39,000	41,300	18,400
22	36,000	38,100	35,000	80,700	81,400	102,000	39,100	41,800	48,100	46,600	44,300	25,000
23	36,000	37,200	45,000	79,300	72,900	103,000	36,500	44,300	42,700	46,700	42,300	45,000
24	35,900	36,600	35,000	74,200	72,000	109,000	33,400	44,100	43,900	45,800	31,200	75,000
25	36,100	35,900	35,000	84,000	87,900	119,000	38,300	39,500	44,500	43,100	31,500	65,000
26	33,300	36,100	40,000	104,000	86,400	119,000	23,000	37,200	46,700	48,200	37,800	25,000
27	28,400	36,100	40,000	99,700	84,500	121,000	19,700	38,000	48,400	48,800	36,300	15,000
28	32,700	35,000	50,000	96,800	79,500	125,000	34,500	38,300	47,700	42,700	36,900	14,000
29	35,500	35,500	70,000	92,600	------	131,000	37,700	37,300	35,000	40,000	39,300	25,000
30	35,100	35,700	75,000	92,300	------	159,000	38,100	38,000	42,000	38,600	36,700	25,000
31	34,400	------	70,000	89,100	------	170,000	------	38,300	------	38,000	27,500	------
TOTAL	1,040.9M	1,066.7M	1,482.9M	2,290.5M	2,544.1M	3,211.4M	2,102.6M	1,240.6M	1,274.0M	1,307.3M	1,161.5M	1,006.2M
MEAN	33,580	35,560	47,840	73,890	90,860	103,600	70,090	40,020	42,470	42,170	37,470	33,540
MAX	38,400	40,200	75,000	104,000	117,000	182,000	167,000	57,700	49,600	48,800	47,100	75,000
MIN	21,600	28,600	34,300	53,700	72,000	50,100	19,700	35,500	30,700	31,300	25,400	14,000

CAL YR 1974 TOTAL 21,041,200 MEAN 57,650 MAX 199,000 MIN 12,800
WTR YR 1975 TOTAL 19,728,700 MEAN 54,050 MAX 182,000 MIN 14,000

M Expressed in thousands.
NOTE.--No gage-height record Dec. 3 to Jan. 3, Jan. 30 to Feb. 27, Apr. 8-17, Sept. 10-12, 22-30.

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.--24 years, 142 cfs (4,021 cu m/s), 29.40 in/yr (747 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,770 cfs (163 cu m/s) Mar. 13, gage height, 12.31 ft (3.752 m); minimum, 3.4 cfs (0.10 cu m/s) Sept. 5, 6.
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.

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

REVISIONS (WATER YEARS).--WRD Tenn. 1973: 1963(P), 1965(M), 1966(P), 1969(M), 1970-71(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	8.4	527	355	109	119	453	100	45	11	6.6	4.6
2	5.0	8.4	362	278	163	141	279	84	41	11	6.0	4.1
3	4.8	8.2	196	252	240	116	210	83	33	10	5.6	3.7
4	4.5	8.6	147	399	330	104	159	107	28	9.5	8.1	3.7
5	4.7	55	123	307	508	96	133	87	25	9.9	21	3.5
6	4.5	61	111	220	394	89	115	111	23	13	16	4.3
7	4.5	38	141	168	263	85	102	679	24	10	11	5.4
8	4.6	30	479	151	188	102	92	843	24	9.1	8.9	4.1
9	4.7	25	407	228	157	87	85	508	21	8.8	7.6	3.9
10	4.6	21	225	292	134	93	88	305	19	11	7.3	4.8
11	4.4	21	152	1170	139	135	79	180	30	19	6.7	35
12	4.3	76	125	649	179	228	69	129	102	11	6.4	20
13	4.2	68	101	365	154	3080	62	106	63	8.8	6.0	14
14	4.1	51	88	235	136	3330	59	86	41	7.8	19	13
15	5.8	44	79	182	119	1070	65	82	54	7.1	13	9.5
16	20	41	83	180	138	517	65	167	116	7.1	14	8.2
17	35	42	75	198	404	329	58	234	71	6.8	11	8.3
18	26	70	65	193	370	231	55	476	46	9.2	9.3	11
19	20	293	61	394	299	373	293	238	34	14	8.2	18
20	16	1030	58	1020	208	365	469	142	28	20	7.2	14
21	14	637	54	568	161	257	240	104	24	17	6.1	11
22	12	233	50	313	134	281	153	82	20	15	5.3	32
23	11	134	46	213	166	310	122	67	17	12	5.2	543
24	9.7	101	233	169	454	930	105	55	15	11	4.7	2460
25	8.9	87	2780	431	300	985	109	46	14	12	4.5	720
26	8.3	78	1310	454	192	434	128	125	14	16	4.3	244
27	8.0	66	647	267	152	258	104	461	13	13	5.4	146
28	8.0	59	1580	187	131	185	93	128	13	10	6.0	107
29	8.4	53	1080	152	---	481	94	76	13	8.8	4.1	82
30	8.7	90	768	139	---	2050	120	60	12	8.0	4.1	66
31	8.3	---	517	121	---	950	---	49	---	7.4	7.5	---
TOTAL	292.3	3537.6	12670	10250	6322	17811	4258	6000	1023	344.3	256.1	4604.1
MEAN	9.43	118	409	331	226	575	142	194	34.1	11.1	8.26	153
MAX	35	1030	2780	1170	508	3330	469	843	116	20	21	2460
MIN	4.1	8.2	46	121	109	85	55	46	12	6.8	4.1	3.5
CFSM	.14	1.80	6.23	5.05	3.45	8.77	2.16	2.96	.52	.17	.13	2.33
IN.	.17	2.01	7.18	5.81	3.59	10.10	2.41	3.40	.58	.20	.15	2.61

CAL YR 1974 TOTAL 67,233.8 MEAN 184 MAX 4,380 MIN 4.1 CFSM 2.80 IN 38.13
WTR YR 1975 TOTAL 67,368.4 MEAN 185 MAX 3,330 MIN 3.5 CFSM 2.82 IN 38.20

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1030	11.33	3,750	03-24	2000	9.76	1,650
12-28	1130	10.06	1,960	03-30	0830	10.67	2,720
03-13	2400	12.31	5,770	09-24	0400	11.27	3,640

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.--55 years, 489 cfs (13.85 cu m/s), 24.15 in/yr (613 mm/yr).

EXTREMES.--Current year: Maximum discharge, 17,400 cfs (493 cu m/s) Mar. 14, gage height, 15.94 ft (4.859 m); minimum, 42 cfs (1.19 cu m/s) Aug. 12, gage height, 1.46 ft (0.445 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 chemical analyses, water temperatures, and specific conductance 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	117	1,180	1,430	559	378	1,470	451	237	68	67	45
2	45	109	1,180	997	562	375	1,290	391	210	71	67	44
3	64	106	851	1,130	1,060	351	1,020	479	132	69	54	44
4	106	134	613	1,190	1,130	306	838	399	145	69	190	44
5	97	217	449	1,190	1,450	307	833	234	168	68	355	44
6	93	262	382	1,090	1,280	309	730	278	170	69	140	45
7	89	345	741	815	1,120	309	459	1,180	172	95	45	45
8	82	272	908	603	820	309	459	1,900	175	113	44	45
9	77	161	1,150	898	819	309	459	1,460	163	113	44	43
10	74	161	909	1,530	691	309	459	1,040	156	115	44	44
11	75	162	609	2,190	606	341	459	581	237	105	44	45
12	84	192	512	2,570	824	1,010	453	464	367	67	45	46
13	83	278	385	1,130	757	8,320	453	510	362	67	45	46
14	78	334	385	1,120	612	13,600	368	475	302	66	44	45
15	166	303	384	1,100	524	5,010	237	950	270	66	44	45
16	421	242	385	1,100	716	2,430	261	1,300	280	65	43	45
17	179	242	333	1,050	1,210	1,470	302	937	280	65	43	47
18	70	245	312	966	1,540	832	302	932	212	65	48	103
19	71	771	312	1,820	1,130	1,210	1,040	932	126	66	67	69
20	71	1,720	312	1,860	929	1,200	1,570	647	244	67	67	69
21	69	1,300	312	2,110	740	1,140	982	488	151	67	67	69
22	65	1,290	264	1,310	737	1,230	625	392	83	67	67	143
23	64	967	196	910	587	1,230	600	299	83	67	67	1,750
24	63	609	1,190	824	843	3,570	496	244	91	67	67	5,110
25	62	486	4,580	1,370	1,050	3,030	458	249	115	67	67	2,710
26	61	251	4,320	1,570	878	1,690	454	259	116	67	67	1,010
27	61	239	2,510	1,310	677	943	451	1,460	116	67	67	574
28	82	239	3,290	742	511	829	357	1,130	116	67	67	568
29	139	336	3,950	776	------	2,410	310	447	116	67	55	568
30	132	682	2,910	759	------	5,670	405	431	102	67	44	419
31	124	------	1,640	558	------	3,650	------	305	------	67	45	------
TOTAL	2,993	12,772	37,454	38,018	24,362	64,077	18,600	21,244	5,497	2,286	2,220	13,924
MEAN	96.5	426	1,208	1,226	870	2,067	620	685	183	73.7	71.6	464
MAX	421	1,720	4,580	2,570	1,540	13,600	1,570	1,900	367	115	355	5,110
MIN	45	106	196	558	511	306	237	234	83	65	43	43
(†)	-1,200	-1,500	-200	0	+100	+2,500	+500	-200	0	0	-300	+100
MEAN#	57.8	376	1,202	1,226	874	2,148	637	679	183	73.7	61.9	467
CFSM#	.21	1.37	4.37	4.46	3.18	7.81	2.32	2.47	.67	.27	.23	1.70
IN.#	.24	1.52	5.04	5.14	3.31	9.00	2.58	2.85	.74	.31	.26	1.90

CAL YR 1974 TOTAL 255,936 MEAN 701 MAX 16,000 MIN 38 MEAN# 700 CFSM# 2.55 IN.# 34.56
WTR YR 1975 TOTAL 243,447 MEAN 667 MAX 13,600 MIN 43 MEAN# 666 CFSM# 2.42 IN.# 32.90

† Change in contents, in cfs-days, in Woods Reservoir.
# Adjusted for change in contents in lakes or reservoirs listed above.
NOTE.--No gage-height record May 7 to June 10.

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.--9 years, 1,020 cfs (28.89 cu m/s), 25.94 in/yr (659 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 8,870 cfs (251 cu m/s) Mar. 15, gage height, 54.45 ft (16.596 m); minimum, 18 cfs (0.51 cu m/s) Oct. 15; minimum daily, 32 cfs (0.91 cu m/s) Nov. 24.
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 water temperatures and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	444	1780	3550	2280	1090	3470	46	38	156	300	306
2	306	443	2230	3550	2270	591	3470	44	832	160	165	435
3	305	296	3480	3590	1230	2270	3470	477	824	159	165	580
4	291	1280	3540	3600	1520	918	3470	46	1090	159	300	567
5	295	1710	3510	3600	1450	924	3470	477	827	160	300	576
6	298	2180	2220	3570	1530	35	3480	474	912	163	300	311
7	294	2170	2200	3560	1540	35	3490	471	433	160	300	165
8	304	1710	39	3570	1530	625	3470	480	430	163	300	444
9	295	741	2190	3040	1520	632	3450	1190	421	426	165	584
10	304	302	2200	1840	1520	36	3430	1150	425	181	165	546
11	293	2170	2190	549	1520	39	3090	1140	495	167	300	571
12	299	2190	2200	2640	1210	50	2240	1420	426	171	434	581
13	306	1740	2200	3600	1510	481	48	708	423	174	449	175
14	304	1740	2210	3600	1520	850	1220	429	159	183	441	170
15	302	1720	37	3600	1070	4890	1340	450	174	184	431	442
16	301	586	2200	3610	37	8470	1210	2020	164	172	167	582
17	289	298	2240	3610	490	8470	1210	2130	162	173	167	572
18	579	1740	1780	3610	919	7850	1220	2130	547	161	447	573
19	574	1770	1730	3660	2110	6610	491	2130	616	166	441	573
20	287	1740	1880	3650	2270	6600	48	995	839	220	451	171
21	2150	1740	1730	3630	2280	6590	505	1540	829	165	434	159
22	2150	1760	33	3640	2260	4280	481	1580	157	164	433	1090
23	2150	1770	1730	3640	1970	3120	481	1190	557	448	159	1010
24	1440	32	1780	3640	2110	1590	481	1160	542	165	169	69
25	1440	2180	109	2340	2110	3540	481	876	533	165	429	1660
26	293	2180	2430	2260	1820	2330	477	868	560	165	442	2010
27	308	2200	3580	2280	1370	2310	46	1140	551	165	444	2020
28	447	2210	3590	2280	1220	1990	481	1430	425	165	442	2040
29	447	2200	3570	2270	---	133	491	936	438	165	435	2010
30	444	2210	3590	2270	---	1580	481	1280	551	300	295	2030
31	491	---	3560	2270	---	3500	---	695	---	300	302	---
TOTAL	18292	45452	67758	96119	44186	82429	51192	31102	15380	6025	10172	23022
MEAN	590	1515	2186	3101	1578	2659	1706	1003	513	194	328	767
MAX	2150	2210	3590	3660	2280	8470	3490	2130	1090	448	451	2040
MIN	287	32	33	549	37	35	46	44	38	156	159	69

CAL YR 1974 TOTAL 540,953 MEAN 1,482 MAX 9,200 MIN 25 MEAN† 1,417 CFSM† 2.65 IN.† 36.02
WTR YR 1975 TOTAL 491,129 MEAN 1,346 MAX 8,470 MIN 32 MEAN† 1,393 CFSM† 2.61 IN.† 35.41

† 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).

AVERAGE DISCHARGE.--5 years, 2.67 cfs (0.0756 cu m/s).

EXTREMES.--Current year: Maximum discharge, 92 cfs (2.61 cu m/s) Mar. 13, gage height, 3.09 ft(0.942 m); minimum, 0.55 cfs (0.016 cu m/s) Nov. 10, 11, 15, 16, 17, 18, gage height, 1.28 ft (0.390 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 gages located at station.

DISCHARGE, IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	.60	1.0	3.5	2.1	2.3	7.5	1.8	1.5	1.1	.82	.79
2	.62	.60	.94	3.1	2.2	2.1	5.8	1.7	1.5	1.0	.82	.71
3	.60	.60	.77	3.0	2.9	1.8	5.1	1.7	1.4	1.1	.82	.70
4	.60	.60	.77	3.3	4.4	1.8	4.4	1.8	1.4	1.0	.82	.65
5	.60	.69	.75	3.4	6.3	1.8	3.9	1.8	1.4	1.0	.82	.65
6	.60	.64	.71	3.0	5.3	1.8	3.6	1.6	1.4	1.0	.81	.74
7	.60	.60	1.0	2.7	4.2	1.8	3.4	4.4	1.3	1.0	.77	1.1
8	.77	.60	1.3	2.5	3.4	1.7	3.1	7.6	1.3	.99	.72	.82
9	.60	.60	1.2	2.9	3.0	1.5	2.9	12	1.2	.94	.71	.74
10	.60	.57	1.1	7.7	3.0	1.5	2.7	7.0	1.2	1.3	.71	.71
11	.60	.58	1.0	14	2.9	1.5	2.5	5.1	1.3	1.8	.71	.76
12	.60	.65	.91	6.6	2.8	2.8	2.2	4.1	1.5	1.5	.71	.89
13	.60	.60	.82	4.6	2.7	56	2.1	3.5	1.4	1.3	.71	.96
14	.60	.60	.78	3.8	2.6	32	2.0	3.2	1.3	1.2	.71	.82
15	.63	.60	.77	3.2	2.5	13	1.9	3.1	1.4	1.1	.73	.77
16	.79	.55	.75	2.9	4.2	7.9	1.8	4.0	1.6	1.0	.83	.75
17	.69	.55	.71	2.8	4.8	5.7	1.8	3.9	1.5	1.0	.77	.73
18	.65	.68	.71	2.9	4.6	4.8	1.8	3.7	1.4	.95	.84	.90
19	.62	1.1	.70	3.4	4.2	5.4	3.3	3.4	1.3	.94	.88	.80
20	.60	1.4	.65	4.7	3.8	5.6	4.3	3.1	1.2	1.0	.80	.77
21	.60	1.0	.65	4.3	3.6	5.1	3.5	2.8	1.2	1.0	.77	.73
22	.60	.88	.64	3.8	3.3	4.7	3.1	2.6	1.2	.94	.71	1.1
23	.60	.79	.60	3.4	3.2	4.3	2.9	2.4	1.1	.89	.71	4.6
24	.60	.72	2.3	3.2	3.2	11	2.7	2.2	1.1	.91	.71	5.8
25	.60	.71	5.6	3.5	3.0	10	2.5	2.0	1.1	.94	.71	3.5
26	.60	.66	3.7	3.5	2.7	6.1	2.3	1.9	1.1	.88	.65	2.8
27	.60	.65	4.0	3.3	2.6	5.0	2.1	1.8	1.2	.87	.65	2.4
28	.60	.64	8.6	3.0	2.5	4.3	2.1	1.8	1.1	.82	.65	2.0
29	.60	.60	6.2	2.8	---	10	2.0	1.6	1.1	.82	.65	1.8
30	.60	.67	5.6	2.5	---	25	1.9	1.6	1.1	.82	.65	1.6
31	.60	---	4.3	2.4	---	12	---	1.6	---	.82	.84	---
TOTAL	19.22	20.73	59.53	119.7	96.0	250.3	91.2	100.8	38.8	31.93	23.21	42.09
MEAN	.62	.69	1.92	3.86	3.43	8.07	3.04	3.25	1.29	1.03	.75	1.40
MAX	.79	1.4	8.6	14	6.3	56	7.5	12	1.6	1.8	.88	5.8
MIN	.60	.55	.60	2.4	2.1	1.5	1.8	1.6	1.1	.82	.65	.65

CAL YR 1974 TOTAL 994.57 MEAN 2.72 MAX 58 MIN .55
WTR YR 1975 TOTAL 893.51 MEAN 2.45 MAX 56 MIN .55

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-28	0230	1.77	10	03-30	0300	2.59	35
01-10	2215	2.28	22	05-08	2330	1.95	14
03-13	2030	3.09	92	09-23	2030	1.76	10
03-24	1415	2.03	16				

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.--41 years, 1,442 cfs (40.84 cu m/s), 23.68 in/yr (601 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 23,500 cfs (666 cu m/s) Mar. 14, gage height, 23.33 ft (7.111 m); minimum, 120 cfs (3.40 cu m/s) Aug. 26, gage height, 1.09 ft (0.332 m); minimum daily, 226 cfs (6.40 cu m/s) Aug. 25.
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).
Flood of March 1842 reached a stage of 27.5 ft (8.38 m), discharge, 37,000 cfs (1,050 cu m/s), and flood of Mar. 23, 1929, reached a stage of 27.2 ft (8.29 m), discharge, 36,000 cfs (1,020 cu m/s), from reports by Tennessee Valley Authority.

REMARKS.--Records good. Prior to August 1949, diurnal fluctuation at low flow caused by powerplants upstream. Flow regulated by Woods Reservoir since 1952 (see sta 03579000), and Tims Ford Lake since December 1970 (see sta 03580740). Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	364	585	2,690	3,990	2,430	1,560	4,510	773	955	700	396	449
2	360	529	2,120	3,820	2,650	1,180	4,080	383	311	409	389	400
3	361	490	3,050	3,950	2,980	1,350	4,060	510	972	403	277	503
4	367	440	3,380	4,280	2,620	2,280	3,760	719	1,000	318	243	651
5	355	1,550	3,350	4,000	3,100	1,220	3,650	388	1,210	305	393	638
6	352	1,850	2,690	3,800	2,610	927	3,590	721	998	280	414	680
7	353	2,190	2,730	3,640	2,290	407	3,550	2,280	1,070	314	399	573
8	358	2,160	2,580	3,820	2,110	531	3,520	1,910	622	300	389	308
9	362	1,710	1,070	4,250	2,000	868	3,510	2,860	593	282	520	510
10	359	775	2,420	4,600	1,900	772	3,510	2,250	581	1,170	264	653
11	361	620	2,370	7,950	1,960	700	3,490	1,920	1,140	824	255	653
12	354	2,160	2,320	2,760	2,170	1,770	2,490	1,710	1,330	420	363	746
13	355	2,180	2,280	4,120	1,780	14,800	2,080	1,790	799	358	494	826
14	360	1,780	2,240	3,940	1,920	19,700	862	889	686	328	507	342
15	390	1,770	1,920	3,760	1,860	6,550	1,270	1,360	633	318	509	290
16	478	1,680	601	3,820	1,550	6,520	1,770	2,090	624	366	520	532
17	436	596	2,160	3,880	2,270	8,410	1,440	2,750	454	321	288	658
18	493	704	2,110	3,810	2,140	8,560	1,410	2,810	408	283	280	718
19	656	2,700	1,860	4,800	2,270	9,160	2,240	2,540	1,020	327	541	712
20	549	3,230	1,790	5,620	2,230	7,500	1,590	2,140	1,160	360	532	685
21	557	2,290	1,800	4,450	2,720	6,830	991	1,390	1,060	323	522	321
22	2,110	2,050	1,500	4,020	2,600	6,610	1,030	1,830	1,030	281	499	578
23	2,150	1,950	501	3,810	2,560	4,450	943	1,800	393	276	497	3,590
24	2,160	1,620	3,550	3,690	2,910	6,740	899	1,430	712	525	251	5,170
25	1,520	565	7,690	4,390	2,550	5,330	937	1,390	703	329	226	1,500
26	1,240	2,180	2,350	2,510	2,410	3,730	956	1,130	721	300	472	2,260
27	426	2,190	4,610	2,770	2,110	2,940	753	1,200	711	279	490	2,330
28	418	2,190	7,370	2,660	1,690	2,620	491	1,350	706	264	500	2,260
29	531	2,180	6,250	2,580	------	5,580	819	1,600	618	260	494	2,200
30	532	2,240	5,440	2,510	------	9,410	969	1,240	585	244	511	2,170
31	524	------	4,360	2,460	------	5,240	------	1,470	------	380	575	------
TOTAL	20,191	49,154	91,152	120,460	64,390	154,245	65,170	48,623	23,805	11,847	13,010	33,906
MEAN	651	1,638	2,940	3,886	2,300	4,976	2,172	1,568	794	382	420	1,130
MAX	2,160	3,230	7,690	7,950	3,100	19,700	4,510	2,860	1,330	1,170	575	5,170
MIN	352	440	501	2,460	1,550	407	491	383	311	244	226	290

CAL YR 1974 TOTAL 768,315 MEAN 2,105 MAX 18,000 MIN 241 MEAN† 2,040 CFSM† 2.47 IN.† 33.49
WTR YR 1975 TOTAL 695,953 MEAN 1,907 MAX 19,700 MIN 226 MEAN† 1,954 CFSM† 2.36 IN.† 32.07

† 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 September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 642.54 ft (195.846 m) above mean sea level.

AVERAGE DISCHARGE.--41 years, 618 cfs (17.50 cu m/s), 22.93 in/yr (582 mm/yr).

EXTREMES.--Current year: Maximum discharge, 47,600 cfs (1,350 cu m/s) Mar. 13, gage height, 23.79 ft (7.251 m); minimum, 43 cfs (1.22 cu m/s) Sept. 5, 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 reports by Tennessee Valley Authority.

REMARKS.--Records excellent. Records of periodic water temperatures and specific conductance 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	95	326	1,520	481	665	2,270	363	343	155	85	59
2	115	93	319	1,210	697	622	1,640	322	286	155	92	53
3	104	92	297	1,140	880	531	1,440	321	255	175	85	49
4	99	103	275	1,130	2,100	482	1,080	331	240	154	109	46
5	97	221	261	996	3,600	450	916	293	229	136	177	44
6	93	196	251	898	2,290	424	798	279	212	153	136	76
7	90	156	661	780	1,590	409	712	1,310	201	291	112	122
8	90	138	1,100	1,020	1,240	384	647	2,320	192	203	97	95
9	88	127	922	1,610	1,040	350	666	3,590	185	155	96	73
10	85	118	735	10,200	867	414	665	1,780	184	161	89	86
11	83	190	610	16,700	810	440	559	1,160	329	154	84	255
12	80	350	523	4,410	981	1,520	496	871	552	139	77	120
13	79	288	430	2,250	808	37,700	452	676	263	124	72	96
14	78	243	369	1,570	736	20,400	481	553	215	116	68	80
15	104	213	368	1,270	685	5,100	557	1,140	1,270	107	72	71
16	197	188	417	1,110	1,360	2,650	461	2,350	1,530	102	83	66
17	186	183	383	961	2,470	1,900	433	2,030	503	97	87	75
18	148	715	348	927	2,390	1,550	413	1,850	347	93	90	89
19	128	1,420	327	2,340	2,120	1,630	1,240	1,310	274	91	92	83
20	115	2,390	306	3,620	1,600	1,330	1,110	1,010	611	102	81	141
21	107	1,420	287	2,180	1,250	1,190	799	796	352	113	70	146
22	102	913	265	1,560	1,020	1,430	657	643	258	105	64	117
23	100	649	248	1,230	1,170	1,370	572	540	214	96	59	477
24	99	505	1,690	1,060	1,580	3,830	519	463	186	100	55	1,620
25	98	463	9,050	1,020	1,130	3,330	540	407	167	115	53	792
26	97	389	4,470	864	908	1,810	493	398	162	104	50	470
27	96	339	3,070	730	791	1,350	418	380	217	92	48	332
28	94	304	5,510	653	710	1,120	386	324	269	83	50	263
29	96	275	3,910	603	------	3,770	409	390	228	78	45	218
30	100	273	2,820	555	------	9,370	415	371	185	74	48	188
31	98	------	1,970	509	------	4,390	------	341	------	73	74	------
TOTAL	3,279	13,049	42,518	66,626	37,304	111,911	22,244	28,912	10,459	3,896	2,500	6,402
MEAN	106	435	1,372	2,149	1,332	3,610	741	933	349	126	80.6	213
MAX	197	2,390	9,050	16,700	3,600	37,700	2,270	3,590	1,530	291	177	1,620
MIN	78	92	248	509	481	350	386	279	162	73	45	44
CFSM	.29	1.19	3.75	5.87	3.64	9.86	2.02	2.55	.95	.34	.22	.58
IN.	.33	1.33	4.32	6.77	3.79	11.37	2.26	2.94	1.06	.40	.25	.65

CAL YR 1974 TOTAL 367,309 MEAN 1,006 MAX 34,100 MIN 68 CFSM 2.75 IN 37.33
WTR YR 1975 TOTAL 349,100 MEAN 956 MAX 37,700 MIN 44 CFSM 2.61 IN 35.48

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1130	17.51	11,800	03-13	1730	23.79	47,600
01-10	2400	20.85	27,900	03-30	1100	17.27	11,000

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.--59 years (1904-7, 1919-75), 3,064 cfs (86.77 cu m/s), 23.32 in/yr (592 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 84,400 cfs (2,390 cu m/s) Mar. 14, gage height, 37.06 ft (11.296 m), from rating curve extended as explained below; minimum, 294 cfs (8.33 cu m/s) Aug. 26, gage height, 1.46 ft (0.445 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 slope-area measurement at gage height 38.17 ft (11.634 m) and 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 of Tennessee Valley Authority.

REMARKS.--Records good. Flow regulated by Woods Reservoir since May 1952 (see sta 03579000), and by Tims Ford Lake since December 1970 (see sta 03580740). Records of chemical analyses, periodic water temperatures, and specific conductance for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	738	828	3,260	7,760	3,770	3,350	14,000	2,010	2,050	1,060	535	798
2	691	888	3,520	6,770	3,990	3,290	8,330	1,590	1,680	1,120	604	618
3	664	834	3,000	6,650	5,190	2,350	7,520	1,360	1,030	785	607	514
4	642	809	3,910	7,580	6,750	3,340	6,520	1,620	1,590	815	537	609
5	641	940	4,170	7,060	10,500	3,100	5,870	1,470	1,630	649	763	798
6	627	2,140	4,100	6,330	8,410	2,410	5,490	1,320	1,790	642	1,140	948
7	614	2,500	3,950	5,790	6,240	1,840	5,250	2,440	1,590	1,280	935	1,280
8	614	2,600	5,650	5,830	5,040	1,570	5,080	6,920	1,540	908	728	955
9	613	2,350	3,970	8,340	4,450	1,710	5,000	11,000	1,130	717	686	552
10	618	1,950	3,330	16,500	3,980	2,090	5,080	7,060	1,080	709	821	892
11	614	1,090	3,770	31,600	3,780	2,690	4,870	4,630	2,180	1,900	517	1,540
12	613	1,710	3,570	29,400	4,110	4,540	4,660	3,690	3,940	1,270	449	1,570
13	599	2,860	3,350	11,000	4,030	28,500	3,550	3,160	2,220	821	487	1,520
14	600	2,720	3,190	7,580	3,630	78,100	2,480	2,800	1,590	701	687	1,310
15	650	2,340	3,100	6,880	3,560	50,200	2,430	2,300	2,930	611	702	720
16	837	2,270	2,290	6,580	4,810	27,700	2,300	7,690	4,170	601	786	531
17	965	1,800	2,090	6,380	8,010	12,700	2,780	7,400	2,100	633	775	819
18	900	1,240	2,990	6,210	8,600	11,800	2,390	7,410	1,500	628	667	946
19	886	3,990	2,910	8,370	7,900	13,300	5,450	5,710	1,250	511	661	982
20	1,010	8,440	2,560	13,900	6,630	12,700	6,610	4,740	2,800	1,120	773	1,060
21	878	6,010	2,540	11,100	5,790	10,500	3,480	3,360	2,090	877	764	1,110
22	1,220	4,030	2,470	8,060	5,130	9,900	2,850	3,010	1,850	705	726	786
23	2,420	3,360	1,710	6,930	5,120	9,570	2,530	3,090	1,680	556	684	4,160
24	2,470	2,990	4,210	6,340	6,850	15,000	2,320	2,900	984	664	667	12,100
25	2,350	2,060	18,300	6,410	5,670	17,600	2,340	2,430	1,260	875	437	7,410
26	1,830	1,970	20,400	6,560	4,740	10,500	2,370	2,200	1,190	665	326	3,780
27	1,260	2,940	9,950	4,540	4,260	6,850	2,100	2,110	1,180	559	489	3,580
28	758	2,900	16,300	4,490	3,690	5,530	1,710	2,140	1,330	510	586	3,370
29	729	2,850	18,200	4,250	------	12,400	1,750	2,330	1,510	449	627	3,120
30	843	2,820	14,600	4,100	------	23,100	2,260	2,370	1,170	428	613	2,970
31	841	------	10,000	3,890	------	25,900	------	2,280	------	405	671	------
TOTAL	29,735	76,229	187,360	273,180	154,630	414,130	129,370	114,540	54,034	24,174	20,450	61,348
MEAN	959	2,541	6,044	8,812	5,523	13,360	4,312	3,695	1,801	780	660	2,045
MAX	2,470	8,440	20,400	31,600	10,500	78,100	14,000	11,000	4,170	1,900	1,140	12,100
MIN	599	809	1,710	3,890	3,560	1,570	1,710	1,320	984	405	326	514

CAL YR 1974 TOTAL 1,655,033 MEAN 4,534 MAX 65,000 MIN 587 MEAN† 4,469 CFSM† 2.51 IN.† 34.00
WTR YR 1975 TOTAL 1,539,180 MEAN 4,217 MAX 78,100 MIN 326 MEAN† 4,264 CFSM† 2.39 IN.† 32.45

† Adjusted for change in contents in Woods Reservoir and Tims Fork 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, nonrecording 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.--9 years (1932-33, 1968-75), 116 cfs (3.285 cu m/s), 28.43 in/yr (722 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,970 cfs (254 cu m/s) Mar. 13, gage height, 12.05 ft (3.673 m), from rating curve extended as explained below; minimum daily, 25 cfs (0.71 cu m/s) Sept. 3.

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 daily, 22 cfs (0.62 cu m/s) Oct. 6, 1970.

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 except those for period of faulty gage-height record, which are fair. 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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1306: Drainage area. WSP 2110: 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	33	52	158	103	137	178	82	93	61	88	28
2	39	33	49	132	160	136	178	77	82	134	66	26
3	38	33	46	142	155	118	157	82	79	68	56	25
4	38	52	46	133	629	102	130	79	75	56	118	39
5	39	45	45	111	268	97	126	74	75	56	95	58
6	39	35	43	101	188	90	121	70	75	72	76	90
7	37	33	143	95	153	91	117	275	75	68	56	60
8	38	33	99	190	139	87	113	278	74	58	49	50
9	38	35	74	175	128	84	143	242	70	80	45	45
10	37	33	65	2,200	117	108	137	124	68	96	50	66
11	37	52	63	650	128	107	117	103	77	60	45	56
12	38	39	61	213	160	1,360	109	90	70	52	43	47
13	38	38	56	170	124	6,100	103	82	65	58	41	42
14	36	38	55	152	113	821	103	81	66	50	40	40
15	65	36	74	138	109	301	105	529	82	48	41	38
16	46	37	72	125	394	224	97	221	70	46	46	43
17	37	41	61	111	362	191	92	366	66	45	50	53
18	36	55	56	126	342	200	92	172	66	52	70	47
19	36	111	55	818	190	267	143	128	66	61	56	45
20	36	103	53	288	160	171	105	113	65	88	45	87
21	33	65	52	185	144	152	92	99	63	62	36	62
22	33	55	52	157	135	296	88	97	63	48	35	49
23	35	52	49	141	641	174	86	92	63	62	32	130
24	35	56	1,000	137	325	843	84	86	65	92	31	210
25	35	60	722	150	229	190	101	84	61	60	29	115
26	35	52	180	128	157	138	92	155	79	54	28	88
27	35	49	772	113	148	116	84	115	70	50	27	66
28	33	47	403	109	138	103	82	90	111	47	26	58
29	36	46	390	107	------	1,300	90	101	74	43	28	52
30	33	53	199	99	------	842	90	88	68	42	32	50
31	33	------	155	97	------	236	------	93	------	51	30	------
TOTAL	1,165	1,450	5,242	7,651	6,039	15,182	3,355	4,368	2,176	1,922	1,510	1,865
MEAN	37.6	48.3	169	247	216	490	112	141	72.5	62.0	48.7	62.2
MAX	65	111	1,000	2,200	641	6,100	178	529	111	134	118	210
MIN	33	33	43	95	103	84	82	70	61	42	26	25
CFSM	.68	.87	3.05	4.46	3.90	8.84	2.02	2.55	1.31	1.12	.88	1.12
IN.	.78	.97	3.52	5.14	4.06	10.19	2.25	2.93	1.46	1.29	1.01	1.25

CAL YR 1974 TOTAL 53,254 MEAN 146. MAX 3,820 MIN 33 CFSM 2.64 IN 35.76
WTR YR 1975 TOTAL 51,925 MEAN 142 MAX 6,100 MIN 25 CFSM 2.56 IN 34.87

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-24	2015	6.42	2,910	03-13	0200	12.05	8,970
01-10	1830	7.98	4,580	03-24	0700	5.56	2,100
01-19	1200	5.65	2,180	03-29	2115	7.22	3,740
02-23	1630	5.46	2,020				

NOTE.--Faulty gage-height record July 1 to Sept. 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 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.--13 years, 83.6 cfs (2.368 cu m/s), 26.40 in/yr (671 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,190 cfs (232 cu m/s) Mar. 13, gage height, 11.98 ft (3.652 m), from rating curve extended above 4,100 cfs (116 cu m/s) on basis of contracted-opening measurement at gage height 14.74 ft (4.493 m); minimum, 25 cfs (0.71 cu m/s) Sept. 4,5.
Period of record: Maximum discharge, 17,900 cfs (507 cu m/s) Mar. 15, 1973, gage height, 14.74 ft (4.493 m), 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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	31	43	138	58	85	273	91	46	32	41	28
2	30	31	40	107	86	80	246	85	42	31	43	26
3	30	31	39	102	95	71	224	93	40	30	34	26
4	30	33	37	90	438	66	164	83	39	30	90	26
5	30	66	36	80	492	64	138	76	38	30	151	61
6	30	41	36	74	267	61	119	70	38	34	60	218
7	30	35	103	67	173	65	106	91	37	36	44	68
8	30	33	116	82	133	61	94	117	37	31	37	43
9	30	32	88	104	111	57	106	173	37	33	34	35
10	30	32	72	2,460	94	75	102	133	41	42	36	108
11	30	45	64	1,180	90	77	88	106	53	34	32	115
12	30	47	59	380	90	789	83	89	46	31	30	58
13	30	39	52	203	77	5,630	79	76	38	35	29	44
14	30	37	47	142	72	1,310	80	77	37	31	28	37
15	45	35	50	116	69	513	77	185	50	29	28	33
16	64	34	50	100	125	313	71	194	40	29	29	31
17	41	35	46	87	351	221	70	273	37	28	29	33
18	35	38	44	93	327	179	67	401	35	32	52	37
19	33	64	43	525	249	164	82	218	35	35	77	32
20	32	102	41	555	177	133	73	143	37	86	37	116
21	31	70	40	270	137	119	70	106	34	52	32	74
22	31	56	38	172	113	148	69	85	32	36	30	54
23	31	48	37	131	180	133	67	73	31	32	29	77
24	31	44	605	112	171	468	66	65	30	58	28	377
25	31	58	1,540	105	134	331	76	58	32	56	28	188
26	31	48	408	88	109	221	73	53	32	37	28	112
27	31	45	537	79	97	167	85	53	46	32	27	82
28	31	42	712	72	88	140	79	49	42	30	26	69
29	32	40	417	68	------	608	94	50	50	29	26	58
30	33	41	261	63	------	1,260	98	47	35	28	26	52
31	32	------	174	60	------	462	------	47	------	28	30	------
TOTAL	1,016	1,333	5,875	7,905	4,603	14,071	3,119	3,460	1,167	1,117	1,251	2,318
MEAN	32.8	44.4	190	255	164	454	104	112	38.9	36.0	40.4	77.3
MAX	64	102	1,540	2,460	492	5,630	273	401	53	86	151	377
MIN	30	31	36	60	58	57	66	47	30	28	26	26
CFSM	.76	1.03	4.42	5.93	3.81	10.6	2.42	2.60	.90	.84	.94	1.80
IN.	.88	1.15	5.08	6.84	3.98	12.17	2.70	2.99	1.01	.97	1.08	2.01

CAL YR 1974 TOTAL 42,876 MEAN 117 MAX 2,290 MIN 24 CFSM 2.72 IN 37.09
WTR YR 1975 TOTAL 47,235 MEAN 129 MAX 5,630 MIN 26 CFSM 3.00 IN 40.86

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-25	0115	9.86	4,000	02-04	1400	5.77	828
12-27	2200	6.45	1,090	03-13	0300	11.98	8,190
01-10	1930	11.73	7,580	03-30	0145	8.09	2,120
01-19	1515	6.36	1,050				

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 22.3 (35.9 km) (revised).

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.--50 years, 641 cfs (18.15 cu m/s), 25.01 in/yr (635 mm/yr).

EXTREMES.--Current year: Maximum discharge, 53,200 cfs (1,510 cu m/s) Mar. 14, gage height, 24.03 ft (7.324 m), from high-water mark; minimum, 130 cfs (3.68 cu m/s) Oct. 13, 14, 15.

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

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	165	323	1,330	495	741	2,060	698	518	267	328	175
2	201	168	301	1,060	615	713	1,600	623	440	250	406	152
3	183	159	279	973	730	620	1,620	649	404	293	313	148
4	183	174	257	934	1,700	559	1,200	645	383	276	411	142
5	183	491	245	811	3,110	523	1,030	568	366	239	1,230	146
6	177	339	239	730	1,980	495	915	529	358	255	570	808
7	174	246	584	647	1,410	491	830	741	352	360	391	729
8	177	207	1,050	746	1,120	487	766	966	344	284	318	354
9	171	192	785	1,330	956	442	820	1,800	331	241	290	267
10	168	180	615	6,690	811	559	963	1,250	360	840	326	244
11	162	252	531	14,200	769	638	800	976	440	432	278	571
12	162	389	491	3,030	822	3,000	714	809	447	291	250	368
13	162	282	424	1,870	724	15,000	662	674	351	271	228	312
14	159	245	374	1,350	652	34,000	651	593	332	247	216	248
15	198	224	388	1,140	620	12,000	659	1,090	448	225	213	219
16	543	201	464	967	1,080	5,000	603	2,000	432	214	235	202
17	342	207	420	832	2,330	3,000	579	1,930	345	209	260	220
18	255	282	385	811	2,260	2,000	562	2,870	315	208	321	288
19	222	487	361	2,280	2,100	1,500	723	1,740	297	250	561	238
20	201	1,020	333	4,190	1,540	1,240	744	1,230	322	445	337	458
21	189	708	310	2,120	1,190	1,090	634	977	291	547	261	579
22	183	511	285	1,510	995	1,130	598	805	274	332	228	380
23	177	413	267	1,170	1,220	1,250	571	685	260	275	210	440
24	177	357	2,150	1,010	2,300	3,370	556	608	249	266	196	2,110
25	171	427	9,840	945	1,420	2,590	611	553	250	483	187	1,400
26	168	388	3,220	827	1,080	1,690	589	512	277	321	176	892
27	165	340	2,670	702	907	1,310	557	661	330	264	169	643
28	159	310	5,460	638	806	1,120	528	519	344	236	160	511
29	162	282	3,100	593	------	2,790	615	525	442	219	157	427
30	189	282	2,430	555	------	9,740	782	526	312	210	161	371
31	177	------	1,730	519	------	3,330	------	487	------	208	185	------
TOTAL	6,159	9,928	40,311	56,510	35,742	112,418	24,542	29,239	10,614	9,458	9,572	14,042
MEAN	199	331	1,300	1,823	1,277	3,626	818	943	354	305	309	468
MAX	543	1,020	9,840	14,200	3,110	34,000	2,060	2,870	518	840	1,230	2,110
MIN	159	159	239	519	495	442	528	487	249	208	157	142
CFSM	.57	.95	3.74	5.24	3.67	10.4	2.35	2.71	1.02	.88	.89	1.34
IN.	.66	1.06	4.31	6.04	3.82	12.02	2.62	3.13	1.13	1.01	1.02	1.50

CAL YR 1974 TOTAL 367,642 MEAN 1,007 MAX 26,600 MIN 159 CFSM 2.89 IN 39.30
WTR YR 1975 TOTAL 358,535 MEAN 982 MAX 34,000 MIN 142 CFSM 2.82 IN 38.33

PEAK DISCHARGE (BASE, 6,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G. HT.	DISCHARGE
12-25	0945	15.36	13,400	03-14	Unknown	[a]24.03	53,200
12-28	0800	11.23	6,790	03-30	0915	15.23	13,100
01-11	0215	19.21	26,300				

[a]From high-water mark.

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.--45 years, 54,720 cfs (1,550 cu m/s), 22.42 in/yr (569 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 319,000 cfs (9,030 cu m/s) Mar. 16; maximum gage height, 87.88 ft (26.786 m) Mar. 17; minimum daily discharge, 18,800 cfs (532 cu m/s) Oct. 13; minimum gage height, 54.74 ft (16.685 m) Nov. 28.

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 (28.255 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. 142 and Water Resources Data for adjoining states, 1975). Flow now almost completely regulated. Records of water temperatures and specific conductivity at Savannah, and chemical analyses at Pickwick Landing Dam are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 853: 1937, drainage area. WSP 1306: 1936 (monthly runoff). WSP 2110: 1966. WRD Tenn. 1974:1973.

DISCHARGE, IN CUBIC FEET PER SECOND , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36100	38000	37300	136000	116000	95600	243000	49200	35600	48400	47900	39700
2	37100	33300	46200	138000	98300	91800	243000	48700	43400	46900	58700	33300
3	34300	29600	41400	134000	103000	82200	240000	44300	48500	45900	46900	43500
4	34100	34000	49700	130000	118000	66200	236000	40900	50100	44800	48200	39400
5	29800	34300	59200	129000	130000	66900	223000	51300	47400	51900	46300	31800
6	23400	40600	63900	120000	135000	60500	194000	55100	44700	53300	44800	22600
7	36500	41700	68000	107000	136000	59100	170000	55400	20500	45900	45700	19100
8	33600	39900	64800	91100	133000	63200	155000	50900	19100	47000	43700	33500
9	34300	39800	64500	85100	132000	56400	133000	56900	43000	53700	49700	45600
10	35500	28900	61700	97700	127000	70800	101000	65800	47500	62200	46600	44900
11	35000	35600	63800	135000	119000	77600	87800	65300	54000	57000	40500	46300
12	32200	36300	63900	146000	116000	100000	63900	67100	63000	62000	43800	50100
13	18800	34400	55800	146000	115000	165000	52300	67400	68000	56900	40000	44900
14	30900	33300	56100	145000	110000	288000	57000	63800	58400	42400	37600	33400
15	34700	35800	56600	144000	107000	314000	59200	64900	54100	44300	36800	40100
16	38200	34200	55800	143000	110000	313000	58400	74700	55500	41700	48900	35500
17	45000	28400	52800	133000	124000	303000	59400	81600	63900	38500	41900	41200
18	39900	30900	52200	123000	134000	284000	69000	86300	66900	39900	44100	40300
19	41100	35800	52600	123000	134000	249000	68000	85100	62900	53900	41900	45700
20	19200	52400	53600	123000	139000	204000	55400	83900	55500	49400	41300	41800
21	31800	56600	49600	120000	145000	163000	56200	83300	60100	49200	39200	24800
22	37500	59200	42800	120000	149000	156000	59300	69100	57500	49400	32000	31900
23	35700	53900	41500	119000	150000	158000	62000	61400	56900	52500	43800	53400
24	34600	43400	41800	114000	138000	160000	44000	54200	45500	50700	40300	87900
25	33400	48000	77000	107000	123000	167000	42400	43600	47700	53400	36000	82600
26	32000	43100	102000	116000	119000	174000	33400	41900	38500	74000	35100	67900
27	25000	37900	115000	126000	113000	181000	29100	45500	30800	60100	36100	63900
28	32300	30700	118000	129000	103000	193000	44700	60400	56000	48000	35900	63600
29	33000	33900	119000	130000	---	208000	47000	62900	49300	44500	30500	62300
30	35700	34700	128000	130000	---	232000	40700	57600	46300	40200	45400	45500
31	43500	---	136000	126000	---	242000	---	42200	---	40100	35900	---
TOTAL	1044200	1158600	2090600	3865900	3476300	5044300	3027200	1880700	1490600	1548100	1305500	1356500
MEAN	33680	38620	67440	124700	124200	162700	100900	60670	49690	49940	42110	45220
MAX	45000	59200	136000	146000	150000	314000	243000	86300	68000	74000	58700	87900
MIN	18800	28400	37300	85100	98300	56400	29100	40900	19100	38500	30500	19100
CFSM	1.02	1.17	2.04	3.76	3.75	4.91	3.04	1.83	1.50	1.51	1.27	1.36
IN.	1.17	1.30	2.35	4.34	3.90	5.66	3.40	2.11	1.67	1.74	1.47	1.52

CAL YR	1974	TOTAL	27575400	MEAN	75550	MAX	326000	MIN	18800	CFSM	2.28	IN 30.95
WTR YR	1975	TOTAL	27288500	MEAN	74760	MAX	314000	MIN	18800	CFSM	2.26	IN 30.63

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.--41 years, 186 (5.268 cu m/s), 23.61 in/yr (600 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs (340 cu m/s) Mar. 13, gage height, 14.97 ft (4.563 m); minimum, 22 cfs (0.62 cu m/s) Sept. 10; minimum gage height, 0.58 ft (0.177 m) Oct. 13, 14.
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 good. Occasional regulation for short periods during low flow by small reservoirs above station. Records of periodic water temperatures and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1436: 1946-47.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	30	351	365	155	122	423	96	93	44	31	25
2	29	30	275	304	644	160	298	84	78	45	31	24
3	29	31	197	327	644	131	258	84	67	45	31	24
4	28	32	167	501	997	115	207	105	61	43	31	23
5	28	42	143	304	1180	97	175	87	57	46	37	23
6	28	43	124	227	560	92	155	77	55	42	64	27
7	28	37	239	181	395	87	141	263	52	73	37	26
8	28	33	495	204	279	131	131	265	51	48	34	25
9	27	31	300	448	229	100	124	326	49	25	33	24
10	27	31	197	755	185	115	126	184	50	26	33	38
11	27	38	159	2160	200	183	118	116	445	26	37	66
12	27	41	143	607	423	404	107	90	605	26	34	56
13	27	40	125	429	279	9580	97	79	179	26	32	40
14	26	39	108	301	195	4880	95	71	103	27	25	33
15	34	38	100	253	162	938	102	210	105	36	99	31
16	57	36	102	298	240	560	102	814	113	41	74	31
17	47	37	94	301	701	426	93	324	82	44	44	38
18	40	106	84	253	436	315	86	229	67	37	73	62
19	36	317	76	571	371	368	417	160	60	40	58	46
20	33	686	73	1170	242	330	501	115	82	48	43	41
21	33	343	54	461	185	248	214	93	77	39	35	38
22	33	183	51	315	158	338	149	81	89	37	32	59
23	33	133	48	242	158	420	122	73	59	35	31	636
24	33	107	452	204	279	1900	111	67	51	38	28	1080
25	33	100	3980	417	207	938	162	62	50	42	27	266
26	31	94	930	338	153	389	204	63	51	36	26	147
27	29	81	930	219	128	261	135	132	49	35	26	107
28	29	72	2320	197	118	209	103	78	47	34	24	86
29	31	66	979	179	---	983	93	201	45	32	24	72
30	33	86	678	195	---	3190	97	354	44	31	24	63
31	32	---	439	171	---	751	---	126	---	31	28	---
TOTAL	988	2983	14413	12897	9903	28761	5146	5109	3016	1178	1186	3257
MEAN	31.9	99.4	465	416	354	928	172	165	101	38.0	38.3	109
MAX	57	686	3980	2160	1180	9580	501	814	605	73	99	1080
MIN	26	30	48	171	118	87	86	62	44	25	24	23
CFSM	.30	.93	4.35	3.89	3.31	8.67	1.61	1.54	.94	.36	.36	1.02
IN.	.34	1.04	5.01	4.48	3.44	10.00	1.79	1.78	1.05	.41	.41	1.13

CAL YR 1974 TOTAL 97,630 MEAN 267 MAX 9,930 MIN 26 CFSM 2.50 IN 33.94
WTR YR 1975 TOTAL 88,837 MEAN 243 MAX 9,580 MIN 23 CFSM 2.27 IN 30.89

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	0730	11.27	6,090	03-13	1100	14.97	12,000
12-28	0815	7.52	2,860	03-24	1900	7.71	3,020
01-11	0615	7.88	3,120	03-30	0545	9.93	4,760

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, 1.7 miles (2.7 km) downstream from Normandy Dam, 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.--14 years, 419 cfs (11.87 cu m/s), 27.36 in/yr (695 mm/yr).

EXTREMES.--Current year: Maximum discharge, 36,200 cfs (1,030 cu m/s) Mar. 13; gage height, 19.00 ft (5.791 m) recorded; 19.28 ft (5.877 m) from floodmarks; minimum daily, 60 cfs (1.70 cu m/s) during period of unstable control conditions.
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 except for period of bridge construction, July, August, September, which are fair. Occasional regulation caused by construction of Normandy Dam. Records of water temperatures and specific conductance 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	91	350	847	411	347	1,180	259	241	112	80	75
2	89	89	494	739	726	369	828	238	212	108	80	70
3	85	89	339	651	1,190	363	743	230	188	108	75	65
4	82	93	275	988	1,440	330	570	250	176	108	80	65
5	82	111	247	779	2,420	311	461	241	160	106	80	60
6	81	108	222	585	1,360	297	398	220	152	109	90	65
7	81	103	297	480	956	286	359	507	148	107	115	65
8	81	95	757	460	718	310	337	662	142	145	95	70
9	81	88	638	862	590	315	322	777	134	105	80	65
10	81	84	394	1,320	505	306	316	520	134	108	100	70
11	80	91	295	3,900	473	380	299	340	419	104	105	370
12	80	107	257	1,950	614	536	280	278	1,290	110	85	170
13	78	105	230	1,020	658	11,600	264	247	483	107	80	125
14	79	102	207	759	490	15,400	257	228	273	107	75	105
15	99	102	193	607	429	3,210	257	307	250	104	80	85
16	139	98	186	603	471	1,370	261	1,660	250	110	100	75
17	127	102	182	648	1,140	1,040	250	938	218	140	150	80
18	117	172	170	589	1,080	820	238	562	180	121	120	125
19	105	413	160	751	878	860	580	419	166	113	135	160
20	97	1,010	153	2,040	656	844	1,210	322	154	130	150	130
21	94	862	150	1,190	522	666	595	273	182	125	115	160
22	92	386	144	801	450	687	384	245	194	105	90	125
23	91	260	139	636	429	971	322	228	158	95	80	800
24	91	216	468	552	539	2,510	293	210	133	90	75	3,450
25	91	196	4,080	732	533	3,120	313	198	126	90	75	1,550
26	92	181	4,090	851	424	1,130	405	186	125	95	70	1,000
27	91	169	1,470	593	377	739	334	214	123	90	80	450
28	89	155	3,770	517	355	584	280	228	120	85	75	310
29	89	146	2,720	479	------	1,190	259	313	117	80	65	235
30	91	155	1,620	467	------	4,790	257	619	112	80	65	190
31	92	------	1,080	450	------	3,850	------	328	------	80	65	------
TOTAL	2,842	5,979	25,777	27,846	20,834	59,531	12,852	12,247	6,760	3,277	2,810	10,365
MEAN	91.7	199	832	898	744	1,920	428	395	225	106	90.6	346
MAX	139	1,010	4,090	3,900	2,420	15,400	1,210	1,660	1,290	145	150	3,450
MIN	78	84	139	450	355	286	238	186	112	80	65	60
CFSM	.44	.96	4.00	4.32	3.58	9.23	2.06	1.90	1.08	.51	.44	1.66
IN.	.51	1.07	4.61	4.98	3.73	10.65	2.30	2.19	1.21	.59	.50	1.85

CAL YR 1974 TOTAL 192,990 MEAN 529 MAX 19,000 MIN 78 CFSM 2.54 IN 34.52
WTR YR 1975 TOTAL 191,120 MEAN 524 MAX 15,400 MIN 60 CFSM 2.52 IN 34.18

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 July 1975 (discontinued as a continuous-record station; converted to a crest-stage partial-record station). 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.--16 years (1953-61, 1966-74), 29.6 cfs (0.838 cu m/s), 24.66 in/yr (626 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,070 cfs (144 cu m/s), Mar. 12, gage height, 9.93 ft (3.027 m), from rating extended as explained below; minimum, 0.11 cfs (0.003 cu m/s) Oct. 4.
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 poor. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	1.1	39	77	15	18	43	4.8	3.8	.21		
2	.16	1.1	24	53	30	17	32	4.0	2.6	6.4		
3	.14	1.1	20	62	49	14	24	4.8	1.9	6.4		
4	.13	1.9	17	52	103	13	17	4.3	1.7	7.2		
5	.14	8.4	14	39	158	12	14	3.5	1.4	8.0		
6	.13	3.8	11	31	100	12	12	6.4	1.6	3.3		
7	.13	1.9	68	24	71	27	11	30	1.3	1.9		
8	.14	1.4	52	88	48	19	10	79	.88	1.1		
9	.14	.99	28	66	38	15	9.3	41	.77	.77		
10	.16	.88	18	358	33	37	8.4	19	1.9	1.3		
11	.19	7.2	15	155	29	30	7.6	12	29	.88		
12	.21	11	12	75	42	1740	6.8	9.3	11	.51		
13	.21	5.4	9.7	47	35	1950	5.8	7.2	5.4	2.9		
14	.24	4.0	8.4	34	30	316	6.4	5.8	3.3	1.6		
15	.59	3.3	9.7	32	24	96	7.2	84	15	.77		
16	4.5	2.6	11	35	53	55	5.8	49	6.8	.51		
17	3.8	6.1	9.7	34	91	36	5.1	32	3.8	.44		
18	1.7	144	8.4	33	87	28	4.8	24	2.4	.33		
19	.99	237	8.0	31	56	28	43	16	3.3	6.4		
20	.69	114	7.2	212	40	20	15	13	2.9	7.2		
21	.63	34	6.4	112	30	17	10	9.3	1.6	3.1		
22	.61	17	6.1	64	24	75	8.4	7.6	.99	1.7		
23	.58	11	5.4	45	34	35	7.2	6.1	.68	.99		
24	.55	8.4	827	35	33	425	6.8	5.1	.44	.77		
25	.56	8.4	582	31	24	75	14	4.5	.38	.88		
26	.59	6.4	100	40	20	38	9.3	3.8	.28	.88		
27	.62	5.4	358	20	17	26	7.2	3.3	.28	.44		
28	.60	4.8	229	20	16	20	6.4	2.9	.28	.28		
29	.77	4.0	148	17	---	524	5.8	6.1	.33	.25		
30	.99	15	87	17	---	199	5.4	4.5	.25	.21		
31	1.1	---	56	16	---	75	---	3.3	---	.20		------
TOTAL	22.16	671.57	2795.0	1955	1330	5992	368.7	505.6	106.26	67.82		
MEAN	.71	22.4	90.2	63.1	47.5	193	12.3	16.3	3.54	2.19		
MAX	4.5	237	827	358	158	1950	43	84	29	8.0		
MIN	.13	.88	5.4	16	15	12	4.8	2.9	.25	.20		
CFSM	.04	1.37	5.53	3.87	2.91	11.8	.75	1.00	.22	.13		
IN.	.05	1.53	6.38	4.46	3.04	13.67	.84	1.15	.24	.15		

CAL YR 1974 TOTAL 12,961.69 MEAN 35.5 MAX 938 MIN .11 CFSM 2.18 IN 29.58

PEAK DISCHARGE (BASE, 2000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-24	2130	9.43	3,980	03-29	0730	8.56	2,450
03-12	2230	9.93	5,070				

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.--42 years, 825 cfs (23.36 cu m/s), 23.29 in/yr (592 mm/yr).

EXTREMES.--Current year: Maximum discharge, 33,000 cfs (935 cu m/s) Mar. 14, gage height, 32.53 ft (9.915 m); minimum, 92 cfs (2.61 cu m/s) Sept. 5; minimum gage height, 2.34 ft (0.713 m) Oct. 14, 15.
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 of peak flow; 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. Records of periodic temperatures and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 783: 1934. WSP 853: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	124	863	1870	657	632	2960	408	401	166	123	115
2	143	123	1010	1590	1680	658	1660	383	329	166	119	107
3	131	123	851	1480	2350	616	1320	367	292	165	114	101
4	125	129	693	1780	3380	542	1070	367	269	168	121	96
5	123	167	596	1610	4590	501	913	367	250	167	123	93
6	123	183	522	1240	3180	459	812	556	231	174	139	98
7	122	155	912	1010	2040	441	744	1460	225	166	178	100
8	121	145	1730	975	1500	552	678	1610	218	163	143	107
9	121	137	1470	1760	1210	503	629	2070	207	181	125	102
10	120	132	1040	3500	1010	521	606	1210	204	223	152	109
11	119	141	794	7820	906	679	567	808	465	182	162	554
12	117	181	657	4540	1220	2120	522	610	1560	152	129	261
13	117	189	550	2190	1180	21200	476	493	986	145	119	191
14	116	169	466	1580	980	30400	448	421	487	146	114	157
15	125	164	416	1250	833	13400	451	1210	553	144	118	127
16	180	158	413	1210	934	3260	427	3270	545	137	151	113
17	234	160	380	1210	2180	2080	411	2230	373	144	225	118
18	181	969	346	1150	2250	1590	386	1550	299	161	179	186
19	156	1860	319	2050	1840	1690	1470	1040	271	154	208	242
20	139	3390	298	3620	1420	1520	1750	780	410	193	226	197
21	131	1830	281	2670	1130	1250	1160	614	295	186	171	238
22	127	1070	265	1670	935	1520	768	500	267	160	140	187
23	124	682	252	1280	880	1650	625	431	257	145	123	1200
24	124	507	1720	1070	1350	6670	548	383	216	137	115	5180
25	124	442	11600	1090	1120	5770	594	350	201	134	111	2370
26	124	380	7230	1290	907	2630	641	321	203	146	106	1530
27	126	334	4230	1040	761	1550	590	307	196	137	118	684
28	124	298	7090	850	676	1180	497	338	187	129	111	464
29	123	265	5710	765	---	3800	444	347	180	123	102	356
30	122	273	3490	743	---	9050	431	689	174	118	97	285
31	124	---	2280	697	---	6310	---	625	---	119	100	---
TOTAL	4143	14880	58474	56600	43099	124744	24598	26115	10751	4831	4262	15668
MEAN	134	496	1886	1826	1539	4024	820	842	358	156	137	522
MAX	234	3390	11600	7820	4590	30400	2960	3270	1560	223	226	5180
MIN	116	123	252	697	657	441	386	307	174	118	97	93
CFSM	.28	1.03	3.92	3.80	3.20	8.37	1.70	1.75	.74	.32	.28	1.09
IN.	.32	1.15	4.52	4.38	3.33	9.65	1.90	2.02	.83	.37	.33	1.21

CAL YR 1974 TOTAL 404,712 MEAN 1,109 MAX 28,200 MIN 116 CFSM 2.31 IN 31.30
WTR YR 1975 TOTAL 388,165 MEAN 1,063 MAX 30,400 MIN 93 CFSM 2.21 IN 30.02

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1630	22.59	13,500	03-24	1900	17.68	8,770
01-11	0730	18.07	9,060	03-30	0800	19.28	9,950
03-14	1130	32.53	33,000				

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. 9, 1925, nonrecording gages near this site; all gages at datum 2.37 ft (0.722 m) higher prior to Oct. 1, 1933.

AVERAGE DISCHARGE.--59 years, 1904-8, 1920-75, 1,993 cfs (56.44 cu m/s), 22.40 in/yr (569 mm/yr).

EXTREMES.--Current year: Maximum discharge, 58,400 cfs (1,650 cu m/s) Mar. 14, gage height, 48.31 ft (14.725 m); minimum, 94 cfs (2.66 cu m/s) Sept. 3.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	257	151	1,200	5,640	1,410	1,550	12,300	807	923	262	144	105
2	254	150	1,950	4,810	3,510	1,420	6,610	754	750	295	138	99
3	238	150	2,120	4,020	5,740	1,370	4,480	733	592	786	140	95
4	206	187	1,880	3,540	10,700	1,260	3,340	717	501	480	357	98
5	185	457	1,540	3,600	14,600	1,150	2,630	680	436	329	654	99
6	168	516	1,320	3,180	11,400	1,040	2,140	645	392	269	390	103
7	158	514	1,710	2,580	7,460	1,030	1,810	2,120	365	297	268	116
8	151	427	3,080	2,400	5,000	1,380	1,580	5,890	327	260	214	105
9	146	339	3,840	4,110	3,710	1,280	1,440	5,040	306	229	217	108
10	141	282	3,170	13,600	2,940	1,330	1,330	4,870	300	210	228	115
11	139	386	2,390	24,600	2,470	1,880	1,230	2,860	310	247	221	135
12	136	884	1,830	21,400	5,200	12,400	1,110	1,940	337	346	228	158
13	134	734	1,500	11,400	4,130	45,700	1,000	1,430	1,410	276	221	525
14	132	649	1,270	5,720	3,150	57,400	952	1,140	1,530	206	179	338
15	148	563	1,130	4,070	2,540	54,700	967	2,690	909	178	224	225
16	234	485	1,260	3,360	2,350	46,800	1,080	7,220	2,710	169	214	183
17	338	484	1,220	3,040	4,230	28,900	961	7,170	1,590	202	210	159
18	413	3,260	1,080	2,780	5,550	8,750	863	4,490	911	183	207	143
19	421	7,740	949	4,250	5,530	4,700	1,180	3,290	767	218	522	131
20	342	12,200	866	7,890	4,420	4,230	2,920	2,320	1,830	605	701	211
21	260	10,100	798	7,680	3,340	3,660	3,090	1,730	2,080	2,340	479	407
22	215	5,180	737	5,620	2,640	3,630	2,220	1,360	919	622	354	354
23	190	3,120	685	3,940	2,610	4,370	1,550	1,110	672	390	248	1,230
24	177	2,090	2,230	3,060	3,440	6,510	1,240	920	539	299	188	5,340
25	170	1,940	17,900	2,640	3,460	12,100	1,170	809	466	290	155	8,080
26	165	1,700	22,700	2,530	2,600	9,710	1,370	719	379	541	135	4,540
27	160	1,390	19,600	2,410	2,100	5,370	1,330	649	371	317	121	2,880
28	156	1,150	16,900	2,130	1,770	3,400	1,140	580	366	234	112	1,760
29	156	970	16,400	1,780	------	8,100	976	550	346	200	107	1,190
30	156	885	13,100	1,580	------	19,100	867	570	295	174	108	917
31	155	------	8,320	1,470	------	19,400	------	699	------	155	111	------
TOTAL	6,301	59,083	154,675	170,830	128,000	373,620	64,876	66,502	23,629	11,609	7,795	29,949
MEAN	203	1,969	4,990	5,511	4,571	12,050	2,163	2,145	788	374	251	998
MAX	421	12,200	22,700	24,600	14,600	57,400	12,300	7,220	2,710	2,340	701	8,080
MIN	132	150	685	1,470	1,410	1,030	863	550	295	155	107	95
CFSM	.17	1.63	4.13	4.56	3.78	9.98	1.79	1.78	.65	.31	.21	.83
IN.	.19	1.82	4.76	5.26	3.94	11.51	2.00	2.05	.73	.36	.24	.92

CAL YR 1974 TOTAL 1,070,650 MEAN 2,933 MAX 39,800 MIN 132 CFSM 2.43 IN 32.97
WTR YR 1975 TOTAL 1,096,869 MEAN 3,005 MAX 57,400 MIN 95 CFSM 2.49 IN 33.78

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-26	1600	31.82	23,200	03-14	0600	48.31	58,400
01-11	0500	33.15	24,800	03-31	0200	29.35	20,600

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 and 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.--22 years, 28.0 cfs (0.793 cu m/s), 21.73 in/yr (552 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,820 cfs (136 cu m/s) Mar. 12, gage height, 9.96 ft (3.036 m), from rating curve extended above 1,400 cfs (39.6 cu m/s) on basis of contracted-opening measurement at gage height 11.55 ft (3.520 m); minimum, 5.1 cfs (0.14 cu m/s) Oct. 14.

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

REVISIONS (WATER YEARS).--WRD Tenn. 1974: 1954(P), 1955, 1956-57(P), 1958(M), 1961(M), 1962-65(P), 1966(M), 1967-68(P), 1969(M), 1970(P), 1971(M), 1972-73(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	6.9	16	43	28	36	75	24	13	8.2	9.7	7.3
2	6.4	6.9	14	34	97	34	60	22	12	7.3	10	7.3
3	5.8	6.9	12	33	78	32	54	55	11	7.3	9.7	7.3
4	6.4	18	11	28	250	31	41	42	11	7.0	17	7.3
5	5.8	26	9.8	23	280	30	36	33	10	6.7	15	7.6
6	5.7	12	9.3	21	110	30	33	29	10	14	11	11
7	5.6	9.1	42	18	62	30	31	165	10	9.7	10	7.3
8	5.6	7.8	37	40	53	29	29	170	9.9	8.2	9.8	7.3
9	5.5	7.1	26	55	46	29	31	198	9.8	7.6	9.6	7.3
10	5.4	6.6	20	877	40	34	32	93	9.6	7.6	9.4	198
11	5.3	20	17	254	36	38	29	55	11	7.6	9.2	24
12	5.2	17	15	86	33	1,170	27	37	9.8	7.3	9.0	13
13	5.2	11	13	56	30	2,190	26	30	9.6	7.6	8.8	12
14	5.1	10	11	44	28	560	26	26	8.8	7.3	8.6	11
15	14	8.6	12	38	26	206	28	159	8.5	7.0	10	10
16	21	7.7	12	37	80	141	26	144	8.5	11	8.5	9.6
17	11	9.0	11	34	160	117	25	134	8.4	10	8.5	9.8
18	9.2	26	9.5	38	110	96	25	102	8.4	7.9	8.2	11
19	8.3	67	9.3	94	69	91	60	56	8.4	8.8	8.0	14
20	7.8	80	8.8	87	49	79	47	33	8.0	10	7.7	24
21	7.2	33	8.3	60	41	73	37	24	8.0	9.4	7.6	15
22	6.9	21	7.9	46	36	99	32	20	7.4	8.5	7.6	11
23	6.8	15	7.5	38	143	96	30	17	7.4	8.2	7.6	85
24	6.6	14	464	36	110	189	28	16	7.4	8.8	7.6	178
25	6.4	22	680	36	65	140	30	15	7.6	9.1	7.6	50
26	6.3	17	104	33	49	103	28	14	8.0	9.1	7.6	26
27	6.2	14	165	31	44	87	27	13	7.4	8.5	7.6	19
28	6.0	12	179	30	38	78	26	13	7.4	8.2	7.3	15
29	7.0	10	113	29	------	551	26	12	7.6	7.9	7.3	13
30	8.0	12	74	28	------	426	25	12	8.0	7.9	7.3	13
31	7.2	------	50	28	------	127	------	12	------	7.9	8.1	------
TOTAL	226.4	533.6	2,168.4	2,335	2,191	6,972	1,030	1,775	271.9	261.6	280.9	831.1
MEAN	7.30	17.8	69.9	75.3	78.3	225	34.3	57.3	9.06	8.44	9.06	27.7
MAX	21	80	680	877	280	2,190	75	198	13	14	17	198
MIN	5.1	6.6	7.5	18	26	29	25	12	7.4	6.7	7.3	7.3
CFSM	.42	1.02	3.99	4.30	4.47	12.9	1.96	3.27	.52	.48	.52	1.58
IN.	.48	1.13	4.61	4.96	4.66	14.82	2.19	3.77	.58	.56	.60	1.77

CAL YR 1974 TOTAL 14,328.3 MEAN 39.3 MAX 1,210 MIN 4.3 CFSM 2.25 IN 30.46
WTR YR 1975 TOTAL 18,876.9 MEAN 51.7 MAX 2,190 MIN 5.1 CFSM 2.95 IN 40.13

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-24	2330	8.02	2,440	03-12	2230	9.96	4,820
01-10	1715	7.84	2,270	03-29	2045	6.03	1,100

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.--50 years, 307 cfs (8.694 cu m/s), 20.64 in/yr (524 mm/yr).

EXTREMES.--Current year: Maximum discharge, 26,800 cfs (759 cu m/s) Mar. 12, gage height, 19.44 ft (5.925 m); minimum daily, 103 cfs (2.917 cu m/s) Sept. 9.
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 (0.991 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 fair. Records of periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	107	236	560	413	723	1320	291	277	136	117	109
2	199	105	229	500	840	649	1070	267	234	140	115	107
3	175	107	217	443	991	579	893	270	223	134	132	106
4	163	116	208	412	1520	521	745	291	214	132	853	104
5	151	157	205	372	1960	482	633	267	211	130	331	104
6	142	130	199	352	1690	450	551	267	211	140	206	111
7	133	121	287	329	1240	437	494	469	198	138	174	107
8	127	116	364	380	988	403	455	469	190	132	160	104
9	124	110	337	528	839	373	455	600	314	129	154	103
10	118	107	308	3350	726	569	436	489	395	127	146	107
11	116	145	294	4610	853	606	386	418	243	125	140	127
12	113	169	280	1530	1200	10800	353	362	231	125	134	129
13	110	154	256	1060	1040	14200	331	318	206	125	130	115
14	107	145	239	840	920	4800	327	291	198	120	127	109
15	142	136	256	709	808	2220	318	820	228	120	127	106
16	205	130	280	615	739	1550	303	1010	201	118	132	107
17	166	133	270	526	782	1220	291	922	188	117	125	109
18	148	151	256	508	696	1040	288	1350	178	115	127	117
19	139	988	249	756	648	953	353	773	172	117	136	112
20	130	1680	236	921	600	820	314	600	168	125	122	349
21	124	956	226	779	556	734	295	469	164	122	120	166
22	118	652	214	671	524	1090	288	395	158	118	118	134
23	116	500	208	596	7040	1060	284	344	152	115	117	134
24	116	408	211	545	3340	1170	281	306	150	117	114	274
25	113	376	214	551	1620	1020	291	281	148	130	112	270
26	110	322	205	495	1150	858	274	277	146	144	112	201
27	107	291	253	439	932	778	260	295	147	120	109	172
28	107	267	376	407	808	796	253	253	146	117	109	154
29	107	242	536	388	---	8780	256	247	140	114	111	144
30	107	236	604	361	---	3270	291	240	136	112	112	134
31	107	---	580	367	---	1860	---	260	---	111	115	---
TOTAL	4172	9257	8833	24900	35463	64811	13089	13911	5967	3865	4937	4225
MEAN	135	309	285	803	1267	2091	436	449	199	125	159	141
MAX	232	1680	604	4610	7040	14200	1320	1350	395	144	853	349
MIN	107	105	199	329	413	373	253	240	136	111	109	103
CFSM	.67	1.53	1.41	3.98	6.27	10.4	2.16	2.22	.99	.62	.79	.70
IN.	.77	1.70	1.63	4.59	6.53	11.94	2.41	2.56	1.10	.71	.91	.78

CAL YR 1974 TOTAL 178,389 MEAN 489 MAX 9,670 MIN 105 CFSM 2.42 IN 32.85
WTR YR 1975 TOTAL 193,430 MEAN 530 MAX 14,200 MIN 103 CFSM 2.62 IN 35.62

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-10	2330	14.88	12,400	03-12	1600	19.44	26,800
02-23	1215	14.89	12,400	03-29	1015	17.12	18,700

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.--50 years, 4,054 cfs (114.8 cu m/s), 21.53 in/yr (547 mm/yr).

EXTREMES.--Current year: Maximum discharge, 102,000 cfs (2,889 cu m/s) Mar. 14, gage height, 28.80 ft (8.778 m); minimum, 747 cfs (21.2 cu m/s) Sept. 5.
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. Records of chemical analyses and periodic water temperatures for the current year are published in Part 2 of this report.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,670	909	2,640	15,600	3,800	5,610	30,400	3,410	2,330	1,250	982	886
2	1,450	891	2,780	10,800	4,430	5,010	25,800	3,100	2,480	1,190	1,010	907
3	1,290	890	3,260	8,940	7,810	4,500	14,400	2,870	2,460	1,190	1,010	833
4	1,190	914	3,730	7,890	11,200	4,110	10,000	2,890	2,200	1,160	1,740	784
5	1,110	1,020	3,590	6,860	19,400	3,830	7,960	2,860	2,010	1,510	2,520	754
6	1,050	1,790	3,240	6,540	25,900	3,560	6,660	2,660	1,870	1,390	2,610	765
7	1,000	1,930	3,040	6,060	23,400	3,350	5,780	2,850	1,740	1,380	2,230	810
8	970	1,670	4,240	5,320	15,700	3,430	5,120	4,100	1,640	1,280	1,660	841
9	932	1,530	5,700	5,440	11,100	3,520	4,700	9,990	1,610	1,220	1,390	810
10	897	1,390	6,400	11,400	8,680	3,790	4,430	10,100	1,850	1,130	1,320	789
11	874	1,320	5,950	29,100	7,400	4,480	4,190	9,120	1,720	1,060	1,280	969
12	869	1,410	5,000	37,000	8,410	21,700	3,880	6,680	1,660	1,030	1,200	2,160
13	844	2,090	4,230	37,500	12,700	74,800	3,540	5,100	1,650	1,100	1,130	1,400
14	836	2,330	3,570	31,200	10,300	101,000	3,330	4,150	1,720	1,210	1,090	1,140
15	893	2,020	3,190	13,700	8,320	90,000	3,200	4,220	2,850	1,140	1,060	1,240
16	1,060	1,820	3,060	9,100	7,070	72,000	3,130	7,190	2,600	1,030	1,030	1,180
17	1,230	1,670	3,090	7,590	7,060	61,500	3,140	11,900	2,760	964	1,070	1,050
18	1,350	1,600	3,050	6,770	8,670	52,600	3,060	13,300	3,550	953	1,090	1,000
19	1,320	2,900	2,830	6,520	9,850	37,800	3,000	9,890	2,450	967	1,080	1,030
20	1,280	11,500	2,610	9,320	9,700	12,800	3,320	7,550	1,980	1,080	1,050	1,230
21	1,250	17,000	2,420	12,800	8,590	9,000	4,460	5,940	1,890	1,500	1,210	1,520
22	1,170	16,100	2,250	12,800	7,060	8,560	5,600	4,850	3,590	2,470	1,420	1,590
23	1,080	10,200	2,120	10,300	14,600	9,120	4,700	4,070	2,530	2,470	1,240	1,530
24	1,040	6,690	2,030	8,130	21,600	9,890	3,910	3,510	1,900	1,570	1,140	1,960
25	1,030	5,070	3,200	6,820	12,500	12,800	3,510	3,090	1,610	1,350	1,040	7,580
26	976	4,610	18,200	6,050	9,610	16,100	3,410	2,840	1,460	1,480	951	10,300
27	922	4,210	24,800	5,500	7,700	15,900	3,420	2,910	1,470	1,310	885	8,140
28	909	3,650	28,000	5,100	6,470	10,900	3,440	2,730	1,450	1,400	849	5,390
29	901	3,170	28,700	4,750	------	19,700	3,230	2,450	1,330	1,210	831	3,970
30	896	2,830	26,400	4,260	------	29,000	3,170	2,320	1,310	1,060	794	2,940
31	910	------	23,000	3,900	------	29,400	------	2,290	------	988	848	------
TOTAL	33,199	115,124	236,320	353,060	309,030	739,760	187,890	160,930	61,670	40,042	38,760	65,498
MEAN	1,071	3,837	7,623	11,390	11,040	23,860	6,263	5,191	2,056	1,292	1,250	2,183
MAX	1,670	17,000	28,700	37,500	25,900	101,000	30,400	13,300	3,590	2,470	2,610	10,300
MIN	836	890	2,030	3,900	3,800	3,350	3,000	2,290	1,310	953	794	754
CFSM	.42	1.50	2.98	4.45	4.32	9.33	2.45	2.03	.80	.51	.49	.85
IN.	.48	1.67	3.44	5.14	4.50	10.76	2.73	2.34	.90	.58	.56	.95

CAL YR 1974 TOTAL 2,175,802 MEAN 5,961 MAX 61,200 MIN 836 CFSM 2.33 IN 31.65
WTR YR 1975 TOTAL 2,341,283 MEAN 6,414 MAX 101,000 MIN 754 CFSM 2.51 IN 34.06

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.--55 years, 743 cfs (21.04 cu m/s), 22.57 in/yr (573 mm/yr).

EXTREMES.--Current year: Maximum discharge, 60,200 cfs (1,700 cu m/s) Mar. 13, gage height, 29.26 ft (8.918 m); minimum, 243 cfs (6.88 cu m/s) Sept. 4, 5.
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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	296	470	1,760	689	938	2,610	791	710	354	388	310
2	392	290	478	1,480	1,120	896	1,960	718	657	362	479	267
3	343	287	458	1,280	1,560	818	1,730	740	608	360	431	253
4	335	296	433	1,200	1,910	760	1,530	861	568	337	493	245
5	327	530	409	1,080	4,280	720	1,260	791	547	325	948	249
6	331	693	401	981	3,380	689	1,120	729	538	396	867	629
7	331	518	482	901	2,320	677	1,010	803	526	440	615	583
8	327	401	748	868	1,770	689	935	1,530	509	391	498	409
9	327	360	779	1,080	1,440	653	904	2,840	488	362	438	336
10	322	339	713	2,680	1,210	685	991	2,400	489	344	399	307
11	318	364	657	16,200	1,100	791	921	1,640	511	344	372	550
12	314	478	618	6,560	1,750	3,960	823	1,310	553	339	351	468
13	314	482	578	2,610	1,830	43,400	761	1,110	524	347	329	362
14	318	425	558	1,900	1,420	34,300	733	969	476	341	310	311
15	331	392	554	1,560	1,220	7,760	740	1,050	462	318	304	290
16	550	364	566	1,320	1,190	3,060	703	2,650	521	307	351	281
17	586	364	534	1,160	1,380	2,250	662	2,460	475	308	352	284
18	453	405	506	1,090	1,670	1,800	646	3,280	436	330	410	306
19	380	578	482	1,310	1,580	1,630	799	2,210	404	334	383	331
20	343	950	462	2,610	1,410	1,460	1,050	1,610	426	605	354	474
21	322	1,100	445	2,270	1,240	1,270	958	1,300	408	834	322	644
22	331	803	425	1,740	1,120	1,190	873	1,100	391	539	300	494
23	355	638	409	1,450	1,350	1,400	810	963	376	422	289	427
24	307	554	574	1,250	1,990	2,050	765	860	362	644	282	920
25	296	582	7,050	1,110	1,840	2,490	805	786	352	695	274	1,380
26	290	610	8,180	1,020	1,410	1,810	867	735	368	545	267	964
27	287	550	3,000	919	1,180	1,460	829	945	378	446	260	732
28	284	510	4,430	830	1,040	1,280	757	816	371	392	254	597
29	284	474	3,710	775	------	2,550	757	724	405	357	251	506
30	296	453	2,910	736	------	5,790	796	722	384	336	251	453
31	304	------	2,180	701	------	4,900	------	701	------	326	267	------
TOTAL	10,756	15,086	44,199	62,431	45,399	134,126	30,105	40,144	14,223	12,780	12,089	14,362
MEAN	347	503	1,426	2,014	1,621	4,327	1,004	1,295	474	412	390	479
MAX	586	1,100	8,180	16,200	4,280	43,400	2,610	3,280	710	834	948	1,380
MIN	284	287	401	701	689	653	646	701	352	307	251	245
CFSM	.78	1.13	3.19	4.51	3.63	9.68	2.25	2.90	1.06	.92	.87	1.07
IN.	.90	1.26	3.68	5.20	3.78	11.16	2.51	3.34	1.18	1.06	1.01	1.20

CAL YR 1974 TOTAL 404,698 MEAN 1,109 MAX 30,900 MIN 237 CFSM 2.48 IN 33.68
WTR YR 1975 TOTAL 435,700 MEAN 1,194 MAX 43,400 MIN 245 CFSM 2.67 IN 36.26

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-26	0300	17.02	11,400	02-05	1500	10.81	4,680
12-28	1800	10.92	4,750	03-13	1500	29.26	60,200
01-11	1200	21.59	20,300	03-30	2200	13.49	7,080

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, non-recording gage 40 ft (12 m) downstream at same datum.

AVERAGE DISCHARGE.--48 years, 1,167 cfs (33.05 cu m/s), 22.42 in/yr (569 mm/yr).

EXTREMES.--Current year: Maximum discharge, 50,200 cfs (1,420 cu m/s) Mar. 14, gage height, 20.07 ft (6.117 m); minimum, 374 cfs (10.6 cu m/s) Sept. 5.

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

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	714	462	744	3,170	1,240	1,870	7,090	1,510	1,090	535	541	437
2	641	450	729	2,590	1,520	1,700	3,890	1,390	1,020	536	599	450
3	578	443	719	2,240	2,170	1,550	3,030	1,290	947	531	638	431
4	539	450	695	1,980	2,680	1,420	2,640	1,300	873	524	986	413
5	509	557	663	1,810	3,660	1,320	2,290	1,330	821	515	1,160	410
6	493	658	632	1,630	5,950	1,250	1,930	1,270	783	644	1,200	429
7	489	821	672	1,490	4,900	1,240	1,710	1,430	754	615	1,180	582
8	485	724	877	1,430	3,410	1,230	1,570	1,630	729	609	929	678
9	481	615	1,030	1,560	2,700	1,190	1,490	2,700	711	576	813	578
10	477	557	1,100	3,510	2,260	1,280	1,480	3,660	692	547	697	518
11	469	548	1,050	9,830	2,010	1,410	1,460	3,170	685	526	627	622
12	466	619	993	14,500	2,320	9,030	1,370	2,390	690	586	588	699
13	462	645	926	9,990	2,960	29,700	1,270	1,900	704	575	557	695
14	462	667	868	3,920	2,810	44,300	1,210	1,640	691	532	531	571
15	505	619	868	2,890	2,340	25,400	1,140	1,560	656	518	510	509
16	677	582	916	2,420	2,120	10,400	1,160	1,850	639	501	498	477
17	764	561	896	2,100	2,550	4,580	1,110	3,260	654	490	510	464
18	785	566	854	1,890	2,610	3,480	1,070	3,970	636	480	522	461
19	677	672	817	1,890	2,590	2,910	1,150	4,180	604	507	547	469
20	594	1,320	774	2,440	2,390	2,580	1,360	3,100	581	606	544	613
21	548	1,650	734	3,420	2,140	2,300	1,490	2,390	576	992	513	682
22	514	1,600	700	3,050	1,920	2,150	1,420	1,930	565	1,060	490	749
23	505	1,310	672	2,510	6,520	2,100	1,340	1,640	549	822	471	689
24	518	1,110	672	2,200	5,760	2,470	1,270	1,440	533	763	457	1,040
25	493	998	1,500	1,990	4,190	3,220	1,240	1,300	521	881	446	1,470
26	469	946	6,480	1,790	3,120	3,410	1,270	1,220	515	901	436	1,680
27	458	936	10,200	1,640	2,470	2,740	1,270	1,230	551	792	427	1,340
28	450	872	5,530	1,500	2,120	2,370	1,230	1,310	540	668	420	1,070
29	447	812	6,160	1,400	------	5,950	1,200	1,210	529	603	413	868
30	447	764	5,510	1,320	------	8,010	1,250	1,120	536	561	411	730
31	450	------	4,110	1,270	------	8,440	------	1,070	------	530	454	------
TOTAL	16,566	23,534	59,091	95,370	86,430	191,000	52,400	60,390	20,375	19,526	19,115	20,824
MEAN	534	784	1,906	3,076	3,087	6,161	1,747	1,948	679	630	617	694
MAX	785	1,650	10,200	14,500	6,760	44,300	7,090	4,180	1,090	1,060	1,200	1,680
MIN	447	443	632	1,270	1,240	1,190	1,070	1,070	515	480	411	410
CFSM	.76	1.11	2.70	4.35	4.37	8.71	2.47	2.76	.96	.89	.87	.98
IN.	.87	1.24	3.11	5.02	4.55	10.05	2.76	3.18	1.07	1.03	1.01	1.10

CAL YR 1974 TOTAL 642,410 MEAN 1,760 MAX 28,500 MIN 443 CFSM 2.49 IN 33.80
WTR YR 1975 TOTAL 664,621 MEAN 1,821 MAX 44,300 MIN 410 CFSM 2.58 IN 34.97

PEAK DISCHARGE (BASE, 5,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
?-27	0800	13.51	11,100	02-23	2300	13.92	12,300
-12	1600	15.11	16,500	03-14	1100	20.07	50,200
06	1600	10.86	6,370	03-31	2300	12.54	9,060

03605555 Trace Creek above 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).

DRAINAGE AREA.--31.9 sq mi (82.6 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.--12 years, 49.2 cfs (1.393 cu m/s), 20.94 in/yr (532 mm/yr).

EXTREMES.--Current year: Maximum discharge 2,460 cfs (69.7 cu m/s) Jan. 10, gage height, 10.21 ft (3.112 m), from rating curve extended above 2,200 cfs (62.3 cu m/s); minimum daily, 12 cfs (0.34 cu m/s) several days in October and July.
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 (73.6 cu m/s); 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 poor. Records of periodic water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	14	28	65	55	71	116	73	29	16	13	16
2	23	14	27	59	158	65	94	56	26	16	15	16
3	20	14	26	58	143	59	78	53	26	15	14	16
4	18	15	25	56	239	51	68	76	26	14	25	15
5	16	17	24	49	398	48	61	60	24	14	21	20
6	15	14	23	44	249	46	55	111	24	17	17	22
7	14	14	24	40	153	45	50	224	21	20	15	19
8	14	13	26	59	116	41	47	153	20	14	14	17
9	13	13	25	95	101	37	48	187	26	14	13	14
10	13	14	23	875	84	77	49	107	30	13	13	15
11	13	17	22	432	93	90	42	82	29	13	13	26
12	13	16	23	171	90	1,290	40	68	41	13	13	37
13	12	15	23	119	75	1,070	38	59	30	14	13	26
14	12	16	21	96	67	394	37	53	28	13	13	20
15	18	14	29	83	55	166	37	55	26	12	16	20
16	26	14	45	76	50	107	34	54	24	13	17	22
17	24	16	37	68	49	84	33	192	21	13	15	20
18	20	18	34	65	1,050	70	32	174	20	12	14	18
19	18	109	31	128	280	66	46	77	19	12	14	62
20	18	246	29	117	153	55	40	59	18	21	14	613
21	18	98	26	90	116	47	35	49	17	18	14	98
22	18	69	25	77	230	117	34	41	16	14	14	64
23	17	55	23	70	360	132	33	37	16	13	14	49
24	17	48	25	65	160	200	33	33	15	13	13	238
25	16	45	31	63	120	100	43	30	15	13	13	156
26	15	38	35	59	108	73	45	32	15	13	14	92
27	15	35	39	53	93	62	39	31	14	13	14	68
28	14	31	69	51	80	112	37	28	46	13	14	55
29	14	29	66	50	------	938	40	29	23	12	14	44
30	16	27	64	46	------	290	71	28	18	12	18	37
31	16	------	58	47	------	158	------	29	------	12	22	------
TOTAL	526	1,098	1,006	3,426	4,925	6,161	1,455	2,340	703	435	466	1,935
MEAN	17.0	36.6	32.5	111	176	199	48.5	75.5	23.4	14.0	15.0	64.5
MAX	30	246	69	875	1,050	1,290	116	224	46	21	25	613
MIN	12	13	21	40	49	37	32	28	14	12	13	14
CFSM	.53	1.15	1.02	3.48	5.52	6.24	1.52	2.37	.73	.44	.47	2.02
IN.	.61	1.28	1.17	4.00	5.74	7.18	1.70	2.73	.82	.51	.54	2.26

CAL YR 1974 TOTAL 21,242 MEAN 58.2 MAX 1,620 MIN 12 CFSM 1.82 IN 24.77
WTR YR 1975 TOTAL 24,476 MEAN 67.1 MAX 1,290 MIN 12 CFSM 2.10 IN 28.54

PEAK DISCHARGE (BASE, 1,850 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-10	2215	10.21	2,460	03-13	0115	9.35	2,120
02-18	1345	9.22	2,080	03-29	0815	9.37	2,130

03606500 Big Sandy River at Bruceton, Tenn.

LOCATION.--Lat 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.--46 years, 287 cfs (8.128 cu m/s), 19.01 in/yr (483 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 cfs (357 cu m/s) Mar. 14, gage height, 15.78 ft (4.810 m); minimum, 80 cfs (2.27 cu m/s) July 5.

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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	160	344	650	468	266	1700	442	182	90	378	138
2	342	160	303	438	759	257	636	380	161	87	446	122
3	185	163	249	410	729	226	397	327	150	85	579	115
4	157	184	214	376	962	215	314	319	149	84	1000	111
5	146	253	201	308	1340	209	281	225	146	84	908	110
6	141	190	197	259	1410	205	261	848	163	277	864	172
7	138	165	251	232	1130	226	248	2,060	140	265	736	156
8	135	160	288	351	762	273	245	2,050	130	168	289	123
9	134	159	238	597	415	221	368	2,270	140	125	186	114
10	133	159	204	1370	303	615	537	1,770	184	112	169	111
11	131	260	204	2880	334	575	485	798	264	104	153	111
12	130	287	237	2990	363	1920	320	386	313	113	142	138
13	130	211	214	2480	321	8170	253	307	203	141	134	150
14	129	181	195	1140	274	8680	253	271	150	112	132	122
15	259	167	320	460	251	3770	271	412	141	100	151	119
16	503	161	386	350	266	2310	242	455	137	96	173	117
17	356	194	351	291	334	1020	231	571	126	95	176	121
18	261	296	253	296	346	548	223	589	120	93	141	126
19	189	814	233	495	282	476	341	499	112	91	137	135
20	169	1600	201	454	235	399	256	331	106	444	132	701
21	160	1660	192	348	216	341	209	238	104	812	127	564
22	156	1610	185	277	211	1100	194	209	101	958	119	724
23	153	932	183	247	1080	838	188	195	96	782	116	619
24	155	459	236	236	1250	1240	188	182	94	237	112	1080
25	158	474	449	257	1340	776	255	190	92	181	111	1100
26	155	341	420	244	1250	618	236	188	85	165	107	855
27	156	273	438	215	466	369	193	176	108	143	103	723
28	156	235	517	209	301	1520	192	175	111	131	109	342
29	155	215	719	220	---	2550	198	178	106	123	224	211
30	158	245	732	242	---	3120	460	175	96	123	148	180
31	160	---	722	311	---	2770	---	171	------	116	177	---
TOTAL	6009	12368	9876	19633	17398	45823	10175	17,387	4,210	6537	8479	9510
MEAN	194	412	319	633	621	1478	339	561	140	211	274	317
MAX	519	1660	732	2990	1410	8680	1700	2,270	313	958	1000	1100
MIN	129	159	183	209	211	205	188	171	85	84	103	110
CFSM	.95	2.01	1.56	3.09	3.03	7.21	1.65	2.74	.68	1.03	1.34	1.55
IN.	1.09	2.24	1.79	3.56	3.16	8.32	1.85	3.16	.76	1.19	1.54	1.73

CAL YR 1974 TOTAL 176,884 MEAN 485 MAX 7,590 MIN 120 CFSM 2.37 IN 32.10
WTR YR 1975 TOTAL 167,405 MEAN 459 MAX 8,680 MIN 84 CFSM 2.24 IN 30.38

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
01-12	1115	13.10	3,170	03-30	1715	13.30	3,530
03-14	0030	15.78	12,600	05-09	1530	12.29	2,340

03609500 Tennessee River near Paducah, Ky.

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; 10 years (1965-75, since opening of Barkley-Kentucky Canal), 67,320 cfs (1,907 cu m/s), unadjusted.

EXTREMES.--Current year: Maximum discharge, 420,000 cfs (11,900 cu m/s) Mar. 17; maximum gage height, 53.62 ft (16.343 m) Apr. 2; minimum daily discharge, 24,100 cfs (683 cu m/s) Sept. 7; minimum gage height, 13.61 ft (4.148 m) July 10.
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, 420,000 cfs (11,900 cu m/s) Mar. 17, 1975.

REMARKS.--Records fair. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other reserviors have been built above station (see p.142 and Water Resources Data for adjoining states, 1975). 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 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43,900	32,400	50,100	180,000	145,000	137,000	255,000	40,000	49,000	41,000	47,600	32,100
2	44,200	31,600	46,800	178,000	145,000	116,000	250,000	32,000	42,000	43,000	40,600	35,200
3	43,100	32,300	45,900	168,000	143,000	100,000	220,000	30,000	40,000	40,000	40,400	31,300
4	44,400	32,500	47,200	160,000	144,000	80,000	225,000	32,000	41,000	38,000	41,600	32,800
5	35,600	32,600	51,100	158,000	151,000	78,000	230,000	38,000	42,000	37,000	37,100	30,400
6	26,800	34,500	50,900	148,000	160,000	75,000	225,000	41,000	41,000	36,000	42,300	29,100
7	36,600	38,800	52,600	132,000	161,000	80,000	230,000	43,000	36,000	41,000	43,600	24,100
8	32,200	37,100	55,600	120,000	160,000	78,000	220,000	56,000	30,000	41,000	42,700	32,500
9	31,700	31,000	50,000	107,000	159,000	77,000	210,000	66,000	41,000	42,900	42,200	36,600
10	32,200	30,400	51,000	119,000	160,000	88,000	190,000	60,000	42,000	41,400	37,000	32,800
11	32,000	32,000	53,000	156,000	156,000	98,000	150,000	54,000	46,000	43,800	37,000	33,600
12	31,700	34,900	53,000	189,000	152,000	135,000	135,000	70,000	54,000	40,400	37,000	38,700
13	29,300	35,900	53,000	211,000	151,000	230,000	115,000	76,000	55,000	36,300	37,100	37,200
14	32,300	33,100	52,000	215,000	149,000	320,000	91,000	76,000	54,000	39,800	36,000	37,200
15	32,500	31,900	52,000	217,000	146,000	380,000	76,000	68,000	41,000	39,700	37,600	32,700
16	38,200	30,500	52,000	210,000	143,000	392,000	68,000	73,000	45,000	40,500	37,800	31,400
17	43,200	33,400	48,000	182,000	142,000	400,000	64,000	86,000	53,000	40,400	36,800	30,000
18	42,800	38,100	47,000	164,000	139,000	365,000	64,000	100,000	54,000	40,400	32,100	37,100
19	32,200	43,500	47,000	157,000	140,000	340,000	64,000	108,000	56,000	34,600	38,800	37,200
20	32,400	55,400	52,000	147,000	142,000	340,000	63,000	112,000	54,000	36,500	35,200	31,600
21	31,900	56,600	48,000	143,000	151,000	310,000	60,000	100,000	45,000	32,900	39,700	31,400
22	32,100	56,200	45,000	145,000	161,000	270,000	56,000	81,000	44,000	40,100	37,400	39,900
23	31,700	55,800	45,000	146,000	174,000	240,000	54,000	61,000	43,000	41,900	37,800	45,800
24	32,000	56,100	41,000	147,000	199,000	230,000	54,000	48,000	38,000	41,700	33,200	56,400
25	31,100	55,300	47,000	148,000	211,000	215,000	60,000	52,000	38,000	42,700	33,100	56,100
26	29,500	54,000	66,000	143,000	184,000	210,000	75,000	38,000	38,000	42,200	32,900	55,400
27	29,700	54,900	102,000	135,000	157,000	220,000	70,000	40,000	38,000	41,100	31,700	52,600
28	29,200	54,900	128,000	132,000	147,000	215,000	55,000	52,000	39,000	39,500	31,300	52,000
29	29,000	54,300	136,000	140,000	------	250,000	50,000	54,000	39,000	40,300	31,900	51,200
30	32,100	54,600	158,000	143,000	------	260,000	45,000	52,000	39,000	39,800	32,800	44,800
31	31,900	------	180,000	144,000	------	250,000	------	50,000	------	32,100	31,700	------
TOTAL	1,057.5M	1,254.6M	2,006.2M	4,884.0M	4,372.0M	6,579.0M	3,724.0M	1,889.0M	1,317.0M	1,228.0M	1,154.0M	1,149.2M
MEAN	34,110	41,820	64,720	157,500	156,100	212,200	124,100	60,940	43,900	39,610	37,230	38,310
MAX	44,400	56,600	180,000	217,000	211,000	400,000	255,000	112,000	56,000	43,800	47,600	56,400
MIN	26,800	30,400	41,000	107,000	139,000	75,000	45,000	30,000	30,000	32,100	31,300	24,100

CAL YR 1974 TOTAL 31,716,100 MEAN 86,890 MAX 396,000 MIN 17,900
WTR YR 1975 TOTAL 30,614,500 MEAN 83,880 MAX 400,000 MIN 24,100

M Expressed in thousands.

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, 615,300 cfs-days (1,506 cu hm) June 4, elevation, 993.55 ft (302.834 m); minimum, 138,200 cfs-days (338.2 cu hm) Dec. 21, elevation, 944.70 ft (287.945 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, 347,100 cfs-days (849.3 cu hm) Apr. 3, elevation, 1,732.82 ft (528.164 m); minimum, 206,400 cfs-days (505.1 cu hm) Dec. 6, elevation, 1,691.00 ft (515.417 m). Extremes for period of record: Maximum contents, 347,100 cfs-days (849.3 cu hm) Apr. 3, 1975, elevation, 1,732.82 ft (528.164 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, 285,700 cfs-days (699.1 cu hm) Apr. 2, elevation, 1,958.67 ft (597.003 m); minimum, 174,000 cfs-days (425.8 cu hm) Sept. 17, elevation, 1,919.43 ft (585.042 m). Extremes for period of record: Maximum contents, 293,300 cfs-days (717.7 cu hm) Apr. 6, 1974, elevation, 1,961.07 ft (597.734 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 ft (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, 94,800 cfs-days (232.0 cu hm) June 13, elevation, 1,383.77 ft (421.773 m); minimum, 45,600 cfs-days (111.6 cu hm) Jan. 7, elevation, 1,353.50 ft (412.547 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) Oct. 9, elevation, 1,263.00 ft (384.962 m); minimum, 11,400 cfs-days (27.90 cu hm) June 6, elevation, 1,257.81 ft (383.380 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 gates, 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, 723,900 cfs-days (1,771 cu hm) May 21, elevation, 1,071.31 ft (326.535 m); minimum, 267,200 cfs-days (653.8 cu hm) Dec. 23, elevation, 1,030.00 ft (313.944 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, 184,000 cfs-days (450.2 cu hm) Mar. 14; maximum elevation, 813.20 ft (247.863 m) Mar. 14; minimum midnight contents, 144,000 cfs-days (352.4 cu hm) Feb. 21; minimum elevation, 806.87 ft (245.934 m) Jan. 8. 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, 25,200 cfs-days (61.66 cu hm) Mar. 30, elevation, 874.40 ft (266.517 m); minimum, 21,100 cfs-days (51.63 cu hm) Sept. 24, elevation, 869.60 ft (265.054 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 (0.034 m) above mean sea level. Gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 1,064,600 cfs-days (2,605 cu hm) Apr. 1, elevation, 1,022.20 ft (311.567 m); minimum, 424,600 cfs-days (1,039 cu hm) Nov. 19, elevation, 973.13 ft (296.610 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) downstream from 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, 61,200 cfs-days (149.8 cu hm) Mar. 29, elevation, 795.23 ft (242.386 m); minimum, 47,700 cfs-days (116.7 cu hm) Oct. 23, elevation, 790.10 ft (240.822 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 at 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, 541,000 cfs-days (1,324 cu hm) Mar. 30; maximum elevation, 742.80 ft (226.405 m) Mar. 14; minimum midnight contents, 410,000 cfs-days (1,003 cu hm) Dec. 24; minimum elevation, 735.04 ft (224.040 m) Dec. 9. 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 Lake Ocoee 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, 44,400 cfs-days (108.6 cu hm) Mar. 30 elevation, 838.4 ft (255.54 m); minimum observed, 33,300 cfs-days (81.49 cu hm) Feb. 23, elevation, 826.4 ft (251.89 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 storage 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, 355,000 cfs-days (868.7 cu hm) Mar. 31; maximum elevation, 683.56 ft (208.349 m) May 18; minimum midnight contents, 206,000 cfs-days (504.1 cu hm) Dec. 14; minimum elevation, 675.00 ft (205.740 m) Dec. 15. 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 gates 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, 2 miles (3 km) upstream from Sequatchie River, 5 miles (8 km) south of Jasper, 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, 141,000 cfs-days (345.0 cu hm) Mar. 30; maximum elevation, 634.35 ft (193.350 m) Aug. 15; minimum midnight contents, 115,000 cfs-days (281.4 cu hm) Oct. 13; minimum elevation, 631.90 ft (192.603 m) Oct. 3. 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 Spring, 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, 40,400 cfs-days (98.86 cu hm) Mar. 14, elevation, 960.06 ft (292.626 m); minimum, 36,100 cfs-days (88.34 cu hm) Feb. 23, elevation, 957.85 ft (291.953 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, 266,100 cfs-days (651.1 cu hm) May 16, elevation, 887.79 ft (270,598 m); minimum, 191,000 cfs-days (467.4 cu hm) Dec. 24, elevation, 871.83 ft (265.734 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, 38,820 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, 570,000 cfs-days (1,395 cu hm) Mar. 15; maximum elevation, 417.04 ft (127.114 m) Mar. 15; minimum midnight contents, 359,000 cfs-days (878.5 cu hm) Dec. 20; minimum elevation, 407.95 ft (124.343 m) Dec. 8. 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, 2,227,000 cfs-days (5,449 cu hm) Mar. 18; maximum elevation, 361.50 ft (110.185 m) Apr. 4; minimum midnight contents, 1,076,000 cfs-days (2,633 cu hm) Nov. 30; minimum elevation, 353.61 ft (107.780 m) Jan. 20. 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, IN FEET, AND CONTENTS, IN CFS-DAYS, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents
	03468500 Douglas Lake			03476000 South Holston Lake			03483500 Watauga Lake		
Sept. 30.....	965.23	292,200	-	1,701.89	238,500	-	1,934.77	214,200	-
Oct. 31.....	954.27	201,200	-91,000	1,699.15	230,200	-8,300	1,932.61	208,200	-6,000
Nov. 30.....	957.33	224,500	+23,300	1,692.21	209,900	-20,300	1,925.96	190,600	-17,600
Dec. 31.....	958.41	233,200	+8,700	1,702.53	240,500	+30,600	1,935.43	216,000	+25,400
CAL YR 1974	-	-	-12,500	-	-	-11,400	-	-	-21,600
Jan. 31.....	952.82	190,800	-42,400	1,707.84	257,200	+16,700	1,943.27	238,200	+22,200
Feb. 28.....	954.95	206,200	+15,400	1,709.41	262,300	+5,100	1,945.97	246,100	+7,900
Mar. 31.....	989.11	556,400	+350,200	1,731.44	341,400	+79,100	1,958.22	284,200	+38,100
Apr. 30.....	984.87	502,400	-54,000	1,727.21	324,500	-16,900	1,955.48	275,400	-8,800
May 31.....	992.60	602,600	+100,200	1,724.63	314,900	-9,600	1,950.07	258,300	-17,100
June 30.....	985.70	512,700	-89,900	1,718.24	292,200	-22,700	1,942.88	237,100	-21,200
July 31.....	970.13	338,600	-174,100	1,709.36	262,200	-30,000	1,934.45	213,300	-23,800
Aug. 31.....	957.60	226,700	-111,900	1,700.01	232,800	-29,400	1,923.97	185,500	-27,800
Sept. 30.....	960.71	252,600	+25,900	1,696.08	221,100	-11,700	1,923.22	183,600	-1,900
WTR YR 1975	-	-	-39,600	-	-	-17,400	-	-	-30,600

	03486800 Boone Lake			03487000 Fort Patrick Henry Lake			03493500 Cherokee Lake		
Sept. 30.....	1,377.17	81,300	-	1,259.38	12,000	-	1,048.48	433,700	-
Oct. 31.....	1,372.81	73,500	-7,800	1,260.18	12,300	+300	1,037.00	324,500	-109,200
Nov. 30.....	1,363.78	58,800	-14,700	1,262.25	13,200	+900	1,037.47	328,500	+4,000
Dec. 31.....	1,358.43	51,800	-7,000	1,261.15	12,800	-400	1,038.78	340,000	+11,500
CAL YR 1974	-	-	-5,200	-	-	+500	-	-	-55,500
Jan. 31.....	1,357.89	51,100	-700	1,261.90	13,100	+300	1,039.17	343,500	+3,500
Feb. 28.....	1,361.80	56,000	+4,900	1,259.04	11,900	-1,200	1,037.68	330,400	-13,100
Mar. 31.....	1,376.89	80,800	+24,800	1,260.62	12,500	+600	1,066.83	660,000	+329,600
Apr. 30.....	1,380.64	88,200	+7,400	1,260.91	12,600	+100	1,067.27	666,000	+6,000
May 31.....	1,380.40	87,700	-500	1,259.30	12,000	-600	1,070.57	713,200	+47,200
June 30.....	1,382.65	92,400	+4,700	1,259.85	12,200	+200	1,065.25	638,100	-75,100
July 31.....	1,382.57	92,200	-200	1,259.95	12,200	0	1,052.15	474,100	-164,000
Aug. 31.....	1,380.69	88,300	-3,900	1,261.75	13,000	+800	1,039.00	342,000	-132,100
Sept. 30.....	1,376.27	79,600	-8,700	1,260.83	12,600	-400	1,034.38	302,000	-40,000
WTR YR 1975	-	-	-1,700	-	-	+600	-	-	-131,700

	03499500 Fort Loudoun Lake‡			03518200 Chilhowee Lake			03532500 Norris Lake		
Sept. 30.....	811.85	175,000	-	873.28	24,200	-	989.04	588,000	-
Oct. 31.....	812.15	177,000	+2,000	872.45	23,500	-700	980.11	491,600	-96,400
Nov. 30.....	808.26	150,000	-27,000	873.88	24,700	+1,200	976.31	454,200	-37,400
Dec. 31.....	808.08	149,000	-1,000	873.88	24,700	0	981.37	504,400	+50,200
CAL YR 1974	-	-	-7,000	-	-	+400	-	-	-358,400
Jan. 31.....	807.71	147,000	-2,000	870.98	22,200	-2,500	995.29	663,100	+158,700
Feb. 28.....	807.71	147,000	0	872.57	23,600	+1,400	995.34	663,800	+700
Mar. 31.....	808.97	155,000	+8,000	871.40	22,600	-1,000	1,021.24	1,047,900	+384,100
Apr. 30.....	811.88	175,000	+20,000	872.77	23,800	+1,200	1,017.41	983,200	-64,700
May 31.....	812.63	180,000	+5,000	873.13	24,100	+300	1,019.61	1,020,000	+36,800
June 30.....	811.90	175,000	-5,000	871.78	22,900	-1,200	1,013.39	918,300	-101,700
July 31.....	812.00	176,000	+1,000	872.75	23,700	+800	1,002.29	755,000	-163,300
Aug. 31.....	812.25	178,000	+2,000	873.21	24,100	+400	990.29	602,600	-152,400
Sept. 30.....	812.10	176,000	-2,000	873.50	24,400	+300	984.37	536,000	-66,600
WTR YR 1975	-	-	+1,000	-	-	+200	-	-	-52,000

‡ Contents based on backwater profile.

Reservoirs in Tennessee River basin--Continued

MONTHEND ELEVATION, IN FEET, AND CONTENTS, IN CFS-DAYS, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	03535900 Melton Hill Lake			03543000 Watts Bar Lake‡			03564000 Lake Ocoee		
	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents
Sept. 30.....	794.15	58,100	-	740.78	505,000	-	834.1	40,100	-
Oct. 31.....	793.30	55,700	-2,400	738.52	462,000	-43,000	833.8	39,800	-300
Nov. 30.....	794.58	59,300	+3,600	736.19	421,000	-41,000	831.0	37,200	-2,600
Dec. 31.....	792.70	54,100	-5,200	737.20	439,000	+18,000	828.5	35,100	-2,100
CAL YR 1974	-	-	-3,000	-	-	+2,000	-	-	-6,400
Jan. 31.....	793.65	56,700	+2,600	735.56	411,000	-28,000	826.7	33,600	-1,500
Feb. 28.....	793.50	56,300	-400	735.48	409,000	-2,000	827.4	34,100	+500
Mar. 31.....	793.70	56,800	+500	742.03	530,000	+121,000	835.1	41,100	+7,000
Apr. 30.....	793.79	57,000	+200	741.00	509,000	-21,000	833.1	39,200	-1,900
May 31.....	794.29	58,400	+1,400	740.60	501,000	-8,000	833.6	39,700	+500
June 30.....	793.80	57,100	-1,300	740.00	490,000	-11,000	834.5	40,500	+800
July 31.....	793.92	57,400	+300	740.76	504,000	+14,000	834.2	40,200	-300
Aug. 31.....	794.23	58,300	+900	740.50	499,000	-5,000	834.3	40,300	+100
Sept. 30.....	794.00	57,600	-700	740.78	505,000	+6,000	833.9	39,900	-400
WTR YR 1975	-	-	-500	-	-	0	-	-	-200

Date	03566500 Chickamauga Lake‡			03570520 Nickajack Lake‡			03579000 Woods Reservoir		
	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents
Sept. 30.....	680.38	281,000	-	632.22	116,000	-	959.45	39,200	-
Oct. 31.....	678.65	249,000	-32.000	633.50	119,000	+3,000	958.85	38,000	-1,200
Nov. 30.....	676.46	217,000	-32,000	633.65	119,000	0	958.05	36,500	-1,500
Dec. 31.....	677.38	230,000	+13,000	632.40	113,000	-6,000	957.97	36,300	-200
CAL YR 1974	-	-	-1,000	-	-	-12,000	-	-	-400
Jan. 31.....	675.48	204,000	-26,000	632.40	113,000	0	957.95	36,300	0
Feb. 28.....	676.06	212,000	+8,000	632.32	113,000	0	958.00	36,400	+100
Mar. 31.....	683.17	328,000	+116,000	632.42	113,000	0	959.33	38,900	+2,500
Apr. 30.....	682.35	314,000	-14,000	633.12	117,000	+4,000	959.58	39,400	+500
May 31.....	682.80	322,000	+8,000	633.33	118,000	+1,000	959.47	39,200	-200
June 30.....	682.67	320,000	-2,000	633.47	118,000	0	959.47	39,200	0
July 31.....	680.90	287,000	-33,000	633.70	120,000	+2,000	959.47	39,200	0
Aug. 31.....	681.05	290,000	+3,000	633.50	119,000	-1,000	959.31	38,900	-300
Sept. 30.....	681.13	292,000	+2,000	632.38	116,000	-3,000	959.35	39,000	+100
WTR YR 1975	-	-	+11,000	-	-	0	-	-	-200

Date	03580740 Tims Ford Lake			03593000 Pickwick Lake‡			03609000 Kentucky Lake‡		
	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents	Elevation	Contents	Change in contents
Sept. 30.....	884.02	246,500	-	411.17	408,000	-	355.40	1,178,000	-
Oct. 31.....	881.59	234,500	-12,000	410.12	386,000	-22,000	354.53	1,104,000	-74,000
Nov. 30.....	876.85	212,400	-22,100	409.05	366,000	-20,000	354.00	1,069,000	-35,000
Dec. 31.....	876.86	212,500	+100	412.59	436,000	+70,000	355.13	1,144,000	+75,000
CAL YR 1974	-	-	-23,300	-	-	-94,000	-	-	-405,000
Jan. 31.....	873.24	196,800	-15,700	408.99	365,000	-71,000	353.96	1,067,000	-77,000
Feb. 28.....	874.86	203,700	+6,900	409.13	368,000	+3,000	355.58	1,175,000	+108,000
Mar. 31.....	886.47	259,100	+55,400	416.28	517,000	+149,000	361.08	1,602,000	+427,000
Apr. 30.....	884.78	250,400	-8,700	414.04	467,000	-50,000	358.10	1,361,000	-241,000
May 31.....	887.23	263,100	+12,700	413.31	451,000	-16,000	358.75	1,412,000	+51,000
June 30.....	887.09	262,400	-700	413.31	451,000	0	357.96	1,350,000	-62,000
July 31.....	887.46	264,300	+1,900	412.68	438,000	-13,000	356.82	1,264,000	-86,000
Aug. 31.....	886.63	260,000	-4,300	411.61	416,000	-22,000	355.84	1,194,000	-70,000
Sept. 30.....	887.38	264,000	+4,000	411.51	414,000	-2,000	355.25	1,153,000	-41,000
WTR YR 1975	-	-	+17,500	-	-	+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.--13 years, 111 cfs (3.144 cu m/s), 27.16 in/yr (690 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,840 cfs (137 cu m/s) Mar. 13, gage height, 12.55 ft (3.825 m); minimum, 29 cfs (0.82 cu m/s) July 5.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1920: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	46	104	161	209	72	115	271	242	30	262	35
2	42	46	91	95	342	71	95	81	61	30	184	33
3	39	55	73	158	305	63	82	151	48	30	70	33
4	39	78	65	109	310	62	70	89	43	30	313	32
5	38	74	63	81	562	60	65	59	40	40	240	33
6	37	51	63	75	722	59	61	501	39	176	72	36
7	37	47	102	70	214	72	59	1950	37	76	50	32
8	38	46	98	187	102	67	59	1440	36	42	43	32
9	38	44	73	391	90	59	135	1390	52	37	41	32
10	37	45	66	731	78	287	117	447	50	36	38	32
11	37	86	74	2300	105	287	77	99	58	36	38	35
12	37	62	81	699	99	1620	65	70	75	51	37	49
13	38	51	68	140	77	3870	59	58	41	40	36	38
14	39	49	63	93	72	1830	69	52	36	35	37	34
15	121	46	150	92	69	541	69	98	38	34	50	35
16	133	44	108	84	102	147	61	74	36	33	51	37
17	59	58	79	71	119	105	59	243	35	33	55	37
18	49	91	67	88	83	114	57	125	34	33	38	37
19	46	253	72	216	72	127	155	66	32	33	38	41
20	44	557	66	208	65	89	68	54	31	593	36	145
21	43	272	62	99	62	79	56	48	31	952	35	46
22	43	93	59	82	62	333	53	45	30	246	34	39
23	44	73	58	76	806	554	51	42	30	54	33	41
24	45	125	82	73	1020	448	51	40	30	57	32	239
25	44	176	131	83	239	308	101	39	31	55	32	258
26	43	94	85	70	96	96	65	39	32	45	32	82
27	43	77	112	64	81	80	53	40	37	39	35	53
28	45	68	125	64	75	996	50	82	31	37	45	45
29	44	64	194	67	---	2210	48	210	31	36	50	43
30	46	83	130	65	---	1230	273	68	30	35	43	42
31	46	---	110	150	---	274	---	259	---	36	50	---
TOTAL	1480	2954	2774	6942	6238	16210	2398	8230	1377	3040	2150	1706
MEAN	47.7	98.5	89.5	224	223	523	79.9	265	45.9	98.1	69.4	56.9
MAX	133	557	194	2300	1020	3870	273	1950	242	952	313	258
MIN	37	44	58	64	62	59	48	39	30	30	32	32
CFSM	.86	1.77	1.61	4.04	4.02	9.42	1.44	4.77	.83	1.77	1.25	1.03
IN.	.99	1.98	1.86	4.65	4.18	10.87	1.61	5.52	.92	2.04	1.44	1.14

CAL YR	1974	TOTAL	52925	MEAN	145	MAX	3520	MIN	28	CFSM	2.61	IN 35.47
WTR YR	1975	TOTAL	55499	MEAN	152	MAX	3870	MIN	30	CFSM	2.74	IN 37.20

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	0745	11.46	2,750	03-29	1845	11.14	2,310
03-13	0245	12.55	4,840	05-07	1245	11.17	2,340

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.--46 years, 577 cfs (16.34 cu m/s), 20.46 in/yr (520 mm/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 cfs (317 cu m/s) Mar. 14, gage height, 16.83 ft (5.130 m); minimum 142 cfs (4.02 cu m/s) July 5.
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. Records of periodic water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1311: 1936(M). WSP 1920: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	752	250	388	830	768	1340	4220	1170	878	151	260	189
2	610	273	404	680	1450	681	3050	1070	918	147	397	175
3	446	345	409	1210	1540	493	2120	1170	959	146	738	164
4	326	344	393	963	1740	440	1160	1190	705	145	898	158
5	269	404	356	772	2310	410	616	820	417	146	763	156
6	244	428	326	652	2720	392	461	623	293	533	763	156
7	228	422	374	538	2730	388	394	1560	238	432	613	157
8	217	370	413	933	2580	399	363	2320	206	427	410	153
9	209	323	411	1420	2280	400	427	4290	456	354	286	150
10	202	299	407	1850	1610	642	476	4070	358	258	231	148
11	200	367	394	2670	897	1080	549	3520	444	204	204	148
12	197	371	390	4100	722	2460	521	3000	701	277	189	174
13	199	384	371	4410	622	4580	444	2420	586	294	180	185
14	213	373	358	4070	574	9100	391	1390	454	248	174	181
15	377	335	444	3150	521	8560	375	697	348	206	305	174
16	451	305	438	2160	498	5250	364	489	251	180	455	168
17	496	307	471	1200	511	3720	350	1050	212	165	528	167
18	505	392	459	697	528	2710	331	1250	198	156	424	165
19	443	717	408	1000	538	1840	507	1070	180	152	310	221
20	358	926	359	1600	513	1160	492	971	170	1530	239	329
21	297	1020	332	1400	445	753	500	658	162	2530	205	277
22	262	1090	307	900	397	1010	430	426	157	2600	186	265
23	247	1120	287	640	2360	1120	350	319	153	2480	173	215
24	239	997	387	430	3390	1460	316	265	150	2200	164	241
25	236	733	525	500	4320	1670	424	265	150	1540	158	374
26	236	615	474	450	4250	1660	425	274	155	704	152	486
27	243	571	499	430	3430	1420	458	241	170	377	149	466
28	243	505	499	420	2400	4440	409	238	190	282	157	343
29	243	435	584	420	---	8470	341	453	170	229	223	244
30	244	385	623	540	---	7820	766	544	158	200	223	200
31	245	---	731	500	---	5920	---	739	---	183	203	---
TOTAL	9677	15406	13221	41535	46644	81788	22030	38562	10587	19476	10360	6629
MEAN	312	514	426	1340	1666	2638	734	1244	353	628	334	221
MAX	752	1120	731	4410	4320	9100	4220	4290	959	2600	898	486
MIN	197	250	287	420	397	388	316	238	150	145	149	148
CFSM	.81	1.34	1.11	3.50	4.35	6.89	1.92	3.25	.92	1.64	.87	.58
IN.	.94	1.50	1.28	4.03	4.53	7.94	2.14	3.75	1.03	1.89	1.01	.64

CAL YR	1974	TOTAL	293338	MEAN	804	MAX	11200	MIN	178	CFSM	2.10	IN 28.49
WTR YR	1975	TOTAL	315915	MEAN	866	MAX	9100	MIN	145	CFSM	2.26	IN 30.68

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-12	1900	15.77	4,510	03-29	0900	16.55	8,710
02-25	2300	15.75	4,440	05-09	1500	15.76	4,470
03-14	2200	16.83	11,200				

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.--38 years (1929-58, 1966-75), 2,666 cfs (75.50 cu m/s), 19.55 in/yr (497 mm/yr).

EXTREMES.--Current year: Maximum discharge, 47,200 cfs (1,340 cu m/s) Mar. 15, gage height, 34.22 ft (10.430 m); minimum, 591 cfs (16.7 cu m/s) Oct. 13, 14.
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. Records of water temperatures, specific conductivity, and chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Twenty-two discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1211: 1930, 1943. WSP 2120: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	703	1200	3320	4850	7000	30000	7140	7120	639	1500	914
2	1270	725	1370	2930	10200	5000	20000	7070	3570	631	2470	814
3	1050	995	1310	7270	10400	3500	12000	6560	2090	620	2350	762
4	892	933	1190	7960	8790	2500	8000	4410	1790	626	8000	728
5	798	1060	1100	4950	10200	2000	5500	3210	1390	1580	7550	1780
6	754	1000	1030	2950	11700	1800	4000	3160	1230	5730	4330	2960
7	711	938	1360	2050	9000	1700	3000	9200	1060	5610	2370	1830
8	695	920	2270	2960	7000	2860	2200	11200	928	3240	1610	864
9	688	853	1810	9150	5000	2180	1700	11900	1500	1850	1270	740
10	680	828	1470	11700	4000	4290	3200	11000	3040	1060	1120	707
11	662	1060	1360	15100	3500	10000	2500	9000	4720	832	1000	814
12	639	1310	1470	15500	4000	21300	2200	7000	6940	805	933	3790
13	622	1100	1440	14000	3000	34100	2000	5500	3500	1030	882	2340
14	602	993	1320	11000	2540	43800	1700	4500	1660	887	868	1170
15	1040	926	1360	8000	2120	46400	1600	3700	2160	749	1020	900
16	1930	859	2160	6000	2070	40000	1500	3000	1700	686	1500	828
17	1480	838	1630	4500	2330	30000	1400	3500	1270	654	1390	801
18	1140	962	1380	3500	2130	20000	1300	5760	1090	630	1230	779
19	983	1370	1270	4000	1880	15000	3730	4730	919	621	1060	823
20	880	3180	1230	3000	1700	11000	3360	2730	835	11800	924	1430
21	788	2660	1130	2300	1550	8000	2120	2070	790	19300	850	1320
22	726	1980	1050	2000	1460	9000	1730	1560	780	22500	797	991
23	692	1780	997	1800	9890	8000	1530	1310	748	20000	762	873
24	684	1870	2330	1700	14700	10000	1470	1170	725	15000	740	981
25	677	2970	5020	1600	15900	7500	3830	1110	685	11000	711	1740
26	676	2180	3660	1500	16000	6000	4050	1230	676	7500	690	1580
27	663	1590	2070	1450	13000	5500	2190	1510	674	5000	856	1290
28	670	1380	1900	1420	10000	17800	1710	1270	710	3500	976	1120
29	725	1230	2120	1380	---	29700	1480	2170	718	2000	1560	952
30	751	1130	2920	1370	---	39300	2710	2050	661	1200	2390	859
31	710	---	2350	1750	---	45000	---	3010	---	1000	1500	---
TOTAL	26798	40323	54277	158110	188910	490230	133710	142730	55679	148280	55209	37480
MEAN	864	1344	1751	5100	6747	15810	4457	4604	1856	4783	1781	1249
MAX	1930	3180	5020	15500	16000	46400	30000	11900	7120	22500	8000	3790
MIN	602	703	997	1370	1460	1700	1300	1110	661	620	690	707
CFSM	.47	.73	.95	2.75	3.64	8.54	2.41	2.49	1.00	2.58	.96	.67
IN.	.54	.81	1.09	3.18	3.79	9.85	2.69	2.87	1.12	2.98	1.11	.75

CAL YR	1974	TOTAL	1265191	MEAN	3466	MAX	38200	MIN	602	CFSM	1.87	IN 25.41
WTR YR	1975	TOTAL	1531736	MEAN	4197	MAX	46400	MIN	602	CFSM	2.27	IN 30.77

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, 14.70 ft (4.481 m) Mar. 30; minimum, 11.58 ft (3.530 m) July 4.
Period of record: Maximum gage height, 15.65 ft (4,770 m), from recorded range in stage, about Apr. 26, 1973; minimum, 11.02 ft (3.359 m) Nov. 15, 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. Records of periodic water temperatures and chemical analyses for the current year are published in Part 2 of this report.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT MIDNIGHT

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.05	11.96	12.20	12.20	12.33	12.59	14.58	12.24	11.92	11.64	12.06	11.95
2	12.01	11.97	12.20	12.22	12.35	12.50	14.42	12.20	11.90	11.62	12.03	11.95
3	11.97	11.96	12.18	12.24	12.33	12.35	14.36	12.18	11.88	11.60	12.10	11.92
4	11.93	11.96	12.19	12.25	12.32	12.25	14.25	12.15	11.84	11.58	12.15	11.91
5	11.93	11.97	12.18	12.20	12.29	12.11	14.14	12.11	11.85	11.60	12.19	11.94
6	11.96	11.99	12.19	12.21	12.22	12.06	14.00	12.14	11.85	11.93	12.18	11.95
7	11.95	11.99	12.24	12.18	12.14	12.18	13.85	12.14	11.87	12.01	12.14	11.95
8	11.91	11.99	12.23	12.21	12.27	12.20	13.69	12.15	11.85	12.07	12.08	11.94
9	11.90	11.97	12.15	12.16	12.22	12.20	13.68	12.14	11.90	12.10	12.02	11.93
10	11.89	12.01	12.16	12.03	12.15	12.25	13.65	12.12	11.91	12.13	11.98	11.91
11	11.88	12.04	12.15	12.30	12.20	12.36	13.48	12.10	11.92	12.10	11.98	12.00
12	11.87	12.03	12.20	12.36	12.15	13.02	13.33	12.10	11.88	12.15	11.97	12.09
13	11.85	12.06	12.20	12.25	12.10	13.34	13.20	12.05	11.86	12.15	11.99	12.08
14	12.00	12.04	12.14	12.17	12.05	13.40	13.10	12.01	11.83	12.13	11.97	12.08
15	11.95	12.02	12.20	12.15	12.02	13.40	12.98	12.00	11.88	12.13	12.04	12.07
16	11.92	12.02	12.20	12.18	12.05	13.32	12.83	12.02	11.88	12.10	12.07	12.08
17	11.94	12.04	12.22	12.14	12.03	13.23	12.65	12.00	11.89	12.08	12.09	12.07
18	11.97	12.04	12.16	12.13	12.04	13.22	12.55	11.98	11.88	12.07	12.08	12.05
19	11.90	12.06	12.23	12.23	12.05	13.20	12.55	11.95	11.87	12.13	12.07	12.20
20	11.91	12.04	12.21	12.11	12.06	13.12	12.50	11.97	11.86	12.27	12.06	12.18
21	11.88	12.08	12.23	12.13	12.07	12.92	12.41	11.97	11.86	12.23	12.04	12.18
22	11.87	12.05	12.14	12.17	12.25	13.00	12.28	11.97	11.82	12.22	12.02	12.16
23	11.87	12.05	12.22	12.13	12.33	12.95	12.14	11.95	11.79	12.18	12.00	12.15
24	11.87	12.17	12.38	12.10	12.54	12.88	12.07	11.94	11.78	12.15	11.95	12.14
25	11.85	12.15	12.40	12.05	12.73	12.90	12.20	11.91	11.73	12.11	11.93	12.06
26	11.87	12.13	12.33	12.15	12.75	12.80	12.19	11.92	11.75	12.10	11.96	12.04
27	11.85	12.14	12.29	12.15	12.69	12.67	12.12	11.93	11.72	12.06	11.95	12.04
28	11.90	12.15	12.26	12.10	12.62	13.92	12.08	11.92	11.71	12.03	11.93	12.03
29	11.92	12.15	12.25	12.20	---	14.61	12.13	11.93	11.69	12.02	11.88	12.02
30	11.93	12.15	12.23	12.20	---	14.70	12.20	11.90	11.67	12.02	11.95	12.02
31	11.91	---	12.23	12.24	---	14.66	---	11.95	---	12.03	11.97	---
MEAN	11.92	12.05	12.22	12.18	12.26	12.98	13.05	12.03	11.83	12.02	12.03	12.04
MAX	12.05	12.17	12.40	12.36	12.75	14.70	14.58	12.24	11.92	12.27	12.19	12.20
MIN	11.85	11.96	12.14	12.03	12.02	12.06	12.07	11.90	11.67	11.58	11.88	11.91

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 Gulf Railroad bridge, 0.6 mile (1.0 km) downstream from Spring Creek, and 1.5 miles (2.4 km) northeast of Bolivar and at mile 135.1.

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 sites in this vicinity at same datum.

AVERAGE DISCHARGE.--46 years, 2,360 cfs (66.84 cu m/s), 21.65 in/yr (550 mm/yr).

EXTREMES.--Current year: Maximum discharge, 35,400 cfs (1,000 cu m/s) Mar. 16, gage height, 19.84 ft (6.047 m), from rating curve extended above 32,000 cfs (906 cu m/s); minimum, 465 cfs (13.2 cu m/s) July 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 fair. Records of periodic water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1211: 1937. WSP 1920: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	715	2480	11900	4020	8230	8210	3590	2870	575	797	593
2	1560	727	2160	10500	5290	7130	9230	3620	2720	561	923	586
3	1120	699	2020	9490	5400	6200	9030	3650	2490	621	1230	531
4	834	709	1880	8610	5590	5490	8580	3710	2190	753	1730	490
5	695	994	1700	7770	5960	4870	7640	3840	1910	745	2100	597
6	627	1550	1500	7040	5940	4340	6760	3920	1590	665	2330	938
7	593	2030	1410	6390	5600	3840	5980	3920	1290	652	2420	1020
8	566	2110	1590	5890	5490	3210	5330	3760	1100	795	2420	1190
9	548	1920	1960	5610	5510	2510	5320	3690	998	850	2260	1020
10	538	1600	2280	6290	5520	2270	5170	3770	956	844	1850	785
11	529	1350	2490	7980	5610	2550	4420	3970	932	791	1370	679
12	516	1270	2680	7370	5930	8510	4020	3320	996	753	1010	869
13	507	1350	2770	7930	5480	31200	3730	3090	1050	713	836	996
14	498	1390	2830	11800	4990	31000	3660	3030	992	630	741	1020
15	598	1270	3200	12000	4550	33000	3630	3870	897	561	681	1090
16	1160	1060	3550	10300	4530	34400	3550	5120	876	516	640	1060
17	1810	985	3620	8790	4870	28300	3390	5750	882	486	636	954
18	2260	998	3620	7680	4440	19800	3140	6660	846	470	834	869
19	2240	1190	3540	7010	4240	13900	2900	9030	785	481	1220	932
20	1970	2040	3500	6830	4090	10500	2590	9600	731	533	1290	1330
21	1520	2710	3440	6390	4000	8620	2370	8670	691	705	1050	1390
22	1070	3150	3260	6010	3960	7500	2180	7660	677	923	825	1340
23	872	3340	2950	5730	6680	6680	2030	6820	667	1050	689	1400
24	768	3400	3440	5780	10200	6200	1850	6060	642	1040	617	1470
25	717	3520	6740	5960	10700	5470	1720	5330	613	1270	586	1660
26	691	3570	6660	5940	12100	4910	1680	5030	587	1580	553	1770
27	673	3550	7040	5710	11400	4510	1720	4810	593	1830	521	1750
28	661	3440	8640	5330	9630	4290	1840	4090	654	1750	503	1600
29	661	3230	11400	4940	---	5930	2500	3810	602	1510	492	1370
30	655	2910	13200	4540	---	7200	3010	3280	586	1160	510	1100
31	663	---	12900	4150	---	7380	---	2950	---	878	531	---
TOTAL	29820	58777	130450	227660	171720	329940	127180	149420	33413	26691	34195	32399
MEAN	962	1959	4208	7344	6133	10640	4239	4820	1114	861	1103	1080
MAX	2260	3570	13200	12000	12100	34400	9230	9600	2870	1830	2420	1770
MIN	498	699	1410	4150	3960	2270	1680	2950	586	470	492	490
CFSM	.65	1.32	2.84	4.96	4.14	7.19	2.86	3.26	.75	.58	.75	.73
IN.	.75	1.48	3.28	5.72	4.32	8.29	3.20	3.76	.84	.67	.86	.81

CAL YR 1974 TOTAL 1321495 MEAN 3621 MAX 46000 MIN 445 CFSM 2.45 IN 33.22
WTR YR 1975 TOTAL 1351665 MEAN 3703 MAX 34400 MIN 470 CFSM 2.50 IN 33.97

PEAK DISCHARGE (BASE, 8,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1600	16.87	13,300	03-16	0500	19.84	35,400
01-14	2300	16.73	12,700	04-02	2200	15.94	9,490
02-26	1500	16.65	12,300	05-20	0300	16.04	9,850

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 30.4 (48.9 km).

DRAINAGE.--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.

AVERAGE DISCHARGE.--6 years, 397 cfs (11.24 cu m/s), 20.58 in/yr (523 mm/yr).

EXTREMES.--Current year: Maximum discharge, 23,700 cfs (671 cu m/s) Mar. 13, gage height, 24.96 ft (7.608 m); minimum daily, 80 cfs (2.27 cu m/s) Oct. 12-14.
Period of record: Maximum discharge, 23,700 cfs (671 cu m/s) Mar. 13, 1975, gage height, 24.96 ft (7.608 m); minimum, 66 cfs (1.87 cu m/s) Apr. 6, 7, 1974.

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

DISCHARGE, IN CUBIC FEET PER SECOND , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	92	153	639	1450	205	246	126	199	94	94	91
2	150	91	145	313	3130	194	198	115	122	94	96	89
3	130	91	129	827	1920	181	167	126	114	92	96	88
4	120	269	110	423	1670	175	141	125	110	92	214	87
5	110	563	102	218	2550	172	134	114	109	92	112	87
6	100	167	101	183	1750	172	129	110	109	99	96	87
7	95	124	102	155	436	172	129	107	107	95	92	86
8	90	115	100	569	286	159	129	122	106	93	92	86
9	87	112	94	1340	262	155	680	166	106	91	95	85
10	84	108	93	2610	233	1290	685	112	110	91	96	95
11	82	130	108	4530	240	663	229	221	109	91	94	91
12	80	121	157	2030	666	3750	162	307	136	91	94	131
13	80	109	118	421	271	14900	140	132	109	89	94	107
14	80	104	106	271	217	8210	157	120	103	89	94	89
15	100	101	349	290	200	2050	179	335	141	90	95	88
16	200	100	321	271	764	498	150	235	118	91	95	87
17	150	101	163	218	1440	387	144	178	106	91	164	86
18	110	100	136	213	394	525	140	153	103	92	114	86
19	95	504	131	376	255	650	322	125	101	109	101	104
20	92	1500	126	469	202	281	187	117	100	108	99	172
21	92	349	123	244	183	225	134	113	99	179	98	102
22	92	173	120	198	185	328	126	110	99	107	98	95
23	92	137	116	179	3270	313	121	109	98	103	98	93
24	92	188	1430	160	3260	1270	121	108	98	102	98	93
25	91	340	4050	183	992	327	123	107	98	197	98	94
26	91	183	2920	169	288	184	128	107	96	155	98	92
27	90	136	1710	157	239	159	118	114	96	96	100	91
28	91	120	1200	152	218	2090	117	112	113	93	96	91
29	95	114	1460	162	---	3520	117	125	96	91	94	90
30	95	139	843	164	---	2660	141	145	95	89	114	90
31	92	---	483	220	---	493	---	250	---	88	101	---
TOTAL	3218	6481	17299	18354	26971	46358	5694	4546	3306	3174	3220	2853
MEAN	104	216	558	592	963	1495	190	147	110	102	104	95.1
MAX	200	1500	4050	4530	3270	14900	685	335	199	197	214	172
MIN	80	91	93	152	183	155	117	107	95	88	92	85
CFSM	.40	.82	2.13	2.26	3.68	5.71	.73	.56	.42	.39	.40	.36
IN.	.46	.92	2.46	2.61	3.83	6.58	.81	.65	.47	.45	.46	.41

CAL YR	1974	TOTAL	218393	MEAN	598	MAX	12200	MIN	66	CFSM	2.28	IN 31.00
WTR YR	1975	TOTAL	141474	MEAN	388	MAX	14900	MIN	80	CFSM	1.48	IN 20.09

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
03-13	1345	24.96	23,700				

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).

AVERAGE DISCHARGE.--6 years, 1,031 cfs (29.20 cu m/s), 20.03 in/yr (509 mm/yr).

EXTREMES.--Current year: Maximum discharge, 33,400 cfs (946 cu m/s) Mar. 14, gage height, 27.98 ft (8.528 m); minimum, 300 cfs (8.50 cu m/s) July 20.
Period of record: Maximum discharge, 33,400 cfs (946 cu m/s) Mar. 14, 1975, gage height, 27.98 ft (8.528 m); minimum, 190 cfs (5.38 cu m/s) Sept. 15, 16, 1972.
CORRECTIONS.--The date of the maximum discharge for water year 1974 is Jan. 12, 1974; the previously published date was not that of the maximum.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	509	381	506	3,050	1,370	2,130	4,090	1,540	761	317	371	305
2	508	381	484	2,370	2,250	1,410	3,380	1,620	731	427	369	308
3	527	381	465	2,290	2,720	943	2,670	2,620	805	327	380	312
4	525	1,410	448	1,790	3,780	757	1,930	2,370	801	316	412	319
5	477	1,040	438	1,480	5,200	649	1,260	2,170	695	322	457	322
6	417	753	436	1,180	4,390	580	899	1,700	553	320	589	347
7	380	804	446	950	3,710	550	774	1,120	455	321	581	333
8	359	769	455	1,010	2,890	510	711	897	407	335	486	336
9	350	667	448	1,050	2,350	492	988	1,370	380	355	457	445
10	343	604	439	3,840	1,830	1,280	1,230	778	371	374	451	476
11	337	670	469	3,310	1,370	1,070	1,270	949	369	439	425	540
12	336	622	548	4,780	1,480	8,910	1,130	1,320	388	364	400	691
13	336	568	556	4,580	1,540	20,700	953	1,260	380	352	342	620
14	334	536	566	3,910	1,350	30,400	885	1,090	374	338	331	555
15	348	490	760	3,040	1,160	24,300	866	1,380	383	323	323	491
16	387	466	810	2,360	1,500	13,500	792	1,280	446	313	317	421
17	418	459	858	1,720	1,870	6,170	720	1,460	462	307	313	376
18	496	465	794	1,150	2,010	4,010	659	1,840	407	303	316	357
19	524	714	721	1,080	1,880	2,870	623	2,070	372	302	371	364
20	532	870	672	1,240	1,660	2,060	635	2,050	355	302	383	454
21	536	763	664	1,220	1,260	1,580	639	1,900	345	326	347	358
22	537	811	636	1,150	842	1,310	592	1,430	336	367	337	360
23	524	789	578	1,100	3,850	1,090	545	901	330	801	339	359
24	480	846	2,050	1,060	4,150	1,610	524	634	322	574	333	353
25	426	1,030	4,290	968	7,200	1,320	538	505	317	524	321	344
26	394	943	5,840	810	6,000	1,190	923	658	312	585	311	340
27	380	817	6,280	668	4,420	881	1,040	586	324	476	305	331
28	373	673	5,450	578	3,020	1,690	1,080	488	327	417	416	327
29	394	576	5,170	531	------	4,040	1,020	708	318	405	347	324
30	389	529	4,300	503	------	5,520	1,370	577	317	400	328	321
31	381	------	3,710	541	------	5,370	------	820	------	385	309	------
TOTAL	13,257	20,827	50,287	55,309	77,052	148,892	34,736	40,091	13,143	12,017	11,767	11,789
MEAN	428	694	1,622	1,784	2,752	4,803	1,158	1,293	438	388	380	393
MAX	537	1,410	6,280	4,780	7,200	30,400	4,090	2,620	805	801	589	691
MIN	334	381	436	503	842	492	524	488	312	302	305	305
CFSM	.61	.99	2.32	2.55	3.94	6.87	1.66	1.85	.63	.56	.54	.56
IN.	.71	1.11	2.68	2.94	4.10	7.92	1.85	2.13	.70	.64	.63	.63

CAL YR 1974 TOTAL 444,458 MEAN 1,218 MAX 15,400 MIN 282 CFSM 1.74 IN 23.65
WTR YR 1975 TOTAL 489,167 MEAN 1,340 MAX 30,400 MIN 302 CFSM 1.92 IN 26.03

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-25	1100	15.03	7,350	03-14	1215	27.98	33,400

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, 62.4 mi (100.4 km), revised, 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 1,000 ft (305 m) downstream from present site, and since December 1934 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 non-recording gage 1.3 mi (2.1 km) upstream at same datum. Apr. 16 to Dec. 21, 1934, nonrecording gage 1,000 ft (305 m) downstream at same datum.

AVERAGE DISCHARGE.--42 years, 472,000 cfs (13,400 cu m/s), 342,000,000 acre-ft/yr (422 cu km/yr).

EXTREMES.--Water year 1974: Maximum discharge, 1,490,000 cfs (42,200 cu m/s) Feb. 6-7; maximum gage height, 36.36 ft (11.083 m) Feb. 7; minimum daily discharge, 226,000 cfs (6,400 cu m/s) Aug. 10.
Water year 1975: Maximum discharge, 1,780,000 cfs (50,400 cu m/s) Apr. 6-7; maximum gage height, 40.32 ft (12.290 m) Apr. 7; minimum discharge, 199,000 cfs (5,640 cu m/s) Nov. 3, gage height 0.19 ft (0.058 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.

COOPERATION.--Records furnished by Corps of Engineers.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280000	349000	829000	940000	1440000	922000	954000	635000	960000	722000	235000	299000
2	338000	355000	878000	974000	1450000	907000	908000	614000	945000	735000	238000	336000
3	401000	374000	936000	1010000	1470000	880000	850000	598000	934000	739000	241000	363000
4	449000	402000	966000	1010000	1480000	840000	806000	585000	937000	734000	241000	376000
5	492000	420000	995000	1010000	1480000	803000	785000	576000	956000	722000	240000	393000
6	525000	421000	1010000	1010000	1490000	760000	794000	568000	978000	704000	236000	430000
7	544000	416000	1030000	1020000	1490000	715000	821000	574000	1030000	681000	232000	460000
8	550000	409000	1040000	1030000	1470000	678000	864000	588000	1050000	654000	228000	464000
9	552000	398000	1050000	1050000	1440000	667000	885000	601000	1060000	623000	228000	474000
10	554000	385000	1050000	1070000	1400000	679000	900000	604000	1080000	593000	226000	484000
11	556000	363000	1050000	1110000	1380000	713000	918000	611000	1080000	565000	229000	478000
12	547000	344000	1030000	1120000	1330000	749000	955000	605000	1090000	534000	235000	462000
13	522000	337000	999000	1140000	1270000	778000	967000	596000	1100000	491000	244000	440000
14	483000	332000	936000	1150000	1220000	818000	982000	581000	1100000	455000	266000	410000
15	437000	329000	853000	1150000	1170000	856000	992000	577000	1090000	425000	291000	386000
16	409000	322000	754000	1170000	1110000	899000	996000	572000	1080000	400000	317000	385000
17	416000	308000	659000	1190000	1020000	939000	1000000	583000	1050000	363000	336000	394000
18	450000	303000	592000	1210000	922000	975000	1010000	617000	1020000	330000	337000	403000
19	471000	304000	582000	1240000	860000	1020000	1000000	662000	980000	315000	313000	406000
20	474000	307000	525000	1260000	821000	1040000	987000	724000	930000	306000	289000	390000
21	476000	321000	503000	1280000	802000	1060000	960000	773000	864000	303000	281000	366000
22	482000	328000	492000	1290000	808000	1080000	958000	807000	807000	297000	277000	336000
23	487000	329000	484000	1300000	821000	1080000	925000	828000	754000	291000	269000	302000
24	487000	336000	476000	1320000	857000	1080000	878000	848000	707000	284000	262000	265000
25	481000	360000	476000	1340000	886000	1080000	839000	875000	673000	272000	254000	242000
26	473000	415000	495000	1350000	906000	1060000	796000	903000	657000	265000	252000	233000
27	456000	529000	531000	1370000	923000	1050000	754000	926000	659000	254000	254000	240000
28	432000	620000	586000	1390000	924000	1080000	719000	932000	672000	247000	250000	247000
29	403000	682000	661000	1400000	---	1020000	690000	935000	684000	241000	248000	250000
30	375000	758000	737000	1410000	---	1000000	659000	936000	702000	239000	251000	237000
31	356000	---	801000	1420000	---	983000	---	944000	---	237000	263000	---
TOTAL	14358000	11856000	24006000	36734000	32640000	28211000	26552000	21778000	27629000	14021000	8063000	10951000
MEAN	463200	395200	774400	1185000	1166000	910000	885100	702500	921000	452300	260100	365000
MAX	556000	758000	1050000	1420000	1490000	1080000	1010000	944000	1100000	739000	337000	484000
MIN	280000	303000	476000	940000	802000	667000	659000	568000	657000	237000	226000	233000
AC-FT	28480000	23520000	47620000	72860000	64740000	55960000	52670000	43200000	54800000	27810000	15990000	21720000

CAL YR 1973 TOTAL 275924000 MEAN 756000 MAX 1630000 MIN 213000 AC-FT 547300000
WTR YR 1974 TOTAL 256799000 MEAN 703600 MAX 1490000 MIN 226000 AC-FT 509400000

07032000 Mississippi River at Memphis, Tenn.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230000	204000	444000	586000	699000	1090000	1640000	986000	563000	467000	288000	273000
2	237000	202000	435000	617000	713000	1120000	1660000	1030000	551000	477000	277000	290000
3	252000	200000	425000	654000	748000	1150000	1660000	1060000	536000	486000	256000	310000
4	261000	205000	414000	680000	806000	1160000	1720000	1090000	550000	494000	253000	318000
5	265000	214000	413000	699000	867000	1160000	1750000	1100000	514000	491000	262000	334000
6	268000	219000	426000	721000	902000	1170000	1780000	1120000	523000	469000	259000	352000
7	265000	222000	451000	732000	920000	1160000	1780000	1110000	531000	461000	257000	373000
8	250000	278000	484000	735000	935000	1160000	1740000	1110000	532000	461000	248000	373000
9	241000	345000	505000	731000	953000	1140000	1710000	1110000	524000	472000	247000	352000
10	239000	409000	516000	737000	967000	1140000	1670000	1110000	513000	484000	252000	320000
11	230000	439000	517000	739000	982000	1120000	1680000	1100000	499000	473000	258000	307000
12	218000	434000	520000	734000	985000	1130000	1670000	1100000	494000	444000	268000	303000
13	215000	410000	528000	752000	983000	1150000	1540000	1090000	495000	433000	254000	388000
14	214000	401000	534000	799000	980000	1130000	1510000	1080000	500000	425000	241000	292000
15	208000	402000	540000	852000	973000	1130000	1380000	1060000	500000	413000	242000	293000
16	204000	412000	544000	892000	963000	1140000	1280000	1030000	493000	395000	229000	295000
17	207000	419000	545000	916000	950000	1160000	1130000	987000	483000	368000	229000	298000
18	214000	421000	540000	929000	925000	1200000	984000	931000	480000	352000	232000	313000
19	228000	415000	540000	929000	890000	1250000	849000	870000	486000	342000	232000	322000
20	238000	424000	529000	915000	855000	1280000	756000	817000	493000	334000	261000	314000
21	246000	419000	518000	886000	827000	1310000	680000	784000	500000	331000	273000	300000
22	249000	418000	515000	853000	813000	1330000	644000	759000	511000	333000	283000	295000
23	249000	416000	514000	818000	825000	1400000	625000	740000	514000	334000	294000	296000
24	248000	418000	511000	786000	827000	1450000	615000	720000	511000	337000	283000	310000
25	241000	417000	511000	763000	858000	1490000	616000	698000	502000	344000	258000	335000
26	231000	420000	501000	748000	923000	1500000	656000	677000	491000	351000	242000	357000
27	221000	426000	501000	742000	988000	1500000	706000	655000	480000	343000	233000	352000
28	211000	438000	502000	743000	1040000	1550000	795000	621000	467000	335000	227000	377000
29	210000	430000	511000	743000	---	1580000	871000	594000	452000	328000	228000	391000
30	210000	452000	533000	730000	---	1590000	939000	578000	452000	317000	239000	418000
31	208000	---	555000	709000	---	1610000	---	570000	---	303000	254000	---
TOTAL	7208000	10929000	15522000	23870000	25097000	39450000	37036000	28287000	15140000	12397000	7859000	9851000
MEAN	232500	364300	500700	770000	896300	1273000	1235000	912500	504700	399900	253500	328400
MAX	268000	452000	555000	929000	1040000	1610000	1780000	1120000	563000	494000	294000	418000
MIN	204000	200000	413000	586000	699000	1090000	615000	570000	452000	303000	227000	273000
AC-FT	14300000	21680000	30790000	47350000	49780000	78250000	73460000	56110000	30030000	24590000	15590000	19540000

CAL YR 1974 TOTAL 240238000 MEAN 658200 MAX 1490000 MIN 200000 AC-FT 476500000
WTR YR 1975 TOTAL 232646000 MEAN 637400 MAX 1780000 MIN 200000 AC-FT 461500000

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, 1.6 miles (4.2 km) south of Germantown, and 17.3 miles (27.8 km) upstream from mouth.

DRAINAGE AREA.--68.2 sq mi (176.6 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).

AVERAGE DISCHARGE.--6 years, 107 cfs (3.03 cu m/m), 21.31 in/yr (541 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,680 cfs (274 cu m/s) Mar. 12, gage height, 27.11 ft (8.263 m); minimum, .10 cfs (.003 cu m/s) Sept. 29, 30.
Period of record: Maximum discharge, 9,680 cfs (274 cu m/s) Mar. 12, 1975, gage height, 27.11 ft (8.263 m); no flow at times most years.

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

REVISIONS.--WRD Tenn. 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.1	1.4	135	805	27	40	96	24	.72	.43	2.0
2	.75	1.8	1.1	42	880	23	23	30	8.8	41	.51	1.3
3	.55	1.4	.95	306	633	20	16	1010	3.3	13	1.3	.99
4	.55	455	.95	70	697	18	11	162	2.1	4.2	2.4	.87
5	.55	101	.55	22	1090	17	8.8	29	1.9	1.0	.94	94
6	.55	8.2	.45	11	299	16	7.0	15	1.9	.72	.51	200
7	.65	3.6	.45	7.6	51	16	6.0	72	1.9	.60	.43	7.6
8	.85	1.2	.30	255	20	14	5.4	24	74	.51	.36	3.0
9	.75	.71	.21	119	13	14	401	11	5.4	5.2	.36	3.7
10	.65	1.1	1.0	2400	8.9	558	198	21	3.3	7.7	.30	3.8
11	.65	27	.40	675	237	162	27	125	4.7	118	.21	2.0
12	.65	6.9	3.5	133	629	5470	7.7	86	8.8	6.3	.21	73
13	.55	2.7	.90	95	48	4910	3.7	8.0	4.9	2.3	.21	6.3
14	.55	1.0	.70	54	22	1130	72	5.4	2.3	1.0	.18	3.1
15	9.5	.62	.55	92	15	278	15	630	2.4	.60	.15	2.0
16	9.5	.52	.50	80	964	182	5.4	111	2.8	.43	.15	1.4
17	4.6	2.4	.45	34	974	167	2.9	152	1.6	.43	.15	1.2
18	2.1	2.5	.42	22	99	256	1.9	39	1.3	.43	.15	1.1
19	1.4	21	.40	355	41	218	1.2	14	1.0	.51	.15	24
20	1.2	148	.38	190	28	84	.60	8.8	1.0	1.6	.25	64
21	1.2	18	.36	57	22	55	.85	5.7	1.0	3.1	.21	7.7
22	1.5	7.6	.35	26	20	90	.51	4.7	.94	1.2	.18	3.1
23	1.4	3.7	.35	15	2090	135	.30	4.2	.85	20	.15	2.1
24	1.1	15	950	12	471	650	.25	3.7	.60	5.7	.15	1.3
25	1.1	54	200	12	68	84	5.4	3.5	.60	.94	.14	.60
26	1.1	11	40	10	40	28	415	8.8	.43	1.2	.12	.15
27	1.1	6.2	150	6.2	36	20	57	36	.43	.43	.12	.13
28	1.1	4.6	450	4.4	32	408	63	12	.72	.30	92	.12
29	14	2.1	354	4.1	---	2450	339	94	1.7	.25	13	.10
30	5.4	1.5	162	3.6	---	538	648	21	1.3	.18	24	.10
31	2.8	---	313	94	---	106	---	68	---	.18	6.2	---
TOTAL	69.85	912.45	2635.62	5341.9	10332.9	18144	2382.91	2910.8	165.97	239.73	145.62	510.76
MEAN	2.25	30.4	85.0	172	369	585	79.4	93.9	5.53	7.73	4.70	17.0
MAX	14	455	950	2400	2090	5470	648	1010	74	118	92	200
MIN	.55	.52	.21	3.6	8.9	14	.25	3.5	.43	.18	.12	.10
CFSM	.03	.45	1.25	2.52	5.41	8.58	1.16	1.38	.08	.11	.07	.25
IN.	.04	.50	1.44	2.91	5.64	9.90	1.30	1.59	.09	.13	.08	.28

CAL YR 1974 TOTAL 48086.24 MEAN 132 MAX 4950 MIN .21 CFSM 1.94 IN 26.23
WTR YR 1975 TOTAL 43792.51 MEAN 120 MAX 5470 MIN .10 CFSM 1.76 IN 23.89

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-10	1445	19.42	5,020	03-12	1815	27.11	9,680
02-16	2400	14.58	2,830	03-29	0415	19.46	5,020
02-23	0900	19.16	4,890				

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 table 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. Other measurements, made for seepage investigations, are listed in subsequent tables.

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 1975

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Mobile River basin				
*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 60 and 74 in Cleveland.	4.35	1975	7-16-75	0.47
		Cumberland River basin				
03407879	Smoky Creek at Smoky Junction, Tenn.	Lat 36°16'38", long 84°22'27", Scott County, 1.0 mile southwest of Smoky Junction and at mile 0.9.	32.8	1975	7-21-75	3.4
03414340	East Fork Obey River at Obey City, Tenn.	Lat 36°11'02", long 85°09'53", Overton County, at county road bridge, 0.7 mile north of Obey City, 0.8 mile west of Cliff Springs, and at mile 39.6.	34.6	1975	8-14-75	2.2
03414680	West Fork Obey River near Allred, Tenn.	Lat 36°18'52", long 85°10'53", Overton County, at bridge on State Highway 85, 1.1 miles south of Allred and at mile 15.4.	70.8	1975	8-14-75	.83
03417695	Roaring River at Okalona, Tenn.	Lat 36°19'08", long 85°20'30", Overton County, at bridge on State Highway 42, 0.4 mile south of Okalona, 4.5 miles south of Livingston, and at mile 33.0.	15.3	1929, 1975	8-14-75	2.8
03418030	Spring Creek near Algood, Tenn.	Lat 36°14'46", long 85°23'14", Overton County, at bridge on State Highway 42, 4.8 miles northeast of Algood and at mile 21.2.	13.8	1929, 1975	8-14-75	3.1
03418180	Blackburn Fork near Dobson Branch, Tenn.	Lat 36°20'53", long 85°34'00", Jackson County, at bridge on State Highway 135, 3.1 miles northwest of Dobson Branch, and at mile 0.24.	61.0	1974-75	8-15-75	21
03419110	Caney Fork at Dodson, Tenn.	Lat 35°49'12", long 85°22'58", White County, 300 ft upstream from Dry Creek, 0.6 mile upstream from county highway bridge at Dodson, and at mile 112.8.	297	1975	8-1-75	a.1
03419270	Calfkiller River near Taylors, Tenn.	Lat 36°01'53", long 85°20'10", White County, at bridge on State Highway 84, 1.9 miles northeast of Taylors, and at mile 34.7.	37.7	1975	8-1-75	9.6
03420200	Collins River near Tarlton, Tenn.	Lat 35°31'04", long 85°40'27", Grundy County, at bridge on State Highway 56, 1.5 miles north of Tarlton and at mile 48.3.	174	1929, 1952, 1965, 1975	7-17-75	21
03426880	Brawleys Fork near Readyville, Tenn.	Lat 35°48'06", long 86°09'04", Cannon County, at county road bridge, 2.2 miles southeast of Readyville, and at mile 0.2.	24.0	1966-68 1974-75	7-30-75	5.3
03426900	East Fork Stones River below Readyville, Tenn.	Lat 35°50'16", long 86°11'21", Rutherford County, at county road bridge, 1.0 mile northwest of Readyville, and at mile 34.7.	125	1966-69 1974-75	7-30-75	19

See footnotes at end of table, p. 163.

Discharge measurements made at low-flow partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Cumberland River basin--Continued				
03430120	McCrory Creek at Donelson, Tenn.	Lat 36°09'27", long 86°38'10", Davidson County, at bridge on Stewart Ferry Pike, 1.6 miles southeast of Donelson, and at mile 1.5.	8.64	1974-75	8-11-75	4.2
03430140	Stoners Creek near Green Hill, Tenn.	Lat 36°12'00", long 86°34'56", Davidson County, at bridge on Chandler Road, upstream from Louisville & Nashville Railroad bridge, 2.4 miles east of Hermitage, 3.5 miles southwest of Green Hill, and at mile 5.2.	15.0	1974-75	8-11-75	3.2
03431570	Whites Creek near Jordonia, Tenn.	Lat 36°13'34", long 86°49'21", Davidson County, at bridge on county road, 0.2 mile upstream from Ewing Creek, 2.7 miles northeast of Jordonia, and at mile 6.3.	35.9	1974-75	8-11-75	3.4
03431578	Ewing Creek at Gwynwood Drive, near Jordonia, Tenn.	Lat 36°13'58", long 86°47'32", Davidson County, at bridge on Gwynwood Drive, 0.3 mile downstream from North Fork, 3.4 miles northeast of Bordeaux, and 4.5 miles northeast of Jordonia, and at mile 2.1.	9.98	1974-75	8-11-75	2.0
03431900	Overall Creek at College Grove, Tenn.	Lat 35°47'14", long 86°40'12", Williamson County, at county road bridge, 0.3 mile east of College Grove and at mile 0.8.	11.4	1959-64, 1968, 1970-72, 1975	5-22-75	9.8
03432000	Harpeth River near Kirkland, Tenn.	Lat 35°49'14", long 86°41'16", Williamson County, at Louisville & Nashville Railroad bridge, 1.7 miles northwest of Kirkland, 3.1 miles upstream from Nelson Creek, and at mile 108.5.	64.6	1953, 1959-61, 1970-72, 1975	5-22-75	30
03432200	Nelson Creek near Arrington, Tenn.	Lat 35°50'44", long 86°41'57", Williamson County, at county road bridge, 1.6 miles south of Arrington and at mile 0.5.	25.7	1953, 1959-66, 1968, 1975	5-22-75	12
03432400	Harpeth River below Franklin, Tenn.	Lat 35°56'53", long 86°52'54", Williamson County, at bridge on U.S. Highway 431, 1.1 miles downstream from Spencer Creek, 1.8 miles northwest of the courthouse in Franklin, and at mile 84.4.	210	1959-64, 1969-72, 1975	5-22-75	189
03432500	West Harpeth River near Leipers Fork, Tenn.	Lat 35°53'56", long 86°58'01", Williamson County, at county road bridge (formerly State Highway 96), 1.8 miles east of town of Leipers Fork and at mile 9.8.	66.9	1955-61[‡] 1962-75[b]	5-21-75	78
03433610	Harpeth River near Pegram, Tenn.	Lat 36°05'10", long 87°01'30", Davidson County, at bridge on McCrory Lane, 2.0 miles southeast of Pegram, and at mile 49.6.	437	1974-75	8-13-75	61
03433660	South Harpeth River at Fernvale, Tenn.	Lat 35°57'15", long 87°04'43", Williamson County, at new county road bridge, at Fernvale, 3.0 miles southeast of Fairview and at mile 14.0.	27.6	1974-75	8-13-75	15
03433700	South Harpeth River at Linton, Tenn.	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 1975	8-13-75	27
03433810	Brush Creek near Kingston Springs, Tenn.	Lat 36°04'38", long 87°04'50", Cheatham County, at new county road bridge, 2.5 miles southeast of Kingston Springs.	27.2	1974-75	8-13-75	13
03433910	Turnbull Creek near New Hope, Tenn.	Lat 36°01'55", long 87°12'48", Dickson County, at bridge on State Highway 96, 0.1 mile downstream from Nails Creek, 0.25 mile downstream from I-40 bridge, 3.2 miles west of New Hope, and at mile 13.1.	66.2	1974-75	8-13-75	30

See footnotes at end of table, p. 163.

Discharge measurements made at low-flow partial-record stations during water year 1975--Continued

Station No.	Station Name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Cumberland River basin--Continued				
03434560	Trace Creek near White Bluff, Tenn.	Lat 36°07'06", long 87°11'49", Dickson County, at county road bridge, 1.5 miles northeast of White Bluff and at mile 3.5.	1.99	1974-75	8-13-75	1.7
03434580	Harpeth River near Petway, Tenn.	Lat 36°11'33", long 87°10'04", Cheatham County, at bridge on Ashland City Road, 1.8 miles southwest of Petway and at mile 14.2.	727	1941-42, 1949-50, 1974-75	8-21-75	144
03434590	Jones Creek near Burns, Tenn.	Lat 36°06'15", long 87°19'05", Dickson County, at bridge on Rock Church Road, 3.5 miles north of Burns and at mile 21.9.	13.3	1974-75	8-21-75	1.8
03434620	Town Branch near Charlotte, Tenn.	Lat 36°10'44", long 87°18'15", Dickson County, at bridge on Old Ashland City Road, 2.0 miles east of Charlotte and at mile 1.5.	8.33	1974-75	8-21-75	.40
03435007	Hurricane Creek near Salem, Tenn.	Lat 36°25'34", long 87°19'02", Montgomery County, at Chapel Hill Road bridge, 2.4 miles south of Salem, 3.0 miles east of Organs Crossroads, and 3.6 miles north of Southside.	11.2	1964 1974-75	8-14-75	.83
03435044	Red River near Orlinda, Tenn.	Lat 36°38'36", long 86°40'46", Robertson County, at ford on county road, 3.6 miles northeast of Orlinda.	78.4	1974-75	8-11-75	14
03435110	South Fork Red River at Cross Plains, Tenn.	Lat 36°33'30", long 86°41'32", Robertson County, at county road bridge, 0.7 miles north of Cross Plains and at mile 24.4.	19.7	1974-75	8-11-75	3.0
03435120	South Fork Red River near Orlinda, Tenn.	Lat 36°35'34", long 86°45'53", Robertson County, at bridge on State Highway 49, 2.75 miles west of Orlinda and at mile 17.9	69.2	1969, 1974-75	8-11-75	9.3
03435637	Sulphur Fork Red River near Greenbrier, Tenn.	Lat 36°29'05", long 86°47'33", Robertson County, at bridge on State Highway 76, 4.0 miles north of Greenbrier.	34.9	1974-75	6-10-75 7-16-75 8-11-75 8-21-75	12 3.2 3.4 3.7
03435700	Sulphur Fork Red River above Beaver Dam Creek near Springfield, Tenn.	Lat 36°30'53", long 86°50'46", Robertson County, 400 ft downstream from private bridge, 0.9 mile upstream from Beaver Dam Creek, 2 miles east of Springfield, and at mile 32.9.	49.1	1975	7-16-75 8-21-75	5.1 5.7
03435750	Beaver Dam Creek near Springfield, Tenn.	Lat 36°31'32", long 86°50'33", Robertson County, at private bridge, 2.7 miles northeast of Springfield and at mile 0.4.	14.2	1975	7-16-75 8-21-75	1.3 1.4
03435800	Sulphur Fork Red River at Springfield, Tenn.	Lat 36°31'15", long 86°53'12", Robertson County, at old U.S. Highway 41 bridge at Springfield and at mile 29.1.	79.9	1969, 1975	6-10-75 7-16-75 8-21-75	c30 c11 8.9
03435810	Sulphur Fork Red River near Springfield, Tenn.	Lat 36°31'00", long 86°54'49", Robertson County, at bridge on county road, 2 miles west of Springfield and at mile 26.7.	84.6	1969, 1975	6-10-75 7-16-75 8-21-75	30 7.3 8.0
03436070	Brush Creek near Adams, Tenn.	Lat 36°30'49", long 87°05'34", Robertson County, at county road bridge, 4.9 miles south of Adams.	12.4	1974-75	8-14-75	0
03436130	Passenger Creek near Sango, Tenn.	Lat 36°32'07", long 87°11'50", Montgomery County, at county road bridge, 2.4 miles northeast of Sango.	20.5	1964, 1974-75	8-14-75	2.3
03436460	Little West Fork Red River near New Providence, Tenn.	Lat 36°35'31", long 87°23'23", Montgomery County, at bridge on Peachers Mill Road, 3.0 miles north of New Providence.	179	1964, 1974-75	8-14-74	35
03436655	Yellow Creek near Ruskin, Tenn.	Lat 36°12'30", long 87°31'46", Dickson County, at county road bridge, 0.1 mile downstream from Cedar Creek, 3.4 miles north of Ruskin, and at mile 22.6.	52.2	1974-75	8-21-75	21

See footnotes at end of table, p.163.

Discharge measurements made at low-flow partial-record stations during water year 1975--Continued

Station No.	Station Name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin				
03454790	Trail Fork Big Creek at Del Rio, Tenn.	Lat 35°54'27", long 83°01'26", Cocke County, at county road bridge, 1.0 mile south of Del Rio and at mile 0.6.	32.6	1975	7-17-75	14.0
03454850	Long Creek near Del Rio, Tenn.	Lat 35°56'53", long 83°03'13", Cocke County, at bridge on U.S. Highways 25 and 70, 2.5 miles northwest of Del Rio, and at mile 0.1.	11.7	1975	7-17-75	3.1
03466870	Roaring Fork near Greeneville, Tenn.	Lat 36°13'18", long 82°52'05", Greene County, at county road bridge, 0.4 mile southeast of Bales Chapel and 4.5 miles northwest of Greeneville.	20.6	1975	7-17-75	5.3
03466880	Roaring Fork near Mosheim, Tenn.	Lat 36°14'38", long 82°53'37", Greene County, at first bridge upstream from the mouth and 4.5 miles northeast of Mosheim.	46.4	1975	7-17-75	10
03467490	Bent Creek near Springvale, Tenn.	Lat 36°11'14", long 83°09'53", Hamblen County, at first bridge upstream from the mouth, 2.4 miles southeast of Springvale, and at mile 0.6.	41.2	1975	7-18-75	8.2
03468140	Muddy Creek near Chestnut Hill, Tenn.	Lat 35°56'57", long 83°20'51", Jefferson County, at county road bridge, 0.7 mile upstream from Cherokee Lake embayment and 1.4 miles north of Chestnut Hill.	1.78	1975	7-17-75	.07
03470330	Tuckahoe Creek at Peters Mill, Tenn.	Lat 35°58'02", long 83°42'07", Knox County, at county road bridge at Peters Mill, 4 miles east of Riverdale and at mile 0.9.	28.3	1975	7-17-75	8.4
03476515	Beidleman Creek near Caywood Ford, Tenn.	Lat 36°31'28", long 82°07'53", Sullivan County, at second bridge upstream from mouth, 0.7 mile north of Caywood Ford and 2.4 miles west of South Holston Dam.	27.4	1975	7-17-75	12
03499053	Culton Creek at Alcoa, Tenn.	Lat 35°46'41", long 83°59'46", Blount County, at county road bridge, 1,000 ft upstream from Louisville & Nashville Railroad bridge, at Alcoa, and at mile 0.9.	11.8	1975	7-17-75	12
03499111	Stock Creek near Rockford, Tenn.	Lat 35°52'11", long 83°53'09", Knox County, 0.2 mile upstream from culvert on Hall Road, 400 ft upstream from unnamed tributary, and 2.8 miles northeast of Rockford.	18.5	1975	7-17-75	.36
03518470	Bald River near Tellico Plains, Tenn.	Lat 35°19'20", long 84°10'40", Monroe County, 50 feet upstream from Bald River Falls and 7 miles east of Tellico Plains.	21.7	1927, 1975	7-17-75	20
03518700	Cane Creek at Belltown Mill, Tenn.	Lat 35°25'31", long 84°15'16", Monroe County, at county road bridge at Belltown Mill, 0.3 mile southwest of Cane Creek (Belltown P.O.).	18.2	1975	7-17-75	3.5
03520170	Pond Creek near Adolphus, Tenn.	Lat 35°42'20", long 84°27'35", Loudon County, at culvert on county road, 3.1 miles southwest of Adolphus and 3.6 miles northwest of Philadelphia.	30.8	1953, 1975	7-17-75	28
03531700	Mulberry Creek at Alanthus Hill, Tenn.	Lat 36°33'18", long 83°22'51", Hancock County, at county road bridge, 1.0 mile southeast of Alanthus and at mile 0.1.	23.9	1975	7-18-75	10
03543300	Little Sewee Creek near Center Point, Tenn.	Lat 35°35'54", long 84°42'13", Meigs County, at bridge on Center Point Road, 1.6 miles southwest of Center Point and at mile 0.9.	32.3	1959, 1975	7-16-75	14
03566117	East Fork North Mouse Creek near Niota, Tenn.	Lat 35°32'54", long 84°33'45", McMinn County, at first bridge upstream from mouth, 2.4 miles north of Niota, and at mile 0.5.	2.87	1975	7-16-75	.56

Discharge measurements made at low-flow partial-record stations during water year 1975--Continued

Station No.	Station Name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin--Continued				
03582205	Norris Creek below Howell, Tenn.	Lat 35°13'33", long 86°33'56", Lincoln County, at bridge on U.S. Highway 231, 2.6 miles east of Howell, 5.1 miles north of Fayetteville, and at mile 8.4.	15.1	1952, 1975	11-12-74 7-17-75	3.2 2.9
03582591	Cane Creek near Egam, Tenn.	Lat 35°11'13", long 86°37'38", Lincoln County, at county road bridge, 1.1 miles east of Egam and at mile 3.8.	93.0	1975	11-13-74 7-17-75	17 11
03582646	Swan Creek at Boonshill, Tenn.	Lat 35°12'33", long 86°43'50", Lincoln County, at bridge on U.S. Highway 64, 0.7 mile southeast of Boonshill and at mile 7.2.	22.5	1952, 1975	7-17-75	1.5
03583320	Richland Creek at Milky Way, Tenn.	Lat 35°18'46", long 87°01'48", Giles County, at bridge on U.S. Highway 31, 0.8 mile north of Milky Way, 1.0 mile downstream from Robertson Fork Creek, and at mile 44.2.	149	1956, 1975	7-17-75	23
03584300	Buchanan Creek near Tarpley, Tenn.	Lat 35°07'13", long 86°58'29", Giles County, at bridge on U.S. Highway 31, 1.9 miles southeast of Tarpley and at mile 2.8.	35.7	1952-54 1975	7-17-75	6.1
03587300	Bluewater Creek near St. Joseph, Tenn.	Lat 35°00'44", long 87°27'08", Lawrence County, at county road bridge, 0.15 mile upstream from Ricketts Branch and 3.3 miles southeast of St. Joseph.	38.8	1961-67, 1970-72, 1975	8-18-75	25
03593123	Lick Creek near Hamburg, Tenn.	Lat 35°06'53", long 88°18'59", Hardin County, at county road bridge, 1.5 miles north of Hamburg.	36.8	1975	7-15-75	11
03595300	Little Duck River at State Highway 55, at Manchester, Tenn.	Lat 35°28'49", long 86°04'46", Coffee County, at bridge on State Highway 55, at Manchester, 3.4 miles upstream from mouth.	35.3	1932-34‡, 1970-72, 1975	1-31-75	77
03596200	Carroll Creek above Ovoca Lake, near Tullahoma, Tenn.	Lat 35°24'23", long 86°12'14", Coffee County, at county road bridge, 200 ft upstream from Ovoca Lake and 3.1 miles north of Tullahoma.	3.32	1970-72, 1975	1-30-75	9.2
03596700	Garrison Fork at Beechgrove, Tenn.	Lat 35°35'37", long 86°14'22", Coffee County, at bridge on U.S. Highway 41, at Beechgrove.	16.8	1932-33, 1953-54, 1970-72, 1975	1-31-75	19
03596900	Noah Fork at Noah, Tenn.	Lat 35°34'27", long 86°11'30", Coffee County, at bridge on U.S. Highway 41, at Noah.	12.1	1970-72, 1975	1-31-75	13
03597700	Garrison Fork near Bugscuffle, Tenn.	Lat 35°29'10", long 86°20'09", Bedford County, at Cannon bridge on Haley Road, 0.6 mile upstream from mouth, 1.4 miles west of Haley, and 1.5 miles southwest of Bugscuffle.	130	1934, 1953-54, 1970-72, 1975	1-30-75	143
03597800	Thompson Creek near Roseville, Tenn.	Lat 35°27'19", long 86°19'57", Bedford County, at county road bridge, 1.8 miles west of Roseville, 4.1 miles west of Normandy, and at mile 1.5.	18.3	1953-54, 1956-57, 1970 1975	7-18-75	4.4
03597900	Flat Creek at Shelbyville, Tenn.	Lat 35°28'17", long 86°28'39", Bedford County, at bridge on State Highway 64, at Shelbyville, 0.7 mile upstream from mouth.	49.6	1953-54, 1956-57, 1970-72, 1975	1-30-75	53
03601100	Big Bigby Creek at Needmore, Tenn.	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	1934, 1969, 1972-73, 1975	8-18-75	20

See footnotes at end of table, p. 163.

Discharge measurements made at low-flow partial-record stations during water year 1975--Continued

Station No.	Station Name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin--Continued				
03604750	Birdsong Creek at Holladay, Tenn.	Lat 35°52'53", long 88°08'39", Benton County, at bridge on State Highway 69, 0.7 mile north of Holladay.	15.7	1975	7-16-75	3.3
03606350	Big Sandy River at Westport, Tenn.	Lat 35°53'34", long 88°18'32", Carroll County, at county road bridge 0.3 mile southeast of Westport and at mile 43.4.	110	1975	7-16-75	64
		Obion River basin				
07024760	Spring Creek near Greenfield, Tenn.	Lat 36°11'24", long 88°45'53", Weakley County, at bridge on State Highway 54, 3.2 miles northeast of Greenfield and at mile 2.3.	93.4	1955, 1975	7-17-75	29
07025190	Mud Creek near Sharon, Tenn.	Lat 36°15'59", long 88°50'05", Weakley County, at bridge on U.S. Highway 45-E, 2.2 miles north of Sharon and at mile 11.0.	45.6	1958, 1975	5-28-75 7- 2-75	3.4 .34
07025300	North Fork Obion River at Jones Mill, Tenn.	Lat 36°26'46", long 88°27'57", Henry County, at county road bridge at Jones Mill and at mile 42.8.	83.7	1958-61, 1964, 1975	7-17-75	58
07026100	Reeds Creek near Trimble, Tenn.	Lat 36°10'48", long 89°15'15", Dyer County, at county road bridge, 0.4 mile north of Locust Grove, 4.0 miles southwest of Trimble, and at mile 1.6.	51.8	1975	7-18-75	3.3
07026500	Reelfoot Creek near Samburg, Tenn.	Lat 36°26'32", long 89°17'47", Obion County, at bridge on State Highway 22, 5 miles northeast of Samburg.	110	1950-73‡ 1975	2-26-75 5-16-75	415 20
07027280	Jacks Creek at Jacks Creek, Tenn.	Lat 35°28'16", long 88°31'21", Chester County, at bridge on State Highway 100, at town of Jacks Creek, and at mile 8.5.	17.9	1975	7-16-75	7.0
		Hatchie River basin				
07030000	Hatchie River near Stanton, Tenn.	Lat 35°31'22", long 89°20'57", Haywood County, at bridge on U.S. Highways 70 and 79, 4.6 miles northeast of Stanton and at mile 68.4.	1,975	1929-58‡, 1975	6-30-75	743
07030140	Cane Creek near Cherry, Tenn.	Lat 35°40'30", long 89°41'21", Lauderdale County, at bridge on State Highway 87-A, 1.2 miles east of Cherry and at mile 4.6.	[d]83.9	1958-60, 1962, 1964, 1975	7-18-75	5.3

* Also operated as a crest-stage partial-record station.
‡ Operated as a continuous-record station.
a Estimated.
b Operated as a crest-stage partial-record station.
c Includes pumpage at Springfield waterworks.
d Revised.

REVISIONS OF RECORDS FOR DISCONTINUED STATIONS

07029200 Cold Creek near Arp, Tenn.

Drainage area.--16.3 sq mi (revised)

07030350 Crooked Creek near Bolton, Tenn.

Drainage area.--18.2 sq mi (revised).

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 1975

Station No.	Station Name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum 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 Consauga, 1.5 miles north of Tennga, and 3 miles upstream from Mill Creek. Datum of gage is 755.78 ft above mean sea level.	108	1930-31‡, 1938, 1940-43, 1944-47‡, 1951-75	3-30-75	16.42	12,700
*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. Datum of gage is 828.3 ft above mean sea level.	4.35	1955-75	9-23-75	7.56	1,460
		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.	0.95	1967-75	3-12-75	10.55	661
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	1967-75	3-12-75	4.87	(+)
		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. Datum of gage is 1,294.05 ft above mean sea level.	13.5	1933‡, 1955-75	3-13-75	13.80	3,240
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	1955-75	3-12-75	9.71	(+)
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	1955-75	3-12-75	6.05	1,740
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	1955-75	3-12-75	6.77	380
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	1973-75	3-12-75	9.07	260
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	1967-75	3-12-75	4.25	215
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	1967-75	5-13-67 12-24-74	3.75 5.56	b78 247
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. Datum of gage is 925.61 ft above mean sea level.	126	1933-57‡ 1958-75	3-14-75	15.03	23,100
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	1955-75	3-14-75	4.87	1,190

See footnotes at end of table, p. 173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Cumberland River basin--continued					
03421100	Sink tributary at McMinnville, Tenn. c	Lat 35°41'47", long 85°46'47", Warren County, at culvert under State Highway 56 at northwest city limits of McMinnville.	0.47	1955-75	3-14-75	5.43	302
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	1955-75	3-14-75	(e)	(+)
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. Datum of gage is 556.08 ft above mean sea level.	35.3	1955-61‡ 1962-75	3-12-75	9.70	7,120
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	1955-75	3-12-75	7.96	1,800
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, 1959-75	3-29-75	6.01	393
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. Datum of gage is 503.06 ft above mean sea level.	19.2	1955-61‡ 1962-75	3-16-63	5.55	f1,540
					3- 9-64	8.28	f3,240
					2-11-64	7.71	f2,840
					5-16-66	9.59	f4,270
					5-13-67	6.74	f2,210
					3-11-68	5.17	f1,340
					11-27-68	5.68	f1,600
					4- 1-70	7.73	f2,850
					12-22-70	6.03	f1,830
					7-28-72	8.17	f3,160
					5-27-73	8.92	f3,740
					11-27-73	10.61	f5,150
					3-29-75	12.00	6,500
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	1966-75	3-12-75	5.73	74
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. Datum of gage is 490.00 ft above mean sea level.	69.7	1953-58‡ 1959-63, 1965-75	3-12-75	g17.56	8,650
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	1965-75	3-29-75	8.14	5,710
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. Datum of gage is 516.05 ft above mean sea level.	43.0	1965-75	3-12-75	13.27	8,010
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 mile southeast of State capitol in Nashville. Datum of gage is 499.08 ft above mean sea level.	12.2	1965-75	3-29-75	7.53	(+)
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. Datum of gage is 432.55 ft above mean sea level.	93.4	1965-75	3-12-75	15.76	13,600
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. Datum of gage is 413.82 ft above mean sea level.	3.98	1965-75	3-29-75	11.00	1,750

See footnotes at end of table, p.173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Cumberland River basin--Continued					
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. Datum of gage is 499.94 ft above mean sea level.	3.30	1965-75	3-29-75	7.00	2,110
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. Datum of gage is 497.91 ft above mean sea level.	1.58	1965-75	7-19-75	4.00	350
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. Datum of gage is 418.92 ft above mean sea level.	13.2	1965-75	3-29-75	8.69	3,730
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	1965-75	3-12-75	7.84	2,440
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	1965-75	2-11-65 8-18-66 5-15-67 3-11-68 4-18-69 12-29-69 2-22-71 8-12-72 7-22-73 5-22-74 3-12-75	5.40 5.10 5.95 4.95 5.10 5.50 4.95 5.00 6.50 9.12 9.31	b650 b530 b870 b470 b530 b690 b470 b490 b1,090 b2,320 2,440
03431560	Whites Creek at WhitesCreek 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. Datum of gage is 440.31 ft above mean sea level.	28.9	1965-75	3-12-75	11.10	(+)
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. Datum of gage is 438.27 ft above mean sea level.	13.3	1965-75	2-23-75	10.85	7,220
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. Datum of gage is 413.38 ft above mean sea level.	5.29	1965-75	3-12-75	9.99	(+)
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. Datum of gage is 515.65 ft above mean sea level.	2.66	1966-75	3-29-75	6.97	1,280
03431670	Richland Creek at Fransworth Drive, at Belle Meade, Tenn. h	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. Datum of gage is 456.44 ft above mean sea level.	12.4	1965-75	3-29-75	8.83	3,400
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. Datum of gage is 634.10 ft above mean sea level.	66.9	1955-61‡ 1962-75	3-12-75	14.70	17,600
03435030	Red River near Portland, Tenn.	Lat 36°33'24", long 86°34'14", Sumner County, at county road bridge, 1.5 miles upstream from Austin Branch, 3.5 miles southwest of Portland and at mile 93.0.	15.1	1966-75‡ 1975	3-12-75	d12.94	7,130
03435600	Mill Branch near White House, Tenn.i	Lat 36°26'52", long 86°42'53", Robertson County, at bridge on county road, 3.7 miles southwest of White House.	3.50	1967-75	3-12-75	7.50	(+)

See footnotes at end of table, p.173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		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	1967-75	12-25-74	5.97	234
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	1967-75	12-31-74 3-14-75	11.67 12.17	b264 364
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. Datum of gage is 2,209.56 ft above mean sea level.	15.9	1945-57‡ 1959-75	3-14-75	4.64	619
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. Datum of gage is 1,015.73 ft above mean sea level.	1,679	1921-57‡ 1959-75	3-14-75	19.28	37,700
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	1967-75	9-12-74 3-13-75	5.48 4.83	b221 95
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. Datum of gage is 928.21 ft above mean sea level.	110	1954-75	3-13-75	12.30	8,250
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. Datum of gage is 929.20 ft above mean sea level.	64.1	1954-75	3-13-75	12.95	3,400
03469500	West Prong Little Pigeon River near Pigeon Forge, Tenn.j	Lat 35°48'21", long 83°34'28", Sevier County, at bridge on old State Highway 71, 1.6 miles northwest of Pigeon Forge. Datum of gage is 965.23 ft above mean sea level.	76.2	1946-49‡ 1954-75	3-14-75	8.72	3,970
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, 1963-75	3-30-75	3.30	(+)
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. Datum of gage is 2,103.11 ft above mean sea level.	102	1943-55‡ 1959-75	3-30-75	6.94	4,650
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 southwest of Elizabethton, and at mile 0.2.	4.88	1973-75	3-14-75	9.76	187
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	1955-75	3-30-75	6.40	255
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	1955-75	3-14-75	3.26	66
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	1954-75	3-30-75	9.41	700
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	1966-75	3-13-75	4.98	256
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	1966-75	12-24-74	5.13	130

See footnotes at end of table, p. 173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Tennessee River basin--Continued					
03519640	Baker Creek near Greenback, Tenn.	Lat 35°40'21", long 86°46'28", Blount County, at county road bridge, 1.0 mile upstream from Little Baker Creek, 3.4 miles east of Greenback, and at mile 15.0.	16.0	1965-75‡ 1975	3-14-75	7.46	848
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	1966-75	5-30-74 3-30-75	b9.20 4.86	b2,120 (+)
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	1954-75	3-30-75	11.03	1,900
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. Datum of gage is 737.03 ft above mean sea level.	62.2	1954-75	3-14-75	8.72	1,800
03534000	Coal Creek at Lake City, Tenn. t	Lat 36°13'14", long 84°09'27", Anderson County, at bridge on U.S. Highway 25-W, at Lake City. Datum of gage is 842.91 ft above mean sea level.	24.5	1932-34‡ 1955-75	3-12-75	5.86	3,200
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. Datum of gage is 901.71 ft above mean sea level.	k9.92	1948-50‡ 1955-75	3-12-75	8.32	910
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. Datum of gage is 1,076.35 ft above mean sea level.	1.23	1967-75	3-29-75	4.46	282
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. Datum of gage is 1,027.82 ft above mean sea level.	3.23	1967-75	3-21-74 3-29-75	m6.55 6.39	342 287
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	1962-75	12-28-74	7.02	1,300
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	1954-75	3-30-75	16.43	4,800
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. Datum of gage is 753.92 ft above mean sea level.	7.15	1960-64‡ 1965-75	3-14-75	6.01	512
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. Datum of gage is 1,003.06 ft above mean sea level.	83.2	1935-57‡ 1958-66, 1967-68‡ 1969-75	3-13-75	19.18	9,600
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.	12.0	1955-75	3-13-75	8.80	950
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	1968-75	3-13-75	6.21	554
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	1967-75	3-13-75	10.10	157
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	1967-75	3-13-75	6.23	1,260
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	1967-75	3-12-75	6.95	405

See footnotes at end of table, p. 173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Tennessee River basin--continued					
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. Datum of gage is 758.62 ft above mean sea level.	108	1935-55‡ 1956-75	3-13-75	18.03	17,100
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. Datum of gage is 749.65 ft above mean sea level.	95.9	1928-30‡ 1955-75	3-13-75	14.89	(+)
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. Datum of gage is 728.59 ft above mean sea level.	50.2	1928-31‡ 1935-55‡ 1956-75	3-13-75	8.87	8,330
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	1955-75	9-23-75	7.89	2,400
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	1950-75	3-14-75	13.82	3,520
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	1959-75	3-13-75	7.05	1,850
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.	.67	1955-75	3-13-75	5.58	108
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. Datum of gage is 621.51 ft above mean sea level.	50.4	1955-75	3-13-75	9.31	5,030
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. Datum of gage is 968.13 ft above mean sea level.	41.3	1952-59‡ 1960-75	3-13-75	11.76	3,360
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	1955-75	9-23-75	7.42	(+)
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, and at mile 14.6.	17.0	1955-75	9-23-75	10.16	4,030
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. Datum of gage is 687.72 ft above mean sea level.	41.2	1954-62‡ 1963-66, 1967-68‡ 1969-75	3-13-75	12.46	6,140
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	1955-75	5-15-75	4.95	39
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. Datum of gage is 666.27 ft above mean sea level.	42.6	1954-75	3-13-75	9.49	4,850

See footnotes at end of table, p. 173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Tennessee River basin--continued					
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	1955-75	12-25-74	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. Datum of gage is 754.28 ft above mean sea level.	47.5	1962-68‡ 1969-75	3-13-75	13.95	7,230
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	1955-75	3-29-75	3.16	100
03587500	Shoal Creek above Little Shoal Creek at Lawrenceburg, Tenn.u	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‡ 1955-75	3-12-75	11.22	4,500
03594200	Eagle Creek near Clifton Junction, Tenn.	Lat 35°20'21", long 87°58'22", Wayne County, at bridge on State Highway 144, 2.5 miles northwest of Clifton Junction and 2.6 miles upstream from mouth.	19.0	1955-75	3-12-75	7.55	5,600
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	1955-75	3-12-75	5.85	(+)
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. Datum of gage is 800.25 ft above mean sea level.	66.3	1954-58‡ 1959-66, 1967-68‡ 1970-75	3-12-75	18.62	13,300
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	1966-75	3-12-75	12.40	3,100
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	1966-75	3-12-75	3.53	395
03597500	Wartrace Creek at Bell Buckle, Tenn.	Lat 35°35'16", long 86°20'22", Bedford County, at bridge on State Highway 82, 0.2 mile downstream from Kelly Creek, 0.9 mile east of Bell Buckle, and at mile 7.7.	16.3	1953-61‡ 1962-66 1966-75‡ 1975	3-12-75	9.93	5,070
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	1966-75	11-26-73 3-12-75	b5.09 4.25	b805 460
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	1955-75	3-12-75	5.25	1,550
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	1954-75	3-13-75	13.46	8,650
03599400	Little Flat Creek tributary near Rally Hill, Tenn.	Lat 35°41'15", long 86°49'46", Maury County, at culvert under U.S. Highway 431 and State Highway 106, 1.5 miles north of crossing of Flat Creek in Rally Hill.	.63	1955-75	3-12-75	5.89	363
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‡ 1959-75	3-12-75	24.66	(+)
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	1954-75	3-12-75	3.59	(+)

See footnotes at end of table, p. 173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station Name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Tennessee River basin--Continued					
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.	0.51	1967-75	3-12-75	4.74	145
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	1967-75	3-12-75	3.78	486
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	1967-75	3-12-75	5.04	1,030
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	1955-75	3-12-75	10.38	(+)
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	1955-75	1-10-75	2.29	(+)
		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. Datum of gage is 350.67 ft above mean sea level.	6.79	1955-75	7-20-75	14.55	(+)
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. Datum of gage is 379.23 ft above mean sea level.	.76	1955-75	7-20-75	6.69	(+)
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, 1959-75	3-28-75	8.20	670
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	1954-75	3-28-75	12.67	4,540
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, 1959-75	3-13-75	11.04	8,000
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	1967-75	3-12-75	9.77	1,340
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	1967-75	3-12-75	16.01	782
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	1967-75	3-12-75	13.08	2,770
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	1955-75	3-28-75	(e)	(+)
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. Datum of gage is 276.52 ft above mean sea level.	25.5	1955-75	3-28-75	19.00	4,600

See footnotes at end of table, p. 173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--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.p	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. Datum of gage is 245.78 ft above mean sea level.	60.5	1954-56, 1959-75	3-13-75	16.83	5,070
07030300	Loosahatchie River tributary at Frayser, Tenn.	Lat 35°13'56", long 89°58'51", Shelby County, 120 ft downstream from culvert under St. Elmo Avenue, at Frayser.	.82	1975	3-12-75	8.94	(+)
		Wolf River basin					
07031653	Wolf River tributary at Willey Road, at Germantown, Tenn.	Lat 35°05'54", long 89°48'36", Shelby County, 16 ft upstream from culvert on Willey Road and 700 ft west of Cordova Road, at Germantown	.21	1975	p7- 2-75	10.18	(+)
07031657	Wolf River tributary No. 2 at Neshoba Road, at Germantown, Tenn.	Lat 35°06'21", long 89°49'54", Shelby County, 30 ft upstream from culvert on Neshoba Road and 150 ft west of Brookside Drive, at Germantown.	.36	1975	p7- 2-75	13.62	(+)
07031665	White Station Creek at Rich Road, at Memphis, Tenn.	Lat 35°08'09", long 89°53'37", Shelby County, at downstream side of bridge on Rich Road, 2,000 ft west of White Station Road, at Memphis.	2.45	1975	q3-12-75	7.97	(+)
07031690	Fletcher Creek tributary No. 2 at Whitten Road near Shelby Penal Farm, Tenn.	Lat 35°09'38", long 89°50'13", Shelby County, at upstream end of culvert under Whitten Road, 0.5 mile north of Mullins Station Road, 1.1 miles northeast of Shelby Penal Farm.	.54	1975	r3-12-75	7.68	(+)
07031694	Harrington Creek tributary at Elmore Park Road, at Bartlett, Tenn.	Lat 35°12'08", long 89°51'26", Shelby County, 25 ft upstream from culvert under Elmore Park Road, 750 ft south of Stage Road, 1 mile east of Bartlett.	.33	1975	3-12-75	4.46	(+)
07031695	Harrington Creek tributary No. 2 at Hawthorne Road, at Bartlett, Tenn.	Lat 35°11'43", long 89°51'21", Shelby County, 25 ft downstream from culvert under Hawthorne Road, 30 ft west of Elmore Park Road, 1 mile southeast of Bartlett.	.21	1975	7-24-75	4.20	(+)
07031697	Harrington Creek tributary No. 3 at Stage Road, at Bartlett, Tenn.	Lat 35°12'30", long 89°53'03", Shelby County, 30 ft upstream from culvert under Stage Road, 300 ft west of Chaucer Road, 1 mile west of Bartlett.	.91	1975	3-12-75	7.78	(+)
07031710	Harrison Creek at Charleswood Road, at Memphis, Tenn.	Lat 35°08'34", long 89°55'00", Shelby County, upstream side of bridge at Charleswood Road, 300 ft west of Waring Road, at Memphis.	1.59	1975	3-12-75	13.14	(+)
07031725	Workhouse Bayou tributary at Isabelle Street, at Memphis, Tenn.	Lat 35°09'24", long 89°56'01", Shelby County, 200 ft upstream from culvert under Isabelle Street, at Memphis.	.09	1975	3-12-75	4.42	(+)
07031730	Workhouse Bayou at Holmes Street, at Memphis, Tenn.	Lat 35°09'43", long 89°57'04", Shelby County, 50 ft downstream from bridge on Holmes Street, 400 ft south of Macon Road, at Memphis.	1.30	1975	3-12-75	10.32	(+)
07031765	Overton Bayou at North Drive, at Memphis, Tenn.	Lat 35°09'20", long 89°58'52", Shelby County, beside Cypress Drive, 45 ft upstream from culvert under North Drive, at Memphis.	.30	1975	3-12-75	6.67	(+)
07031773	Lick Creek at Jefferson Avenue, at Memphis, Tenn.	Lat 35°08'20", long 89°59'30", Shelby County, 20 ft upstream from culvert under Jefferson Avenue, at Memphis.	1.00	1975	s5-11-75	7.37	(+)
07031795	Wolf River tributary No. 3 at Whitney Avenue, at Frayser, Tenn.	Lat 35°12'31", long 90°01'15", Shelby County, at upstream end of culvert under Whitney Avenue, at Frayser.	.35	1975	q7-31-75	8.29	(+)

See footnote at end of table, p. 173.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station Name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Nonconnah Creek basin					
07032195	Nonconnah Creek tributary No. 3 at Shelby Drive, near Capleville, Tenn.	Lat 35°01'13", long 89°49'57", Shelby County, at upstream end of culvert under Shelby Drive, 3.7 miles east of Capleville.	1.58	1975	3-12-75	10.73	(+)
07032242	Cherry Bayou at Park Avenue, at Memphis, Tenn.	Lat 35°06'24", long 89°54'13", Shelby County, 20 ft downstream from culvert under Park Avenue, 150 ft west of Colonial Road, at Memphis.	.18	1975	3-12-75	5.54	(+)
07032244	Cherokee Creek at Alamo Street, at Memphis, Tenn.	Lat 35°05'43", long 89°57'31", Shelby County, at upstream end of culvert under Alamo Street, 80 ft north of Kimball Avenue, at Memphis.	.49	1975	3-12-75	9.93	(+)
07032246	Days Creek at Shelby Drive, at Whitehaven, Tenn.	Lat 35°01'14", long 90°00'37", Shelby County, 75 ft upstream from culvert under Shelby Drive, at Whitehaven.	2.63	1975	3-12-75	8.28	(+)
07032247	Parkway Bayou at South Parkway East, at Memphis, Tenn.	Lat 35°06'33", long 89°59'41", Shelby County, between one-way lanes of South Parkway East, 100 ft west of Castalia Street, at Memphis.	.49	1975	s3-12-75	8.54	(+)
07032249	Latham Branch at Valley Boulevard, at Memphis, Tenn.	Lat 35°05'56", long 90°02'43", Shelby County, between one-way lanes of Valley Boulevard, 200 ft downstream from Dison Avenue, at Memphis.	.05	1975	3-12-75	13.89	(+)

* Also a low-flow partial-record station.
† Discharge not determined.
‡ Operated as a continuous-record station.
a Includes 3.21 sq mi without surface drainage.
b Revised.
c Published as station no. 03421300, Bybee Branch at McMinnville prior to 1961.
d From floodmark.
e Stage not determined.
f Not previously published.
g Furnished by Corps of Engineers, Nashville district.
h Published as at Dunham Springs Road prior to 1966.
i Previously published at Sulphur Fork Red River tributary near White House.
j Published as West Fork Little Pigeon River prior to 1966.
k Includes 2.10 sq mi without surface drainage.
m Corrected.
n Published as Cypress Creek prior to 1968.
p Maximum stage January to September 1975.
q Maximum stage June to September 1975.
r Maximum stage December 1974 to September 1975.
s Maximum stage February to September 1975.
t Published as at Coal Creek prior to 1935.
u Published as Beeler Fork at Lawrenceburg prior to 1934.

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 1975

Stream and Site Number	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Green River basin				
Dutch Creek 03313820	Middle Fork Drakes Creek	Lat 36°33'55", long 86°16'03", Sumner County, at bridge on State Highway 52, 1.2 miles west of Westmoreland, Tenn.	0.59	-	7-31-75	*0
Trammel Creek 03313870	Drakes Creek	Lat 36°34'20", long 86°13'03", Sumner County, 30 ft upstream from David Creek, 1.8 miles northeast of Westmoreland, Tenn.	4.09	-	7-31-75	*.88
		Cumberland River basin				
Nicks Creek 034078735	New River	Lat 36°16'13", long 84°20'39", Campbell County, at ford 400 ft upstream from mouth, at town of Nicks Creek and 1.6 miles southeast of Smoky Junction, Tenn.	5.03	-	7-21-75	*0
Double Springs Branch 03427650	Sinkhole to Bushman Creek to East Fork Stones River	Lat 35°50'07", long 86°20'13", Rutherford County, at culvert under county road, 300 ft south of U.S. Highway 70-S, at west edge of Double Springs, Tenn.	.97	1974	3-11-75	*1.7
Stoners Creek 03430142	Stones River	Lat 36°12'07", long 86°35'29", Davidson County, at bridge on Tulip Grove Road, at Tulip Grove, Tenn., 100 ft upstream from Scott Creek.	15.4	1968	7-29-75	*1.7
Stones River 03430200	Cumberland River	Lat 36°11'11", long 86°38'00", Davidson County, at bridge on U.S. Highway 70, 2.1 miles northeast of Donelson, Tenn.	934	1939-40b	3-15-75	10,900
Ewing Creek 03431572	Whites Creek to Cumberland River	Lat 36°14'01", long 86°47'03", Davidson County, at culvert under Interstate Highway 24, 1,000 ft upstream from North Fork, and 4.6 miles north of the State capitol in Nashville, Tenn.	3.41	-	2-23-75	2,350
Concord Creek 03431880	Harpeth River	Lat 35°45'25", long 86°36'31", Rutherford County, at bridge on Swamp Road, 1.2 miles southwest of Pleasant Hill and at mile 0.6.	16.2	1975c	7- 3-75	.68
Harpeth River 03432700	Cumberland River	Lat 35°59'36", long 86°54'10", Williamson County, at Wray Bridge on old Hillsboro Road, 5.0 miles north of Franklin and at mile 74.9.	340	1975c	6-25-75 7-30-75 8-28-75 9-24-75	*40 *24 *11 1,230
do 03433820	do	Lat 36°06'25", long 87°04'26", Cheatham County, at bridge on Kingston Springs Road, 1.0 mile west of Pegram, and at mile 40.5.	556	-	6-25-75 7-30-75 8-28-75 9-24-75	*106 *73 *54 1,620
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) 1,700 ft east of intersection of State Highways 48 and 49 at Charlotte and 2,000 ft upstream from Matlock Branch.	2.05	1973	8-11-75	*.25
Harpeth River 03434650	Cumberland River	Lat 36°13'37", long 87°10'35", on Cheatham-Dickson County line, a quarter of a mile downstream from Jones Creek 1.6 miles northwest of Pegram, and at mile 10.4.	843	-	6-25-75 7-30-75 8-28-75	*220 *163 *119
do 03434720	do	Lat 36°17'07", long 87°08'46", on Cheatham-Dickson county line, at Montgomery Bell Bridge on State Highway 49, 5 miles west of Ashland City, and at mile 10.4.	863	1949-50	9-24-75	2,850

See footnotes at end of table, p. 178.

Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream and Site Number	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Measurements Discharge (cfs)
		Cumberland River basin--Continued				
Sulphur Fork Red River 03435790	Red River	Lat 36°31'13", long 86°53'09", Robertson County, at bridge on U.S. Highway 41, at Springfield and at mile 29.4.	75.1	1970	6-10-75	31d
Carr Creek 03435870	Sulphur Fork Red River	Lat 36°25'16", long 86°49'18", Robertson County, at bridge on Hackney Road, 1.0 mile southwest of Greenbrier, and at mile 11.2.	3.63	-	7-17-75 9-19-75	.51 .50
Spring Creek 03436290	West Fork Red River	Lat 36°36'58", long 87°17'13", Montgomery County, at Kennedy School, 400 ft upstream from county road bridge, and 3.1 miles north of St. Bethlehem.	55.4	-	7-17-75 9-19-75	10 1.2
		Tennessee River basin				
Nolichucky River 03464650	French Broad River	Lat 36°07'24", long 82°26'37", Unicoi County, at bridge on U.S. Highways 19-W and 23, about 2 miles southwest of Erwin, Tenn., and at mile 95.9.	639	1966, 1972, 1974	4-17-75	*1,480
Jockey Creek 03466097	Big Limestone Creek to Nolichucky River	Lat 36°14'12", long 82°38'50", Greene County, 100 ft upstream from county road bridge, 100 ft north of Mt. Bethel Church, 1.2 miles northwest of Limestone, Tenn., and at mile 1.4.	18.4	-	7-17-75	*8.8
Webb Creek 03469112	Little Pigeon River	Lat 35°45'39", long 83°21'20", Sevier County, just downstream from Darky Branch, 3.0 miles above mouth, 3 miles east of Pittman Center, Tenn.	11.2	1972, 1974	4-23-75	*22
Clark Branch tributary 03487558	Clark Branch to Reedy Creek	Lat 36°34'21", long 82°29'44", Sullivan County, at Cherokee Rod & Gun Club, 800 ft above dam, 1.3 miles north of U.S. Highway 11-E, 3.8 miles northeast of Kingsport, Tenn.	.45	1972, 1974	4-17-75	*.81
Richland Creek 03494750	Holston River	Lat 36°16'24", long 83°31'46", Grainger County, 0.25 mile south of U.S. Highway 11-W and 1 mile southwest of Rutledge, Tenn.	19.9	1968	4-17-75	*14
Clift Creek 03494955	Holston River	Lat 36°08'48", long 83°42'44", Knox County, 20 ft downstream from U.S. Highway 11-E, 1.5 miles north of Trentville, Tenn.	3.62	1972, 1974	4-17-75	*3.7
Beaver Creek 03535187	Clinch River	Lat 36°03'31", long 83°58'25", Knox County, at bridge on Dry Gap Road, 500 ft upstream from unnamed tributary, 2.5 miles northeast of Dante, Tenn.	36.4	1972, 1974	4-17-75	*38
Decatur Creek 03544225	Goodfield Creek to Tennessee River	Lat 35°29'28", long 84°49'34", Meigs County, 100 ft upstream from bridge on Finnell Road, 500 ft upstream from Hardin Creek, and 1.5 miles northwest of Goodfield, Tenn.	9.40	-	9- 2-75	*.29
Goodfield Creek 03544235 (revised)	Tennessee River	Lat 35°29'34", long 84°49'55", Meigs County, 250 ft downstream from Decatur Creek, 1.7 miles northwest of Goodfield, and 2.8 miles southeast of Decatur, Tenn.	22.2	1971-72	9- 2-75	*2.5
Chattanooga Creek 03568640	Tennessee River	Lat 35°00'14", long 85°18'26", Hamilton County, 150 ft downstream from bridge on 38th Street at Chattanooga, Tenn.	65.2	1932, 1959-60	11- 7-74	*17
Boiling Fork Creek 03579900	Elk River	Lat 35°09'45", long 86°00'20", Franklin County, at county road bridge in Cowan, 250 ft upstream from Louisville & Nashville Railroad bridge and at mile 14.6.	17.0	1957	7-16-75	2.6
Murrell Creek 03580749	Elk River	Lat 35°11'32", long 86°16'46", Franklin County, 500 ft upstream from mouth, 3.6 miles north of Lexie Crossroads, and 9.5 miles west of Winchester, Tenn.	3.91	1972	6-11-75 6-11-75	e15 e28

See footnotes at end of table, p. 178.

Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream and Site Number	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Measurements Discharge (cfs)
		Tennessee River basin--Continued				
Loretto Branch 03588310	Clack Branch to Shoal Creek to Tennessee River	Lat 35°04'53", long 87°26'59", Lawrence County, just upstream from unnamed tributary 0.6 mile northwest of Loretto, Tenn.	1.17	-	8-18-75	*6.5
Browns Creek 03594450	Beech River to Tennessee River	Lat 35°38'22", long 88°14'52", Henderson County, at bridge on State Highway 20, 1.1 miles east of Chesterfield, Tenn.f	20.2	-	7-16-75	*4.5
Crumpton Creek 03596090	Duck River	Lat 35°25'18", long 86°08'09", Coffee County, 300 ft upstream from Wiley Creek, 0.1 mile north of town of Rutledge Falls, and at mile 3.1.	22.8	1974	10-10-74 1-31-75	*3.3 *33
do 03596100	do	Lat 35°25'19", long 86°08'12", Coffee County, 50 ft upstream from Rutledge Falls, 100 ft downstream from county bridge, 150 ft downstream from Wiley Creek, at town of Rutledge Falls, and at mile 3.0.	28.1	1953-54, 1957, 1964, 1974	10-10-74 1-31-75	*6.0 *43
do 03596130	do	Lat 35°26'11", long 86°09'57", Coffee County, at bridge on Mountain View Road, 400 ft upstream from mouth, and 4.0 miles north of Tullahoma, Tenn.	30.6	1972, 1974	10-10-74 1-31-75	*19 *59
Duck River 03596400	Tennessee River	Lat 35°28'04", long 86°13'04", Coffee County, at Hiles Bridge at town of Riley Creek, Tenn. just upstream from Fuller Branch and at mile 251.2.	179	1971-72, 1974	11-11-74	*72
do 03596470	do	Lat 35°27'39", long 86°14'43", Bedford-Coffee Counties, at Huffman Bridge, 0.3 miles downstream from Normandy Dam site, just east of Normandy, Tenn., and at mile 248.3.	196	1971-72, 1974	11-11-74	*73
Shipman Creek 03596543	Duck River	Lat 35°24'12", long 86°16'36", Moore County, 100 ft downstream from Ledfords Mill, 3.5 miles south of Normandy, and 4.8 miles northwest of Tullahoma, Tenn.	.45	1972	9- 4-75	*2.2
Garrison Fork 03597220	do	Lat 35°30'38", long 86°19'20", Bedford County, at Louisville & Nashville Railroad bridge 1.2 miles south of Wartrace, Tenn.	85.5	1972	9- 4-75	*7.0
Sinking Creek 03598188	do	Lat 35°28'59", long 86°36'19", Bedford County, at bridge on State Highway 64, 1 mile east of Wheel, Tenn., and at mile 6.5.	18.1	-	7-18-75	*.38
		Obion River basin				
Harris Fork Creek 07025480	North Fork Obion River	Lat 36°26'42", long 88°56'46", Obion County, at county road bridge a quarter of a mile southeast of Harris, Tenn., and at mile 4.6.	34.7	-	7-17-75	*5.9
North Reelfoot Creek 07026380	Reelfoot Creek	Lat 36°26'55", long 89°16'47", Obion County, at bridge on State Highway 22 and 2.5 miles west of southwest of Clayton, Tenn.	62.5	1951, 1954-55	7-18-75	*4.5
Reelfoot Creek tributary 07026510	Reelfoot Creek	Lat 36°24'26", long 89°19'33", Obion County, at bridge on State Highway 22, 2.4 miles northeast of Samburg, Tenn.	.82	-	2-26-75 5-16-75	1.3a .5a
Rittenhouse Slough 07026600	Reelfoot Lake	Lat 36°31'25", long 89°19'08", Fulton County, at bridge on Kentucky Highway 1282, at Bondurant, Ky.	3.31	-	2-26-75 5-15-75	18a 0a

See footnotes at end of table, p. 178.

Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream and Site Number	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Measurements Discharge (cfs)
		Obion River basin--Continued				
Willow Slough 07026625	Reelfoot Lake	Lat 36°30'42", long 89°20'51", Fulton County, at bridge on Kentucky Highway 94, 0.4 mile northeast of Tyler, Ky.	13.8	-	2-26-75 5-15-75	13a 10a
Running Slough 07026650	Bayou du Chien	Lat 36°31'45", long 89°18'02", Fulton County, at Illinois Central Gulf Railroad bridge, at Ledford, Ky.	15.0	-	2-26-75 5-15-75	117 35
Owens Slough 07026675	do	Lat 36°30'55", long 89°16'47", Fulton County, at bridge on Kentucky Highway 311, 1.5 miles southeast of Ledford, Ky.	4.62	-	2-26-75 5-15-75	5a 0a
Big Sandy Creek 07026750	Reelfoot Lake	Lat 36°27'52", long 89°23'34", Lake County, at bridge on State Highway 78, 0.7 mile northeast of New Markham, Tenn.	3.17	-	2-26-75 5-15-75	5.9 28
Indian Creek 07026800	do	Lat 36°23'09", long 89°20'35", Obion County, at bridge on State Highway 22, 0.8 mile northeast of Samburg, Tenn.	8.41	-	2-26-75 5-16-75	*10 *3.1
Big Ronaldson Slough 07026900	do	Lat 36°26'10", long 89°25'11", Lake County, at bridge on State Highway 78, at Wright, Tenn.	2.13	-	2-25-75 5-15-75	*20a *5a
Black Bayou 07026925	Big Richardson Slouth	Lat 36°26'52", long 89°24'31", Lake County, at bridge on State Highway 78, 0.7 mile southwest of New Markham, Tenn.	1.45	-	2-25-75 5-15-75	*5a *1a
Reelfoot Lake Spillway 07027002	Running Reelfoot Bayou	Lat 36°21'09", long 89°25'39", Lake County, just upstream from spillway and State Highway 22, 4.0 miles southeast of Tiptonville, Tenn.	240	-	2-27-75	1,430
Sugar Creek 07028980	Middle Fork Forker Deer River	Lat 35°49'02", long 88°52'50", Gibson County, at bridge on State Highway 152, 2.0 miles east of Humboldt, Tenn.	10.4	-	7- 1-75	*0
Little Sugar Creek 07028982	Sugar Creek	Lat 35°49'12", long 88°53'20", Gibson County, at bridge on State Highway 152, 1.5 miles east of Humboldt, Tenn.	4.22	-	7- 1-75	*0
		Hatchie River basin				
Cypress Creek 07029379	Tuscumbia River	Lat 35°04'40", long 88°37'45", McNairy County, at county road bridge, 0.7 mile northwest of Ramer, Tenn.	87.9	-	7-15-75	*33
Porters Creek 07029445	Hatchie River	Lat 35°09'21", long 88°53'00", Hardeman County, at county road bridge, 0.8 mile southeast of Hebron, Tenn.	58.0	-	7-15-75	*15
Hatchie River 07029650	Mississippi River	Lat 35°20'49, long 89°00'55", Hardeman County, at bridge on State Highway 100, 3.6 miles west of Toone and 6.4 miles north of Bolivar, Tenn.	1,547	-	6-30-75	624
do 07029900	do	Lat 35°31'23", long 89°15'12", Haywood County, at bridge on State Highway 76, 0.6 mile south of Sunnyhill and 4.9 miles south of Brownsville, Tenn.	1,858	-	6-30-75	738
do 07030025	do	Lat 35°34'05", long 89°29'04", Tipton County, at bridge on State Highway 54, 2.7 miles southwest of Turnpike and 10 miles east of Covington, Tenn.	2,167	-	6-30-75	886

See footnotes at end of table, p. 178.

Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream and Site Number	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Measurements Discharge (cfs)
		Nonconnah Creek basin				
Johns Creek 07032219	Loosahatchie River	Lat 35°00'21", long 89°54'58", Shelby County, at bridge on Holmes Road, 1.4 miles southwest of Capleville, Tenn.	4.44	-	4-25-75	*4.6
do 07032220	do	Lat 35°01'14", long 89°54'06", Shelby County, at bridge on Shelby Drive, 0.2 mile west of Capleville, Tenn.	5.92	-	4-25-75	*5.4

a Estimated.
b Auxiliary gage for Stones River near Donelson, Tenn.
c See Harpeth River seepage investigation, page 179.
d Corrected for pumpage at Springfield waterworks.
e Flow includes leakage from Tims Ford Lake.
f Tennessee Valley Authority operated gage at this site 1953-63 and 1966 to date.

In 1931, a minor drought year, a study was made of large springs in east Tennessee and the results published in WSP 713. From 1950 to 1954, a more detailed study, including some of those springs, was carried on in cooperation with the Ground Water Branch in connection with an investigation of the ground-water resources of the region. This study was made on a roving basis, the discharge of one group of springs being measured monthly for one year and then measurements made on another group for a year. During a round of measurements in June 1954, measurements were made at many springs where regular monthly measurements had previously been discontinued. The results of measurements made were published annually in WSP 1173, 1206, 1236, 1276, and 1336. As some of the springs were measured during the drought year 1931, comparisons might be made to determine probable minimum flow of springs which were not measured in 1931. Many of these springs are used for municipal or industrial water supplies. Others do not have well sustained flow during the dry season. Daily mean discharges for Mossy Spring near Jefferson City for water years 1951-59 and Mill Spring near Jefferson City for water years 1952-59 are published in annual WSP's. Daily mean discharges for Jack Daniel Spring at Lynchburg since 1970 have been published in the annual State report. Daily mean discharges or results of the discharge measurements show the characteristics of the springs and give good indication of the variation of the flow.

During the water years 1955-71, and 1974-75 measurements were made at several springs, some of which were measured during the 1950-54 study. The results of discharge measurements during the 1975 water year, showing the yield, water temperature, and in some instances, specific conductance, are given in the following table.

Discharge measurements of springs in Tennessee during water year 1975

Spring and Site Number	Location	Tributary to--	Date	Discharge (gpm)	Temp. (°C) Water	Specific conductance (umhos at 25°C)	Pumpage during measurement (gpm)
		Hamilton County					
Anderson 03566440	Lat 35°14'16", long 85°00'41", 500 ft east of State Highway 58, 4.5 miles northeast of Snow Hill and 5.0 miles southwest of Georgetown.	Long Savannah Creek to Wolftever Creek to Tennessee River.	5-01-75	2,720	13	190	0
			6-25-75	1,560	14.5	240	0
			6-26-75	1,020	14	215	900
			6-27-75	1,630	14	240	0
		Jackson County					
The Boils 03418184	Lat 36°21'00", long 85°33'48", 5.5 miles east of Gainesboro.	Roaring River	8-15-75	42	23	-	-
		Lincoln County					
Big Hungry Branch 03582240	Lat 35°14'21", long 86°31'51", 1.5 miles north of Mimosa.	Big Hungry Branch to Little Norris Creek to Norris Creek to Elk River.	11-12-74	0	-	-	-
Boonshill 03582647	Lat 35°12'44", long 86°44'26", at Boonshill, just upstream from county road culvert.	Unnamed tributary to Swan Creek to Elk River.	1-16-75	370	15	-	-
Gimlet 03581474	Lat 35°16'21", long 86°30'22", 2.7 miles east of Belleville.	Creson Hollow Branch to Gimlet Creek to West Fork Mulberry Creek to Elk River.	1-16-75	460	14.5	-	-
John Gill 03582175	Lat 35°15'21", long 86°34'00", 250 ft downstream from U.S. Highway 231 bridge, 1.3 miles southeast of Belleville.	Norris Creek to Elk River.	11-12-74	195	-	-	-
Patton Hollow 03582579	Lat 35°15'27", long 86°36'02", in Patton Hollow, 2.0 miles north of Howell.	Patton Hollow Branch to Gingerbread Creek to Norris Creek, to Elk River.	1-15-75	160	13	-	-
Polecat Hollow 03581403	Lat 35°17'59", long 86°29'01", in Polecat Hollow, 2.0 miles northwest of Booneville.	Polecat Hollow Branch to West Fork Mulberry Creek to Mulberry Creek to Elk River.	11-12-75	36	11.5	-	-
Steed 03582535	Lat 35°19'24", long 86°32'32", near head of Little Cane Creek, 0.8 mile south of Chestnut Ridge.	Little Cane Creek to Cane Creek to Elk River.	11-12-75	42	14.5	-	-
			1-15-75	120	15	-	-
		Rutherford County					
Head of River 03431850	Lat 35°43'09", long 86°37'23", just north of State Highway 99, at Mt. Vernon, 1.6 miles east of Eagleville.	Harpeth River	7-03-75	920	16.5	-	-
Double 03422647	Lat 35°49'57", long 86°20'29", at town of Double Springs.	Double Springs Branch to cave in sink hole to Bushman Creek to East Fork Stones River.	3-11-75	610	-	-	-

Discharge measurements of springs in Tennessee during water year 1975--Continued

Spring and Site Number	Location	Tributary to--	Date	Discharge (gpm)	Temp. (°C) Water	Specific conductance (umhos at 25°C)	Pumpage during measurement (gpm)
		Williamson County					
Spring No. 1 03432615	Lat 35°54'43", long 86°54'21", 650 ft west of Horton Lane, 2.1 miles southwest of Franklin.	West Harpeth River tributary No. 8 to West Harpeth River to Harpeth River.	6-16-75	2.5	14.5	500	-
Spring No. 2 03432395	Lat 35°57'03", long 86°52'00", 200 ft upstream from county road bridge, 0.4 mile southeast of Green Hill, and 2.75 miles north of Franklin.	Harpeth River tributary No. 13 to Harpeth River.	6-16-75	55	16.7	450	-
Spring No. 3 034323465	Lat 35°54'35", long 86°52'02", 400 ft downstream from Louisville & Nashville RR. bridge, 1.1 miles south of the courthouse in Franklin.	Harpeth River tributary No. 8 to Harpeth River.	6-16-75	65	15	420	-
Spring No. 5 034323532	Lat 35°55'23", long 86°50'36", 200 ft west of county road, 1.4 miles east of Franklin.	Harpeth River tributary No. 10 to Harpeth River.	6-16-75	30	15.2	400	-
Spring No. 6 03432353	Lat 35°55'20", long 86°50'32", 200 ft east of county road, 1.5 miles east of Franklin.	Harpeth River tributary No. 10 to Harpeth River.	6-16-75	8	16	440	-
Spring No. 8 034323408	Lat 35°55'11", long 86°49'29", 200 ft east of Interstate Highway 65, 2.5 miles east of Franklin.	Unnamed tributary to Watson Branch to Harpeth River.	6-16-75	3	15	560	-
Spring No. 10 034323369	Lat 35°53'29", long 86°50'58", 200 ft east of U.S. Highway 431 and 2.6 miles southeast of Franklin.	Harpeth River tributary No. 5 to Harpeth River.	6-16-75	0	-	-	-
Spring No.13-A 034323302	Lat 35°55'15", long 86°46'45", 100 ft north of county road and 0.7 mile west of Clovercroft.	Unnamed tributary to Mayes Creek to Harpeth River.	6-16-75	5[a]	16	400	-
Spring No. 14 034323305	Lat 35°54'53", long 86°46'59", 1.1 miles southeast of Clovercroft.	Unnamed tributary to Mayes Creek to Harpeth River.	6-16-75	11	16	420	-
Spring No. 15 034323308	Lat 35°52'47", long 86°46'13", in farm pond, 1.15 miles east of Millview.	Mayes Creek to Harpeth River.	6-16-75	0	-	-	-
Spring No. 16 03432329	Lat 35°55'45", long 86°45'13", just upstream from county road, 0.8 mile northeast of Clovercroft.	Unnamed tributary to Mayes Creek to Harpeth River.	6-16-75	0	-	-	-
Spring No. 17 03432890	Lat 35°58'35", long 86°45'40", 500 ft southeast of Crockett (Concord) Road, 2.3 miles southeast of Lipscomb School, and 4.3 miles southeast of Brentwood.	Unnamed tributary to Little Harpeth River to Harpeth River.	6-16-75	10	13	420	-
German 03432395	Lat 35°55'29", long 86°47'47", 1.7 miles west of Clovercroft.	Unnamed tributary to Watson Branch to Harpeth River.	6-16-75	5	18	320	-
Green 034323485	Lat 35°55'01", long 86°51'07", 450 ft south of State Highway 96, at Ewingville and 1.1 miles southeast of Franklin.	Harpeth River tributary No. 9 to Harpeth River.	6-16-75	30	16	290	-
Langford 034323398	Lat 35°54'56", long 86°48'23", 0.5 mile northeast of Mudsink and 2.3 miles southwest of Clovercroft.	Watson Branch to Harpeth River.	6-16-75	15	25	370	-
Rebels Rest 03432356	Lat 35°55'56", long 86°50'04", at Rebels Rest, 2 miles northeast of Franklin.	Harpeth River tributary No. 11 to Harpeth River.	6-16-75	4	19.8	360	-

a Estimated.

Discharge measurements of springs in Tennessee during water year 1975--Continued

Spring and Site Number	Location	Tributary to--	Date	Discharge (gpm)	Temp. (°C) Water	Specific conduc-tance (umhos at 25°C)	Pumpage during measure-ment (gpm)
		Williamson County--Continued					
Sweeney 034323303	Lat 35°55'16", long 86°47'04", 1.0 mile west of Clovercroft.	Unnamed tributary to Mayes Creek to Harpeth River.	6-16-75	14	20	370	-
Truitt 034323405	Lat 35°54'31", long 86°49'15", 0.5 mile west of Mudsink and 2.9 miles southeast of Franklin.	Watson Branch to Harpeth River.	6-16-75	80	18	490	-
Unnamed 03430450	Lat 35°59'27", long 86°45'16", 200 ft south of Concord Road, 2.2 miles east of Lipscomb School, and 3.6 miles southeast of Brentwood.	Unnamed tributary to Owl Creek to Mill Creek.	6-16-75	9	14.5	360	-

Harpeth River seepage investigation--Headwaters to Wray Bridge

Discharge measurements were made May 22, 1975, on Harpeth River and tributaries. The reach is 43.8 miles in length. These streamflow measurements were made during a period of base flow to identify reaches of ground-water discharge to streams as well as river gains and losses. These data will be used as partial criteria for locating test drilling sites for municipal wells. Tributary flow was considered a contribution and not a gain.

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
116.8	Puckett Branch 03431870	Lat 35°44'00", long 86°35'14", Rutherford County, at bridge on State Highway 99, a third of a mile east of town of Puckett Store.	2.80	.10*	+.10	-	23.0	390	-	-
116.8	Concord Creek 03431880	Lat 35°45'25", long 86°36'31", Rutherford County, at county bridge on "Swamp Road," 1.2 miles southwest of Pleasant Hill and at mile 0.6.	16.2	.79	+.69	-	23.5	-	-	-
114.5	Harpeth River 03431885	Lat 35°45'58", long 86°38'48", Rutherford County, at bridge on U.S. Highway 41-A, 1.7 miles north of Eagleville.	34.4	9.8	-	-	23.0	440	-	-
112.0	do 03431890	Lat 35°47'11", long 86°39'41", Williamson-Rutherford Counties, at bridge on College Grove Road, 0.8 mile east of College Grove.	40.5	12.3	-	+2.5	23.5	390	-	-
111.3	Overall Creek 03431895	Lat 35°46'12", long 86°40'55", Williamson County, at county bridge on Webb Road, 1.1 miles south of College Grove.	8.87	6.8	-	-	23.0	280	-	-
111.3	do 03431900	Lat 35°47'14", long 86°40'12", Williamson County, at bridge on College Grove Road, 0.3 mile east of College Grove and at mile 0.8.	11.4	9.8	+3.0	-	23.0	290	-	-
111.3	Overall Creek tributary 03431910	Lat 35°47'27", long 86°40'42", Williamson County, at bridge on Stokes Mill Road, 0.3 mile north of College Grove.	.43	.4*	-	-	-	-	-	-
110.9	Harpeth River 03431950	Lat 35°48'00", long 86°39'52", Williamson County, at bridge on U.S. Highway 31-A, 0.6 mile south of Kirkland and 1.1 miles northeast of College Grove.	55.4	22.3	-	+10.0	23.0	350	-	-
110.4	Harpeth River tributary No. 20 03431960	Lat 35°47'53", long 86°40'42", Williamson County, at bridge on Stokes Mill Road 0.8 mile north of College Grove.	.19	.05*	-	-	-	-	-	-

*Estimated discharge.

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
110.1	Harpeth River tributary No. 21 03431970	Lat 35°48'53", long 86°39'46", Williamson County, at bridge on U.S. Highways 31-A and 41-A, 0 4 mile north of Kirkland	98	.8*	-	-	-	-	-	-
109.4	Harpeth River tributary No. 1 03431980	Lat 35°48'30", long 86°40'54", Williamson County, at county road bridge, just upstream from L&N RR. bridge, 1.1 miles west of Kirkland and at mile 0.2.	5.24	4.3	-	-	22.0	300	-	-
109.1	Harpeth River tributary No. 22 03431990	Lat 35°48'59", long 86°40'40", Williamson County, at county road bridge, 1.0 mile northwest of Kirkland.	.60	.4*	-	-	-	-	-	-
108.5	Harpeth River 03432000	Lat 35°49'11", long 86°41'09", Williamson County, at ford, 650 ft upstream from L&N RR. bridge, 1.7 miles west of Kirkland.	64.6	30.2	-	+7.9	21.0	340	-	-
107.1	Harpeth River tributary No. 23 03432010	Lat 35°49'40", long 86°41'26", Williamson County, at county road bridge, just upstream from L&N RR. bridge, 0.5 mile southwest of McDaniel.	.24	0	-	-	-	-	-	-
106.4	Harpeth River 03432100	Lat 35°49'57", long 86°41'56", Williamson County, at bridge on McDaniel Road, 900 ft southwest of McDaniel.	66.6	33.0	-	+2.8	22.0	330	-	-
105.3	Nelson Creek 03432200	Lat 35°50'44", long 86°41'57", Williamson County, at county road bridge, 1.6 miles south of Arrington and at mile 0.5.	25.7	12.5	-	-	22.0	340	-	-
104.5	McCrory Creek[a] 03432250	Lat 35°50'21", long 86°43'06", Williamson County, at bridge on McDaniel Road, 1.3 miles west of McDaniel, 1.3 miles east of Rudderville, and at mile 0.5.	11.4	10.3	-	-	21.0	380	-	-
103.0	Harpeth River 03432305	Lat 35°51'08", long 86°44'04", Williamson County, at Lampkin Bridge, 0.9 mile north of Rudderville.	125	80.4	-	+47.4	20.7	-	-	-

*Estimated discharge.
aPreviously published as McClorys Branch.

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
102.8	Harpeth River tributary No. 24 03432306	Lat 35°50'58", long 86°44'05", Williamson County, at bridge on Lampkin Bridge Road, 0.7 mile northeast of Rudderville and at mile 0.2.	.23	0	-	-	-	-	-	-
102.8	Harpeth River tributary No. 2 03432307	Lat 35°52'27", long 86°44'00", Williamson County, at bridge on State Highway 96, 0.4 mile west of Benhill.	1.43	.1*	-	-	-	-	-	-
102.8	Harpeth River tributary No. 25 03432308	Lat 35°52'31", long 86°44'08", Williamson County, at bridge on State Highway 96, 0.6 mile northwest of Benhill.	.24	.02*	-	-	-	-	-	-
102.8	Harpeth River tributary No. 2 03432309	Lat 35°51'20", long 86°44 22", Williamson County, at first bridge above mouth, 1.0 mile north of Rudderville.	2.50	.80	+.70	-	22.5	400	-	-
100.1	Harpeth River 03432320	Lat 35°51'43", long 86°45'47", Williamson County, at county road bridge, 3.1 miles northeast of Peytonville.	138	82.4	-	+2.0	21.0	375	-	-
97.8	Toom Creek 03432325	Lat 35°52'14", long 86°47'06", Williamson County, at county road bridge, 0.4 mile southwest of Epworth.	3.43	3.1	-	-	24.0	380	-	-
97.3	Harpeth River 03432331	Lat 35°52'42", long 86°47'27", Williamson County, at bridge on Arno Pike, at Millview.	160	101	-	+18.6	22.0	380	-	-
97.3	Harpeth River tributary No. 29 034323312	Lat 35°52'44", long 86°47'31", Williamson County at first bridge above mouth, at Millview.	.38	.1*	-	-	-	-	-	-
96.7	Harpeth River tributary No. 26 034323314	Lat 35°52'45", long 86°48'04", Williamson County, at county road bridge, 0.6 mile west of Millview.	.11	.05*	-	-	-	-	-	-

*Estimated discharge.

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
95.4	Harpeth River tributary No. 27 034323316	Lat 35°52'46", long 86°48'18", Williamson County, at county road bridge, 0.8 mile west of Millview.	.05	0	-	-	-	-	-	-
95.1	Harpeth River tributary No. 3 03432332	Lat 35°52'55", long 86°48'35", Williamson County, at county road bridge, 1.1 miles west of Millview.	1.25	.2*	-	-	-	-	-	-
93.1	Harpeth River tributary No. 4 03432333	Lat 35°53'16", long 86°49'02", Williamson County, at county road bridge, 1.5 miles south of Mudsink.	.42	.27	-	-	22.0	340	-	-
92.4	Harpeth River tributary No. 28 034323335	Lat 35°53'50", long 86°49'24", Williamson County, at county road bridge, a quarter of a mile upstream from Robinson Lake and 1.1 miles southwest of Mudsink.	.39	.1*	-	-	-	-	-	-
92.3	Harpeth River 03432334	Lat 35°53'32", long 86°49'46", Williamson County, at Interstate Highway 65 bridge, 3.2 miles southeast of Franklin.	168	134	-	+33.0	21.0	360	-	-
92.2	do	Lat 35°53'27", long 86°49'50", Williamson County.	-	-	-	-	20.5	360	-	-
92.0	do	Lat 35°53'17", long 86°49'52", Williamson County.	-	-	-	-	20.5	360	-	-
91.8	do	Lat 35°53'13", long 86°50 03", Williamson County.	-	-	-	-	20.5	360	-	-
91.7	Fivemile Creek 03432335	Lat 35°52'53", long 86°50'12", Williamson County, just upstream from private road bridge, 3.5 miles southeast of Franklin.	9.55	9.4	-	-	21.5	-	-	-
91.7	do 034323355	Lat 35°53'08", long 86°50'11", Williamson County, 350 feet upstream from mouth, 3.3 miles southeast of Franklin.	9.69	13.4	+4.0	-	18.0	385	-	-
91.6	Harpeth River 03432336	Lat 35°53'10", long 86°50'13", Williamson County, 75 feet downstream from Fivemile Creek, 3.2 miles southeast of Franklin.	178	145	-	+11.0	21.0	360	-	-

*Estimated discharge.

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second			Water quality, field measurements			
				Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
91.4	Harpeth River	Lat 35°53'17", long 86°50'24", Williamson County.	-	-	-	-	21.0	360	-	-
91.2	do	Lat 35°53'23", long 86°50'34", Williamson County.	-	-	-	-	21.0	350	-	-
91.0	do	Lat 35°53'32", long 86°50'38", Williamson County.	-	-	-	-	21.0	360	-	-
90.8	Harpeth River tributary No. 5 03432337	Lat 35°53'31", long 86°50'54", Williamson County, 450 feet downstream from bridge on U.S. Highway 431, 2.5 miles southeast of Franklin.	2.85	4.1	-	-	21.5	370	-	-
90.8	do 03432338	Lat 35°53'51", long 86°50'40", Williamson County, 200 feet upstream from mouth and 2.5 miles southeast of Franklin.	2.99	4.3	+0.2	-	18.0	345	-	-
90.8	Harpeth River 03432339	Lat 35°53'43", long 86°50'36", Williamson County, 100 feet downstream from tributary No. 5 and 2.5 miles southeast of Franklin.	181	141	-	-4.0	21.0	360	-	-
90.6	do	Lat 35°53'49", long 86°50'29", Williamson County.	-	-	-	-	20.5	360	-	-
90.4	do	Lat 35°53'59", long 86°50'33", Williamson County.	-	-	-	-	20.5	360	-	-
90.2	do	Lat 35°54'04", long 86°50'41", Williamson County.	-	-	-	-	20.5	360	-	-
90.0	do	Lat 35°54'07", long 86°50'47", Williamson County.	-	-	-	-	20.5	360	-	-
89.8	do	Lat 35°54'17", long 86°50'49", Williamson County.	-	-	-	-	21.0	360	-	-
89.6	do	Lat 35°54'24", long 86°50'59", Williamson County.	-	-	-	-	21.0	360	-	-
89.4	do	Lat 35°54'29", long 86°51'09", Williamson County.	-	-	-	-	21.0	360	-	-

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
89.2	Watson Branch 03432341	Lat 35°54'42", long 86°49'35", Williamson County, 100 feet downstream from Interstate Highway 65 bridge, and 2.6 miles east of Franklin.	3.53	4.3	-	-	17.5	-	-	-
89.2	do 03432342	Lat 35°54'47", long 86°51'10", Williamson County, a quarter of a mile upstream from mouth and 1.5 miles southeast of Franklin.	4.70	5.0	+0.7	-	21.5	-	-	-
89.2	Harpeth River† 034323425	Lat 35°54'34", long 86°51'23", Williamson County, 300 feet downstream from Watson Branch and 1.3 miles southeast of Franklin.	187	142	-	+1.0	20.5	360	-	-
89.1	Harpeth River tributary No. 6 03432343	Lat 35°54'33", long 86°51'24", Williamson County, at bridge on U.S. Highway 431, 50 feet upstream from mouth and 1.3 miles southeast of Franklin.	.70	2.3	-	-	17.5	250	-	-
89.0	Harpeth River	Lat 35°54'37", long 86°51'32", Williamson County.	-	-	-	-	21.0	360	-	-
88.9	do 03432344	Lat 35°54'40", long 86°51'35", Williamson County, 1.1 miles southeast of Franklin.	188	142	-	0	21.0	360	-	-
88.9	Harpeth River tributary No. 7 034323445	Lat 35°54'12", long 86°51'59", Williamson County, 1000 feet downstream from L&N RR. bridge, 1.5 miles south of Franklin.	1.69	.61	-	-	18.0	390	-	-
88.9	do 03432345	Lat 35°54'36", long 86°51'39", Williamson County, 20 feet downstream from dam, 400 feet upstream from bridge on U.S. Highway 431, and 1.1 miles south of Franklin.	1.88	2.4	+1.79	-	21.0	390	-	-
88.8	Harpeth River	Lat 35°54'45", long 86°51'40", Williamson County.	-	-	-	-	21.0	360	-	-
88.6	Harpeth River 03432346	Lat 35°54'52", long 86°51'49", Williamson County, 0.8 mile south of Franklin.	190	151	-	+9.0	21.0	355	-	-

† - City of Franklin municipal water supply intake on Harpeth R. at mile 89.3, withdrawal - 3.12 cfs.

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Discharge, in cubic feet per second: Drainage Area (sq mi)	Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
88.6	Harpeth River tributary No. 8 03432347	Lat 35°54'50", long 86°51'52", Williamson County, at bridge on U.S. Highway 431, just upstream from mouth and 0.8 mile south of Franklin.	.41	.46	-	-	17.5	370	-	-
88.4	Harpeth River	Lat 35°54'59", long 86°51'59", Williamson County.	-	-	-	-	21.0	360	-	-
88.25	do 03432348	Lat 35°55'05", long 86°52'01", Williamson County, 0.3 mile upstream from bridge on State Highway 96 at Franklin.	190	146	-	-5.0	21.0	360	-	-
88.2	Harpeth River tributary No. 9 03432349	Lat 35°55'03", long 86°51'34", Williamson County, at bridge on dead-end street, 400 ft south of State Highway 96, at Ewingville.	.11	.42	-	-	18.0	270	-	-
88.2	do 034323495	Lat 35°55'08", long 86°51'58", Williamson County, just upstream from mouth, 0.15 mile south of State Highway 96 and 0.5 mile east of Franklin.	.15	0	-.42	-	-	-	-	-
88.1	Harpeth River 03432350	Gaging station at Franklin.	191	151	-	+5.0	21.0	365	-	-
88.0	do	Lat 35°55'16", long 86°51'52", Williamson County.	-	-	-	-	21.0	365	-	-
87.8	do 03432352	Lat 35°55'23", long 86°51'52", Williamson County, 0.3 mile downstream from bridge on State Highway 96, 0.4 mile east of the courthouse in Franklin.	191	159	-	+8.0	21.0	370	-	-
87.8	Harpeth River tributary No. 10 03432354	Lat 35°55'06", long 86°51'08", Williamson County, at Ewingville, 1.0 mile southeast of the courthouse in Franklin.	1.45	1.6	-	-	17.0	360	-	-
87.8	do 03432355	Lat 35°53'24", long 86°51'39", Williamson County, just upstream from mouth, 0.5 mile east of the courthouse in Franklin.	1.71	2.0	+.4	-	21.0	370	-	-
87.4	Harpeth River tributary No. 11 03432357	Lat 35°55'44", long 86°51'37", Williamson County, 300 feet downstream from L&N RR. bridge, 0.5 mile northeast of the courthouse in Franklin.	.96	.34	-	-	19.0	460	-	-

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Discharge, in cubic feet per second: Tributary Gain or Loss	Discharge, in cubic feet per second: Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Water quality, field measurements: Specific Conductance (umhos/cm)	Water quality, field measurements: pH (units)	Water quality, field measurements: Dissolved Oxygen (mg/l)
87.4	Harpeth River tributary No. 11 03432358	Lat 35°55'40", long 86°51'51", Williamson County, at mouth, 0.3 mile northeast of the courthouse in Franklin.	1.04	.38	+.04	-	21.0	400	-	-
87.3	Harpeth River 03432360	Lat 35°55'38", long 86°51'57", Williamson County, at bridge on U.S. Highway 31 at Franklin.	194	154	-	-5.0	21.0	400	-	-
87.2	do	Lat 35°55'42", long 86°52'03", Williamson County.	-	-	-	-	21.0	400	-	-
87.0	do	Lat 35°55'50", long 86°52'11", Williamson County.	-	-	-	-	21.0	380	-	-
86.8	do	Lat 35°55'48", long 86°52'23", Williamson County.	-	-	-	-	21.0	395	-	-
86.7	Harpeth River tributary No. 12 03432365	Lat 35°55'10", long 86°52'50", Williamson County, at bridge on former State Highway 96 in Franklin.	1.11	2.0	-	-	15.5	-	-	-
86.7	do 03432370	Lat 35°55'21", long 86°52'49", Williamson County, at bridge on city street, 500 feet upstream from bridge on State Highway 96 in Franklin.	1.78	2.8	+.8	-	17.0	-	-	-
86.7	do 03432375	Lat 35°55'54", long 86°52'30", Williamson County, at bridge on city street just upstream from mouth, 0.5 mile northwest of the courthouse in Franklin.	2.54	3.6	+.8	-	18.0	470	-	-
86.6	Harpeth River 03432380	Lat 35°55'51", long 86°52'31", Williamson County, beside U.S. Highway 231, at Franklin filtration plant.	196	179	-	+25.0	21.0	400	-	-
86.4	do	Lat 35°56'00", long 86°52'23", Williamson County.	-	-	-	-	21.0	400	-	-
86.2	do	Lat 35°56'07", long 86°52'14", Williamson County.	-	-	-	-	21.0	410	-	-
86.0	do	Lat 35°56'15", long 86°52'08", Williamson County.	-	-	-	-	21.0	400	-	-
85.8	do	Lat 35°56'24", long 86°52'02", Williamson	-	-	-	-	21.0	405	-	-

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
85.7	Harpeth River 03432385	Lat 35°56'25", long 86°51'57", Williamson County, a quarter of a mile upstream from Spencer Creek, 1.1 miles north of Franklin.	196	179	-	0	21.0	400	-	-
85.6	do	Lat 35°56'26", long 86°51'53", Williamson County.	-	-	-	-	21.0	400	-	-
85.4	Spencer Creek 03432390	Lat 35°56'35", long 86°51'18", Williamson County, at bridge on U.S. Highway 31, 1.5 miles northeast of Franklin.	10.3	9.8	-	-	19.0	380	-	-
85.4	do 03432392	Lat 35°56'35", long 86°52'00", Williamson County, at mouth, 1.25 miles north of Franklin.	11.4	16.	+6.2	-	18.5	-	-	-
85.4	Harpeth River ††	Lat 35°56'34", long 86°52'01", Williamson County.	-	-	-	-	21.0	400	-	-
85.2	do	Lat 35°56'41", long 86°52'12", Williamson County.	-	-	-	-	21.0	400	-	-
85.1	do 03432394	Lat 35°56'43", long 86°52'16", Williamson County, 0.3 mile downstream from Spencer Creek, 1.4 miles north of the courthouse in Franklin.	209	158	-	-21.0	21.0	400	-	-
85.0	Harpeth River tributary No. 13 03432396	Lat 35°57'01", long 86°52'01", Williamson County, at county road bridge, 1.7 miles north of Franklin.	.44	.4*	-	-	16.5	460	-	-
85.0	do 03432398	Lat 35°56'48", long 86°52'17", Williamson County, at mouth, 1.5 miles north of Franklin.	.53	.28	-.12	-	17.0	-	-	-
84.8	Harpeth River	Lat 35°56'56", long 86°52'25", Williamson County.	-	--	-	-	21.5	400	-	-
84.6	do	Lat 35°56'53", long 86°52'38", Williamson County.	-	-	-	-	21.0	400	-	-
84.4	do 03432400	Lat 35°56'53", long 86°52'54", Williamson County, at bridge on U.S. Highway 431, 1.75 miles northwest of the courthouse in Franklin.	210	189	-	+31.0	21.0	400	-	-
84.2	do	Lat 35°56'47", long 86°53'00", Williamson County.	-	-	-	-	21.0	420	-	-

*Estimated discharge.
†† - Sewage treatment plant effluent enters Harpeth, mile 85.4, flow - 2.48 cfs.

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Discharge, in cubic feet per second: Drainage Area (sq mi)	Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
84.0	Harpeth River	Lat 35°56'38", long 86°53'08", Williamson County.	-	-	-	-	21.0	430	-	-
83.8	Harpeth River tributary No. 14 03432403	Lat 35°56'28", long 86°53'16", Williamson County, at mouth, 1.5 miles northwest of the courthouse in Franklin.	.74	0	-	-	-	-	-	-
83.75	Harpeth River 03432405	Lat 35°56'27", long 86°53'16", Williamson County, 4.5 miles northwest of the courthouse in Franklin.	211	181	-	-8.0	21.0	420	-	-
83.6	do	Lat 35°56'22", long 86°53'21", Williamson County.	-	-	-	-	21.0	400	-	-
83.5	Harpeth River tributary No. 15 03432406	Lat 35°56'25", long 86°53'30", Williamson County, at mouth 1.7 miles northwest of the courthouse in Franklin.	.23	1.3	-	-	25.5	360	-	-
83.4	Harpeth River	Lat 35°56'29", long 86°53'21", Williamson County.	-	-	-	-	21.5	380	-	-
83.2	Harpeth River tributary No. 16 03432408	Lat 35°56'41", long 86°53'31", Williamson County, at mouth, 1.8 miles northwest of the courthouse in Franklin.	.42	.48	-	-	21.0	400	-	-
83.0	Harpeth River	Lat 35°56'50", long 86°53'28", Williamson County.	-	-	-	-	21.0	400	-	-
82.8	do	Lat 35°56'59", long 86°53'34", Williamson County.	-	-	-	-	22.0	395	-	-
82.6	do 03432410	Lat 35°57'11", long 86°53'38", Williamson County, at Baugh Bend, 2.3 miles northwest of Franklin.	212	191	-	+10.0	22.0	395	-	-
82.4	do	Lat 35°57'12", long 86°53'28", Williamson County.	-	-	-	-	21.5	380	-	-
82.0	do	Lat 35°57'11", long 86°53'06", Williamson County.	-	-	-	-	21.5	380	-	-
81.9	Harpeth River tributary No. 17 03432411	Lat 35°57'24", long 86°52'31", Williamson County, at bridge on Spence Creek Road, 2.3 miles north of Franklin.	.23	0	-	-	-	-	-	-
81.9	do 03432412	Lat 35°57'17", long 86°52'59", Williamson County, at bridge on U.S. Highway 431, 2.2 miles north of Franklin.	.49	0	0	-	-	-	-	-

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Discharge, in cubic feet per second: Drainage Area (sq mi)	Meas. Disch.	Tributary Gain or Loss	Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
81.9	Harpeth River 03432414	Lat 35°57'17", long 86°53'02", Williamson County, at Walker Bend, just downstream from Tributary No. 17 and 2.2 miles north of Franklin.	213	195	-	+4.0	22.0	380	-	-
81.8	do	Lat 35°57'20", long 86°53'02", Williamson County.	-	-	-	-	22.0	380	-	-
81.6	do	Lat 35°57'23", long 86°53'13", Williamson County.	-	-	-	-	21.5	380	-	-
81.4	Harpeth River	Lat 35°57'25", long 86°53'24", Williamson County.	-	-	-	-	21.5	390	-	-
81.3	Harpeth River tributary No. 18 03432415	Lat 35°57'42", long 86°53'05", Williamson County, at bridge on U.S. Highway 431, 2.8 miles north of Franklin.	.55	0	-	-	-	-	-	-
81.3	do 03432416	Lat 35°57'30", long 86°52'59", Williamson County, at mouth, 2.6 miles north of Franklin.	.75	.47	+.47	-	18.0	420	-	-
81.3	Harpeth River 03432417	Lat 35°57'32", long 86°53'23", Williamson County, 2.7 miles north of Franklin.	214	174	-	-21.0	22.0	460	-	-
81.2	do	Lat 35°57'35", long 86°53'22", Williamson County.	-	-	-	-	22.0	460	-	-
81.0	do 03432418	Lat 35°57'36", long 86°53'36", Williamson County, 2.8 miles north of Franklin.	214	192	-	+18.0	22.0	460	-	-
80.8	do	Lat 35°57'36", long 86°53'45", Williamson County.	-	-	-	-	22.0	460	-	-
80.6	do	Lat 35°57'41", long 86°53'58", Williamson County.	-	-	-	-	22.0	460	-	-
80.4	do	Lat 35°57'40", long 86°54'10", Williamson County.	-	-	-	-	22.0	460	-	-
80.1	do 03432419	Lat 35°57'52", long 86°54'14", Williamson County, a quarter of a mile upstream from Lynnwood Branch, 3.4 miles northwest of Franklin.	215	193	-	+1.0	22.0	455	-	-
80.0	do	Lat 35°57'56", long 86°54'10", Williamson County.	-	-	-	-	22.0	455	-	-
79.8	Lynnwood Branch 03432421	Lat 35°58'22", long 86°53'33", Williamson County, in new subdivision, 0.4 mile downstream from bridge on U.S. Highway 431, 3.6 miles north of Franklin.	3.74	2.7	-	-	18.0	430	-	-

Harpeth River seepage investigation--Headwaters to Wray Bridge--Continued

Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Discharge, in cubic feet per second: Tributary Gain or Loss	Discharge, in cubic feet per second: Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Water quality, field measurements: Specific Conductance (umhos/cm)	Water quality, field measurements: pH (units)	Water quality, field measurements: Dissolved Oxygen (mg/l)
79.8	Harpeth River 03432426	Lat 35°58'05", long 86°54'03", Williamson County, at Cotton Road bridge, 3.5 miles northwest of Franklin.	219	209	-	+16.0	22.0	455	-	-
78.8	Harpeth River tributary No. 19 03432430	Lat 35°57'43", long 86°54'57", Williamson County, at Del Rio Pike bridge, 1.2 miles southeast of Forest Home.	.33	0	-	-	-	-	-	-
78.8	do 03432432	Lat 35°58'05", long 86°54'55", Williamson County, at mouth, 0.9 mile southeast of Forest Home.	.92	.84	+.84		20.0	300	-	-
78.8	Harpeth River 03432436	Lat 35°58'07", long 86°54'56", Williamson County, 850 feet upstream from West Harpeth River, 0.8 mile southeast of Forest Home, and 3.9 miles northwest of Franklin.	221	232[a] 187	- -	 -22.0	20.5 22.0	410 395	- -	- -
74.9	do 03432700	Lat 35°59'36", long 86°54'10", Williamson County, at Wray Bridge on old Hillsboro Road, 5.0 miles north of Franklin.	340	436[a] 337	- -	- +150.0	21.0 19.5	- -	- -	- -
		Overall Net Gain or Loss				+327.2				

a Measurement made May 21.

West Harpeth River seepage investigation--Headwaters to mouth

Discharge measurements were made on May 21, 1975, on West Harpeth River and tributaries. The reach is 22.3 miles in length. These streamflow measurements were made during a period of base flow to identify reaches of ground-water discharge to streams as well as river gains and losses. These data will be used as partial criteria for locating test drilling sites for municipal wells. Tributary flow was considered a contribution and not a gain.

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second			Water quality, field measurements			
				Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
22.3	West Harpeth River 03432440	Lat 35°48'27", long 86°51'09", Williamson County, at county road bridge, at Cowles Chapel, 750 feet downstream from Interstate Highway 65 bridge, and 0.8 mile northwest of Harpeth.	5.49	4.84	-	-	21.5	330	-	-
22.2	Kennedy Branch 03432444	Lat 35°48'37", long 86°51'07", Williamson County, at bridge on U.S. Highway 431, 0.1 mile upstream from mouth and 1.0 mile north of Harpeth.	3.26	3.17	-	-	23.5	360	-	-
19.5	West Harpeth River 03432448	Lat 35°49'49", long 86°52'58", Williamson County, at bridge on U.S. Highway 31, 1.6 miles northeast of Thompson Station.	13.8	16.3	-	+11.46	19.5	350	-	-
19.2	West Harpeth River tributary No. 12 03432449	Lat 35°50'01", long 86°52'58", Williamson County, at bridge on U.S. Highway 31 (south bound) 1.2 miles southeast of town of West Harpeth.	.64	.8*	-	-	-	-	-	-
18.7	West Harpeth River tributary No. 13 03432450	Lat 35°50'36", long 86°52'58", Williamson County, at bridge on U.S. Highway 31, 1.0 mile east of West Harpeth.	.49	.5*	-	-	-	-	-	-
18.7	West Harpeth River tributary No. 14 03432451	Lat 35°50'41", long 86°53'13", Williamson County, at county road bridge on road to West Harpeth, 1,100 feet west of U.S. Highway 31, and 0.75 mile east of town of West Harpeth.	.27	.1*	-	-	-	-	-	-
18.1	West Harpeth River tributary No. 15 03432452	Lat 35°48'44", long 86°53'21", Williamson County, at bridge on Critz Lane, 1.4 miles northeast of Thompson Station.	.65	.3*	-	-	19.5	330	-	-
18.1	do 03432453	Lat 35°49'00", long 86°53'30", Williamson County, at bridge on U.S. Highway 31, 1.8 miles south of town of West Harpeth.	.93	1*	+.7	-	-	-	-	-

*Estimated discharge.

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
17.8	West Harpeth River 03432454	Lat 35°50'32", long 86°54'10", Williamson County, at county road bridge at town of West Harpeth.	20.8	26.8	-	+10.5	-	-	-	-
17.1	West Harpeth River tributary No. 16 03432455	Lat 35°50'51", long 86°54'40", Williamson County, at county road bridge, 0.5 mile northwest of town of West Harpeth.	.57	.8*	-	-	-	-	-	-
16.8	West Harpeth River 03432456	Lat 35°51'04", long 86°54'46", Williamson County, near end of private road, 1.0 mile northwest of town of West Harpeth.	22.9	28.3	-	+1.5	18.7	-	-	-
16.8	West Harpeth River tributary No. 2 03432459	Lat 35°50'07", long 86°54'47", Williamson County, 300 feet upstream from mouth and 1.0 mile west of town of West Harpeth.	2.14	0	-	-	-	-	-	-
13.1	West Harpeth River 03432462	Lat 35°52'36", long 86°56'30", Williamson County, at county road bridge, 1.4 miles southwest of Southall.	29.7	37.3	-	+9.0	18.5	370	-	-
10.4	Murfrees Fork 03432463	Lat 35°48'03", long 86°54'41", Williamson County, at county road bridge at Thompson Station.	.68	.8*	-	-	-	-	-	-
10.4	Murfrees Fork tributary 03432464	Lat 35°48'15", long 86°54'55", Williamson County, at county road bridge at Thompson Station.	.22	.3*	-	-	-	-	-	-
10.4	Murfrees Fork tributary No. 2 03432465	Lat 35°48'09", long 86°54'56", Williamson County, at county road bridge at Thompson Station.	.11	0	-	-	-	-	-	-
10.4	Murfrees Fork tributary No. 3 03432466	Lat 35°48'21", long 86°55'33", Williamson County, at county road bridge, 0.9 mile west of Thompson Station.	.31	.2*	-	-	-	-	-	-
10.4	Murfrees Fork tributary No. 4 03432467	Lat 35°48'29", long 86°55'48", Williamson County, at county road bridge, 1.2 miles west of Thompson Station.	.26	.2*	-	-	-	-	-	-

*Estimated discharge.

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second			Water quality, field measurements			
				Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
10.4	Murfrees Fork 03432468	Lat 35°48'33", long 86°56'24", Williamson County, beside county road, 300 feet downstream from private driveway, 1.7 miles west of Thompson Station.	3.22	3.26	+2.46	-	19.5	390	-	-
10.4	Murfrees Fork tributary No. 5 03432469	Lat 35°48'47", long 86°56'29", Williamson County, at county road bridge, 1.9 miles northwest of Thompson Station.	.20	.05*	-	-	-	-	-	-
10.4	Murfrees Fork 03432470	Lat 35°48'58", long 86°57'20", Williamson County, at county road bridge just downstream from Cayce Branch and 1.6 miles east of Burwood.	7.43	6*	+2.74	-	-	-	-	-
10.4	do 03432471	Lat 35°49'38", long 86°57'46", Williamson County, at county road bridge, 1.5 miles northeast of Burwood.	8.37	8.59	+2.59	-	20.0	350	-	-
10.4	West Prong Murfrees Fork 03432474	Lat 35°49'40", long 86°57'55", Williamson County, at county road bridge, 1.5 miles northeast of Burwood.	4.93	4.82	-	-	19.0	330	-	-
10.4	Ridley Hollow Branch 03432477	Lat 35°49'54", long 86°57'40", Williamson County, at county road bridge, 1.9 miles northeast of Burwood.	1.39	1.14	-	-	24.0	-	-	-
10.4	Murfrees Fork 03432480	Lat 35°49'58", long 86°57'41", Williamson County, under powerline, 700 feet downstream from West Prong and 1.9 miles northeast of Burwood.	14.8	16.4	+7.81	-	20.0	350	-	-
10.4	do 03432482	Lat 35°50'12", long 86°57'42", Williamson County, at county road bridge, 0.4 mile downstream from West Prong and 2.0 miles northeast of Burwood.	15.2	26*	+9.6	-	-	-	-	-
10.4	Doc Jones Hollow Branch 03432483	Lat 35°50'33", long 86°57'44", Williamson County, at bridge on Carter Creek Pike 2.4 miles northeast of Burwood.	2.11	1.71	-	-	22.0	280	-	-

*Estimated discharge.

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Discharge, in cubic feet per second: Tributary Gain or Loss	Discharge, in cubic feet per second: West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Water quality, field measurements: Specific Conductance (umhos/cm)	Water quality, field measurements: pH (units)	Water quality, field measurements: Dissolved Oxygen (mg/l)
10.4	Murfrees Fork 03432486	Lat 35°50'41", long 86°57'39", Williamson County, at bridge on Carter Creek Pike, 2.5 miles northeast of Burwood.	17.5	17.2 18.2	-8.8 -7.8	- -	18.5 19.0	- 360	- -	- -
10.4	Rattlesnake Branch 03432489	Lat 35°50'46", long 86°57'33", Williamson County, at bridge on Carters Creek Pike, 2.7 miles northeast of Burwood.	3.11	4.45	-	-	19.0	390	-	-
10.4	Bear Creek 03432492	Lat 35°51'30", long 86°57'55", Williamson County, 450 feet downstream from county road bridge 3.1 miles southeast of town of Leipers Fork.	3.96	3.99	-	-	18.0	310	-	-
10.4	Murfrees Fork 03432495	Lat 35°51'57", long 86°57'38", Williamson County, at ford on Floyd Road, 3.0 miles southeast of town of Leipers Fork.	26.3	33.8	+16.6 +15.6	- -	19.0	350	-	-
10.4	do 03432498	Lat 35°52'54", long 86°57'38", Williamson County, 300 feet downstream from new county road bridge, 2.2 miles southeast of town of Leipers Fork.	29.1	30.8	-3.0	-	19.0	350	-	-
9.8	West Harpeth River 03432500	Lat 35°53'56", long 86°58'01", Williamson County, at county road bridge (formerly State Highway 96) 1.8 miles east of town of Leipers Fork.	66.9	78.4	-	+41.1	19.0	360	-	-
8.6	Robinson Branch 03432504	Lat 35°48'51", long 87°01'09", Williamson County, at county road culvert, 2.1 miles south of Boston.	.57	.32	-	-	19.0	210	-	-
8.6	Robinson Branch tributary 03432505	Lat 35°48'53", long 87°01'10", Williamson County, at mouth, 2.1 miles south of Boston.	.22	.09	-	-	-	-	-	-
8.6	Robinson Branch tributary No. 2 03432506	Lat 35°49'03", long 87°01'12", Williamson County, at county road bridge 300 feet upstream from mouth and 1.9 miles south of Boston.	.11	0	-	-	-	-	-	-

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Discharge, in cubic feet per second: Tributary Gain or Loss	Discharge, in cubic feet per second: West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Water quality, field measurements: Specific Conductance (umhos/cm)	Water quality, field measurements: pH (units)	Water quality, field measurements: Dissolved Oxygen (mg/l)
8.6	Robinson Branch tributary No. 3 03432507	Lat 35°49'45", long 87°01'17", Williamson County, at county road bridge, 1.2 miles south of Boston and at mile 0.2.	.44	0	-	-	-	-	-	-
8.6	Robinson Branch 03432508	Lat 35°49'45", long 87°01'26", Williamson County, 15 feet upstream from private bridge, 1.1 miles south of Boston.	2.31	1.69	+1.37	-	20.0	230	-	-
8.6	Robinson Branch tributary No. 4 03432510	Lat 35°50'03", long 87°01'37", Williamson County, at county road bridge, 0.7 mile south of Boston.	.25	0	-	-	-	-	-	-
8.6	Robinson Branch 03432512	Lat 35°50'33", long 87°01'58", Williamson County, at Boston, 50 feet upstream from mouth.	3.48	2.53	+.84	-	21.0	260	-	-
8.6	Leipers Fork 03432516	Lat 35°50'40", long 87°01'59", Williamson County, at Boston, 0.1 mile downstream from confluence of Robinson and Boston Branches and at mile 6.9.	5.30	4.09	+1.56	-	20.0	255	-	-
8.6	do 03432520	Lat 35°51'49", long 87°01'52", Williamson County, 200 feet east of a county road, 1.3 miles north of Boston and at mile 5.5.	8.36	7.34	+3.25	-	19.0	270	-	-
8.6	Garrison Creek 03432524	Lat 35°52'29", long 87°01'47", Williamson County, 150 feet downstream from county road bridge, 2.1 miles north of Boston.	6.84	6.00	-	-	20.0	205	-	-
8.6	Leipers Fork 03432528	Lat 35°53'10", long 87°00'20", Williamson County, 50 feet upstream from Pinewood Branch, 200 feet upstream from county road bridge, and 0.6 mile southwest of town of Leipers Fork.	19.0	18.9	+11.56	-	19.5	265	-	-
8.6	Pinewood Branch 03432529	Lat 35°53'10", long 87°00'21", Williamson County, 50 feet upstream from mouth and 0.6 mile southwest of town of Leipers Fork.	3.33	2.41	-		18.0	220	-	-

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
8.6	Dobbins Branch 03432532	Lat 35°53'45", long 86°59'39", Williamson County, at bridge on Natchez Trace (old Hillsboro Pike) at town of Leipers Fork.	2.14	1.72	-	-	19.0	240	-	-
8.6	Leipers Fork 03432536	Lat 35°53'49", long 86°59'10", Williamson County, at county road bridge (formerly State Highway 96), 0.6 mile east of town of Leipers Fork and at mile 1.3.	26.5	24.8	+5.9	-	20.0	260	-	-
8.6	Leipers Fork tributary 03432540	Lat 35°54'21", long 86°59'16", Williamson County, at bridge on Natchez Trace (old Hillsboro Pike), 0.9 mile northeast of town of Leipers Fork.	.76	.50*	-	-	19.0	260	-	-
8.6	Parker Branch 03432545	Lat 35°55'07", long 86°58'44", Williamson County, at bridge on Natchez Trace, (old Hillsboro Pike), 1.9 miles northeast of town of Leipers Fork.	1.32	1.18*	-	-	17.5	295	-	-
7.0	West Harpeth River 03432550	Lat 35°55'31", long 86°58'09", Williamson County, at county road bridge, 600 feet east of old Hillsboro Pike, 1.5 miles downstream from Leipers Fork, and 2.6 miles northeast of town of Leipers Fork.	98.6	106	-	+27.6	20.0	340	-	-
6.9	Boxley Valley Branch 03432552	Lat 35°55'32", long 86°58'00", Williamson County, at county road culvert, 2.7 miles northeast of town of Leipers Fork.	1.55	5.39	-	-	16.0	370	-	-
5.8	West Harpeth River 03432555	Lat 35°56'05", long 86°57'42", Williamson County, 0.5 mile northeast of Bingham and 3.3 miles northeast of town of Leipers Fork.	101	118	-	+12.0	19.5	330	7.7	4.2
5.8	Waddell Hollow Branch 03432557	Lat 35°56'03", long 86°57'54", Williamson County, at bridge on old Hillsboro Pike, a third of a mile northeast of Bingham, 3.2 miles northeast of town of Leipers Fork, and at mile 0.2.	4.06	.20*	-	-	20.0	270	-	-

*Estimated discharge.

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Discharge, in cubic feet per second: Drainage Area (sq mi)	Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
5.8	Waddell Hollow Branch 03432558	Lat 35°56'06", long 86°57'43", Williamson County, 25 feet upstream from mouth and 0.5 mile northeast of Bingham.	4.11	3.17	+2.97	-	17.0	265	7.8	-
5.6	West Harpeth River	Lat 35°56'05", long 86°57'33", Williamson County.	-	-	-	-	19.5	330	7.8	-
5.5	West Harpeth River 03432559	Lat 35°56'10", long 86°57'29", Williamson County, 0.7 mile northeast of Bingham and 5.0 miles west of Franklin.	105	121	-	+3.0	18.8	-	-	-
5.4	West Harpeth River tributary No.3 03432560	Lat 35°55'57", long 86°57'27", Williamson County, at county road bridge, 0.7 mile east of Bingham and at mile 0.2.	.30	.17	-	-	17.5	430	-	-
5.4	do 03432561	Lat 35°56'10", long 86°57'25", Williamson County, at mouth, 0.8 mile northeast of Bingham and 4.9 miles west of Franklin.	.31	.12	-.05	-	19.0	415	8.0	-
5.4	West Harpeth River	Lat 35°56'10", long 86°57'25", Williamson County.	-	-	-	-	20.0	330	7.9	6.8
5.3	do 03432565	Lat 35°56'09", long 86°57'15", Williamson County, 0.9 mile east of Bingham and 4.8 miles west of Franklin.	105	126	-	+5.0	19.4	-	-	-
5.2	do	Lat 35°56'06", long 86°57'12", Williamson County.	-	-	-	-	20.0	330	7.9	6.7
5.0	do	Lat 35°56'09", long 86°56'59", Williamson County.	-	-	-	-	20.0	330	7.9	6.8
4.8	do	Lat 35°56'01", long 86°56'56", Williamson County.	-	-	-	-	20.0	330	7.9	6.7
4.7	do 03432567	Lat 35°56'03", long 86°56'48", Williamson County, 4.3 miles west of Franklin.	106	120	-	-6.0	20.5	-	-	-
4.7	West Harpeth River tributary No.4 03432569	Lat 35°55'45", long 86°56'37", Williamson County, at bridge on private road, 4.1 miles west of Franklin.	.27	.20	-	-	22.0	460	-	-
4.7	do 03432570	Lat 35°55'59", long 86°56'48", Williamson County, at county road bridge just upstream from mouth and 4.3 miles west of Franklin.	.45	.64	+.44	-	19.5	470	-	-

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
4.6	West Harpeth River	Lat 35°56'04", long 86°56'43", Williamson County.	-	-	-	-	20.0	320	7.8	6.6
4.4	do	Lat 35°56'13", long 86°56'37", Williamson County.	-	-	-	-	20.0	320	7.8	6.6
4.2	West Harpeth River tributary No. 5 03432578	Lat 35°56'21", long 86°56'44", Williamson County, just upstream from mouth and 4.3 miles west of Franklin.	.45	.08	-	-	17.0	340	7.7	6.9
4.2	West Harpeth River 03432580	Lat 35°56'21", long 86°56'43", Williamson County, 50 feet downstream from tributary No. 5 and 4.3 miles west of Franklin.	107	124	-	+4.0	20.0	330	7.8	6.7
4.0	do	Lat 35°56'31", long 86°56'41", Williamson County.	-	-	-	-	20.0	320	7.8	6.8
3.8	West Harpeth River tributary No. 6 03432586	Lat 35°56'53", long 86°56'57", Williamson County, at bridge on Natchez Trace (old Hillsboro Pike), 4.7 miles northwest of Franklin.	1.61	.54	-	-	17.5	370	-	-
3.8	do 03432589	Lat 35°56'39", long 86°56'40", Williamson County, 250 feet upstream from mouth and 4.4 miles west of Franklin.	1.84	1.58	+1.04	-	17.0	360	-	-
3.8	West Harpeth River 03432590	Lat 35°56'38", long 86°56'35", Williamson County, 400 feet downstream from bridge on State Highway 96 and 4.25 miles west of Franklin.	109	136	-	+12.0	20.5	325	7.8	6.9
3.6	do	Lat 35°56'34", long 86°56'21", Williamson County.	-	-	-	-	20.5	330	7.8	6.8
3.2	do	Lat 35°56'27", long 86°56'03", Williamson County.	-	-	-	-	20.5	325	7.8	6.6
3.0	do	Lat 35°56'32", long 86°55'51", Williamson County.	-	-	-	-	20.5	325	7.8	6.9
2.8	do 03432595	Lat 35°56'26", long 86°55'44", Williamson County, just upstream from Tributary No. 4 and 3.4 miles west of Franklin.	109	126	-	-10.0	20.5	330	8.0	7.2

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
2.8	West Harpeth River tributary No. 7 03432605	Lat 35°56'04", long 86°56'00", Williamson County, below county road bridge, 3.5 miles west of Franklin.	.25	.2*	-	-	22.5	380	-	-
2.8	West Harpeth River tributary No. 1 03432610	Lat 35°56'25", long 86°55'44", Williamson County, at mouth 3.4 miles west of Franklin.	1.12	1.78	-	-	18.5	-	-	-
2.6	West Harpeth River	Lat 35°56'36", long 86°55'42", Williamson County.	-	-	-	-	20.5	325	7.8	7.1
2.4	do	Lat 35°56'42", long 86°55'33", Williamson County.	-	-	-	-	20.5	330	7.9	7.2
2.3	West Harpeth River tributary No. 8 03432620	Lat 35°56'10", long 86°56'16", Williamson County, at county road bridge, 2.9 miles west of Franklin.	2.95	2.50	-	-	25.4	420	-	-
2.3	do 03432625	Lat 35°56'43", long 86°55'27", Williamson County, 300 feet upstream from mouth and 3.3 miles northwest of Franklin.	3.44	2.97	+.47	-	20.5	385	7.8	6.1
2.3	West Harpeth River 03432630	Lat 35°56'45", long 86°55'28", Williamson County, 20 feet downstream from Tributary No. 8, 3.3 miles northwest of Franklin.	114	139	-	+13.0	20.5	325	7.8	7.1
2.2	West Harpeth River tributary No. 9 03432635	Lat 35°56'48", long 86°55'25", Williamson County, at mouth 3.3 miles northwest of Franklin.	.29	0	-	-	-	-	-	-
2.1	West Harpeth River	Lat 35°56'49", long 86°55'26", Williamson County.	-	-	-	-	21.0	335	7.9	7.2
2.1	do 03432640	Lat 35°56'53", long 86°55'36", Williamson County, 300 feet downstream from Tributary No. 9, 3.4 miles northwest of Franklin.	114	123	-	-16.0	20.0	-	-	-

*Estimated discharge.

West Harpeth River seepage investigation--Headwaters to mouth--Continued

West Harpeth River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. Disch.	Tributary Gain or Loss	West Harpeth River Gain or Loss	Water quality, field measurements: Temp. (°C)	Specific Conductance (umhos/cm)	pH (units)	Dissolved Oxygen (mg/l)
2.0	West Harpeth River	Lat 35°56'59", long 86°55'22", Williamson County.	-	-	-	-	21.0	325	7.9	7.2
1.8	do	Lat 35°57'09", long 86°55'26", Williamson County.	-	-	-	-	21.0	335	7.9	7.2
1.6	do	Lat 35°57'16", long 86°56'20", Williamson County.	-	-	-	-	21.0	325	7.9	7.0
1.4	do	Lat 35°57'20", long 86°56'10", Williamson County.	-	-	-	-	21.0	325	7.8	7.1
1.3	do 03432645	Lat 35°57'25", long 86°55'08", Williamson County, 3.5 miles northwest of Franklin.	115	136	-	+13.0	19.0	-	-	-
0.8	West Harpeth River tributary No. 10 03432650	Lat 35°57'32", long 86°55'32", Williamson County, 600 feet upstream from mouth, and 1.2 miles south of Forest Home.	1.63	.85	-	-	19.0	-	-	-
0.8	West Harpeth River 03432655	Lat 35°57'38", long 86°55'30", Williamson County, 25 feet downstream from Tributary No. 10, 1.1 miles south of Forest Home and 3.9 miles northwest of Franklin.	117	135	-	-1.0	20.5	-	-	-
0.5	West Harpeth River tributary No. 11 03432660	Lat 35°57'46", long 86°55'19", Williamson County, at mouth, 1.0 miles south of Forest Home.	.21	0	-	-	-	-	-	-
0.3	West Harpeth River 03432670	Lat 35°57'51", long 86°55'07", Williamson County, at Del Rio Pike bridge, 0.9 mile south of Forest Home.	117	135	-	0	21.0	340	-	-
0.2	do 03432680	Lat 35°57'54", long 86°55'03", Williamson County, 1,000 feet downstream from Del Rio Pike bridge, 0.9 mile southeast of Forest Home.	117	130	-	-5.0	-	-	-	-
0.1	do 03432690	Lat 35°58'02", long 86°55'07", Williamson County, 0.1 mile upstream from mouth, 0.8 mile southeast of Forest Home, and 4.0 miles northwest of Franklin.	117	135 113[a]	- -	+5.0 -	21.0	340	-	-
		Overall Net Gain or Loss				+130.16				

a Measured on May 22.

West Fork Mulberry Creek seepage investigations--Headwaters to mouth

As part of the Elk River tributaries seepage investigation in northern Lincoln County, discharge measurements were made on Nov. 12-13, 1974, on West Fork Mulberry Creek and tributaries to identify sections of the stream where gains or losses occurred. The reach is 8.6 miles in length. Streamflow measurements were made during a period of base flow to identify reaches of groundwater discharge to streams as well as stream gains and losses. The data will be used as partial criteria for locating test drilling sites for municipal wells. Tributary flow was considered a contribution and not a gain.

West Fork Mulberry Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	West Fork Mulberry Creek Gain or Loss
8.6	West Fork Mulberry Creek 03581400	Lat 35°17'32", long 86°27'35", Moore County, 200 ft downstream from county road bridge, 1.6 miles north of Booneville.	17.4	5.57	-	-
8.5	Polecat Hollow Spring 03581403	Lat 35°17'59", long 86°29'01", Lincoln County, 2.0 miles northwest of Booneville.	-	.08	-	-
8.5	Polecat Hollow Branch 03581404	Lat 35°17'58", long 86°28'49", Moore County, 1000 ft downstream from Polecat Hollow Spring and 1.9 miles northwest of Booneville.	.83	.10	+.02	-
8.5	do 03581408	Lat 35°17'55", long 86°28'26", Moore County, 1.7 miles north of Booneville.	1.02	.13	+.03	-
8.5	do 03581412	Lat 35°17'46", long 86°27'54", Moore County, at county road bridge, 0.3 mile upstream from mouth and 1.5 miles north of Booneville.	1.71	.35	+.22	-
7.8	West Fork Mulberry Creek 03581416	Lat 35°17'01", long 86°27'39", Lincoln County, at ford on private road, 0.7 mile north of Booneville.	19.8	6.09	-	+.52
7.2	do 03581420	Lat 35°16'32", long 86°27'33", Lincoln County, 0.3 mile upstream from Bailey Branch and 0.3 mile east of Booneville.	20.5	6.60	-	+.51
6.9	Bailey Branch 03581423	Lat 35°16'45", long 86°28'15", Lincoln County, 0.3 mile upstream from Booneville.	1.12	.04	-	-
6.9	do 03581424	Lat 35°16'31", long 86°27'56", Lincoln County, at county road bridge, at Booneville.	1.38	0	-.04	-
5.5	West Fork Mulberry Creek 03581428	Lat 35°15'18", long 86°27'39", Lincoln County, 400 ft upstream from unnamed tributary and 1.4 miles south of Booneville.	23.6	9.27	-	+2.67
5.5	West Fork Mulberry Creek tributary 03581432	Lat 35°15'16", long 86°27'41", Lincoln County, 200 ft upstream from mouth and 1.4 miles south of Booneville.	1.22	.05	-	-
4.7	Buckeye Creek 03581436	Lat 35°17'32", long 86°25'00", Moore County, at bridge on private road, 2.4 miles west of Lynchburg.	1.86	.17	-	-
4.7	do 03581440	Lat 35°16'47", long 86°25'37", Moore County, at county road bridge, 2.8 miles west of Lynchburg.	3.12	.30	+.13	-
4.7	do 03581444	Lat 35°16'19", long 86°26'08", Lincoln County, just downstream from right bank tributary, 75 ft downstream from bridge at county line, 1.6 miles east of Booneville.	4.50	.30	0	-
4.7	do 03581448	Lat 35°16'00", long 86°26'22", Lincoln County, at county road bridge, 1.5 miles southeast of Booneville.	4.99	.58	+.28	-
4.7	do 03581452	Lat 35°15'40", long 86°26'37", Lincoln County, 400 ft upstream from private bridge, 1.5 miles southeast of Booneville.	5.43	.60	+.02	-
4.7	do 03581456	Lat 35°15'31", long 86°26'46", Lincoln County, at abandoned bridge, 1.5 miles southeast of Booneville and 3.4 miles north of Mulberry.	5.50	.72	+.12	-

West Fork Mulberry Creek seepage investigations--Headwaters to mouth--Continued

West Fork Mulberry Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	West Fork Mulberry Creek Gain or Loss
4.7	Buckeye Creek 03581460	Lat 35°15'10", long 86°27'07", Lincoln County, at county road bridge, 1.7 miles south of Booneville and 3.0 miles north of Mulberry.	6.45	0.60	-0.12	-
3.9	West Fork Mulberry Creek 03581464	Lat 35°14'14", long 86°27'27", Lincoln County, 900 ft southeast of county road, and 1.8 miles north of Mulberry.	32.6	11.1	-	+1.83
3.3	McGhee Hollow Branch 03581468	Lat 35°14'05", long 86°27'54", Lincoln County, at culvert on county road, 1.8 miles north of Mulberry.	.46	.07	-	-
2.7	West Fork Mulberry Creek 03581472	Lat 35°13'17", long 86°27'47", Lincoln County, 150 ft upstream from Gimlet Creek, and 0.7 mile north of Mulberry.	33.8	12.0	-	+.9
2.6	Gimlet Creek 03581476	Lat 35°14'53", long 86°29'30", Lincoln County, at county road bridge, 2.3 miles southwest of Booneville.	4.26	1.56	-	-
2.6	do 03581480	Lat 35°14'22", long 86°29'02", Lincoln County, at county road bridge, 2.7 miles southwest of Booneville.	5.14	1.28	-.28	-
2.6	do 03581484	Lat 35°14'04", long 86°28'44", Lincoln County, beside county road, 150 ft upstream from right bank tributary, and 2.5 miles northeast of Mimosa.	5.42	1.82	+.54	-
2.6	do 03581488	Lat 35°13'53", long 86°28'31", Lincoln County, beside county road, 2.6 miles east of Mimosa.	5.85	1.72	-.10	-
2.6	do 03581492	Lat 35°13'36", long 86°28'16", Lincoln County, at county road bridge, 1.3 miles north of Mulberry.	6.10	1.68	-.04	-
2.6	do 03581496	Lat 35°13'20", long 86°27'57", Lincoln County, at ford, 0.2 mile upstream from mouth and 0.9 mile north of Mulberry.	6.92	2.00	+.32	-
1.7	West Fork Mulberry Creek 03581500	Lat 35°12'34", long 86°27'46", Lincoln County, at former gaging station at Mulberry, 1000 ft downstream from State Highway 50 bridge.	41.2	13.9	-	+1.9
		Overall Net Gain or Loss				+8.33

Norris Creek seepage investigations--Headwaters to mouth

As part of the Elk River tributaries seepage investigation in northern Lincoln County, discharge measurements were made on Nov. 12-13, 1974, on Norris Creek and tributaries to identify sections of the stream where gains or losses occurred. The reach is 13.8 miles in length. Streamflow measurements were made during a period of base flow to identify reaches of ground-water discharge to streams as well as stream gains and losses. The data will be used as partial criteria for locating test drilling sites for municipal wells. Tributary flow was considered as a contribution and not a gain.

Norris Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	Norris Creek Gain or Loss
13.8	Norris Creek 03582040	Lat 35°17'23", long 86°32'09", Lincoln County, at county road bridge, 1.6 miles northeast of Belleville.	1.76	0	-	-
13.3	Norris Creek tributary 03582050	Lat 35°17'04", long 86°32'17", Lincoln County, at county road bridge just upstream from the mouth, 1.3 miles northeast of Belleville.	.78	0	-	-
12.9	Norris Creek 03582060	Lat 35°16'50", long 86°32'41", Lincoln County, just upstream from tributary No. 2 and 0.8 mile northeast of Belleville.	3.26	.78	-	+0.78
12.8	Norris Creek tributary No. 2 03582070	Lat 35°17'02", long 86°32'52", Lincoln County, 0.5 mile upstream from bridge on U.S. Highway 231 and 0.9 mile north of Belleville.	1.29	.04	-	-
12.8	do 03582080	Lat 35°16'48", long 86°32'44", Lincoln County, 500 ft upstream from bridge on U.S. Highway 231, 0.8 mile northeast of Belleville.	1.35	.38	+0.34	-
11.8	Ashby Hollow Branch 03582090	Lat 35°16'29", long 86°33'35", Lincoln County, at ford on private road, 0.3 mile northwest of Belleville.	1.01	0	-	-
11.8	do 03582100	Lat 35°16'10", long 86°33'22", Lincoln County, at bridge on U.S. Highway 231 at Belleville.	1.14	0	0	-
11.4	Norris Creek 03582110	Lat 35°15'54", long 86°33'33", Lincoln County, at county road bridge, 0.5 mile southwest of Belleville.	7.68	1.19	-	+.41
10.8	Union Branch 03582120	Lat 35°16'47", long 86°34'57", Lincoln County, at county road bridge, 1.7 miles west of Belleville.	1.12	0	-	-
10.8	do 03582130	Lat 35°16'07", long 86°34'38", Lincoln County, at Conwell Cemetery, 1.3 miles west of Belleville.	2.07	0	0	-
10.8	do 03582140	Lat 35°15'48", long 86°34'22", Lincoln County, at private bridge, 1.2 miles southwest of Belleville.	2.37	0	0	-
10.8	Union Branch tributary 03582150	Lat 35°15'32", long 86°34'08", Lincoln County, 1.2 miles southwest of Belleville and at mile 0.1.	.25	0	-	-
10.8	Union Branch 03582160	Lat 35°15'30", long 86°33'57", Lincoln County, at bridge on U.S. Highway 231, 1.1 miles southwest of Belleville, and at mile 0.1	2.86	0	0	
10.7	Norris Creek 03582170	Lat 35°15'21", long 86°33'57", Lincoln County, at bridge on U.S. Highway 231, 1.3 miles southwest of Belleville.	11.6	2.08	-	+.89
10.6	do 03582180	Lat 35°15'16", long 86°34'03", Lincoln County, 500 ft downstream from John Gill Spring, 700 ft downstream from bridge on U.S. Highway 231, and 3.0 miles northeast of Howell.	11.7	2.52	-	+.34
9.1	do 03582190	Lat 35°14'04", long 86°33'58", Lincoln County, at county road bridge, 700 ft west of U.S. Highway 231, and 2.6 miles east of Howell.	13.3	2.42	-	-.10
8.4	do 03582205	Lat 35°13'33", long 86°33'56", Lincoln County, at bridge on U.S. Highway, 231, and 2.6 miles east of Howell.	15.1	3.15	-	+.73

Norris Creek seepage investigations--Headwaters to mouth--Continued

Norris Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	Norris Creek Gain or Loss
7.0	Norris Creek 03582210	Lat 35°12'30", long 86°33'53", Lincoln County, 200 ft downstream from ford on private road, 200 ft east of U.S. Highway 231, and 2.7 miles southwest of Mimosa.	16.5	3.40	-	+.25
6.9	Long Hollow Branch 03582215	Lat 35°12'27", long 86°33'47", Lincoln County, at mouth, 2.6 miles southeast of Mimosa.	.64	.09	-	-
5.7	Norris Creek 03582220	Lat 35°11'32", long 86°33'45", Lincoln County, at county road bridge, 2.8 miles north of the courthouse in Fayetteville.	18.6	3.28	-	-.12
4.1	do 03582225	Lat 35°10'57", long 86°32'37", Lincoln County, 150 ft downstream from bridge on Mimosa Road, just upstream from Little Norris Creek, 1.0 mile northeast of Creson, and 2.6 miles northeast of the courthouse in Fayetteville.	19.8	4.72	-	+1.44
4.1	Big Hungry Branch 03582230	Lat 35°14'40", long 86°32'36", Lincoln County, at county road bridge, just downstream from Paint Hollow Branch, and 2.0 miles south of Belleville.	1.24	.13	-	-
4.1	do 03582235	Lat 35°14'28", long 86°32'12", Lincoln County, at bridge on Big Hungry Road, 2.4 miles south of Belleville.	1.82	.10	-.03	-
4.1	Big Hungry Branch Spring 03582240	Lat 35°14'21", long 86°31'51", Lincoln County, 1.5 miles north of Mimosa.	-	0	-	-
4.1	Big Hungry Branch 03582245	Lat 35°14'14", long 86°31'38", Lincoln County, beside Big Hungry Road, 1.2 miles north of Mimosa	2.42	.10*	0	-
4.1	Big Hungry Branch tributary 03582250	Lat 35°14'17", long 86°31'34", Lincoln County, 300 ft upstream from mouth and 1.3 miles north of Mimosa.	.49	0	-	-
4.1	Big Hungry Branch 03582255	Lat 35°14'05", long 86°31'21", Lincoln County, beside Big Hungry Road, 1.0 mile north of Mimosa.	3.04	0	-.10	-
4.1	do 03582259	Lat 35°14'02", long 86°31'06", Lincoln County, 200 ft upstream from confluence with Lane Branch, 0.9 mile north of Mimosa.	3.08	0	0	-
4.1	Little Norris Creek 03582260	Lat 35°13'59", long 86°31'05", Lincoln County, just downstream from confluence of Lane Branch and Big Hungry Branch, 0.9 mile north of Mimosa.	6.94	.69	-	-
4.1	do 03582265	Lat 35°13'14", long 86°31'04", Lincoln County, at bridge on Hamestring Road at Mimosa.	7.38	1.17	+.48	-
4.1	Toddy Hollow Branch 03582270	Lat 35°13'26", long 86°31'34", Lincoln County, 500 ft upstream from county road bridge, 0.5 mile northwest of Mimosa.	.58	.04	-	-
4.1	do 03582274	Lat 35°13'15", long 86°31'15", Lincoln County, 500 ft upstream from bridge on Mimosa Road, at Mimosa and at mile 0.2.	.70	.06	+.02	-
4.1	do 03582275	Lat 35°13'12", long 86°31'10", Lincoln County, at bridge on Mimosa Road at Mimosa.	.71	0	-.06	-
4.1	Hamestring Branch 03582280	Lat 35°13'18", long 86°30'16", Lincoln County, at bridge on Hamestring Road, 0.8 mile east of Mimosa.	1.72	.12	-	-
4.1	Little Norris Creek 03582285	Lat 35°12'41", long 86°31'17", Lincoln County, beside Mimosa Road, 0.6 mile south of Mimosa.	11.5	2.09	+1.40	-

*Estimated discharge.

Norris Creek seepage investigations--Headwaters to mouth--Continued

Norris Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	Norris Creek Gain or Loss
4.1	Possum Hollow Branch 03582290	Lat 35°11'51", long 86°32'00", Lincoln County, at bridge on Mimosa Road, 1.7 miles south of Mimosa and 3.8 miles northeast of the courthouse in Fayetteville.	1.33	0.25	-	-
4.1	Little Norris Creek 03582295	Lat 35°10'57", long 86°32'35", Lincoln County, 100 ft upstream from mouth, 2.6 miles northeast of the courthouse in Fayetteville.	15.3	2.24	+.15	-
		Overall Net Gain or Loss				+6.96

Cane Creek seepage investigation--Headwaters to mouth

As part of the Elk River tributaries seepage investigation in northern Lincoln County, discharge measurements were made Nov. 12-13, 1974, on Cane Creek and tributaries to identify sections of the stream where gains or losses occurred. The reach is 20.8 miles in length. Streamflow measurements were made during a period of base flow to identify reaches of ground-water discharge to streams as well as stream gains and losses. The data will be used as partial criteria for locating test drilling sites for municipal wells. Tributary flow was considered a contribution and not a gain.

Cane Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	Cane Creek Gain or Loss
20.8	West Cane Creek 03582510	Lat 35°20'17", long 86°40'00", Marshall County, at county road bridge, 800 feet upstream from bridge on U.S. Highway 431, and 1.6 miles southeast of Talley and at mile 0.6.	11.6	3.42	-	-
20.8	Middle Cane Creek 03582515	Lat 35°20'29", long 86°39'28", Marshall County, at county road bridge, 1.9 miles northwest of Petersburg, and at mile 0.4.	5.39	1.29	-	-
20.4	Cane Creek 03582520	Lat 35°19'49", long 86°39'14", Marshall County, 100 ft downstream from county road bridge and 1.2 miles northwest of Petersburg.	18.4	6.71	-	+3.29
19.5	do 03582525	Lat 35°19'23", long 86°38'40", Marshall County, 0.5 mile northwest of Petersburg.	19.2	7.48	-	+.77
19.1	do 03582530	Lat 35°19'20", long 86°38'17", Marshall County, at bridge on State Highway 130, just upstream from Sanders Creek and at north edge of Petersburg.	19.5	6.81	-	-.67
19.1	do 03582532	Lat 35°19'20", long 86°38'15", Marshall County, just downstream from Sanders Creek, 120 ft downstream from bridge on State Highway 130, and at north edge of Petersburg.	24.0	9.73	-	+2.92
17.2	Steed Spring 03582535	Lat 35°19'24", long 86°32'32", Lincoln County, near the head of Little Cane Creek and 0.8 mile south of Chestnut Ridge.	-	.09	-	-
17.2	Little Cane Creek 03582536	Lat 35°19'26", long 86°32'41", Lincoln County, at county road bridge, 0.8 mile southwest of Chestnut Ridge.	.67	.13	+.04	-
17.2	do 03582537	Lat 35°19'03", long 86°33'23", Lincoln County, beside county road 1.6 miles southwest of Chestnut Ridge.	2.00	.36	+.23	-
17.2	Little Cane Creek tributary 03582538	Lat 35°18'55", long 86°33'32", Lincoln County, at old county road bridge, 1.75 miles southeast of Bledsoe.	.46	.05	-	-
17.2	Little Cane Creek tributary No. 2 03582539	Lat 35°18'53", long 86°33'36", Lincoln County, at county road bridge, 1.7 miles southeast of Bledsoe.	.07	.25*	-	-
17.2	Little Cane Creek 03582540	Lat 35°18'52", long 86°33'56", Lincoln County, at county road bridge, 1.6 miles southeast of Bledsoe.	3.33	.67	+.31	-
17.2	Hannah Gap Branch 03582541	Lat 35°20'06", long 86°34'38", Lincoln County, at county road bridge at Bledsoe.	4.28	.59	-	-
17.2	Barham Branch 03582543	Lat 35°20'32", long 86°32'54", Lincoln County, at county road bridge, 0.7 mile northwest of Chestnut Ridge.	.83	.10*	-	-
17.2	do 03582546	Lat 35°20'15", long 86°33'46", Lincoln County, 0.9 mile east of Bledsoe.	2.25	.50*	+.40	-
17.2	do 03582547	Lat 35°20'02", long 86°34'07", Lincoln County, beside county road 0.5 mile east of Bledsoe.	2.63	.85	+.35	-

*Estimated discharge.

Cane Creek seepage investigation--Headwaters to mouth--Continued

Cane Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	Cane Creek Gain or Loss
17.2	Hannah Gap Branch 03582548	Lat 35°18'59", long 86°34'49", Lincoln County, at county road bridge, 1.3 miles south of Bledsoe	8.22	2.19	-	-
17.2	Little Cane Creek 03582550	Lat 35°18'42", long 86°35'17", Lincoln County, 1.7 miles southwest of Bledsoe.	13.6	3.46	+2.79	-
17.2	do 03582551	Lat 35°18'29", long 86°36'06", Lincoln County, at county road bridge, 2.2 miles southeast of Petersburg.	14.7	3.95	+.49	-
17.2	Scott Branch 03582553	Lat 35°19'52", long 86°36'02", Lincoln County, at private bridge, 1.3 miles west of Bledsoe.	.88	0	-	-
17.2	do 03582554	Lat 35°19'29", long 86°36'07", Lincoln County, at county road bridge, 1.5 miles southwest of Bledsoe.	1.63	.47	+.47	-
17.2	Scott Branch tributary 03582555	Lat 35°19'20", long 86°36'36", Lincoln County, at county road bridge 1.5 miles east of Petersburg.	.28	0	-	-
17.2	Scott Branch 03582556	Lat 35°18'46", long 86°36'39", Lincoln County, at county road bridge, 1.5 miles southeast of Petersburg.	2.50	.80	+.33	-
17.2	Little Cane Creek 03582557	Lat 35°18'13", long 86°37'43", Lincoln County, beside private road, just upstream from mouth, 1.2 miles south of Petersburg.	19.4	4.34	+.39	-
13.6	Pleasant Valley Creek 03582563	Lat 35°19'02", long 86°41'18", Marshall County, at county road bridge, 0.9 mile east of town of Browns Shop.	5.08	1.47	-	-
13.6	do 03582565	Lat 35°18'52", long 86°40'51", Marshall County beside county road, just upstream from tributary No. 1 and 1.3 miles east of town of Browns Shop.	6.40	1.82	+.35	-
13.6	Pleasant Valley Creek tributary 03582566	Lat 35°19'41", long 86°41'09", Marshall County, at county road bridge, 1.1 miles northeast of town of Browns Shop and 2.8 miles west of Petersburg.	.35	.05	-	-
13.6	do 03582567	Lat 35°19'24", long 86°41'01", Marshall County, at county road bridge, 1.1 miles east of town of Browns Shop and 2.7 miles west of Petersburg.	.46	0	-.05	-
13.6	Pleasant Valley Creek tributary No. 2 03582568	Lat 35°19'22", long 86°40'41", Marshall County, at county road bridge, 2.4 miles west of Petersburg.	.38	.02	-	-
13.6	Pleasant Valley Creek tributary 03582569	Lat 35°18'52", long 86°40'50", Marshall County, just upstream from mouth, 2.5 miles west of Petersburg.	1.43	.13	+.13	-
13.6	Pleasant Valley Creek 03582570	Lat 35°18'05", long 86°39'56", Lincoln County, at county road bridge, 2.1 miles west of Petersburg.	9.93	1.51	-.31	-
13.6	do 03582572	Lat 35°17'14', long 86°39'03", Lincoln County, at Mt. Olivet Church, 2.4 miles south of Petersburg.	12.6	1.88	+.37	-
13.6	do 03582573	Lat 35°16'49", long 86°38'53", Lincoln County, at Collier cemetery, 2.8 miles south of Petersburg.	13.0	1.94	+.06	-
11.2	Gingerbread Creek 03582574	Lat 35°16'47", long 86°36'09", Lincoln County, beside county road, 1.5 miles east of Bidwell.	1.28	.04	-	-
11.2	do 03582575	Lat 35°16'04", long 86°35'54", Lincoln County, at county road bridge, 1.8 miles southeast of Bidwell and 2.5 miles west of Belleville.	1.66	.08	+.04	-

Cane Creek seepage investigation--Headwaters to mouth--Continued

Cane Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	Cane Creek Gain or Loss
11.2	Smith Hollow Branch 03582576	Lat 35°16'07", long 86°35'44", Lincoln County, at county road bridge, 2.3 miles west of Belleville.	.42	0	-	-
11.2	Gingerbread Creek 03582577	Lat 35°15'45", long 86°36'21", Lincoln County, at county road bridge, 2.2 miles north of Howell.	2.63	.15	+.07	-
11.2	Patton Hollow Branch 03582578	Lat 35°15'26", long 86°36'02", Lincoln County, at county road bridge, 2.0 miles north of Howell.	1.16	.05*	-	-
11.2	do 03582581	Lat 35°15'44", long 86°36'21", Lincoln County, at county road bridge, 1.6 miles southeast of Bidwell.	1.32	.13	+.08	-
11.2	Gingerbread Creek 03582582	Lat 35°15'22", long 86°37'13", Lincoln County, at county road bridge, 750 ft upstream from bridge on State Highway 50, 2.0 miles northwest of Howell.	4.89	.66	+.51	-
6.6	Craighead Creek 03582584	Lat 35°14'45", long 86°40'02", Lincoln County, at county road bridge, 1.1 miles southeast of Blakeville.	2.01	.25	-	-
6.6	Craighead Creek tributary 03582585	Lat 35°14'44", long 86°39'46", Lincoln County, at county road bridge, 1.3 miles southeast of Blakeville.	.40	.07	-	-
6.6	Craighead Creek 03582586	Lat 35°13'50", long 86°39'28", Lincoln County, at county road bridge, 1.1 miles northeast of Sulphur Springs.	3.85	.52	+.27	-
6.6	do 03582587	Lat 35°13'16", long 86°38'45", Lincoln County, at county road bridge, 2.0 miles west of Howell.	5.44	.84	+.32	-
6.5	Cane Creek 03582589	Lat 35°12'42", long 86°38'03", Lincoln County, beside county road, 2.1 miles east of Sulphur Springs.	88.7	28.9	-	+19.17
5.5	Cane Creek tributary 03582590	Lat 35°12'24", long 86°37'11", Lincoln County, at county road bridge, 1.7 miles south of Howell.	1.22	.09	-	-
3.8	Cane Creek 03582591	Lat 35°11'13", long 86°37'38", Lincoln County, 300 ft downstream from county road bridge, 1.1 miles east of Egam.	93.0	17.0	-	-11.9
3.6	Hayes Branch 03582592	Lat 35°10'59", long 86°38'04", Lincoln County, at county road bridge, 0.7 mile east of Egam.	2.28	.23	-	-
3.2	Cane Creek tributary No. 2 03582593	Lat 35°11'11", long 86°37'04", Lincoln County, at county road bridge, 3.6 miles northwest of the courthouse in Fayetteville.	1.01	.25*	-	-
.6	Buchanan Creek 03582594	Lat 35°12'34", long 86°35'24", Lincoln County, 150 ft downstream from county road bridge, 1.8 miles southeast of Howell.	1.99	.37	-	-
.6	do 03582595	Lat 35°11'51", long 86°35'21", Lincoln County, at county road bridge, 3.2 miles northwest of the courthouse in Fayetteville.	2.89	.35	-.02	-
.6	do 03582596	Lat 35°11'02", long 86°35'21", Lincoln County, 2.4 miles northwest of the courthouse in Fayetteville.	3.61	.47	+.12	-
.6	do 03582597	Lat 35°09'50", long 86°35'48", Lincoln County, at bridge on Boonshill Road, 1.75 miles northwest of the courthouse in Fayetteville.	5.86	.28	-.19	-
.6	do 03582598	Lat 35°09'29", long 86°38'11", Lincoln County, beside U.S. Highway 64, 1000 ft upstream from the mouth, and 1.9 miles west of the courthouse in Fayetteville.	6.55	.50	+.22	-

*Estimated discharge.

Swan Creek seepage investigations--Headwaters to mouth

As part of the Elk River tributaries seepage investigation in northern Lincoln County, discharge measurements were made Nov. 12-13, 1974, on Swan Creek and tributaries to identify sections of the stream where gains or losses occurred. The reach is 15.6 miles in length. Streamflow measurements were made during a period of base flow to identify reaches of ground-water discharge to streams as well as stream gains and losses. The data will be used as partial criteria for locating test drilling sites for municipal wells. Tributary flow was considered a contribution and not a gain.

Swan Creek River mile	Stream and Site Number	Location	Drainage Area (sq mi)	Discharge, in cubic feet per second: Meas. disch.	Tributary Gain or Loss	Swan Creek Gain or Loss
11.1	Swan Creek 03582640	Lat 35°15'00", long 86°43'35", Lincoln County, at county road bridge, 1.4 miles southeast of Delina.	12.7	3.38	-	-
10.8	Swan Creek tributary 03582642	Lat 35°14'47", long 86°43'38", Lincoln County, at county road bridge, 1.6 miles south of Delina.	.70	.12	-	-
9.1	Morton Branch 03582644	Lat 35°14'05", long 86°42'28", Lincoln County, at county road bridge, 2.5 miles northeast of Boonshill.	3.23	.41	-	-
8.3	Swan Creek 03582645	Lat 35°12'59", long 86°43'03", Lincoln County, beside county road, 1.4 miles east of Boonshill.	21.2	5.69	-	+2.31
5.7	McAfee Creek 03582648	Lat 35°12'01", long 86°45'13", Lincoln County, at bridge on U.S. Highway 64 at Taylortown.	6.52	.89	-	-
5.2	Swan Creek 03582650	Lat 35°11'32", long 86°45'05", Lincoln County, beside county road, 0.5 mile south of Taylortown.	32.0	6.07 6.45 8.06	- - -	+1.17
4.1	do 03582652	Lat 35°11'04", long 86°44'20", Lincoln County, at county road bridge, 1.5 miles southeast of Taylortown.	33.7	9.67	-	+.81
2.5	Little Swan Creek 03582654	Lat 35°13'12", long 86°40'59", Lincoln County, beside county road, 0.8 mile west of Sulphur Springs.	1.10	.09 .09	- -	- -
2.5	do 03582656	Lat 35°12'58", long 86°41'08", Lincoln County, beside county road, 0.7 mile northeast of Hughey.	1.48	.20	+.11	-
2.5	do 03582658	Lat 35°12'40", long 86°41'31", Lincoln County, 400 ft west of county road, 0.2 mile west of Hughey.	2.09	.39	+.19	-
2.5	Little Swan Creek tributary 03582660	Lat 35°12'30", long 86°41'32", Lincoln County, at county road bridge, at Hughey.	1.56	.09	-	-
2.5	Little Swan Creek 03582662	Lat 35°12'25", long 86°42'06", Lincoln County, at county road bridge, 0.5 mile west of Hughey.	4.19	.83	+.44	-
2.5	do 03582665	Lat 35°11'58", long 86°42'42", Lincoln County, at bridge on U.S. Highway 64, 1.9 miles southeast of Boonshill.	5.35	.90	+.07	-

PART 2. WATER QUALITY RECORDS

03425000 Cumberland River at Carthage, Tenn.
(National stream-quality accounting network station)

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.--Chemical analyses: January to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
JAN.											
15...	1200	46000	4.3	410	0	62	0	29	4.6	2.7	1.3
FEB.											
11...	1100	52200	4.7	--	--	--	--	23	4.8	2.5	1.2
MAR.											
27...	1130	75700	5.1	--	--	--	--	19	4.1	2.2	1.0
APR.											
23...	1015	50100	4.6	--	--	--	--	20	3.7	2.0	1.1
MAY											
08...	1045	24800	4.6	1500	0	80	30	15	3.7	2.4	1.2
JUNE											
11...	1200	12800	4.3	--	--	--	--	19	3.9	2.5	1.2
JULY											
09...	1045	7680	--	--	--	--	--	--	--	--	--
22...	1100	4950	4.2	--	--	--	--	31	3.8	2.7	1.9
AUG.											
05...	1100	794	2.8	440	0	50	20	25	3.1	2.2	1.1
SEP.											
09...	1030	7860	4.1	--	--	--	--	21	3.3	2.2	1.0

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
JAN.											
15...	82	--	67	18	2.9	.1	.29	.23	.52	2.3	.03
FEB.											
11...	65	--	53	20	2.5	.3	.32	.15	.47	2.1	.04
MAR.											
27...	60	--	49	17	2.3	.1	.33	.21	.54	2.4	.06
APR.											
23...	47	0	39	18	1.9	.1	.22	.37	.59	2.6	.02
MAY											
08...	45	0	37	18	1.7	.2	.29	.24	.53	2.3	.05
JUNE											
11...	52	0	43	21	2.1	.0	.25	.19	.44	1.9	.12
JULY											
09...	--	--	--	--	--	--	--	--	--	--	--
22...	84	0	69	15	3.5	.3	.52	.59	1.1	4.9	.23
AUG.											
05...	83	0	68	10	2.7	.1	.17	.20	.37	1.6	.06
SEP.											
09...	61	0	50	13	2.0	.1	.26	.15	.41	1.8	.01

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
JAN.										
15...	128	103	.17	15900	91	24	6	.1	250	7.1
FEB.										
11...	81	91	.11	11400	77	24	6	.1	200	7.1
MAR.										
27...	90	80	.12	18400	64	15	7	.1	140	6.9
APR.										
23...	71	75	.10	9600	65	27	6	.1	125	7.7
MAY										
08...	69	69	.09	4620	53	16	9	.1	110	7.1
JUNE										
11...	79	80	.11	2730	64	21	8	.1	130	7.1
JULY										
09...	--	--	--	--	--	--	--	--	140	6.6
22...	104	104	.14	1390	93	24	6	.1	200	7.1
AUG.										
05...	101	88	.14	217	75	7	6	.1	175	7.1
SEP.										
09...	74	77	.10	1570	66	16	7	.1	140	7.3

03425000 CUMBERLAND RIVER AT CARTHAGE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	IMMEDIATE COLIFORM (COL. PER 100 ML)
JAN.										
15...	8.5	10	--	10	470	--	--	--	--	260
FEB.										
11...	11.5	8	--	8.3	150	--	--	--	--	60
MAR.										
27...	13.5	20	--	12	190	--	--	--	--	72
APR.										
23...	13.5	42	--	1.5	210	--	--	--	--	395
MAY										
08...	19.5	30	--	5.7	810	--	--	--	--	135
JUNE										
11...	19.5	25	--	6.6	2500	--	--	--	--	99
JULY										
09...	20.5	--	5.5	--	--	--	--	--	--	--
22...	26.0	25	--	11	6700	--	--	--	--	467
AUG.										
05...	22.0	6	--	11	6200	42	48	99	14	1293
SEP.										
09...	21.5	5	--	4.9	3500	--	--	--	--	4900

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
JAN.												
15...	43	79	6.1	0	0	1	1	10	0	1	0	22
FEB.												
11...	44	50	--	--	--	--	--	--	--	--	--	--
MAR.												
27...	B30	52	--	--	--	--	--	--	--	--	--	--
APR.												
23...	103	B48	--	--	--	--	--	--	--	--	--	--
MAY												
08...	B32	B9	4.0	1	0	2	2	<10	0	0	0	48
JUNE												
11...	B21	61	--	--	--	--	--	--	--	--	--	--
JULY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
22...	209	156	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	1120	276	1.8	0	0	0	0	<10	0	1	0	7
SEP.												
09...	B48	120	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JAN.												
15...	9	110	17	.1	.0	0	0	70	20	18	2240	80
FEB.												
11...	--	--	--	--	--	--	--	--	--	11	1550	95
MAR.												
27...	--	--	--	--	--	--	--	--	--	35	7150	95
APR.												
23...	--	--	--	--	--	--	--	--	--	47	6360	97
MAY												
08...	6	250	0	.3	.1	0	0	43	3	81	5420	90
JUNE												
11...	--	--	--	--	--	--	--	--	--	48	1660	87
JULY												
09...	--	16	5	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	30	401	97
AUG.												
05...	0	4	0	.1	.0	0	0	43	20	8	17	97
SEP.												
09...	--	--	--	--	--	--	--	--	--	15	318	89

B--Results based on colony count outside the acceptable range (non-ideal colony count).

03425000 CUMBERLAND RIVER AT CARTHAGE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
Jan. 15, 1975	470	Melosira	70
		Navicula	13
		Nitzschia	9
		Cyclotella	9
Feb. 11	150	Melosira	39
		Navicula	22
		Achnanthes	13
		Fragilaria	9
		Nitzschia	4
		Cymbella	4
		Amphora	4
		Gomphonema	4
Mar. 27	190	Melosira	33
		Navicula	17
		Asterionella	17
		Cyclotella	10
		Nitzschia	7
		Achnanthes	7
		Surirella	3
		Gomphonema	3
		Hannaea	3
Apr. 23	210	Cyclotella	44
		Fragilaria	19
		Nitschia	13
		Cymbella	6
		Achnanthes	6
		Diatoma	6
		Glenodinium	6
May 8	810	Melosira	64
		Fragilaria	15
		Scenedesmus	10
		Cyclotella	5
		Cymbella	3
		Cocconeis	3
June 11	2,500	Melosira	61
		Cyclotella	11
		Nitzschia	8
		Navicula	8
		Cymbella	3
		Gyrosigma	3
		Achnanthes	3
		Euglena	3
		Ankistrodesmus	3
July 22, 1975	6,700	Cyclotella	52
		Comphosphafria	15
		Nitzschiaceae	9
		Oscillatoria	7
		Gomphonema	6
		Nitzschia	4
		Cymbella	2
		Melosira	2
		Achnanthes	1
		Chlamydomonas	1
		Selenastrum	1
		Ankistrodesmus	1
		Gomphosphaerta	1
		DIVERSITY INDICES	
		Phyl/Div 0.930	
		Class 0.930	
		Order 1.791	
		Family 2.205	
		Genera 2.373	
Aug. 5, 1975	6,200	Cyclotella	44
		Melosira	28
		Nitzschia	18
		Scenedesmus	5
		Tetraedron	2
		Cymbella	2
		Navicula	2
		DIVERSITY INDICES	
		Phyl/Div 0.367	
		Class 0.367	
		Order 1.084	
		Family 1.313	
		Genera 2.007	

03428070 WEST FORK STONES RIVER AT MANSON PIKE, AT MURFREESBORO, TENN.

LOCATION.--Lat 35°51'25", long 86°24'43", Rutherford County, at gaging station on right bank at upstream abutment of Manson Pike bridge, 1.4 miles (2.3 km) northwest of courthouse in Murfreesboro, 900 ft (274 m) downstream from Lytle Creek, and at mile 16.1 (25.9 km).

DRAINAGE AREA.--165 sq mi (427 sq km).

PERIOD OF RECORD.--Chemical analyses: July 1973 to current year.
Water temperatures: July 1973 to current year.

EXTREMES.--1974-75:
Specific conductance: Maximum, 479 micromhos Sept. 29; minimum, 180 micromhos July 20.
pH: Maximum, 8.7 units Dec. 21, 22, 23; minimum, 7.0 units Oct. 17, July 2, 3, Sept. 6, 7, 8, 9, 10.
Dissolved oxygen: Maximum, 13.6 mg/l Dec. 22; minimum, 3.7 mg/l Sept. 9.
Water temperatures: Maximum, 31.0°C Aug. 23, 25, 26, 27, 28; minimum, 6.0°C Feb. 10.
Period of record:
Specific conductance: Maximum, 479 micromhos Sept. 29, 1975; minimum, 119 micromhos Jan. 11, 1974.
pH: Maximum, 8.7 units Oct. 10, 1973, Dec. 21, 22, 23, 1974; minimum 6.7 units Oct. 17, 18, 19, 1973.
Dissolved oxygen: Maximum, unknown; minimum, 1.3 mg/l Aug. 30, 1973.
Water temperatures: Maximum, 31.0°C Aug. 9, 29, 1973; minimum, 3.0°C Dec. 22, 1973.

REMARKS.--Record of hourly values available in district office in Nashville.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	368	366	367	441	424	432	396	383	390
2	---	---	---	376	374	375	424	394	409	385	377	381
3	---	---	---	383	381	382	437	398	418	408	384	396
4	---	---	---	392	362	376	459	436	448	416	409	412
5	---	---	---	391	337	364	470	459	464	420	416	418
6	---	---	---	420	397	408	474	470	472	423	420	422
7	---	---	---	425	424	424	475	450	462	425	424	424
8	---	---	---	430	425	428	450	366	408	---	---	---
9	300	256	278	431	428	430	---	---	---	---	---	---
10	255	250	252	437	432	434	---	---	---	---	---	---
11	253	245	250	439	389	414	---	---	---	---	---	---
12	254	250	252	441	412	426	---	---	---	---	---	---
13	258	255	256	455	441	448	---	---	---	---	---	---
14	268	258	263	455	449	452	---	---	---	---	---	---
15	277	268	272	462	451	458	---	---	---	---	---	---
16	295	268	282	465	462	464	---	---	---	---	---	---
17	320	295	308	464	455	460	---	---	---	---	---	---
18	329	324	326	---	---	---	---	---	---	---	---	---
19	335	329	332	---	---	---	---	---	---	---	---	---
20	335	331	333	---	---	---	---	---	---	---	---	---
21	337	332	334	383	288	336	444	437	440	---	---	---
22	341	335	338	415	383	399	443	431	437	---	---	---
23	340	337	338	425	415	420	440	434	437	---	---	---
24	342	341	341	431	425	428	---	---	---	432	430	431
25	346	345	345	432	426	429	---	---	---	435	430	432
26	348	347	347	440	433	436	---	---	---	433	427	430
27	351	351	351	445	439	442	---	---	---	437	427	432
28	354	353	353	450	445	448	---	---	---	435	430	432
29	357	356	356	455	451	453	---	---	---	435	430	432
30	360	358	359	457	431	444	---	---	---	435	430	432
31	360	358	359	---	---	---	---	---	---	420	415	418
MONTH	---	---	---	465	288	420	---	---	---	---	---	---

03428070 WEST FORK STONES RIVER AT MANSON PIKE, AT MURFREESBORO, TENN.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	420	405	412	403	395	399	---	---	---	362	357	359
2	460	220	340	404	400	402	343	334	340	364	357	361
3	365	268	316	---	---	---	331	290	304	366	363	364
4	338	205	372	---	---	---	342	321	333	368	363	366
5	335	230	382	---	---	---	351	344	348	367	361	365
6	371	335	353	---	---	---	352	345	349	367	364	366
7	390	372	381	---	---	---	353	343	349	373	305	348
8	400	390	395	380	230	305	351	346	349	326	305	316
9	406	400	403	315	250	282	354	348	352	343	308	334
10	410	405	408	372	315	343	359	348	355	342	335	338
11	415	340	378	368	324	346	359	348	354	370	344	359
12	350	283	316	---	---	---	357	338	350	381	371	377
13	350	285	318	---	---	---	352	335	343	390	381	386
14	388	350	369	---	---	---	353	330	338	396	386	390
15	400	387	394	---	---	---	353	338	347	395	290	362
16	400	370	395	---	---	---	354	342	348	284	232	253
17	383	320	352	---	---	---	354	339	346	360	287	323
18	370	320	345	---	---	---	351	333	342	408	364	389
19	395	370	382	345	340	342	346	305	325	414	400	409
20	403	390	396	354	345	350	341	335	338	402	399	400
21	410	402	406	355	350	352	344	331	340	408	402	405
22	418	414	416	355	270	312	342	331	338	408	403	406
23	420	390	405	---	---	---	352	334	345	407	401	403
24	402	362	382	---	---	---	363	349	357	403	394	398
25	400	372	386	---	---	---	356	338	350	394	372	383
26	403	400	402	---	---	---	363	346	357	373	366	370
27	410	402	406	---	---	---	365	351	357	374	371	373
28	403	401	402	---	---	---	365	350	358	374	369	372
29	---	---	---	---	---	---	362	352	357	381	378	380
30	---	---	---	---	---	---	361	355	358	381	378	379
31	---	---	---	---	---	---	---	---	---	380	374	378
MONTH	460	205	379	---	---	---	365	290	346	414	232	368

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	381	378	379	334	329	332	342	333	338	310	306	308
2	379	374	377	352	198	303	334	330	332	310	304	308
3	377	372	374	269	195	222	333	330	332	309	301	306
4	375	371	373	292	272	281	334	283	321	308	300	305
5	---	---	---	311	292	300	313	283	300	308	300	305
6	---	---	---	323	312	318	316	266	294	312	306	308
7	---	---	---	330	324	326	324	309	318	317	313	315
8	---	---	---	339	330	335	326	314	321	320	312	316
9	---	---	---	341	332	338	329	322	326	320	310	316
10	---	---	---	339	333	336	334	321	328	318	313	316
11	---	---	---	345	338	342	340	330	335	321	308	317
12	---	---	---	346	341	342	345	337	341	322	309	315
13	---	---	---	351	344	348	340	335	338	310	250	289
14	---	---	---	348	326	337	340	336	338	303	278	293
15	---	---	---	327	312	320	322	318	320	307	278	294
16	---	---	---	313	306	310	325	322	324	311	275	297
17	370	338	358	310	307	308	326	324	325	---	---	---
18	380	371	377	316	310	311	328	325	326	---	---	---
19	390	380	386	325	207	294	328	326	327	---	---	---
20	400	390	396	323	180	216	327	322	325	---	---	---
21	402	394	399	251	192	219	323	312	317	---	---	---
22	399	395	397	297	257	274	315	303	309	---	---	---
23	395	391	393	335	303	321	306	296	301	---	---	---
24	392	383	387	370	326	344	302	298	301	---	---	---
25	384	373	379	360	336	348	306	302	304	383	291	339
26	375	366	371	360	347	352	308	302	306	430	382	411
27	372	356	370	362	354	357	310	302	307	453	400	442
28	358	347	354	367	351	357	311	303	309	463	444	452
29	349	339	345	358	347	352	312	305	309	479	450	466
30	342	336	339	354	343	348	310	305	308	478	471	475
31	---	---	---	346	335	342	311	306	309	---	---	---
MONTH	---	---	---	370	180	317	345	266	319	---	---	---
YEAR	479	180	360									

03428070 WEST FORK STONES RIVER AT MANSON PIKE, AT MURFREESBORO, TENN.--Continued

PH (UNITS) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.7	7.7	7.7	7.6	7.5	7.5	8.0	8.0	8.0
2	---	---	---	7.7	7.6	7.6	7.5	7.5	7.5	8.0	8.0	8.0
3	---	---	---	7.6	7.5	7.5	7.7	7.5	7.6	8.1	8.0	8.0
4	---	---	---	7.6	7.5	7.5	7.7	7.6	7.6	8.1	8.0	8.0
5	---	---	---	7.4	7.4	7.4	7.7	7.7	7.7	8.1	8.1	8.1
6	---	---	---	7.5	7.4	7.4	7.7	7.7	7.7	8.2	8.1	8.2
7	---	---	---	7.8	7.5	7.6	7.7	7.7	7.7	8.2	8.1	8.2
8	---	---	---	7.9	7.8	7.8	7.7	7.5	7.6	---	---	---
9	7.7	7.6	7.6	8.0	7.9	7.9	7.6	7.4	7.5	---	---	---
10	7.6	7.5	7.5	7.9	7.9	7.9	7.7	7.6	7.6	---	---	---
11	7.6	7.5	7.5	7.9	7.8	7.8	---	---	---	---	---	---
12	7.5	7.4	7.4	7.8	7.7	7.7	---	---	---	---	---	---
13	7.5	7.4	7.4	7.9	7.7	7.7	---	---	---	---	---	---
14	7.5	7.4	7.4	7.9	7.9	7.9	---	---	---	---	---	---
15	7.3	7.1	7.2	8.0	7.9	7.9	---	---	---	---	---	---
16	7.2	7.1	7.1	8.0	7.9	7.9	---	---	---	---	---	---
17	7.7	7.0	7.4	8.0	8.0	8.0	---	---	---	---	---	---
18	7.7	7.7	7.7	---	---	---	---	---	---	---	---	---
19	7.8	7.7	7.7	---	---	---	---	---	---	---	---	---
20	7.8	7.7	7.7	---	---	---	---	---	---	---	---	---
21	7.9	7.8	7.8	7.3	7.2	7.2	8.7	8.6	8.6	---	---	---
22	8.0	7.8	7.9	7.5	7.4	7.4	8.7	8.6	8.6	---	---	---
23	8.0	7.9	7.9	7.5	7.4	7.4	8.7	8.6	8.6	---	---	---
24	8.0	7.9	7.9	7.5	7.5	7.5	---	---	---	7.7	7.6	7.6
25	8.0	7.9	7.9	7.5	7.5	7.5	---	---	---	7.7	7.6	7.6
26	8.0	7.9	7.9	7.5	7.5	7.5	---	---	---	7.8	7.6	7.7
27	8.0	7.9	7.9	7.6	7.5	7.5	---	---	---	7.7	7.6	7.6
28	8.0	7.9	7.9	7.6	7.5	7.5	---	---	---	7.7	7.6	7.6
29	7.9	7.8	7.8	7.6	7.6	7.6	---	---	---	7.7	7.6	7.6
30	7.9	7.8	7.8	7.7	7.6	7.6	---	---	---	7.7	7.6	7.6
31	7.8	7.8	7.8	---	---	---	---	---	---	7.9	7.6	7.8
MONTH	---	---	---	8.0	7.2	7.6	---	---	---	---	---	---

PH (UNITS) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	7.9	7.9	7.9	7.8	7.8	---	---	---	7.8	7.7	7.7
2	8.0	7.7	7.8	8.0	7.8	7.9	7.7	7.5	7.6	7.8	7.7	7.8
3	7.8	7.7	7.7	---	---	---	7.6	7.5	7.5	7.8	7.7	7.7
4	7.8	7.6	7.7	---	---	---	7.7	7.6	7.6	7.8	7.7	7.7
5	7.7	7.5	7.6	---	---	---	7.8	7.6	7.7	7.9	7.7	7.8
6	7.8	7.7	7.7	---	---	---	7.8	7.6	7.7	7.8	7.7	7.7
7	7.8	7.7	7.7	---	---	---	7.8	7.6	7.7	7.7	7.6	7.6
8	7.7	7.6	7.6	7.7	7.5	7.6	7.7	7.6	7.7	7.6	7.6	7.6
9	7.7	7.7	7.7	7.7	7.5	7.6	7.7	7.5	7.6	7.8	7.5	7.7
10	7.8	7.7	7.8	7.7	7.7	7.7	7.8	7.5	7.6	7.8	7.7	7.7
11	7.7	7.7	7.7	7.7	7.6	7.6	7.8	7.6	7.7	7.8	7.7	7.8
12	7.7	7.4	7.6	---	---	---	7.9	7.7	7.8	7.8	7.8	7.8
13	7.5	7.4	7.4	---	---	---	7.9	7.7	7.8	7.9	7.8	7.8
14	7.7	7.5	7.6	---	---	---	8.0	7.7	7.8	7.9	7.8	7.9
15	7.8	7.7	7.7	---	---	---	7.9	7.7	7.8	7.9	7.6	7.8
16	7.8	7.7	7.7	---	---	---	8.0	7.9	8.0	7.6	7.5	7.6
17	7.7	7.5	7.6	---	---	---	8.0	7.9	8.0	7.8	7.6	7.7
18	7.6	7.5	7.5	---	---	---	8.0	7.9	7.9	7.9	7.8	7.8
19	7.7	7.6	7.7	7.4	7.3	7.3	8.0	7.7	7.9	7.9	7.9	7.9
20	7.8	7.7	7.7	7.5	7.4	7.4	8.1	7.7	7.9	7.9	7.9	7.9
21	7.8	7.7	7.7	7.5	7.4	7.5	8.1	7.7	7.9	7.9	7.9	7.9
22	7.8	7.7	7.7	7.6	7.4	7.5	8.1	7.8	7.9	7.9	7.9	7.9
23	7.7	7.7	7.7	---	---	---	8.2	7.8	7.9	7.9	7.9	7.9
24	7.7	7.7	7.7	---	---	---	8.1	7.8	8.0	8.1	7.9	8.0
25	7.8	7.7	7.7	---	---	---	8.0	7.8	7.9	8.2	7.9	8.0
26	7.7	7.7	7.7	---	---	---	8.0	7.7	7.9	8.1	7.8	8.0
27	7.8	7.7	7.7	---	---	---	8.0	7.7	7.8	7.9	7.8	7.9
28	7.8	7.7	7.7	---	---	---	7.9	7.7	7.8	8.0	7.8	7.9
29	---	---	---	---	---	---	7.8	7.6	7.7	7.8	7.7	7.8
30	---	---	---	---	---	---	7.7	7.6	7.7	7.9	7.6	7.7
31	---	---	---	---	---	---	---	---	---	7.8	7.6	7.7
MONTH	8.0	7.4	7.7	---	---	---	8.2	7.5	7.8	8.2	7.5	7.8

03428070 WEST FORK STONES RIVER AT MANSON PIKE, AT MURFREESBORO, TENN.--Continued

PH (UNITS) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.6	7.7	7.6	7.3	7.4	7.6	7.4	7.5	7.3	7.1	7.2
2	8.0	7.6	7.8	7.3	7.0	7.2	7.7	7.5	7.6	7.3	7.1	7.2
3	7.9	7.7	7.8	7.1	7.0	7.0	7.7	7.6	7.6	7.3	7.1	7.2
4	7.9	7.7	7.8	7.3	7.2	7.2	7.6	7.5	7.6	7.4	7.1	7.2
5	---	---	---	7.4	7.2	7.3	7.8	7.5	7.6	7.4	7.1	7.2
6	---	---	---	7.6	7.4	7.4	7.8	7.6	7.7	7.1	7.0	7.1
7	---	---	---	7.7	7.3	7.5	7.9	7.7	7.8	7.2	7.0	7.1
8	---	---	---	7.7	7.4	7.5	7.9	7.5	7.7	7.2	7.0	7.1
9	---	---	---	7.9	7.5	7.7	7.9	7.4	7.6	7.3	7.0	7.1
10	---	---	---	7.9	7.5	7.7	7.9	7.4	7.6	7.2	7.0	7.1
11	---	---	---	7.8	7.4	7.6	7.6	7.4	7.5	7.3	7.0	7.1
12	---	---	---	7.8	7.5	7.6	7.9	7.4	7.6	7.4	7.0	7.2
13	---	---	---	7.7	7.5	7.6	7.9	7.5	7.7	7.4	7.3	7.4
14	---	---	---	7.9	7.5	7.6	7.7	7.5	7.6	7.6	7.4	7.5
15	---	---	---	7.9	7.6	7.7	7.6	7.5	7.6	7.6	7.4	7.5
16	---	---	---	7.9	7.6	7.8	7.6	7.4	7.5	7.6	7.4	7.5
17	7.9	7.7	7.8	7.8	7.6	7.7	7.5	7.4	7.4	---	---	---
18	7.9	7.8	7.8	7.9	7.5	7.7	7.4	7.3	7.3	---	---	---
19	7.9	7.8	7.9	7.6	7.2	7.5	7.4	7.3	7.3	---	---	---
20	7.9	7.8	7.9	7.2	7.1	7.1	7.5	7.3	7.4	---	---	---
21	7.9	7.8	7.9	7.2	7.1	7.1	7.7	7.3	7.5	---	---	---
22	7.9	7.8	7.8	7.3	7.1	7.2	7.8	7.4	7.6	---	---	---
23	7.9	7.8	7.8	7.4	7.2	7.3	7.7	7.4	7.6	---	---	---
24	7.9	7.7	7.8	7.4	7.2	7.3	7.6	7.4	7.5	---	---	---
25	7.9	7.7	7.8	7.4	7.2	7.3	7.6	7.3	7.4	7.5	7.3	7.4
26	7.9	7.6	7.7	7.6	7.3	7.4	7.5	7.3	7.4	7.6	7.5	7.5
27	7.7	7.5	7.6	7.8	7.4	7.6	7.5	7.2	7.3	7.7	7.6	7.6
28	7.7	7.4	7.5	7.9	7.6	7.7	7.4	7.2	7.3	7.7	7.6	7.7
29	7.7	7.4	7.5	7.8	7.5	7.6	7.3	7.1	7.2	7.7	7.6	7.7
30	7.6	7.4	7.5	7.8	7.6	7.7	7.3	7.1	7.2	7.7	7.7	7.7
31	---	---	---	7.7	7.5	7.6	7.3	7.1	7.2	---	---	---
MONTH	---	---	---	7.9	7.0	7.5	7.9	7.1	7.5	---	---	---
YEAR	8.7	7.0	7.6									

DISSOLVED OXYGEN (DO), MG/L , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.5	7.6	8.0	11.0	10.5	10.8	11.6	10.8	11.2
2	---	---	---	8.4	7.4	7.9	11.2	11.1	11.1	12.6	11.6	12.1
3	---	---	---	8.1	7.2	7.6	11.3	11.2	11.2	12.4	12.2	12.3
4	---	---	---	7.8	7.2	7.5	12.2	12.0	12.1	12.7	12.3	12.5
5	---	---	---	7.4	7.0	7.2	12.2	12.0	12.1	13.0	12.4	12.7
6	---	---	---	8.2	7.0	7.6	12.1	12.0	12.0	12.9	12.6	12.8
7	---	---	---	8.8	7.9	8.4	12.0	11.3	11.6	12.6	12.5	12.6
8	---	---	---	9.5	8.7	9.1	11.3	11.2	11.2	---	---	---
9	10.3	9.6	10.0	9.6	9.2	9.4	---	---	---	---	---	---
10	10.4	9.6	10.0	9.6	9.2	9.4	---	---	---	---	---	---
11	10.8	10.0	10.4	9.2	8.7	9.0	---	---	---	---	---	---
12	11.1	10.0	10.6	9.0	8.8	8.9	---	---	---	---	---	---
13	11.0	10.0	10.5	9.8	9.0	9.4	---	---	---	---	---	---
14	10.5	9.6	10.0	10.2	9.8	10.0	---	---	---	---	---	---
15	9.8	9.0	9.4	10.6	9.9	10.2	---	---	---	---	---	---
16	9.4	9.0	9.2	11.3	10.6	11.0	---	---	---	---	---	---
17	9.2	8.4	8.8	11.0	10.2	10.6	---	---	---	---	---	---
18	9.1	8.8	9.0	---	---	---	---	---	---	---	---	---
19	9.8	8.8	9.3	---	---	---	---	---	---	---	---	---
20	10.4	9.6	10.0	---	---	---	---	---	---	---	---	---
21	11.0	10.4	10.7	10.0	9.9	9.9	13.3	13.2	13.2	---	---	---
22	11.5	10.7	11.1	10.2	10.0	10.1	13.6	13.3	13.3	---	---	---
23	11.6	11.0	11.3	10.1	9.8	10.0	13.5	13.1	13.1	---	---	---
24	11.4	11.0	11.2	9.8	9.7	9.7	---	---	---	12.5	11.8	12.2
25	11.6	10.7	11.2	10.2	9.7	10.0	---	---	---	12.4	11.7	12.0
26	11.3	10.3	10.8	10.6	10.1	10.4	---	---	---	12.7	11.7	12.2
27	11.1	10.4	10.8	10.8	10.5	10.6	---	---	---	12.2	11.8	12.0
28	10.7	9.9	10.3	10.0	10.3	10.6	---	---	---	11.6	11.0	11.3
29	10.0	9.4	9.7	10.8	10.6	10.7	---	---	---	10.9	10.0	10.4
30	9.6	8.8	9.2	10.8	10.4	10.6	---	---	---	11.0	9.8	10.4
31	10.0	7.9	9.0	---	---	---	---	---	---	10.8	10.0	10.4
MONTH	---	---	---	11.3	7.0	9.4	---	---	---	---	---	---

03428070 WEST FORK STONES RIVER AT MANSON PIKE, AT MURFREESBORO, TENN.--Continued

DISSOLVED OXYGEN (DO), MG/L , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.2	9.8	10.0	11.4	10.9	11.1	---	---	---	7.9	7.5	7.7
2	10.8	9.9	10.4	12.6	11.4	12.0	11.0	10.1	10.8	8.1	7.6	7.9
3	10.8	10.7	10.7	---	---	---	11.1	10.1	10.7	8.2	7.7	7.9
4	10.8	10.6	10.7	---	---	---	11.7	11.1	11.5	8.2	7.6	7.9
5	10.8	10.5	10.6	---	---	---	11.7	11.1	11.5	8.5	7.8	8.1
6	11.0	10.4	10.7	---	---	---	11.5	10.8	11.2	8.2	7.7	7.9
7	11.6	11.0	11.3	---	---	---	11.3	10.6	11.1	8.3	7.4	8.1
8	11.8	11.5	11.6	11.0	10.5	10.8	10.9	10.1	10.5	8.3	8.0	8.2
9	11.8	11.1	11.4	11.6	11.0	11.3	10.6	9.8	10.1	8.6	8.0	8.3
10	12.0	11.4	11.7	11.8	11.4	11.6	10.5	9.7	10.0	8.2	7.9	8.0
11	11.4	10.6	11.0	11.4	11.2	11.3	10.7	9.6	10.2	7.9	7.7	7.8
12	10.4	9.9	10.2	---	---	---	11.1	10.5	10.7	7.8	7.3	7.6
13	11.2	10.6	10.9	---	---	---	11.3	10.4	10.8	7.6	7.4	7.5
14	11.6	11.2	11.4	---	---	---	11.0	9.6	10.2	7.9	7.5	7.7
15	11.4	11.0	11.2	---	---	---	10.9	9.8	10.2	8.1	7.2	7.6
16	11.1	10.6	10.8	---	---	---	11.0	10.4	10.7	8.7	8.1	8.4
17	10.9	10.6	10.7	---	---	---	10.9	9.6	10.3	8.7	8.6	8.6
18	10.8	10.8	10.8	---	---	---	10.2	8.8	9.5	8.7	8.6	8.7
19	11.6	10.8	11.2	11.2	11.0	11.1	9.4	8.6	8.9	8.5	8.2	8.4
20	12.0	11.6	11.8	11.3	10.7	11.0	9.9	8.8	9.4	8.1	7.7	7.8
21	12.0	11.7	11.9	10.7	10.2	10.4	10.2	9.1	9.5	7.9	7.4	7.5
22	11.4	11.0	11.2	10.3	10.0	10.2	10.2	9.1	9.5	7.6	7.2	7.4
23	10.9	10.0	10.5	---	---	---	10.1	8.7	9.2	7.5	7.2	7.4
24	11.2	9.9	10.6	---	---	---	9.4	8.7	9.0	8.0	7.2	7.6
25	11.8	11.1	11.5	---	---	---	9.2	8.3	8.8	8.7	7.6	8.1
26	11.7	11.3	11.5	---	---	---	9.1	8.0	8.5	8.3	7.1	7.7
27	11.6	11.2	11.4	---	---	---	8.9	7.9	8.3	7.8	6.9	7.3
28	11.5	9.5	10.5	---	---	---	8.4	7.4	7.9	8.1	7.0	7.4
29	---	---	---	---	---	---	7.8	7.3	7.6	7.8	7.0	7.3
30	---	---	---	---	---	---	7.8	7.3	7.6	7.9	6.8	7.3
31	---	---	---	---	---	---	---	---	---	8.0	6.8	7.3
MONTH	12.0	9.8	11.0	---	---	---	11.7	7.3	9.8	8.7	6.8	7.8

DISSOLVED OXYGEN (DO), MG/L , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	6.9	7.5	8.2	6.4	7.1	7.8	6.4	6.9	6.6	4.3	5.2
2	8.7	7.3	8.0	6.8	5.9	6.4	7.7	6.1	6.7	6.4	4.3	5.2
3	8.6	7.7	8.1	6.7	6.1	6.4	7.5	5.9	6.6	7.1	4.4	5.5
4	8.2	7.5	7.9	6.6	6.0	6.3	6.8	5.7	6.1	7.0	4.4	5.4
5	---	---	---	6.8	6.1	6.4	7.0	5.4	5.9	6.9	4.1	5.1
6	---	---	---	7.6	6.1	6.6	7.1	5.4	6.2	5.1	3.9	4.4
7	---	---	---	7.3	6.0	6.9	7.4	6.2	6.6	6.9	4.2	5.3
8	---	---	---	8.5	6.1	7.2	8.2	6.2	7.1	7.2	4.1	5.4
9	---	---	---	9.4	6.8	7.0	8.9	6.7	7.6	7.8	3.7	5.5
10	---	---	---	9.3	7.0	8.2	9.2	7.0	8.0	7.0	4.3	5.4
11	---	---	---	8.0	6.4	7.2	8.4	7.7	8.0	6.9	3.9	5.4
12	---	---	---	7.6	5.5	6.4	8.8	7.4	8.1	---	---	---
13	---	---	---	7.4	5.7	6.5	8.6	7.6	8.0	---	---	---
14	---	---	---	8.7	5.7	7.1	7.1	6.2	6.6	---	---	---
15	---	---	---	9.4	6.6	7.9	7.6	6.6	7.1	---	---	---
16	---	---	---	9.5	7.0	8.3	7.3	6.2	6.7	---	---	---
17	9.2	6.1	7.2	8.8	7.1	7.9	---	---	---	---	---	---
18	---	---	---	8.7	6.2	7.1	---	---	---	---	---	---
19	---	---	---	7.9	5.6	6.5	---	---	---	---	---	---
20	8.6	8.0	8.3	7.1	5.8	6.7	---	---	---	---	---	---
21	8.4	7.9	8.2	6.7	6.2	6.4	---	---	---	---	---	---
22	8.6	7.9	8.3	7.1	6.6	6.8	---	---	---	---	---	---
23	8.8	7.8	8.2	7.9	6.9	7.3	---	---	---	---	---	---
24	9.2	7.8	8.4	8.5	7.0	7.6	---	---	---	---	---	---
25	9.2	7.8	8.3	7.8	6.7	7.2	---	---	---	---	---	---
26	9.3	7.5	8.2	8.3	6.9	7.6	---	---	---	---	---	---
27	8.7	7.0	7.9	9.3	7.4	8.3	8.3	5.4	6.6	---	---	---
28	8.2	6.6	7.3	9.8	7.8	8.6	7.8	5.3	6.2	---	---	---
29	8.2	6.4	7.2	9.5	7.8	8.5	7.3	4.9	5.9	---	---	---
30	8.0	6.2	7.0	8.9	7.3	8.0	7.4	5.2	6.1	---	---	---
31	---	---	---	8.1	6.8	7.4	7.4	5.1	6.0	---	---	---
MONTH	---	---	---	9.8	5.5	7.2	---	---	---	---	---	---
YEAR	13.6	3.7	9.1									

03428070 WEST FORK STONES RIVER AT MANSON PIKE, AT MURFREESBORO, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	20.5	17.5	19.0	8.5	7.0	8.0	---	---	---
2	---	---	---	20.5	18.5	19.5	7.0	6.5	6.5	---	---	---
3	---	---	---	21.0	18.5	20.0	8.5	6.5	7.5	---	---	---
4	---	---	---	19.0	18.5	19.0	8.0	7.5	7.5	---	---	---
5	---	---	---	17.5	15.5	16.5	8.0	7.0	7.5	---	---	---
6	---	---	---	15.5	14.5	15.0	8.5	7.0	7.5	---	---	---
7	---	---	---	14.0	13.0	13.5	9.5	8.0	9.0	---	---	---
8	---	---	---	14.0	12.5	13.0	9.5	9.0	9.0	---	---	---
9	17.0	14.5	15.5	13.5	12.0	13.0	---	---	---	---	---	---
10	17.5	14.5	16.0	13.0	12.5	13.0	---	---	---	---	---	---
11	17.5	15.0	16.0	13.0	12.5	13.0	---	---	---	---	---	---
12	18.5	16.0	17.0	12.5	11.5	12.0	---	---	---	---	---	---
13	19.0	16.5	18.0	11.0	10.5	11.0	---	---	---	---	---	---
14	20.0	17.5	19.0	10.5	9.0	10.0	---	---	---	---	---	---
15	18.5	16.5	17.5	9.0	7.5	8.0	---	---	---	---	---	---
16	17.5	15.5	16.5	9.0	7.5	8.0	---	---	---	---	---	---
17	18.5	15.0	17.0	10.5	8.5	9.5	---	---	---	---	---	---
18	17.0	15.5	16.0	---	---	---	---	---	---	---	---	---
19	16.5	15.0	16.0	---	---	---	---	---	---	---	---	---
20	16.0	14.0	15.0	---	---	---	---	---	---	---	---	---
21	14.5	13.0	14.0	13.5	11.5	12.5	8.0	7.5	7.5	---	---	---
22	14.5	12.5	13.5	12.5	11.5	11.5	8.5	7.5	8.0	---	---	---
23	15.0	12.0	13.5	13.5	11.0	12.0	9.5	7.5	8.5	---	---	---
24	15.0	13.0	14.0	13.0	12.5	13.0	---	---	---	9.5	8.0	9.0
25	16.5	13.0	15.0	12.5	10.5	11.5	---	---	---	10.5	9.5	10.0
26	17.5	14.5	16.0	10.5	9.5	10.0	---	---	---	10.0	9.0	9.5
27	17.5	15.0	16.0	9.5	9.0	9.0	---	---	---	11.5	9.0	10.0
28	18.0	15.0	16.5	9.5	8.0	9.0	---	---	---	13.5	11.0	12.0
29	17.5	16.5	17.0	9.5	8.0	9.0	---	---	---	15.0	13.5	14.0
30	19.5	16.5	18.0	9.0	9.0	9.0	---	---	---	14.5	13.0	14.0
31	19.5	17.5	18.5	---	---	---	---	---	---	13.5	13.0	13.0
MONTH	---	---	---	21.0	7.5	12.5	---	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.5	13.0	13.5	11.5	9.0	10.0	---	---	---	22.5	21.0	21.5
2	13.0	11.5	12.0	9.0	7.5	8.0	16.0	13.0	14.5	22.0	20.5	21.0
3	11.5	10.5	11.0	---	---	---	15.0	12.5	13.5	21.0	20.0	20.5
4	11.0	9.5	10.0	---	---	---	13.5	11.0	12.0	22.0	19.5	20.5
5	10.5	9.5	10.0	---	---	---	14.0	11.0	12.5	22.0	19.5	21.0
6	11.0	9.0	10.0	---	---	---	14.0	11.5	13.0	21.0	20.0	20.5
7	9.0	7.5	8.0	---	---	---	14.5	12.0	13.0	20.5	19.5	20.0
8	9.0	7.0	8.0	11.5	9.5	10.5	14.5	13.0	13.5	20.0	19.0	19.5
9	9.0	7.0	8.0	9.0	7.5	8.0	14.5	14.0	14.5	20.5	18.5	19.5
10	8.0	6.0	7.0	8.5	7.5	8.0	16.0	14.0	15.0	21.5	19.5	20.5
11	11.5	8.0	10.0	9.0	7.5	8.0	15.5	14.5	15.0	22.5	20.0	21.5
12	12.0	10.0	11.0	---	---	---	14.5	13.0	14.0	23.5	21.5	22.0
13	10.0	7.5	8.5	---	---	---	15.0	13.5	14.5	22.5	21.5	22.0
14	10.0	7.5	8.5	---	---	---	15.5	14.0	14.5	23.0	21.0	22.0
15	11.5	9.0	10.0	---	---	---	14.0	13.5	14.0	22.5	20.5	22.0
16	12.5	11.0	12.0	---	---	---	15.0	13.0	14.0	20.5	19.5	20.0
17	15.0	12.5	14.0	---	---	---	17.0	15.0	16.0	19.5	19.0	19.5
18	13.5	13.0	13.0	---	---	---	18.5	17.0	18.0	20.5	19.0	20.0
19	13.0	10.5	12.0	12.5	11.5	12.0	19.5	17.5	18.5	22.5	20.0	21.0
20	11.5	9.5	10.5	14.5	11.0	13.0	19.0	16.5	17.5	23.5	21.5	22.5
21	12.0	9.0	10.5	16.0	12.5	14.0	18.0	16.0	17.0	25.0	23.0	24.0
22	12.5	11.0	12.0	16.0	14.5	15.0	19.0	16.5	18.0	25.5	24.0	24.5
23	15.0	12.5	14.0	---	---	---	19.0	18.0	18.5	26.5	24.5	25.5
24	14.0	9.5	12.0	---	---	---	19.5	18.5	19.0	27.0	25.0	26.0
25	11.0	8.5	10.0	---	---	---	22.0	19.0	20.5	27.5	25.5	26.5
26	10.0	9.0	9.5	---	---	---	22.5	20.5	21.5	27.0	25.5	26.0
27	11.0	9.0	10.0	---	---	---	23.0	21.5	22.5	26.0	24.5	25.5
28	11.5	9.5	10.5	---	---	---	23.5	22.5	23.0	26.5	24.5	25.5
29	---	---	---	---	---	---	23.0	22.0	22.5	25.5	25.0	25.5
30	---	---	---	---	---	---	22.0	21.0	21.5	26.0	24.5	25.0
31	---	---	---	---	---	---	---	---	---	25.0	24.0	24.5
MONTH	15.0	6.0	10.5	---	---	---	23.5	11.0	16.5	27.5	18.5	22.5

03428070 WEST FORK STONES RIVER AT MANSON PIKE, AT MURFREESBORO, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.5	23.5	24.5	29.0	27.0	28.0	28.0	26.5	27.0	30.0	26.5	28.0
2	25.5	23.0	24.0	27.5	24.5	26.0	28.5	26.5	27.5	30.5	26.0	28.0
3	25.5	23.0	24.0	25.5	24.0	25.0	29.0	27.0	27.5	30.5	26.0	28.0
4	26.5	23.5	25.0	26.5	25.0	25.5	27.5	26.5	27.0	30.5	26.5	28.5
5	---	---	---	27.5	25.5	26.5	27.5	26.0	26.5	30.5	27.0	28.5
6	---	---	---	27.0	26.0	26.5	27.5	25.5	26.5	27.5	25.5	26.5
7	---	---	---	28.0	25.5	26.5	26.5	25.5	26.0	28.5	25.0	26.5
8	---	---	---	27.5	25.5	26.5	27.0	25.0	26.0	29.0	24.5	26.5
9	---	---	---	28.5	26.0	27.0	28.0	25.0	26.5	29.5	25.0	27.0
10	---	---	---	27.5	26.5	27.0	27.5	25.5	26.5	27.0	25.0	26.0
11	---	---	---	27.5	26.0	26.5	27.5	25.5	26.5	27.5	25.0	26.0
12	---	---	---	26.0	25.0	25.5	29.0	26.0	27.5	26.0	24.0	25.0
13	---	---	---	25.5	24.0	24.5	30.0	27.0	28.0	23.5	22.0	23.0
14	---	---	---	25.5	23.5	24.5	30.0	27.5	28.5	22.0	20.5	21.5
15	---	---	---	26.5	24.0	25.5	30.0	27.5	28.5	22.5	20.5	21.5
16	---	---	---	27.0	25.0	26.0	30.0	27.0	28.5	22.5	21.0	21.5
17	24.5	22.5	23.5	28.5	25.5	27.0	29.0	27.5	28.0	---	---	---
18	26.0	23.5	25.0	29.0	26.5	27.5	28.0	27.0	27.5	---	---	---
19	26.0	25.5	25.5	26.5	24.5	26.5	28.5	27.0	27.5	---	---	---
20	26.0	24.5	25.5	25.0	23.0	24.0	28.5	26.5	27.5	---	---	---
21	26.0	25.0	25.5	25.5	24.0	24.5	30.0	27.0	28.0	---	---	---
22	27.0	25.5	26.0	26.5	24.5	25.5	30.5	27.0	28.5	---	---	---
23	27.0	25.5	26.5	28.0	25.5	27.0	31.0	27.5	29.0	---	---	---
24	27.0	25.5	26.5	28.0	26.5	27.0	30.5	28.0	29.0	---	---	---
25	27.0	25.5	26.5	27.5	26.0	26.5	31.0	27.5	29.0	16.0	16.0	16.0
26	28.0	26.5	27.0	28.0	26.0	27.0	31.0	27.5	29.5	16.0	15.5	15.5
27	28.5	26.5	26.5	28.5	26.5	27.5	31.0	27.5	29.0	16.0	15.0	15.5
28	28.0	26.5	27.0	28.5	26.5	27.5	31.0	28.0	29.5	17.0	15.0	16.0
29	28.5	27.0	27.5	29.5	27.5	28.0	30.0	27.5	28.5	18.0	16.5	17.5
30	28.5	27.0	28.0	30.0	27.0	28.0	29.5	27.0	28.0	19.0	18.0	18.5
31	---	---	---	28.0	27.0	27.5	29.5	27.0	28.0	---	---	---
MONTH	---	---	---	30.0	23.0	26.5	31.0	25.0	28.0	---	---	---
YEAR	31.0	6.0	19.0									

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.--327 sq mi (614 sq km), includes 43 sq mi (111 sq km) without surface drainage.

PERIOD OF RECORD.--Water temperatures: March 1974 to September 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 26.5°C several days in June and July; minimum, 6.0°C Mar. 11.
Period of record:
Water temperatures: Maximum, 26.5°C several days in June and July 1975; minimum, 6.0°C Mar. 11, 1975.

REMARKS.--Records good.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	15.5	15.5	15.0	10.5	10.5	11.0	11.0	10.5	10.5	9.5	9.0
2	15.5	15.0	15.5	15.5	10.5	10.0	11.0	10.5	10.5	10.0	9.0	7.0
3	15.0	14.5	15.5	15.5	10.0	10.0	10.5	10.0	10.0	9.5	7.0	6.5
4	15.0	14.5	15.5	15.0	10.0	9.0	10.0	9.5	9.5	9.5	6.5	6.5
5	14.5	14.0	15.0	14.5	9.0	8.5	10.0	9.5	9.5	9.5	6.5	6.5
6	15.0	14.5	14.5	13.5	9.0	8.5	9.5	9.5	9.5	9.5	6.5	6.5
7	15.0	14.5	13.5	11.5	9.5	9.0	9.5	9.5	9.5	9.0	7.0	6.5
8	15.0	14.5	12.0	11.5	9.5	9.5	9.5	9.5	9.0	9.0	7.0	6.5
9	15.0	14.5	11.5	11.5	9.5	9.0	9.5	9.5	9.0	9.0	6.5	6.5
10	14.5	14.0	11.5	11.5	9.0	8.5	10.5	9.5	9.0	9.0	6.5	6.5
11	15.0	14.5	11.5	11.5	9.0	8.5	10.5	10.0	10.0	9.0	6.5	6.0
12	15.5	14.5	11.5	11.0	8.5	8.5	9.0	10.0	10.0	10.0	8.5	6.5
13	15.5	15.0	11.5	11.0	9.0	8.5	9.0	8.5	10.0	10.0	8.5	7.0
14	16.0	15.5	11.5	11.0	9.0	8.5	8.5	8.0	10.0	9.5	8.0	7.0
15	15.5	15.0	11.0	10.5	9.0	9.0	8.0	8.0	10.0	10.0	9.0	9.0
16	15.0	14.5	10.5	10.5	9.0	8.5	8.5	8.0	10.5	10.0	11.0	10.0
17	14.5	14.0	10.5	10.5	8.5	8.5	8.5	8.0	11.0	10.5	11.0	11.0
18	14.5	14.0	11.0	10.5	8.5	8.0	8.5	8.0	11.0	11.0	11.0	11.0
19	14.0	13.5	12.0	11.0	8.5	8.0	9.0	8.5	11.0	10.5	11.0	11.0
20	14.0	13.5	12.0	12.0	8.5	8.5	9.0	8.5	10.5	10.0	12.0	11.0
21	13.5	13.0	12.0	12.0	8.5	8.5	9.0	8.5	10.5	10.0	13.5	11.5
22	13.5	13.0	12.0	11.5	8.5	8.5	8.5	8.5	10.5	10.0	13.5	13.0
23	13.5	13.0	12.0	11.5	9.0	8.5	8.5	8.5	11.0	10.5	13.5	13.0
24	13.5	13.0	11.5	11.5	9.5	9.0	8.5	8.5	11.0	10.0	13.5	13.0
25	14.0	13.5	11.5	11.5	10.0	9.5	9.0	8.5	10.0	9.5	13.5	13.5
26	14.0	13.5	11.5	11.0	10.0	9.0	9.0	9.0	9.5	9.0	13.5	12.0
27	14.5	14.0	11.0	10.5	9.0	9.0	9.0	9.0	9.0	9.0	13.0	12.0
28	14.5	14.0	10.5	10.5	9.0	9.0	10.0	9.0	9.5	9.0	13.5	13.0
29	14.5	14.0	10.5	10.5	9.5	9.0	10.5	10.0	---	---	13.5	13.5
30	15.0	14.5	10.5	10.5	10.0	9.5	10.5	10.5	---	---	14.0	12.0
31	15.5	15.0	---	---	11.0	10.0	10.5	10.5	---	---	12.0	12.0
MONTH	16.0	13.0	15.5	10.5	11.0	8.0	11.0	8.0	11.0	9.0	14.0	6.0

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER • WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.0	18.0	17.0	22.0	22.0	26.5	26.5	26.0	25.5	24.5	24.5
2	13.5	13.0	18.5	17.0	23.0	21.5	26.5	26.0	26.0	25.5	25.0	24.0
3	13.5	13.0	18.0	16.5	23.0	22.0	26.0	26.0	26.0	25.5	25.0	24.0
4	13.5	13.0	17.0	16.5	23.0	22.0	26.0	26.0	26.0	25.5	25.0	24.5
5	13.5	12.0	18.0	17.0	23.0	23.0	26.0	26.0	25.5	25.0	25.0	24.5
6	13.5	12.0	17.0	17.0	23.5	23.0	26.0	25.5	26.0	25.0	24.5	25.0
7	13.5	13.0	18.0	16.5	23.5	23.0	25.5	25.0	25.5	25.0	24.0	23.5
8	13.5	13.0	18.0	17.0	23.5	23.0	25.5	25.0	25.5	25.0	23.5	23.0
9	13.0	13.0	17.0	16.5	24.0	23.5	25.5	25.0	25.5	25.0	23.5	23.0
10	14.0	13.0	17.0	16.5	23.5	23.5	25.5	25.0	25.5	25.0	23.5	23.0
11	14.0	13.5	18.0	17.0	23.5	23.5	25.5	25.0	25.5	24.5	24.0	23.0
12	14.0	13.5	18.5	17.0	23.5	23.0	25.5	24.5	25.5	24.5	23.5	23.0
13	14.0	13.5	18.5	18.0	24.0	24.0	---	---	25.5	25.5	23.0	21.5
14	13.5	13.5	19.0	18.0	24.0	24.0	---	---	25.5	25.5	21.5	21.5
15	13.5	13.5	19.5	19.0	24.0	24.0	---	---	25.5	25.5	21.5	21.0
16	14.0	13.5	19.5	19.0	24.0	23.5	25.0	24.5	26.0	25.5	21.0	21.0
17	14.0	13.5	19.0	18.5	24.0	23.5	25.0	24.5	26.0	25.5	20.5	20.0
18	15.0	14.0	19.5	18.5	24.0	24.0	25.0	24.5	26.0	25.5	20.0	20.0
19	14.5	14.5	20.0	19.0	24.5	24.5	25.0	24.5	25.5	24.5	20.0	20.0
20	14.5	14.5	20.5	20.0	24.5	24.0	25.0	24.5	26.0	25.0	20.0	20.0
21	14.5	14.5	21.0	20.5	24.5	24.5	25.0	24.5	26.0	25.5	20.0	20.0
22	14.5	14.5	21.0	20.5	24.5	24.5	25.5	24.5	26.0	25.5	20.0	19.5
23	14.5	14.5	22.0	21.0	25.0	25.0	25.5	25.0	26.0	25.5	19.5	19.0
24	15.0	14.5	22.0	21.0	25.0	24.5	25.5	25.5	26.0	25.5	19.0	17.0
25	16.0	15.0	23.0	22.0	26.0	24.5	25.5	25.0	26.0	25.5	17.0	17.0
26	18.0	17.0	23.0	22.0	25.5	25.5	26.0	25.0	26.0	25.5	17.0	16.5
27	18.0	17.0	23.0	21.5	25.5	25.0	26.5	25.0	26.0	25.5	16.5	16.5
28	18.5	17.0	23.0	21.5	26.0	25.0	26.5	25.5	26.0	25.5	16.5	16.5
29	18.5	18.5	22.0	21.5	26.5	25.5	26.5	25.5	25.5	25.0	17.0	17.0
30	18.5	18.5	23.0	22.0	26.5	26.5	26.5	25.5	25.0	24.5	18.0	17.0
31	---	---	22.0	22.0	---	---	26.5	26.0	25.0	24.5	---	---
MONTH	18.5	12.0	23.0	16.5	26.5	21.5	26.5	24.5	26.0	24.5	25.0	16.5
YEAR	26.5	6.0										

03435700 SULPHUR FORK RED RIVER ABOVE BEAVER DAM CREEK NEAR SPRINGFIELD, TENN.

LOCATION.--Lat 36°30'53", long 86°50'46", Robertson County, on left bank at ford on private road, 1.0 mile (1.6 km) upstream from the mouth of Beaver Dam Creek, 2.4 miles (3.9 km) northeast of Springfield, and at mile 32.9 (52.9 km).

DRAINAGE AREA.--49.1 sq mi (127.2 sq km).

PERIOD OF RECORD.--Water temperatures: August to September 1975.

REMARKS.--Records of hourly values available in district office at Nashville.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1									---	---	26.0	24.5
2									---	---	25.5	24.5
3									---	---	25.0	23.0
4									---	---	25.5	22.5
5									---	---	26.0	23.5
6									---	---	26.5	24.0
7									---	---	25.5	24.0
8									---	---	24.0	22.0
9									---	---	22.5	20.5
10									---	---	22.5	19.5
11									---	---	23.0	21.0
12									---	---	22.5	21.5
13									---	---	23.5	22.0
14									---	---	23.0	20.0
15									---	---	20.0	17.0
16									---	---	17.0	15.5
17									---	---	18.0	17.0
18									---	---	19.0	17.5
19									---	---	19.0	18.0
20									---	---	19.5	18.5
21									---	---	20.0	18.5
22										24.5	20.0	19.0
23									26.5	24.0	19.5	17.5
24									26.5	24.5	18.0	17.0
25									26.5	24.5	17.0	15.5
26									26.5	24.5	15.5	15.0
27									26.5	24.5	15.5	15.0
28									27.0	25.0	15.0	14.5
29									26.5	24.5	15.0	14.0
30									26.5	24.5	---	---
31									26.0	24.0	---	---
MONTH									---	---	26.5	14.0

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TENN.
(National stream-quality accounting network station)

LOCATION.--Lat 35°57'30", long 83°46'26", Knox County, at gaging station, 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.--Chemical analyses: November 1974 to September 1975.
Water temperatures: June to September, 1975.

REMARKS.--Hourly values of specific conductance and temperature are available in Tennessee District files since record began on June 1, 1975. Missing record June 20-22, Aug. 28 to Sept. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV.												
25...	1445	1460	5.9	--	--	--	--	17	3.2	3.0	1.6	51
DEC.												
18...	1400	14100	8.6	--	--	--	--	18	2.7	13	2.0	51
JAN.												
28...	1500	17800	8.6	1300	40	81	26	15	2.7	5.7	1.5	47
FEB.												
25...	1130	15800	8.4	--	--	--	--	18	3.1	5.6	1.2	53
APR.												
01...	1000	21900	7.5	--	--	--	--	14	2.6	3.3	1.4	42
21...	1500	12300	7.6	--	--	--	--	16	2.9	3.4	1.7	53
MAY												
19...	1200	1880	5.1	650	0	30	0	17	3.3	3.0	1.2	62
JUNE												
03...	1500	2450	6.5	--	--	--	--	15	2.9	4.7	1.7	54
JULY												
15...	1400	1850	6.6	--	--	--	--	16	2.8	7.4	1.5	56
AUG.												
14...	1100	2340	6.5	390	10	130	--	17	3.1	10	1.8	57
SEP.												
09...	1130	2020	6.0	--	--	--	--	19	2.9	10	1.8	57

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV.												
25...	0	42	9.4	3.4	.1	.57	.18	.75	3.3	.02	70	69
DEC.												
18...	--	42	20	14	.2	.49	.40	.89	3.9	.05	96	104
JAN.												
28...	--	39	12	5.4	.1	.59	.23	.82	3.6	.06	90	74
FEB.												
25...	--	43	12	5.8	.2	.58	.22	.80	3.5	.05	85	80
APR.												
01...	0	34	9.6	4.3	.0	.50	.32	.82	3.6	.07	52	63
21...	0	43	8.8	3.3	.1	.45	.34	.79	3.5	.04	73	70
MAY												
19...	0	51	8.1	3.2	.0	.35	.18	.53	2.3	.03	75	71
JUNE												
03...	0	44	8.8	4.5	.2	.43	.03	.46	2.0	.01	91	71
JULY												
15...	0	46	11	7.0	.1	.34	.08	.42	1.9	.02	73	80
AUG.												
14...	0	47	15	11	.2	.18	.46	.64	2.8	.02	84	95
SEP.												
09...	0	47	15	11	.2	.13	.20	.33	1.5	.04	80	94

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TENN.-Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTO-PLANK-TON (CELLS PER ML)
NOV.												
25...	.10	276	56	14	10	.2	120	7.9	8.5	9	1.0	250
DEC.												
18...	.13	3660	56	14	33	.8	185	7.3	5.0	6	4.1	1200
JAN.												
28...	.12	4330	49	10	20	.4	140	6.7	5.5	20	15	540
FEB.												
25...	.12	3630	58	14	17	.3	135	7.1	6.5	10	6.7	420
APR.												
01...	.07	3080	46	11	13	.2	100	7.4	11.0	40	2.7	360
21...	.10	2430	52	8	12	.2	120	7.8	11.5	33	1.3	140
MAY												
19...	.10	381	56	5	10	.2	130	8.0	18.5	8	1.0	720
JUNE												
03...	.12	602	49	5	17	.3	130	6.9	16.5	8	11	610
JULY												
15...	.10	365	51	6	23	.4	145	8.2	22.0	5	.6	3400
AUG.												
14...	.11	531	55	8	27	.6	160	7.1	25.5	5	7.2	1100
SEP.												
09...	.11	436	59	13	26	.6	170	7.7	26.0	5	1.8	3900

DATE	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
NOV.												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
18...	15	--	--	--	--	--	--	--	--	--	--	--
JAN.												
28...	82	54	3.1	0	0	3	1	<10	1	1	1	9
FEB.												
25...	112	59	--	--	--	--	--	--	--	--	--	--
APR.												
01...	340	59	--	--	--	--	--	--	--	--	--	--
21...	--	31	--	--	--	--	--	--	--	--	--	--
MAY												
19...	--	--	3.8	2	2	0	0	<10	0	0	0	8
JUNE												
03...	--	44	--	--	--	--	--	--	--	--	--	--
JULY												
15...	19	88	--	--	--	--	--	--	--	--	--	--
AUG.												
14...	23	23	1.8	1	0	1	0	<10	0	0	0	6
SEP.												
09...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
NOV.											
25...	--	--	--	--	--	--	--	--	5	20	100
DEC.											
18...	--	--	--	--	--	--	--	--	9	343	86
JAN.											
28...	3	62	3	.0	.0	0	40	4	42	2020	49
FEB.											
25...	--	--	--	--	--	--	--	--	25	1070	80
APR.											
01...	--	--	--	--	--	--	--	--	38	2250	87
21...	--	--	--	--	--	--	--	--	21	697	83
MAY											
19...	2	19	1	.4	.1	0	20	5	8	41	100
JUNE											
03...	--	--	--	--	--	--	--	--	134	886	100
JULY											
15...	--	--	--	--	--	--	--	--	5	25	100
AUG.											
14...	3	10	3	.4	.3	0	60	20	8	51	94
SEP.											
09...	--	--	--	--	--	--	--	--	4	22	100

B--Results based on colony count outside the acceptable range (non-ideal colony count).

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TENN.-Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
Nov. 25, 1974	250	Melosira	28
		Achnanthes	18
		Nitzschia	11
		Navicula	11
		Cyclotella	7
		Synedra	5
		Fragilaria	4
		Scenedesmus	4
		Gomphonema	3
		Amphora	2
		Rhoiocosphenia	2
		Chlamydomonas	2
		Surirella	1
		Cocconeis	1
		Diatoma	1
		Ankistrodesmus	1
Dec. 18.....	1,200	Melosira	48
		Scenedesmus	20
		Nitzschia	10
		Fragilaria	10
		Trachelomonas	8
		Cyclotella	3
Jan. 28, 1975	540	Nitzschia	46
		Melosira	31
		Achnanthes	12
		Navicula	8
		Cymbella	4
Feb. 25.....	420	Synedra	34
		Navicula	14
		Achnanthes	14
		Asterionella	14
		Actinastrum	14
		Melosira	7
		Nitzschia	3

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
Apr. 1, 1975	360	Synedra	19
		Melosira	19
		Asterionella	15
		Cyclotella	15
		Navicula	12
		Chlamydomonas	8
		Cymbella	4
		Gomphonema	4
		Neidium	4
Apr. 21.....	140	Melosira	45
		Cyclotella	18
		Nitzschia	9
		Cymbella	9
		Gomphonema	9
		Navicula	9
May 19.....	720	Navicula	27
		Nitzschia	16
		Cyclotella	14
		Melosira	11
		Achnanthes	7
		Cymbella	6
		Stephanodiscus	6
		Ankistrodesmus	4
		Gomphonema	3
		Frustulia	1
		Synedra	1
		Diatoma	1
		Closterium	1
June 3.....	610	Melosira	48
		Cymbella	24
		Gomphonema	5
		Navicula	5
		Achnanthes	5
		Asterionella	5
		Diatoma	5
		Biddulphia	5

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TENN.-Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
July 15, 1975	3,400	Melosira	29
		Synedra	26
		Scenedesmus	19
		Cocconeis	6
		Navicula	6
		Ankistrodesmus	3
		Fragilaria	3
		Gomphonema	3
		Nitzschia	3

DIVERSITY INDICES

Phyl/Div	0.771
Class	0.771
Order	1.510
Family	2.484
Genera	2.630

Aug. 14.....	1,100	Nitzschia	67
		Melosira	11
		Ankistrodesmus	8
		Achnanthes	6
		Gomphonema	6
		Cymbella	3

DIVERSITY INDICES

Phyl/Div	0.414
Class	0.414
Order	0.902
Family	1.648
Genera	1.648

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TENN.-Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	130	121	126	152	144	148	142	136	138	---	---	---
2	124	118	122	158	146	150	149	137	141	---	---	---
3	127	119	121	153	143	147	157	141	148	---	---	---
4	122	118	120	150	137	144	155	144	150	---	---	---
5	122	119	121	155	140	145	153	143	146	---	---	---
6	124	121	122	152	141	147	147	142	145	---	---	---
7	127	122	125	154	143	148	144	132	142	---	---	---
8	131	126	127	154	144	147	148	133	141	---	---	---
9	129	124	126	151	141	145	146	138	141	---	---	---
10	128	124	125	158	143	152	145	132	137	---	---	---
11	126	123	124	160	147	153	151	78	126	---	---	---
12	128	124	126	150	144	147	142	135	138	---	---	---
13	137	128	132	158	146	153	144	137	139	---	---	---
14	140	134	137	157	145	151	302	139	142	---	---	---
15	142	137	139	149	141	145	149	141	145	---	---	---
16	146	136	140	144	137	141	151	144	147	---	---	---
17	136	130	134	141	137	138	163	148	154	---	---	---
18	211	130	152	139	136	137	165	79	122	---	---	---
19	200	134	158	138	136	137	151	144	148	---	---	---
20	---	---	---	141	137	138	151	141	146	---	---	---
21	---	---	---	137	132	135	149	141	145	---	---	---
22	---	---	---	137	133	135	147	140	144	---	---	---
23	136	132	134	137	131	133	150	143	145	---	---	---
24	138	132	136	133	129	131	153	141	147	---	---	---
25	138	135	136	131	126	129	151	142	146	---	---	---
26	144	138	142	136	128	131	146	140	144	---	---	---
27	146	141	142	141	129	135	145	141	143	---	---	---
28	147	141	144	137	129	134	---	---	---	---	---	---
29	157	143	150	136	130	133	---	---	---	---	---	---
30	154	146	150	138	132	134	---	---	---	---	---	---
31	---	---	---	139	134	136	---	---	---	---	---	---
MONTH	211	118	134	160	126	141	302	78	143	---	---	---
YEAR	339	78	136									

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	14.5	16.0	20.5	19.0	20.0	26.5	24.0	25.0	---	---	---
2	16.5	14.0	15.0	20.5	19.5	20.0	27.0	24.0	25.0	---	---	---
3	16.5	14.0	15.0	22.0	19.5	20.5	26.5	24.0	25.0	---	---	---
4	17.5	14.0	15.0	22.5	20.0	20.5	27.0	18.5	25.0	---	---	---
5	16.5	14.0	15.0	24.0	20.0	21.0	26.5	24.5	25.0	---	---	---
6	16.0	14.0	15.0	21.5	20.0	20.5	25.0	24.5	24.5	---	---	---
7	19.0	15.0	16.5	22.0	20.0	20.5	25.5	23.5	24.5	---	---	---
8	19.0	14.5	16.5	22.0	20.5	21.0	27.0	23.5	25.0	---	---	---
9	16.5	15.0	15.5	23.0	20.5	21.5	26.5	24.5	25.0	---	---	---
10	16.0	15.0	15.5	24.0	20.5	22.0	25.0	24.0	24.5	---	---	---
11	16.5	15.5	16.0	22.5	21.0	21.5	29.0	23.0	24.5	---	---	---
12	18.0	16.0	16.5	22.5	20.5	21.5	26.5	24.5	25.0	---	---	---
13	20.0	16.0	17.5	23.5	20.5	22.0	27.0	24.5	25.5	---	---	---
14	23.0	17.0	19.5	22.5	21.0	21.5	27.0	10.5	25.5	---	---	---
15	22.0	17.0	19.5	23.0	21.5	22.0	27.0	24.5	25.5	---	---	---
16	23.0	17.5	19.5	23.5	21.5	22.5	27.0	24.5	25.5	---	---	---
17	18.5	16.0	17.0	24.0	22.0	22.5	27.0	24.5	25.5	---	---	---
18	20.0	9.0	15.5	23.5	22.0	23.0	31.5	22.5	26.0	---	---	---
19	20.0	9.0	14.0	25.5	22.5	23.5	27.0	24.5	25.5	---	---	---
20	---	---	---	24.5	10.0	23.0	27.0	24.5	25.5	---	---	---
21	---	---	---	25.0	23.0	23.5	27.0	24.5	25.5	---	---	---
22	---	---	---	26.0	23.0	24.0	27.0	25.0	25.5	---	---	---
23	19.5	18.5	19.0	26.0	23.0	24.0	27.5	25.0	26.0	---	---	---
24	21.0	17.5	19.0	25.0	23.0	24.0	28.0	25.0	26.0	---	---	---
25	19.0	18.0	18.5	25.0	23.0	24.0	27.5	25.0	25.5	---	---	---
26	21.0	18.5	19.5	26.5	23.0	24.5	27.0	25.0	25.5	---	---	---
27	20.0	18.5	19.5	26.0	23.0	24.5	27.0	25.0	25.5	---	---	---
28	21.0	19.0	19.5	27.0	23.0	24.5	---	---	---	---	---	---
29	23.0	19.0	20.5	26.0	23.5	24.5	---	---	---	---	---	---
30	21.5	19.0	20.0	26.5	23.5	24.5	---	---	---	---	---	---
31	---	---	---	26.0	23.5	24.5	---	---	---	---	---	---
MONTH	23.0	9.0	17.0	27.0	10.0	22.5	31.5	10.5	25.5	---	---	---
YEAR	31.5	6.0	20.5									

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.

LOCATION.--Lat 36°28'19", long 82°50'50", Hawkins County, temperature recorder at gaging station 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).

DRAINAGE AREA.--2,874 sq mi (7,444 sq km), including that of Surgoinsville Creek.

PERIOD OF RECORD.--Water temperatures: November 1974 to September 1975.

EXTREMES.--November 1974 to September 1975:
Water temperatures: Maximum, 29.5°C June 30; minimum, 4.0°C Jan. 14, 15, Mar. 4.

REMARKS.--Miscellaneous chemical analyses published for water year 1974. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT.											
01...	1340	1.0	1510	500	260	--	50	--	24	6.5	10
02...	1340	1.0	1660	800	310	--	60	--	26	7.1	15
03...	1340	1.0	3130	300	240	--	50	--	24	6.5	12
04...	1235	1.0	2740	600	190	--	60	--	25	7.0	9.9
05...	1545	1.0	1120	600	210	--	40	--	26	7.0	9.8
06...	1815	1.0	1380	600	120	--	60	--	32	8.7	24
07...	1330	1.0	1410	500	50	--	20	--	23	6.3	9.2
08...	1330	1.0	2550	600	140	--	70	--	25	7.0	12
09...	1245	1.0	1520	800	250	--	60	--	24	6.6	11
10...	1335	1.0	1440	500	150	--	30	--	24	6.4	11
11...	1330	1.0	1570	300	120	--	140	--	24	6.9	11
12...	1615	1.0	1180	300	150	--	40	--	26	7.4	12
13...	1635	1.0	999	800	210	--	50	--	27	6.6	11
14...	1330	1.0	999	500	70	--	50	--	38	9.0	29
15...	1335	1.0	1460	600	70	--	230	--	29	7.2	17
16...	1340	1.0	2090	1500	170	--	30	--	25	6.9	9.8
16...	1515	1.0	2240	1100	300	<50	60	<10	24	6.3	11
16...	1540	1.0	2560	1500	310	<50	60	<10	24	6.3	11
17...	1350	1.0	2090	700	430	--	60	--	30	7.7	11
18...	1330	1.0	1640	1400	260	--	60	--	33	7.4	15
19...	1325	1.0	1750	1000	120	--	40	--	33	6.9	18
20...	1815	1.0	1270	200	160	--	40	--	46	8.5	25
21...	1205	1.0	2130	300	180	--	70	--	45	8.6	43
22...	1300	1.0	1120	500	190	--	40	--	24	6.6	8.5
23...	1345	1.0	1120	500	190	--	30	--	24	6.8	6.6
24...	1345	1.0	1070	<100	50	--	70	--	32	8.9	15
25...	1300	1.0	1050	500	1600	--	50	--	35	18	21
26...	1345	1.0	1050	400	1600	--	50	--	33	9.2	26
27...	1715	1.0	973	200	160	--	60	--	35	9.7	24
28...	1230	1.0	1540	300	170	--	170	--	34	10	25
29...	1330	1.0	1510	500	280	--	100	--	31	8.7	11
30...	0924	1.0	2070	700	970	--	40	--	4.0	1.8	8.9
30...	1330	1.0	1470	300	330	--	70	--	23	7.1	16
31...	1300	1.0	1440	100	220	--	60	--	23	6.5	15
NOV.											
01...	1415	1.0	1010	200	170	--	60	--	25	7.2	11
02...	1410	1.0	1380	100	220	--	70	--	20	6.2	11
03...	1700	1.0	1190	<100	380	--	2900	--	20	3.1	18
04...	1215	1.0	973	<100	<50	--	30	--	21	6.1	8.7
05...	1345	1.0	1520	<100	110	--	320	--	32	8.1	2.3

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TOTAL SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.											
01...	1.8	--	--	--	18	10	<.1	.86	.18	.22	.07
02...	2.1	--	--	--	26	14	<.1	.93	.45	.33	.10
03...	1.8	--	--	--	22	12	<.1	.85	.22	.26	.07
04...	1.8	--	--	--	27	10	<.1	.85	.20	.23	.06
05...	1.9	--	--	--	24	11	<.1	.87	.11	.26	.07
06...	2.9	--	--	--	52	30	<.1	.85	.59	.52	.12
07...	1.8	--	--	--	20	10	<.1	.99	.10	.33	.10
08...	1.9	--	--	--	25	15	<.1	.94	.34	.34	.08
09...	1.9	--	--	--	21	11	<.1	.99	.27	.23	.08
10...	1.8	--	--	--	19	2.0	<.1	.84	.34	.92	.08
11...	1.9	--	--	--	24	10	<.1	.79	.30	.28	.10
12...	2.0	--	--	--	26	10	<.1	.80	.26	.37	.10
13...	1.9	--	--	--	19	12	<.1	.90	.09	.39	.09
14...	2.8	--	--	--	49	40	<.1	.90	.56	.44	.12
15...	2.3	--	--	--	35	19	<.1	.63	.64	.43	.14
16...	2.0	--	--	--	18	12	<.1	3.5	.37	.23	.08
16...	2.2	70	0	<.0	24	12	<.1	.84	.25	.31	.10
16...	2.3	67	0	<.0	25	13	<.1	.84	.25	.32	.10
17...	2.4	--	--	--	19	19	.1	.76	.18	.24	.08
18...	2.6	--	--	--	26	26	<.1	1.1	.31	.25	.10
19...	2.3	--	--	--	24	35	<.1	.95	.22	.28	.09
20...	2.7	--	--	--	22	54	<.1	.95	.28	.32	.12
21...	3.0	--	--	--	29	71	<.1	.78	.55	.35	.17
22...	1.8	--	--	--	13	10	<.1	.88	.07	.13	.08
23...	1.9	--	--	--	14	6.0	<.1	.92	.05	.15	.08
24...	2.3	--	--	--	40	16	<.1	5.1	.42	.24	.11
25...	2.6	--	--	--	46	19	<.1	1.1	.78	.26	.20
26...	2.6	--	--	--	41	29	<.1	1.0	.59	.27	.21
27...	2.6	--	--	--	48	30	<.1	1.1	.55	.43	.22
28...	2.8	--	--	--	50	29	<.1	.89	.88	.41	.22
29...	2.4	--	--	--	35	26	<.1	.95	.42	.33	.18
30...	1.5	--	--	--	12	4.0	.0	.38	<.01	.16	.09
30...	2.4	--	--	--	21	16	.1	1.3	.45	.31	.17
31...	2.4	--	--	--	15	17	.1	1.0	.28	.26	.16
NOV.											
01...	2.4	--	--	--	27	22	.1	1.2	.28	.38	.17
02...	2.0	--	--	--	17	11	.1	.81	.28	.27	.14
03...	2.4	--	--	--	28	21	<.1	.84	.57	.35	.16
04...	1.8	--	--	--	17	9.0	<.1	1.0	.07	.23	.10
05...	2.4	--	--	--	19	26	<.1	.91	1.2	.33	.19

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT.											
01...	120	.16	489	7	87	--	--	20.0	10	2	--
02...	150	.20	672	6	94	--	--	19.0	15	7	--
03...	140	.19	1180	3	87	--	--	18.0	10	6	--
04...	130	.18	962	5	91	--	--	18.0	10	4	--
05...	130	.18	393	6	94	--	--	20.0	10	6	--
06...	210	.29	782	5	120	--	--	22.0	30	2	--
07...	120	.16	457	3	83	--	--	20.0	10	1	--
08...	150	.20	1030	6	91	--	--	19.0	10	5	--
09...	130	.18	534	5	87	--	--	18.0	20	11	--
10...	130	.18	505	3	86	--	--	19.0	10	7	--
11...	130	.18	551	4	88	--	--	20.0	10	3	--
12...	150	.20	478	6	95	--	--	21.0	15	3	--
13...	140	.19	378	6	95	--	--	21.0	15	3	--
14...	230	.31	620	2	130	--	--	21.0	25	1	--
15...	170	.23	670	3	100	--	--	21.0	20	2	--
16...	130	.18	734	4	91	--	--	19.0	15	2	--
16...	140	.19	846	6	86	240	7.0	17.8	15	4	6.9
16...	140	.19	967	5	86	250	7.4	17.8	15	5	6.4
17...	150	.20	846	6	110	--	--	18.0	20	6	--
18...	160	.22	708	7	110	--	--	18.0	20	4	--
19...	170	.23	803	4	110	--	--	17.0	15	3	--
20...	250	.34	857	2	150	--	--	16.0	25	3	--
21...	290	.39	1670	5	150	--	--	14.0	25	3	--
22...	130	.18	393	4	87	--	--	16.0	10	5	--
23...	110	.15	333	4	88	--	--	16.0	5	4	--
24...	180	.24	520	2	120	--	--	16.0	15	1	--
25...	200	.27	567	3	160	--	--	17.0	25	3	--
26...	200	.27	567	2	120	--	--	20.0	25	2	--
27...	210	.29	552	5	130	--	--	18.0	25	3	--
28...	220	.30	915	6	130	--	--	20.0	25	4	--
29...	180	.24	734	8	110	--	--	20.0	10	10	--
30...	60	.08	335	11	17	--	--	16.0	10	8	--
30...	160	.22	635	11	87	--	--	21.0	15	12	--
31...	160	.22	622	7	84	--	--	22.0	10	7	--
NOV.											
01...	180	.24	491	3	92	--	--	22.0	20	3	--
02...	130	.18	484	7	75	--	--	22.0	15	3	--
03...	180	.24	578	5	63	--	--	21.0	20	2	--
04...	130	.18	342	2	78	--	--	19.0	10	1	--
05...	220	.30	903	7	110	--	--	21.0	25	3	--

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
OCT.											
01...	12	--	--	--	--	--	--	--	--	--	2
02...	19	--	--	--	--	--	--	--	--	--	9
03...	11	--	--	--	--	--	--	--	--	--	1
04...	10	--	--	--	--	--	--	--	--	--	2
05...	8	--	--	--	--	--	--	--	--	--	1
06...	19	--	--	--	--	--	--	--	--	--	<1
07...	9	--	--	--	--	--	--	--	--	--	<1
08...	13	--	--	--	--	--	--	--	--	--	<1
09...	12	--	--	--	--	--	--	--	--	--	2
10...	9	--	--	--	--	--	--	--	--	--	2
11...	11	--	--	--	--	--	--	--	--	--	2
12...	12	--	--	--	--	--	--	--	--	--	<1
13...	9	--	--	--	--	--	--	--	--	--	3
14...	16	--	--	--	--	--	--	--	--	--	<1
15...	14	--	--	--	--	--	--	--	--	--	1
16...	12	--	--	--	--	--	--	--	--	--	2
16...	13	1.8	640	10	2.8	9	<5	<100	<10	<100	<1
16...	9	1.4	280	40	2.5	11	<5	<100	<10	<100	<1
17...	12	--	--	--	--	--	--	--	--	--	3
18...	13	--	--	--	--	--	--	--	--	--	2
19...	11	--	--	--	--	--	--	--	--	--	5
20...	14	--	--	--	--	--	--	--	--	--	2
21...	18	--	--	--	--	--	--	--	--	--	2
22...	8	--	--	--	--	--	--	--	--	--	2
23...	8	--	--	--	--	--	--	--	--	--	2
24...	12	--	--	--	--	--	--	--	--	--	1
25...	14	--	--	--	--	--	--	--	--	--	4
26...	13	--	--	--	--	--	--	--	--	--	2
27...	11	--	--	--	--	--	--	--	--	--	3
28...	14	--	--	--	--	--	--	--	--	--	7
29...	15	--	--	--	--	--	--	--	--	--	2
30...	3	--	--	--	--	--	--	--	--	--	2
30...	7	--	--	--	--	--	--	--	--	--	<1
31...	6	--	--	--	--	--	--	--	--	--	1
NOV.											
01...	9	--	--	--	--	--	--	--	--	--	1
02...	8	--	--	--	--	--	--	--	--	--	<1
03...	15	--	--	--	--	--	--	--	--	--	2
04...	11	--	--	--	--	--	--	--	--	--	2
05...	15	--	--	--	--	--	--	--	--	--	1

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
01...	--	<10	<10	--	<.2	--	--	--	--	<10
02...	--	<10	<10	--	<.2	--	--	--	--	<10
03...	--	<10	12	--	<.2	--	--	--	--	<10
04...	--	<10	12	--	<.2	--	--	--	--	10
05...	--	<10	10	--	.8	--	--	--	--	<10
06...	--	<10	10	--	<.2	--	--	--	--	40
07...	--	<10	14	--	<.2	--	--	--	--	40
08...	--	380	<10	--	<.2	--	--	--	--	40
09...	--	40	<10	--	<.2	--	--	--	--	30
10...	--	<10	<10	--	--	--	--	--	--	20
11...	--	90	<10	--	<.2	--	--	--	--	20
12...	--	10	<10	--	<.2	--	--	--	--	<10
13...	--	20	<10	--	<.2	--	--	--	--	<10
14...	--	20	<10	--	<.2	--	--	--	--	<10
15...	--	20	<10	--	<.2	--	--	--	--	30
16...	--	30	<10	--	<.2	--	--	--	--	<10
16...	<5	20	<10	<10	--	<50	<2	<10	<1000	<10
16...	<5	20	<10	<10	--	<50	10	<10	<1000	<10
17...	--	<10	<10	--	1.1	--	--	--	--	30
18...	--	30	<10	--	3.4	--	--	--	--	30
19...	--	10	<10	--	.2	--	--	--	--	20
20...	--	<10	<10	--	.2	--	--	--	--	20
21...	--	20	<10	--	5.4	--	--	--	--	30
22...	--	<10	<10	--	.8	--	--	--	--	20
23...	--	50	<10	--	<.2	--	--	--	--	50
24...	--	700	<10	--	<.2	--	--	--	--	30
25...	--	<10	<10	--	<.2	--	--	--	--	20
26...	--	10	<10	--	<.2	--	--	--	--	20
27...	--	<10	<10	--	<.2	--	--	--	--	20
28...	--	10	<10	--	<.2	--	--	--	--	30
29...	--	<10	<10	--	.8	--	--	--	--	20
30...	--	<10	<10	--	<.2	--	--	--	--	70
30...	--	<10	<10	--	3.6	--	--	--	--	20
31...	--	<10	<10	--	<.2	--	--	--	--	<10
NOV.										
01...	--	<10	<10	--	<.2	--	--	--	--	10
02...	--	10	<10	--	<.2	--	--	--	--	20
03...	--	70	<10	--	<.2	--	--	--	--	40
04...	--	<10	<10	--	<.2	--	--	--	--	<10
05...	--	20	<10	--	<.2	--	--	--	--	30

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)
NOV.											
06...	1330	1.0	1820	200	200	160	35	8.3	28	2.5	--
06...	1400	1.0	1640	--	160	170	34	8.3	29	2.5	84
06...	1425	1.0	1580	--	120	180	35	8.4	28	1.5	85
07...	1330	1.0	2050	400	220	130	28	6.6	12	2.0	--
08...	1215	1.0	2450	300	220	120	26	6.3	9.5	2.0	--
09...	1410	1.0	2810	500	300	120	28	6.8	11	2.1	--
10...	1545	1.0	1910	300	190	110	25	6.1	8.3	1.9	--
11...	1315	1.0	1520	300	140	70	25	6.7	8.8	1.9	--
12...	1315	1.0	1510	300	130	80	31	8.6	18	2.4	--
13...	1215	1.0	5070	500	440	240	25	6.5	9.5	1.9	--
14...	1330	1.0	1840	<100	80	40	27	6.9	14	2.0	--
15...	1215	1.0	1930	200	150	50	26	6.7	10	1.9	--
16...	0915	1.0	8140	500	370	200	26	7.0	9.2	2.0	--
16...	1315	1.0	3700	--	230	90	27	7.0	8.6	1.9	--
16...	1630	1.0	1930	200	210	70	26	6.8	8.1	1.8	--
17...	1015	1.0	1090	<100	80	40	29	7.5	12	2.1	--
17...	1410	1.0	1050	100	80	30	28	7.4	11	2.0	--
17...	1755	1.0	1040	<100	50	30	28	7.3	10	1.9	--
18...	0710	1.0	1030	100	80	20	35	9.0	16	2.1	--
18...	1205	1.0	1330	100	90	20	38	4.7	22	2.4	--
18...	1615	1.0	1150	<100	100	20	42	9.1	28	2.6	--
19...	0720	1.0	8740	1000	720	430	30	8.0	14	2.4	--
19...	1205	1.0	4320	700	430	180	25	6.7	9.0	2.0	--
19...	1610	1.0	2000	200	180	80	25	6.5	8.7	1.9	--
20...	0720	1.0	3730	600	360	100	30	7.9	14	2.3	--
20...	1210	1.0	2000	400	330	60	30	7.6	12	2.2	--
20...	1620	1.0	923	400	400	70	33	8.2	15	2.6	--
21...	0720	1.0	5990	3900	3500	410	42	9.4	14	5.5	--
21...	1230	1.0	4970	2600	2500	300	39	8.0	28	3.8	--
21...	1600	1.0	7070	2100	2200	270	41	8.3	34	3.6	--
22...	0800	1.0	12000	1400	2300	430	30	6.3	13	2.3	--
22...	1210	1.0	12100	1200	2200	420	30	6.4	10	2.2	--
22...	1615	1.0	11900	800	1600	280	29	6.2	11	2.3	--
23...	0820	1.0	6050	1600	1000	120	32	6.7	15	2.2	--
23...	1335	1.0	3990	500	830	120	30	6.9	10	2.2	--
23...	1620	1.0	10100	1700	960	160	27	6.6	9.3	2.2	--
24...	1005	1.0	5620	1100	590	100	25	6.6	6.5	2.0	--
24...	1325	1.0	2810	700	500	80	25	6.5	6.9	2.1	--
24...	1720	1.0	6360	600	420	100	25	6.4	6.4	2.2	--
25...	0720	1.0	6920	1000	550	100	25	6.5	8.3	2.1	--

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
NOV.											
06...	--	31	38	<.1	4.3	1.0	.46	.20	230	.31	1130
06...	0	25	39	.1	.76	.96	.39	.20	240	.33	1060
06...	0	27	38	.1	.76	1.0	.38	.21	240	.33	1020
07...	--	17	15	<.1	.83	.29	.09	.10	140	.19	775
08...	--	17	9.0	<.1	.80	.20	.18	.09	130	.18	860
09...	--	19	10	<.1	.80	.24	.27	.13	140	.19	1060
10...	--	15	7.0	.1	.75	.10	.19	.08	120	.16	619
11...	--	17	8.0	<.1	.78	.20	.10	.08	130	.18	534
12...	--	38	20	.1	.87	.35	.39	.12	190	.26	775
13...	--	18	9.0	<.1	.68	.09	.27	.10	130	.18	1780
14...	--	19	18	<.1	.83	.15	.22	.07	150	.20	745
15...	--	19	12	<.1	.75	.17	.34	.09	140	.19	730
16...	--	18	10	<.1	.68	.12	.30	.10	140	.19	3080
16...	--	19	9.0	<.1	.68	.10	.17	.07	130	.18	1300
16...	--	17	8.0	<.1	.69	.08	.18	.07	130	.18	677
17...	--	22	15	<.1	.85	.19	.23	.09	160	.22	471
17...	--	19	13	<.1	.80	.16	.19	.08	140	.19	397
17...	--	18	12	<.1	.79	.13	.23	.08	140	.19	393
18...	--	22	30	.1	.92	.21	.19	.09	180	.24	501
18...	--	31	40	<.1	.85	.33	.25	.11	230	.31	826
18...	--	37	48	.1	.89	.47	.35	.14	250	.34	776
19...	--	26	16	<.1	6.0	.50	.40	.22	160	.22	3780
19...	--	19	10	<.1	.73	.18	.23	.12	120	.16	1400
19...	--	19	10	<.1	3.1	.14	.24	.09	120	.16	648
20...	--	28	17	<.1	9.6	.36	.37	.14	60	.08	604
20...	--	23	17	<.1	1.0	.28	.28	.11	150	.20	810
20...	--	30	18	<.1	1.1	.40	.31	.16	170	.23	424
21...	--	25	32	<.1	8.1	.22	.53	.23	200	.27	3240
21...	--	23	53	<.1	.73	.18	.22	.14	230	.31	3090
21...	--	25	56	<.1	.76	.19	.28	.14	240	.33	4580
22...	--	18	20	<.1	3.2	.15	.31	.17	150	.20	4860
22...	--	17	11	<.1	.76	.17	.19	.11	130	.18	4250
22...	--	13	16	<.1	2.8	.15	.21	.12	130	.18	4180
23...	--	16	24	<.1	.87	.19	.19	.07	160	.22	2610
23...	--	17	13	<.1	.74	.19	.27	.09	140	.19	1510
23...	--	16	11	<.1	2.6	.15	.31	.10	130	.18	3550
24...	--	15	6.0	<.1	.65	.18	.37	.08	100	.14	1520
24...	--	15	7.0	<.1	.65	.15	.24	.10	120	.16	910
24...	--	13	6.0	<.1	.66	.12	.20	.07	120	.16	2060
25...	--	15	8.0	<.1	3.9	.20	.35	.08	120	.16	2240

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NON-FILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
NOV.										
06...	6	120	--	--	19.0	30	4	--	17	--
06...	7	120	440	7.3	18.3	30	5	5.6	17	3.2
06...	6	120	430	7.2	19.4	30	8	5.2	19	3.4
07...	7	97	--	--	17.0	10	3	--	10	--
08...	4	91	--	--	16.0	10	3	--	5	--
09...	6	98	--	--	18.0	15	4	--	2	--
10...	5	88	--	--	17.0	10	3	--	3	--
11...	7	90	--	--	17.0	10	2	--	2	--
12...	2	110	--	--	16.0	25	3	--	13	--
13...	18	89	--	--	14.0	10	10	--	10	--
14...	2	96	--	--	14.0	10	4	--	6	--
15...	5	92	--	--	14.0	10	2	--	12	--
16...	17	94	--	--	12.0	10	7	--	9	--
16...	9	96	--	--	15.0	15	5	--	7	--
16...	5	93	--	--	16.0	10	3	--	5	--
17...	2	100	--	--	13.0	5	3	--	6	--
17...	2	100	--	--	15.0	5	3	--	6	--
17...	2	100	--	--	14.0	5	2	--	3	--
18...	2	120	--	--	12.0	15	2	--	5	--
18...	2	110	--	--	14.0	20	2	--	7	--
18...	3	140	--	--	14.0	20	3	--	12	--
19...	29	110	--	--	16.0	15	13	--	37	--
19...	18	90	--	--	15.0	10	7	--	9	--
19...	6	89	--	--	15.0	15	4	--	10	--
20...	13	110	--	--	16.0	20	10	--	16	--
20...	8	110	--	--	16.0	15	6	--	9	--
20...	12	120	--	--	15.0	20	7	--	17	--
21...	75	140	--	--	12.0	60	120	--	35	--
21...	99	130	--	--	11.0	35	58	--	--	--
21...	100	140	--	--	12.0	35	60	--	26	--
22...	70	100	--	--	11.0	15	32	--	17	--
22...	61	100	--	--	13.0	10	21	--	15	--
22...	48	98	--	--	13.0	15	23	--	10	--
23...	24	110	--	--	10.0	15	16	--	9	--
23...	19	100	--	--	13.0	20	12	--	10	--
23...	25	94	--	--	13.0	15	12	--	10	--
24...	14	90	--	--	13.0	10	10	--	14	--
24...	9	89	--	--	14.0	10	7	--	9	--
24...	10	89	--	--	12.0	10	7	--	8	--
25...	13	89	--	--	12.0	15	10	--	14	--

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.										
06...	--	--	--	--	4	--	20	<10	<.2	30
06...	260	30	4.1	--	--	<5	<10	--	--	30
06...	200	20	4.4	--	--	<5	<10	--	--	40
07...	--	--	--	--	2	--	10	<10	.2	20
08...	--	--	--	--	<1	--	<10	<10	<.2	20
09...	--	--	--	--	3	--	<10	<10	<.2	30
10...	--	--	--	--	12	--	<10	<10	<.2	20
11...	--	--	--	--	2	--	<10	<10	<.2	20
12...	--	--	--	--	2	--	<10	<10	<.2	20
13...	--	--	--	--	<1	--	<10	<10	.2	40
14...	--	--	--	--	2	--	<10	<10	<.2	10
15...	--	--	--	--	3	--	10	<10	<.2	20
16...	--	--	--	--	1	--	<10	<10	<.2	30
16...	--	--	--	300	1	--	<10	<10	<.2	20
16...	--	--	--	--	<1	--	<10	<10	.2	10
17...	--	--	--	--	<1	--	<10	<10	<.2	<10
17...	--	--	--	--	4	--	<10	<10	<.2	20
17...	--	--	--	--	2	--	<10	<10	3.2	10
18...	--	--	--	--	<1	--	10	<10	<.2	<10
18...	--	--	--	--	4	--	20	<10	<.2	20
18...	--	--	--	--	5	--	<10	<10	<.2	20
19...	--	--	--	--	<1	--	<10	<10	<.2	90
19...	--	--	--	--	6	--	<10	<10	<.2	40
19...	--	--	--	--	2	--	20	<10	<.2	20
20...	--	--	--	--	<1	--	<10	<10	<.2	40
20...	--	--	--	--	2	--	10	<10	<.2	40
20...	--	--	--	--	<1	--	<10	<10	<.2	20
21...	--	--	--	--	<1	--	10	<10	<.2	70
21...	--	--	--	--	<1	--	<10	<10	2.7	50
21...	--	--	--	--	<1	--	10	<10	<.2	60
22...	--	--	--	--	1	--	20	<10	--	80
22...	--	--	--	--	<1	--	20	<10	<.2	80
22...	--	--	--	--	<1	--	20	<10	<.2	80
23...	--	--	--	--	<1	--	<10	<10	<.2	30
23...	--	--	--	--	4	--	20	<10	<.2	30
23...	--	--	--	--	<1	--	20	<10	<.2	50
24...	--	--	--	--	<1	--	<10	<10	<.2	40
24...	--	--	--	--	2	--	20	<10	<.2	30
24...	--	--	--	--	<1	--	20	<10	<.2	30
25...	--	--	--	--	<1	--	20	<10	<.2	40

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)
NOV.											
25...	1210	1.0	4390	700	490	90	24	6.3	7.9	2.0	--
25...	1615	1.0	6010	400	360	60	25	6.2	9.2	2.0	--
26...	0725	1.0	10200	800	570	130	23	6.1	7.5	2.0	--
26...	1215	1.0	8270	1300	710	160	22	5.9	7.1	2.0	--
26...	1610	1.0	9320	700	490	100	23	6.0	7.0	1.9	--
27...	0720	1.0	9030	800	540	120	25	6.5	9.0	2.2	--
27...	1205	1.0	5400	700	470	100	22	5.9	6.9	2.0	--
27...	1610	1.0	8390	700	390	80	23	5.9	6.8	1.9	--
28...	1015	--	6250	700	440	70	22	5.6	8.6	2.0	--
28...	1315	--	3190	400	370	60	22	5.6	9.2	2.0	--
28...	1645	--	1730	300	340	60	22	5.7	9.1	2.0	--
29...	0805	--	1170	400	210	40	28	6.6	16	2.2	--
29...	1145	--	1470	500	200	60	25	7.0	16	2.5	--
29...	1620	--	4290	400	240	60	25	6.5	12	2.3	--
30...	0745	--	2150	200	220	50	23	6.2	8.8	2.0	--
30...	1215	--	3280	400	250	40	24	5.8	8.2	2.0	--
30...	1545	--	1690	500	250	80	29	7.1	12	2.3	--
DEC.											
01...	1005	--	3470	500	290	70	26	7.0	9.5	2.2	--
01...	1610	--	1590	400	240	70	27	7.4	11	2.3	--
01...	1745	--	1410	500	220	70	28	7.5	12	2.4	--
02...	0720	--	6100	1100	590	130	24	6.6	7.8	2.1	--
02...	1220	--	2470	700	380	80	25	6.6	7.5	2.1	--
02...	1605	--	2110	700	370	60	25	6.6	7.4	2.1	--
03...	0810	1.0	6220	400	390	80	26	6.8	9.1	2.1	--
03...	1205	1.0	4500	600	340	70	26	6.8	8.7	1.9	--
03...	1620	1.0	5400	500	480	60	26	6.8	8.2	1.8	--
04...	0820	--	6190	400	350	110	28	7.5	15	2.1	--
04...	1215	--	3260	400	320	90	26	7.0	11	1.9	--
04...	1310	1.0	2770	--	310	80	26	6.8	10	1.9	77
04...	1320	1.0	2720	--	310	70	26	6.9	11	1.9	77
04...	1610	--	3510	300	240	70	25	6.8	9.8	2.0	--
05...	0825	--	4520	500	250	80	28	7.5	13	2.1	--
05...	1230	--	3850	500	290	140	34	8.5	21	2.3	--
05...	1600	--	4390	600	230	110	28	7.4	13	2.1	--
06...	0820	1.0	2280	300	140	50	28	7.0	9.9	2.0	--
06...	1205	1.0	3540	300	160	50	28	7.0	10	2.0	--
06...	1605	1.0	4040	200	190	70	43	8.7	14	2.2	--
07...	0940	1.0	1190	400	110	50	35	8.0	9.6	1.9	--
07...	1245	1.0	1150	300	100	50	29	7.2	9.8	1.9	--

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
NOV.										
25...	--	15	8.0	<.1	.69	.25	.21	.07	120	.16
25...	--	13	10	<.1	.72	.11	.17	.06	120	.16
26...	--	18	6.0	<.1	.70	.24	.17	.15	120	.16
26...	--	17	6.0	<.1	.80	.09	.31	.08	110	.15
26...	--	18	5.0	<.1	.69	.12	.19	.08	110	.15
27...	--	21	8.0	<.1	--	--	--	--	120	.16
27...	--	17	6.0	<.1	.65	.09	.29	.08	110	.15
27...	--	16	6.0	<.1	.65	.07	.27	.07	110	.15
28...	--	32	9.0	<.1	4.2	.08	.16	.06	110	.15
28...	--	21	9.0	<.1	.63	.09	.19	.06	110	.15
28...	--	18	8.0	<.1	9.9	.09	.27	.06	110	.15
29...	--	30	20	<.1	3.7	.17	.28	.08	150	.20
29...	--	15	16	<.1	2.9	.25	.20	.08	160	.22
29...	--	38	10	<.1	3.2	.18	.28	.08	130	.18
30...	--	15	8.0	<.1	.68	.19	.35	.09	120	.16
30...	--	24	10	<.1	.75	.19	.27	.08	120	.16
30...	--	24	16	<.1	.76	.27	.33	.09	150	.20
DEC.										
01...	--	19	10	<.1	3.6	.55	.01	.08	130	.18
01...	--	26	13	<.1	3.5	.42	.14	.09	150	.20
01...	--	27	12	<.1	.70	.27	.33	.09	140	.19
02...	--	18	2.0	<.1	.63	.13	.29	.08	120	.16
02...	--	17	6.0	<.1	5.5	.15	.23	.08	120	.16
02...	--	17	7.0	<.1	.63	.14	.14	.07	120	.16
03...	--	17	10	.1	.64	.13	.31	.08	120	.16
03...	--	16	9.0	<.1	1.3	.12	.20	.06	130	.18
03...	--	16	9.0	<.1	.66	.14	.52	.06	120	.16
04...	--	27	18	.1	.70	.21	.33	.09	160	.22
04...	--	18	14	<.1	6.4	.18	.24	.07	140	.19
04...	0	22	12	<.1	.61	.18	.16	.07	140	.19
04...	0	22	12	<.1	.60	.18	.17	.07	140	.19
04...	--	19	11	<.1	4.9	.21	.31	.06	130	.18
05...	--	25	15	.1	1.8	.29	.30	.08	150	.20
05...	--	34	31	.1	6.3	.53	.35	.10	200	.27
05...	--	25	14	<.1	.62	.27	.25	.07	150	.20
06...	--	20	12	<.1	.66	.23	.16	.05	130	.18
06...	--	19	14	<.1	5.2	.26	.23	.05	130	.18
06...	--	23	20	<.1	2.8	.34	.22	.06	160	.22
07...	--	18	12	.1	4.8	.28	.21	.05	130	.18
07...	--	19	12	<.1	8.9	.34	.19	.05	140	.19

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
NOV.										
25...	1420	11	86	--	--	12.0	10	7	--	11
25...	1950	7	88	--	--	12.0	10	5	--	8
26...	3310	12	83	--	--	10.0	10	3	--	8
26...	2460	17	79	--	--	12.0	10	5	--	9
26...	2770	12	82	--	--	12.0	10	6	--	11
27...	2930	13	89	--	--	9.0	15	4	--	12
27...	1600	10	79	--	--	13.0	10	2	--	10
27...	2490	7	82	--	--	12.0	10	2	--	8
28...	1860	8	78	--	--	11.0	10	7	--	5
28...	947	8	78	--	--	12.0	10	5	--	9
28...	514	7	78	--	--	12.0	10	6	--	7
29...	474	4	97	--	--	9.0	15	3	--	10
29...	635	4	91	--	--	12.0	20	5	--	15
29...	1510	5	89	--	--	12.0	15	3	--	9
30...	697	4	83	--	--	9.0	10	4	--	8
30...	1060	8	84	--	--	11.0	10	5	--	6
30...	684	7	100	--	--	11.0	15	6	--	11
DEC.										
01...	1220	6	94	--	--	8.0	15	7	--	9
01...	644	4	98	--	--	10.0	15	5	--	16
01...	533	4	100	--	--	10.0	15	5	--	14
02...	1980	15	87	--	--	8.0	10	7	--	14
02...	800	7	90	--	--	10.0	10	6	--	13
02...	684	5	90	--	--	11.0	10	5	--	5
03...	2020	9	93	--	--	9.0	10	7	--	8
03...	1580	7	93	--	--	11.0	10	6	--	--
03...	1750	6	93	--	--	11.0	10	6	--	--
04...	2670	8	100	--	--	9.0	10	8	--	14
04...	1230	7	94	--	--	12.0	10	6	--	11
04...	1050	7	93	240	7.7	9.4	15	7	9.5	11
04...	1030	6	93	250	7.5	9.4	15	7	9.6	10
04...	1230	6	90	--	--	12.0	10	5	--	11
05...	1830	4	100	--	--	6.0	10	2	--	12
05...	2080	6	120	--	--	11.0	15	3	--	15
05...	1780	6	100	--	--	12.0	10	3	--	12
06...	800	4	99	--	--	6.7	10	2	--	11
06...	1240	5	99	--	--	7.8	10	2	--	10
06...	1750	4	140	--	--	7.8	15	3	--	13
07...	418	3	120	--	--	9.0	10	2	--	9
07...	435	3	100	--	--	11.0	10	1	--	9

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.										
25...	--	--	--	--	2	--	20	<10	<.2	40
25...	--	--	--	--	<1	--	<10	<10	<.2	20
26...	--	--	--	--	<1	--	20	<10	<.2	40
26...	--	--	--	--	<1	--	<10	<10	<.2	50
26...	--	--	--	--	<1	--	10	<10	<.2	30
27...	--	--	--	--	1	--	110	<10	<.2	50
27...	--	--	--	--	<1	--	20	<10	<.2	50
27...	--	--	--	--	<1	--	10	<10	<.2	40
28...	--	--	--	--	1	--	10	<10	<.2	40
28...	--	--	--	--	2	--	<10	<10	.3	30
28...	--	--	--	--	<1	--	60	<10	15	<10
29...	--	--	--	--	3	--	40	<10	.4	40
29...	--	--	--	--	<1	--	10	<10	<.2	40
29...	--	--	--	--	<1	--	20	<10	<.2	40
30...	--	--	--	--	<1	--	<10	<10	<.2	30
30...	--	--	--	--	<1	--	<10	<10	<.2	20
30...	--	--	--	--	<1	--	10	<10	10	40
DEC.										
01...	--	--	--	--	1	--	10	<10	.3	40
01...	--	--	--	--	4	--	10	<10	.5	40
01...	--	--	--	--	2	--	10	<10	.6	60
02...	--	--	--	--	<1	--	100	<10	.3	60
02...	--	--	--	--	2	--	110	<10	.3	40
02...	--	--	--	--	<1	--	10	<10	.3	40
03...	--	--	--	--	2	--	30	<10	<.2	40
03...	--	--	--	--	5	--	30	<10	<.2	40
03...	--	--	--	--	3	--	50	<10	.2	50
04...	--	--	--	--	<1	--	40	<10	7.0	50
04...	--	--	--	--	<1	--	40	<10	<.2	40
04...	1.0	260	<10	2.2	--	<5	20	--	--	40
04...	1.9	270	<10	2.0	--	<5	20	--	--	40
04...	--	--	--	--	<1	--	40	<10	<.2	40
05...	--	--	--	--	<1	--	40	<10	<.2	30
05...	--	--	--	--	<1	--	50	<10	.2	30
05...	--	--	--	--	1	--	40	<10	<.2	40
06...	--	--	--	--	<1	--	40	<10	<.2	20
06...	--	--	--	--	<1	--	40	<10	<.2	20
06...	--	--	--	--	2	--	40	<10	<.2	30
07...	--	--	--	--	2	--	40	<10	3.3	20
07...	--	--	--	--	6	--	40	<10	.3	20

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
DEC.												
07...	1620	1.0	1140	--	300	90	--	50	--	30	7.3	10
08...	1015	1.0	1540	--	<200	110	--	70	--	38	8.8	18
08...	1325	1.0	1280	--	400	120	--	120	--	40	9.2	19
08...	1705	1.0	1180	--	300	110	--	120	--	41	9.4	20
09...	0815	1.0	4270	--	800	420	--	170	--	29	7.2	12
09...	1220	1.0	1980	--	500	230	--	110	--	26	6.9	10
09...	1605	1.0	2300	--	300	130	--	60	--	27	6.9	9.6
10...	0825	1.0	8080	--	500	480	--	160	--	30	7.2	13
10...	1205	1.0	5240	--	300	380	--	130	--	31	7.2	12
10...	1545	1.0	8390	--	600	300	--	110	--	29	7.0	11
11...	0825	1.0	3750	--	200	260	--	100	--	29	7.1	13
11...	1210	1.0	2570	--	200	240	--	100	--	37	7.5	22
11...	1605	1.0	1930	--	300	250	--	210	--	33	7.4	18
12...	0825	1.0	3280	--	300	260	--	130	--	27	6.8	11
12...	1225	1.0	1860	--	<200	220	--	110	--	26	6.8	11
12...	1540	1.0	1590	--	700	230	--	140	--	26	7.2	12
13...	0710	1.0	2920	--	500	200	--	100	--	30	7.3	12
13...	1205	1.0	1780	--	500	190	--	200	--	31	7.6	17
13...	1550	1.0	3510	--	500	200	--	190	--	30	7.7	17
14...	0825	1.0	3330	--	500	200	--	80	--	25	7.0	8.0
14...	1145	1.0	2200	--	500	180	--	470	--	26	6.7	7.8
14...	1610	1.0	1520	--	800	180	--	570	--	28	7.0	9.2
15...	0920	1.0	1410	--	500	120	--	40	--	29	7.1	9.8
15...	1320	1.0	1460	--	400	110	--	60	--	32	7.9	18
15...	1715	1.0	1490	--	400	110	--	60	--	31	7.8	17
16...	0805	1.0	1610	--	400	140	--	100	--	33	8.1	21
16...	1205	1.0	1590	--	400	140	--	100	--	34	8.2	21
JAN.												
15...	1335	1.0	9990	--	200	250	--	180	--	31	6.8	5.3
15...	1355	1.0	10600	--	<200	250	--	170	--	31	6.7	5.2
FEB.												
12...	1130	1.0	7430	--	--	250	--	90	--	25	5.2	6.8
12...	1210	1.0	7280	--	--	370	--	100	--	26	5.2	7.1
MAR.												
19...	1325	1.0	12100	4.7	--	200	--	110	--	18	5.5	5.8
19...	1345	1.0	12100	4.7	--	570	--	120	--	20	5.5	6.1
APR.												
16...	1345	1.0	2130	5.5	<200	70	--	70	--	22	6.4	6.9
16...	1400	1.0	2040	4.9	<200	80	--	70	--	21	6.2	7.0
JULY												
09...	1415	1.0	2510	6.0	--	190	<50	60	10	29	7.4	16

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TOTAL SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
DEC.											
07...	1.9	--	--	--	18	12	<.1	2.6	.26	.25	.05
08...	2.4	--	--	--	29	28	<.1	--	--	--	.01
08...	2.7	--	--	--	30	30	.1	1.5	.52	1.1	.12
08...	2.8	--	--	--	32	29	.1	.66	.56	.44	.10
09...	1.9	--	--	--	17	15	.1	3.2	.19	.29	.09
09...	1.9	--	--	--	15	12	.1	8.8	.17	1.1	.07
09...	1.8	--	--	--	15	12	.1	1.1	.14	.19	.05
10...	1.8	--	--	--	13	20	<.1	8.9	.12	1.0	.07
10...	1.8	--	--	--	12	18	<.1	2.6	.14	.30	.06
10...	1.8	--	--	--	11	17	<.1	1.2	.15	.43	.05
11...	2.0	--	--	--	18	20	.1	9.0	.22	.21	.05
11...	2.0	--	--	--	22	41	<.1	.67	.34	.02	.04
11...	2.2	--	--	--	32	25	.1	.64	.27	.21	.05
12...	2.0	--	--	--	16	14	<.1	4.1	.45	.05	.08
12...	2.0	--	--	--	17	13	<.1	.70	.33	.14	.06
12...	2.2	--	--	--	18	13	<.1	.64	.23	.29	.07
13...	2.1	--	--	--	21	16	<.1	6.5	.27	.18	.07
13...	2.4	--	--	--	25	19	<.1	15	.33	.37	.07
13...	2.3	--	--	--	24	20	<.1	4.4	.34	.36	.08
14...	2.0	--	--	--	16	10	<.1	8.0	.30	.55	.08
14...	1.9	--	--	--	15	10	<.1	4.5	.25	.17	.07
14...	2.0	--	--	--	14	12	.1	8.1	.27	.16	.07
15...	2.1	--	--	--	17	15	<.1	5.1	.31	.29	.10
15...	2.3	--	--	--	25	26	<.1	1.9	.40	.19	.08
15...	2.3	--	--	--	25	27	<.1	.67	.39	.30	.10
16...	2.2	--	--	--	29	34	<.1	.64	.56	.17	.12
16...	2.2	--	--	--	30	35	<.1	3.3	.46	.40	.12
JAN.											
15...	1.7	88	0	<.0	15	6.0	--	.78	.26	.31	.08
15...	1.7	87	0	<.0	13	7.0	--	.78	.26	.30	.07
FEB.											
12...	1.8	85	0	--	14	9.0	<.1	.79	.12	.20	.05
12...	1.8	84	0	--	13	10	<.1	.79	.11	.16	.06
MAR.											
19...	1.4	75	0	--	14	--	<.1	.88	.10	.12	.06
19...	1.5	73	0	--	14	--	<.1	.88	.11	.11	.06
APR.											
16...	1.6	85	0	.0	15	11	<.1	.76	.20	.15	.07
16...	1.6	85	0	.0	16	11	<.1	.71	.21	.15	.07
JULY											
09...	1.8	75	0	--	19	29	<.1	.55	.17	.26	.06

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
DEC.											
07...	--	140	.19	431	2	100	--	--	12.0	10	1
08...	--	200	.27	832	3	130	--	--	8.0	20	3
08...	--	200	.27	691	3	140	--	--	11.0	25	3
08...	--	210	.29	669	4	140	--	--	11.0	25	3
09...	--	140	.19	1610	16	100	--	--	7.0	15	3
09...	--	130	.18	695	8	93	--	--	8.0	10	5
09...	--	120	.16	745	4	96	--	--	9.0	10	2
10...	--	150	.20	3270	16	100	--	--	6.0	10	5
10...	--	140	.19	1980	11	110	--	--	8.0	10	2
10...	--	140	.19	3170	9	100	--	--	9.0	10	2
11...	--	150	.20	1520	6	100	--	--	5.0	10	1
11...	--	190	.26	1320	5	120	--	--	7.0	15	1
11...	--	180	.24	938	5	110	--	--	7.0	20	1
12...	--	140	.19	1240	5	95	--	--	8.0	15	1
12...	--	140	.19	703	3	93	--	--	9.0	15	1
12...	--	140	.19	601	3	95	--	--	9.0	20	1
13...	--	160	.22	1260	2	100	--	--	7.0	20	2
13...	--	170	.23	817	3	110	--	--	9.0	20	2
13...	--	170	.23	1610	1	110	--	--	9.0	20	2
14...	--	120	.16	1080	4	91	--	--	8.0	10	2
14...	--	110	.15	653	3	92	--	--	9.0	10	2
14...	--	130	.18	534	2	99	--	--	9.0	10	1
15...	--	130	.18	495	2	100	--	--	8.0	10	2
15...	--	170	.23	670	2	110	--	--	9.0	15	2
15...	--	170	.23	684	2	110	--	--	9.0	15	2
16...	--	190	.26	826	2	120	--	--	7.0	15	2
16...	--	190	.26	816	2	120	--	--	9.0	15	2
JAN.											
15...	--	140	.19	3780	19	93	240	7.6	6.1	15	19
15...	--	140	.19	4000	22	100	240	7.5	6.1	10	17
FEB.											
12...	--	140	.19	2810	13	84	240	7.7	7.8	14	13
12...	--	130	.18	2560	17	86	240	7.8	7.8	16	16
MAR.											
19...	--	120	.16	3920	16	68	220	7.5	8.9	15	19
19...	--	120	.16	3920	16	73	200	7.5	8.9	11	18
APR.											
16...	--	130	.18	748	11	81	240	7.8	13.9	14	6
16...	--	140	.19	771	13	78	240	7.7	13.9	15	7
JULY											
09...	.03	190	.26	1290	4	100	280	7.2	22.2	13	2

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)
DEC.											
07...	--	10	--	--	--	--	--	--	--	--	--
08...	--	13	--	--	--	--	--	--	--	--	--
08...	--	15	--	--	--	--	--	--	--	--	--
08...	--	15	--	--	--	--	--	--	--	--	--
09...	--	15	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	10	--	--	--	--	--	--	--	--	--
10...	--	11	--	--	--	--	--	--	--	--	--
10...	--	11	--	--	--	--	--	--	--	--	--
10...	--	9	--	--	--	--	--	--	--	--	--
11...	--	5	--	--	--	--	--	--	--	--	--
11...	--	10	--	--	--	--	--	--	--	--	--
11...	--	16	--	--	--	--	--	--	--	--	--
12...	--	11	--	--	--	--	--	--	--	--	--
12...	--	10	--	--	--	--	--	--	--	--	--
12...	--	12	--	--	--	--	--	--	--	--	--
13...	--	12	--	--	--	--	--	--	--	--	--
13...	--	3	--	--	--	--	--	--	--	--	--
13...	--	12	--	--	--	--	--	--	--	--	--
14...	--	5	--	--	--	--	--	--	--	--	--
14...	--	9	--	--	--	--	--	--	--	--	--
14...	--	9	--	--	--	--	--	--	--	--	--
15...	--	5	--	--	--	--	--	--	--	--	--
15...	--	9	--	--	--	--	--	--	--	--	--
15...	--	7	--	--	--	--	--	--	--	--	--
16...	--	8	--	--	--	--	--	--	--	--	--
16...	--	10	--	--	--	--	--	--	--	--	--
JAN.											
15...	10.5	8	2.4	100	<10	1.6	<1	<5	<100	<10	<100
15...	10.4	9	2.3	510	20	1.5	<1	<5	<100	<10	<100
FEB.											
12...	10.5	9	2.0	21000	180	1.9	--	--	--	--	--
12...	10.6	9	2.0	18000	220	2.0	--	--	--	--	--
MAR.											
19...	10.3	7	1.4	<100	<10	2.4	--	--	--	--	--
19...	10.3	7	1.6	<100	<10	2.4	--	--	--	--	--
APR.											
16...	10.6	10	1.2	<10	<10	2.2	1	<5	<100	<10	<100
16...	10.4	11	1.1	<10	<10	3.3	1	<5	<100	<10	<100
JULY											
09...	9.5	2	--	--	--	--	--	--	--	--	--

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC.											
07...	4	--	60	<10	--	<.2	--	--	--	--	50
08...	3	--	10	<10	--	<.2	--	--	--	--	40
08...	4	--	10	<10	--	.5	--	--	--	--	50
08...	3	--	10	<10	--	<.2	--	--	--	--	50
09...	4	--	10	<10	--	<.2	--	--	--	--	60
09...	2	--	10	<10	--	<.2	--	--	--	--	40
09...	3	--	10	<10	--	<.2	--	--	--	--	30
10...	<1	--	10	<10	--	.4	--	--	--	--	50
10...	<1	--	10	<10	--	<.2	--	--	--	--	40
10...	1	--	20	<10	--	3.4	--	--	--	--	40
11...	1	--	20	<10	--	<.2	--	--	--	--	30
11...	<1	--	10	<10	--	<.2	--	--	--	--	30
11...	5	--	20	<10	--	.2	--	--	--	--	50
12...	<1	--	20	<10	--	<.2	--	--	--	--	40
12...	<1	--	20	<10	--	<.2	--	--	--	--	40
12...	<1	--	20	<10	--	<.2	--	--	--	--	40
13...	<1	--	<10	<10	--	2.1	--	--	--	--	60
13...	<1	--	10	<10	--	<.2	--	--	--	--	70
13...	4	--	10	<10	--	<.2	--	--	--	--	60
14...	3	--	<10	<10	--	<.2	--	--	--	--	70
14...	4	--	10	<10	--	1.7	--	--	--	--	50
14...	<1	--	10	<10	--	1.3	--	--	--	--	80
15...	1	--	<10	<10	--	<.2	--	--	--	--	30
15...	1	--	20	<10	--	<.2	--	--	--	--	40
15...	<1	--	<10	<10	--	<.2	--	--	--	--	50
16...	<1	--	10	<10	--	<.2	--	--	--	--	50
16...	<1	--	10	<10	--	<.2	--	--	--	--	40
JAN.											
15...	<1	<5	<10	<10	<10	--	<50	<2	<10	<1000	50
15...	<1	<5	<10	<10	<10	--	<50	<2	<10	<1000	60
FEB.											
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
19...	--	<5	<10	--	--	--	--	--	--	--	50
19...	--	<5	<10	--	--	--	--	--	--	--	30
APR.											
16...	<1	<5	<10	<10	<10	--	<50	<2	<10	<1000	30
16...	<1	<5	10	<10	<10	--	<50	<2	<10	<1000	20
JULY											
09...	--	--	--	--	--	--	--	--	--	--	--

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
AUG. 13...	1120	1.0	4700	5.6	1200	690	<50	130	10	22	5.2
SEP. 10...	1210	1.0	2370	5.2	--	80	<50	30	20	21	5.4

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
AUG. 13...	7.3	1.7	69	0	13	9.0	<.1	.79	.13	.19
SEP. 10...	8.2	1.6	65	0	28	10	<.1	.79	.17	.21

DATE	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
AUG. 13...	.06	.02	110	.15	1400	20	76	190	7.1	19.4
SEP. 10...	.06	.06	110	.15	704	3	75	180	7.5	25.6

DATE	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
AUG. 13...	17	10	10.0	7	2.3	5	<100	<10	100	<1
SEP. 10...	16	2	7.7	4	--	--	--	--	--	--

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG. 13...	<5	40	<10	<10	<.2	<50	<2	<10	<1000	280
SEP. 10...	--	--	--	--	--	--	--	--	--	--

03490500 HOLSTON RIVER AT SURGOINSVILLE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	9.5	8.0	10.0	9.0	10.5	9.0	9.0	6.5
2	---	---	---	---	9.0	7.0	9.0	6.0	9.5	8.5	6.5	5.0
3	---	---	---	---	9.5	8.0	8.0	6.0	9.5	8.5	6.0	4.5
4	---	---	---	---	10.0	7.0	8.0	6.5	8.5	7.0	8.5	4.0
5	---	---	---	---	10.0	6.5	7.0	5.0	8.0	7.0	9.0	5.5
6	---	---	---	---	9.0	6.5	7.0	5.5	8.5	7.0	9.5	6.0
7	---	---	---	---	9.0	8.5	8.0	5.5	8.0	6.0	9.5	8.0
8	---	---	---	---	8.5	8.0	8.0	6.0	8.0	5.5	8.5	6.5
9	---	---	---	---	10.0	9.0	9.0	6.5	6.5	5.0	8.0	4.5
10	---	---	---	---	8.0	5.5	10.0	7.0	7.0	4.5	7.0	5.5
11	---	---	---	---	6.5	4.5	10.5	9.5	8.0	6.0	8.5	6.0
12	---	---	---	---	9.0	5.0	10.0	8.0	8.5	6.5	9.5	7.0
13	---	---	---	---	9.5	6.5	9.0	6.0	8.0	6.0	9.5	8.5
14	---	---	---	---	9.5	7.0	7.0	4.0	7.0	6.0	9.0	8.0
15	---	---	---	---	8.0	6.5	5.5	4.0	8.5	6.5	8.5	7.0
16	---	---	---	---	9.5	7.0	6.0	4.5	8.5	7.0	8.0	7.0
17	---	---	---	---	9.0	6.0	6.5	4.5	10.0	8.0	9.5	8.0
18	---	---	---	---	6.5	5.5	7.0	5.0	9.0	8.0	9.0	8.5
19	---	---	---	---	8.0	5.5	8.0	6.0	9.0	8.0	9.0	8.5
20	---	---	---	---	7.0	5.5	7.0	5.5	9.5	6.5	11.0	8.5
21	---	---	---	---	8.5	6.0	6.5	5.0	10.0	6.5	11.5	9.0
22	---	---	---	---	8.0	5.5	7.0	5.5	10.5	6.5	12.0	9.5
23	---	---	---	---	8.5	5.0	8.5	5.5	13.0	8.5	12.0	9.5
24	---	---	---	---	9.0	7.0	8.5	6.5	11.0	8.0	12.0	10.5
25	---	---	---	---	10.5	7.0	9.5	8.0	9.0	7.0	11.5	9.5
26	---	---	12.0	10.0	8.5	5.5	8.5	6.0	10.0	6.5	11.0	8.5
27	---	---	11.5	9.5	8.0	6.0	8.0	5.5	10.0	8.0	12.0	9.5
28	---	---	11.5	9.5	8.0	6.5	9.0	5.5	9.5	7.0	12.0	9.5
29	---	---	11.0	7.0	8.5	7.0	10.5	8.0	---	---	12.0	11.0
30	---	---	10.5	9.5	10.0	8.0	9.5	8.0	---	---	11.5	9.0
31	---	---	---	---	10.0	9.0	10.5	8.0	---	---	10.0	8.5
MONTH	---	---	---	---	10.5	4.5	10.5	4.0	13.0	4.5	12.0	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.0	19.0	14.5	22.0	18.5	26.0	19.0	24.0	21.0	26.0	24.0
2	13.0	10.0	19.0	14.5	25.5	20.0	26.0	21.0	24.5	20.0	29.0	24.5
3	13.0	9.5	18.0	14.5	22.0	18.5	26.0	20.0	25.5	23.0	28.0	24.0
4	11.0	9.0	17.0	14.5	23.0	18.0	26.0	19.5	28.5	23.5	24.0	20.0
5	11.0	8.5	19.0	16.0	23.0	19.0	26.0	20.0	23.5	19.0	24.5	20.5
6	11.5	9.0	19.5	14.0	21.5	18.0	26.0	23.0	24.0	21.5	25.0	20.0
7	12.0	9.5	17.0	15.0	22.0	18.5	26.0	25.0	24.0	22.0	22.0	20.0
8	12.0	10.0	19.0	15.0	22.0	18.5	26.0	23.0	24.0	21.0	25.0	20.5
9	13.0	11.0	19.5	15.0	23.5	21.0	25.0	19.5	24.0	21.5	26.0	22.0
10	14.5	11.5	18.5	15.0	23.5	19.5	24.0	19.0	24.5	22.0	24.0	20.0
11	15.0	12.0	20.0	15.0	21.0	18.5	25.0	18.5	26.5	23.5	24.0	19.5
12	13.5	10.5	19.5	16.0	21.5	18.5	24.0	18.0	23.5	19.0	24.0	19.5
13	13.5	10.0	20.0	15.0	22.0	18.0	25.0	18.5	24.0	19.0	20.5	18.0
14	13.5	11.5	20.0	15.5	23.0	17.0	24.5	18.5	23.0	19.5	23.0	19.0
15	13.0	11.0	18.5	15.5	23.5	18.5	24.5	18.0	26.5	21.5	23.0	19.5
16	14.5	10.0	19.5	16.0	24.0	19.0	23.5	18.0	26.5	23.0	22.0	20.0
17	16.0	11.5	20.0	16.5	24.5	18.5	24.0	21.0	25.0	20.0	21.0	19.0
18	18.0	13.0	20.0	17.0	24.0	19.5	23.5	19.5	25.5	21.0	21.5	19.0
19	14.5	13.0	21.5	18.5	24.0	18.0	24.0	19.5	25.0	20.0	22.0	19.5
20	16.0	11.5	21.5	16.5	23.5	18.5	24.0	21.0	24.5	20.0	20.5	19.0
21	18.0	13.5	23.0	18.5	23.5	18.0	28.0	22.0	24.0	19.5	23.5	20.5
22	18.5	13.0	23.5	17.0	23.5	19.0	29.0	23.5	24.0	19.0	20.5	19.5
23	18.0	14.0	21.5	16.5	24.5	20.0	26.0	23.0	24.0	19.0	19.5	18.0
24	18.0	13.5	23.0	18.5	24.5	19.5	24.5	20.0	23.0	19.0	19.0	18.0
25	18.5	15.5	26.5	22.0	24.5	19.0	23.5	19.5	27.0	22.0	19.5	18.0
26	19.5	14.5	26.0	24.0	23.5	19.0	24.0	18.5	25.5	20.0	20.0	18.5
27	18.5	14.5	24.0	18.5	23.5	19.0	24.0	19.0	24.0	20.0	20.0	18.5
28	19.0	16.0	23.5	16.5	24.5	20.0	28.5	21.5	24.5	21.0	21.5	18.0
29	19.5	16.0	20.5	17.0	24.5	21.5	24.5	19.5	27.0	23.0	21.5	18.5
30	19.0	15.5	24.5	20.5	29.5	23.0	25.0	20.5	29.0	25.0	22.0	19.5
31	---	---	21.5	18.5	---	---	24.5	21.0	28.0	24.0	---	---
MONTH	19.5	8.5	26.5	14.0	29.5	17.0	29.0	18.0	29.0	19.0	29.0	18.0
YEAR	29.5	4.0										

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 24.0°C August 15, 16, 17; minimum, 3.0°C Dec. 23.

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 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.0	13.0	12.0	6.0	5.0	8.0	7.0	9.5	9.5	8.5	8.0
2	13.5	11.5	13.5	13.0	6.0	5.5	8.0	5.5	9.5	9.5	8.5	6.5
3	11.5	10.0	13.5	13.0	6.0	6.0	5.5	5.0	9.5	9.5	6.5	6.0
4	11.0	9.0	13.5	13.0	6.0	5.5	5.5	5.0	9.5	8.5	6.0	5.5
5	10.5	9.0	13.5	13.0	6.0	5.5	5.0	4.5	9.0	8.5	6.0	5.5
6	11.5	9.5	13.0	11.0	5.5	4.5	4.5	4.0	9.0	9.0	7.0	6.0
7	11.5	10.0	11.0	10.0	5.5	4.5	4.5	4.5	9.0	8.0	7.0	7.0
8	11.5	10.5	10.0	9.5	5.5	5.0	4.5	4.5	8.0	7.0	7.0	7.0
9	11.0	10.0	9.5	8.0	5.5	5.0	5.5	4.5	7.0	7.0	7.0	6.0
10	11.0	10.0	9.0	7.0	5.0	4.5	6.5	5.5	7.0	6.0	6.0	6.0
11	11.5	10.5	9.0	8.5	5.0	4.0	7.0	6.5	7.0	6.0	6.5	6.0
12	11.5	11.0	9.0	9.0	5.5	4.5	8.0	5.5	8.0	7.0	8.0	6.5
13	12.0	11.5	9.0	8.0	5.5	5.0	5.5	5.5	8.0	8.0	8.5	8.0
14	13.0	12.0	8.5	7.0	5.5	5.0	6.0	5.0	8.0	8.0	8.5	8.5
15	13.0	12.0	7.0	6.0	5.5	4.5	5.0	5.0	8.5	8.0	8.5	8.0
16	12.0	12.0	6.0	5.5	5.5	5.5	5.0	5.0	8.5	8.5	8.5	8.5
17	12.0	11.5	6.5	6.0	5.5	4.5	5.0	5.0	9.5	8.5	9.0	8.5
18	12.0	11.0	8.5	7.0	4.5	3.5	5.0	5.0	10.0	10.0	9.0	9.0
19	11.5	10.5	9.5	8.5	4.0	3.5	5.5	5.0	9.5	9.5	9.5	9.0
20	10.5	9.5	10.5	9.5	4.0	3.5	5.5	5.5	9.5	8.5	11.0	9.5
21	9.5	7.0	10.5	9.0	5.0	3.5	5.5	5.5	9.0	7.0	11.0	11.0
22	9.0	6.5	9.5	8.5	4.5	3.5	6.0	5.5	8.5	7.0	11.0	11.0
23	9.0	6.5	9.5	8.5	4.0	3.0	6.5	6.0	10.0	8.5	11.0	11.0
24	9.5	8.5	8.5	8.0	4.5	4.0	7.0	6.5	10.5	10.0	11.5	11.0
25	10.5	9.5	8.5	8.0	5.5	4.5	8.0	7.0	10.0	8.5	11.5	11.0
26	11.0	10.5	8.5	7.0	5.5	4.0	8.0	7.0	9.0	8.5	11.0	9.5
27	11.0	10.0	7.0	6.0	4.5	4.5	7.0	6.5	9.0	8.5	11.0	10.5
28	11.0	10.0	6.0	6.0	6.0	4.0	8.0	6.5	9.0	8.0	11.5	10.5
29	11.0	10.5	6.5	6.0	5.5	5.5	9.5	8.0	---	---	11.5	11.5
30	12.0	11.0	7.0	6.0	6.5	5.5	9.5	9.5	---	---	11.5	10.0
31	12.0	12.0	---	---	7.0	6.5	9.5	9.5	---	---	10.5	9.0
MONTH	14.5	6.5	13.5	5.5	7.0	3.0	9.5	4.0	10.5	6.0	11.5	5.5

03491000 BIG CREEK NEAR ROGERSVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	15.5	15.5	19.0	19.0	20.5	20.5	23.0	22.0	23.0	23.0
2	12.0	11.0	17.0	15.5	19.0	18.0	20.5	20.5	23.0	22.0	22.0	21.5
3	12.0	11.0	17.0	15.5	19.0	18.0	20.5	20.5	23.0	23.0	21.5	21.5
4	11.0	9.0	15.5	15.0	19.0	18.0	20.5	20.5	23.5	23.0	21.5	21.5
5	11.0	9.0	16.0	14.5	19.0	19.0	20.5	20.5	23.5	23.5	21.5	21.5
6	11.0	9.0	16.5	15.5	19.0	19.0	20.5	20.5	23.5	23.5	21.5	21.5
7	11.5	9.5	16.5	16.5	19.5	19.0	20.5	20.5	23.5	23.0	21.5	21.5
8	11.5	11.0	16.5	16.5	19.5	18.5	21.0	20.5	23.0	22.0	21.5	21.5
9	11.5	11.0	16.5	16.0	19.5	18.0	21.5	21.0	22.0	22.0	21.5	21.0
10	12.0	11.5	16.5	16.0	19.0	19.0	21.5	21.5	22.0	22.0	22.0	21.0
11	12.0	12.0	16.5	15.5	19.0	18.5	21.5	21.5	22.0	22.0	21.5	21.5
12	13.0	11.0	16.5	16.5	18.5	18.5	21.5	21.5	22.0	22.0	21.5	21.5
13	12.0	10.5	16.5	16.5	18.5	18.0	21.5	21.0	22.0	22.0	21.5	18.5
14	12.0	11.5	17.0	16.0	18.0	18.0	21.0	20.5	22.0	22.0	19.0	16.0
15	11.5	11.5	17.0	17.0	18.5	18.0	21.0	21.0	24.0	22.0	18.0	16.0
16	13.0	10.5	17.0	15.5	19.0	18.5	21.0	21.0	24.0	22.0	17.0	16.5
17	13.5	12.0	16.0	15.5	19.0	19.0	21.0	21.0	24.0	23.0	17.0	17.0
18	13.5	13.5	16.0	16.0	19.5	19.0	21.0	21.0	23.5	22.0	18.0	17.0
19	13.5	13.5	16.0	15.5	20.0	19.5	22.0	21.0	22.0	22.0	18.0	18.0
20	13.5	11.5	17.0	16.0	20.0	20.0	22.0	22.0	22.0	22.0	18.0	18.0
21	13.5	11.5	17.0	16.0	20.5	20.0	22.0	22.0	22.0	22.0	18.0	18.0
22	13.5	12.0	18.0	16.5	20.5	20.0	22.0	22.0	22.0	22.0	18.5	17.0
23	13.5	13.5	18.0	17.0	20.0	20.0	23.0	22.0	22.0	22.0	17.0	16.5
24	14.5	13.5	18.0	17.0	20.0	20.0	23.0	23.0	22.0	22.0	16.5	16.5
25	14.5	14.5	19.0	18.0	20.5	20.0	23.0	23.0	22.0	22.0	16.5	16.5
26	14.5	13.5	19.0	19.0	20.5	20.5	23.0	23.0	23.0	23.0	16.5	16.5
27	14.5	13.5	19.5	19.0	20.5	20.5	23.0	22.0	23.0	23.0	16.5	15.5
28	15.5	14.5	20.0	18.5	20.5	20.5	23.0	22.0	23.0	23.0	15.5	14.5
29	15.5	15.5	20.0	19.5	20.5	20.5	23.0	22.0	23.0	23.0	15.0	14.0
30	15.5	15.5	19.5	19.0	20.5	20.5	23.0	22.0	23.0	23.0	15.0	14.5
31	---	---	19.0	19.0	---	---	23.0	22.0	23.0	23.0	---	---
MONTH	15.5	9.0	20.0	14.5	20.5	18.0	23.0	20.5	24.0	22.0	23.0	14.0

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 (7,861 sq km).

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 32.0°C Sept. 1; minimum, 4.5°C several days during winter period.

Period of record:
Water temperatures: Maximum, 32.0°C July 6, 1969, Sept. 1, 1975; minimum, 0.5°C Jan. 9, 1970.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	18.5	19.5	17.0	8.5	7.0	9.0	8.5	9.0	8.5	8.0	7.0
2	19.0	16.5	19.5	17.0	7.0	6.5	8.5	6.5	9.0	8.5	7.0	5.5
3	16.5	15.5	19.5	18.0	8.0	6.5	6.5	6.0	8.5	8.5	5.5	4.5
4	16.0	15.0	18.5	16.5	8.5	7.0	6.5	5.5	8.5	7.0	6.0	4.5
5	17.0	15.0	18.0	16.5	8.5	7.0	6.5	5.5	7.0	7.0	7.0	5.0
6	16.5	15.0	17.0	16.0	8.5	6.5	6.0	5.5	8.0	7.0	8.0	6.5
7	18.0	15.5	16.5	15.0	8.0	7.0	6.5	6.0	7.0	6.0	8.0	7.0
8	18.5	16.0	15.0	14.0	8.0	7.0	6.5	6.0	6.5	5.5	8.0	7.0
9	18.5	16.5	14.0	13.5	8.0	6.5	8.0	6.5	6.0	5.0	7.0	6.0
10	18.0	16.0	14.0	13.5	8.0	6.0	9.0	7.0	5.5	4.5	6.5	6.0
11	18.0	16.0	14.0	13.5	6.0	5.5	9.5	9.0	6.0	5.5	6.5	5.5
12	18.0	16.0	14.0	12.0	6.0	5.5	9.0	8.0	7.0	6.0	8.0	6.5
13	19.0	16.0	13.5	12.0	6.5	5.5	8.0	6.0	7.0	6.0	8.5	8.0
14	19.0	16.5	13.0	11.5	8.5	6.5	6.0	4.5	6.5	6.0	8.5	8.0
15	18.0	17.0	13.0	11.0	8.0	7.0	5.0	4.5	7.0	6.0	8.0	7.0
16	18.5	16.5	11.0	10.5	8.0	6.5	5.5	5.0	7.0	7.0	7.0	6.5
17	16.5	15.5	12.0	11.0	6.5	6.0	5.0	4.5	8.5	7.0	8.5	7.0
18	16.5	15.0	11.5	11.0	6.0	5.5	5.0	4.5	8.5	8.0	8.5	8.0
19	16.0	14.5	14.0	11.0	5.5	5.5	6.0	5.0	8.0	7.0	8.0	8.0
20	15.5	14.0	14.0	11.5	6.0	5.5	6.0	6.0	8.0	7.0	9.5	8.0
21	14.5	13.0	11.5	10.0	6.0	5.5	6.0	5.0	8.0	7.0	10.0	9.0
22	14.5	13.0	10.5	9.5	6.5	5.5	6.0	5.5	8.5	8.0	10.0	10.0
23	15.5	13.5	10.5	10.0	6.0	5.0	6.5	5.5	10.0	8.5	10.5	9.5
24	18.5	14.5	10.5	10.0	6.5	6.0	6.5	6.5	10.5	8.5	10.5	10.5
25	18.0	14.5	11.0	10.5	8.0	6.5	8.0	6.5	8.5	7.0	10.5	9.5
26	15.5	14.0	10.0	9.5	8.0	6.5	8.0	6.5	8.5	7.0	10.0	9.0
27	16.5	14.0	9.5	9.5	7.0	6.0	6.5	5.5	9.0	8.0	10.0	8.5
28	17.0	15.0	10.0	9.0	6.5	6.0	7.0	6.0	8.5	8.0	10.5	10.0
29	17.0	15.5	10.0	8.5	6.5	6.5	8.5	7.0	---	---	11.0	10.5
30	18.5	16.0	8.5	7.0	8.0	6.5	9.0	8.5	---	---	11.0	9.5
31	19.0	16.5	---	---	8.5	8.0	8.5	8.0	---	---	9.5	8.5
MONTH	20.0	13.0	19.5	7.0	8.5	5.0	9.5	4.5	10.5	4.5	11.0	4.5

03491500 HOLSTON RIVER NEAR ROGERSVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.5	18.0	15.5	23.0	19.0	28.5	23.5	24.0	22.0	32.0	28.0
2	11.5	10.0	17.0	15.5	23.0	19.5	29.0	22.0	24.0	21.5	30.0	28.5
3	12.0	10.0	16.0	15.5	23.0	21.0	26.0	21.0	24.0	21.0	29.0	23.5
4	10.0	9.0	16.0	14.0	23.0	19.5	26.0	20.5	25.5	22.0	29.5	22.0
5	10.0	9.0	18.0	15.5	22.0	20.5	26.0	21.0	24.5	21.0	25.0	21.0
6	11.0	9.5	18.0	16.5	21.5	19.5	26.0	24.0	22.0	20.0	24.0	21.0
7	11.5	10.0	16.5	14.5	20.5	19.5	28.0	26.0	22.0	21.0	24.0	19.5
8	11.0	10.5	16.0	14.5	21.0	19.5	28.0	24.0	23.0	21.5	28.0	21.5
9	11.5	10.5	16.5	15.5	23.0	20.5	25.0	20.5	23.0	21.5	26.5	20.5
10	12.0	11.0	16.5	15.0	23.5	21.0	25.0	20.0	26.0	23.0	24.5	21.5
11	13.5	12.0	16.5	15.5	23.5	20.0	24.0	19.5	27.0	24.5	24.5	21.0
12	13.0	11.0	19.5	16.0	21.0	19.0	25.0	19.0	25.5	21.5	23.5	20.0
13	12.0	11.0	18.5	16.5	21.0	19.5	24.0	19.5	21.5	19.5	20.5	18.5
14	13.5	11.0	18.5	16.5	23.0	19.5	25.0	19.5	23.0	19.5	19.5	18.0
15	12.0	11.0	18.0	16.0	22.0	20.0	24.5	19.0	24.0	20.5	22.0	18.5
16	13.5	10.5	16.5	15.5	23.5	20.0	24.5	18.0	24.0	21.0	22.0	19.0
17	14.5	11.5	18.5	16.5	24.0	21.0	26.0	20.0	25.0	22.0	22.0	19.5
18	16.0	13.5	19.0	18.0	25.0	21.0	25.0	21.0	26.5	24.0	20.0	19.0
19	14.5	13.5	20.0	18.0	25.0	20.5	25.0	20.0	25.0	20.5	20.0	18.5
20	15.0	11.5	20.5	19.5	24.5	20.0	26.0	21.0	24.0	20.5	20.0	19.5
21	16.5	14.0	21.5	18.5	24.5	20.0	26.5	23.5	23.0	20.5	19.5	18.5
22	18.0	15.0	21.5	19.5	23.5	20.0	28.0	23.0	24.0	19.5	21.5	19.0
23	18.0	15.0	21.0	18.5	24.0	19.5	27.0	23.5	21.0	19.5	19.5	17.0
24	16.5	15.0	19.0	18.0	26.0	22.0	24.5	22.0	21.0	19.5	17.0	16.5
25	17.0	15.0	20.5	18.5	26.0	21.5	23.0	20.0	23.0	19.5	18.0	17.0
26	18.5	15.0	25.0	20.5	25.5	21.0	21.5	19.0	26.0	21.0	18.0	17.0
27	18.5	15.5	25.0	23.5	24.5	21.0	24.0	19.0	24.5	21.0	19.0	17.0
28	18.5	16.5	25.0	19.0	25.5	21.0	25.5	21.5	25.5	20.5	19.0	18.0
29	18.0	17.0	20.5	18.5	25.5	22.0	26.5	21.5	28.0	24.5	21.5	18.5
30	19.0	18.0	21.0	19.0	28.0	25.5	24.0	21.0	27.0	23.5	20.5	18.0
31	---	---	23.0	20.0	---	---	23.5	21.5	28.0	24.0	---	---
MONTH	19.0	8.5	25.0	14.0	28.0	19.0	29.0	18.0	28.0	19.5	32.0	16.5

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 29.0°C Aug. 25; minimum, 5.5°C Dec. 4, 18, Jan. 14, 15.

Period of record:
Water temperatures: Maximum, 29.0°C sometime between Aug. 3-6, 1970, Aug. 25, 1975; minimum, 1.0°C Jan. 21, 1970.

REMARKS.--Miscellaneous chemical analyses 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 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	21.5	---	---	10.0	9.5	8.0	6.5	8.0	8.0	9.0	8.5
2	21.5	21.5	---	---	9.5	9.0	8.0	6.5	8.5	8.0	8.5	8.0
3	21.5	21.0	---	---	9.0	6.5	6.5	6.0	9.0	8.5	8.0	7.0
4	21.0	20.5	---	---	8.5	5.5	7.0	6.5	8.5	8.5	8.5	7.0
5	20.5	20.0	---	---	9.0	8.0	6.5	6.0	8.5	8.5	9.0	8.5
6	20.5	20.5	---	---	9.0	8.5	6.5	6.0	8.5	8.5	9.5	8.5
7	21.0	20.0	15.5	15.0	9.0	9.0	7.0	6.5	8.5	8.0	9.5	9.5
8	20.5	20.0	15.5	15.0	9.0	8.5	7.0	7.0	8.0	7.0	9.5	8.5
9	20.5	19.5	15.0	14.5	8.5	7.0	8.0	7.0	8.0	7.0	8.5	8.0
10	20.0	19.5	15.5	14.0	8.0	6.5	8.5	8.0	8.0	6.5	9.0	8.0
11	---	---	15.5	14.5	8.0	7.0	9.0	8.5	8.5	8.0	8.5	8.0
12	---	---	15.0	14.5	8.5	8.0	9.0	6.5	8.5	8.5	9.5	8.5
13	---	---	14.5	14.0	8.5	7.0	6.5	6.0	8.5	8.0	10.5	9.5
14	---	---	14.0	13.5	8.0	7.0	6.0	5.5	8.0	7.0	10.5	10.0
15	---	---	13.5	13.0	8.0	7.0	6.0	5.5	8.5	8.0	10.0	10.0
16	---	---	13.0	12.0	8.0	7.0	6.5	6.0	8.5	8.5	10.0	9.5
17	---	---	13.5	13.0	8.0	6.0	6.5	6.0	9.5	8.5	9.5	9.0
18	---	---	13.5	13.0	6.5	5.5	6.5	6.5	9.0	8.5	9.5	9.0
19	---	---	14.0	13.5	7.0	6.0	7.0	6.5	8.5	8.0	9.0	9.0
20	---	---	14.0	13.5	7.0	6.0	7.0	6.5	8.0	7.0	9.5	9.0
21	---	---	13.5	13.0	7.0	6.0	6.5	6.0	8.5	7.0	10.0	9.0
22	---	---	13.0	11.5	7.0	6.0	6.5	6.5	9.0	8.0	---	---
23	---	---	13.0	11.0	8.0	6.5	6.5	6.5	9.5	9.0	---	---
24	---	---	11.5	11.0	8.0	6.5	7.0	6.5	10.0	9.5	---	---
25	---	---	11.5	10.0	8.5	7.0	8.5	7.0	9.5	8.0	---	---
26	---	---	10.0	9.0	8.5	6.5	8.0	6.0	9.0	8.5	---	---
27	---	---	10.5	9.5	8.5	8.0	6.5	6.0	9.5	9.0	---	---
28	---	---	10.5	10.0	8.0	7.0	7.0	6.5	9.5	8.5	---	---
29	---	---	10.5	10.0	9.0	8.0	8.0	7.0	---	---	---	---
30	---	---	10.0	10.0	9.0	8.0	8.0	7.0	---	---	---	---
31	---	---	---	---	8.5	7.0	8.0	7.0	---	---	---	---
MONTH	---	---	15.5	9.0	10.0	5.5	9.0	5.5	10.0	6.5	---	---

03497100 TENNESSEE RIVER BELOW KNOXVILLE, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	26.0	25.0	27.0	26.5
2	12.0	11.0	15.5	14.5	---	---	21.0	19.5	26.0	25.0	28.0	26.5
3	12.0	10.5	15.5	14.5	18.5	16.5	21.5	20.0	26.0	25.5	28.0	26.5
4	11.0	10.0	14.5	13.5	18.0	16.5	22.0	20.0	26.5	25.0	28.0	27.0
5	11.0	10.5	14.5	14.0	18.0	16.5	22.0	20.5	26.5	25.5	28.0	27.0
6	11.5	10.5	15.0	14.0	---	---	23.5	20.5	26.0	25.0	28.0	26.5
7	11.5	11.0	15.5	14.5	---	---	22.0	20.5	26.0	25.0	26.5	25.5
8	11.5	11.5	14.5	14.0	---	---	22.0	20.5	26.0	25.0	26.0	25.5
9	11.5	11.5	15.5	14.5	---	---	22.0	21.0	26.5	25.5	26.5	26.0
10	13.0	11.5	17.0	15.0	---	---	23.5	21.5	26.0	25.5	27.0	26.5
11	13.0	12.0	18.5	16.0	---	---	23.5	22.0	26.0	25.0	27.0	26.5
12	12.0	11.5	18.0	16.0	---	---	23.5	21.5	27.0	25.5	26.5	26.0
13	12.0	11.5	18.5	15.5	---	---	23.0	21.5	28.0	26.0	26.0	24.5
14	13.0	12.0	16.5	15.5	---	---	23.5	21.0	28.0	26.5	25.0	24.0
15	12.0	12.0	16.0	15.5	---	---	23.5	22.0	28.0	26.0	24.5	24.0
16	13.0	11.5	16.0	15.5	---	---	24.0	22.0	27.0	26.0	25.0	24.0
17	---	---	16.5	15.5	---	---	24.5	23.0	27.0	26.5	25.0	25.0
18	---	---	---	---	---	---	24.5	23.0	28.0	26.0	25.0	24.5
19	---	---	---	---	---	---	24.5	23.0	28.0	26.5	25.0	25.0
20	---	---	---	---	---	---	24.5	23.5	28.0	26.5	25.5	25.0
21	---	---	---	---	---	---	25.0	23.5	28.0	27.0	25.5	25.0
22	---	---	---	---	---	---	25.0	24.0	28.0	27.0	25.0	24.0
23	---	---	---	---	---	---	25.0	24.0	28.0	27.0	24.0	23.0
24	---	---	---	---	---	---	25.0	24.0	28.5	27.0	23.0	21.5
25	---	---	---	---	---	---	25.0	24.0	29.0	28.0	21.5	21.0
26	---	---	---	---	---	---	26.0	24.0	28.5	27.0	21.0	19.5
27	---	---	---	---	---	---	26.0	24.5	28.0	27.0	20.0	18.5
28	---	---	---	---	---	---	26.5	24.0	28.0	27.0	20.0	19.5
29	---	---	---	---	---	---	26.0	24.5	28.0	27.0	20.5	20.0
30	---	---	---	---	---	---	26.0	25.0	28.0	27.0	21.5	20.5
31	---	---	---	---	---	---	26.0	25.0	28.0	26.5	---	---
MONTH	---	---	---	---	---	---	26.5	19.5	29.0	25.0	28.0	18.5

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 21.5°C many days in June, July, August, and September; minimum, 2.0°C Mar. 4, 5.

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.--Miscellaneous chemical analyses published for the water years, 1964-71.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.0	12.0	12.0	5.0	4.5	---	---	9.0	9.0	5.5	5.5
2	12.0	11.0	13.0	12.0	5.0	4.5	---	---	9.0	9.0	5.5	3.5
3	12.0	10.0	13.0	13.0	4.5	4.5	---	---	9.0	8.5	3.5	3.0
4	10.0	9.5	13.0	13.0	4.5	3.5	---	---	8.5	8.0	3.0	2.0
5	10.0	9.5	13.0	13.0	3.5	3.5	---	---	8.0	8.0	3.0	2.0
6	10.5	10.0	13.0	11.0	3.5	3.5	---	---	8.0	7.0	4.0	3.0
7	11.0	10.5	11.0	10.0	4.5	3.5	4.0	4.0	7.0	5.0	4.5	4.0
8	12.0	11.0	10.0	9.5	5.0	4.5	6.0	4.0	5.0	3.5	4.5	4.5
9	12.0	11.5	9.0	8.0	5.0	4.5	6.0	6.0	3.5	3.5	4.5	4.0
10	11.5	11.5	8.0	7.0	4.5	3.5	9.5	6.0	3.5	3.5	4.5	4.0
11	11.0	11.0	8.0	7.0	4.0	3.5	9.5	9.0	6.0	3.5	5.0	4.5
12	11.5	11.0	8.0	8.0	5.5	4.0	9.0	6.5	6.5	6.0	7.0	5.0
13	12.0	11.5	8.0	7.0	5.5	5.5	6.5	5.0	6.5	6.0	7.0	7.0
14	13.5	12.0	7.0	6.5	5.5	5.0	5.0	3.5	6.0	5.0	8.0	7.0
15	13.5	13.5	6.5	5.0	5.0	5.0	3.5	3.5	6.0	5.0	6.5	6.5
16	13.5	13.0	5.0	4.0	5.5	5.0	3.5	3.0	7.0	6.0	6.5	6.5
17	13.0	11.5	5.0	4.0	5.5	4.5	3.5	3.5	8.5	7.0	7.0	6.5
18	11.5	10.5	6.5	5.0	4.5	3.5	4.5	3.5	8.0	8.0	7.0	7.0
19	10.5	10.5	8.5	6.5	4.0	3.5	6.5	4.5	8.0	7.0	7.0	7.0
20	10.5	9.5	9.5	8.5	4.0	4.0	6.5	5.5	7.0	5.5	8.0	7.0
21	9.5	8.5	9.5	8.0	4.0	4.0	5.5	5.0	5.5	4.5	8.5	8.0
22	8.5	8.0	8.0	6.0	4.0	4.0	5.0	5.0	6.0	5.0	9.0	8.5
23	8.0	8.0	6.0	6.0	4.5	4.0	5.0	5.0	9.0	6.0	9.5	9.0
24	8.5	8.0	6.5	6.0	6.5	4.5	6.0	5.0	9.0	7.0	10.0	9.5
25	9.0	8.0	6.5	6.5	---	---	6.5	6.0	7.0	5.5	10.0	9.5
26	10.0	9.0	6.5	5.5	---	---	6.5	6.5	5.5	5.0	9.5	8.0
27	10.0	10.0	5.5	4.5	---	---	6.5	6.0	5.5	5.5	8.5	8.0
28	10.0	10.0	4.5	4.5	---	---	8.0	6.0	5.5	5.5	10.0	8.5
29	10.5	10.0	4.5	4.0	---	---	9.0	8.0	---	---	10.0	10.0
30	12.0	10.5	4.5	4.0	---	---	9.0	9.0	---	---	10.0	9.0
31	12.0	12.0	---	---	---	---	9.0	9.0	---	---	9.0	8.5
MONTH	13.5	8.0	13.0	4.0	---	---	9.5	3.0	9.0	3.5	10.0	2.0

03497300 LITTLE RIVER ABOVE TOWNSEND.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.5	17.0	16.5	18.5	18.0	21.5	21.0	21.5	21.0	21.0	20.5
2	10.0	9.5	18.0	17.0	18.0	16.5	21.5	20.5	21.5	21.0	21.0	20.5
3	10.0	9.0	18.0	16.5	18.0	16.5	21.0	20.0	21.5	21.5	21.0	20.5
4	9.0	7.0	16.5	16.0	18.5	16.5	21.0	21.0	21.5	21.5	21.5	20.5
5	7.0	7.0	16.5	15.0	18.5	18.0	21.0	19.5	21.5	21.0	21.5	21.0
6	7.0	6.5	16.5	15.0	18.5	18.0	21.0	20.0	21.0	20.0	21.5	21.5
7	8.0	7.0	16.5	16.5	19.5	18.0	20.0	19.0	20.0	19.5	21.5	20.0
8	8.0	8.0	16.5	16.0	19.5	18.0	20.5	19.5	19.5	19.0	20.0	19.5
9	9.0	8.0	17.0	16.5	19.0	17.0	21.5	20.0	19.0	19.0	20.0	19.5
10	10.5	9.0	18.0	16.5	18.5	18.5	21.5	21.0	19.0	19.0	20.5	20.0
11	11.0	10.5	18.0	16.5	18.5	18.5	21.0	20.5	19.5	19.0	20.5	20.5
12	11.0	10.5	17.0	16.5	18.5	18.5	21.0	20.0	20.0	19.5	20.5	20.5
13	10.5	9.0	17.0	16.5	19.0	18.0	21.0	19.5	20.0	19.5	20.5	19.0
14	9.5	9.5	17.0	16.0	19.5	18.0	20.0	19.0	21.0	20.5	19.0	17.0
15	9.5	9.5	16.5	16.5	19.5	19.0	20.5	20.0	21.5	21.0	17.0	17.0
16	9.5	9.0	16.5	16.0	20.0	19.0	21.0	20.0	21.0	20.5	17.0	17.0
17	11.0	9.5	16.5	16.0	20.0	19.0	21.0	20.0	21.0	20.5	17.0	17.0
18	12.0	11.0	16.5	16.5	21.0	20.0	21.5	20.5	21.5	20.5	17.0	17.0
19	12.0	12.0	18.0	16.5	21.5	20.5	21.5	20.5	20.5	19.5	18.0	17.0
20	12.0	11.0	18.0	16.5	21.5	21.0	21.0	20.5	19.5	19.0	18.5	18.0
21	11.5	10.5	18.5	17.0	21.5	20.0	21.0	20.5	19.5	19.5	18.5	18.5
22	12.0	10.5	19.0	18.0	21.0	20.0	21.5	21.0	20.0	19.5	18.5	17.0
23	13.0	12.0	19.0	18.5	20.0	19.5	21.5	21.5	20.5	20.0	17.0	16.0
24	14.0	13.0	19.5	18.5	20.5	20.5	21.5	19.5	21.0	20.5	16.0	16.0
25	15.5	14.0	19.5	18.5	21.0	20.5	20.0	19.5	21.0	20.5	16.0	15.5
26	16.0	15.0	19.5	18.5	21.0	20.0	20.5	20.0	21.5	21.0	15.5	15.0
27	16.0	15.0	19.0	18.5	20.0	19.5	20.5	20.0	21.5	21.5	15.0	15.0
28	17.0	16.0	19.0	18.5	20.5	19.5	20.5	19.5	21.5	21.5	15.0	14.5
29	17.0	16.5	18.5	18.5	21.0	20.5	21.0	20.5	21.5	21.0	14.5	14.0
30	17.0	16.5	18.5	18.0	21.5	20.5	21.0	20.5	21.5	21.0	14.5	14.0
31	---	---	18.5	18.5	---	---	21.5	21.0	21.0	21.0	---	---
MONTH	17.0	6.5	19.5	15.0	21.5	16.5	21.5	19.0	21.5	19.0	21.5	14.0

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 20.5°C Sept. 20, 21; minimum, 6.5°C Feb. 9, 10.

Period of record:
Water temperatures: Maximum, 28.0°C Aug. 29, 1964; minimum, 2.5°C Feb. 27, 1970.

REMARKS.--Miscellaneous chemical analyses published for water year 1973. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	18.5	18.5	17.0	13.0	11.5	9.5	9.0	9.0	9.0	8.5	8.5
2	19.5	18.5	18.5	17.0	11.5	11.5	10.0	9.0	9.0	9.0	8.5	8.0
3	19.0	18.0	18.5	17.0	11.5	10.5	9.5	9.5	9.0	9.0	8.5	7.0
4	18.5	16.0	18.0	17.0	11.0	10.0	9.5	9.0	9.0	8.5	8.5	7.0
5	18.5	17.0	18.0	17.0	11.0	10.0	10.0	9.0	8.5	8.5	8.0	7.0
6	18.5	17.0	18.0	16.5	10.5	10.0	9.5	8.5	8.5	8.0	8.5	7.0
7	18.5	17.0	17.0	16.5	10.0	10.0	9.0	8.5	8.5	8.0	8.0	8.0
8	18.5	17.0	17.0	16.0	10.0	9.5	9.0	8.5	8.5	7.0	8.0	7.0
9	18.5	17.0	16.5	15.5	10.0	9.5	9.0	8.5	7.0	6.5	8.5	7.0
10	18.5	17.0	16.0	15.5	10.0	9.0	9.0	8.5	7.0	6.5	8.0	7.0
11	19.0	17.0	16.0	15.5	9.5	9.0	9.0	8.5	7.0	7.0	8.0	7.0
12	18.5	18.0	16.0	15.5	9.5	9.0	8.5	8.5	7.0	7.0	8.0	8.0
13	19.0	18.0	15.5	15.0	9.0	9.0	8.5	8.5	8.0	7.0	9.0	8.0
14	19.0	18.0	15.0	14.5	9.5	9.0	9.0	8.0	8.0	7.0	9.0	8.5
15	18.5	18.5	15.5	14.5	9.5	9.0	8.0	7.0	8.0	7.0	9.0	8.5
16	18.5	18.5	15.0	14.5	9.5	9.0	8.0	7.0	8.0	7.0	9.0	8.5
17	19.5	18.0	15.0	14.5	9.0	9.0	8.0	7.0	9.0	8.0	9.0	8.5
18	19.0	17.0	15.0	14.5	9.5	9.0	8.0	7.0	9.0	8.5	9.0	8.5
19	19.0	18.0	15.0	15.0	9.0	9.0	8.0	8.0	9.0	8.5	9.0	8.5
20	18.5	17.0	15.0	14.5	9.0	9.0	8.0	7.0	9.0	8.5	9.5	8.5
21	18.0	16.5	15.0	14.0	9.0	9.0	8.0	7.0	8.5	8.5	9.5	9.0
22	18.0	16.5	15.0	14.0	9.5	8.5	8.5	7.0	9.0	8.5	9.5	9.0
23	18.0	16.5	15.0	13.5	9.0	8.5	8.0	7.0	9.0	8.5	10.0	9.0
24	17.0	16.5	14.5	13.5	9.5	9.0	8.0	8.0	9.0	9.0	10.0	9.5
25	18.5	16.5	14.0	13.5	9.5	9.0	8.0	8.0	9.0	8.5	10.0	9.5
26	18.0	17.0	14.5	13.5	9.5	9.0	8.5	8.0	9.0	8.5	10.0	9.5
27	18.5	17.0	14.0	13.0	9.0	9.0	9.0	8.0	9.0	9.0	10.0	9.5
28	18.5	17.0	13.5	13.0	9.5	9.0	9.0	8.0	9.0	8.5	10.0	9.5
29	18.5	17.0	13.5	13.0	9.5	9.5	9.0	8.5	---	---	9.5	9.0
30	18.5	18.0	13.0	13.0	9.5	9.5	9.0	8.5	---	---	9.5	9.0
31	18.5	18.0	---	---	10.0	9.5	9.5	9.0	---	---	9.5	---
MONTH	19.5	16.0	18.5	13.0	13.0	8.5	10.0	7.0	9.0	6.5	10.0	7.0

03518300 LITTLE TENNESSEE RIVER BELOW CHILHOWEE DAM, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	13.0	11.0	14.0	13.0	15.0	13.5	15.5	14.5	19.5	18.0
2	10.0	9.0	14.0	11.0	13.5	12.0	14.5	13.5	16.5	14.5	19.5	18.0
3	10.0	9.0	12.0	11.0	14.5	12.0	15.0	13.5	15.5	14.5	19.5	18.0
4	9.5	9.0	12.0	11.0	14.0	12.0	14.0	13.5	15.5	14.5	19.5	18.5
5	9.5	9.0	13.0	10.5	14.5	12.0	14.5	13.0	15.5	14.5	19.5	18.0
6	9.5	9.0	13.5	10.5	13.5	13.0	13.5	13.0	15.5	15.0	19.0	18.5
7	9.0	8.5	13.0	10.5	14.0	12.0	13.5	13.0	16.0	14.5	19.0	18.0
8	8.5	8.5	13.0	10.5	14.0	12.0	14.0	12.0	15.5	14.5	19.5	18.0
9	8.5	8.5	13.0	10.5	14.0	12.0	13.5	13.0	16.0	14.5	20.0	18.0
10	9.0	8.5	12.0	11.0	13.5	13.0	13.5	13.0	15.5	14.5	20.0	18.5
11	9.5	8.5	13.0	10.5	13.5	13.0	14.0	13.0	16.5	14.5	19.5	18.5
12	9.5	8.5	13.5	11.0	14.0	13.0	13.5	12.0	16.5	15.0	19.0	18.5
13	10.0	9.0	13.0	11.0	14.5	13.0	14.0	12.0	16.5	15.0	20.0	18.5
14	10.0	9.0	13.0	11.0	14.5	13.0	14.0	12.0	16.5	15.5	20.0	18.5
15	9.5	9.0	13.0	11.5	14.0	13.0	14.0	13.0	16.5	15.5	20.0	18.5
16	9.5	9.0	13.0	11.5	14.5	13.0	14.0	13.0	17.0	15.5	19.5	19.0
17	10.0	9.0	13.0	11.5	14.5	13.0	14.0	13.0	18.0	16.0	19.5	19.0
18	10.0	9.0	13.5	11.5	14.5	13.0	14.0	13.5	17.0	16.0	19.5	19.0
19	10.0	9.5	13.5	11.5	14.5	13.0	14.0	13.0	17.0	16.0	20.0	18.5
20	11.0	10.0	13.5	11.5	15.0	13.5	14.5	13.5	18.0	16.5	20.5	18.5
21	11.0	9.5	13.5	11.5	15.0	13.5	14.5	13.5	18.0	16.5	20.5	18.5
22	11.0	10.0	13.5	11.5	14.5	13.5	14.5	13.5	18.0	16.5	19.5	19.0
23	11.0	10.0	14.0	12.0	14.5	13.5	14.5	13.5	18.5	17.0	20.0	19.5
24	10.5	10.0	14.0	12.0	15.0	13.5	14.5	13.5	19.0	17.0	20.0	19.0
25	11.5	10.5	14.0	12.0	14.5	13.5	14.5	14.0	18.5	17.0	19.0	19.0
26	12.0	11.0	14.0	13.0	15.0	13.5	15.0	13.5	18.5	17.0	19.5	19.0
27	12.0	10.5	14.0	13.0	14.5	13.5	15.0	14.0	19.0	18.0	19.5	19.0
28	13.0	11.0	14.5	13.0	15.0	13.5	15.0	14.0	19.0	18.0	20.0	19.0
29	13.0	10.5	14.0	13.0	15.0	13.5	15.5	14.0	19.0	18.0	20.0	18.5
30	13.5	11.0	14.0	13.0	15.0	13.5	15.5	14.0	19.0	18.0	20.0	18.5
31	---	---	13.5	13.0	---	---	15.0	14.5	19.0	18.0	---	---
MONTH	13.5	8.5	14.5	10.5	15.0	12.0	15.5	12.0	19.0	14.5	20.5	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 1973 to September 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 29.5°C July 23; minimum, 1.5°C several days in December, January, and March.

Period of record:
Water temperatures: Maximum, 31.0°C July 31, Aug. 2, 1964; minimum, freezing point, many days during winter months, 1964-69, Dec. 18, 1974.

REMARKS.--Miscellaneous chemical analyses published for the water years 1969, 1970, 1973, 1974. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)
OCT.												
21...	1045	1.0	52	--	90	50	20	<10	3.0	.8	1.6	1.1
NOV.												
25...	1200	1.0	107	--	70	<50	<10	<10	2.0	.6	1.0	.5
25...	1345	1.0	107	--	70	<50	<10	<10	2.0	.6	1.0	.6
DEC.												
18...	1030	1.0	130	--	70	<50	<10	20	<1.0	.4	1.1	.5
JAN.												
15...	1030	1.0	361	--	100	<50	20	<10	<1.0	.4	1.1	.6
FEB.												
12...	0950	1.0	629	--	180	<50	20	10	3.0	.5	1.9	.7
MAR.												
12...	1100	1.0	550	6.1	110	<50	20	<10	1.0	.5	1.1	.4
APR.												
07...	1000	1.0	385	6.0	50	<50	10	<10	4.0	.5	.6	.3
MAY												
21...	1330	1.0	111	6.4	320	<50	20	10	4.0	.8	5.1	.9
JUNE												
18...	1400	1.0	64	8.4	580	80	20	10	2.0	.6	4.8	.9
JULY												
14...	1045	1.0	37	7.4	<50	50	10	<10	3.0	.7	2.4	.6
AUG.												
14...	0930	1.0	114	6.3	450	<50	30	<10	3.0	.6	1.8	.8
SEP.												
18...	1045	1.0	116	7.6	810	<50	50	<10	2.0	.6	2.0	.6

DATE	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.											
21...	6	0	2.0	2.0	<.1	.01	.08	.26	.01	<.01	30
NOV.											
25...	8	0	3.0	1.0	<.1	<.01	.01	.07	.01	.01	20
25...	8	0	2.0	2.0	<.1	.01	.07	.10	.01	.01	20
DEC.											
18...	8	0	2.0	1.0	<.1	.03	.02	.10	.03	.01	10
JAN.											
15...	8	0	3.0	2.0	--	.07	.11	.25	<.01	<.01	30
FEB.											
12...	8	0	2.0	2.0	<.1	.05	.49	<.02	.02	.02	20
MAR.											
12...	6	0	2.0	2.0	<.1	.05	.01	.07	.01	.01	20
APR.											
07...	6	0	1.0	2.0	<.1	.08	.04	.36	<.01	<.01	50
MAY											
21...	7	0	2.0	1.0	<.1	.12	.27	.55	.01	.01	20
JUNE											
18...	7	0	2.0	2.0	<.1	.09	.12	.62	.04	.02	20
JULY											
14...	7	0	3.0	1.0	<.1	.01	.02	.08	<.01	<.01	30
AUG.											
14...	7	0	5.0	2.0	<.1	.06	.06	.46	.01	<.01	30
SEP.											
18...	7	0	<1.0	2.0	<.1	.02	.07	.11	.01	<.01	30

03518500 TELLICO RIVER AT TELLICO PLAINS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
OCT.											
21...	.04	4.21	<1	11	34	6.0	7.8	10	2	10.8	7
NOV.											
25...	.03	5.78	1	7	25	5.7	6.7	<5	1	11.1	2
25...	.03	5.78	1	7	23	5.7	6.7	<5	1	11.1	2
DEC.											
18...	.01	3.51	<1	<4	31	5.9	3.3	5	<1	11.1	4
JAN.											
15...	.04	29.2	<1	4	25	6.0	5.6	5	1	11.0	3
FEB.											
12...	.03	34.0	5	10	19	6.1	6.7	7	1	10.7	7
MAR.											
12...	.03	29.7	3	5	22	6.4	10.0	6	<1	11.1	7
APR.											
07...	.07	52.0	2	12	18	6.7	5.6	4	4	10.9	10
MAY											
21...	.03	5.99	3	13	23	6.7	16.7	1	1	10.5	12
JUNE											
18...	.03	3.45	6	7	18	6.6	16.7	17	4	10.3	13
JULY											
14...	.04	3.00	<1	10	30	6.5	20.6	14	1	10.1	11
AUG.											
14...	.04	9.23	4	10	25	6.8	18.9	11	1	10.1	8
SEP.											
18...	.04	9.40	7	7	24	6.9	18.3	22	3	10.2	8

03518500 TELLICO RIVER AT TELLICO PLAINS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	14.0	18.0	14.5	7.0	4.5	13.0	10.5	13.0	12.0	7.0	4.5
2	17.0	13.0	18.5	15.0	4.5	4.0	10.5	5.5	13.0	10.5	5.0	3.0
3	15.0	10.0	18.0	15.0	5.0	3.5	8.0	5.5	11.0	10.5	4.0	3.0
4	14.5	9.0	17.0	14.0	4.5	2.0	8.5	6.5	10.5	10.0	5.0	1.5
5	15.0	10.0	16.5	14.0	4.0	1.5	6.5	5.0	11.0	9.5	6.5	3.0
6	15.5	10.5	14.5	11.0	4.0	1.5	7.0	5.0	10.5	8.5	8.5	5.0
7	16.5	11.5	12.0	9.0	6.5	3.5	6.0	5.0	8.5	4.5	9.0	7.0
8	17.0	13.5	13.0	9.5	7.0	6.5	8.5	6.0	5.5	3.5	9.0	5.5
9	16.0	11.5	11.0	8.0	6.5	3.0	9.5	8.5	5.5	4.5	6.0	4.0
10	16.0	11.0	10.5	7.0	3.5	1.5	12.0	8.5	6.0	3.5	6.0	5.0
11	16.0	11.5	10.5	9.0	4.5	1.5	12.0	8.5	10.0	6.0	8.0	6.0
12	16.0	13.0	11.0	9.0	7.0	4.5	8.5	6.5	10.0	8.5	11.5	8.0
13	18.0	13.5	10.0	7.0	7.0	5.5	6.5	3.0	9.0	6.5	11.5	10.5
14	18.0	14.5	8.0	6.0	6.0	4.5	3.0	1.5	8.0	6.0	11.0	8.0
15	16.5	15.5	8.0	4.5	6.0	4.5	4.0	1.5	10.0	7.0	8.5	6.5
16	16.0	14.0	7.0	3.5	8.0	6.0	5.5	3.5	11.0	10.0	9.0	8.5
17	16.5	12.0	8.5	5.5	6.0	4.0	5.0	4.0	13.0	11.0	11.0	9.0
18	15.5	11.0	10.0	7.0	4.0	2.0	6.5	4.5	11.5	10.5	10.5	10.0
19	15.0	11.0	12.0	9.5	5.5	2.0	9.0	6.5	11.5	7.0	10.0	9.5
20	13.0	9.0	13.0	10.0	5.5	4.5	8.5	5.0	8.5	6.5	11.0	9.0
21	12.0	8.0	10.0	6.5	6.5	4.5	5.5	5.0	8.5	6.0	12.0	9.5
22	11.0	6.5	8.0	5.5	6.0	4.0	6.5	5.0	11.0	7.0	13.5	12.0
23	11.0	6.5	8.0	5.0	6.5	4.0	7.0	5.5	13.5	11.0	14.5	10.5
24	11.5	7.0	9.0	5.5	9.5	6.5	10.5	7.0	12.0	7.0	14.5	10.5
25	13.5	9.0	9.0	6.0	11.0	9.0	10.5	8.5	9.0	7.0	11.5	8.5
26	14.5	10.5	7.0	4.0	9.0	7.0	8.5	6.5	8.5	6.5	10.0	8.0
27	15.0	11.5	6.0	3.5	9.0	7.0	9.0	6.0	9.5	6.5	11.5	8.5
28	14.5	11.0	6.0	3.0	11.0	9.0	10.5	9.0	8.0	6.5	14.0	10.5
29	16.0	12.0	5.5	2.0	11.0	10.0	12.0	10.5	---	---	14.0	11.0
30	18.5	15.0	7.0	3.5	11.5	11.0	11.5	10.5	---	---	11.0	8.5
31	18.5	15.0	---	---	13.0	11.5	13.0	10.5	---	---	10.5	8.5
MONTH	19.5	6.5	18.5	2.0	13.0	1.5	13.0	1.5	13.5	3.5	14.5	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	10.0	20.5	18.0	21.5	18.5	28.0	23.0	27.0	22.0	26.0	21.0
2	14.5	10.5	22.0	18.0	24.5	18.5	25.5	23.0	26.5	22.0	26.5	20.5
3	14.5	9.0	18.5	16.5	24.5	18.5	27.0	21.0	28.0	23.0	26.5	20.5
4	9.5	6.5	20.0	16.0	25.0	19.0	26.0	22.0	26.5	23.5	27.0	21.0
5	10.0	6.5	19.5	15.0	24.0	19.5	27.0	21.5	25.5	23.0	27.0	21.5
6	10.0	7.0	20.5	15.0	23.5	19.5	24.5	21.5	24.5	20.0	26.0	23.0
7	10.5	7.0	18.5	16.0	24.0	19.5	24.0	20.5	21.0	19.0	23.0	20.5
8	10.0	9.0	19.0	15.5	25.0	19.0	25.5	20.5	22.0	19.5	23.5	19.5
9	11.5	10.0	21.0	17.0	23.5	18.0	28.0	22.0	22.0	20.0	24.5	19.5
10	14.0	11.5	22.0	17.0	21.5	19.5	26.5	23.0	20.5	19.0	24.0	20.0
11	15.0	12.0	22.0	16.5	21.5	19.5	26.0	22.0	22.0	18.5	24.5	20.5
12	13.5	10.5	21.0	17.0	23.0	19.5	26.5	21.0	23.5	19.5	24.0	21.5
13	12.0	8.5	21.5	17.0	25.0	19.0	25.0	20.5	25.0	20.5	23.0	19.0
14	11.0	10.5	21.0	16.0	25.5	19.0	25.0	20.0	25.5	21.0	21.0	16.5
15	11.5	10.0	19.5	16.5	24.0	20.0	24.5	21.0	25.0	21.5	21.0	16.5
16	11.5	9.0	19.5	16.5	25.0	20.0	26.0	20.5	25.5	21.0	20.0	16.5
17	14.5	10.0	19.0	17.0	26.5	20.0	27.0	21.5	25.0	21.0	19.5	18.5
18	15.5	13.0	20.0	18.0	27.0	21.0	26.5	22.0	25.0	21.0	20.0	18.5
19	15.0	13.0	23.0	18.0	27.0	22.0	25.5	22.0	25.0	21.0	23.0	18.0
20	15.5	11.0	23.5	18.0	28.0	22.0	26.0	21.5	26.0	20.5	23.0	19.0
21	15.0	10.5	24.0	19.0	25.5	22.0	26.5	21.5	26.0	21.5	23.5	19.0
22	16.0	10.5	24.5	19.5	25.0	20.5	28.5	23.0	26.5	21.5	21.0	17.0
23	16.5	13.0	25.5	20.0	26.0	20.5	29.5	21.5	27.0	21.5	18.0	16.0
24	18.0	14.5	26.0	20.5	26.5	21.5	23.5	21.0	27.0	22.0	18.5	16.5
25	19.5	16.0	26.0	20.5	27.0	22.0	26.5	21.5	28.0	22.0	17.0	16.0
26	20.0	16.0	24.5	19.5	26.0	21.5	28.0	23.0	28.5	23.0	16.0	15.0
27	20.5	15.5	25.5	19.5	25.5	20.5	28.0	22.0	28.0	23.0	18.0	14.5
28	21.0	17.0	24.5	20.0	27.0	21.0	28.5	21.5	26.5	22.0	18.0	13.5
29	20.0	18.0	23.0	19.0	28.0	21.5	28.5	23.0	26.5	22.0	18.5	13.5
30	20.5	17.0	24.0	19.0	29.0	22.0	28.5	23.5	26.5	22.0	19.5	14.5
31	---	---	22.0	19.5	---	---	26.5	23.0	25.5	23.0	---	---
MONTH	21.0	6.5	26.0	15.0	29.0	18.0	29.5	20.0	28.5	18.5	27.0	13.5
YEAR	29.5	1.5										

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 29.0°C August 25; minimum, 2.0°C Dec. 10, 11.

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.--Water temperatures March 1962 to March 1966 are published in reports of Tennessee Valley Authority. Miscellaneous chemical analyses published for the water years 1971, 1972, 1973, 1974. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)
OCT.												
15...	1115	1.0	241	--	420	<50	40	100	42	17	5.1	2.7
15...	1230	1.0	241	--	330	<50	70	30	42	17	4.8	2.3
NOV.												
04...	1135	1.0	331	--	390	50	70	550	32	13	5.0	2.8
DEC.												
10...	1245	2.0	2840	--	770	<50	60	60	44	11	4.3	2.4
JAN.												
07...	1300	3.0	2450	--	240	60	50	50	35	7.8	3.0	1.8
FEB.												
11...	1115	1.0	3470	--	190	<50	50	2800	23	5.5	3.6	1.6
MAR.												
10...	1145	2.0	4960	4.3	870	<50	90	<10	21	6.4	3.1	1.3
APR.												
08...	1030	2.0	2410	5.7	220	<50	210	100	26	3.5	2.2	1.0
MAY												
06...	1100	2.0	3830	6.1	740	90	40	<10	18	6.7	2.5	1.2
JUNE												
02...	1030	1.0	1590	6.3	880	<50	110	90	36	9.6	12	2.3
JULY												
02...	1400	1.0	772	5.9	1100	50	1800	1800	35	7.1	4.7	2.4
AUG.												
05...	1250	1.0	326	3.7	90	<50	80	80	33	14	4.8	2.4
SEP.												
09...	1100	1.0	331	3.9	200	<50	110	110	41	17	6.6	3.1

DATE	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.											
15...	140	0	26	5.0	<.1	<.01	.04	.32	.03	.03	160
15...	140	0	26	4.0	<.1	<.01	.02	.32	.03	R.05	180
NOV.											
04...	130	0	22	5.0	<.1	<.01	.09	.72	.02	.01	170
DEC.											
10...	120	0	19	5.0	<.1	.63	.10	2.0	.10	.03	170
JAN.											
07...	96	0	14	4.0	--	1.0	.04	.50	.04	.03	140
FEB.											
11...	96	0	14	4.0	<.1	1.0	.03	.33	.05	.02	140
MAR.											
10...	78	0	14	4.0	<.1	.65	.06	.42	.05	.01	120
APR.											
08...	75	0	27	3.0	<.1	.88	.08	.20	.04	.03	150
MAY											
06...	87	0	16	3.0	<.1	.55	.09	.07	.02	.01	110
JUNE											
02...	110	--	20	3.0	<.1	.61	.16	.70	.04	.04	150
JULY											
02...	110	0	20	11	<.1	.82	.11	.65	.07	.05	170
AUG.											
05...	27	0	26	5.0	--	.10	.08	1.0	.05	.08	160
SEP.											
09...	140	0	23	5.0	<.1	.12	.05	1.2	.05	.02	200

03528000 CLINCH RIVER ABOVE TAZEWELL, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
OCT.											
15...	.22	104	10	170	330	7.9	15.6	10	3	8.9	11
15...	.24	117	7	170	330	7.7	16.1	10	3	9.0	7
NOV.											
04...	.23	152	7	130	320	7.8	16.1	5	8	9.2	15
DEC.											
10...	.23	1300	16	160	300	8.2	3.3	10	5	13.5	10
JAN.											
07...	.19	926	5	120	360	7.7	5.6	10	4	12.4	9
FEB.											
11...	.19	1310	11	80	240	8.0	7.2	3	11	12.1	9
MAR.											
10...	.16	1610	42	79	220	7.4	6.7	12	38	11.3	16
APR.											
08...	.20	976	9	79	270	7.2	10.0	9	8	10.9	6
MAY											
06...	.15	1140	35	72	200	7.9	18.9	9	20	9.3	12
JUNE											
02...	.20	643	5	130	280	7.3	23.0	6	12	8.0	11
JULY											
02...	.23	354	17	120	280	8.2	25.6	15	9	8.4	20
AUG.											
05...	.22	141	6	140	290	7.2	27.2	11	3	8.0	13
SEP.											
09...	.27	179	10	170	320	7.7	23.3	15	2	7.5	14

03528000 CLINCH RIVER ABOVE TAZEWELL, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.0	16.0	14.0	4.5	4.0	10.0	9.0	9.5	9.0	8.0	7.0
2	16.5	14.0	16.5	14.0	4.5	4.5	9.0	8.0	10.0	9.5	7.0	5.5
3	15.0	11.5	16.5	14.5	4.5	3.5	8.0	7.0	9.5	9.0	4.5	5.5
4	14.5	11.0	16.0	14.5	4.5	3.5	7.0	6.5	9.0	8.5	6.0	4.0
5	14.5	11.0	16.0	14.0	4.5	3.0	6.5	6.0	8.5	8.5	6.5	4.5
6	15.0	11.5	15.0	14.0	4.0	3.0	6.0	5.5	8.5	8.5	7.0	5.0
7	15.0	13.0	14.0	13.0	4.0	3.0	5.5	5.0	8.5	7.0	7.0	6.0
8	15.5	13.0	13.0	11.5	4.0	3.5	5.5	5.0	7.0	6.0	7.0	6.5
9	15.0	13.0	12.0	10.5	4.5	3.5	6.0	5.5	6.0	5.0	7.0	6.0
10	15.5	13.0	11.5	10.0	3.5	2.0	7.0	5.5	5.0	4.5	6.5	6.0
11	15.5	13.5	11.0	10.5	3.5	2.0	9.0	7.0	5.0	4.5	6.5	6.0
12	15.5	13.5	11.0	9.5	4.0	3.5	8.5	7.0	6.5	5.0	8.5	6.0
13	17.0	14.0	10.5	9.0	4.5	4.0	7.0	6.5	8.0	6.5	9.5	8.5
14	17.0	15.0	9.5	8.0	5.0	4.0	6.5	5.0	7.0	6.5	9.5	9.0
15	15.5	13.0	8.5	6.5	5.0	4.5	5.0	4.5	7.0	6.5	9.0	9.0
16	15.5	14.5	7.0	6.0	5.5	4.5	4.5	4.0	7.0	6.5	9.0	8.5
17	15.0	14.5	7.0	6.5	5.0	4.5	4.5	3.5	8.5	7.0	9.0	8.5
18	14.5	14.0	8.0	7.0	4.5	4.0	4.0	4.0	9.0	8.5	9.5	9.0
19	14.5	13.5	9.0	8.0	5.0	4.0	6.0	4.0	9.0	8.5	9.5	9.0
20	13.5	12.0	10.5	9.0	4.5	4.0	6.5	6.0	9.0	8.0	10.0	9.0
21	13.0	11.5	10.0	9.0	5.0	4.5	6.0	6.0	8.5	7.0	10.5	9.5
22	12.0	11.0	9.0	8.0	5.0	4.0	6.0	5.5	8.5	7.0	11.0	10.5
23	11.5	10.5	8.0	7.0	4.5	3.5	6.0	5.5	9.0	8.0	11.5	10.5
24	11.5	11.0	8.0	7.0	5.0	4.0	6.0	6.0	10.0	9.0	12.0	11.5
25	13.0	11.0	8.0	6.5	5.5	4.5	8.0	6.0	9.5	8.5	12.0	11.0
26	15.0	13.0	7.0	5.5	5.5	4.5	8.0	7.0	9.0	8.0	11.0	10.0
27	14.0	11.5	6.0	4.5	6.0	5.0	7.0	6.5	9.0	8.0	10.5	10.0
28	14.5	10.5	5.5	4.5	8.0	6.0	7.0	6.5	9.0	8.0	11.0	10.5
29	15.5	11.0	5.0	4.0	8.5	8.0	8.5	7.0	---	---	12.0	11.0
30	15.0	13.5	4.5	4.0	9.5	8.5	9.0	8.5	---	---	12.0	10.5
31	16.5	14.0	---	---	9.5	9.5	9.5	8.5	---	---	10.5	9.5
MONTH	18.0	10.5	16.5	4.0	9.5	2.0	10.0	3.5	10.0	4.5	12.0	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.5	19.0	18.0	23.5	21.0	27.0	24.5	28.0	26.0	27.0	24.5
2	12.0	10.0	19.5	18.5	23.0	21.0	26.0	24.5	28.0	26.5	27.0	24.5
3	12.0	11.0	19.0	16.0	23.0	21.0	26.0	23.5	28.0	27.0	28.0	24.5
4	11.0	10.5	16.5	16.0	23.5	21.0	25.5	24.0	28.0	26.5	28.0	24.5
5	10.5	10.0	16.0	15.5	23.5	21.5	26.0	23.5	28.0	23.5	27.0	25.0
6	11.0	10.0	16.5	15.5	23.5	21.0	25.5	23.5	25.0	23.5	26.5	23.5
7	11.0	10.0	16.5	16.0	24.0	21.5	24.5	23.0	25.5	24.0	24.5	24.0
8	11.0	10.5	17.0	16.5	24.0	21.0	25.0	23.0	25.5	24.5	25.5	23.5
9	11.5	10.5	18.0	17.0	23.5	21.0	25.0	23.5	26.0	24.5	26.5	23.5
10	13.5	11.0	19.0	18.0	22.0	21.0	25.5	23.5	25.0	24.0	26.5	24.0
11	14.5	13.0	20.0	18.5	21.5	20.5	25.5	23.5	25.5	23.5	26.0	24.5
12	14.5	13.0	20.0	18.5	21.5	20.5	25.5	23.0	26.5	24.0	25.0	23.5
13	14.0	12.0	20.0	18.5	22.0	20.0	24.5	23.0	27.0	24.5	24.0	21.5
14	13.5	13.0	20.5	18.5	23.5	20.0	25.0	22.0	26.5	25.0	21.5	20.0
15	13.0	12.0	19.5	19.0	24.0	21.5	25.0	23.0	27.0	25.0	21.0	19.5
16	13.0	11.5	19.0	18.0	25.5	22.0	26.0	23.0	27.0	25.0	20.5	19.0
17	14.5	12.0	18.0	18.0	25.5	23.0	26.5	24.0	26.5	25.0	20.0	19.5
18	15.0	14.0	18.0	17.0	26.5	23.5	26.5	24.0	26.5	25.0	20.5	19.5
19	15.0	14.5	18.0	17.0	26.5	23.5	27.0	24.5	26.5	24.5	21.5	20.0
20	15.0	14.0	18.0	17.0	26.5	24.0	26.5	25.0	27.0	24.5	21.5	20.5
21	15.0	14.0	19.0	18.0	26.5	24.0	28.0	25.0	27.0	25.0	21.5	20.0
22	15.5	14.0	20.0	19.0	26.0	24.5	28.5	25.5	27.0	25.5	20.5	19.0
23	16.0	15.0	20.5	20.0	26.5	24.0	27.0	25.5	28.0	25.5	19.0	18.0
24	16.5	15.0	21.5	20.0	27.0	24.0	26.0	24.5	28.5	25.5	18.0	16.0
25	16.5	16.0	22.0	21.0	28.5	25.0	26.0	24.5	29.0	26.0	16.5	16.0
26	16.5	16.0	23.0	21.5	28.5	25.5	26.5	24.0	28.5	26.0	17.0	16.5
27	16.5	16.0	23.0	21.5	27.0	25.0	27.0	24.5	28.0	26.0	17.0	16.5
28	18.0	16.0	23.5	21.5	28.0	25.0	27.0	24.5	28.5	25.5	18.0	16.0
29	18.5	17.0	24.0	22.0	26.5	25.0	28.0	24.5	28.0	25.5	18.5	16.0
30	18.5	18.0	24.0	22.0	26.5	24.5	27.0	24.5	26.5	25.0	19.0	16.5
31	---	---	23.0	21.5	---	---	28.0	25.0	26.5	25.0	---	---
MONTH	18.5	9.5	24.0	15.5	28.5	20.0	28.5	22.0	29.0	23.5	28.0	16.0

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 25.0°C several days in August and September; minimum, 2.0°C Dec. 10, 11, Jan. 17.

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.--Missing record Aug. 1-7, range in temperature 19.5°C to 25.0°C; Aug. 23 to Sept. 9, range in temperature 19.5°C to 25.0°C; Sept. 22-30, range in temperature 14.0°C to 18.0°C. Water temperatures August 1962 to February 1966 are published in reports of Tennessee Valley Authority. Miscellaneous chemical analyses published for the water year 1972, 1974. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV.											
12...	1145	3.0	348	--	600	490	<50	40	450	38	12
JAN.											
07...	1050	5.0	1520	--	--	770	80	60	60	33	7.5
FEB.											
11...	1245	1.0	1660	--	<200	310	<50	60	480	19	5.3
MAR.											
10...	1430	1.0	2190	4.7	--	2400	<50	130	20	15	5.4
APR.											
08...	1145	2.0	1290	4.9	--	190	<50	120	120	17	8.1
MAY											
07...	1100	1.0	1500	5.8	1300	2000	60	160	30	16	5.6
07...	1200	1.0	1480	5.8	1100	1900	60	100	60	16	5.7
JUNE											
02...	1500	1.0	920	7.4	--	1100	<50	730	780	33	10
JULY											
02...	1210	1.0	388	5.7	--	2000	70	480	420	34	7.5
AUG.											
12...	1440	1.0	200	4.5	620	370	60	420	320	36	12
SEP.											
09...	1315	1.0	150	4.2	--	250	<50	60	--	38	16

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
NOV.											
12...	7.8	2.4	130	0	21	3.0	.0	.18	.19	.27	.02
JAN.											
07...	3.9	1.3	120	0	15	2.0	--	.78	.05	.09	.02
FEB.											
11...	6.1	1.4	84	0	18	3.0	<.1	.79	.03	.21	.03
MAR.											
10...	2.9	1.1	73	0	17	2.0	<.1	.52	.03	.22	.07
APR.											
08...	8.8	1.5	83	0	<1.0	3.0	<.1	.76	.17	.25	.05
MAY											
07...	3.3	1.2	62	0	20	4.0	<.1	.51	.04	.16	.05
07...	3.3	1.2	62	0	21	3.0	<.1	.66	.03	.19	.04
JUNE											
02...	13	2.4	150	--	24	3.0	<.1	.63	.09	.52	.05
JULY											
02...	7.8	2.4	100	0	22	4.0	<.1	.70	.26	.42	.06
AUG.											
12...	11	3.3	140	7	28	6.0	<.1	.01	.06	1.0	.03
SEP.											
09...	6.8	2.5	140	0	19	4.0	<.1	.28	.04	.56	.03

03532000 POWELL RIVER NEAR ARTHUR, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
NOV.											
12...	.01	180	.24	169	9	140	320	8.1	10.6	10	7
JAN.											
07...	.02	140	.19	575	25	110	340	8.2	4.4	10	16
FEB.											
11...	.02	140	.19	627	16	69	240	7.4	5.6	5	14
MAR.											
10...	.02	110	.15	650	120	60	180	7.2	6.1	22	78
APR.											
08...	.64	20	.03	69.7	<1	76	250	7.5	9.4	6	5
MAY											
07...	.02	100	.14	405	100	63	190	7.5	17.8	8	58
07...	.03	100	.14	400	120	63	180	7.5	17.8	17	60
JUNE											
02...	.03	160	.22	397	20	120	290	7.8	23.0	18	13
JULY											
02...	.05	160	.22	168	28	120	260	8.1	21.1	15	17
AUG.											
12...	<.01	240	.33	130	22	140	330	8.6	26.3	24	11
SEP.											
09...	.02	190	.26	76.9	11	160	300	7.9	20.6	20	4

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV.											
12...	11.5	11	2.5	960	80	6.2	<5	<100	<10	<100	2
JAN.											
07...	11.6	6	--	--	--	--	--	--	--	--	--
FEB.											
11...	11.3	10	--	--	--	1.9	<5	200	<10	<100	6
MAR.											
10...	11.2	27	--	--	--	--	--	--	--	--	--
APR.											
08...	10.5	8	--	--	--	--	--	--	--	--	--
MAY											
07...	9.2	22	1.4	240	240	4.1	<5	<100	<10	<100	<1
07...	9.4	18	1.6	300	300	3.9	<5	<100	<10	<100	<1
JUNE											
02...	8.3	13	--	--	--	--	--	--	--	--	--
JULY											
02...	7.8	18	--	--	--	--	--	--	--	--	--
AUG.											
12...	9.4	17	--	--	--	6.0	7	<100	<10	<100	2
SEP.											
09...	9.0	10	--	--	--	--	--	--	--	--	--

DATE	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TI-TANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.										
12...	<5	50	<10	<10	12	<50	<2	<10	<1000	60
JAN.										
07...	--	--	--	--	--	--	--	--	--	--
FEB.										
11...	<5	<10	15	<10	.2	<50	<2	<10	<1000	40
MAR.										
10...	--	--	--	--	--	--	--	--	--	--
APR.										
08...	--	--	--	--	--	--	--	--	--	--
MAY										
07...	<5	10	<10	<10	<.2	<50	<2	<10	<1000	30
07...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	30
JUNE										
02...	--	--	--	--	--	--	--	--	--	--
JULY										
02...	--	--	--	--	--	--	--	--	--	--
AUG.										
12...	<5	60	<10	<10	<.2	<50	<2	<10	<1000	70
SEP.										
09...	--	--	--	--	--	--	--	--	--	--

03532000 POWELL RIVER NEAR ARTHUR, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	14.5	15.0	13.5	6.0	4.5	9.0	7.0	9.0	8.0	8.0	6.0
2	15.0	13.5	15.5	13.5	5.5	5.0	7.0	6.5	9.0	8.5	6.0	5.0
3	14.0	11.5	15.5	14.0	5.5	5.0	6.5	6.0	8.5	8.5	5.0	4.0
4	13.5	11.0	15.0	14.0	5.0	4.5	6.0	5.0	8.5	8.0	5.0	3.0
5	13.5	11.0	15.0	13.5	4.5	3.5	5.5	4.5	8.5	8.0	5.5	3.5
6	14.0	11.5	13.5	12.0	4.0	3.5	5.5	4.5	8.0	7.0	6.5	4.5
7	14.0	12.0	12.0	11.0	4.0	3.5	5.0	4.5	7.0	6.0	6.5	6.0
8	14.5	12.0	11.5	10.5	4.5	4.0	5.0	4.5	6.0	5.5	6.0	6.0
9	14.0	12.0	11.0	9.5	4.5	3.5	5.5	5.0	6.0	4.5	6.5	5.5
10	14.5	12.0	10.5	9.0	3.5	2.0	6.5	5.5	5.0	4.0	6.0	5.0
11	14.5	13.0	10.0	10.0	3.0	2.0	7.0	6.5	6.0	5.0	6.0	5.0
12	14.5	13.0	10.0	9.0	4.0	3.0	7.0	6.0	7.0	6.0	8.0	6.0
13	15.5	13.5	9.0	8.5	4.0	3.5	6.0	5.0	8.0	6.5	9.0	8.0
14	15.5	14.5	8.5	7.0	4.5	3.5	5.0	4.0	6.5	6.5	9.0	8.5
15	15.5	14.5	7.0	6.0	4.0	3.5	4.0	3.5	7.0	6.0	8.5	8.0
16	14.5	13.5	6.5	5.5	5.0	4.0	4.0	3.0	7.0	6.5	8.5	8.0
17	13.5	13.0	6.5	6.0	4.5	3.5	3.5	2.0	8.5	7.0	9.0	8.0
18	13.0	12.0	7.0	6.0	4.0	3.0	4.0	3.0	9.0	8.5	9.0	8.5
19	13.0	11.5	8.5	7.0	4.0	3.5	5.5	4.0	9.0	7.0	9.0	8.5
20	11.5	10.0	9.5	8.5	4.0	3.5	5.5	5.0	8.0	6.5	10.0	8.5
21	10.5	9.0	9.0	9.0	4.5	3.5	5.5	5.0	8.0	6.0	10.5	9.5
22	10.0	8.5	9.0	8.0	4.0	3.0	5.0	4.5	8.0	6.5	11.0	10.5
23	10.0	8.5	8.0	7.0	4.0	3.0	5.0	4.5	9.0	8.0	11.5	10.5
24	10.0	9.5	7.0	6.0	5.0	4.0	5.5	4.5	9.5	9.0	11.5	11.0
25	11.0	9.5	7.0	6.5	5.0	4.0	6.5	5.5	9.0	8.0	11.5	10.5
26	12.0	11.0	6.5	5.5	4.0	3.5	6.5	6.0	8.5	7.0	10.5	9.5
27	12.0	11.0	5.5	4.5	5.5	4.0	6.0	5.5	8.5	7.0	10.0	9.0
28	12.0	10.0	5.5	4.5	7.0	5.5	6.0	5.0	8.0	6.5	11.0	10.0
29	13.0	10.5	5.0	4.0	8.0	7.0	7.0	6.0	---	---	11.5	11.0
30	14.0	13.0	4.5	4.0	8.5	8.0	7.0	6.5	---	---	11.0	10.0
31	15.0	13.5	---	---	9.0	8.5	8.0	7.0	---	---	10.0	9.0
MONTH	16.0	8.5	15.5	4.0	9.0	2.0	9.0	2.0	9.5	4.0	11.5	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	16.5	15.5	19.5	18.5	22.0	20.5	---	---	---	---
2	11.5	9.5	17.0	15.5	19.5	18.5	22.0	20.5	---	---	---	---
3	11.5	10.5	17.0	15.5	19.5	18.5	22.0	20.0	---	---	---	---
4	10.5	9.0	15.5	14.5	20.5	18.5	21.0	20.0	---	---	---	---
5	10.0	9.0	15.5	14.0	20.0	19.0	21.5	19.5	---	---	---	---
6	10.5	8.5	15.5	14.0	20.5	19.0	21.0	19.5	---	---	---	---
7	10.5	8.5	15.5	15.0	21.0	19.0	20.5	19.0	---	---	---	---
8	10.5	9.5	15.5	15.0	20.5	19.0	21.0	19.0	23.5	20.5	---	---
9	10.5	10.0	17.0	15.0	20.0	19.0	21.5	20.0	23.5	20.5	---	---
10	12.0	10.5	17.0	16.0	19.0	18.5	21.5	20.0	22.0	21.0	22.0	19.5
11	13.0	11.5	17.0	15.5	18.5	18.0	21.5	19.5	22.0	20.5	21.5	20.5
12	13.0	11.0	17.0	16.0	19.5	17.0	21.5	19.0	24.0	20.5	21.0	19.5
13	12.0	10.5	18.0	16.5	19.0	17.0	20.5	19.0	24.5	21.0	19.5	18.0
14	11.5	11.0	18.0	16.5	20.0	18.0	20.5	18.5	24.5	22.0	18.5	16.0
15	11.0	10.0	18.0	16.5	20.5	19.0	20.5	19.0	24.5	22.0	18.0	16.5
16	11.5	9.5	16.5	16.0	20.5	18.5	21.0	19.0	24.0	22.0	17.0	16.5
17	13.0	11.0	16.5	16.0	20.5	19.0	21.0	19.5	24.0	22.0	18.5	16.5
18	14.0	13.0	16.5	15.5	20.5	19.5	22.0	19.5	23.5	21.5	19.5	15.0
19	14.0	13.0	16.5	14.5	21.5	20.0	22.0	20.5	24.0	21.0	15.0	14.5
20	14.0	12.0	14.5	14.0	22.0	20.0	22.0	20.5	24.0	21.0	14.5	14.0
21	13.5	12.0	16.0	14.5	22.0	20.0	22.0	20.5	24.5	22.0	15.0	13.5
22	14.0	12.0	17.0	16.0	21.5	20.5	23.5	20.5	24.5	22.0	---	---
23	14.0	13.0	18.0	16.5	21.5	20.5	23.0	21.0	---	---	---	---
24	15.0	13.5	19.0	17.0	22.0	20.0	22.0	20.5	---	---	---	---
25	15.5	14.5	19.5	18.0	23.5	20.5	21.5	20.0	---	---	---	---
26	15.5	14.5	20.0	19.0	23.5	21.0	22.0	20.0	---	---	---	---
27	15.0	14.0	19.5	18.5	21.5	20.0	23.0	20.0	---	---	---	---
28	15.5	14.5	20.0	19.0	22.0	21.0	23.0	20.0	---	---	---	---
29	16.5	15.5	20.5	19.5	22.0	21.0	23.0	20.0	---	---	---	---
30	16.5	16.0	20.5	19.5	23.0	20.5	23.0	20.5	---	---	---	---
31	---	---	20.0	19.5	---	---	23.0	20.5	---	---	---	---
MONTH	16.5	8.5	20.5	14.0	23.5	17.0	23.5	18.5	---	---	---	---

03535915 CLINCH RIVER NEAR EATON CROSSROADS, TENN.

LOCATION.--Lat 35°53'15", long 84°19'28", Roane County, temperature recorder on right bank 100 feet (30 m) downstream from bridge on State Highway 95, 1.5 miles (2.4 km) downstream from Melton Hill Dam, and at mile 21.6 (34.8 km).

DRAINAGE AREA.--3,346 sq mi (8,666 sq km).

PERIOD OF RECORD.--Water temperatures: October 1974 to September 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 23.0°C Sept. 4; minimum, 6.5°C several days in January, February, and March.

REMARKS.--Water temperatures May 1963 to September 1974 are published in reports of Tennessee Valley Authority. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	19.5	20.0	18.0	10.5	10.0	10.5	9.0	10.0	9.0	8.0	7.0
2	21.0	20.0	20.0	18.5	10.0	10.0	10.0	9.0	9.5	9.5	8.0	6.5
3	21.0	19.5	20.5	18.5	10.5	9.5	9.0	9.0	9.5	9.0	8.0	6.5
4	20.5	19.0	20.0	19.0	10.5	9.0	9.5	8.5	9.0	9.0	9.0	6.5
5	20.5	18.5	20.0	19.0	11.0	9.0	9.5	8.5	9.0	9.0	10.0	6.5
6	21.0	19.0	20.0	18.5	10.5	9.5	10.0	8.5	9.0	8.5	10.0	7.0
7	21.0	19.0	19.5	18.0	10.0	9.5	10.5	8.5	8.5	8.0	9.0	7.0
8	20.5	19.0	19.5	18.0	10.0	9.5	9.5	9.0	8.5	7.0	8.5	6.5
9	20.5	18.5	19.5	17.0	9.5	8.5	9.5	9.0	8.0	7.0	9.0	6.5
10	20.5	18.5	19.0	17.0	9.5	8.0	10.5	9.0	8.0	6.5	8.0	7.0
11	20.0	18.5	18.0	17.0	9.0	8.0	10.0	9.0	7.0	7.0	8.5	7.0
12	20.5	18.5	17.0	16.0	9.5	8.5	9.0	9.0	8.0	7.0	8.5	8.0
13	20.5	19.0	16.5	15.5	8.5	8.0	9.0	8.5	8.5	7.0	8.5	8.0
14	20.5	19.0	16.0	14.5	9.5	8.0	9.5	8.5	8.5	7.0	8.5	8.0
15	20.0	19.0	14.5	13.5	9.0	8.5	9.5	8.5	8.5	7.0	9.5	8.0
16	19.5	19.0	14.0	13.0	9.5	8.5	9.5	8.5	8.0	8.0	9.5	9.0
17	20.5	19.0	14.5	13.5	9.0	8.5	9.0	8.0	9.0	8.0	10.0	9.0
18	20.0	18.5	13.5	13.5	9.5	8.0	8.5	8.0	9.0	8.0	9.5	9.0
19	19.5	18.5	14.0	13.5	9.5	8.5	8.5	8.5	8.5	8.0	10.0	9.5
20	19.5	18.0	14.0	13.5	9.5	9.0	8.5	6.5	9.0	8.0	12.0	10.0
21	19.5	17.0	13.5	13.0	9.5	9.0	8.0	6.5	10.0	8.0	11.0	10.0
22	19.5	17.0	13.5	11.5	10.0	8.5	7.0	6.5	9.0	7.0	10.5	9.5
23	19.0	18.0	14.0	11.5	10.0	8.5	8.0	6.5	9.5	8.5	10.5	9.5
24	19.5	17.0	14.0	11.5	10.0	9.5	7.0	6.5	9.0	8.0	11.0	9.5
25	19.5	17.0	13.0	11.5	10.5	9.5	8.5	7.0	9.0	7.0	10.5	9.5
26	19.0	17.0	13.0	11.0	9.5	9.0	8.0	7.0	8.5	7.0	10.5	9.0
27	19.0	17.0	12.0	10.5	9.5	9.0	9.0	7.0	9.5	7.0	11.5	9.5
28	19.0	16.5	13.0	10.5	10.5	9.5	9.5	8.0	9.5	7.0	10.0	9.5
29	19.5	17.0	12.0	10.5	10.0	9.5	9.5	8.5	---	---	10.0	9.5
30	19.5	18.0	11.0	10.5	10.0	9.5	9.0	8.5	---	---	9.5	9.5
31	20.0	18.0	---	---	11.0	9.5	9.5	9.0	---	---	10.0	9.5
MONTH	21.5	16.5	20.5	10.5	11.0	8.0	10.5	6.5	10.0	6.5	12.0	6.5

03535915 CLINCH RIVER NEAR EATON CROSSROADS, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	9.5	17.0	14.5	16.5	15.0	19.0	18.0	19.5	18.5	21.0	20.0
2	11.0	9.5	18.0	15.5	16.5	15.0	19.0	18.0	19.5	18.5	21.5	19.5
3	10.5	9.5	17.0	16.5	16.5	15.0	19.0	18.5	19.5	18.5	21.5	20.0
4	10.5	9.0	18.0	16.0	17.0	15.5	19.0	18.5	20.0	19.0	23.0	20.5
5	10.0	9.0	18.5	15.5	17.0	15.5	19.0	18.0	20.0	19.5	22.0	21.0
6	10.5	9.0	18.0	16.0	17.0	15.5	19.0	18.0	19.5	19.0	21.0	20.5
7	10.5	9.5	18.0	16.5	17.0	16.0	18.0	17.0	20.0	19.0	21.0	20.5
8	10.5	9.5	18.0	16.5	18.0	15.5	18.5	17.0	20.0	19.5	21.0	20.0
9	11.0	10.0	18.0	16.0	18.5	16.5	18.5	18.0	20.5	19.0	21.5	20.0
10	11.5	10.0	17.0	16.0	19.0	18.0	18.5	18.0	19.5	19.0	21.0	20.5
11	11.5	10.5	17.0	15.5	19.0	18.0	18.5	18.0	20.0	18.5	21.0	20.5
12	11.5	10.0	16.5	15.5	18.0	16.5	18.5	17.0	20.5	19.0	20.5	20.0
13	12.0	10.5	16.5	15.5	18.0	16.5	19.0	18.0	20.5	19.5	21.5	19.5
14	11.5	11.0	16.5	15.5	17.0	15.5	19.0	17.0	20.0	19.0	21.5	20.0
15	11.5	11.0	16.0	15.5	16.0	15.0	19.0	18.5	20.0	19.0	21.0	20.0
16	12.0	10.5	16.5	16.0	16.5	14.5	19.0	18.5	20.0	19.0	21.0	20.0
17	13.0	10.5	16.0	15.5	17.0	15.0	19.5	18.0	19.5	19.0	21.5	20.5
18	13.0	11.5	16.0	15.0	18.5	16.0	19.5	18.5	19.5	19.0	21.0	20.0
19	13.0	11.5	16.5	14.5	19.0	18.0	19.0	18.0	20.0	19.0	20.5	20.5
20	13.0	11.0	16.5	15.5	19.0	18.0	18.5	18.0	20.5	19.5	20.5	20.0
21	14.0	11.5	17.0	16.0	19.5	17.0	19.5	18.0	20.5	19.5	20.5	19.0
22	15.0	12.0	18.0	16.0	19.0	18.0	19.0	18.0	20.5	19.5	19.5	19.5
23	14.0	12.0	18.0	16.5	19.0	18.0	19.0	18.0	20.5	20.0	20.0	19.5
24	14.5	13.0	18.0	16.5	19.0	18.0	19.0	18.0	20.5	19.5	20.0	19.0
25	15.5	13.5	18.0	17.0	19.0	18.5	19.0	18.0	20.0	19.5	19.5	18.5
26	15.5	13.5	18.0	16.5	18.5	17.0	19.5	18.5	20.0	19.5	19.0	18.5
27	16.5	14.5	17.0	16.5	18.5	18.0	19.0	18.5	21.0	19.5	19.5	18.0
28	15.5	15.0	17.0	16.0	18.5	17.0	19.5	18.0	21.0	20.5	20.0	18.5
29	16.0	15.0	17.0	15.5	19.0	18.0	20.0	18.5	21.0	20.0	20.0	18.5
30	16.5	14.5	16.0	15.5	19.5	18.0	19.5	18.5	20.5	19.5	20.0	19.0
31	---	---	16.0	15.5	---	---	20.0	18.5	20.5	20.0	---	---
MONTH	16.5	9.0	18.5	14.5	19.5	14.5	20.0	17.0	21.0	18.5	23.0	18.0

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TENN.
(National stream-quality accounting network station)

LOCATION.--Lat 35°37'13", long 84°47'00", Rhea County, on right bank downstream from Watts Bar Dam, 6.5 miles (10.4 km) southeast of Spring City, at mile 529.9 (852.6 km).

DRAINAGE AREA.--17,310 sq mi (44,830 sq km), approximately.

PERIOD OF RECORD.--Chemical analyses: November 1974 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	FERROUS IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)
OCT.												
07...a	0800		-- 34000	--	--	--	--	--	--	--	--	--
14...a	0800		-- 32200	--	--	--	--	--	--	--	--	--
21...a	0800		-- 42500	--	--	--	--	--	--	--	--	--
28...a	0800		-- 21900	--	--	300	--	--	30	--	--	19
NOV.												
04...a	1000		-- 31900	--	--	--	--	--	--	--	--	--
11...a	0800		-- 24000	--	--	--	--	--	--	--	--	--
12...a	1120	3.0	42000	--	<200	380	<50	60	50	--	20	19
12...a	1121	3.0	42000	--	400	340	<50	40	50	--	20	19
18...a	0800		-- 26400	--	--	--	--	--	--	--	--	--
25...a	0730		-- 31700	--	--	--	--	--	--	--	--	--
26...	1100		-- 35000	4.0	--	--	--	--	--	--	--	--
DEC.												
02...a	0800		-- 17800	--	--	--	--	--	--	--	--	--
09...a	1300		-- 45000	--	--	--	--	--	--	--	--	--
16...a	0800		-- 43900	--	--	360	--	--	40	--	--	19
19...	1130		-- 44600	5.2	--	--	--	--	--	--	--	--
23...a	0800		-- 35700	--	--	--	--	--	--	--	--	--
30...a	0900		-- 47000	--	--	--	--	--	--	--	--	--
JAN.												
20...a	0730		-- 45950	--	--	--	--	--	--	--	--	--
29...	1200		-- 65400	6.0	--	670	30	--	72	49	23	--
FEB.												
04...a	1215		-- 45800	--	300	320	110	<20	50	--	10	17
04...a	1216		-- 85250	--	300	320	110	<20	70	--	10	17
26...	1200		-- 60000	5.7	--	--	--	--	--	--	--	--
MAR.												
17...a	0800		-- 69700	3.3	--	440	--	--	90	--	--	8.0
26...	1100		-- 85900	5.8	--	--	--	--	--	--	--	--
APR.												
14...a	0800		-- 41400	5.0	--	220	--	--	50	--	--	15
22...	1150		-- 33100	5.1	--	--	--	--	--	--	--	--
MAY												
19...a	1147	1.0	33600	3.1	200	770	<50	60	40	--	<10	19
19...a	1148	1.0	33600	3.2	500	560	60	40	40	--	10	20
20...	1100		-- 31500	--	--	--	--	--	--	--	--	--
JUNE												
04...	1430		-- 42800	--	--	--	--	--	--	--	--	--
16...a	0800		-- 44200	--	--	--	--	--	--	--	--	--
23...a	0700		-- 13100	4.7	--	520	--	--	50	--	--	20
JULY												
16...	1130		-- 43900	--	--	--	--	--	--	--	--	--
21...a	0800		-- 24100	4.8	--	1000	--	--	70	--	--	20
AUG.												
05...a	1210	1.0	35200	5.6	730	370	<50	<20	80	--	<10	20
05...a	1211	1.0	35200	5.5	480	390	<50	30	80	--	<10	20
13...	1140		-- 42400	--	--	--	--	--	--	--	--	--
SEP.												
10...	1130		-- 42500	4.8	--	--	--	--	--	--	--	--
15...a	1025		-- 35000	5.2	--	260	--	--	70	--	--	19

a Analysis by Tennessee Valley Authority.

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	4.9	--	6.8	--	1.5	--	--	--	57	0	16
NOV.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	5.1	--	6.8	--	1.6	--	--	--	--	--	13
12...	--	5.2	--	6.8	--	1.6	--	--	--	--	--	14
18...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
26...	21	--	5.0	--	6.9	--	1.6	71	0	58	--	16
DEC.												
02...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	4.5	--	7.1	--	1.9	--	--	--	50	0	11
19...	19	--	4.5	--	7.3	--	1.6	70	--	57	--	15
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
20...	--	--	--	--	--	--	--	--	--	--	--	--
29...	22	--	4.4	--	5.2	--	1.5	69	--	57	--	13
FEB.												
04...	--	3.5	--	4.6	--	1.4	--	--	--	51	0	17
04...	--	3.6	--	4.8	--	1.4	--	--	--	54	0	18
26...	22	--	4.9	--	4.0	--	1.3	72	--	59	--	11
MAR.												
17...	--	2.7	--	2.3	--	1.0	--	--	--	36	0	12
26...	19	--	4.5	--	2.9	--	1.2	68	--	56	--	10
APR.												
14...	--	3.9	--	4.6	--	.9	--	--	--	53	0	11
22...	21	--	4.4	--	3.0	--	1.2	69	0	57	--	9.9
MAY												
19...	--	4.5	--	6.8	--	1.3	--	--	--	57	0	9.0
19...	--	4.5	--	6.6	--	1.3	--	--	--	55	--	9.0
20...	19	--	4.6	--	3.4	--	1.2	--	--	--	--	--
JUNE												
04...	20	--	4.6	--	2.9	--	1.2	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	4.5	--	7.0	--	1.3	--	--	--	58	--	12
JULY												
16...	23	--	4.7	--	4.3	--	1.3	--	--	--	--	--
21...	--	4.9	--	4.9	--	1.4	--	--	--	51	0	12
AUG.												
05...	--	4.4	--	4.5	--	1.2	--	--	--	61	0	10
05...	--	4.4	--	4.6	--	1.2	--	--	--	62	0	11
13...	--	--	--	--	--	--	--	--	--	--	--	--
SEP.												
10...	23	--	4.8	--	6.6	--	1.5	77	0	63	--	12
15...	--	4.8	--	6.8	--	1.3	--	--	--	63	0	13

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
28...	8.0	<.1	--	.29	.02	.12	--	--	--	.02	--	90
NOV.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
12...	7.0	<.1	--	.32	.04	.11	--	--	--	.02	.02	--
12...	7.0	<.1	--	.33	.04	.12	--	--	--	.02	.01	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
26...	6.7	--	.1	.37	--	--	.24	.61	2.7	.02	--	116
DEC.												
02...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
16...	9.0	<.1	--	.44	.14	.04	--	--	--	.04	--	90
19...	7.6	--	.2	.44	--	--	.33	.77	3.4	.04	--	100
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
20...	--	--	--	--	--	--	--	--	--	--	--	--
29...	6.4	--	.0	.53	--	--	.26	.79	3.5	.05	--	86
FEB.												
04...	6.0	<.1	--	.53	.08	.12	--	--	--	.02	.01	100
04...	6.0	<.1	--	.53	.08	.14	--	--	--	.02	.01	90
26...	4.1	--	.2	.50	--	--	.20	.70	3.1	.03	--	79
MAR.												
17...	4.0	<.1	--	.49	.03	.17	--	--	--	.05	--	60
26...	3.4	--	.1	.45	--	--	.16	.61	2.7	.06	--	82
APR.												
14...	4.0	<.1	--	.48	.04	.07	--	--	--	.03	--	70
22...	3.5	--	.1	.43	--	--	.31	.74	3.3	.02	--	94
MAY												
19...	4.0	<.1	--	.33	.08	.12	--	--	--	.02	<.01	90
19...	4.0	<.1	--	.34	.07	.11	--	--	--	.02	.01	90
20...	--	--	.1	--	--	--	--	--	--	--	--	--
JUNE												
04...	--	--	.3	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
23...	4.0	<.1	--	.32	.07	.12	--	--	--	.02	--	90
JULY												
16...	--	--	.2	--	--	--	--	--	--	--	--	--
21...	6.0	.1	--	.29	.07	.13	--	--	--	.03	--	90
AUG.												
05...	7.0	<.1	--	.28	.05	.17	--	--	--	.02	<.01	90
05...	7.0	<.1	--	.28	.05	.18	--	--	--	.02	<.01	90
13...	--	--	--	--	--	--	--	--	--	--	--	--
SEP.												
10...	7.9	--	.1	.18	--	--	.25	.43	1.9	.03	--	85
15...	8.0	<.1	--	.20	.06	.28	--	--	--	.02	--	100

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)
OCT.												
07...	--	--	--	--	--	--	--	--	--	--	20.0	--
14...	--	--	--	--	--	--	--	--	--	--	20.0	--
21...	--	--	--	--	--	--	--	--	--	--	18.0	--
28...	--	.12	5320	3	68	--	--	--	180	7.8	18.0	5
NOV.												
04...	--	--	--	--	--	--	--	--	--	--	19.0	--
11...	--	--	--	--	--	--	--	--	--	--	16.0	--
12...	--	--	--	--	68	--	--	--	--	--	16.0	10
12...	--	--	--	--	69	--	--	--	--	--	16.0	10
18...	--	--	--	--	--	--	--	--	--	--	15.0	--
25...	--	--	--	--	--	--	--	--	--	--	14.0	--
26...	96	.16	11000	--	73	15	17	.4	175	7.4	10.0	--
DEC.												
02...	--	--	--	--	--	--	--	--	--	--	9.0	--
09...	--	--	--	--	--	--	--	--	--	--	9.0	--
16...	--	.12	10700	3	66	--	--	--	160	7.3	8.0	10
19...	95	.14	12000	--	66	9	19	.4	179	7.3	6.5	--
23...	--	--	--	--	--	--	--	--	--	--	9.0	--
30...	--	--	--	--	--	--	--	--	--	--	9.0	--
JAN.												
20...	--	--	--	--	--	--	--	--	--	--	7.0	--
29...	93	.12	15200	--	73	16	13	.3	160	7.2	7.0	--
FEB.												
04...	--	.14	12400	12	57	--	--	--	160	7.5	9.0	20
04...	--	.12	20700	12	57	--	--	--	160	7.6	9.0	18
26...	89	.11	12800	--	75	16	10	.2	140	7.1	8.0	--
MAR.												
17...	--	.08	11300	13	31	--	--	--	97	7.3	9.0	17
26...	80	.11	19000	--	66	10	9	.2	140	6.9	9.5	--
APR.												
14...	--	.10	7830	10	53	--	--	--	140	7.5	12.0	15
22...	82	.13	8390	--	71	14	8	.2	140	7.7	13.0	--
MAY												
19...	--	.12	8170	8	66	--	--	--	150	7.4	19.5	7
19...	--	.12	8170	9	68	--	--	--	150	7.6	19.5	7
20...	--	--	--	--	66	--	10	.2	155	7.8	18.0	--
JUNE												
04...	--	--	--	--	69	--	8	.2	160	6.7	20.5	--
16...	--	--	--	--	--	--	--	--	--	--	22.0	--
23...	--	.12	3180	<1	68	--	--	--	150	7.5	23.0	20
JULY												
16...	--	--	--	--	77	--	11	.2	165	7.7	23.5	--
21...	--	.12	5860	3	70	--	--	--	160	7.5	24.0	15
AUG.												
05...	--	.12	8550	9	68	--	--	--	--	7.1	25.5	11
05...	--	.12	8550	9	68	--	--	--	--	7.1	25.5	16
13...	--	--	--	--	--	--	--	--	165	6.5	25.5	--
SEP.												
10...	99	.12	9750	--	77	14	15	.3	180	7.7	26.5	--
15...	--	.14	9450	4	67	--	--	--	160	7.6	25.0	15

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
OCT.												
07...	--	7.0	--	--	--	--	--	--	--	--	--	--
14...	--	7.0	--	--	--	--	--	--	--	--	--	--
21...	--	7.6	--	--	--	--	--	--	--	--	--	--
28...	6	8.0	3	--	--	--	--	--	--	--	--	--
NOV.												
04...	--	7.7	--	--	--	--	--	--	--	--	--	--
11...	--	7.6	--	--	--	--	--	--	--	--	--	--
12...	4	7.8	8	<1.0	--	--	--	--	--	--	<10	<10
12...	3	7.8	8	1.2	--	--	--	--	--	--	<10	<10
18...	--	8.1	--	--	--	--	--	--	--	--	--	--
25...	--	8.8	--	--	--	--	--	--	--	--	--	--
26...	6	--	--	--	4.5	1200	--	--	--	--	--	--
DEC.												
02...	--	9.0	--	--	--	--	--	--	--	--	--	--
09...	--	9.2	--	--	--	--	--	--	--	--	--	--
16...	3	9.1	11	--	--	--	--	--	--	--	--	--
19...	3	--	--	--	5.6	1500	--	--	--	--	--	13
23...	--	9.9	--	--	--	--	--	--	--	--	--	--
30...	--	10.0	--	--	--	--	--	--	--	--	--	--
JAN.												
20...	--	10.2	--	--	--	--	--	--	--	--	--	--
29...	10	--	--	--	7.0	780	--	--	--	--	--	B14
FEB.												
04...	21	10.4	4	<1.0	--	--	--	--	--	--	50	20
04...	20	10.5	6	<1.0	--	--	--	--	--	--	30	<10
26...	8	--	--	--	9.2	1000	--	--	--	--	--	82
MAR.												
17...	34	9.9	5	--	--	--	--	--	--	--	--	--
26...	20	--	--	--	14	580	--	--	--	--	--	50
APR.												
14...	15	9.6	6	--	--	--	--	--	--	--	--	--
22...	10	--	--	--	2.2	3100	--	--	--	--	--	--
MAY												
19...	10	6.9	5	<1.0	--	--	--	--	--	--	<10	<10
19...	10	7.0	4	<1.0	--	--	--	--	--	--	<10	<10
20...	--	--	--	--	--	4000	--	--	--	--	--	--
JUNE												
04...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	6.9	--	--	--	--	--	--	--	--	--	--
23...	8	6.0	9	--	--	--	--	--	--	--	--	--
JULY												
16...	--	--	--	--	--	--	--	--	--	--	--	B11
21...	8	6.4	3	--	--	--	--	--	--	--	--	--
AUG.												
05...	<1	4.7	6	1.8	--	--	--	--	--	--	--	--
05...	<1	4.8	6	1.7	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	B3
SEP.												
10...	3	--	--	--	2.5	6900	--	--	--	--	--	--
15...	7	--	4	--	--	--	--	--	--	--	--	--

B--Results based on colony count outside the acceptable range (non-ideal colony count).

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
NOV.										
12...	--	3.0	<5	--	--	<100	<10	--	2	--
12...	--	2.8	<5	--	--	<100	<10	--	1	--
26...	--	--	--	--	--	--	--	--	--	--
DEC.										
19...	--	--	--	--	--	--	--	--	--	--
JAN.										
29...	36	3.1	0	0	0	--	--	--	0	0
FEB.										
04...	--	2.1	<5	--	--	<100	<10	<100	<1	--
04...	--	2.0	<5	--	--	<100	<10	<100	<1	--
26...	B1	--	--	--	--	--	--	--	--	--
MAR.										
26...	B3	--	--	--	--	--	--	--	--	--
APR.										
22...	--	--	--	--	--	--	--	--	--	--
MAY										
19...	--	1.6	<5	--	--	<100	<10	<100	3	--
19...	--	1.6	<5	--	--	<100	<10	<100	3	--
20...	B2	--	--	--	2	--	--	--	--	--
JUNE										
04...	26	--	--	--	--	--	--	--	--	--
JULY										
16...	B2	--	--	--	--	--	--	--	--	--
AUG.										
05...	--	2.1	<5	--	--	<100	<10	<100	7	--
05...	--	2.1	<5	--	--	<100	<10	<100	13	--
13...	B2	--	--	--	0	--	--	--	--	--
SEP.										
10...	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
NOV.										
12...	--	<5	--	--	--	--	--	<10	--	--
12...	--	5	--	--	--	--	--	<10	--	--
26...	--	--	--	--	--	--	--	--	--	--
DEC.										
19...	--	--	--	--	--	--	--	--	--	--
JAN.										
29...	0	<10	<10	0	1	1	0	11	6	5
FEB.										
04...	--	<5	--	--	--	--	--	20	--	--
04...	--	<5	--	--	--	--	--	10	--	--
26...	--	--	--	--	--	--	--	--	--	--
MAR.										
26...	--	--	--	--	--	--	--	--	--	--
APR.										
22...	--	--	--	--	--	--	--	--	--	--
MAY										
19...	--	<5	--	--	--	--	--	10	--	--
19...	--	<5	--	--	--	--	--	<10	--	--
20...	0	--	--	0	--	--	0	--	--	2
JUNE										
04...	--	--	--	--	--	--	--	--	--	--
JULY										
16...	--	--	--	--	--	--	--	--	--	--
AUG.										
05...	--	<5	--	--	--	--	--	30	--	--
05...	--	<5	--	--	--	--	--	20	--	--
13...	0	--	--	0	--	--	0	--	--	4
SEP.										
10...	--	--	--	--	--	--	--	--	--	--

B--Results based on colony count outside the acceptable range (non-ideal colony count).

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)
NOV.									
12...	<10	--	--	--	<.2	--	--	<50	<2
12...	<10	--	--	--	<.2	--	--	<50	<2
26...	--	--	--	--	--	--	--	--	--
DEC.									
19...	--	--	--	--	--	--	--	--	--
JAN.									
29...	26	21	5	--	.0	.0	.0	--	--
FEB.									
04...	15	--	--	<10	<.2	--	--	<50	<2
04...	130	--	--	<10	<.2	--	--	<50	<2
26...	--	--	--	--	--	--	--	--	--
MAR.									
26...	--	--	--	--	--	--	--	--	--
APR.									
22...	--	--	--	--	--	--	--	--	--
MAY									
19...	<10	--	--	<10	<.2	--	--	<50	<2
19...	<10	--	--	<10	<.2	--	--	<50	<2
20...	--	--	3	--	--	--	.1	--	--
JUNE									
04...	--	--	--	--	--	--	--	--	--
JULY									
16...	--	--	--	--	--	--	--	--	--
AUG.									
05...	<10	--	--	<10	<.2	--	--	<50	<2
05...	<10	--	--	<10	.2	--	--	<50	<2
13...	--	--	7	--	--	--	.3	--	--
SEP.									
10...	--	--	--	--	--	--	--	--	--

DATE	SUS-PENDED SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TI-TANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
NOV.									
12...	--	<10	--	10	--	--	--	--	--
12...	--	<10	--	<10	--	--	--	--	--
26...	--	--	--	--	--	--	7	661	100
DEC.									
19...	--	--	--	--	--	--	5	602	100
JAN.									
29...	--	--	--	30	30	0	13	2300	87
FEB.									
04...	--	<10	<1000	50	--	--	--	--	--
04...	--	<10	<1000	40	--	--	--	--	--
26...	--	--	--	--	--	--	12	1940	90
MAR.									
26...	--	--	--	--	--	--	21	4870	97
APR.									
22...	--	--	--	--	--	--	9	804	100
MAY									
19...	--	<10	<1000	<10	--	--	--	--	--
19...	--	<10	<1000	<10	--	--	--	--	--
20...	--	--	--	--	--	5	10	850	98
JUNE									
04...	--	--	--	--	--	--	43	4970	55
JULY									
16...	--	--	--	--	--	--	8	948	100
AUG.									
05...	--	<10	<1000	20	--	--	--	--	--
05...	--	<10	<1000	20	--	--	--	--	--
13...	--	--	--	--	--	20	9	1030	92
SEP.									
10...	--	--	--	--	--	--	4	459	100

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
Nov. 26, 1974	1,200	Melosira	75
		Cyclotella	9
		Lyngbya	8
		Scenedesmus	5
		Ankistrodesmus	2
		Nitzschia	1
		Navicula	1
Dec. 19.....	1,500	Melosira	78
		Asterionella	7
		Cyclotella	6
		Synedra	5
		Stephanodiscus	2
		Nitzschia	1
		Phacus	1
Jan. 29, 1975	780	Cyclotella	36
		Melosira	31
		Achnanthes	13
		Nitzschia	10
		Navicula	8
		Gomphonema	3
Feb. 26.....	1,000	Melosira	71
		Cyclotella	10
		Anacystis	5
		Scenedesmus	4
		Ankistrodesmus	4
		Synedra	3
		Gomphonema	1
		Phacus	1
		Chlamydomonas	1
Mar. 26, 1975	580	Melosira	69
		Cyclotella	16
		Rhoiocosphenia	4
		Chlamydomonas	4
		Pinnularia	2
		Navicula	2
		Ankistrodesmus	2
Apr. 22.....	3,100	Melosira	93
		Nitzschia	3
		Tabellaria	3
		Cyclotella	3
May 20.....	4,000	Cyclotella	95
		Scenedesmus	4
		Synedra	1
Sept. 10....	6,900	Anacystis	51
		Oscillatoria	22
		Melosira	7
		Nitzschia	6
		Aphanizomenon	6
		Synedra	3
		Ankistrodesmus	1
		Actinastrum	1
		Cyclotella	1
		Spirulina	1
		Trachelomonas	1

DIVERSITY INDICES

Phyl/Div	0.899
Class	0.899
Order	1.818
Family	2.138
Genera	2.220

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TENN.
(National stream-quality accounting network station)

LOCATION.--Lat 35°00'41", long 85°41'51", Marion County, at gaging station, 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.--Chemical analyses: Water years 1972-74 (partial-record station), November 1974 to September 1975. Water temperatures: July to September 1975.

REMARKS.--Hourly values of specific conductance and temperature are available in Tennessee District files since record began on July 28, 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
NOV.												
27...	1000	35900	4.7	--	--	--	--	--	20	4.6	7.8	1.6
DEC.												
20...	1230	40000	5.0	--	--	--	--	--	18	4.1	6.9	1.5
JAN.												
30...	1200	92900	5.8	920	20	87	58	29	24	3.8	4.6	1.5
FEB.												
27...	1100	84000	5.3	--	--	--	--	--	16	3.9	3.8	1.2
MAR.												
27...	1130	121000	5.2	--	--	--	--	--	16	3.0	2.0	1.1
APR.												
23...	1200	39000	5.3	--	--	--	--	--	18	3.8	3.1	1.2
MAY												
21...	1200	52000	3.8	460	0	60	50	10	18	3.8	3.7	1.1
JUNE												
05...	1220	30500	3.8	--	--	--	--	--	18	4.2	3.4	1.2
JULY												
21...	1400	45000	4.9	--	--	--	--	--	19	4.5	5.0	1.3
AUG.												
06...	1100	40100	4.8	360	0	50	40	7	19	4.3	5.2	1.4
SEP.												
11...	1100	50500	5.7	--	--	--	--	--	24	4.8	6.3	1.5

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
NOV.												
27...	68	0	56	16	7.9	.2	.37	.04	.41	1.8	.03	106
DEC.												
20...	68	--	56	14	7.5	.2	.44	.18	.62	2.7	.04	88
JAN.												
30...	61	--	50	12	6.2	.0	.50	.23	.73	3.2	.06	66
FEB.												
27...	65	--	53	11	4.2	.1	.44	.23	.67	3.0	.05	91
MAR.												
27...	53	--	43	8.0	3.2	.0	.34	.20	.54	2.4	.06	75
APR.												
23...	67	0	55	9.6	3.5	.1	.45	.23	.68	3.0	.04	79
MAY												
21...	65	0	53	8.8	3.9	.1	.34	.18	.52	2.3	.04	71
JUNE												
05...	66	0	54	10	4.0	.1	.30	.19	.49	2.2	.02	91
JULY												
21...	75	0	62	11	5.4	.0	.30	.21	.51	2.3	.03	103
AUG.												
06...	75	0	62	10	5.8	.2	.28	.25	.53	2.3	.03	97
SEP.												
11...	79	0	65	12	7.1	.2	.28	.18	.46	2.0	.04	93

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL FILTRABLE RESIDUE (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
NOV.												
27...	95	96	.14	10300	4	69	13	19	.4	175	7.2	10.0
DEC.												
20...	--	91	.12	9500	--	62	6	19	.4	160	7.7	7.0
JAN.												
30...	--	88	.09	16600	--	76	26	11	.2	150	7.1	7.5
FEB.												
27...	--	78	.12	20600	--	56	3	13	.2	120	7.4	8.0
MAR.												
27...	68	65	.10	24500	38	52	9	8	.1	110	8.4	10.5
APR.												
23...	--	78	.11	8320	--	61	6	10	.2	140	8.0	13.5
MAY												
21...	--	75	.10	9970	--	61	7	12	.2	120	7.5	20.0
JUNE												
05...	--	77	.12	7490	--	62	8	10	.2	150	7.8	22.0
JULY												
21...	--	88	.14	12500	--	66	4	14	.3	160	7.4	26.5
AUG.												
06...	--	88	.13	10500	--	65	4	14	.3	160	7.5	26.5
SEP.												
11...	--	101	.13	12700	--	80	15	14	.3	190	7.0	25.0

DATE	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
NOV.												
27...	6	6.9	380	--	--	--	--	--	--	--	--	--
DEC.												
20...	4	2.2	190	--	--	25	--	--	--	--	--	--
JAN.												
30...	20	7.8	740	--	--	84	36	1.8	0	0	0	0
FEB.												
27...	10	4.1	620	--	--	123	50	--	--	--	--	--
MAR.												
27...	40	.3	410	--	--	--	34	--	--	--	--	--
APR.												
23...	15	1.1	1700	--	--	--	25	--	--	--	--	--
MAY												
21...	7	3.3	1600	--	--	--	87	3.1	2	1	1	2
JUNE												
05...	4	1.7	2200	1.2	.00	--	87	--	--	--	--	--
JULY												
21...	4	4.8	2100	--	--	87	82	--	--	--	--	--
AUG.												
06...	4	3.8	930	--	--	21	62	4.6	0	0	0	1
SEP.												
11...	4	13	720	--	--	435	10	--	--	--	--	--

DATE	SUSPENDED CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
NOV.											
27...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
20...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
30...	0	0	<10	<9	1	0	0	0	9	6	3
FEB.											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
27...	--	--	--	--	--	--	--	--	--	--	--
APR.											
23...	--	--	--	--	--	--	--	--	--	--	--
MAY											
21...	2	0	<10	<10	0	0	0	0	5	3	2
JUNE											
05...	--	--	--	--	--	--	--	--	--	--	--
JULY											
21...	--	--	--	--	--	--	--	--	--	--	--
AUG.											
06...	0	2	<10	<10	0	0	0	0	5	2	3
SEP.											
11...	--	--	--	--	--	--	--	--	--	--	--

B--Results based on colony count outside the acceptable range (non-ideal colony count).

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV. 27...	--	--	--	--	--	--	--	--	--	--	--	--
DEC. 20...	--	--	--	--	--	--	--	--	--	--	--	--
JAN. 30...	13	11	2	.0	.0	.0	--	--	0	30	30	0
FEB. 27...	--	--	--	--	--	--	--	--	--	--	--	--
MAR. 27...	--	--	--	--	--	--	--	--	--	--	--	--
APR. 23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 21...	41	38	3	.4	.4	.0	--	--	0	10	0	10
JUNE 05...	--	--	--	--	--	--	--	--	--	--	--	--
JULY 21...	--	--	--	--	--	--	--	--	--	--	--	--
AUG. 06...	12	4	8	--	--	.2	0	0	0	30	30	0
SEP. 11...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
NOV. 27...	<1.0	<.4	2.8	.5	2.2	.4	.03	.21	4	388	100
DEC. 20...	--	--	--	--	--	--	--	--	6	648	100
JAN. 30...	--	--	--	--	--	--	--	--	20	5020	97
FEB. 27...	--	--	--	--	--	--	--	--	16	3630	88
MAR. 27...	1.9	3.7	3.4	3.2	2.7	2.6	.01	.02	35	11400	94
APR. 23...	--	--	--	--	--	--	--	--	17	1790	94
MAY 21...	--	--	--	--	--	--	--	--	14	1970	95
JUNE 05...	--	--	--	--	--	--	--	--	13	1360	98
JULY 21...	--	--	--	--	--	--	--	--	8	972	100
AUG. 06...	--	--	--	--	--	--	--	--	9	974	100
SEP. 11...	--	--	--	--	--	--	--	--	6	818	98

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
Nov. 27, 1974	380	Lyngbya	57
		Melosira	20
		Scenedesmus	6
		Chlamydomonas	6
		Cyclotella	6
		Navicula	2
		Nitzschia	1
		Synedra	1
Dec. 20.....	190	Melosira	72
		Navicula	11
		Nitzschia	6
		Cocconeis	6
		Synedra	6
Jan. 30, 1975	740	Melosira	44
		Cyclotella	28
		Nitzschia	6
		Synedra	6
		Scenedesmus	6
		Gomphonema	3
		Stephanodiscus	3
		Euglena	3
		Chlorella	3
Feb. 27.....	620	Melosira	79
		Nitzschia	10
		Gomphonema	3
		Navicula	3
		Achnanthes	3
Mar. 27.....	410	Melosira	62
		Tabellaria	13
		Navicula	7
		Actinastrum	7
		Eunotia	3
		Cyclotella	3
		Cymbella	2
		Rhoiocosphenia	2
		Achnanthes	2
Apr. 23, 1975	1,700	Melosira	71
		Asterionella	24
		Cyclotella	4
		Nitzschia	2
May 21.....	1,600	Cyclotella	36
		Melosira	31
		Scenedesmus	28
		Ankistrodesmus	6
June 5.....	2,200	Melosira	50
		Cyclotella	43
		Navicula	5
		Nitzschia	3
July 21.....	2,100	Scenedesmus	29
		Cyclotella	29
		Melosira	29
		Ankistrodesmus	5
		Acanthosphaera	2
		Tetraedron	2
		Chlamydomonas	2
		Agmenellum	2

DIVERSITY INDICES

Phyl/Div	1.118
Class	1.118
Order	1.249
Family	1.635
Genera	2.272

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
Aug. 6, 1975	930	Oscillatoria	62
		Scenedesmus	10
		Melosira	10
		Nitzschia	8
		Cyclotella	5
		Golenkinia	3
		Cocconeis	3

DIVERSITY INDICES

Phyl/Div	1.314
Class	1.314
Order	1.563
Family	1.739
Genera	1.880

Sept. 11.....	720	Oscillatoria	82
		Cyclotella	7
		Scenedesmus	4
		Achnanthes	4
		Nitzschia	2

DIVERSITY INDICES

Phyl/Div	0.819
Class	0.819
Order	0.953
Family	1.014
Genera	1.014

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	167	165	166	182	180	180
2	---	---	---	---	---	---	168	165	167	180	178	179
3	---	---	---	---	---	---	170	165	167	181	179	180
4	---	---	---	---	---	---	169	164	166	183	181	182
5	---	---	---	---	---	---	169	165	167	184	181	182
6	---	---	---	---	---	---	169	165	167	193	182	185
7	---	---	---	---	---	---	169	167	168	190	180	184
8	---	---	---	---	---	---	171	168	169	187	183	184
9	---	---	---	---	---	---	172	168	170	189	184	185
10	---	---	---	---	---	---	171	168	169	188	184	186
11	---	---	---	---	---	---	171	168	169	185	183	185
12	---	---	---	---	---	---	172	169	170	188	181	187
13	---	---	---	---	---	---	174	171	172	185	180	182
14	---	---	---	---	---	---	175	172	173	186	181	183
15	---	---	---	---	---	---	176	170	173	188	180	182
16	---	---	---	---	---	---	173	171	172	188	182	184
17	---	---	---	---	---	---	175	171	173	188	178	182
18	---	---	---	---	---	---	174	171	173	182	178	179
19	---	---	---	---	---	---	174	172	173	184	178	180
20	---	---	---	---	---	---	175	173	174	187	182	184
21	---	---	---	---	---	---	178	174	175	188	185	186
22	---	---	---	---	---	---	177	173	174	187	178	182
23	---	---	---	---	---	---	177	173	174	180	173	178
24	---	---	---	---	---	---	178	173	174	174	143	157
25	---	---	---	---	---	---	174	172	173	152	144	149
26	---	---	---	---	---	---	176	173	175	153	151	152
27	---	---	---	---	---	---	178	176	176	153	150	152
28	---	---	---	162	161	162	179	176	177	154	151	152
29	---	---	---	163	159	161	179	176	177	154	151	153
30	---	---	---	163	159	160	180	177	179	155	152	153
31	---	---	---	165	161	163	182	179	180	---	---	---
MONTH	---	---	---	---	---	---	182	164	172	193	143	176

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	29.0	28.0	28.5	30.5	29.0	29.5
2	---	---	---	---	---	---	29.0	28.0	28.5	30.5	29.0	30.0
3	---	---	---	---	---	---	29.0	28.0	28.5	30.5	29.0	29.5
4	---	---	---	---	---	---	29.0	28.5	29.0	30.5	29.0	29.5
5	---	---	---	---	---	---	29.0	28.5	29.0	30.5	29.0	29.5
6	---	---	---	---	---	---	29.0	28.5	28.5	29.5	29.0	29.5
7	---	---	---	---	---	---	29.0	28.0	28.5	29.5	29.0	29.0
8	---	---	---	---	---	---	29.0	28.0	28.5	29.5	29.0	29.0
9	---	---	---	---	---	---	29.0	28.0	28.5	30.0	29.0	29.0
10	---	---	---	---	---	---	28.5	28.0	28.0	29.5	28.5	29.0
11	---	---	---	---	---	---	29.0	27.5	28.0	29.0	28.5	28.5
12	---	---	---	---	---	---	29.0	27.5	28.5	28.5	28.0	28.5
13	---	---	---	---	---	---	29.0	28.5	28.5	28.5	27.0	27.5
14	---	---	---	---	---	---	29.0	28.5	29.0	27.0	26.5	27.0
15	---	---	---	---	---	---	29.0	28.5	29.0	27.0	26.5	26.5
16	---	---	---	---	---	---	29.5	28.5	29.0	27.0	26.0	26.5
17	---	---	---	---	---	---	30.0	29.0	29.0	26.5	25.5	26.0
18	---	---	---	---	---	---	29.5	29.0	29.0	26.0	25.5	25.5
19	---	---	---	---	---	---	30.0	29.0	29.5	26.0	25.0	25.5
20	---	---	---	---	---	---	30.0	29.0	29.5	25.5	25.0	25.5
21	---	---	---	---	---	---	30.5	29.0	29.5	25.5	25.0	25.0
22	---	---	---	---	---	---	30.0	29.0	29.5	25.0	24.5	25.0
23	---	---	---	---	---	---	30.5	29.0	29.5	24.5	22.5	24.0
24	---	---	---	---	---	---	30.5	29.0	29.5	22.5	20.5	22.0
25	---	---	---	---	---	---	30.5	29.5	30.0	21.0	20.5	20.5
26	---	---	---	---	---	---	31.0	29.5	30.0	21.5	21.0	21.0
27	---	---	---	---	---	---	31.0	29.5	30.0	21.5	20.0	21.0
28	---	---	---	29.0	29.0	29.0	31.0	29.5	30.0	21.5	20.0	21.0
29	---	---	---	29.0	28.5	29.0	30.5	29.5	30.0	21.5	20.5	21.0
30	---	---	---	29.0	28.5	29.0	31.0	29.5	30.0	21.5	20.5	21.0
31	---	---	---	29.0	28.0	28.5	30.5	29.5	30.0	---	---	---
MONTH	---	---	---	---	---	---	31.0	27.5	29.0	30.5	20.0	26.0

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 28.0°C June 18; minimum, 6.5°C several days in January.

Period of record:
Water temperatures: Maximum, 34.0°C Sept. 8, 1973; minimum, 5.5°C Feb. 9, 1972.

REMARKS.--Missing record March 6 through April 7. Miscellaneous chemical analyses published for water year 1974. Records furnished by Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)
OCT.												
15...	1227	1.0	76	--	<50	<50	30	20	24	4.3	1.1	.8
15...	1228	1.0	76	--	<50	<50	40	30	23	4.2	1.2	.9
22...	1430	2.0	64	--	<50	<50	50	<10	23	3.6	1.1	.8
29...	1135	1.0	141	--	<50	<50	<10	30	23	4.0	1.1	.8
29...	1136	1.0	141	--	<50	<50	<10	30	23	4.0	1.1	.8
DEC.												
03...	1200	1.0	838	--	280	<50	30	10	24	4.1	1.2	.9
JAN.												
14...	1330	2.0	1135	--	930	280	10	10	21	3.2	1.0	.6
FEB.												
11...	1000	1.0	450	--	190	80	30	20	16	2.3	2.1	1.0
11...	1200	1.0	450	--	110	110	30	20	15	2.2	2.2	1.1
MAR.												
04...	1535	1.0	309	--	--	--	--	--	--	--	--	--
11...	1325	3.0	300	3.9	190	<50	30	20	15	3.0	1.4	.7
21...	1925	1.0	1050	--	--	--	--	--	--	--	--	--
APR.												
04...	1330	1.0	838	--	--	--	--	--	--	--	--	--
07...	1030	2.0	450	3.4	180	<50	30	10	16	2.2	.3	.7
16...	1005	1.0	237	--	--	--	--	--	--	--	--	--
MAY												
01...	1310	1.0	455	--	--	--	--	--	--	--	--	--
13...	1400	2.0	570	4.4	210	<50	50	30	17	2.7	1.3	.7
16...	1700	1.0	1320	--	--	--	--	--	--	--	--	--
29...	1556	1.0	435	--	--	--	--	--	--	--	--	--
JUNE												
10...	1142	1.0	156	--	--	--	--	--	--	--	--	--
17...	1330	1.0	270	3.3	230	<50	50	20	22	3.0	4.1	.8
26...	0850	1.0	116	--	--	--	--	--	--	--	--	--
JULY												
08...	1400	2.0	114	6.3	1300	520	720	660	24	3.4	1.6	1.0
25...	1025	1.0	67	--	--	--	--	--	--	--	--	--
AUG.												
05...	1500	2.0	240	7.0	1400	710	1300	960	26	3.5	1.1	1.2
08...	1030	1.0	45	--	--	--	--	--	--	--	--	--
22...	1020	1.0	66	--	--	--	--	--	--	--	--	--
SEP.												
19...	1320	1.0	69	--	--	--	--	--	--	--	--	--
23...	1030	2.0	550	7.0	1400	360	3700	2400	27	3.5	1.4	1.1

03579100 ELK RIVER NEAR ESTILL SPRINGS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
OCT.												
15...	60	0	8.0	4.0	.0	.09	.03	.17	.01	.01	80	.11
15...	61	0	6.0	4.0	.0	.10	.04	.24	.01	.01	80	.11
22...	60	0	5.0	3.0	.0	.08	.03	.19	<.01	.03	90	.12
29...	70	0	7.0	3.0	.0	.07	.04	.10	.01	.01	80	.11
29...	67	0	7.0	3.0	.0	.07	.03	.11	.01	.01	80	.11
DEC.												
03...	69	0	8.0	3.0	.0	.11	.05	.14	.01	<.01	90	.12
JAN.												
14...	52	0	6.0	3.0	--	.49	.11	.77	.05	.03	90	.12
FEB.												
11...	82	0	8.0	4.0	<.1	.72	.05	.09	.02	.01	90	.12
11...	81	0	8.0	4.0	<.1	.69	.05	.07	.02	.01	100	.14
MAR.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
11...	71	0	6.0	4.0	<.1	.66	.01	.11	.01	<.01	90	.12
21...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
07...	6	0	11	3.0	<.1	.51	.04	.30	.05	.02	110	.15
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
01...	--	--	--	--	--	--	--	--	--	--	--	--
13...	50	0	6.0	3.0	<.1	.51	.12	.19	.02	.01	80	.11
16...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
10...	--	--	--	--	--	--	--	--	--	--	--	--
17...	95	--	6.0	3.0	<.1	.31	.16	.12	.01	<.01	130	.18
26...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
08...	67	0	4.0	3.0	<.1	.28	.22	.36	.04	.17	90	.12
25...	--	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	71	0	5.0	3.0	<.1	.11	.32	.23	.03	--	90	.12
08...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
SEP.												
19...	--	--	--	--	--	--	--	--	--	--	--	--
23...	85	0	3.0	2.0	<.1	.16	.57	.11	.02	<.01	100	.14

03579100 ELK RIVER NEAR ESTILL SPRINGS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
15...	16.4	2	78	160	7.1	18.6	5	0	8.0	7	1.8
15...	16.4	2	75	160	7.5	18.6	5	0	8.2	11	2.0
22...	15.6	1	72	150	7.8	14.5	<5	1	7.8	1	--
29...	30.5	<1	74	160	7.6	16.5	5	1	8.8	4	1.0
29...	30.5	2	74	160	7.6	16.5	5	1	8.8	3	.8
DEC.											
03...	203	3	77	170	7.2	11.0	5	5	12.2	10	1.0
JAN.											
14...	276	11	66	140	6.5	8.2	20	17	12.3	21	--
FEB.											
11...	109	5	49	150	8.1	8.3	12	10	7.7	6	--
11...	121	5	47	140	8.2	8.3	15	10	7.5	9	--
MAR.											
04...	--	--	--	--	--	10.0	--	--	15.5	--	--
11...	72.9	4	50	150	7.4	11.0	8	7	12.8	12	--
21...	--	--	--	--	--	10.6	--	--	11.7	--	--
APR.											
04...	--	--	--	--	--	10.6	--	--	11.2	--	--
07...	134	5	49	120	7.8	13.3	30	16	7.3	7	--
16...	--	--	--	--	--	12.8	--	--	12.1	--	--
MAY											
01...	--	--	--	--	--	18.0	--	--	11.3	--	--
13...	123	4	54	130	7.2	19.4	6	5	10.2	12	--
16...	--	--	--	--	--	20.0	--	--	9.0	--	--
29...	--	--	--	--	--	22.0	--	--	8.8	--	--
JUNE											
10...	--	--	--	--	--	21.9	--	--	7.8	--	--
17...	94.8	2	67	140	7.5	25.0	11	1	8.0	18	--
26...	--	--	--	--	--	17.8	--	--	7.5	--	--
JULY											
08...	27.7	4	74	150	7.4	19.4	23	4	8.0	7	--
25...	--	--	--	--	--	18.3	--	--	6.2	--	--
AUG.											
05...	58.3	7	79	150	7.3	20.6	24	3	8.0	--	--
08...	--	--	--	--	--	17.5	--	--	7.0	--	--
22...	--	--	--	--	--	20.6	--	--	7.2	--	--
SEP.											
19...	--	--	--	--	--	20.5	--	--	7.1	--	--
23...	148	22	82	150	7.4	17.6	19	11	8.0	8	--

03579100 ELK RIVER NEAR ESTILL SPRINGS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	17.0	19.5	18.0	13.0	12.0	9.5	8.0	8.5	8.0	9.0	9.0
2	20.0	17.0	19.5	18.0	12.0	11.5	9.5	8.5	9.0	8.5	9.5	9.0
3	19.5	16.0	20.0	18.5	11.5	11.0	9.0	8.5	9.5	9.0	9.5	8.5
4	19.5	18.0	19.5	17.0	11.0	11.0	9.0	8.5	9.0	9.0	9.5	8.5
5	20.0	17.0	18.5	17.0	11.0	10.5	9.0	8.5	9.0	9.0	9.5	8.0
6	19.5	17.0	18.0	16.5	10.5	10.0	8.5	8.0	9.0	8.5	---	---
7	20.0	18.0	18.0	17.0	10.0	9.5	8.5	8.0	8.5	8.0	---	---
8	19.5	18.0	17.0	16.5	9.5	9.5	8.5	8.5	8.5	8.0	---	---
9	19.5	16.5	17.0	15.5	9.5	9.0	9.0	8.5	8.5	8.0	---	---
10	19.5	17.0	17.0	16.0	9.5	9.0	9.0	8.5	8.0	7.0	---	---
11	20.0	17.0	16.5	16.0	9.0	8.5	9.0	9.0	8.0	7.0	---	---
12	19.5	18.5	16.0	15.5	9.0	8.5	9.0	9.0	8.0	7.0	---	---
13	19.5	18.0	16.0	15.0	9.0	9.0	9.0	8.0	8.5	7.0	---	---
14	19.5	18.5	15.5	15.0	9.0	8.5	9.0	7.0	8.5	7.0	---	---
15	19.5	18.5	15.5	14.5	8.5	8.5	8.5	7.0	8.0	7.0	---	---
16	19.5	18.5	15.0	14.0	9.0	8.5	8.0	7.0	8.5	8.0	---	---
17	19.5	18.0	15.0	14.5	8.5	8.0	8.0	7.0	8.5	7.0	---	---
18	19.0	16.5	14.5	14.5	8.0	7.0	7.0	7.0	8.5	8.0	---	---
19	18.5	16.5	14.5	13.5	8.0	8.0	8.0	7.0	9.0	8.5	---	---
20	18.0	15.5	14.5	13.5	8.0	8.0	8.0	7.0	9.0	8.5	---	---
21	17.0	14.5	14.5	14.0	8.0	8.0	7.0	6.5	9.0	8.0	---	---
22	17.0	14.5	14.5	13.5	8.0	7.0	7.0	6.5	9.0	8.5	---	---
23	17.0	15.0	14.0	13.5	9.0	7.0	7.0	6.5	9.0	9.0	---	---
24	18.0	15.5	14.0	13.5	10.5	8.0	7.0	6.5	9.5	9.0	---	---
25	18.5	15.5	14.0	13.5	8.0	8.0	6.5	6.5	9.5	8.5	---	---
26	19.0	16.0	13.5	13.0	8.0	8.0	7.0	6.5	9.0	9.0	---	---
27	18.5	17.0	13.0	12.0	8.0	8.0	7.0	6.5	9.5	9.0	---	---
28	19.0	16.5	13.0	12.0	8.5	8.0	7.0	6.5	9.5	9.0	---	---
29	19.0	17.0	13.0	11.5	8.5	8.5	8.0	7.0	---	---	---	---
30	19.5	18.0	12.0	12.0	9.0	8.0	8.5	8.0	---	---	---	---
31	19.5	17.0	---	---	8.5	8.0	8.5	8.0	---	---	---	---
MONTH	20.5	14.5	20.0	11.5	13.0	7.0	9.5	6.5	9.5	7.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	16.0	15.0	23.0	21.0	21.5	19.0	21.0	19.5	21.5	18.5
2	---	---	16.5	15.0	23.5	20.5	20.5	19.0	21.5	19.5	23.5	19.5
3	---	---	15.5	15.0	24.5	21.5	21.5	19.0	23.5	20.0	23.5	20.0
4	---	---	16.0	15.0	25.0	21.5	21.0	19.0	21.5	20.0	23.5	20.0
5	---	---	16.5	14.5	25.0	23.0	21.5	19.0	20.5	19.0	23.5	21.0
6	---	---	16.0	14.5	25.0	23.0	20.5	18.5	21.5	19.0	22.0	20.5
7	---	---	18.0	15.5	25.0	23.0	20.0	18.5	21.5	20.0	21.0	20.0
8	13.5	12.0	19.0	17.0	25.5	23.0	20.5	18.5	21.5	19.5	23.0	20.0
9	13.0	12.0	18.5	18.0	25.0	23.0	20.5	18.5	21.5	19.5	23.5	20.5
10	14.0	12.0	19.0	16.0	24.0	23.5	20.0	18.5	20.5	20.0	22.0	20.5
11	14.0	12.0	18.5	16.0	24.5	22.0	20.0	18.0	23.0	19.5	21.5	20.5
12	14.5	12.0	19.0	16.0	25.0	23.5	21.0	19.0	22.0	19.5	21.0	19.5
13	14.5	12.0	18.5	15.5	25.5	23.5	21.5	19.0	23.5	20.0	23.5	18.5
14	13.0	12.0	18.5	16.5	25.5	23.0	20.5	19.0	23.0	20.0	20.0	18.0
15	13.5	12.0	20.5	17.0	24.5	23.5	21.5	19.0	21.5	20.0	20.5	18.5
16	15.0	12.0	20.0	17.0	25.5	23.0	21.0	19.0	21.0	19.5	20.5	19.0
17	14.5	13.0	18.0	17.0	25.5	23.5	21.5	19.0	20.5	19.5	20.0	19.0
18	14.5	13.0	18.5	17.0	28.0	24.0	21.5	19.0	21.0	19.0	20.0	19.5
19	14.5	13.5	19.0	18.0	26.5	23.5	20.5	19.5	21.0	19.0	21.0	18.5
20	15.0	14.0	20.5	18.0	26.0	20.5	20.5	19.0	21.0	18.5	20.5	19.0
21	15.5	14.0	19.5	18.0	24.0	20.5	21.0	19.0	21.0	18.5	20.5	18.5
22	15.5	14.0	19.5	18.5	26.5	24.0	21.5	19.5	21.0	18.5	20.0	18.5
23	15.0	14.0	22.0	18.5	26.5	23.5	22.0	19.5	21.5	19.0	22.0	19.5
24	14.5	14.0	23.0	20.0	26.0	23.0	21.0	19.5	21.0	18.5	22.0	21.0
25	15.5	14.5	23.5	21.0	26.0	18.5	20.5	19.0	21.5	19.0	21.0	19.0
26	15.5	14.0	24.0	20.0	20.0	18.0	22.0	19.5	20.5	18.5	19.0	18.0
27	15.5	14.0	21.5	19.5	21.0	18.5	21.5	19.5	21.5	19.0	18.0	17.0
28	16.5	14.5	20.5	19.5	20.5	18.5	21.5	19.5	21.0	18.5	18.5	18.0
29	15.5	14.5	21.5	20.0	21.0	18.5	21.5	19.5	20.5	18.5	19.0	18.0
30	15.5	14.5	21.0	20.0	21.0	18.5	22.0	19.5	21.0	19.0	19.5	18.0
31	---	---	21.5	20.0	---	---	21.0	19.5	21.0	18.5	---	---
MONTH	---	---	24.0	14.5	28.0	18.0	22.0	18.0	23.5	18.5	23.5	17.0

03580110 BOILING FORK CREEK NEAR DECHERD, TENN.

LOCATION.--Lat 35°09'44", long 86°03'37", Franklin County, temperature recorder on left bank at county road bridge, 0.4 miles (0.6 km) north of Goshen Church, 2.5 miles (4.0 km) southeast of Winchester, 2.2 miles (3.5 km) west of Cowan, and at mile 10.0 (16.1 km).

DRAINAGE AREA.--37.7 sq mi (97.6 sq km).

PERIOD OF RECORD.--Water temperatures: October 1974 to September 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 23.5°C July 24; minimum, 8.0°C Nov. 15, Dec. 10.

REMARKS.--Missing record Jan. 31 to Feb. 4, range in temperature 12.0°C to 15.0°C; Sept. 7-30, range in temperature 14.5°C to 19.0°C. Water temperatures, February 1973 to September 1974 published in reports of Tennessee Valley Authority. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	12.0	14.5	13.0	9.5	9.5	14.5	13.0	---	---	13.0	10.0
2	13.5	11.5	14.0	12.0	10.0	9.5	13.0	10.5	---	---	11.0	10.0
3	13.0	10.5	13.5	11.5	10.5	9.5	13.0	11.5	---	---	11.5	9.5
4	13.0	10.5	13.0	10.5	10.0	8.5	12.0	11.0	---	---	13.0	9.5
5	14.0	11.5	13.0	10.5	10.5	8.5	12.0	10.0	13.0	11.5	13.5	10.0
6	14.0	11.5	13.5	11.5	10.5	9.5	13.0	11.0	13.0	11.0	14.0	11.0
7	14.0	11.5	12.0	10.5	10.5	9.5	13.0	10.5	11.0	10.0	14.5	13.0
8	14.0	12.0	13.0	11.0	10.5	9.5	13.5	13.0	12.0	9.5	13.0	11.0
9	14.0	11.5	13.0	10.0	10.0	9.0	14.0	11.0	12.0	10.5	12.0	10.0
10	14.5	11.5	13.0	11.0	10.0	8.0	15.0	13.0	12.0	9.5	11.5	10.5
11	14.5	12.0	13.0	12.0	11.0	9.5	13.0	11.0	13.5	12.0	12.0	11.0
12	15.0	13.0	12.0	10.0	11.5	10.5	13.0	10.5	13.5	11.5	14.5	12.0
13	15.0	13.0	11.0	9.0	11.5	10.5	11.0	9.5	12.0	10.0	13.0	10.5
14	15.5	13.5	11.0	9.0	11.5	9.5	11.0	8.5	13.0	10.0	11.0	10.5
15	15.0	14.0	10.0	8.0	12.0	11.5	12.0	10.0	14.0	11.0	13.0	10.5
16	14.0	11.0	11.0	8.5	12.0	10.0	12.0	10.5	14.0	12.0	13.5	12.0
17	14.0	11.0	12.0	10.5	11.0	10.0	12.0	9.5	14.5	12.0	14.0	13.0
18	14.5	11.5	13.0	12.0	11.0	9.0	13.0	11.5	13.5	12.0	14.0	13.0
19	13.5	11.5	14.0	13.0	13.0	11.0	13.5	12.0	13.5	11.5	13.5	12.0
20	13.5	10.5	14.0	11.5	13.0	11.5	12.0	10.0	13.0	10.5	15.0	11.0
21	13.0	10.0	12.0	11.0	12.0	11.0	12.0	10.0	14.0	10.5	15.0	12.0
22	13.0	10.5	12.0	9.5	13.0	10.0	13.0	11.0	14.0	12.0	15.5	14.0
23	13.0	10.0	13.0	10.5	13.5	11.5	13.5	11.0	15.5	13.0	15.5	13.5
24	13.5	11.5	13.5	11.5	14.0	12.0	13.5	12.0	13.0	11.0	15.5	13.0
25	14.0	11.0	13.0	10.5	13.5	10.5	13.5	10.5	13.5	10.5	14.0	11.5
26	14.5	11.5	11.5	9.5	11.0	10.0	13.0	11.0	13.0	10.5	14.5	10.5
27	14.5	12.0	12.0	10.0	11.5	10.0	13.5	11.0	14.0	11.5	14.5	12.0
28	14.5	12.0	11.5	9.5	13.0	11.5	15.0	13.5	14.0	11.5	16.0	13.5
29	14.5	13.5	11.5	9.5	13.5	11.5	15.0	14.5	---	---	15.5	10.0
30	15.5	13.5	11.5	8.5	14.0	13.5	14.5	13.5	---	---	12.0	10.0
31	15.5	14.0	---	---	15.0	14.0	---	---	---	---	13.5	11.0
MONTH	15.5	10.0	14.5	8.0	15.0	8.0	15.0	8.5	15.5	9.5	16.0	9.5

03580110 BOILING FORK CREEK NEAR DECHERD, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	11.0	16.5	15.0	16.0	15.0	18.5	17.0	19.5	19.0	20.0	18.0
2	15.5	12.0	16.5	14.5	16.5	14.0	18.5	18.0	20.0	19.0	20.5	18.5
3	14.5	12.0	15.5	15.0	16.0	14.0	19.0	18.0	20.0	19.0	20.0	18.0
4	14.5	11.0	16.0	14.5	19.5	14.0	19.5	18.0	19.5	19.0	20.5	18.5
5	14.5	11.0	15.5	13.5	19.0	17.0	19.5	18.0	19.5	19.0	20.5	18.5
6	14.5	11.5	15.5	14.5	19.0	17.0	19.0	18.0	19.5	18.5	19.5	19.0
7	15.0	11.0	16.0	14.5	19.0	17.0	19.0	18.0	19.5	18.0	---	---
8	14.5	13.5	16.0	14.5	19.0	16.5	19.5	18.0	19.0	18.0	---	---
9	15.0	13.5	16.5	14.0	19.0	16.5	19.5	18.0	19.0	18.0	---	---
10	15.5	14.0	16.0	13.5	19.0	18.0	19.5	18.5	19.0	18.5	---	---
11	15.0	13.5	16.0	14.0	20.0	18.0	19.0	18.0	19.0	18.0	---	---
12	15.0	12.0	16.5	14.5	20.0	18.0	18.5	16.5	19.5	18.0	---	---
13	15.5	11.5	16.5	14.5	19.0	16.0	19.0	17.0	19.5	18.0	---	---
14	14.5	14.0	16.5	14.0	19.5	16.5	19.0	18.0	19.5	18.5	---	---
15	14.5	13.5	18.0	15.5	19.5	18.0	19.5	18.0	20.0	18.5	---	---
16	15.5	12.0	16.0	14.0	19.0	16.5	19.0	18.5	20.0	18.0	---	---
17	16.5	13.5	15.5	14.0	19.5	17.0	19.5	18.5	19.5	18.5	---	---
18	17.0	15.0	15.5	14.0	19.5	17.0	19.5	18.5	21.5	19.5	---	---
19	16.0	14.0	15.5	13.5	19.5	18.0	19.5	18.5	20.5	19.0	---	---
20	15.5	12.0	16.0	14.5	20.0	18.0	19.0	18.0	20.0	18.5	---	---
21	15.5	11.5	16.0	14.5	19.5	18.0	20.0	18.5	20.0	18.5	---	---
22	16.0	12.0	16.5	14.5	19.5	18.5	20.0	18.5	20.5	19.0	---	---
23	15.5	14.5	16.5	15.0	19.5	17.0	20.0	19.0	20.5	19.0	---	---
24	16.5	15.0	16.5	14.5	18.5	16.0	23.5	19.0	21.0	19.0	---	---
25	18.0	15.0	17.0	14.5	18.5	16.5	20.0	18.5	21.0	19.0	---	---
26	17.0	15.0	19.0	15.0	18.5	16.5	20.0	18.5	20.5	19.0	---	---
27	17.0	15.0	18.0	14.5	19.0	17.0	20.0	18.0	20.5	19.0	---	---
28	18.0	15.5	16.5	14.0	19.0	17.0	20.0	18.5	21.0	19.5	---	---
29	16.5	15.5	16.0	15.0	19.0	16.5	20.0	19.0	20.5	19.5	---	---
30	16.5	15.0	16.5	15.0	19.0	17.0	20.0	19.0	20.0	19.0	---	---
31	---	---	16.0	15.5	---	---	20.0	19.5	20.0	19.0	---	---
MONTH	18.0	11.0	19.0	13.5	20.0	14.0	23.5	16.5	21.5	18.0	---	---

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 20.0°C July 10, but may have been higher during period of missing record; minimum, 7.0°C Feb. 10.

Period of record:
Water temperatures: Maximum, 25.0°C June 24, 25, 1971, July 23, 1972; minimum, 3.5°C Feb. 19, 1972.

REMARKS.--Range in temperature during period of missing record May 10-13, 9.5°C to 15.5°C. Miscellaneous chemical analyses published for the water year 1973. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	12.0	17.0	13.5	14.0	11.0	10.5	10.0	10.5	9.0	9.5	8.5
2	16.5	11.5	17.0	13.5	13.5	11.0	10.5	10.0	10.0	9.0	10.0	8.5
3	17.0	11.0	17.0	13.5	13.5	12.0	10.0	10.0	10.0	9.0	9.5	8.0
4	16.5	11.5	16.0	13.5	13.5	13.0	10.5	10.0	10.0	9.0	11.0	8.0
5	17.0	11.5	16.0	14.0	13.0	12.0	10.5	10.0	10.0	9.0	11.0	8.5
6	17.0	12.0	15.0	13.5	13.0	11.0	10.0	9.5	10.0	9.0	12.0	9.0
7	16.5	11.5	15.5	13.0	12.0	11.5	10.0	9.5	9.5	8.5	11.5	9.0
8	17.0	11.5	15.0	13.5	11.5	11.0	10.0	9.5	9.5	8.0	11.0	8.5
9	17.0	12.0	15.5	13.0	12.0	10.5	10.5	9.5	9.5	8.0	10.5	8.0
10	17.0	12.0	15.0	13.5	12.0	10.0	11.5	9.5	9.5	7.0	10.0	9.0
11	17.0	12.0	15.5	13.5	11.5	10.5	11.5	9.5	10.5	8.5	10.5	9.0
12	16.5	12.0	16.0	13.5	11.5	11.0	10.5	8.5	10.5	9.0	13.0	9.5
13	16.5	13.0	15.5	13.0	11.0	10.5	10.0	10.0	9.5	8.5	12.0	10.0
14	16.5	13.0	16.5	13.0	11.0	10.5	10.0	9.5	9.5	8.5	10.5	9.5
15	15.5	12.0	16.0	13.0	11.0	10.0	10.0	9.5	10.0	8.5	10.0	9.0
16	15.5	13.0	16.0	13.0	11.0	10.0	9.5	9.0	11.5	9.5	9.5	9.0
17	17.0	12.0	16.0	13.5	11.0	9.5	9.5	9.0	13.0	8.5	9.0	9.0
18	17.0	12.0	15.5	14.0	11.0	10.5	9.0	9.0	11.0	9.0	9.5	9.0
19	16.5	12.0	16.0	14.0	11.0	10.5	9.5	9.0	10.5	9.5	10.0	9.5
20	16.5	11.5	16.0	14.5	11.0	10.5	9.5	9.0	9.5	9.0	10.0	9.0
21	16.0	12.0	16.0	13.5	11.0	10.5	9.5	9.0	9.5	9.0	10.0	8.0
22	16.0	14.0	16.0	13.5	12.0	10.0	9.5	9.0	9.5	9.0	9.0	8.5
23	15.5	13.5	16.0	13.5	11.0	10.0	9.5	9.0	10.5	8.5	10.5	8.5
24	15.5	13.5	16.0	14.0	11.0	10.0	9.5	9.0	10.0	8.5	14.5	8.5
25	15.5	13.5	16.0	13.5	13.0	10.0	10.0	9.0	10.0	8.5	9.5	8.5
26	17.0	13.5	16.0	13.5	10.5	9.0	10.0	9.0	10.0	8.5	10.0	9.0
27	16.5	13.5	16.0	13.5	10.0	10.0	10.0	8.5	10.0	9.5	10.5	8.5
28	16.5	13.5	14.5	11.5	10.0	10.0	10.5	8.5	10.5	9.0	10.5	8.5
29	16.0	13.5	14.5	11.5	10.0	9.5	11.0	8.5	---	---	15.0	10.5
30	17.0	13.5	14.0	13.0	10.0	9.5	10.0	9.0	---	---	10.5	9.5
31	16.0	13.5	---	---	10.0	9.5	10.5	9.0	---	---	10.0	9.5
MONTH	17.0	11.0	17.0	11.5	14.0	9.0	11.5	8.5	13.0	7.0	15.0	8.0

03580750 ELK RIVER BELOW TIMS FORD DAM, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.5	15.5	11.0	16.0	11.5	15.5	10.5	14.5	10.0	---	10.0
2	10.5	9.5	14.5	11.0	15.5	11.5	15.5	10.5	---	---	15.5	10.0
3	11.0	10.0	14.0	10.5	16.0	10.5	16.5	10.5	---	---	14.5	10.0
4	10.5	10.0	15.5	11.5	16.0	10.5	15.5	10.5	---	---	15.0	10.0
5	11.0	10.5	14.5	11.0	15.5	10.5	15.5	10.5	14.5	10.0	14.5	10.0
6	11.0	10.5	11.5	10.5	15.5	10.5	15.0	11.0	16.5	10.0	13.0	10.0
7	11.0	10.5	16.0	9.5	15.5	11.5	16.5	10.5	15.0	10.5	13.0	10.0
8	11.0	10.5	15.5	9.5	---	---	16.5	10.5	13.5	10.0	14.5	10.0
9	11.5	11.0	14.5	9.5	---	---	16.0	10.5	---	---	15.0	10.0
10	11.5	10.5	---	---	14.5	10.5	20.0	10.5	14.0	11.0	13.0	10.0
11	11.5	11.0	---	---	13.5	10.5	16.0	10.5	14.0	11.0	13.5	10.0
12	12.0	11.0	---	---	16.5	10.5	15.0	10.5	16.0	10.5	13.0	10.5
13	15.5	11.5	---	---	16.5	10.5	15.5	10.5	15.5	10.5	13.5	10.5
14	13.0	11.0	14.5	10.0	18.0	12.0	15.0	10.5	15.5	10.5	13.5	10.0
15	13.0	10.0	13.5	10.0	17.0	11.5	15.0	10.0	---	---	14.5	10.5
16	12.0	10.0	12.0	10.0	17.0	13.5	15.0	10.5	---	---	13.0	11.0
17	12.0	10.0	12.0	10.0	18.0	10.5	16.0	10.5	---	---	11.5	10.5
18	13.0	9.5	12.0	10.0	16.5	10.5	16.5	11.0	---	---	12.0	10.0
19	15.0	10.5	11.5	10.0	14.5	10.5	14.5	11.5	15.5	10.5	14.0	10.0
20	15.5	11.0	16.0	10.0	15.5	11.0	14.5	11.0	16.0	10.5	13.0	10.0
21	15.5	10.0	15.0	10.5	16.5	11.0	15.5	12.0	16.5	10.5	14.0	10.5
22	15.5	10.0	15.5	10.5	15.5	10.5	15.5	10.0	---	---	12.0	10.5
23	14.0	10.5	15.0	11.0	15.0	10.0	15.5	10.0	---	---	15.0	10.5
24	15.0	10.5	15.5	11.0	15.5	10.0	15.0	10.0	---	---	13.5	12.0
25	16.0	10.5	14.5	12.0	14.0	10.5	15.0	10.5	---	---	12.0	10.5
26	15.5	11.0	15.0	11.0	15.5	10.5	16.0	10.0	15.5	10.5	11.5	10.5
27	16.5	12.0	16.5	10.5	16.0	10.5	15.5	10.5	16.0	10.5	11.5	11.0
28	16.0	10.5	14.0	10.0	18.5	11.0	15.0	10.0	15.5	10.5	12.0	11.0
29	13.5	11.0	14.0	10.5	17.0	10.5	14.5	9.5	14.0	10.0	12.0	11.0
30	14.5	10.0	13.5	10.5	15.5	10.5	15.0	9.5	15.0	10.5	12.0	11.0
31	---	---	13.5	10.5	---	---	13.0	9.5	---	---	---	---
MONTH	16.5	9.5	16.5	9.5	18.5	10.0	20.0	9.5	---	---	15.5	10.0

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LOWER LOCK), TENN.
(National stream-quality accounting network station)

LOCATION.--Lat 35°03'54", long 88°15'08", Hardin County, at gaging station at downstream end of lockwall in lower pool at Pickwick Landing Dam, 16.8 miles (27.0 km) upstream from Savannah, Tennessee, and at mile 206.7 (332.6 km).

DRAINAGE AREA.--32,820 sq mi (85,000 sq km), approximately.

PERIOD OF RECORD.--Chemical analyses: March to September 1975 (partial record station).

REMARKS.--Once daily readings of temperature and specific conductance from March 27 to September 30, 1975 for Tennessee River at Savannah are located in Tennessee District files.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
01...a	1400	35000	--	--	--	--	--	--	--	--	--
08...a	1330	29000	--	--	--	--	--	--	--	--	--
18...a	1300	51000	--	--	--	--	--	--	--	--	--
22...a	1330	35000	--	--	190	--	30	--	--	20	--
29...a	1400	32800	--	--	--	--	--	--	--	--	--
NOV.											
05...a	1230	44000	--	--	--	--	--	--	--	--	--
12...a	1400	36000	--	--	--	--	--	--	--	--	--
19...a	1300	45000	--	--	250	--	20	--	--	19	--
26...a	1400	33300	--	--	--	--	--	--	--	--	--
DEC.											
03...a	1400	35000	--	--	--	--	--	--	--	--	--
10...a	1400	66000	--	400	360	--	30	--	--	19	--
17...a	1430	51300	--	--	--	--	--	--	--	--	--
24...a	1300	42000	--	--	--	--	--	--	--	--	--
JAN.											
16...a	0700	142900	--	--	220	--	30	--	--	13	--
FEB.											
18...a	1200	139700	--	--	180	--	30	--	--	18	--
MAR.											
11...a	1300	82800	5.3	--	--	--	--	--	--	--	--
27...	0945	183000	4.7	--	950	10	60	30	30	--	17
APR.											
11...a	1300	87300	5.6	--	120	--	10	--	--	14	--
23...	1130	60200	5.1	--	580	0	70	20	50	--	18
MAY											
20...a	1400	82800	4.9	--	790	--	30	--	--	22	--
21...	1330	83400	--	--	--	--	--	--	--	--	19
JUNE											
10...a	1300	74700	4.0	400	250	--	20	--	--	20	--
23...	1530	76000	--	--	--	--	--	--	--	--	18
JULY											
14...	1245	56600	--	--	--	--	--	--	--	--	21
22...a	1400	73800	4.8	--	60	--	30	--	--	23	--
AUG.											
12...a	1300	68000	5.4	--	110	--	20	--	--	20	--
26...	1430	49800	--	--	--	--	--	--	--	--	19
SEP.											
09...a	1400	64800	5.6	200	150	--	40	--	--	19	--
30...	1330	47500	--	--	--	--	--	--	--	--	21

a Analysis by Tennessee Valley Authority.

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LOWER LOCK), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.											
01...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
22...	4.5	--	7.0	--	1.5	--	--	50	0	13	8.0
29...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
05...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
19...	4.4	--	7.4	--	1.7	--	--	51	0	12	8.0
26...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
03...	--	--	--	--	--	--	--	--	--	--	--
10...	4.4	--	7.7	--	1.8	--	--	57	0	12	8.0
17...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
16...	3.0	--	4.0	--	1.5	--	--	48	0	9.0	6.0
FEB.											
18...	3.0	--	5.3	--	1.6	--	--	53	0	13	5.0
MAR.											
11...	--	--	--	--	--	--	--	58	0	10	6.0
27...	--	2.5	--	2.1	--	1.1	58	48	--	8.2	3.3
APR.											
11...	2.8	--	2.3	--	.9	--	--	45	0	10	3.0
23...	--	3.0	--	2.3	--	1.2	57	47	--	8.7	2.5
MAY											
20...	3.1	--	6.9	--	1.4	--	--	48	--	4.0	4.0
21...	--	3.2	--	2.6	--	1.2	--	--	--	--	--
JUNE											
10...	3.3	--	6.7	--	1.3	--	--	47	--	8.0	5.0
23...	--	3.5	--	3.9	--	1.3	--	--	--	--	--
JULY											
14...	--	3.9	--	4.0	--	1.3	--	--	--	--	--
22...	4.3	--	4.1	--	1.2	--	--	46	0	8.0	6.0
AUG.											
12...	2.8	--	5.0	--	1.4	--	--	48	0	10	7.0
26...	--	3.7	--	4.7	--	1.5	--	--	--	--	--
SEP.											
09...	4.1	--	5.5	--	1.4	--	--	56	0	11	7.0
30...	--	4.0	--	5.8	--	1.5	--	--	--	--	--

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LOWER LOCK), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL FLUO-RIDE (F) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.											
01...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
22...	.0	--	.42	.14	.06	--	--	--	.07	100	--
29...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
05...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
19...	.0	--	.38	.07	.13	--	--	--	.07	100	--
26...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
03...	--	--	--	--	--	--	--	--	--	--	--
10...	.1	--	.45	.28	.31	--	--	--	.08	90	--
17...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
16...	--	--	.59	.06	.21	--	--	--	.09	90	--
FEB.											
18...	<.1	--	.58	.07	.13	--	--	--	.05	90	--
MAR.											
11...	<.1	--	.57	.07	.18	--	--	--	.07	90	--
27...	--	.0	.48	--	--	.55	1.0	4.6	.07	72	68
APR.											
11...	<.1	--	.43	.08	.10	--	--	--	.05	80	--
23...	--	.1	.48	--	--	.26	.74	3.3	.05	80	69
MAY											
20...	<.1	--	.47	.11	.01	--	--	--	.06	70	--
21...	--	.1	--	--	--	--	--	--	--	--	--
JUNE											
10...	<.1	--	.52	.08	.04	--	--	--	.04	80	--
23...	--	.1	--	--	--	--	--	--	--	--	--
JULY											
14...	--	.0	--	--	--	--	--	--	--	--	--
22...	<.1	--	.19	.03	.21	--	--	--	.05	80	--
AUG.											
12...	<.1	--	.26	.04	.16	--	--	--	.04	90	--
26...	--	.2	--	--	--	--	--	--	--	--	--
SEP.											
09...	<.1	--	.15	.05	.15	--	--	--	.05	100	--
30...	--	.1	--	--	--	--	--	--	--	--	--

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LOWER LOCK), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)
OCT.											
01...	--	--	--	--	--	--	--	--	--	24.0	--
08...	--	--	--	--	--	--	--	--	--	22.0	--
18...	--	--	--	--	--	--	--	--	--	20.0	--
22...	.14	9450	3	68	--	--	--	180	7.8	19.0	10
29...	--	--	--	--	--	--	--	--	--	20.0	--
NOV.											
05...	--	--	--	--	--	--	--	--	--	20.0	--
12...	--	--	--	--	--	--	--	--	--	17.0	--
19...	.14	12200	3	66	--	--	--	180	7.8	16.0	5
26...	--	--	--	--	--	--	--	--	--	15.0	--
DEC.											
03...	--	--	--	--	--	--	--	--	--	13.0	--
10...	.12	16000	2	64	--	--	--	180	7.6	12.0	<5
17...	--	--	--	--	--	--	--	--	--	10.0	--
24...	--	--	--	--	--	--	--	--	--	10.5	--
JAN.											
16...	.12	34700	7	45	--	--	--	140	7.1	10.0	25
FEB.											
18...	.12	33900	3	57	--	--	--	150	7.6	11.0	16
MAR.											
11...	.12	20100	6	--	--	--	--	150	7.2	10.0	15
27...	.10	35600	--	53	5	8	.1	117	8.5	13.0	--
APR.											
11...	.11	18900	6	46	--	--	--	140	7.5	15.0	21
23...	.11	13000	--	57	11	8	.1	120	8.2	16.0	--
MAY											
20...	.10	15600	6	68	--	--	--	140	7.1	24.0	10
21...	--	--	--	61	--	8	.1	115	8.2	23.0	--
JUNE											
10...	.11	16100	5	64	--	--	--	150	7.1	10.6	17
23...	--	--	--	59	--	12	.2	140	6.1	27.2	--
JULY											
14...	--	--	--	69	--	11	.2	142	8.0	27.5	--
22...	.11	15900	9	75	--	--	--	150	7.1	31.0	13
AUG.											
12...	.12	16500	<1	61	--	--	--	150	6.7	29.0	14
26...	--	--	--	63	--	14	.3	150	8.3	29.0	--
SEP.											
09...	.14	17500	<1	64	--	--	--	150	7.3	30.0	14
30...	--	--	--	69	--	15	.3	155	6.7	21.0	--

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LOWER LOCK), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	FECAL COLIFORM (COL. PER 100 ML)
OCT.										
01...	--	7.4	--	--	--	--	--	--	--	--
08...	--	7.1	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
22...	2	--	4	--	--	--	--	--	--	--
29...	--	8.5	--	--	--	--	--	--	--	--
NOV.										
05...	--	14.2	--	--	--	--	--	--	--	--
12...	--	14.2	--	--	--	--	--	--	--	--
19...	16	8.9	3	--	--	--	--	--	--	--
26...	--	9.4	--	--	--	--	--	--	--	--
DEC.										
03...	--	9.6	--	--	--	--	--	--	--	--
10...	1	10.5	9	--	--	--	--	--	--	--
17...	--	10.7	--	--	--	--	--	--	--	--
24...	--	10.9	--	--	--	--	--	--	--	--
JAN.										
16...	14	10.1	--	--	--	--	--	--	--	--
FEB.										
18...	5	10.8	2	--	--	--	--	--	--	--
MAR.										
11...	4	10.7	9	--	--	--	--	--	--	--
27...	20	--	--	.3	35	--	--	--	--	B33
APR.										
11...	7	9.8	4	--	--	--	--	--	--	--
23...	10	--	--	.6	690	--	--	--	--	B2
MAY										
20...	6	--	5	--	--	--	--	--	--	--
21...	--	--	--	--	760	--	--	--	--	23
JUNE										
10...	2	8.5	5	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	B1
JULY										
14...	--	--	--	--	1500	11	18	62	14	<1
22...	5	7.2	7	--	--	--	--	--	--	--
AUG.										
12...	1	7.6	5	--	--	--	--	--	--	--
26...	--	--	--	--	12000	91	140	100	10	--
SEP.										
09...	1	6.8	4	--	--	--	--	--	--	--
30...	--	--	--	--	1300	12	15	150	12	<1

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
DEC.										
10...	--	3.1	<5	--	--	100	<10	<100	<1	--
MAR.										
11...	--	1.2	<5	--	--	--	--	160	--	--
27...	B4300	3.4	0	0	0	--	--	--	1	0
APR.										
23...	--	2.2	1	1	0	--	--	--	3	3
MAY										
21...	39	--	--	--	--	--	--	--	--	--
JUNE										
10...	--	2.9	<5	--	--	<100	<10	<100	1	--
23...	29	--	--	--	--	--	--	--	--	--
JULY										
14...	--	--	--	--	0	--	--	--	--	--
AUG.										
26...	--	--	--	--	--	--	--	--	--	--
SEP.										
09...	--	2.2	5	--	--	<100	<10	80	1	--
30...	B5	--	--	--	--	--	--	--	--	--

B--Results based on colony count outside the acceptable range (non-ideal colony count).

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LOWER LOCK), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
DEC.										
10...	--	<5	--	--	--	--	--	40	--	--
MAR.										
11...	--	--	--	--	--	--	--	--	--	--
27...	1	<10	<10	0	10	6	4	7	6	1
APR.										
23...	0	<10	<10	0	1	1	0	7	6	1
MAY										
21...	--	--	--	--	--	--	--	--	--	--
JUNE										
10...	--	<5	--	--	--	--	--	40	--	--
23...	--	--	--	--	--	--	--	--	--	--
JULY										
14...	0	--	--	0	--	--	0	--	--	4
AUG.										
26...	--	--	--	--	--	--	--	--	--	--
SEP.										
09...	--	5	--	--	--	--	--	<10	--	--
30...	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)
DEC.									
10...	<10	--	--	<10	<.2	--	--	210	<2
MAR.									
11...	--	--	--	--	<.2	--	--	--	<2
27...	6	2	4	--	.0	.0	.0	--	0
APR.									
23...	66	63	3	--	.3	.0	.3	--	0
MAY									
21...	--	--	--	--	--	--	--	--	--
JUNE									
10...	<10	--	--	<10	.2	--	--	<50	<2
23...	--	--	--	--	--	--	--	--	--
JULY									
14...	--	--	0	--	--	--	.3	--	--
AUG.									
26...	--	--	--	--	--	--	--	--	--
SEP.									
09...	<10	--	--	<10	.9	--	--	<50	<2
30...	--	--	--	--	--	--	--	--	--

DATE	SUS-PENDED SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TI-TANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
DEC.									
10...	--	<10	<1000	<10	--	--	--	--	--
MAR.									
11...	--	--	--	--	--	--	--	--	--
27...	0	--	--	80	80	5	--	--	--
APR.									
23...	0	--	--	20	20	0	15	2440	74
MAY									
21...	--	--	--	--	--	--	19	4280	50
JUNE									
10...	--	<10	<1000	10	--	--	--	--	--
23...	--	--	--	--	--	--	6	1230	100
JULY									
14...	--	--	--	--	--	0	5	764	100
AUG.									
26...	--	--	--	--	--	--	7	941	100
SEP.									
09...	--	<10	<1000	<10	--	--	--	--	--
30...	--	--	--	--	--	--	6	769	100

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LOWER LOCK), TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
APRIL 23, 1975	690	Melosira	40
		Cyclotella	26
		Pandorina	22
		Chlamydomonas	6
		Actinastrum	3
		Nitzschia	1
		Synedra	1
MAY 21, 1975	760	Cyclotella	82
		Melosira	14
		Navicula	5
JULY 14, 1975	1,500	Melosira	88
		Scenedesmus	4
		Cyclotella	4
		Chlamydomonas	2
		Nitzschia	2

DIVERSITY INDICES

Phyl/Div	0.337
Class	0.337
Order	0.539
Family	0.539
Genera	0.783

AUG. 26, 1975	12,000	Agmenellum	50
		Melosira	32
		Arthrospira	8
		Gomphosphaeria	4
		Ankistrodesmus	2
		Cyclotella	2
		Nitzschia	1
		Spirulina	1

DIVERSITY INDICES

Phyl/Div	1.068
Class	1.068
Order	1.523
Family	1.523
Genera	1.881

SEPT. 30, 1975	1,300	Melosira	64
		Cyclotella	14
		Chlamydomonas	9
		Chodatella	5
		Scenedesmus	5
		Navicula	5

DIVERSITY INDICES

Phyl/Div	0.684
Class	0.684
Order	1.119
Family	1.210
Genera	1.730

PERIPHYTON ANALYSES

COLLECTED BY A PLASTIC STRIP SAMPLER ATTACHED TO A FLOATING BREAKWATER BARRIER AT THE DOWNSTREAM END OF THE STREAMWARD LOCKWALL BELOW PICKWICK DAM

JULY 14, 1975 SAMPLER ATTACHED JUNE 23, 1975, AND REMOVED JULY 14, 1975

BIOMASS TOTAL DRY WEIGHT g/m^2	BIOMASS ASH WEIGHT g/m^2	CHLOROPHYLL A mg/m^2	CHLOROPHYLL B mg/m^2
18	11	62	14

AUGUST 26, 1975 SAMPLER ATTACHED JULY 14, 1975, AND REMOVED AUGUST 26, 1975

BIOMASS TOTAL DRY WEIGHT g/m^2	BIOMASS ASH WEIGHT g/m^2	CHLOROPHYLL A mg/m^2	CHLOROPHYLL B mg/m^2
140	91	100	10

SEPTEMBER 30, 1975 SAMPLER ATTACHED AUGUST 26, 1975, AND REMOVED SEPTEMBER 26, 1975

BIOMASS TOTAL DRY WEIGHT g/m^2	BIOMASS ASH WEIGHT g/m^2	CHLOROPHYLL A mg/m^2	CHLOROPHYLL B mg/m^2
15	12	150	12

03593500 TENNESSEE RIVER AT SAVANNAH, TENN.

LOCATION.--Lat 35°13'29", long 88°15'36", Hardin County, at gaging station, at bridge at U.S. Highway 64, at Savannah, 16.8 miles (270 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.--Water temperatures: March to September 1975 (daily readings).
Specific conductance: March to September 1975 (daily readings).

REMARKS.--Miscellaneous chemical and biologic analyses for Tennessee River at Pickwick Landing Dam are located in Tennessee District files.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	102	120	147	---	---	158
2						---	106	121	145	---	---	157
3						---	112	122	140	160	---	159
4						---	110	125	144	158	---	157
5						---	108	125	144	158	---	157
6						---	110	124	148	160	---	225
7						---	108	122	146	---	167	260
8						---	114	124	147	---	150	270
9						---	116	---	150	---	150	260
10						---	119	---	152	---	150	180
11						---	119	---	150	---	155	180
12						---	120	---	163	---	158	175
13						---	120	---	163	---	158	170
14						---	121	---	163	---	155	170
15						---	120	---	165	---	157	190
16						---	120	---	160	---	158	182
17						---	123	---	160	---	160	190
18						---	119	---	158	---	160	173
19						---	122	---	157	---	182	173
20						---	120	---	---	160	150	177
21						---	120	---	---	158	150	170
22						---	120	---	---	160	150	170
23						---	120	---	---	158	152	175
24						---	122	---	157	157	157	181
25						---	121	150	158	164	158	215
26						---	121	150	---	166	158	220
27						11(	122	138	---	160	158	210
28						11(	121	138	158	157	158	220
29						115	120	138	160	160	157	225
30						116	119	144	---	---	158	225
31						108	---	145	---	---	160	---
MONTH						---	117	---	---	---	157	192

03593500 TENNESSEE RIVER AT SAVANNAH, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	14.0	19.0	24.0	29.0	28.0	29.0
2						---	14.5	18.0	24.0	29.0	27.5	30.0
3						---	11.5	18.0	25.0	29.0	27.0	30.0
4						---	13.0	19.0	25.0	28.5	27.0	30.0
5						---	12.0	19.5	25.0	28.0	27.0	29.0
6						---	13.0	20.0	25.5	28.0	27.0	28.0
7						---	14.0	20.0	25.0	29.0	27.0	28.0
8						---	14.0	20.0	26.0	29.0	27.0	28.0
9						---	13.0	20.0	25.0	29.0	27.0	29.0
10						---	14.5	20.0	25.0	29.0	27.0	29.0
11						---	13.5	20.0	25.0	29.0	28.0	29.0
12						---	12.5	21.0	25.5	28.0	28.0	28.0
13						---	13.0	21.0	25.5	28.0	28.0	27.0
14						---	14.0	21.0	26.0	28.5	29.0	26.0
15						---	14.0	21.0	26.0	28.5	28.0	26.0
16						---	15.0	20.5	27.0	29.0	28.0	26.0
17						---	15.0	21.0	27.0	29.0	28.0	26.0
18						---	15.5	21.0	28.0	29.0	28.0	26.0
19						---	15.0	22.0	28.0	28.0	28.0	25.0
20						---	15.0	22.0	28.0	28.0	29.0	25.0
21						---	16.5	23.0	27.0	30.0	29.0	24.0
22						---	17.5	24.0	27.0	30.0	29.0	24.0
23						---	17.0	24.0	28.0	30.0	28.0	23.0
24						---	17.0	24.0	28.0	29.0	28.0	22.0
25						---	18.0	24.0	28.0	29.0	29.0	22.0
26						---	17.0	24.0	28.0	28.0	29.5	21.0
27						12.5	17.5	24.5	29.0	28.5	29.0	21.0
28						13.5	19.0	24.5	28.5	29.5	29.0	21.0
29						13.0	19.0	24.5	28.0	29.5	29.0	21.0
30						13.0	19.0	24.0	28.5	29.5	28.0	21.5
31						12.5	---	24.5	---	28.0	30.0	---
MONTH						---	15.0	21.5	26.5	29.0	28.0	26.0

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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 26.5°C several days in July, August, and September; minimum, 5.0°C Feb. 10, Mar. 3.

Period of record:
Water temperatures: Maximum, 27.0°C July 15, 16, 1970; minimum, freezing point, Jan. 8-11, 1970.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 30...	1515	467	5.3	30	51	19	2.3	1.4	.8	62

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 30...	51	4.7	3.7	.1	60	68	.08	75.7	57

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 30...	6	5	.1	113	7.9	13.0	60	50	1.2

03596500 DUCK RIVER AT NORMANDY, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	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	15.5	8.0	7.0	11.0	10.5	12.0	11.5	8.5	7.0
2	16.0	15.0	16.5	15.5	7.0	6.0	10.5	9.0	12.0	11.5	8.0	6.0
3	15.0	13.0	16.5	15.5	6.5	6.0	9.0	8.5	11.5	10.5	6.0	5.0
4	13.5	11.5	16.5	15.5	6.5	6.0	8.5	8.0	10.5	9.5	7.0	5.5
5	13.0	11.5	16.5	15.0	6.0	5.5	8.0	6.5	9.5	8.5	8.0	6.0
6	13.5	11.5	15.0	13.5	6.0	5.5	8.5	6.5	8.5	8.0	8.5	6.5
7	13.5	12.0	14.0	12.0	8.0	6.0	8.5	7.0	8.0	7.0	9.5	8.5
8	13.0	11.5	13.0	11.5	8.5	8.0	9.5	8.5	7.0	6.0	9.5	8.5
9	13.5	12.0	12.0	11.0	8.0	7.0	10.0	9.5	6.5	6.5	9.0	7.0
10	13.5	12.0	12.0	11.0	8.0	6.5	12.0	10.0	6.5	5.0	8.0	7.0
11	14.0	13.0	12.0	11.5	6.5	6.5	12.0	11.0	8.5	6.0	8.5	8.0
12	14.5	13.5	12.0	11.0	8.0	6.5	11.0	8.5	8.5	8.0	10.0	9.5
13	15.0	14.0	11.0	10.0	8.5	8.0	8.5	7.0	8.0	6.5	9.5	9.0
14	15.5	14.5	10.5	10.0	8.5	8.0	7.0	5.5	8.0	6.0	8.5	8.0
15	15.5	15.0	10.0	9.0	8.5	8.0	6.5	5.5	8.5	7.0	8.0	7.0
16	15.0	14.5	9.5	8.5	8.0	8.0	7.0	6.0	9.0	8.5	8.5	8.0
17	14.5	13.5	10.0	9.0	8.0	6.5	7.0	6.5	10.5	9.0	9.5	8.5
18	14.5	13.5	11.0	10.0	6.5	5.5	8.0	6.5	10.5	10.0	9.5	9.5
19	14.5	13.5	13.0	11.0	7.0	5.5	9.5	8.0	10.0	9.0	9.5	9.5
20	14.0	12.0	13.5	13.0	6.5	7.0	9.5	8.0	9.0	8.0	11.0	9.0
21	13.0	11.0	13.0	11.5	8.0	7.0	8.0	6.5	8.5	7.0	12.0	10.5
22	12.0	11.0	11.5	10.5	8.0	7.0	8.0	6.5	9.0	8.0	13.5	11.5
23	12.0	10.5	11.0	10.0	8.0	7.0	8.5	7.0	10.5	9.0	13.5	12.0
24	12.0	11.0	11.0	10.5	10.0	8.0	8.5	7.0	10.5	8.5	14.0	13.0
25	13.5	11.5	11.0	10.5	11.0	10.0	9.5	8.5	8.5	7.0	13.5	11.5
26	14.0	12.0	10.5	9.5	10.5	8.5	9.5	8.5	8.5	7.0	11.5	10.0
27	14.5	13.0	9.5	8.5	8.5	8.5	9.5	8.5	8.5	7.0	12.0	10.5
28	14.5	13.5	8.5	7.0	8.5	8.5	11.0	9.5	8.5	7.0	13.5	11.5
29	14.5	14.0	8.0	7.0	9.5	8.5	12.0	11.0	---	---	13.5	11.0
30	15.5	14.5	8.0	8.0	10.0	9.5	12.0	11.0	---	---	11.0	9.5
31	16.0	14.5	---	---	11.0	10.0	11.5	11.5	---	---	9.5	8.5
MONTH	17.0	10.5	16.5	7.0	11.0	5.5	12.0	5.5	12.0	5.0	14.0	5.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.0	19.0	17.0	20.0	19.0	25.0	24.5	25.5	24.5	25.5	25.0
2	13.0	11.0	19.0	17.0	20.5	19.0	25.0	24.5	25.5	24.5	25.5	25.0
3	13.0	11.0	18.5	16.5	20.5	19.5	24.5	23.5	26.5	25.5	26.0	25.0
4	11.5	10.0	18.0	16.5	21.0	20.0	25.0	24.0	26.5	26.5	26.5	25.5
5	11.5	9.5	18.0	16.0	21.5	21.0	25.0	24.5	26.5	25.5	26.5	26.0
6	12.0	10.0	18.0	16.5	21.0	21.0	25.0	24.0	25.5	25.0	26.5	25.0
7	12.0	10.5	18.0	15.5	21.5	21.0	24.0	23.5	25.0	24.5	25.0	24.0
8	12.0	11.0	18.0	17.0	21.5	21.0	24.0	23.5	24.0	24.0	24.0	23.0
9	13.0	12.0	18.5	16.0	21.0	20.5	25.0	24.0	24.0	23.5	24.5	23.5
10	14.5	13.0	19.0	17.0	20.5	20.0	25.0	24.5	24.0	24.0	24.5	24.0
11	14.5	13.5	19.5	17.0	20.0	20.0	25.0	24.0	24.5	24.0	24.5	23.0
12	13.5	11.0	19.5	18.0	21.5	20.0	24.0	23.0	25.5	24.5	23.5	21.5
13	13.5	11.0	19.5	17.0	22.0	19.5	23.5	22.0	26.5	25.5	21.5	20.0
14	13.5	12.0	19.5	17.0	22.0	19.5	23.5	23.0	26.5	25.5	20.0	19.5
15	12.0	11.5	19.5	18.5	22.0	20.0	24.0	23.5	26.0	25.5	19.5	19.5
16	14.0	11.0	18.5	17.0	21.5	20.0	24.5	24.0	25.5	23.0	20.0	19.5
17	15.0	13.0	18.5	18.0	23.0	20.5	24.5	24.0	24.5	24.5	20.0	19.5
18	15.5	14.5	19.0	17.0	23.5	22.0	25.0	24.5	24.5	24.0	19.5	19.5
19	16.0	15.0	19.5	17.0	24.0	23.5	25.0	25.0	23.5	22.0	19.5	19.0
20	15.5	14.0	20.0	18.0	24.0	22.0	25.0	24.5	24.5	23.5	20.0	19.5
21	15.5	13.5	21.0	19.0	24.0	23.0	24.5	24.5	25.5	24.5	20.0	19.5
22	15.5	13.5	21.5	19.5	23.5	23.0	25.5	24.5	25.5	25.0	19.5	19.0
23	16.5	15.0	21.5	20.0	24.0	23.0	26.0	25.5	26.5	25.5	19.0	16.0
24	16.5	15.5	21.5	20.0	23.5	23.0	26.0	26.0	26.5	26.0	16.0	15.5
25	18.0	16.5	22.0	20.5	23.5	23.0	26.0	25.0	26.5	26.0	15.5	15.5
26	19.0	17.0	21.5	21.0	23.5	23.5	26.0	25.0	26.5	26.0	15.5	15.5
27	20.0	18.0	21.5	20.5	23.5	23.0	26.0	25.5	26.5	25.5	15.5	15.0
28	20.0	18.5	21.5	20.0	24.5	23.5	26.0	25.5	26.5	26.0	16.5	15.0
29	19.5	18.5	22.0	20.0	24.5	24.0	26.5	26.0	26.5	26.0	17.0	16.0
30	18.5	17.0	21.0	19.5	25.0	24.5	26.5	26.0	26.0	25.5	18.0	17.0
31	---	---	21.0	19.5	---	---	26.0	25.5	25.5	25.0	---	---
MONTH	20.0	9.0	22.0	15.5	25.0	19.0	26.5	22.0	26.5	22.0	26.5	15.0

03599460 DUCK RIVER NEAR COLUMBIA, TENN.

LOCATION.--Lat 35°35'53", long 86°57'27", Maury County, temperature recorder on right bank at bridge on Sowell Mill Pike, 0.8 miles (1.3 km) west of Union Grove School, 5.4 miles (8.7 km) east of Columbia, and at mile 141.1 (227.0 km).

DRAINAGE AREA.--1,176 sq mi (3,046 sq km).

PERIOD OF RECORD.--Water temperatures: November 1973 to September 1975.

EXTREMES.--1973-74:
Water temperatures: Maximum, 28.5°C Aug. 27, 28; minimum, 4.5°C Dec. 21, 22.

1974-75:
Water temperatures: Maximum, 28.5°C several days in July and August; minimum, 6.0°C Dec. 10, Feb. 10, Mar. 5, 6.

Period of record:
Water temperatures: Maximum, 28.5°C several days during summer period; minimum, 4.5°C Dec. 21, 22, 1973.

REMARKS.--Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	13.0	11.0	9.5	8.5	13.0	11.0	10.0	8.5
2	---	---	---	---	12.0	11.0	8.5	8.0	14.5	13.0	11.0	9.5
3	---	---	---	---	13.0	11.5	8.0	6.5	14.0	13.5	13.5	11.0
4	---	---	---	---	13.5	12.0	7.0	6.5	13.5	11.0	15.0	13.0
5	---	---	---	---	13.0	11.0	8.0	7.0	11.5	10.0	15.0	14.5
6	---	---	---	---	11.5	10.0	8.5	8.0	11.0	10.0	15.0	14.5
7	---	---	---	---	10.0	9.0	9.0	8.0	10.5	9.5	16.5	15.0
8	---	---	---	---	9.5	8.0	9.0	8.0	9.5	8.5	18.0	15.5
9	---	---	---	---	8.5	8.0	10.0	9.0	9.0	8.0	18.0	16.0
10	---	---	---	---	8.0	6.0	11.5	10.0	9.0	7.0	18.5	16.5
11	---	---	---	---	6.0	5.5	12.0	11.5	9.0	7.0	---	---
12	---	---	---	---	8.5	5.5	11.5	10.5	9.0	6.5	---	---
13	---	---	---	---	9.5	8.5	10.5	9.5	9.5	8.5	---	---
14	---	---	---	---	9.0	8.0	9.5	9.0	10.5	9.0	---	---
15	---	---	---	---	8.5	8.0	11.0	9.5	11.0	10.0	---	---
16	---	---	19.0	11.5	8.0	6.5	11.5	11.0	11.5	10.0	---	---
17	---	---	13.0	10.5	6.5	6.0	13.0	11.5	11.0	9.0	---	---
18	---	---	11.0	10.0	6.0	5.5	13.5	13.0	11.0	9.5	---	---
19	---	---	11.5	10.5	6.5	6.0	14.5	13.5	10.5	10.0	---	---
20	---	---	13.0	11.0	6.5	5.5	14.5	14.0	11.5	9.5	---	---
21	---	---	15.0	13.0	6.0	4.5	14.5	13.5	11.5	10.0	---	---
22	---	---	14.0	13.0	5.5	4.5	14.0	13.0	11.5	10.0	---	---
23	---	---	14.0	14.0	6.0	5.5	14.0	12.0	10.5	9.5	---	---
24	---	---	15.0	14.0	7.0	6.0	12.0	11.0	10.0	8.5	---	---
25	---	---	16.0	15.0	10.5	7.0	11.0	10.0	8.5	6.0	---	---
26	---	---	16.5	15.0	11.0	10.5	11.5	10.5	8.5	6.0	---	---
27	---	---	16.5	16.0	11.5	10.5	13.5	11.5	9.0	6.5	---	---
28	---	---	16.0	14.5	11.0	10.5	14.0	13.0	9.0	8.5	---	---
29	---	---	15.0	13.0	11.0	10.0	13.5	12.0	---	---	---	---
30	---	---	13.5	11.5	10.5	10.0	13.5	11.5	---	---	---	---
31	---	---	---	---	10.5	9.5	13.0	11.5	---	---	---	---
MONTH	---	---	---	---	13.5	4.5	14.5	6.5	14.5	6.0	---	---

03599460 DUCK RIVER NEAR COLUMBIA, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	21.0	21.0	20.5	20.0	---	---	---	---	26.5	26.0
2	---	---	21.0	20.5	21.0	20.5	---	---	---	---	26.5	26.0
3	---	---	21.0	20.5	23.0	19.0	---	---	---	---	26.0	24.0
4	---	---	21.0	20.0	19.5	19.0	---	---	---	---	24.0	21.5
5	---	---	20.0	19.5	19.5	19.5	---	---	---	---	21.5	20.5
6	---	---	19.5	18.5	20.5	19.5	---	---	---	---	20.5	19.0
7	---	---	19.0	18.5	20.0	20.0	---	---	---	---	20.5	20.0
8	---	---	19.0	18.5	20.0	19.5	---	---	---	---	20.5	20.0
9	---	---	19.0	19.0	20.5	20.0	---	---	---	---	20.0	20.0
10	---	---	19.0	17.0	20.5	20.0	---	---	25.5	24.5	21.0	20.0
11	---	---	19.0	18.5	21.0	20.0	---	---	25.5	25.0	22.0	21.0
12	---	---	19.5	18.5	21.5	21.0	---	---	25.0	25.0	23.0	22.0
13	---	---	19.5	19.0	22.0	20.5	---	---	25.0	24.5	23.0	23.0
14	---	---	20.0	19.0	---	---	---	---	25.0	25.0	23.0	21.5
15	---	---	20.0	19.0	---	---	---	---	25.5	25.0	21.5	20.5
16	---	---	19.0	19.0	---	---	---	---	26.0	25.5	21.0	21.0
17	---	---	20.0	19.0	---	---	---	---	26.5	25.5	21.0	21.0
18	---	---	21.0	20.0	---	---	---	---	27.0	26.5	21.0	20.5
19	18.0	15.5	23.0	21.0	---	---	---	---	27.0	26.5	21.5	21.0
20	18.5	16.5	24.0	21.5	---	---	---	---	28.0	26.5	22.0	21.5
21	18.5	18.0	---	---	---	---	---	---	28.0	27.0	23.0	22.0
22	18.5	18.0	---	---	---	---	---	---	27.0	26.0	22.0	20.0
23	18.5	17.0	---	---	---	---	---	---	26.0	25.0	20.5	19.0
24	18.5	18.0	---	---	---	---	---	---	26.5	25.5	19.5	18.5
25	18.5	17.0	---	---	---	---	---	---	27.0	26.0	18.5	18.0
26	18.5	16.5	24.0	21.5	---	---	---	---	28.0	26.5	19.0	18.0
27	19.0	18.0	21.5	20.5	---	---	---	---	28.5	27.0	19.0	18.5
28	20.0	19.0	21.0	20.0	---	---	---	---	28.5	28.0	20.0	19.0
29	21.0	20.0	21.0	21.0	---	---	---	---	28.0	28.0	20.0	19.5
30	21.0	20.5	21.0	19.5	---	---	---	---	28.0	26.5	20.0	19.0
31	---	---	21.0	19.5	---	---	---	---	26.5	26.0	---	---
MONTH	---	---	24.0	17.0	---	---	---	---	---	---	26.5	18.0

03599460 DUCK RIVER NEAR COLUMBIA, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	17.0	18.5	17.0	8.5	8.0	14.0	13.5	13.0	12.0	9.5	9.0
2	18.0	16.5	18.5	18.0	8.0	8.0	13.5	12.0	12.0	11.5	9.0	8.0
3	16.5	15.0	18.5	18.0	8.0	7.0	12.0	11.0	12.0	11.0	8.0	6.5
4	16.0	15.0	18.5	17.0	7.0	6.5	11.0	10.0	11.0	9.5	8.0	6.5
5	15.5	15.0	17.0	15.5	8.0	6.5	10.0	9.0	10.5	10.0	8.0	6.0
6	16.0	15.0	15.5	14.5	7.0	6.0	9.5	9.0	10.0	9.5	7.0	6.0
7	16.0	15.0	14.5	13.5	8.5	6.5	9.0	8.5	9.5	9.0	9.0	7.0
8	15.5	15.0	13.5	13.0	8.5	8.5	10.0	9.0	9.0	8.0	9.0	8.5
9	15.5	14.5	13.5	13.0	9.0	8.5	10.5	9.5	8.0	7.0	9.0	8.0
10	15.5	14.5	13.0	12.0	8.5	8.0	13.5	10.5	7.0	6.0	8.0	7.0
11	16.0	15.0	13.0	12.0	8.0	8.0	14.0	13.0	9.0	7.0	8.0	7.0
12	16.5	15.5	13.0	12.0	8.0	8.0	13.0	11.0	9.5	8.5	11.5	8.0
13	17.0	16.0	12.0	11.0	8.5	8.0	11.0	8.0	8.5	8.0	11.5	10.5
14	17.0	16.5	11.0	10.5	8.5	8.0	8.0	7.0	8.5	8.0	10.5	9.0
15	17.0	17.0	10.5	9.5	8.5	8.5	8.0	8.0	9.0	8.5	9.5	8.5
16	17.0	16.0	9.5	9.0	9.0	8.5	8.5	7.0	10.0	9.0	10.0	9.0
17	16.0	15.5	10.0	9.0	8.5	8.5	8.5	8.0	11.0	10.0	11.0	9.5
18	15.5	15.0	12.0	10.0	8.5	6.5	10.5	8.5	11.5	11.0	11.0	11.0
19	15.5	15.0	13.5	12.0	8.0	7.0	10.5	10.0	11.5	11.0	11.0	11.0
20	15.0	14.0	14.5	13.5	8.0	7.0	10.0	9.5	11.0	10.0	13.5	10.5
21	14.0	13.5	14.5	14.0	7.0	7.0	9.5	8.5	10.0	9.0	14.5	12.0
22	13.5	13.0	14.0	13.0	7.0	7.0	9.0	8.5	10.0	9.5	13.0	11.5
23	13.0	12.0	13.0	11.5	8.5	7.0	9.0	8.5	12.0	10.0	13.5	13.0
24	13.5	12.0	12.0	12.0	13.5	8.5	9.0	8.5	12.0	10.0	14.0	13.5
25	14.0	13.0	12.0	11.5	13.5	12.0	9.5	9.0	10.5	10.0	14.0	13.5
26	14.5	14.0	11.5	10.5	13.5	11.5	9.5	9.5	10.5	9.0	14.0	12.0
27	15.5	14.5	10.5	9.5	11.5	11.0	10.0	9.5	9.5	9.0	12.0	11.5
28	16.0	15.5	10.0	8.5	11.0	11.0	11.5	10.0	9.5	9.0	13.5	12.0
29	16.0	16.0	9.0	8.5	11.5	11.0	13.0	11.5	---	---	14.5	12.0
30	17.0	16.0	9.0	8.5	12.0	11.5	13.0	12.0	---	---	12.0	10.5
31	18.0	16.5	---	---	13.5	12.0	13.0	12.0	---	---	10.5	9.5
MONTH	19.5	12.0	18.5	8.5	13.5	6.0	14.0	7.0	13.0	6.0	14.5	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	10.0	20.0	19.5	23.0	22.0	24.0	24.0	27.0	26.5	28.0	26.5
2	13.0	10.5	20.0	19.0	22.0	20.5	24.5	24.0	26.5	26.0	27.0	26.5
3	13.0	12.0	19.5	19.0	20.5	20.5	25.0	24.0	27.0	26.0	28.0	26.5
4	13.0	11.5	19.5	18.5	21.0	20.5	25.0	24.5	27.0	24.5	27.0	26.5
5	13.0	11.5	19.5	19.0	21.5	21.0	25.0	24.5	26.5	26.0	28.0	27.0
6	12.0	11.5	19.5	18.5	22.0	21.5	25.0	24.5	26.5	26.0	27.0	26.5
7	13.0	11.5	18.5	16.5	22.0	21.5	25.0	24.5	26.0	25.0	26.5	25.5
8	13.0	11.5	18.0	16.5	22.0	21.0	25.0	24.5	25.0	25.0	25.5	25.0
9	13.0	12.0	17.0	16.5	21.5	21.0	26.5	25.0	25.5	24.5	25.0	24.5
10	14.0	13.0	18.0	16.5	21.0	20.5	26.0	25.5	25.5	25.0	25.5	25.0
11	14.0	14.0	18.5	17.0	21.0	20.5	26.0	25.0	25.5	25.0	26.0	25.0
12	14.0	13.0	19.0	18.5	23.0	21.0	25.0	24.0	26.5	25.5	25.5	24.0
13	14.0	13.0	19.0	18.5	23.0	21.5	24.5	23.5	27.0	26.0	24.0	22.0
14	14.0	13.0	19.5	18.0	21.5	20.5	24.5	23.5	28.0	26.5	22.0	21.0
15	13.5	13.0	19.5	16.5	21.5	20.5	25.0	24.0	28.0	27.0	21.0	21.0
16	14.0	13.0	17.0	16.5	21.5	19.0	25.5	24.5	27.0	26.0	21.5	21.0
17	15.0	13.5	17.0	17.0	21.0	20.0	26.0	25.0	26.5	26.5	21.5	21.0
18	16.0	15.0	18.0	17.0	23.0	21.0	26.0	25.0	26.5	26.5	21.5	21.0
19	16.5	16.0	18.5	17.0	23.5	21.0	26.0	24.5	26.5	25.5	21.5	21.0
20	16.0	14.5	19.0	16.5	22.0	20.5	25.5	24.0	26.5	25.5	22.0	21.0
21	16.0	15.0	20.5	19.0	21.0	20.0	26.0	22.0	27.0	26.5	21.5	21.0
22	16.0	15.0	21.5	20.0	21.5	20.5	24.0	23.0	27.0	26.5	21.0	19.5
23	16.0	15.0	23.0	20.5	23.0	21.5	25.5	24.0	28.0	27.0	19.5	16.0
24	17.0	15.5	23.0	22.0	23.5	22.0	26.0	25.5	28.5	27.0	17.0	16.0
25	19.0	17.0	23.5	23.0	23.5	23.5	26.0	25.5	28.0	27.0	16.0	15.5
26	19.5	18.0	23.5	23.5	23.5	23.5	26.0	24.5	28.0	27.0	15.5	15.5
27	20.5	18.5	23.5	22.0	23.5	23.0	26.5	26.0	28.5	27.0	15.5	15.0
28	20.5	19.5	23.5	23.0	23.5	22.0	28.0	26.5	28.5	28.0	16.0	15.0
29	21.0	19.5	23.5	23.5	24.0	23.5	28.5	28.0	28.5	28.0	16.5	15.0
30	20.0	19.0	23.5	23.0	24.0	24.0	28.5	28.0	28.5	28.0	17.0	16.0
31	---	---	23.0	22.0	---	---	28.0	27.0	28.0	27.0	---	---
MONTH	21.0	10.0	23.5	16.5	24.0	19.0	28.5	22.0	28.5	24.5	28.0	15.0

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°29'45", long 87°49'58", Perry County, temperature recorder at gaging station on right bank, 0.5 mile (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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 28.0°C Aug. 26, 27, 28, Sept. 3, 4; minimum, 4.5°C Dec. 5, 6, 18.

Period of record:
Water temperatures: Maximum, 31.0°C July 13, 14, 15, 1966; minimum, freezing point, Jan. 9, 10, 11, 1970.

REMARKS.--Thermograph record furnished by Tennessee Valley Authority. Miscellaneous chemical analyses published for the water years 1967-74.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
NOV.												
04...	1130	296	5.8	170	30	15	2.2	1.0	.6	51	0	42
DEC.												
19...	1030	403	4.9	--	--	13	2.1	1.1	.5	44	--	36
FEB.												
12...	1000	1530	5.1	--	--	8.8	1.3	.6	.7	27	--	22
APR.												
02...	1100	1980	6.7	300	40	8.8	1.3	.8	.7	28	0	23
JUNE												
12...	1045	480	6.1	--	--	14	1.5	1.3	.9	41	0	34
AUG.												
06...	0930	900	7.4	--	--	13	1.4	1.4	.9	50	0	41

DATE	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL FILTRABLE RESIDUE (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)
NOV.												
04...	3.6	2.2	.1	.01	.01	69	56	56	.09	55.1	5	47
DEC.												
19...	3.1	1.4	.2	.11	.01	65	--	48	.09	70.7	--	41
FEB.												
12...	5.0	2.3	.2	.28	.09	30	--	37	.04	140	--	27
APR.												
02...	5.4	1.4	.0	.24	.03	40	--	39	.05	214	--	27
JUNE												
12...	3.1	1.8	.1	.18	.03	61	--	49	.08	79.1	--	41
AUG.												
06...	3.3	1.9	.1	.19	.03	56	--	54	.08	136	--	38

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	CYANIDE (CN) (MG/L)
NOV.												
04...	5	4	.1	120	7.3	17.0	9.3	4.1	310	--	65	.00
DEC.												
19...	5	5	.1	100	7.1	7.0	11.9	5.6	B4	B3	B4	--
FEB.												
12...	5	4	.1	80	7.2	8.5	--	2.7	B3670	B3150	B3410	--
APR.												
02...	4	6	.1	60	7.2	13.5	8.8	2.8	1188	66	80	.00
JUNE												
12...	8	6	.1	90	7.2	20.5	--	4.1	--	--	--	--
AUG.												
06...	0	7	.1	105	7.0	22.0	--	8.0	1600	713	720	--

B--Results based on colony count outside the acceptable range (non-ideal colony count).

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)
NOV. 04...	.00	.0	.0	0	.00	.0	.00	.0	.00	.0	.00
DEC. 19...	--	--	--	--	--	--	--	--	--	--	--
FEB. 12...	--	--	--	--	--	--	--	--	--	--	--
APR. 02...	--	--	--	--	--	--	--	--	--	--	--
JUNE 12...	--	--	--	--	--	--	--	--	--	--	--
AUG. 06...	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (1G/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)
NOV. 04...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
DEC. 19...	--	--	--	--	--	--	--	--	--	--	--
FEB. 12...	--	--	--	--	--	--	--	--	--	--	--
APR. 02...	--	--	--	--	--	--	--	--	--	--	--
JUNE 12...	--	--	--	--	--	--	--	--	--	--	--
AUG. 06...	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)	TOTAL ARSENIC (AS) (UG/L)
NOV. 04...	.00	.00	.0	0	0	0	.00	.00	.00	1
DEC. 19...	--	--	--	--	--	--	--	--	--	--
FEB. 12...	--	--	--	--	--	--	--	--	--	--
APR. 02...	--	--	--	--	--	--	--	--	--	0
JUNE 12...	--	--	--	--	--	--	--	--	--	--
AUG. 06...	--	--	--	--	--	--	--	--	--	--

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED GROSS ALPHA AS U-NAT. (UG/L)
NOV. 04...	0	1	<10	0	10	1.4	0	0	10	<.6
DEC. 19...	--	--	--	--	--	--	--	--	--	--
FEB. 12...	--	--	--	--	--	--	--	--	--	--
APR. 02...	0	0	20	1	3	.0	0	0	--	--
JUNE 12...	--	--	--	--	--	--	--	--	--	--
AUG. 06...	--	--	--	--	--	--	--	--	--	--

DATE	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L)	DISSOLVED GROSS BETA AS CS-137 (PC/L)	SUSPENDED GROSS BETA AS CS-137 (PC/L)	DISSOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUSPENDED GROSS BETA AS SR90 /Y90 (PC/L)	DISSOLVED RA-226 (RADON METHOD) (PC/L)	DISSOLVED URANIUM (U) (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
NOV. 04...	<.4	1.3	<.4	1.1	<.4	.06	<.01	5	4.0	--
DEC. 19...	--	--	--	--	--	--	--	18	20	100
FEB. 12...	--	--	--	--	--	--	--	49	202	--
APR. 02...	--	--	--	--	--	--	--	16	86	98
JUNE 12...	--	--	--	--	--	--	--	12	16	--
AUG. 06...	--	--	--	--	--	--	--	17	41	--

03604000 BUFFALO RIVER NEAR FLAT WOODS, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.5	19.0	18.0	7.0	6.0	12.0	11.0	13.0	11.5	9.0	8.0
2	17.0	15.5	19.0	18.0	6.0	5.5	11.0	9.0	11.5	11.0	8.0	6.0
3	15.5	14.0	19.0	18.0	5.5	5.0	9.5	8.5	11.0	10.0	6.5	5.5
4	15.0	14.0	18.5	17.0	5.5	5.0	9.0	8.5	10.5	9.5	6.5	5.5
5	15.0	14.0	17.0	15.0	5.0	4.5	8.5	7.0	9.5	9.0	7.0	5.5
6	15.5	14.0	15.0	13.5	5.0	4.5	7.0	6.5	9.5	8.5	8.5	6.5
7	15.5	14.5	13.5	12.0	6.5	5.0	8.0	6.5	8.5	6.5	10.0	8.5
8	15.5	14.5	12.0	11.5	7.0	6.5	9.0	8.0	6.5	6.0	10.0	9.0
9	15.0	14.0	12.0	11.0	6.5	6.0	10.5	9.0	6.5	6.5	9.5	7.0
10	15.5	14.0	12.0	11.5	6.0	5.0	12.0	10.5	6.5	5.5	7.0	6.5
11	16.0	14.5	13.0	12.0	5.5	5.0	12.0	10.5	9.0	6.0	8.5	7.0
12	16.5	15.0	11.5	10.0	6.0	5.5	10.5	8.0	9.5	9.0	11.0	8.5
13	16.5	15.5	10.0	9.5	7.0	6.0	8.0	5.5	9.0	7.0	11.0	9.5
14	17.0	16.0	10.0	8.5	7.0	6.5	5.5	5.0	8.5	6.5	9.5	7.0
15	17.0	15.5	8.5	8.0	8.0	7.0	6.5	5.0	9.5	8.0	8.5	7.0
16	15.5	15.0	8.5	7.0	8.0	7.0	6.5	6.0	11.0	9.5	9.0	8.5
17	15.5	14.0	9.5	8.5	7.0	5.5	6.5	6.0	11.5	11.0	10.0	9.0
18	15.0	14.0	10.5	9.5	5.5	4.5	8.0	6.5	11.5	10.5	10.0	10.0
19	15.0	14.0	13.0	10.5	6.0	5.5	9.5	8.0	10.5	9.5	10.5	10.0
20	14.0	13.5	13.5	13.0	6.0	5.5	9.5	8.0	9.5	8.5	11.5	9.5
21	13.5	12.0	13.0	11.0	6.0	5.5	8.0	6.0	9.0	8.0	13.5	11.0
22	13.0	11.5	11.0	10.0	6.0	5.0	6.0	5.5	10.5	9.0	14.5	13.5
23	13.0	11.5	11.0	10.0	8.0	6.0	6.5	6.0	12.0	10.5	14.5	13.5
24	14.0	12.0	11.5	11.0	10.5	8.0	6.5	6.0	11.5	9.0	15.0	14.5
25	14.5	13.5	11.0	9.5	11.0	10.0	8.0	6.5	9.0	8.5	14.5	11.5
26	15.5	14.5	9.5	8.5	10.0	8.5	8.5	8.0	8.5	8.0	11.5	11.0
27	16.0	15.0	8.5	8.0	9.5	8.5	9.0	8.0	8.5	7.0	13.0	11.0
28	16.0	15.5	8.0	6.5	10.0	9.5	11.0	9.0	9.5	8.5	15.0	13.0
29	16.5	16.0	7.0	6.5	10.5	10.0	13.0	11.0	---	---	15.0	11.5
30	18.0	16.5	7.0	7.0	11.0	10.5	13.0	12.0	---	---	11.5	10.0
31	18.5	16.5	---	---	12.0	11.0	13.0	13.0	---	---	10.0	9.5
MONTH	18.5	11.5	19.0	6.5	12.0	4.5	13.0	5.0	13.0	5.5	15.0	5.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.5	18.5	18.0	21.0	19.5	26.5	24.5	24.0	23.0	26.5	25.0
2	13.5	11.0	18.0	17.0	21.0	19.5	26.0	24.0	23.5	23.0	27.0	25.0
3	13.5	11.5	18.0	16.5	21.5	20.0	26.0	24.5	24.5	23.0	28.0	25.5
4	12.0	10.5	18.5	16.5	23.0	20.5	26.0	24.5	24.5	23.5	28.0	26.0
5	11.5	10.5	19.0	17.0	23.5	21.5	26.5	24.5	24.0	23.5	27.0	26.0
6	12.0	10.5	18.5	18.0	24.0	21.5	25.5	24.5	24.5	23.0	26.0	23.5
7	12.0	11.0	19.0	17.0	24.0	23.0	25.5	23.5	24.5	23.0	24.5	23.0
8	12.0	12.0	18.5	18.0	24.0	21.5	26.5	24.5	24.5	23.0	24.5	23.0
9	13.0	12.0	18.0	16.5	23.5	21.5	26.5	24.5	25.0	23.0	25.0	23.5
10	14.5	13.0	19.0	17.0	21.5	21.0	26.0	25.0	25.0	23.5	25.5	24.0
11	14.5	13.5	19.0	17.0	22.0	21.0	25.5	24.0	25.0	24.0	25.0	24.0
12	14.0	13.0	19.0	18.0	24.0	21.5	24.0	23.0	26.0	24.0	25.0	23.0
13	13.5	12.0	19.0	18.0	24.0	21.5	24.0	22.0	26.5	25.0	23.0	20.5
14	13.5	12.0	19.0	18.0	24.0	22.0	24.0	21.5	27.0	25.5	20.5	19.0
15	13.5	12.0	19.0	18.5	24.0	22.0	24.0	22.0	27.0	25.5	20.0	19.5
16	14.5	12.0	18.5	17.0	24.5	22.0	25.0	22.0	26.5	25.0	20.5	20.0
17	16.0	14.0	18.0	17.0	25.0	23.5	25.0	23.5	26.0	25.0	20.5	20.0
18	18.0	16.0	18.5	17.0	26.0	24.0	25.5	23.5	26.0	24.5	21.0	20.0
19	18.5	17.0	19.5	18.0	26.0	24.5	25.5	24.0	25.5	24.0	21.5	20.5
20	18.0	16.0	20.0	18.5	26.0	24.0	24.5	23.0	26.5	24.5	21.5	20.5
21	16.5	15.0	21.0	19.0	26.0	24.5	24.0	22.0	27.0	25.0	21.0	20.0
22	17.0	15.5	21.5	20.0	26.5	24.5	24.5	23.0	27.0	25.0	20.0	19.0
23	17.0	16.0	22.0	20.5	26.5	24.5	24.5	23.5	27.0	25.5	19.0	17.0
24	18.5	16.5	23.0	21.0	26.5	24.0	24.0	23.0	27.0	25.5	17.0	15.5
25	20.0	18.0	23.5	21.0	26.0	24.0	23.5	23.0	27.0	25.5	15.5	15.5
26	20.0	19.0	23.0	21.0	26.0	24.5	25.0	23.0	28.0	25.5	16.0	15.5
27	20.5	19.5	21.5	20.5	26.0	24.5	25.5	24.0	28.0	26.0	16.5	15.5
28	20.5	19.5	22.0	20.5	26.0	24.5	26.0	24.0	28.0	25.5	17.0	15.5
29	20.0	19.0	21.5	21.0	26.0	24.0	26.5	25.0	27.0	26.0	18.0	16.0
30	19.0	18.5	21.0	20.5	26.5	24.5	26.5	25.0	27.0	25.5	18.5	17.0
31	---	---	21.0	20.0	---	---	25.0	24.0	27.0	25.0	---	---
MONTH	20.5	9.5	23.5	16.5	26.5	19.5	26.5	21.5	28.0	23.0	28.0	15.5

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 (200 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 1975.

EXTREMES.--1974-75:
Water temperatures: Maximum, 24.5°C July 22, 23, 24; minimum, 2.0°C Jan. 14.

Period of record:
Water temperatures: Maximum, 26.0°C, July 25, 26, 1973; minimum, 1.0°C Feb. 10, 14, 1971.

REMARKS.--Miscellaneous chemical analyses published for the water years 1968, 1970-72. Records furnished by Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.0	19.0	17.0	8.0	6.0	12.0	10.5	12.0	10.5	10.5	9.0
2	16.0	14.0	19.5	18.5	6.0	6.0	10.5	8.0	10.5	9.5	9.0	6.5
3	14.0	12.0	19.0	18.0	6.5	5.0	8.5	8.0	9.5	9.0	7.0	5.0
4	13.5	11.5	18.5	17.0	6.5	5.0	8.5	7.0	9.5	9.0	8.0	4.5
5	14.5	12.0	17.0	14.5	6.0	4.5	8.0	5.5	10.0	9.0	8.5	5.5
6	14.5	13.0	14.5	12.0	6.5	5.5	8.0	6.0	10.0	7.0	10.0	7.0
7	15.5	13.5	12.0	10.5	8.5	6.5	8.0	6.0	7.0	5.0	12.0	10.0
8	14.5	13.0	12.0	11.0	8.5	8.0	10.5	8.0	6.0	4.0	11.5	9.5
9	14.5	13.0	11.5	10.0	8.0	6.0	10.5	9.0	6.0	5.5	9.5	7.0
10	15.0	13.5	13.0	11.5	6.0	5.0	13.5	9.5	6.0	4.0	7.0	5.0
11	15.5	14.0	13.0	13.0	6.5	5.5	13.0	11.0	8.5	5.5	8.0	6.0
12	16.0	14.5	13.0	10.0	7.0	6.5	11.0	8.5	9.5	8.5	11.5	8.0
13	16.5	15.0	10.0	8.5	8.5	7.0	8.5	4.5	9.0	6.5	11.5	10.5
14	18.0	16.0	10.0	9.0	8.5	7.0	4.5	2.0	8.5	5.5	10.5	8.0
15	16.5	13.5	9.0	7.0	9.5	8.5	6.0	3.5	10.0	8.0	8.0	6.0
16	14.0	13.0	9.0	7.0	9.0	7.0	6.5	5.5	11.5	10.0	8.5	6.5
17	14.0	12.0	10.0	9.0	7.0	5.5	6.5	5.0	12.0	11.0	10.5	8.5
18	14.0	13.0	11.5	10.0	6.0	4.5	8.0	6.0	11.0	9.5	10.5	10.0
19	14.0	11.5	14.0	11.5	7.0	6.0	9.5	8.0	10.0	9.0	12.0	10.0
20	13.5	10.5	14.5	13.5	7.0	6.0	9.0	6.0	9.0	7.0	13.5	10.0
21	12.0	10.0	13.5	11.5	7.0	6.0	6.0	4.5	10.0	7.0	15.0	12.0
22	12.0	10.0	12.0	10.0	7.0	5.5	5.5	4.5	12.0	9.5	16.0	13.5
23	13.0	10.0	12.0	10.5	9.5	7.0	6.0	5.5	13.0	11.0	16.0	14.0
24	14.5	11.5	13.0	11.5	11.5	9.5	6.5	5.0	11.0	8.0	16.5	15.0
25	15.0	13.0	11.5	9.0	11.5	9.0	9.0	6.5	9.0	6.5	16.0	13.0
26	15.5	14.0	9.0	8.0	9.0	6.0	9.0	8.0	9.0	6.5	14.0	10.0
27	16.0	14.5	8.5	7.0	7.0	6.0	10.0	8.0	9.0	6.5	14.0	11.0
28	16.0	14.5	8.0	6.5	8.5	7.0	12.0	9.5	10.5	8.0	16.5	13.0
29	16.5	16.0	8.5	7.0	9.0	8.0	15.0	12.0	---	---	16.5	13.0
30	17.0	16.0	8.5	8.0	10.0	9.0	14.5	13.0	---	---	13.0	11.0
31	18.0	16.0	---	---	11.5	10.0	13.0	11.5	---	---	11.0	9.5
MONTH	18.0	10.0	19.5	6.5	11.5	4.5	15.0	2.0	13.0	4.0	16.5	4.5

03606500 BIG SANDY RIVER AT BRUCETON, TENN.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	8.5	21.0	18.5	19.5	18.5	24.0	21.0	21.0	20.5	23.0	22.0
2	14.5	12.0	21.0	17.0	19.5	17.0	24.0	23.0	21.5	21.0	23.0	22.0
3	14.5	11.5	18.5	16.0	19.5	18.0	23.5	21.0	22.0	21.5	23.5	22.0
4	13.0	10.0	19.0	17.0	20.5	19.0	22.0	21.0	22.0	21.0	23.5	23.0
5	13.0	10.0	18.5	16.5	21.0	20.0	22.0	21.0	23.0	22.0	23.5	21.5
6	13.5	10.5	18.5	16.5	21.5	20.0	21.0	20.5	23.5	22.0	21.5	21.0
7	13.0	11.0	19.5	17.0	21.0	20.0	22.0	20.5	23.5	22.0	21.0	19.5
8	13.5	12.0	19.5	18.5	20.5	19.0	23.0	21.5	23.0	21.0	20.0	19.0
9	14.0	13.0	20.0	18.0	19.5	18.5	23.0	21.5	21.5	20.5	20.5	19.5
10	15.0	13.5	20.5	19.0	19.5	18.5	23.0	21.5	22.0	21.0	21.0	20.0
11	15.0	12.0	20.5	18.5	20.5	19.5	22.0	20.5	23.0	21.5	21.5	20.5
12	13.5	10.5	19.5	18.5	22.0	19.5	20.5	19.5	23.0	21.5	21.5	19.5
13	13.5	11.0	19.0	17.0	21.0	20.0	20.0	19.0	23.5	22.0	19.5	16.5
14	13.5	12.0	18.0	16.0	21.5	20.5	20.0	18.5	24.0	22.0	16.5	15.0
15	14.0	11.5	18.5	17.0	21.0	20.0	20.5	18.5	23.5	23.0	16.5	15.5
16	15.0	12.0	19.0	17.0	21.0	19.5	20.5	19.5	23.5	22.0	18.0	16.5
17	17.0	14.0	19.0	18.0	23.0	20.5	21.5	20.0	23.5	22.0	18.5	18.0
18	19.0	16.5	21.0	18.5	24.0	21.5	23.0	21.0	23.5	23.0	19.0	18.0
19	19.0	17.0	21.5	19.5	24.0	22.0	22.0	21.5	24.0	22.0	19.0	18.5
20	18.0	15.5	21.5	20.5	23.5	21.5	22.0	21.0	23.5	22.0	19.0	19.0
21	18.0	14.5	21.0	20.5	23.5	21.5	24.0	22.0	23.5	22.0	19.0	19.0
22	18.5	15.0	21.0	20.0	23.5	22.0	24.5	23.5	24.0	22.0	19.0	17.0
23	18.0	16.5	21.5	20.0	23.5	21.5	24.5	23.5	24.0	23.0	17.0	15.5
24	19.0	17.0	21.5	20.5	23.0	21.0	24.5	22.0	24.0	23.0	15.5	14.0
25	20.5	18.5	21.5	20.5	23.0	21.0	22.0	21.5	24.0	22.0	14.0	14.0
26	21.0	19.0	21.0	20.0	23.5	21.0	22.0	21.0	24.0	23.0	14.5	14.0
27	21.0	19.5	20.5	19.5	23.0	21.0	21.5	21.0	24.0	23.0	15.0	14.0
28	21.0	19.0	21.0	19.5	23.0	21.5	22.0	21.0	24.0	23.0	15.5	14.0
29	20.0	19.0	20.5	19.5	23.5	21.5	23.0	21.5	24.0	22.0	16.0	14.0
30	19.0	18.5	20.0	19.5	23.5	21.5	23.0	21.5	23.5	23.0	16.5	15.0
31	---	---	20.0	19.5	---	---	22.0	21.0	23.5	22.0	---	---
MONTH	21.0	8.5	21.5	16.0	24.0	17.0	24.5	18.5	24.0	20.5	23.5	14.0

07026000 OBION RIVER AT OBION, TENN.
(National stream-quality accounting network station)

LOCATION.--Lat 36°15'04", long 89°11'33", Obion County, at gaging station at 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.--Water temperatures: June to August 1975.
Specific conductance: June to August 1975.
Chemical analyses: March to September 1975 (partial record station).

REMARKS.--Hourly values of specific conductance and water temperatures for the periods of record are located in Tennessee District files.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAR.												
26...	1200	7750	6.1	8700	100	320	80	5.8	1.8	3.0	1.8	21
APR.												
24...	1200	1740	8.8	2000	50	280	120	6.9	3.0	5.6	1.6	37
MAY												
22...	1130	1870	10	--	--	--	--	6.8	2.5	4.7	1.7	32
JUNE												
24...	1200	1030	13	--	--	--	--	6.2	2.5	6.2	1.3	40
JULY												
15...	1000	1060	12	5000	60	300	120	6.7	2.3	5.2	1.6	32
AUG.												
27...	1200	674	13	--	--	--	--	5.8	2.5	6.6	1.4	38

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAR.												
26...	17	7.0	3.6	.0	.26	.77	1.0	4.6	.27	61	39	.08
APR.												
24...	30	5.8	3.8	.1	.35	.41	.76	3.4	.10	58	54	.08
MAY												
22...	26	4.7	3.5	.1	.45	.58	1.0	4.6	.20	53	50	.07
JUNE												
24...	33	3.4	3.6	.1	.48	1.1	1.6	7.0	.11	72	56	.10
JULY												
15...	26	5.3	3.8	.4	.46	.56	1.0	4.5	.22	48	53	.07
AUG.												
27...	31	3.2	4.0	.1	.50	1.1	1.6	7.1	.10	71	55	.10

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTOPLANKTON (CELLS PER ML)
MAR.											
26...	1280	22	5	21	.3	59	6.2	12.0	95	21	510
APR.											
24...	272	30	0	28	.4	72	7.6	17.0	35	1.5	1100
MAY											
22...	268	27	1	26	.4	67	6.8	24.0	60	8.1	1500
JUNE											
24...	200	26	0	33	.5	80	7.4	25.5	15	2.5	12000
JULY											
15...	137	26	0	29	.4	76	6.8	21.5	55	8.1	1100
AUG.											
27...	129	25	0	35	.6	85	7.4	28.0	10	2.4	2400

07026000 OBION RIVER AT OBION, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAR.												
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	1060	440	8.4	2	0	1	0	<10	0	8	0	21
APR.												
24...	160	B93	4.3	3	1	3	0	<10	0	2	0	5
MAY												
22...	300	600	--	--	--	--	--	--	--	--	--	--
JUNE												
24...	--	232	--	--	--	--	--	--	--	--	--	--
JULY												
15...	400	--	3.2	3	0	0	0	<10	0	1	0	12
AUG.												
27...	620	420	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
MAR.												
26...	--	--	--	--	--	--	--	--	--	20	--	94
26...	0	34	0	.0	.0	0	0	70	5	221	4620	94
APR.												
24...	0	56	0	.4	.3	0	0	20	6	78	366	88
MAY												
22...	--	--	--	--	--	--	--	--	--	221	1120	68
JUNE												
24...	--	--	--	--	--	--	--	--	--	89	248	98
JULY												
15...	3	7	0	.2	.2	0	0	50	20	146	418	97
AUG.												
27...	--	--	--	--	--	--	--	--	--	35	64	92

PHYTOPLANKTON ANALYSES

DATE	TOTAL COUNT Cells/ml	GENERA	% COMPOSITION
MAR. 26, 1975	510	Navicula	33
		Nitzschia	19
		Scenedesmus	19
		Melosira	10
		Ankistrodesmus	10
		Gomphonema	5
		Cyclotella	5
APR. 24, 1975	1,100	Nitzschia	32
		Scenedesmus	24
		Dictyosphaerium	16
		Navicula	8
		Meridion	4
		Melosira	4
		Trachelomonas	4
		Ankistrodesmus	4
		Chlamydomonas	4
MAY 22, 1975	1,500	Scenedesmus	43
		Anacystis	28
		Navicula	11
		Nitzschia	9
		Melosira	7
		Fragilaria	2
JUNE 24, 1975	12,000	Oscillatoria	35
		Nitzschia	16
		Ankistrodesmus	13
		Anacystis	10
		Kirchneriella	8
		Pandorina	8
		Dictyosphaerium	4
		Scenedesmus	2
		Melosira	1
		Cyclotella	1
		Euglena	1
JULY 15, 1975	1,100	Nitzschia	48
		Anabaena	29
		Scenedesmus	19
		Gomphonema	5
		DIVERSITY INDICES	
		Phyl/Div	1.461
		Class	1.461
		Order	1.461
		Family	1.691
		Genera	1.691
AUG. 27, 1975	2,400	Coccochloris	24
		Nitzschia	18
		Anacystis	15
		Scenedesmus	14
		Aphanizomenon	11
		Navicula	7
		Oocystis	3
		Dictyosphaerium	3
		Ankistrodesmus	2
		Kirchneriella	2
		Pinnularia	1
		Euglena	1
		Trachelomonas	1
		DIVERSITY INDICES	
		Phyl/Div	1.586
		Class	1.586
		Order	1.959
		Family	2.408
		Genera	3.011

B--Results based on colony count outside the acceptable range (non-ideal colony count).

07026000 OBION RIVER AT OBION, TENN.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	88	83	85	139	133	135			
2	---	---	---	88	85	87	134	109	120			
3	---	---	---	89	86	87	114	108	111			
4	---	---	---	91	86	88	116	65	93			
5	---	---	---	118	83	95	87	66	75			
6	---	---	---	90	64	75	109	88	99			
7	---	---	---	67	57	64	126	110	119			
8	---	---	---	58	55	56	135	127	132			
9	---	---	---	68	57	61	140	135	138			
10	65	60	63	80	68	74	143	139	141			
11	72	48	59	86	81	83	---	---	---			
12	54	51	52	109	84	88	---	---	---			
13	65	54	61	122	77	100	---	---	---			
14	69	66	68	77	71	73	---	---	---			
15	75	66	69	86	73	77	---	---	---			
16	75	73	74	84	80	82	---	---	---			
17	92	75	79	85	80	82	---	---	---			
18	105	85	90	85	76	82	---	---	---			
19	88	85	86	83	81	82	---	---	---			
20	90	88	89	82	39	63	---	---	---			
21	92	89	90	38	35	36	---	---	---			
22	91	86	89	40	35	37	---	---	---			
23	86	85	85	47	39	42	---	---	---			
24	94	86	88	53	46	49	---	---	---			
25	93	88	91	57	53	55	---	---	---			
26	93	90	92	67	57	61	---	---	---			
27	94	89	91	89	68	77	---	---	85			
28	90	87	89	113	90	102	---	---	---			
29	93	83	86	134	115	124	---	---	---			
30	88	84	85	155	134	144	---	---	---			
31	---	---	---	167	132	148	---	---	---			
MONTH	---	---	---	167	35	79	---	---	---			

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	27.5	25.0	26.0	24.0	21.5	23.0			
2	---	---	---	27.0	25.0	26.5	21.5	21.0	21.0			
3	---	---	---	27.5	25.0	26.5	22.0	21.5	21.5			
4	---	---	---	28.0	26.0	27.0	21.5	21.5	21.5			
5	---	---	---	28.0	22.0	25.0	23.5	21.5	22.5			
6	---	---	---	26.0	22.0	23.5	23.5	22.0	23.0			
7	---	---	---	24.0	22.0	22.5	23.5	21.5	23.0			
8	---	---	---	25.5	22.5	23.5	24.0	21.5	23.0			
9	---	---	---	26.5	23.0	24.5	24.0	22.0	23.5			
10	---	20.0	20.0	27.0	24.0	25.5	24.5	22.5	23.5			
11	22.0	20.0	21.0	27.0	23.5	25.5	---	---	---			
12	23.0	21.0	22.0	25.5	22.0	24.0	---	---	---			
13	24.5	22.0	23.0	24.0	20.0	22.0	---	---	---			
14	24.5	22.0	23.5	22.0	19.5	21.0	---	---	---			
15	24.0	21.0	22.5	22.0	19.5	21.0	---	---	---			
16	24.5	21.0	22.5	23.0	20.5	22.0	---	---	---			
17	25.0	22.5	24.0	24.0	22.0	23.0	---	---	---			
18	27.5	23.5	25.5	26.0	23.5	24.5	---	---	---			
19	27.5	25.0	26.5	26.5	24.5	25.5	---	---	---			
20	28.0	25.5	27.0	27.0	21.0	23.5	---	28.0	---			
21	28.0	25.5	27.0	23.0	21.5	22.0	---	---	---			
22	28.0	25.5	27.0	24.5	23.5	24.0	30.0	26.5	28.5			
23	28.0	25.5	27.0	25.5	24.5	25.0	30.5	26.5	28.0			
24	28.0	25.5	27.0	26.5	25.5	26.0	---	27.0	28.0			
25	28.5	26.0	27.5	26.5	25.5	26.0	---	26.5	27.5			
26	28.5	26.5	27.5	26.0	25.0	25.5	31.0	27.0	29.0			
27	28.0	26.0	27.0	26.0	24.5	25.5	31.5	27.0	29.0			
28	27.0	25.0	26.0	25.5	24.5	25.0	---	---	---			
29	27.5	25.0	26.5	26.0	24.5	25.5	---	---	---			
30	27.0	25.5	26.5	27.0	25.0	26.0	---	---	---			
31	---	---	---	27.0	24.0	26.0	---	---	---			
MONTH	---	---	---	28.0	19.5	24.5	---	---	---			

CUMBERLAND RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03403690 - CLEAR FORK AT CLAIRFIELD, TENN (LAT 36 32 57 LONG 083 56 57)

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
DEC.							
10...	1000	6.8	33	27	85	2.3	.1
17...	0950	6.8	46	38	110	1.5	.1

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
DEC.							
10...	168	.23	250	8.7	.5	2	.1
17...	200	.27	260	7.2	3.0	2	4.6

03407790 - NEW RIVER AT FORK MTN, TENN (LAT 36 07 28 LONG 084 25 32)

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL ALUM-INUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED 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)	BICAR-BONATE (HCO3) (MG/L)
MAY												
14...	1730	3.0	6.8	50	1000	580	70	14	5.6	65	1.7	153

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
MAY												
14...	0	126	77	3.1	.1	.15	.10	.25	.01	197	249	.27

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY												
14...	1.60	58	0	70	3.7	345	7.7	17.4	4	6.8	4.9	26

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY											
14...	.0	0	0	<10	0	1	5	.1	6	0	50

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407790 - NEW RIVER AT FORK MTN, TENN (LAT 36 07 28 LONG 084 25 32)--Continued

BENTHIC INVERTEBRATE ANALYSES

MAY 14, 1975, COLLECTED FROM STREAM BOTTOM SEDIMENT ON ASTM NO. 30-SIEVE

DIPTERA	NO.	EPHEMEROTERA	NO.
Chironomidae	52		2

DIVERSITY INDEX

ORDER 0.23

PERIPHYTON ANALYSES

MAY 14, 1975, COLLECTED FROM HAND-SIZED ROCKS IN STREAM CHANNEL

DOMINANT GENERA	OTHER GENERA IDENTIFIED
Vaucheria	Achnanthes
	Closterium
	Cymbella
	Gomphonema
	Lyngbya
	Melosira
	Navicula
	Nitzschia
	Oedogonium
	Oscillatoria
	Pinnularia
	Stigeoclonium
	Surirella
	Synedra
	Tribonema

03407804 - INDIAN FORK ABOVE BRAYTOWN, TENN (LAT 36 09 37 LONG 084 23 15)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 14...	1430	3.0	6.3	140	21000	4500	1900	97	37	60	4.3	6

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 14...	0	5	500	1.1	.1	.39	1.0	1.4	.01	786	713	1.07

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 14...	6.37	390	390	25	1.3	885	6.7	19.2	85	4.4	1.9	.6

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 14...	.2	0	1	<10	20	2	19	.1	53	1	80

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407804 - INDIAN FORK ABOVE BRAYTOWN, TENN (LAT 36 09 37 LONG 084 23 15)--Continued

BENTHIC INVERTEBRATE ANALYSES

MAY 14, 1975, COLLECTED FROM STREAM
BOTTOM SEDIMENT ON ASTM NO.-30 SIEVE

DIPTERA	NO.	TRICHOPTERA	NO.
Chironomidae	6		2

DIVERSITY INDEX

ORDER 0.81

PERIPHYTON ANALYSES

MAY 14, 1975, COLLECTED FROM HAND-SIZE
ROCKS IN STREAM CHANNEL

NO ORGANISMS FOUND

03407805 - INDIAN FORK AT BRAYTOWN, TENN (LAT 36 09 19 LONG 084 22 39)

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
DEC.							
10...	1400	4.6	22	18	140	2.0	.1
17...	1215	4.4	29	24	230	2.2	.0

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
DEC.							
10...	218	.30	340	7.7	3.5	30	.7
17...	360	.49	420	6.8	3.0	30	7.4

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407840 - LIGIAS FORK AT STAINVILLE, TENN (LAT 36 12 26 LONG 084 19 12)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 14...	1130	11	3.0	70	180	10	30	29	8.8	37	2.2	88

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 14...	0	72	120	1.0	.1	.25	.01	.26	.00	245	245	.33

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 14...	7.28	110	36	42	1.5	320	8.4	15.3	3	5.0	.6	.9

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 14...	.0	0	0	<10	0	0	4	.1	3	0	10

BENTHIC INVERTEBRATE ANALYSES

MAY 14, 1975, COLLECTED FROM STREAM-BOTTOM SEDIMENT ON ASTM NO. 30-SIEVE

DECAPODA	NO.	DIPTERA	NO.	EPHEMEROTERA	NO.	PLECOPTERA	NO.
	1	Chironomidae	1		1		1

DIVERSITY INDEX

ORDER 2.00

PERIPHYTON ANALYSES

MAY 14, 1975, COLLECTED FROM HAND-SIZE ROCKS IN STEAM CHANNEL

DOMINANT GENUS	OTHER GENERA IDENTIFIED
Nitzschia	Achnanthes
	Amphipleura
	Cosmarium
	Cymbella
	Diatoma
	Frustulia
	Gomphonema
	Mougeotia
	Navicula
	Oscillatoria
	Phormidium
	Pinnularia
	Stigeoclonium
	Surirella
	Synedra

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407850 - NEW RIVER AT STAINVILLE, TENN (LAT 36 12 34 LONG 084 19 18)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 14...	1230	38	4.3	80	320	10	260	43	14	24	2.4	57

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 14...	0	47	160	1.2	.0	.23	.09	.32	.01	283	277	.38

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 14...	29.0	170	120	24	.8	375	8.2	17.8	2	7.5	.6	1.1

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 14...	.0	0	0	<10	1	1	7	.0	9	0	20

03407873 - BEECH FORK AT SHEA, TENN (LAT 36 14 17 LONG 084 19 49)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 14...	0830	17	3.3	40	160	20	20	23	7.5	.9	1.8	52

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 14...	0	43	46	1.0	.0	.06	.04	.10	.00	113	109	.15

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 14...	5.19	88	46	2	.0	150	8.0	14.3	4	3.8	.8	2.6

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407873 - BEECH FORK AT SHEA, TENN (LAT 36 14 17 LONG 084 19 49)--Continued

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 14...	.0	0	0	<10	0	0	3	.0	2	1	10

BENTHIC INVERTEBRATE ANALYSES

MAY 14, 1975, COLLECTED FROM STREAM BOTTOM SEDIMENT ON ASTM NO. 30-SIEVE

DIPTERA	NO.
Chironomidae	1

DIVERSITY INDEX

0.00

PERIPHYTON ANALYSES

MAY 14, 1975, COLLECTED FROM HAND-SIZE ROCKS IN STREAM CHANNEL

DOMINANT GENERA	OTHER GENERA IDENTIFIED
Synedra	Achnanthes
Nitzschia	Amphipleura
	Cosmarium
	Cymbella
	Gomphonema
	Lyngbya
	Mougeotia
	Navicula
	Oscillatoria
	Pinnularia
	Stigeoclonium
	Surirella

03407876 - BILLS BRANCH AT MOUTH, NEAR HEMBREE, TENN (LAT 36 12 52 LONG 084 24 53)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
MAY 13...	1100	1.0	5.6	270	850	10	180	8.3	4.7	2.3	1.2

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
MAY 13...	19	0	16	29	.7	.0	59	61	.08	.16	40

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TANNIN AND LIGNIN (MG/L)
MAY 13...	25	11	.2	75	7.1	16.2	10	7.4	2.4	.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407876 - BILLS BRANCH AT MOUTH, NEAR HEMBREE, TENN (LAT 36 12 52 LONG 084 24 53)--Continued

DATE	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 13...	0	1	<10	1	2	7	.1	7	0	50

03407879 - SMOKY CREEK AT SMOKY JUNCTION, TENN (LAT 36 16 38 LONG 084 22 27)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 13...	1300	18	4.5	70	340	30	70	11	5.1	5.7	1.2	26

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 13...	0	21	41	.8	.0	.05	.06	.11	.00	96	82	.13

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 13...	4.67	48	27	20	.4	125	7.7	18.8	4	8.3	.8	2.3

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 13...	.0	0	0	<10	1	2	7	.1	8	0	30

BENTHIC INVERTEBRATE ANALYSES

MAY 13, 1975, COLLECTED FROM STREAM BOTTOM SEDIMENT ON ASTM NO. 30-SIEVE

NEMATODA NO.	DIPTERA NO.
1	CHIRONOMIDAE 1

DIVERSITY INDEX

0.00

PERIPHYTON ANALYSES

MAY 13, 1975, COLLECTED FROM HAND-SIZE ROCKS IN STREAM CHANNEL

DOMINANT GENERA	OTHER GENERA IDENTIFIED
Nitzschia	Achnanthes
Lyngbya	Amphipleura
Spirogyra	Audouinella
	Closterium
	Cosmarium
	Cymbella
	Frustulia
	Gomphonema
	Gyrosigma
	Mougeotia
	Navicula
	Oedogonium
	Oscillatoria
	Pinnularia
	Surirella
	Synedra

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407880 - NEW RIVER AT SMOKY JUNCTION, TENN (LAT 36 17 13 LONG 084 22 01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 13...	1530	98	3.7	100	370	20	110	26	9.3	12	1.8	44

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 13...	0	36	88	1.0	.0	.11	.07	.18	.00	190	164	.26

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 13...	50.3	100	67	20	.5	253	8.0	19.8	4	8.0	.7	3.3

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 13...	.0	0	0	<10	1	0	2	.1	7	0	30

03407905 - NEW RIVER AT NORMA, TENN (LAT 36 20 09 LONG 084 23 29)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 13...	1730	118	4.1	160	470	0	150	26	9.0	9.3	1.7	40

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 13...	0	33	90	1.0	.1	.10	.08	.18	.00	176	161	.24

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 13...	56.1	100	69	16	.4	240	8.0	20.8	6	7.6	.6	2.4

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407905 - NEW RIVER AT NORMA, TENN (LAT 36 20 09 LONG 084 23 29)--Continued

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 13...	.0	0	0	<10	0	2	6	.1	9	0	20

BENTHIC INVERTERATE ANALYSES

MAY 13, 1975, COLLECTED FROM STREAM BOTTOM SEDIMENT ON ASTM NO. 30-SIEVE

NO ORGANISMS FOUND

PERIPHYTON ANALYSES

MAY 13, 1975, COLLECTED FROM HAND-SIZE ROCKS IN STREAM CHANNEL

DOMINANT GENERA	OTHER GENERA IDENTIFIED
Tuomeya flu.	Achnanthes
Synedra spp.	Cocconeis
	Cosmarium
	Cymbella
	Fragilaria
	Gomphonema
	Lyngbya
	Mougeotia
	Navicula
	Nitzschia
	Oscillatoria

03407920 - BUFFALO CREEK NEAR WINONA, TENN (LAT 36 23 16 LONG 084 25 13)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 12...	1600	33	6.7	330	1100	20	70	4.5	2.7	1.4	1.2	18

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 12...	0	15	13	.9	.0	.09	.12	.21	.03	42	39	.06

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 12...	3.74	22	8	11	.1	59	7.1	17.8	15	7.4	2.3	1.3

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 12...	.0	0	0	<10	0	2	6	.0	7	0	40

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03407960 - PAINT ROCK CREEK NEAR HUNTSVILLE, TENN (LAT 36 24 14 LONG 084 26 59)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 12...	1800	18	5.7	230	790	100	60	9.0	3.1	5.0	1.3	28

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
MAY 12...	0	23	17	1.2	.0	.13	.08	.21	.02	56	.08	2.72

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 12...	35	12	23	.4	85	8.2	19.0	10	8.1	.3	7.9

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 12...	.0	0	0	<10	0	3	2	.1	3	0	10

BENTHIC INVERTEBRATE ANALYSES

MAY 12, 1975, COLLECTED FROM STREAM-BOTTOM SEDIMENT ON ASTM NO. 30-SIEVE

DIPTERA	NO.	EPHEMEROTERA	NO.	PLECOPTERA	NO.
Chironomidae	13		4		1

DIVERSITY INDEX

ORDER 1.05

PERIPHYTON ANALYSES

MAY 12, 1975, COLLECTED FROM HAND-SIZED ROCKS IN STREAM CHANNEL

DOMINANT GENERA	OTHER GENERA IDENTIFIED
Lyngbya	Achnanthes
Cymbella	Amphipleura
	Cosmarium
	Cyclotella
	Eunotia
	Gomphonema
	Melosira
	Navicula
	Nitzschia
	Oscillatoria
	Phormidium
	Rhoiocosphenia
	Stigeoclonium
	Surirella
	Synedra

CUMBERLAND RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03408200 - BRIMSTONE CREEK NEAR ROBBINS, TENN (LAT 36 20 43 LONG 084 32 22.01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY 12...	1300	44	6.9	240	830	70	170	6.5	4.2	3.4	1.1	19

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY 12...	0	16	27	1.7	.0	.04	.06	.10	.02	64	60	.09

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 12...	7.60	34	18	17	.3	90	7.2	17.7	6	7.4	1.9	4.9

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 12...	.0	0	0	<10	0	1	5	.1	7	0	30

BENTHIC INVERTEBRATE ANALYSES

MAY 12, 1975, COLLECTED FROM STREAM-BOTTOM SEDIMENT ON ASTM NO. 30-SIEVE

DIPTERA	NO.	EPHEMEROTERA	NO.	COLEOPTERA	NO.
Simuliidae	1		2	Elmidae	3
Chironomidae	4				

DIVERSITY INDEX

ORDER 1.49

PERIPHYTON ANALYSES

MAY 12, 1975, COLLECTED FROM HAND-SIZE ROCKS IN STREAM CHANNEL. NUMEROUS AQUATIC MACROPHYTES NOTED IN CHANNEL.

DOMINANT GENERA	OTHER GENERA IDENTIFIED
Lyngbya	Achnanthes
Batrachospermum	Closterium
	Cosmarium
	Cymbella
	Frustulia
	Gomphonema
	Navicula
	Nitzschia
	Oscillatoria
	Pinnularia
	Spirogyra
	Stauroneis
	Surirella
	Synedra

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03408500 - NEW RIVER AT NEW RIVER, TENN (LAT 36 23 08 LONG 084 33 17.01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAY												
13...	0700	275	5.6	1100	2300	10	190	18	6.3	5.3	1.5	27
SEP.												
23...	0815	94	--	--	--	--	--	--	--	--	--	--
24...	0930	5150	--	--	--	--	--	--	--	--	--	--

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
MAY												
13...	0	22	54	1.1	.0	.99	.14	1.1	.04	100	105	.14
SEP.												
23...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY												
13...	74.3	71	49	14	.3	161	7.6	19.0	50	7.3	1.1	1.9
SEP.												
23...	--	--	--	--	--	410	6.6	17.8	--	7.5	--	--
24...	--	--	--	--	--	255	6.6	15.2	--	6.7	--	--

DATE	TANNIN AND LIGNIN (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY											
13...	.0	0	0	<10	3	3	8	.1	12	1	30
SEP.											
23...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03418410 - CUMBERLAND RIVER AT CORDELL HULL DAM (TW), TENN (LAT 36 17 23 LONG 085 56 39)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
DEC. 11...	0840	1.0	17400	--	500	410	50	80	40	23	5.1
APR. 17...	1430	1.0	42180	5.0	<200	780	<50	80	20	11	3.2

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
DEC. 11...	3.4	1.5	57	0	23	3.0	.1	.29	.05	.05	.02
APR. 17...	2.0	.9	39	0	21	3.0	<.1	.29	.04	.14	.06

DATE	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
DEC. 11...	.02	120	.16	5630	4	78	200	6.9	7.8	5	6
APR. 17...	.94	90	.12	10300	20	41	--	7.6	12.0	14	29

DATE	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
DEC. 11...	10.6	2	<1.0	10	<10	1.8	<5	<100	<10	100	3
APR. 17...	10.8	--	<1.0	<10	<10	1.9	<5	<100	<10	<100	4

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC. 11...	<5	10	<10	--	<.2	<50	<2	<10	--	20
APR. 17...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	20

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03424010 - CANEY FORK AT CENTER HILL DAM (TAILWATER), TENN (LAT 36 05 52 LONG 085 49 38)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
DEC. 11...	0950	1.0	5800	--	<200	60	<50	250	30	21	3.4
APR. 17...	1315	1.0	10700	4.6	<200	120	<50	20	<10	12	2.2

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
DEC. 11...	1.0	1.0	55	0	10	2.0	.1	.12	.03	.05	<.01
APR. 17...	.7	.6	46	0	10	2.0	<.1	.33	.04	.09	.03

DATE	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
DEC. 11...	<.01	70	.10	1090	1	66	150	6.7	5	2	7.2
APR. 17...	.26	70	.10	2020	4	39	--	7.4	24	16	9.8

DATE	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
DEC. 11...	7	<1.0	<10	<10	1.1	<5	<100	<10	<100	2
APR. 17...	4	<1.0	10	<10	1.8	<5	<100	<10	<100	1

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC. 11...	<5	10	<10	--	<2.0	<50	<2	<10	--	<10
APR. 17...	<5	<10	10	<10	<.2	<50	<2	<10	<1000	20

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03455000 - FRENCH BROAD RIVER NEAR NEWPORT, TENN. (LAT 35 58 54 LONG 083 09 40)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT. 24...	1350	1.0	2710	--	2300	190	80	20	5.0	2.0	9.4
NOV. 11...	1315	2.0	2310	300	490	180	30	1100	6.0	1.8	11

DATE	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)
OCT. 24...	1.7	19	0	17	3.0	.0	.46	.16	.10	.11	.04
NOV. 11...	2.1	20	0	15	4.0	.0	.26	.14	.74	.11	.07

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 24...	70	.10	512	32	21	90	7.6	10.5	20	21	10.0
NOV. 11...	50	.07	312	2	22	110	7.2	11.1	15	3	12.8

DATE	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
OCT. 24...	17	--	--	--	3.4	--	--	--	--	--
NOV. 11...	9	5.3	20	<10	4.5	<5	<100	<10	<100	3

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 24...	--	<10	--	--	<.2	--	--	--	--	100
NOV. 11...	6	10	12	<10	<.2	<50	<2	<10	<1000	170

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03461500 - PIGEON RIVER AT NEWPORT, TENN. (LAT 35 57 38 LONG 083 10 28)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT. 22...	1530	1.0	2120	--	680	320	240	180	69	3.0	64
NOV. 11...	1410	2.0	95	200	340	210	100	230	50	3.5	54

DATE	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)
OCT. 22...	3.8	46	0	32	120	.0	.82	.22	.30	.13	.08
NOV. 11...	3.4	64	0	25	100	.0	.45	.59	.37	.39	.24

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 22...	390	.53	2230	9	180	660	6.4	16.0	120	4	9.1
NOV. 11...	340	.46	87.2	6	140	580	8.2	12.2	120	2	9.9

DATE	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
OCT. 22...	54	--	--	--	10	--	--	--	--	--
NOV. 11...	38	6.0	4000	50	12	<5	100	<10	<100	2

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 22...	--	20	--	--	.4	--	--	--	--	20
NOV. 11...	12	<10	<10	20	4.1	<50	<2	<10	<1000	20

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03466500 - NOLICHUCKY RIVER BELOW NOLICHUCKY DAM, TENN. (LAT 36 03 59 LONG 082 52 18)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV.											
11...	1050	4.0	650	--	600	640	80	110	90	18	3.3
JAN.											
06...	1200	1.0	2774	--	--	350	130	70	270	15	3.8
06...	1245	1.0	2780	--	--	370	130	130	140	15	2.8
FEB.											
12...	1035	1.0	3738	--	300	280	70	50	50	15	2.5
MAR.											
04...	1300	2.0	2410	--	--	280	<50	140	120	17	3.5
APR.											
01...	1250	1.0	7950	7.6	--	1100	110	160	90	11	.8
MAY											
07...	1540	2.0	1840	8.3	<200	310	<50	210	210	12	2.7
JUNE											
03...	1020	1.0	2460	10	--	2100	90	940	1200	11	2.3
JULY											
07...	1100	1.0	1365	8.6	--	1200	100	100	100	18	3.3
SEP.											
15...	1415	1.0	1360	9.5	--	580	<50	90	<10	18	3.7

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
NOV.											
11...	3.4	1.9	53	0	5.0	6.0	.3	.38	.11	.53	.06
JAN.											
06...	2.6	1.9	39	0	5.0	3.0	--	.70	.13	.53	.07
06...	2.2	1.4	40	0	3.0	3.0	--	.70	.09	.31	.06
FEB.											
12...	2.7	1.4	47	0	5.0	3.0	<.1	.84	.03	.20	.05
MAR.											
04...	3.3	1.6	45	0	4.0	4.0	.1	.67	.08	.78	.05
APR.											
01...	1.2	1.4	26	0	8.0	3.0	<.1	.63	.08	.72	.06
MAY											
07...	2.0	1.1	52	0	4.0	4.0	<.1	.43	.04	.15	.04
JUNE											
03...	9.7	1.8	72	--	6.0	3.0	.1	.52	.27	.21	.06
JULY											
07...	3.3	1.9	54	0	5.0	3.0	.2	.55	.09	.27	.09
SEP.											
15...	3.3	1.6	62	0	2.0	4.0	.3	.40	.07	.13	.11

DATE	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
NOV.											
11...	.04	80	.11	140	7	59	150	7.7	15.6	5	4
JAN.											
06...	.04	80	.11	599	11	53	120	7.0	5.0	10	7
06...	.04	80	.11	600	12	49	110	7.0	6.1	10	6
FEB.											
12...	.04	80	.11	807	10	46	130	7.2	5.6	7	4
MAR.											
04...	.04	70	.10	455	5	57	130	7.0	3.3	7	3
APR.											
01...	.31	60	.08	1290	13	31	100	6.6	10.1	10	34
MAY											
07...	.03	70	.10	348	8	41	130	7.4	18.9	3	7
JUNE											
03...	.19	60	.08	398	21	37	89	8.2	22.0	22	26
JULY											
07...	.20	70	.10	258	20	59	120	7.1	24.0	17	10
SEP.											
15...	.06	90	.12	330	12	60	130	7.8	19.8	34	11

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03466500 - NOLICHUCKY RIVER BELOW NOLICHUCKY DAM, TENN. (LAT 36 03 59 LONG 082 52 18)--Continued.

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV.											
11...	11.5	5	1.3	20	20	3.8	<5	<100	<10	<100	2
JAN.											
06...	13.1	12	--	--	--	--	--	--	--	--	--
06...	13.0	9	--	--	--	--	--	--	--	--	--
FEB.											
12...	12.4	6	--	--	--	1.7	<5	<100	<10	<100	4
MAR.											
04...	14.5	13	--	--	--	--	--	--	--	--	--
APR.											
01...	11.7	21	--	--	--	--	--	--	--	--	--
MAY											
07...	11.1	7	1.7	40	10	2.3	<5	<100	<10	<100	<1
JUNE											
03...	8.9	14	--	--	--	--	--	--	--	--	--
JULY											
07...	8.3	5	--	--	--	--	--	--	--	--	--
SEP.											
15...	9.4	4	--	--	--	--	--	--	--	--	--

DATE	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TI-TANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.										
11...	<5	60	<10	<10	.2	240	<2	<10	<1000	60
JAN.										
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
FEB.										
12...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	20
MAR.										
04...	--	--	--	--	--	--	--	--	--	--
APR.										
01...	--	--	--	--	--	--	--	--	--	--
MAY										
07...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	60
JUNE										
03...	--	--	--	--	--	--	--	--	--	--
JULY										
07...	--	--	--	--	--	--	--	--	--	--
SEP.										
15...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03478610 - BEAVER CREEK AT THOMAS BRIDGE, NR BLUFF CITY, TN (LAT 36 30 26 LONG 082 16 25)

DATE	TIME	DEPTH (FT)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)
OCT.											
15...	1030	1.0	--	340	<50	110	10	78	21	13	4.9
NOV.											
12...	1340	1.0	--	440	90	70	50	57	15	6.1	3.0
DEC.											
02...	1335	1.0	--	630	<50	50	40	74	18	9.2	2.7
JAN.											
07...	1345	1.0	--	190	<50	40	40	56	17	5.0	2.3
FEB.											
11...	1245	1.0	--	190	<50	40	10	42	9.4	4.2	2.1
11...	1300	1.0	--	170	<50	30	20	40	9.2	4.4	2.2
MAR.											
10...	1050	1.0	5.2	300	<50	40	20	34	12	3.6	1.7
APR.											
08...	1050	1.0	5.5	200	<50	30	R60	44	15	2.5	1.5
MAY											
13...	1540	1.0	7.9	400	<50	40	20	4.0	1.4	3.9	1.6
JUNE											
03...	1600	1.0	8.8	1900	<50	80	20	67	17	14	2.7
JULY											
08...	1025	1.0	7.1	1800	80	80	10	77	18	4.0	2.4
AUG.											
05...	1220	1.0	7.3	1200	<50	40	<10	80	19	5.0	2.6
SEP.											
16...	1410	1.0	8.1	70	R80	20	20	86	18	5.0	2.7

DATE	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.											
15...	190	0	18	14	.2	.71	2.7	.74	1.3	1.2	240
NOV.											
12...	170	0	14	6.0	.1	.96	.29	.44	.37	.27	210
DEC.											
02...	200	0	16	12	.1	1.4	.27	.23	.23	.20	240
JAN.											
07...	270	0	13	4.0	--	1.6	.14	.17	.15	.12	250
FEB.											
11...	200	0	13	5.0	.1	1.7	.06	.11	.07	.04	230
11...	190	0	12	3.0	.1	1.8	.07	.13	.09	.06	240
MAR.											
10...	170	0	12	6.0	<.1	1.2	.06	.07	.06	.04	210
APR.											
08...	180	0	14	5.0	.1	1.5	.04	.14	.04	.03	220
MAY											
13...	190	5	11	5.0	.1	3.2	.12	.22	.12	.08	220
JUNE											
03...	220	--	12	4.0	.1	1.6	.09	.19	.10	.06	230
JULY											
08...	180	3	12	4.0	.2	1.2	.06	.20	.12	.09	220
AUG.											
05...	200	3	14	5.0	.2	.97	.05	.24	.09	.07	230
SEP.											
16...	220	--	11	6.0	.2	1.3	.16	.18	.12	.10	250

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03473610 - BEAVER CREEK AT THOMAS BRIDGE, NR BLUFF CITY, TN (LAT 36 30 26 LONG 082 16 25)--Continued.

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
OCT.										
15...	.33	10	280	480	7.5	14.4	20	2	5.6	22
NOV.										
12...	.29	20	200	380	8.0	11.7	20	6	8.1	19
DEC.										
02...	.33	11	260	480	7.8	3.9	15	7	11.4	8
JAN.										
07...	.34	14	210	440	8.0	6.1	10	5	11.2	5
FEB.										
11...	.31	19	140	420	8.1	7.2	3	12	10.6	7
11...	.33	20	140	420	8.0	7.2	4	14	10.6	12
MAR.										
10...	.29	20	130	400	8.2	7.2	8	12	11.4	7
APR.										
08...	.30	13	170	380	8.0	9.4	11	10	10.2	4
MAY										
13...	.30	36	16	390	8.8	20.0	8	16	8.9	13
JUNE										
03...	.31	36	240	420	8.5	16.7	7	26	8.1	11
JULY										
08...	.30	17	270	380	8.0	20.6	18	37	7.3	12
AUG.										
05...	.31	19	280	400	7.3	22.8	22	8	7.4	8
SEP.										
16...	.34	11	290	380	8.3	16.9	15	5	9.3	6

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03481450 - ELK RIVER AT ELK MILLS, TENN (LAT 36 16 37 LONG 081 59 25)

DATE	TIME	DEPTH (FT)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)
OCT.											
21...	1445	1.0	--	180	70	20	<10	6.0	2.2	3.2	1.3
NOV.											
04...	1045	1.0	--	250	140	<10	<10	4.0	2.0	3.0	1.1
DEC.											
09...	1130	1.0	--	230	60	20	<10	5.0	1.6	3.8	1.2
JAN.											
06...	1100	1.0	--	160	60	20	20	2.0	1.2	2.7	1.0
FEB.											
03...	1200	1.0	--	290	<50	<10	<10	4.0	1.2	3.5	1.0
MAR.											
03...	1215	1.0	--	360	<50	30	<10	5.0	1.9	4.0	.7
APR.											
14...	1115	1.0	13	350	<50	10	<10	4.0	1.4	4.8	.8
MAY											
14...	1310	1.0	11	380	<50	10	<10	4.0	1.4	3.0	.7
14...	1335	1.0	11	390	<50	10	<10	4.0	1.4	2.9	.8
JUNE											
02...	1245	1.0	11	880	80	30	20	5.0	1.4	5.4	1.0
JULY											
07...	1110	1.0	12	300	120	80	80	6.0	2.0	3.6	1.0
AUG.											
04...	1045	1.0	11	2300	<50	40	<10	8.0	2.3	3.0	1.1
SEP.											
03...	1315	1.0	10	410	<50	30	<10	8.0	3.0	4.2	1.2

DATE	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.											
21...	14	0	3.0	5.0	<.1	.19	.06	.03	.01	<.01	50
NOV.											
04...	26	0	1.0	4.0	<.1	.07	.01	.11	.01	.01	40
DEC.											
09...	11	0	5.0	5.0	<.1	.60	.01	.13	.01	<.01	40
JAN.											
06...	15	0	1.0	4.0	--	.60	.01	.04	.01	.01	40
FEB.											
03...	22	0	5.0	4.0	--	.54	.03	.09	.02	.02	40
MAR.											
03...	14	0	3.0	6.0	<.1	.65	.08	.01	.02	.01	40
APR.											
14...	16	0	2.0	4.0	<.1	.44	.03	.05	.02	<.01	40
MAY											
14...	19	0	2.0	4.0	<.1	.27	.02	.13	.02	.02	40
14...	21	0	1.0	4.0	<.1	.40	.02	.17	.02	.02	60
JUNE											
02...	20	--	1.0	4.0	<.1	.40	.01	.11	.02	.01	--
JULY											
07...	33	0	3.0	4.0	<.1	.33	.02	.12	.02	.01	50
AUG.											
04...	45	2	5.0	9.0	<.1	.29	.03	.17	.04	.02	60
SEP.											
03...	37	3	2.0	5.0	.1	.17	.01	.09	.02	.01	60

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03481450 - ELK RIVER AT ELK MILLS, TENN (LAT 36 16 37 LONG 081 59 25)--Continued

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
OCT.										
21...	.07	<1	24	69	7.7	8.3	10	1	11.5	5
NOV.										
04...	.05	1	18	65	7.3	12.8	15	1	10.9	3
DEC.										
09...	.05	5	19	62	6.8	3.3	15	2	12.4	8
JAN.										
06...	.05	3	10	48	8.4	3.3	5	1	12.4	6
FEB.										
03...	.05	8	15	50	7.8	7.2	13	5	11.0	6
MAR.										
03...	.05	1	20	55	8.0	.0	7	3	13.4	4
APR.										
14...	.05	3	16	53	8.0	8.3	3	1	11.0	2
MAY										
14...	.05	4	16	50	8.2	15.6	5	2	10.4	6
14...	.08	5	16	60	8.3	15.6	2	3	10.3	7
JUNE										
02...	--	14	18	49	8.2	17.2	15	4	9.9	9
JULY										
07...	.07	5	23	63	6.0	18.9	18	2	8.8	4
AUG.										
04...	.08	27	29	71	8.5	21.1	30	25	8.3	9
SEP.										
03...	.08	8	32	84	8.5	22.2	18	6	8.9	7

TENNESSEE RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03482100 - ROAN CREEK NEAR DUEVILLE, TENN.(TVA) (LAT 36 22 59 LONG 081 55 20)

DATE	TIME	DEPTH (FT)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)
OCT.											
21...	1140	2.0	--	150	50	10	<10	10	5.1	2.1	1.7
NOV.											
04...	1250	1.0	--	120	<50	<10	<10	9.0	5.2	2.3	1.7
DEC.											
09...	1030	1.0	--	1800	<50	100	<10	6.0	3.3	1.8	1.6
JAN.											
06...	1325	2.0	--	170	100	30	10	5.5	3.5	1.8	1.4
FEB.											
03...	1445	1.0	--	210	<50	20	<10	6.0	2.3	2.3	1.3
MAR.											
03...	1345	1.0	--	260	<50	20	10	8.0	4.1	2.0	1.0
APR.											
14...	1400	1.0	8.7	160	<50	10	20	8.0	4.0	2.6	.8
MAY											
14...	1130	1.0	5.5	250	<50	10	<10	9.0	4.1	2.2	1.1
JUNE											
02...	1445	1.0	10	2400	60	110	30	9.0	3.9	9.3	1.8
JULY											
07...	1315	1.0	8.6	950	120	60	40	12	5.1	2.9	1.8
AUG.											
04...	1315	1.0	7.2	750	<50	20	<10	14	6.0	3.0	1.8
04...	1325	1.0	7.0	680	<50	20	<10	13	6.0	3.0	1.9
SEP.											
03...	1055	1.0	6.6	380	<50	30	<10	14	6.2	3.4	2.1

DATE	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.											
21...	49	0	4.0	3.0	.0	.35	.03	.05	.03	.02	60
NOV.											
04...	63	10	2.0	3.0	.0	.09	.01	.10	.03	.02	60
DEC.											
09...	20	0	5.0	4.0	.0	.81	.03	.48	.05	<.01	40
JAN.											
06...	28	0	1.0	3.0	--	.86	.01	.10	.03	.02	50
FEB.											
03...	24	0	5.0	3.0	--	.66	.02	.09	.02	.01	40
MAR.											
03...	30	0	4.0	3.0	<.1	.86	.02	.08	.03	.01	460
APR.											
14...	39	0	3.0	3.0	<.1	.60	.06	.01	.03	.03	50
MAY											
14...	43	4	2.0	3.0	<.1	.19	.05	.12	.03	.02	60
JUNE											
02...	42	--	1.0	3.0	<.1	.55	.02	.14	.06	.03	40
JULY											
07...	52	3	4.0	3.0	<.1	.40	.03	.16	.06	.05	70
AUG.											
04...	67	3	4.0	4.0	<.1	.14	.03	.20	.07	.04	80
04...	72	3	4.0	4.0	<.1	.13	.03	.19	.07	.05	80
SEP.											
03...	67	3	<1.0	4.0	<.1	.20	.02	.11	.09	.06	80

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03482100 - ROAN CREEK NEAR DOEVILLE, TENN.(TVA) (LAT 36 22 59 LONG 081 55 20)-- Continued

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
OCT.										
21...	.08	1	46	110	7.6	6.1	<5	1	12.6	9
NOV.										
04...	.08	2	44	120	8.9	15.0	10	1	11.3	2
DEC.										
09...	.05	37	29	68	7.6	3.9	15	9	11.9	9
JAN.										
06...	.07	6	28	76	8.3	4.4	10	2	12.0	5
FEB.										
03...	.05	10	24	66	8.3	7.8	10	6	11.1	3
MAR.										
03...	.63	2	37	84	7.6	.0	4	2	13.3	<1
APR.										
14...	.07	4	36	94	7.8	8.9	5	1	11.3	2
MAY										
14...	.08	3	39	110	9.4	15.0	2	2	10.4	6
JUNE										
02...	.05	46	38	82	8.4	18.9	12	17	8.7	10
JULY										
07...	.10	16	51	110	6.1	21.1	16	13	8.7	8
AUG.										
04...	.11	6	60	130	8.0	25.0	20	4	9.0	5
04...	.11	6	57	130	8.2	25.0	15	5	9.0	6
SEP.										
03...	.11	9	60	140	8.5	21.1	20	7	8.7	6

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03490350 - HOLSTON RIVER AT CHURCH HILL, TENN (LAT 36 31 02 LONG 082 43 22)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT., 1974												
16...	1630	1.0	6470	--	5700	2100	<50	390	60	28	7.0	8.7
16...	1700	1.0	6470	--	9100	3500	<50	830	<10	30	7.3	9.7
NOV.												
06...	1525	1.0	2800	--	--	290	--	300	--	29	7.2	17
06...	1530	1.0	2800	--	--	260	--	250	--	31	7.2	18
DEC.												
04...	1445	1.0	2600	--	--	320	--	180	--	26	7.2	13
04...	1450	1.0	2600	--	--	330	--	170	--	30	7.8	16
JAN., 1975												
15...	1440	1.0	--	--	1200	270	--	210	--	30	6.8	5.0
15...	1510	1.0	--	--	800	260	--	160	--	31	6.5	6.1
FEB.												
12...	1345	1.0	--	--	--	350	--	120	--	28	5.5	9.3
12...	1405	1.0	--	--	--	420	--	100	--	30	5.7	12
MAR.												
19...	1410	1.0	--	4.7	--	240	--	140	--	18	5.1	5.3
19...	1445	1.0	--	4.8	--	250	--	100	--	18	5.4	6.4
APR.												
16...	1500	1.0	--	5.5	<200	150	--	140	--	22	6.3	6.0
16...	1505	1.0	--	5.0	<200	180	--	100	--	22	6.3	7.0
JULY												
09...	1515	1.0	--	3.5	--	660	<50	80	30	40	8.7	30
09...	1530	1.0	--	3.6	--	320	<50	60	20	44	8.7	33
AUG.												
13...	1400	1.0	--	5.4	560	480	<50	30	20	22	5.1	6.7
13...	1405	1.0	--	5.4	340	280	<50	30	10	24	5.2	8.3

DATE	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TOTAL SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.											
16...	3.4	77	0	<.0	24	10	.0	.65	.18	.51	.20
16...	3.0	71	0	<.0	22	17	.0	.98	.21	.41	.18
NOV.											
06...	2.1	82	0	--	28	20	.1	.66	.87	.25	.15
06...	2.1	82	0	--	25	25	.0	.77	.76	.26	.14
DEC.											
04...	2.1	76	0	--	25	13	.1	.60	.30	.32	.08
04...	2.2	80	0	--	27	19	.1	.63	.29	.33	.07
JAN.											
15...	1.7	85	0	<.0	15	6.0	--	.72	.28	.30	.09
15...	1.6	82	0	<.0	11	8.0	--	.82	.27	.23	.07
FEB.											
12...	2.1	82	0	--	18	13	<.1	.80	.15	.19	.07
12...	2.0	87	0	--	14	19	<.1	.88	.09	.19	.07
MAR.											
19...	1.5	70	0	--	14	--	<.1	.74	.12	.16	.07
19...	1.3	71	0	--	14	--	<.1	.81	.10	.12	.05
APR.											
16...	1.7	86	0	.0	17	8.0	--	.72	.24	.20	.08
16...	1.6	86	0	.0	15	13	<.1	.74	.14	.16	.07
JULY											
09...	2.0	83	0	--	18	62	<.1	.63	.23	.21	.07
09...	2.0	86	0	--	18	69	<.1	.77	.40	.18	.06
AUG.											
13...	1.7	68	0	--	13	9.0	<.1	.77	.14	.18	.03
13...	1.7	68	0	--	13	12	<.1	.83	.12	.22	.05

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03490350 - HOLSTON RIVER AT CHURCH HILL, TENN (LAT 36 31 02 LONG 082 43 22)--Continued

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
OCT.											
16...	--	140	.19	2440	96	99	260	7.3	17.2	20	37
16...	--	150	.20	2620	72	100	270	7.3	17.2	15	36
NOV.											
06...	--	170	.23	1280	8	100	310	7.5	17.2	15	7
06...	--	180	.24	1360	9	110	340	7.7	17.2	15	8
DEC.											
04...	--	150	.20	1050	6	95	270	7.5	10.0	20	7
04...	--	160	.22	1120	7	110	300	7.5	10.0	15	8
JAN.											
15...	--	140	.19	--	26	91	240	7.5	7.2	10	22
15...	--	140	.19	--	30	100	240	7.6	7.2	10	24
FEB.											
12...	--	150	.20	--	26	93	270	7.7	8.3	16	22
12...	--	160	.22	--	26	98	290	7.7	8.3	16	22
MAR.											
19...	--	110	.15	--	18	66	220	7.4	8.9	13	18
19...	--	150	.20	--	18	67	210	7.4	8.9	15	19
APR.											
16...	--	130	.18	--	25	81	240	8.1	13.3	19	9
16...	--	140	.19	--	15	81	250	7.5	13.3	10	9
JULY											
09...	.04	240	.33	--	6	140	400	8.0	22.8	19	1
09...	.04	270	.37	--	5	150	450	8.1	23.3	15	3
AUG.											
13...	.02	110	.15	--	4	76	190	7.2	23.3	15	3
13...	.02	120	.16	--	4	81	210	7.7	23.3	13	3

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)
OCT.											
16...	3.9	43	6.0	40000	760	3.5	7	<5	100	<10	<100
16...	5.0	32	4.4	30000	1460	3.1	8	<5	100	<10	<100
NOV.											
06...	6.5	14	3.0	300	70	4.0	--	--	--	--	--
06...	7.5	14	2.9	2000	10	4.4	--	--	--	--	--
DEC.											
04...	8.8	14	3.1	280	<10	3.0	--	--	--	--	--
04...	8.5	15	3.5	170	<10	3.2	--	--	--	--	--
JAN.											
15...	10.3	11	2.7	1200	50	1.4	<1	<5	<100	<10	<100
15...	10.8	10	2.3	900	30	1.9	<1	<5	<100	<10	<100
FEB.											
12...	10.6	11	2.5	140	40	3.3	--	--	--	--	--
12...	10.5	10	2.1	17000	390	2.3	--	--	--	--	--
MAR.											
19...	10.4	8	2.0	100	30	2.5	--	--	--	--	--
19...	10.3	17	2.2	170	20	2.8	--	--	--	--	--
APR.											
16...	9.0	16	4.6	300	<10	2.7	3	<5	<100	<10	<100
16...	9.0	17	4.9	120	40	2.9	1	<5	<100	<10	<100
JULY											
09...	9.9	2	--	--	--	--	--	--	--	--	--
09...	11.5	2	--	--	--	--	--	--	--	--	--
AUG.											
13...	10.1	5	--	--	--	2.4	--	<5	<100	<10	<100
13...	10.8	5	--	--	--	2.0	--	<5	<100	<10	<100

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03490350 - HOLSTON RIVER AT CHURCH HILL, TENN (LAT 36 31 02 LONG 082 43 22)--Continued

DATE	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
16...	<1	10	30	10	<10	--	<50	<2	<10	<1000	90
16...	<1	10	40	32	20	--	<50	<2	<10	<1000	160
NOV.											
06...	--	<5	30	--	--	--	--	--	--	--	50
06...	--	6	60	--	--	--	--	--	--	--	40
DEC.											
04...	--	<5	20	--	--	--	--	--	--	--	70
04...	--	<5	40	--	--	--	--	--	--	--	60
JAN.											
15...	<1	<5	<10	13	<10	--	<50	<2	<10	<1000	60
15...	<1	<5	20	16	<10	--	<50	<2	<10	<1000	70
FEB.											
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
19...	--	<5	10	--	--	--	--	--	--	--	60
19...	--	<5	10	--	--	--	--	--	--	--	30
APR.											
16...	<1	<5	<10	<10	<10	--	<50	<2	<10	<1000	40
16...	<1	<5	<10	10	<10	--	<50	<2	<10	<1000	30
JULY											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
AUG.											
13...	<1	<5	30	<10	<10	<.2	<50	<2	<10	<1000	20
13...	<1	<5	40	<10	<10	<.2	<50	<2	<10	<1000	20

TENNESSEE RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (Tw), TENN (LAT 35 47 30 LONG 084 44 36)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.												
01...	0940	19000	900	550	70	22	4.9	11	1.8	--	--	18
02...	0950	19000	900	530	70	22	5.0	11	1.8	--	--	18
03...	0945	18600	900	500	60	22	4.9	11	1.8	--	--	17
04...	0945	18000	900	520	60	22	4.9	11	1.7	--	--	20
05...	1000	1300	700	430	50	22	4.9	11	1.8	--	--	17
06...	1030	13000	700	480	50	22	4.9	11	1.8	--	--	17
07...	0930	19000	200	280	40	21	4.8	11	1.8	--	--	21
08...	0915	17000	1000	380	50	20	4.6	11	1.8	--	--	23
09...	0945	18600	1000	450	70	21	4.9	11	1.8	--	--	17
10...	1000	19500	900	410	40	21	5.0	11	1.8	--	--	21
11...	0900	16700	700	350	50	22	5.2	11	1.9	--	--	20
12...	0900	11500	900	660	60	22	5.1	11	1.7	--	--	20
13...	1030	10000	600	330	60	21	5.1	11	1.8	--	--	20
14...	0930	10800	700	320	50	21	5.1	11	1.8	--	--	19
15...	0930	20600	1100	280	140	22	5.4	10	1.8	--	--	21
16...	0930	25000	1500	290	50	21	4.7	10	1.9	--	--	16
17...	0845	22000	1900	400	60	24	5.0	10	1.8	--	--	20
18...	0900	22200	1100	310	30	22	4.8	10	1.9	--	--	22
19...	0900	17000	1000	300	40	21	4.7	10	1.8	--	--	20
20...	0930	22000	1300	410	50	22	4.9	10	1.9	--	--	20
21...	0930	22000	1300	420	50	21	4.8	10	1.8	--	--	18
22...	0945	20000	400	310	40	22	4.7		1.8	--	--	18
23...	0945	24000	600	350	50	22	5.4	10	1.8	--	--	19
24...	0925	21700	500	380	40	22	5.6	11	1.8	--	--	20
25...	0900	17500	600	400	50	22	5.5	11	1.8	--	--	21
26...	0945	12800	600	450	40	22	5.5	10	1.9	--	--	20
27...	0945	16700	500	420	50	22	5.4	11	2.0	--	--	20
28...	0935	15600	500	420	50		5.5	11	2.0	--	--	20
29...	0845	14000	--	400	40	22	5.6	11	2.0	61	0	22
29...	0915	10800	700	400	60	23	5.6	11	1.9	--	--	19
30...	0910	8600	700	420	50	18	4.9	11	2.0	--	--	14
31...	0935	10300	500	350	40	19	4.8	11	1.9	--	--	17
NOV.												
01...	1000	13900	400	300	30	18	4.7	11	1.9	--	--	15
02...	0935	11000	500	270	30	18	4.6	11	2.0	--	--	17
03...	0935	11100	<200	260	40	18	4.7	11	1.9	--	--	16
04...	0935	11700	500	300	40	18	4.7	11	1.9	--	--	15
05...	1000	13900	300	270	20	18	4.7	11	1.9	--	--	23
06...	0935	17800	500	250	30	22	4.6	11	1.9	--	--	17
07...	1000	15000	400	210	30	22	4.8	11	1.9	--	--	19

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (TW), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.												
01...	11	.1	2.0	.08	.16	.04	120	.16	6160	5	75	--
02...	11	<.1	.47	.06	.15	.04	120	.16	6160	5	76	--
03...	12	.1	.49	.06	.15	.04	120	.16	6030	6	75	--
04...	12	.1	.47	.05	.15	.04	120	.16	5830	6	75	--
05...	12	<.1	.46	.05	.14	.04	120	.16	421	3	75	--
06...	11	<.1	.45	.05	.11	.05	120	.16	4210	4	75	--
07...	11	<.1	.44	.06	.14	.04	120	.16	6150	3	72	--
08...	12	.1	.43	.06	.15	.04	120	.16	5510	9	69	--
09...	22	.1	.42	.06	.14	.04	110	.15	5520	2	73	--
10...	12	.1	.40	.05	.17	.04	120	.16	6320	2	73	--
11...	12	.1	.40	.55	.02	.04	120	.16	5410	5	76	--
12...	12	.1	.40	.12	.10	.06	110	.15	3420	6	76	--
13...	12	.1	2.0	.13	.09	.04	110	.15	2970	5	73	--
14...	11	.1	.39	.09	.14	.08	110	.15	3210	6	73	--
15...	11	<.1	.33	.03	.25	.04	110	.15	6120	2	77	--
16...	11	<.1	.34	.04	.20	.04	110	.15	7430	3	72	--
17...	12	<.1	.31	.06	.16	.03	120	.16	7130	5	80	--
18...	12	<.1	.45	.08	.12	.04	100	.14	5990	5	75	--
19...	12	<.1	.34	.09	.13	.04	120	.16	5510	4	72	--
20...	12	<.1	.35	.10	.12	.04	120	.16	7130	4	75	--
21...	11	<.1	.38	.08	.12	.04	110	.15	6530	3	72	--
22...	11	<.1	.36	.07	.33	.04	160	.22	8640	4	74	--
23...	11	.1	.38	.16	.08	.04	120	.16	7780	2	77	--
24...	11	<.1	.43	.10	.14	.05	120	.16	7030	5	78	--
25...	11	<.1	.40	.14	.15	.04	110	.15	5200	5	78	--
26...	11	<.1	.47	.08	.17	.04	120	.16	4150	5	78	--
27...	11	<.1	.46	.08	.16	.04	120	.16	5410	5	77	--
28...	11	<.1	.47	.11	.12	.04	120	.16	5050	5	35	--
29...	13	<.1	.47	.07	.15	.04	120	.16	4540	6	78	220
29...	12	<.1	.46	.09	.15	.04	120	.16	3500	3	80	--
30...	12	.1	.45	.14	.10	.04	120	.16	2790	7	65	--
31...	12	.1	2.2	.08	.22	.03	120	.16	3340	4	67	--
NOV.												
01...	11	.1	.45	.07	.13	.04	120	.16	4500	3	64	--
02...	11	.1	.43	.09	.14	.03	130	.18	3860	3	64	--
03...	11	.1	.40	.06	.18	.03	130	.18	3900	3	64	--
04...	11	.1	.41	.09	.15	.03	130	.18	4110	2	64	--
05...	11	.1	2.0	.14	.11	.03	120	.16	4500	5	64	--
06...	12	.1	.37	.09	.17	.03	120	.16	5770	3	74	--
07...	12	<.1	.42	.08	.09	.04	120	.16	4860	2	75	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (Tw), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
01...	--	22.0	10	3	--	9	5	<10	<10	<.2	<10
02...	--	22.0	10	8	5.4	9	4	<10	<10	<.2	<10
03...	--	20.0	15	6	--	9	<1	<10	<10	<.2	20
04...	--	20.0	10	3	--	8	1	<10	10	<.2	<10
05...	--	20.0	10	3	--	7	<1	<10	13	<.2	<10
06...	--	22.0	10	4	--	7	2	<10	12	<.2	10
07...	--	22.0	10	6	--	9	<1	<10	12	<.2	<10
08...	--	22.0	10	7	--	9	2	<10	11	<.2	10
09...	--	20.0	15	7	--	8	3	50	<10	<.2	<10
10...	--	20.0	10	8	--	6	<1	<10	<10	<.2	20
11...	--	20.0	10	3	--	7	3	<10	<10	<.2	<10
12...	--	20.0	10	3	--	9	<1	<10	<10	<.2	20
13...	--	20.0	10	3	--	7	<1	40	<10	<.2	30
14...	--	20.0	10	5	--	8	2	<10	<10	<.2	<10
15...	--	20.0	10	7	--	8	2	30	<10	.2	<10
16...	--	20.0	10	1	6.8	8	<1	10	<10	.2	<10
17...	--	20.0	<5	3	--	4	2	20	<10	<.2	<10
18...	--	19.0	5	4	--	9	1	20	<10	1.4	10
19...	--	20.0	5	6	--	6	<1	<10	<10	<.2	<10
20...	--	19.0	5	6	--	3	<1	20	<10	<.2	<10
21...	--	19.0	10	5	--	10	3	10	<10	<.2	<10
22...	--	19.0	5	6	--	8	2	20	10	.2	10
23...	--	19.0	10	4	7.0	9	3	<10	<10	1.9	10
24...	--	17.0	10	4	--	9	3	<10	<10	1.0	20
25...	--	17.0	10	3	--	6	4	<10	<10	<.2	40
26...	--	18.0	10	3	--	9	2	<10	<10	2.0	20
27...	--	18.0	15	5	--	10	2	<10	<10	<.2	20
28...	--	18.0	10	5	--	8	6	30	<10	.2	20
29...	7.5	17.1	5	6	--	7	--	--	--	--	--
29...	--	18.0	10	6	--	12	1	20	<10	2.0	<10
30...	--	18.0	10	5	6.8	9	3	<10	<10	<.2	20
31...	--	17.0	10	5	--	7	7	<10	<10	<.2	<10
NOV.											
01...	--	17.0	15	3	--	4	2	150	10	<.2	10
02...	--	16.0	10	3	--	9	1	<10	<10	<.2	<10
03...	--	18.0	10	3	--	9	2	140	<10	.2	<10
04...	--	18.0	10	4	--	8	2	<10	<10	<.2	<10
05...	--	17.0	10	3	--	7	6	20	<10	<.2	20
06...	--	17.0	10	8	--	9	4	<10	<10	<.2	<10
07...	--	18.0	10	1	--	7	3	<10	<10	.2	<10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (Tw), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
NOV.												
07...	1200	10000	--	--	--	--	--	--	--	--	--	--
08...	1100	10000	200	240	30	22	4.7	11	1.8	--	--	19
09...	1020	12200	400	210	40	23	4.8	11	1.9	--	--	18
10...	1030	16000	300	180	30	22	4.7	11	1.8	--	--	16
11...	1010	11100	200	240	30	22	4.8	11	1.9	--	--	17
12...	1000	16000	500	250	50	22	5.4	12	1.9	--	--	17
13...	1000	16000	500	330	50	23	5.3	12	2.0	--	--	21
14...	0910	15500	600	400	60	23	5.5	12	2.0	--	--	19
15...	0915	19000	600	390	60	22	5.5	12	2.0	--	--	20
16...	0935	19000	400	410	60	23	5.5	13	2.0	--	--	21
17...	0950	15000	500	320	60	23	5.6	13	2.0	--	--	20
18...	0840	11000	<200	320	30	20	6.2	13	2.0	--	--	21
19...	0700	11000	--	290	40	20	5.6	13	2.1	62	0	25
19...	0840	17000	500	320	50	20	6.0	13	2.0	--	--	18
20...	0910	5500	200	300	50	20	5.8	13	2.1	--	--	20
21...	0930	16000	800	380	50	24	5.7	13	2.1	--	--	20
22...	1000	19700	500	360	50	24	5.7	14	2.2	--	--	20
23...	0930	17800	700	350	40	24	5.8	13	2.2	--	--	20
24...	0945	5000	600	340	40	23	5.6	13	2.2	--	--	20
25...	0900	5600	600	380	40	23	5.8	13	2.2	--	--	18
26...	0915	26700	600	390	50	23	5.7	13	2.2	--	--	20
27...	0830	25000	--	--	--	--	--	--	--	--	--	--
27...	1015	13000	500	380	40	25	5.7	13	2.0	--	--	20
28...	1000	17800	400	340	40	24	5.7	13	2.2	--	--	19
29...	0930	16700	500	370	40	25	5.8	13	2.2	--	--	20
30...	0900	11100	200	350	40	24	5.6	13	2.2	--	--	19
DEC.												
01...	1015	18400	600	340	40	25	5.8	12	1.9	--	--	20
02...	0900	6000	700	390	50	24	5.7	12	1.9	--	--	17
03...	0900	5000	700	400	40	23	5.6	11	2.0	--	--	19
03...	1000	5000	--	--	--	--	--	--	--	--	--	--
04...	0915	15000	800	520	40	23	5.4	10	1.9	--	--	20
05...	0935	22500	1300	500	60	23	5.0	9.4	2.1	--	--	19
06...	0830	26100	1000	700	50	25	5.1	8.7	2.1	--	--	15
07...	0840	18000	1000	510	40	27	5.3	10	2.1	--	--	17
08...	0930	12800	400	400	40	29	5.8	11	2.0	--	--	18
09...	0900	27200	400	410	50	25	5.3	12	1.9	--	--	18
10...	0730	24700	300	430	50	24	5.1	12	2.0	61	0	14
10...	1200	25600	400	470	50	25	5.2	11	1.9	--	--	8.0
11...	0810	22000	600	480	50	25	5.0	11	2.1	--	--	19

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (Tw), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
NOV.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
08...	11	<.1	.36	.07	.13	.02	120	.16	3240	<1	74	--
09...	14	<.1	.37	.08	.20	.03	120	.16	3950	<1	77	--
10...	12	<.1	.28	.08	.13	.03	120	.16	5180	<1	74	--
11...	11	<.1	.39	.08	.12	.03	110	.15	3300	1	75	--
12...	12	.1	.41	.14	.13	.04	130	.18	5620	2	77	--
13...	12	.1	6.2	.12	.28	.06	130	.18	5620	2	79	--
14...	13	.1	.43	.09	.11	.04	130	.18	5440	3	80	--
15...	13	<.1	.47	.09	.18	.04	140	.19	7180	7	78	--
16...	14	.1	.50	.10	.18	.04	130	.18	6670	4	80	--
17...	14	<.1	.52	.10	.18	.03	140	.19	5670	5	80	--
18...	14	.1	.55	.10	.20	.04	130	.18	3860	5	75	--
19...	16	<.1	.54	.10	.18	.03	170	.23	5050	3	73	240
19...	15	<.1	.55	.10	.16	.04	130	.18	5970	3	75	--
20...	16	<.1	.54	.10	.16	.04	150	.20	2230	4	74	--
21...	14	<.1	.55	.10	.16	.04	130	.18	5620	7	83	--
22...	15	<.1	.55	.10	.34	.06	130	.18	6920	5	83	--
23...	14	<.1	.55	.12	.16	.04	130	.18	6250	5	84	--
24...	15	.1	.57	.10	.24	.05	130	.18	1760	4	80	--
25...	14	<.1	.55	.09	.20	.04	100	.14	1510	3	81	--
26...	14	<.1	.54	.09	.23	.04	130	.18	9370	3	81	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	14	<.1	.55	.10	.16	.05	130	.18	4560	3	86	--
28...	14	<.1	.54	.09	.17	.05	130	.18	6250	2	83	--
29...	14	<.1	.53	.27	.03	.05	130	.18	5860	3	86	--
30...	14	<.1	.53	.11	.25	.06	130	.18	3900	2	83	--
DEC.												
01...	13	<.1	.51	.10	.16	.05	120	.16	5960	4	86	--
02...	14	.1	.51	.27	.05	.06	130	.18	2110	3	83	--
03...	12	.1	.50	.11	.17	.05	120	.16	1620	1	80	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
04...	12	.1	.49	.16	.12	.06	120	.16	4860	4	80	--
05...	10	.1	.49	.14	.36	.08	110	.15	6680	5	78	--
06...	10	<.1	.53	.15	.29	.06	120	.16	8460	5	83	--
07...	11	<.1	.52	.13	.18	.05	120	.16	5830	4	89	--
08...	12	<.1	.51	.13	.25	.06	130	.18	4490	4	96	--
09...	12	.1	.48	.14	.16	.03	130	.18	9550	7	84	--
10...	12	.1	.55	.14	.13	.04	120	.16	8000	5	81	220
10...	12	.1	.49	.20	.06	.11	120	.16	8290	4	84	--
11...	12	.1	.53	.13	.09	.05	110	.15	6530	5	83	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (TW), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)
NOV.											
07...	--	19.4	--	--	7.9	--	--	--	--	--	--
08...	--	18.0	10	3	--	7	--	--	--	--	--
09...	--	18.0	10	3	--	7	--	--	--	--	--
10...	--	18.0	10	3	--	7	--	--	--	--	--
11...	--	18.0	10	3	--	48	--	--	--	--	--
12...	--	18.0	10	3	--	6	--	--	--	--	--
13...	--	17.0	10	4	--	7	--	--	--	--	--
14...	--	15.0	10	2	--	9	--	--	--	--	--
15...	--	15.0	10	4	--	5	--	--	--	--	--
16...	--	15.0	15	5	--	6	--	--	--	--	--
17...	--	15.0	15	4	--	7	--	--	--	--	--
18...	--	15.0	10	5	--	6	--	--	--	--	--
19...	7.6	15.0	10	5	--	15	--	--	--	--	--
19...	--	15.0	10	4	--	6	--	--	--	--	--
20...	--	15.0	10	4	--	14	--	--	--	--	--
21...	--	13.0	10	3	--	6	--	--	--	--	--
22...	--	13.0	10	3	--	5	--	--	--	--	--
23...	--	13.0	10	4	--	8	--	--	--	--	--
24...	--	13.0	10	3	--	6	--	--	--	--	--
25...	--	12.0	10	4	--	6	--	--	--	--	--
26...	--	12.0	10	5	--	6	--	--	--	--	--
27...	--	12.0	--	--	7.7	--	--	--	--	--	--
27...	--	12.0	10	2	--	5	--	--	--	--	--
28...	--	11.0	10	3	--	4	--	--	--	--	--
29...	--	12.0	10	4	--	8	--	--	--	--	--
30...	--	12.0	10	4	--	9	--	--	--	--	--
DEC.											
01...	--	11.0	10	4	--	8	--	--	--	--	--
02...	--	11.0	10	6	--	9	--	--	--	--	--
03...	--	11.0	15	7	--	11	--	--	--	--	--
03...	--	13.0	--	--	8.3	--	--	--	--	--	--
04...	--	11.0	15	7	--	9	--	--	--	--	--
05...	--	10.0	20	11	--	8	--	--	--	--	--
06...	--	10.0	20	4	--	14	--	--	--	--	--
07...	--	12.0	15	4	--	8	--	--	--	--	--
08...	--	10.0	10	3	--	8	--	--	--	--	--
09...	--	9.0	15	3	--	7	--	--	--	--	--
10...	7.5	9.0	15	5	--	8	2.2	<5	<100	<10	100
10...	--	8.0	15	3	--	7	--	--	--	--	--
11...	--	8.0	15	10	--	8	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (TW), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.											
07...	--	--	--	--	--	--	--	--	--	--	--
08...	1	--	<10	<10	--	.2	--	--	--	--	<10
09...	2	--	<10	10	--	.3	--	--	--	--	<10
10...	<1	--	160	<10	--	.2	--	--	--	--	<10
11...	15	--	<10	<10	--	<.2	--	--	--	--	<10
12...	1	--	50	<10	--	.2	--	--	--	--	30
13...	2	--	<10	<10	--	<.2	--	--	--	--	20
14...	2	--	<10	<10	--	<.2	--	--	--	--	20
15...	2	--	<10	<10	--	<.2	--	--	--	--	20
16...	2	--	<10	<10	--	<.2	--	--	--	--	20
17...	2	--	<10	<10	--	<.2	--	--	--	--	20
18...	2	--	20	<10	--	<.2	--	--	--	--	10
19...	--	--	--	--	--	--	--	--	--	--	--
19...	1	--	10	<10	--	<.2	--	--	--	--	20
20...	2	--	20	<10	--	<.2	--	--	--	--	20
21...	6	--	20	<10	--	<.2	--	--	--	--	20
22...	1	--	30	<10	--	<.2	--	--	--	--	30
23...	1	--	50	<10	--	<.2	--	--	--	--	20
24...	4	--	40	<10	--	<.2	--	--	--	--	20
25...	4	--	10	<10	--	<.2	--	--	--	--	20
26...	<1	--	20	<10	--	<.2	--	--	--	--	20
27...	--	--	--	--	--	--	--	--	--	--	--
27...	2	--	<10	<10	--	<.2	--	--	--	--	20
28...	2	--	<10	<10	--	<.2	--	--	--	--	20
29...	1	--	20	<10	--	5.8	--	--	--	--	20
30...	<1	--	10	<10	--	<.2	--	--	--	--	20
DEC.											
01...	2	--	10	<10	--	.8	--	--	--	--	<10
02...	2	--	20	<10	--	.6	--	--	--	--	<10
03...	2	--	20	<10	--	<.2	--	--	--	--	<10
03...	--	--	--	--	--	--	--	--	--	--	--
04...	1	--	20	<10	--	<.2	--	--	--	--	10
05...	<1	--	40	<10	--	<.2	--	--	--	--	10
06...	1	--	50	<10	--	<.2	--	--	--	--	<10
07...	2	--	50	<10	--	<.2	--	--	--	--	<10
08...	1	--	40	<10	--	<.2	--	--	--	--	<10
09...	3	--	<10	<10	--	1.1	--	--	--	--	10
10...	<1	<5	10	<10	<10	<.2	<50	<2	<10	<1000	20
10...	1	--	<10	<10	--	<.2	--	--	--	--	20
11...	2	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (TW), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)
DEC.												
11...	0900	27500	--	--	--	--	--	--	--	--	--	--
12...	1100	20000	--	300	380	50	22	4.9	12	2.2	--	--
13...	1115	22200	--	300	450	60	21	4.8	13	2.1	--	--
14...	1100	27800	--	300	470	70	22	4.9	13	2.2	--	--
15...	0945	27000	--	800	360	50	21	4.7	13	2.2	--	--
18...	0930	23500	--	--	--	--	--	--	--	--	--	--
25...	0800	8900	--	--	--	--	--	--	--	--	--	--
JAN.												
21...	0700	30300	--	--	230	60	20	4.9	8.1	1.7	65	0
22...	0830	30450	--	--	--	--	--	--	--	--	--	--
FEB.												
18...	0715	24200	--	--	350	110	23	4.1	7.2	1.8	67	0
19...	0900	31100	--	--	--	--	--	--	--	--	--	--
MAR.												
11...	0705	11700	6.6	400	340	60	15	4.2	5.7	1.2	68	0
12...	0920	26100	--	--	--	--	--	--	--	--	--	--
APR.												
09...	0725	37400	--	--	--	--	--	--	--	--	--	--
15...	0730	22000	6.0	--	490	90	18	4.2	4.6	1.2	60	0
MAY												
20...	0715	19000	5.2	--	500	50	26	5.1	8.1	1.5	67	--
20...	1030	6800	--	--	--	--	--	--	--	--	--	--
JUNE												
10...	0715	15000	3.0	500	870	110	22	4.5	8.3	1.5	64	--
11...	0730	19650	--	--	--	--	--	--	--	--	--	--
JULY												
22...	0715	11100	5.7	--	780	140	26	5.3	7.2	1.7	66	0
23...	1115	26400	--	--	--	--	--	--	--	--	--	--
AUG.												
19...	0730	5600	5.2	--	300	80	25	3.2	9.0	1.7	72	0
SEP.												
09...	0730	6000	5.5	400	170	120	23	5.0	16	1.9	66	0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (TW), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
DEC.												
11...	--	--	--	--	--	--	--	--	--	--	--	--
12...	18	12	<.1	.55	.12	.14	.04	130	.18	7020	2	75
13...	16	14	.1	.54	.08	.22	.05	120	.16	7190	2	72
14...	17	14	.1	.56	.11	.27	.05	120	.16	9010	3	75
15...	18	14	<.1	.58	.12	.16	.05	120	.16	8750	1	72
18...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
21...	16	9.0	--	.71	.12	.26	.06	120	.16	9820	7	70
22...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
18...	16	7.0	<.1	.76	.19	.13	.06	90	.12	5870	7	74
19...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
11...	13	8.0	<.1	.81	.08	.14	.05	100	.14	3160	9	55
12...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
09...	--	--	--	--	--	--	--	--	--	--	--	--
15...	15	7.0	<.1	.59	.10	.11	.05	90	.12	5350	15	62
MAY												
20...	5.0	2.0	<.1	.56	.13	.13	.04	100	.14	5130	6	86
20...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
10...	11	7.0	<.1	2.5	.14	.15	.11	100	.14	4050	7	73
11...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
22...	10	9.0	.1	.38	.09	.20	.03	110	.15	3300	5	87
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG.												
19...	15	12	.1	.46	.03	.15	.04	230	.31	3480	5	76
SEP.												
09...	18	13	<.1	.39	.05	.43	.05	120	.16	1940	3	78

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (Tw), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)
DEC.												
11...	--	--	8.0	--	--	9.2	--	--	--	--	--	--
12...	--	--	9.0	10	1	--	7	--	--	--	--	--
13...	--	--	9.0	10	1	--	6	--	--	--	--	--
14...	--	--	9.0	15	2	--	8	--	--	--	--	--
15...	--	--	10.0	15	2	--	6	--	--	--	--	--
18...	--	--	9.0	--	--	9.6	--	--	--	--	--	--
25...	--	--	9.0	--	--	10.4	--	--	--	--	--	--
JAN.												
21...	200	7.6	7.0	15	15	--	11	--	--	--	--	--
22...	--	--	8.0	--	--	10.4	--	--	--	--	--	--
FEB.												
18...	200	7.4	11.0	20	20	--	8	--	--	--	--	--
19...	--	--	10.0	--	--	10.1	--	--	--	--	--	--
MAR.												
11...	200	7.8	9.0	10	10	--	7	3.3	<5	<100	<10	<100
12...	--	--	9.0	--	--	10.4	--	--	--	--	--	--
APR.												
09...	--	--	12.0	--	--	9.2	--	--	--	--	--	--
15...	170	7.6	12.0	20	26	--	10	--	--	--	--	--
MAY												
20...	150	7.3	17.0	15	3	6.6	7	--	--	--	--	--
20...	--	--	18.0	--	--	6.6	--	--	--	--	--	--
JUNE												
10...	180	7.4	21.0	23	10	--	9	3.1	<5	<100	<10	<100
11...	--	--	20.0	--	--	6.4	--	--	--	--	--	--
JULY												
22...	190	7.5	25.0	11	5	--	3	--	--	--	--	--
23...	--	--	26.0	--	--	4.5	--	--	--	--	--	--
AUG.												
19...	200	7.0	27.0	18	4	3.4	11	--	--	--	--	--
SEP.												
09...	200	7.5	27.0	12	2	4.9	16	3.7	<5	100	<10	30

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03499510 - TENNESSEE RIVER AT FORT LOUDOUN DAM (TW), TENN (LAT 35 47 30 LONG 084 44 36)--Continued

DATE	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC.											
11...	--	--	--	--	--	--	--	--	--	--	--
12...	3	--	10	<10	--	<.2	--	--	--	--	10
13...	1	--	20	<10	--	<.2	--	--	--	--	10
14...	3	--	10	<10	--	<.2	--	--	--	--	10
15...	1	--	10	<10	--	1.6	--	--	--	--	<10
18...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
21...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
FEB.											
18...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
11...	<1	<5	20	24	<10	<.2	<50	<2	<10	<1000	50
12...	--	--	--	--	--	--	--	--	--	--	--
APR.											
09...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
JUNE											
10...	<1	<5	40	<10	<10	.3	<50	<2	<10	<1000	10
11...	--	--	--	--	--	--	--	--	--	--	--
JULY											
22...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
AUG.											
19...	--	--	--	--	--	--	--	--	--	--	--
SEP.											
09...	<1	<5	<10	<10	<10	2.0	<50	<2	<10	<1000	10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03534900 - CLINCH RIVER AT EDGEMOOR, TENN (TVA) (LAT 36 01 32 LONG 084 10 03)

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL ALUM-INUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)
OCT.											
07...	1445	--	400	330	130	31	8.8	2.6	1.4	110	0
JAN.											
13...	1300	--	--	--	--	--	--	--	--	89	0
27...	1330	--	400	500	30	27	7.9	3.2	1.5	96	0
MAR.											
03...	1500	--	--	240	40	31	8.2	4.3	1.3	95	0
10...	1400	--	--	920	60	17	7.0	3.6	1.4	94	0
APR.											
07...	0820	5.2	500	470	50	23	7.2	3.0	1.1	88	0
MAY											
12...	1128	5.4	--	630	90	16	7.0	1.9	.7	83	0
JUNE											
09...	1300	2.8	--	300	50	27	6.7	6.3	1.1	80	0
JULY											
14...	1400	9.5	690	560	70	29	7.1	3.0	1.2	82	0
AUG.											
12...	0800	6.0	--	450	60	28	6.6	2.2	1.2	93	0
SEP.											
08...	1100	5.7	--	410	180	28	9.4	3.1	1.2	98	0

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.											
07...	14	3.0	.0	.24	.13	.17	.01	130	.18	6	110
JAN.											
13...	18	3.0	--	.40	.06	.17	.05	140	.19	55	--
27...	21	3.0	--	.32	.08	.06	.02	130	.18	5	100
MAR.											
03...	14	3.0	<.1	.55	.02	.11	.02	120	.16	1	110
10...	14	3.0	<.1	.57	.02	.08	.03	130	.18	12	45
APR.											
07...	20	3.0	<.1	.61	.04	.08	.01	130	.18	6	87
MAY											
12...	14	3.0	<.1	.55	.01	.06	.01	120	.16	<1	69
JUNE											
09...	14	3.0	<.1	.77	.02	.08	.06	120	.16	<1	95
JULY											
14...	15	2.0	<.1	.60	.02	.14	.04	110	.15	1	100
AUG.											
12...	14	3.0	<.1	.52	.02	.06	.01	110	.15	3	97
SEP.											
08...	16	3.0	<.1	.36	.06	.20	.01	130	.18	<1	110

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03534900 - CLINCH RIVER AT EDGEMOOR, TENN (TVA) (LAT 36 01 32 LONG 084 10 03)--Continued.

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)
OCT.											
07...	240	7.7	22.2	5	6	6	.4	<5	100	<10	<100
JAN.											
13...	220	7.7	8.0	15	60	--	2.0	<5	--	--	<100
27...	220	7.7	7.2	6	9	6	1.2	<5	<100	<10	<100
MAR.											
03...	230	7.9	8.3	6	2	7	1.2	--	--	--	--
10...	230	7.6	8.3	5	6	7	--	--	--	--	--
APR.											
07...	220	7.9	8.9	4	3	1	1.7	<5	<100	<10	<100
MAY											
12...	210	7.7	11.1	7	1	--	--	--	--	--	--
JUNE											
09...	200	7.6	13.3	17	2	7	--	--	--	--	--
JULY											
14...	200	7.8	13.9	8	<1	3	1.4	<5	<100	<10	<100
AUG.											
12...	210	7.6	15.0	9	2	3	--	--	--	--	--
SEP.											
08...	240	7.5	16.7	11	1	7	--	--	--	--	--

DATE	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
07...	<1	<5	40	<10	<10	<.2	<50	<2	<10	<1000	30
JAN.											
13...	--	--	--	--	--	--	--	<2	--	--	--
27...	<1	<5	80	12	<10	<.2	<50	<2	<10	<1000	150
MAR.											
03...	--	--	--	--	--	<.2	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
APR.											
07...	<1	<5	60	18	<10	<.2	<50	<2	<10	<1000	30
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUNE											
09...	--	--	--	--	--	--	--	--	--	--	--
JULY											
14...	<1	<5	50	<10	<10	<.2	<50	<2	<10	<1000	30
AUG.											
12...	--	--	--	--	--	--	--	--	--	--	--
SEP.											
08...	--	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03535912 - CLINCH RIVER AT MELTON HILL DAM (TAILWATER),TENN (LAT 35 53 07 LONG 084 18 03)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
OCT.											
04...	0940	--	15500	--	--	--	--	--	--	--	--
11...	0800	--	8400	--	--	--	--	--	--	--	--
18...	1130	--	6000	--	--	--	--	--	--	--	--
29...	0755	--	16000	--	--	240	--	40	--	30	9.8
NOV.											
01...	0900	--	16000	--	--	--	--	--	--	--	--
08...	1200	--	11000	--	--	--	--	--	--	--	--
15...	0900	--	16000	--	--	--	--	--	--	--	--
18...	0830	--	8000	--	--	330	--	60	--	26	9.9
29...	1000	--	8000	--	--	--	--	--	--	--	--
DEC.											
06...	1330	--	8400	--	--	--	--	--	--	--	--
10...	0800	--	15500	--	600	330	--	40	--	32	9.4
13...	0900	--	10200	--	--	--	--	--	--	--	--
20...	1200	--	10000	--	--	--	--	--	--	--	--
27...	0930	--	10000	--	--	--	--	--	--	--	--
JAN.											
21...	0830	--	10300	--	--	200	--	80	--	28	8.0
21...	0900	--	10300	--	--	--	--	--	--	--	--
FEB.											
18...	0745	--	20000	--	--	170	--	40	--	28	6.8
21...	0800	--	22000	--	--	--	--	--	--	--	--
MAR.											
11...	0815	--	8000	4.3	300	170	--	30	--	20	6.9
14...	0630	--	24450	--	--	--	--	--	--	--	--
APR.											
15...	0800	--	22000	5.2	--	220	--	50	--	21	7.0
18...	0830	--	10550	--	--	--	--	--	--	--	--
MAY											
23...	0820	--	10200	--	--	--	--	--	--	--	--
JUNE											
09...	0810	--	9680	--	--	--	--	--	--	--	--
10...	0815	--	20000	2.6	<200	260	--	30	--	28	7.0
18...	1330	1.0	15250	5.3	--	500	<50	40	<10	27	7.4
JULY											
22...	0800	--	9000	5.6	--	140	--	40	--	30	7.8
25...	0930	--	10200	--	--	--	--	--	--	--	--
AUG.											
18...	0800	--	5000	5.8	--	510	--	50	--	30	4.6
SEP.											
08...	0800	--	5000	5.3	500	150	--	60	--	33	9.3

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03535912 - CLINCH RIVER AT MELTON HILL DAM (TAILWATER),TENN (LAT 35 53 07 LONG 084 18 03)--Continued

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.											
04...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
29...	2.8	1.5	93	0	17	3.0	<.1	.14	.03	.22	.03
NOV.											
01...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
18...	3.4	1.8	98	0	18	3.0	<.1	.22	.03	.12	.02
29...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
06...	--	--	--	--	--	--	--	--	--	--	--
10...	3.4	1.8	97	0	12	3.0	<.1	1.6	.08	.17	.01
13...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
21...	2.7	1.6	98	0	17	3.0	--	.39	.09	.05	.02
21...	--	--	--	--	--	--	--	--	--	--	--
FEB.											
18...	4.3	1.6	98	0	18	3.0	<.1	.65	.14	.02	.02
21...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
11...	3.2	1.2	98	0	13	3.0	<.1	.54	.03	.13	.02
14...	--	--	--	--	--	--	--	--	--	--	--
APR.											
15...	3.4	1.0	92	0	16	3.0	<.1	1.3	.02	.08	.02
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
23...	--	--	--	--	--	--	--	--	--	--	--
JUNE											
09...	--	--	--	--	--	--	--	--	--	--	--
10...	6.6	1.2	84	--	15	3.0	<.1	.63	.06	.14	.01
18...	7.2	1.4	87	0	17	2.0	--	.53	.03	.11	.01
JULY											
22...	2.2	1.2	83	0	10	2.0	<.1	.53	.03	.12	.06
25...	--	--	--	--	--	--	--	--	--	--	--
AUG.											
18...	2.8	1.1	92	--	14	3.0	<.1	.54	.03	.17	.02
SEP.											
08...	3.4	1.3	100	0	13	3.0	<.1	.54	.03	.17	.01

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03535912 - CLINCH RIVER AT MELTON HILL DAM (TAILWATER),TENN (LAT 35 53 07 LONG 084 18 03)--Continued

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)
OCT.										
04...	--	--	--	--	--	--	--	--	19.5	--
11...	--	--	--	--	--	--	--	--	19.0	--
18...	--	--	--	--	--	--	--	--	20.0	--
29...	--	120	.16	5180	5	120	230	7.9	17.8	5
NOV.										
01...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	18.9	--
15...	--	--	--	--	--	--	--	--	15.0	--
18...	--	150	.20	3240	3	110	240	7.9	11.1	10
29...	--	--	--	--	--	--	--	--	12.2	--
DEC.										
06...	--	--	--	--	--	--	--	--	12.2	--
10...	--	130	.18	5440	3	120	240	7.9	8.3	10
13...	--	--	--	--	--	--	--	--	9.4	--
20...	--	--	--	--	--	--	--	--	8.9	--
27...	--	--	--	--	--	--	--	--	10.0	--
JAN.										
21...	--	140	.19	3890	8	100	240	7.7	7.2	10
21...	--	--	--	--	--	--	--	--	7.8	--
FEB.										
18...	--	120	.16	6480	1	98	240	7.9	8.9	6
21...	--	--	--	--	--	--	--	--	8.9	--
MAR.										
11...	--	120	.16	2590	5	78	230	7.9	8.9	6
14...	--	--	--	--	--	--	--	--	8.9	--
APR.										
15...	--	120	.16	7130	7	81	220	7.9	11.7	5
18...	--	--	--	--	--	--	--	--	12.8	--
MAY										
23...	--	--	--	--	--	--	--	--	17.8	--
JUNE										
09...	--	--	--	--	--	--	--	--	18.1	--
10...	--	120	.16	6480	<1	99	210	7.6	19.4	12
18...	.01	110	.15	4530	5	98	220	7.8	19.5	17
JULY										
22...	--	110	.15	2670	1	110	190	7.7	18.3	10
25...	--	--	--	--	--	--	--	--	20.0	--
AUG.										
18...	--	120	.16	1620	6	94	200	7.2	19.4	15
SEP.										
08...	--	140	.19	1890	<1	120	230	7.5	20.6	14

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03535912 - CLINCH RIVER AT MELTON HILL DAM (TAILWATER),TENN (LAT 35 53 07 LONG 084 18 03)--Continued

DATE	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
OCT.										
04...	--	7.0	--	--	--	--	--	--	--	--
11...	--	7.4	--	--	--	--	--	--	--	--
18...	--	7.0	--	--	--	--	--	--	--	--
29...	5	--	3	--	--	--	--	--	--	--
NOV.										
01...	--	7.7	--	--	--	--	--	--	--	--
08...	--	7.5	--	--	--	--	--	--	--	--
15...	--	8.0	--	--	--	--	--	--	--	--
18...	4	--	6	--	--	--	--	--	--	--
29...	--	8.9	--	--	--	--	--	--	--	--
DEC.										
06...	--	9.2	--	--	--	--	--	--	--	--
10...	4	--	5	--	7.6	<5	100	<10	<100	<1
13...	--	9.8	--	--	--	--	--	--	--	--
20...	--	9.7	--	--	--	--	--	--	--	--
27...	--	9.4	--	--	--	--	--	--	--	--
JAN.										
21...	17	--	5	--	--	--	--	--	--	--
21...	--	10.5	--	--	--	--	--	--	--	--
FEB.										
18...	5	--	6	--	--	--	--	--	--	--
21...	--	11.0	--	--	--	--	--	--	--	--
MAR.										
11...	6	--	--	--	1.4	<5	<100	<10	<100	2
14...	--	10.0	--	--	--	--	--	--	--	--
APR.										
15...	11	--	7	--	--	--	--	--	--	--
18...	--	10.1	--	--	--	--	--	--	--	--
MAY										
23...	--	9.6	--	--	--	--	--	--	--	--
JUNE										
09...	--	8.9	--	--	--	--	--	--	--	--
10...	2	--	9	--	2.1	6	<100	<10	<100	1
18...	8	7.3	8	<1.0	3.1	--	--	--	--	<1
JULY										
22...	5	--	4	--	--	--	--	--	--	--
25...	--	9.2	--	--	--	--	--	--	--	--
AUG.										
18...	6	9.4	4	--	--	--	--	--	--	--
SEP.										
08...	2	8.2	6	--	1.7	<5	<100	<10	160	<1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03535912 - CLINCH RIVER AT MELTON HILL DAM (TAILWATER),TENN (LAT 35 53 07 LONG 084 18 03)--Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
04...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
NOV.										
01...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
DEC.										
06...	--	--	--	--	--	--	--	--	--	--
10...	<5	20	<10	<10	<.2	<50	<2	<10	<1000	<10
13...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
JAN.										
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
FEB.										
18...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
MAR.										
11...	<5	40	33	<10	<.2	<50	<2	<10	<1000	10
14...	--	--	--	--	--	--	--	--	--	--
APR.										
15...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
MAY										
23...	--	--	--	--	--	--	--	--	--	--
JUNE										
09...	--	--	--	--	--	--	--	--	--	--
10...	<5	30	<10	<10	<.2	<50	<2	<10	<1000	<10
18...	<5	20	<10	--	<.2	<50	--	--	--	<10
JULY										
22...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
AUG.										
18...	--	--	--	--	--	--	--	--	--	--
SEP.										
08...	<5	20	<10	<10	<.2	<50	<2	<10	<1000	10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03538295 - EMORY RIVER AT MAHAN VILLAGE, TENN (LAT 36 10 39 LONG 084 28 28)

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
DEC.							
10...	1605	4.8	11	9	63	1.6	.0
17...	1410	4.9	14	11	80	1.2	.0

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
DEC.							
10...	90	.12	180	7.6	3.0	3	.4
17...	112	.15	220	7.0	2.0	2	2.2

03539848 - FLAT FORK NEAR PETROS, TENN (LAT 36 07 35 LONG 084 30 11)

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
DEC.							
10...	1500	4.8	9	7	7.6	1.2	.0

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
DEC.							
10...	46	.06	34	8.0	5.0	3	.1

03539850 - JUDGE BRANCH NEAR PETROS, TENN (LAT 36 07 34 LONG 084 30 11)

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
DEC.							
10...	1500	5.0	9	7	11	2.2	.1
17...	1310	4.9	10	8	11	2.5	.1

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
DEC.							
10...	20	.03	40	8.2	5.0	2	.1
17...	20	.03	30	7.5	4.5	2	.5

TENNESSEE RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03540500 - EMORY RIVER AT OAKDALE, TENN. (LAT 35 58 59 LONG 084 33 29)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV.											
06...	1100	1.0	591	--	400	260	90	140	140	8.0	2.4
JAN.											
14...	1330	1.0	3210	--	--	130	<50	40	40	2.0	.9
FEB.											
18...	1015	1.0	3750	--	400	180	70	50	50	4.0	1.0
MAR.											
04...	1345	1.0	2860	--	--	230	<50	70	60	4.0	1.4
04...	1500	1.0	2860	--	--	110	<50	70	60	5.0	1.5
APR.											
07...	1130	1.0	1166	3.8	--	130	50	70	70	4.0	1.3
MAY											
06...	1030	1.0	864	3.6	400	110	70	40	30	3.0	1.3
JUNE											
09...	1430	1.0	192	1.3	--	300	80	40	30	7.0	1.7
JULY											
08...	1045	1.0	92	2.5	--	390	120	80	40	9.0	2.8
AUG.											
12...	1400	1.0	166	2.9	650	610	100	30	10	12	3.6
SEP.											
15...	1430	1.0	6.4	1.8	--	1000	<50	50	40	12	3.4

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
NOV.											
06...	2.2	1.5	13	0	5.0	4.0	<.1	.01	.03	.05	.01
JAN.											
14...	1.1	.7	5	0	8.0	2.0	--	.18	.02	.04	.02
FEB.											
18...	1.4	.7	3	0	11	2.0	<.1	.28	.03	.03	.01
MAR.											
04...	1.3	.6	6	0	9.0	2.0	<.1	.15	<.01	.14	.01
04...	1.3	.6	6	0	9.0	3.0	<.1	.16	<.01	.11	.01
APR.											
07...	.4	.5	1	0	10	2.0	<.1	.06	.02	.18	.03
MAY											
06...	1.2	.7	7	0	9.0	3.0	<.1	.32	.03	.05	.01
JUNE											
09...	5.6	1.1	14	--	13	3.0	<.1	.07	.06	.08	.01
JULY											
08...	2.5	1.2	12	0	23	3.0	<.1	.11	.03	.13	.01
AUG.											
12...	4.0	1.6	16	0	34	4.0	<.1	.14	.02	.12	.02
SEP.											
15...	3.1	1.5	20	0	3.0	3.0	<.1	.03	.02	.22	.03

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03540500 - EMORY RIVER AT OAKDALE, TENN. (LAT 35 58 59 LONG 084 33 29)--Continued

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
NOV.											
06...	.01	50	.07	79.8	1	30	98	6.2	10.6	10	5
JAN.											
14...	.02	30	.04	260	5	9	41	5.5	3.9	5	15
FEB.											
18...	.01	40	.05	405	5	14	43	5.0	6.7	11	11
MAR.											
04...	<.01	20	.03	154	<1	16	43	6.5	3.9	5	2
04...	<.01	20	.03	154	<1	19	42	6.5	3.9	5	3
APR.											
07...	<.01	30	.04	94.4	<1	15	44	5.6	8.6	4	4
MAY											
06...	<.01	20	.03	46.7	<1	13	49	6.0	16.1	3	1
JUNE											
09...	<.01	50	.07	25.9	2	24	64	5.8	23.6	22	2
JULY											
08...	<.01	60	.08	14.9	9	34	92	6.5	26.7	12	9
AUG.											
12...	.01	80	.11	35.9	9	45	120	6.2	31.1	13	8
SEP.											
15...	.01	70	.10	1.21	7	44	110	7.5	23.5	17	7

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV.											
06...	9.8	5	1.1	10	<10	2.4	<5	<100	<10	<100	<1
JAN.											
14...	13.0	12	--	--	--	--	--	--	--	--	--
FEB.											
18...	11.0	2	--	--	--	1.2	<5	<100	<10	<100	<1
MAR.											
04...	13.5	6	--	--	--	--	--	--	--	--	--
04...	13.5	6	--	--	--	--	--	--	--	--	--
APR.											
07...	11.0	2	--	--	--	--	--	--	--	--	--
MAY											
06...	8.7	2	<1.0	<10	<10	1.5	<5	<100	<10	<100	<1
JUNE											
09...	7.7	8	--	--	--	--	--	--	--	--	--
JULY											
08...	6.8	6	--	--	--	--	--	--	--	--	--
AUG.											
12...	6.9	8	--	--	--	2.7	7	<100	<10	70	<1
SEP.											
15...	8.2	5	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03540500 - EMORY RIVER AT OAKDALE, TENN. (LAT 35 58 59 LONG 084 33 29)--Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.										
06...	<5	<10	<10	<10	--	<50	<2	<10	<1000	40
JAN.										
14...	--	--	--	--	--	--	--	--	--	--
FEB.										
18...	<5	<10	21	<10	.2	<50	<2	<10	<1000	20
MAR.										
04...	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--
APR.										
07...	--	--	--	--	--	--	--	--	--	--
MAY										
06...	<5	10	22	<10	<.2	<50	<2	<10	<1000	20
JUNE										
09...	--	--	--	--	--	--	--	--	--	--
JULY										
08...	--	--	--	--	--	--	--	--	--	--
AUG.										
12...	<5	30	<10	<10	<.2	<50	<2	<10	<1000	<10
SEP.										
15...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566404 - TENNESSEE RIVER AT SEQUOYAH NUCLEAR PLANT, TENN (LAT 35 13 15 LONG 085 05 12)

DATE	TIME	DEPTH (FT)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL ALUM-INUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
NOV.											
13...	1315	3.0	--	--	--	--	--	--	--	--	--
13...	1317	10	--	--	--	--	--	--	--	--	--
13...	1320	3.0	--	900	370	60	60	30	18	4.8	7.0
13...	1322	13	--	--	--	--	--	--	--	--	--
13...	1325	26	--	--	--	--	--	--	--	--	--
13...	1330	39	--	700	420	<50	70	40	19	4.9	7.1
13...	1335	46	--	--	--	--	--	--	--	--	--
FEB.											
05...	1316	3.0	--	--	--	--	--	--	--	--	--
05...	1320	10	--	--	--	--	--	--	--	--	--
05...	1325	3.0	--	400	330	110	80	<10	17	3.5	4.7
05...	1327	13	--	--	--	--	--	--	--	--	--
05...	1329	26	--	--	--	--	--	--	--	--	--
05...	1331	39	--	300	470	120	150	<10	17	3.5	4.6
05...	1333	49	--	--	--	--	--	--	--	--	--
MAY											
20...	1415	10	--	--	--	--	--	--	--	--	--
20...	1420	3.0	3.4	200	440	<50	40	10	21	4.1	6.2
20...	1422	13	--	--	--	--	--	--	--	--	--
20...	1425	26	--	--	--	--	--	--	--	--	--
20...	1430	39	3.7	200	580	<50	50	10	21	4.1	6.4
20...	1432	46	--	--	--	--	--	--	--	--	--
AUG.											
06...	1333	3.0	--	--	--	--	--	--	--	--	--
06...	1335	10	--	--	--	--	--	--	--	--	--
06...	1340	3.0	5.8	560	180	<50	40	<10	19	4.2	4.7
06...	1342	13	--	--	--	--	--	--	--	--	--
06...	1345	26	--	--	--	--	--	--	--	--	--
06...	1350	39	5.7	550	520	<50	50	<10	19	4.1	4.7
06...	1356	46	--	--	--	--	--	--	--	--	--

DATE	TOTAL PO-TAS-SIUM (K) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON-ATE ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)
NOV.											
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	1.5	53	0	4.0	7.0	<.1	.29	.07	.39	.02	.01
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	1.5	51	0	16	8.0	<.1	.29	.06	.12	.02	.02
13...	--	--	--	--	--	--	--	--	--	--	--
FEB.											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	1.4	51	0	15	5.0	<.1	.54	.07	.11	.02	.02
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	1.2	51	0	16	6.0	<.1	1.8	.08	.16	.06	.03
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	1.2	49	0	7.0	5.0	<.1	.29	.05	.17	.03	.01
20...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
20...	1.2	48	0	5.0	5.0	<.1	.30	.07	.15	.03	.01
20...	--	--	--	--	--	--	--	--	--	--	--
AUG.											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	1.2	54	0	12	7.0	<.1	.21	.01	.19	.02	.01
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	1.1	55	0	12	7.0	<.1	.27	.04	.14	.02	<.01
06...	--	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566404 - TENNESSEE RIVER AT SEQUOYAH NUCLEAR PLANT, TENN (LAT 35 13 15 LONG 085 05 12)--Continued

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
NOV.										
13...	--	--	--	--	180	7.5	14.7	--	--	7.7
13...	--	--	--	--	180	7.4	15.0	--	--	7.5
13...	--	--	--	65	180	7.5	14.7	10	6	7.9
13...	--	--	--	--	170	7.4	14.7	--	--	7.6
13...	--	--	--	--	180	7.4	14.7	--	--	7.3
13...	--	--	--	68	170	7.4	14.7	10	6	7.2
13...	--	--	--	--	170	7.4	14.7	--	--	7.2
FEB.										
05...	--	--	--	--	190	6.8	8.5	--	--	12.0
05...	--	--	--	--	190	6.8	8.5	--	--	12.0
05...	100	.14	20	57	190	6.8	8.5	17	27	11.6
05...	--	--	--	--	190	6.8	8.5	--	--	12.0
05...	--	--	--	--	190	6.8	8.5	--	--	12.0
05...	100	.14	43	57	190	6.8	8.5	15	40	12.2
05...	--	--	--	--	190	6.8	8.5	--	--	12.2
MAY										
20...	--	--	--	--	140	7.2	20.0	--	--	6.8
20...	70	.10	6	69	140	7.3	21.2	10	6	7.6
20...	--	--	--	--	140	7.2	20.0	--	--	6.8
20...	--	--	--	--	140	7.1	19.7	--	--	6.6
20...	90	.12	7	69	140	7.1	19.5	10	8	6.6
20...	--	--	--	--	140	7.1	19.5	--	--	6.7
AUG.										
06...	--	--	--	--	--	--	26.2	--	--	6.8
06...	--	--	--	--	--	--	25.9	--	--	5.9
06...	100	.14	6	65	160	7.6	26.5	16	3	7.2
06...	--	--	--	--	--	--	25.8	--	--	5.4
06...	--	--	--	--	--	--	25.7	--	--	5.1
06...	90	.12	5	64	160	7.0	25.6	13	4	4.8
06...	--	--	--	--	--	--	25.5	--	--	4.8

DATE	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV.										
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	6	<1.0	40	<10	4.6	<5	200	<10	--	1
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	5	<1.0	10	<10	2.5	<5	<100	<10	--	<1
13...	--	--	--	--	--	--	--	--	--	--
FEB.										
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	6	<1.0	30	20	1.9	<5	<100	<10	<100	<1
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	7	<1.0	10	10	2.3	<5	<100	<10	<100	<1
05...	--	--	--	--	--	--	--	--	--	--
MAY										
20...	--	--	--	--	--	--	--	--	--	--
20...	5	1.3	10	10	2.1	<5	<100	<10	<100	<1
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	4	<1.0	30	10	6.2	<5	<100	<10	<100	<1
20...	--	--	--	--	--	--	--	--	--	--
AUG.										
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	9	2.7	<10	<10	2.5	<5	<100	<10	<100	<1
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	6	<1.0	<10	<10	1.5	<5	<100	<10	<100	<1
06...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566404 - TENNESSEE RIVER AT SEQUOYAH NUCLEAR PLANT, TENN (LAT 35 13 15 LONG 085 05 12)--Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.										
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	<5	20	<10	--	<.2	<50	<2	<10	--	20
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	<5	30	<10	--	<.2	<50	<2	<10	--	20
13...	--	--	--	--	--	--	--	--	--	--
FEB.										
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	20
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	<5	<10	52	<10	<.2	<50	<2	<10	<1000	30
05...	--	--	--	--	--	--	--	--	--	--
MAY										
20...	--	--	--	--	--	--	--	--	--	--
20...	<5	290	<10	<10	<.2	<50	<2	<10	<1000	70
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	7	230	<10	<10	<.2	<50	<2	<10	<1000	60
20...	--	--	--	--	--	--	--	--	--	--
AUG.										
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	<5	70	<10	<10	<.2	<50	<2	<10	<1000	30
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	<5	40	<10	<10	<.2	<50	--	<10	<1000	40
06...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.												
01...	0825	37000	800	470	60	20	4.6	7.1	1.4	--	--	11
02...	0820	25000	800	500	70	19	4.6	7.2	1.4	--	--	14
03...	0820	23000	800	460	60	19	4.6	7.2	1.4	--	--	15
04...	0830	27000	900	610	80	19	4.5	7.4	1.4	--	--	13
05...	1800	36000	1000	360	60	18	4.2	7.4	1.4	--	--	15
06...	1800	28000	900	300	40	18	4.3	7.2	1.6	--	--	16
07...	0835	27500	900	420	60	20	4.7	7.3	1.4	--	--	16
08...	0825	37000	1000	350	60	18	4.3	7.2	1.5	--	--	16
09...	0820	44000	1100	350	70	19	4.5	7.1	1.5	--	--	15
10...	0830	44000	800	360	40	19	4.7	7.1	1.5	--	--	14
11...	0830	36000	800	340	70	19	4.7	7.2	1.5	--	--	15
12...	0900	22800	1100	720	80	18	4.8	7.0	1.5	--	--	15
13...	0900	15200	700	330	40	19	4.9	7.2	1.5	--	--	15
14...	0900	33500	1000	520	50	19	5.0	7.0	1.5	--	--	15
15...	0830	27500	600	330	50	19	4.8	7.2	1.6	--	--	16
16...	0830	26000	1200	540	70	20	4.4	6.9	1.7	--	--	15
17...	0830	31000	1600	400	60	19	4.4	6.7	1.5	--	--	14
18...	0830	32000	1100	400	50	20	4.4	6.9	1.5	--	--	16
19...	0800	32000	1600	450	70	18	4.2	7.0	1.5	--	--	17
20...	0100	29100	1500	550	60	19	4.2	7.0	1.5	--	--	17
21...	0830	31000	1500	410	60	20	4.4	6.9	1.5	--	--	16
21...	1000	31300	--	420	60	18	4.3	7.0	1.5	52	0	14
22...	0830	31500	800	460	50	19	4.3	7.2	1.5	--	--	12
23...	0825	31000	800	420	70	19	4.6	7.4	1.5	--	--	15
24...	0830	31000	600	390	60	18	4.6	7.2	1.4	--	--	15
25...	0830	31000	800	380	70	18	4.8	7.3	1.4	--	--	14
26...	0830	34400	400	400	70	18	4.6	7.3	1.5	--	--	15
27...	1215	22400	900	390	60	18	4.6	7.4	1.5	--	--	13
28...	0730	32600	800	380	70	18	4.6	7.3	1.5	--	--	15
29...	0828	34000	900	390	70	18	4.6	7.3	1.5	--	--	13
30...	0820	27000	600	260	60	17	4.2	7.3	1.5	--	--	15
31...	0820	31000	500	360	60	14	3.8	7.4	1.5	--	--	16
NOV.												
01...	0825	28000	600	380	60	15	3.9	7.4	1.5	--	--	11
02...	0830	30400	700	400	80	15	4.0	7.4	1.6	--	--	12
03...	0830	27000	700	390	60	15	4.0	7.1	1.5	--	--	10
04...	0825	27500	800	400	80	15	4.0	7.1	1.5	--	--	13
05...	0825	32000	800	430	80	15	4.0	7.3	1.5	--	--	14
06...	0820	32000	500	340	70	18	4.1	7.1	1.5	--	--	14
07...	0825	32000	800	380	80	18	4.1	6.8	1.5	--	--	14

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.												
01...	8.0	<.1	.40	.06	.18	.04	90	.12	8990	4	69	--
02...	8.0	<.1	.39	.07	.51	.03	100	.14	6750	4	66	--
03...	8.0	<.1	.41	.07	.13	.02	100	.14	6210	3	66	--
04...	8.0	<.1	.40	.07	.12	.02	100	.14	7290	6	66	--
05...	8.0	<.1	.38	.03	.13	.02	100	.14	9720	6	62	--
06...	8.0	<.1	.37	.02	.14	.02	90	.12	6800	6	63	--
07...	8.0	<.1	.39	.04	.04	.02	100	.14	7430	5	69	--
08...	8.0	<.1	.38	.02	.13	.02	100	.14	9990	8	63	--
09...	8.0	<.1	.41	.17	.13	.03	100	.14	11900	7	66	--
10...	8.0	<.1	.36	.04	.12	.02	100	.14	11900	5	67	--
11...	6.0	<.1	.34	.05	.10	.02	100	.14	9720	6	67	--
12...	8.0	<.1	1.6	.11	.11	.03	90	.12	5540	8	65	--
13...	8.0	<.1	3.6	.08	.18	.02	100	.14	4100	5	68	--
14...	8.0	<.1	.31	.05	.15	.02	90	.12	8140	6	68	--
15...	8.0	<.1	.34	.07	.25	.02	100	.14	7430	7	67	--
16...	8.0	<.1	.37	.07	.47	.04	90	.12	6320	10	68	--
17...	7.0	<.1	.32	.05	.25	.03	100	.14	8370	4	66	--
18...	8.0	<.1	.33	.05	.13	.03	100	.14	8640	7	68	--
19...	11	<.1	.37	.05	.10	.02	80	.11	6910	6	62	--
20...	11	<.1	.51	.05	.11	.02	90	.12	7070	5	65	--
21...	11	<.1	.50	.10	.08	.02	80	.11	6700	5	68	--
21...	8.0	<.1	.42	.07	.08	.02	100	.14	8450	3	63	180
22...	8.0	<.1	.38	.05	.13	.03	100	.14	8510	4	65	--
23...	8.0	<.1	.34	.06	.16	.02	100	.14	8370	3	66	--
24...	8.0	.1	.34	.13	.05	.02	90	.12	7530	4	64	--
25...	8.0	<.1	.34	.09	.07	.02	90	.12	7530	11	65	--
26...	8.0	<.1	.34	.07	.09	.02	100	.14	9290	2	64	--
27...	8.0	<.1	.34	.07	.09	.02	90	.12	5440	2	64	--
28...	8.0	<.1	.33	.05	.09	.02	90	.12	7920	2	64	--
29...	8.0	<.1	.33	.05	.08	.02	90	.12	8260	2	64	--
30...	9.0	<.1	.31	.05	.15	.03	90	.12	6560	2	60	--
31...	8.0	<.1	.32	.05	.10	.02	100	.14	8370	4	51	--
NOV.												
01...	8.0	<.1	.32	.06	.16	.02	100	.14	7560	6	53	--
02...	8.0	<.1	.32	.04	.12	.02	90	.12	7390	7	54	--
03...	8.0	<.1	.31	.04	.14	.02	100	.14	7290	6	54	--
04...	8.0	<.1	.30	.04	.14	.02	100	.14	7430	3	54	--
05...	8.0	<.1	.29	.06	.09	.01	100	.14	8640	5	54	--
06...	5.0	<.1	.29	.07	.09	.01	100	.14	8640	5	62	--
07...	8.0	<.1	.29	.11	.07	.02	90	.12	7780	5	62	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
01...	--	21.0	10	2	--	14	<1	<10	10	<.2	<10
02...	--	21.0	10	4	--	9	<1	<10	<10	<.2	<10
03...	--	20.0	10	7	--	23	<1	<10	<10	<.2	<10
04...	--	20.0	10	9	--	11	1	<10	52	<.2	<10
05...	--	21.0	10	3	--	8	<1	80	18	<.2	<10
06...	--	21.0	10	3	--	9	<1	20	25	.8	20
07...	--	19.0	10	7	8.0	8	<1	<10	12	<.2	<10
08...	--	19.0	10	6	--	4	<1	170	18	<.2	<10
09...	--	19.0	10	6	--	7	1	30	<10	<.2	20
10...	--	19.0	10	7	--	7	<1	<10	<10	<.2	10
11...	--	19.0	10	4	--	6	<1	<10	<10	<.2	<10
12...	--	21.0	10	4	--	6	<1	60	<10	<.2	100
13...	--	21.0	10	4	--	9	<1	20	<10	<.2	<10
14...	--	22.0	10	5	--	6	<1	40	<10	<.2	60
15...	--	20.0	10	4	7.1	9	<1	10	<10	<.2	<10
16...	--	20.0	10	5	--	16	3	30	18	<.2	320
17...	--	19.0	5	3	--	9	<1	20	<10	<.2	<10
18...	--	20.0	5	4	--	3	<1	20	<10	<.2	<10
19...	--	19.0	10	5	--	6	<1	20	<10	<.2	10
20...	--	19.0	10	6	--	5	<1	90	<10	.2	80
21...	--	18.0	10	6	8.1	6	<1	20	<10	<.2	<10
21...	7.7	17.0	10	5	--	6	--	--	--	--	--
22...	--	18.0	5	4	--	8	<1	<10	<10	1.7	20
23...	--	17.0	5	6	--	7	<1	<10	<10	<.2	30
24...	--	17.0	10	7	--	6	<1	<10	<10	<.2	20
25...	--	17.0	10	3	--	5	<1	<10	<10	.2	20
26...	--	17.0	5	3	--	6	<1	20	<10	<.2	30
27...	--	20.0	10	4	--	4	9	10	<10	<.2	10
28...	--	16.0	5	5	--	4	<1	10	<10	<.2	30
29...	--	17.0	10	6	7.6	6	<1	<10	<10	<.2	20
30...	--	18.0	10	6	--	6	<1	<10	<10	<.2	10
31...	--	18.0	10	6	--	7	<1	<10	<10	<.2	10
NOV.											
01...	--	18.0	5	2	--	9	<1	<10	<10	<.2	20
02...	--	17.8	10	5	--	3	1	<10	10	.2	140
03...	--	17.2	10	5	--	2	<1	<10	<10	.5	10
04...	--	17.8	10	6	7.4	3	1	<10	<10	.2	30
05...	--	17.8	10	5	--	5	1	120	<10	2.3	10
06...	--	17.8	10	5	--	6	1	<10	10	<.2	<10
07...	--	17.0	15	6	--	5	<1	<10	<10	1.5	10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV.										
08...	0828	--	31500	800	420	--	60	--	19	4.1
09...	0720	--	13350	700	370	--	80	--	18	4.2
10...	0720	--	24300	500	400	--	60	--	19	4.2
11...	0830	--	31500	700	350	--	50	--	19	4.2
12...	0825	--	31000	800	430	--	20	--	18	4.2
13...	0825	--	31500	900	400	--	80	--	19	4.8
13...	1030	1.0	30450	700	360	<50	80	50	18	4.7
14...	0825	--	30000	600	690	--	90	--	18	4.8
15...	0830	--	31000	400	360	--	70	--	18	4.8
16...	1200	--	29900	400	400	--	40	--	15	4.7
17...	1300	--	29200	400	390	--	80	--	15	5.0
18...	0830	--	31000	300	390	--	70	--	16	4.8
19...	0825	--	33000	700	360	--	80	--	16	4.6
20...	0820	--	31500	1000	360	--	60	--	15	4.6
21...	0825	--	29000	300	350	--	60	--	17	4.6
22...	0825	--	29000	400	210	--	40	--	17	4.5
23...	0900	--	30500	500	470	--	90	--	18	4.7
24...	0800	--	34000	600	480	--	80	--	18	4.7
25...	0825	--	32000	500	400	--	60	--	18	4.6
26...	0820	--	33000	700	470	--	50	--	17	4.7
27...	0800	--	35000	1200	510	--	50	--	17	4.8
28...	0830	--	35000	800	530	--	60	--	19	4.9
29...	0825	--	29500	700	700	--	60	--	18	4.9
30...	1000	--	37000	800	490	--	70	--	19	4.9
DEC.										
01...	1000	--	14000	800	430	--	60	--	18	4.9
02...	0830	--	30000	700	380	--	60	--	18	4.7
03...	0825	--	28000	700	340	--	50	--	19	4.9
04...	0835	--	29000	300	340	--	40	--	18	4.7
05...	0830	--	44000	300	350	--	50	--	18	4.6
06...	0830	--	44000	700	430	--	50	--	18	4.6
07...	1150	--	39600	500	420	--	50	--	18	4.4
08...	0820	--	35400	500	430	--	50	--	17	4.2
09...	0825	--	41000	900	410	--	50	--	18	4.3
10...	0800	--	41000	500	420	--	50	--	17	4.2
11...	0800	--	38000	800	500	--	130	--	18	4.3
12...	0800	--	43300	500	480	--	60	--	17	4.3
13...	0825	--	43000	400	460	--	40	--	17	4.4
14...	0900	--	41900	900	1600	--	150	--	18	4.5
15...	0900	--	14000	900	390	--	40	--	17	4.3

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
NOV.										
08...	6.6	1.5	--	--	12	8.0	<.1	.30	.06	.08
09...	6.9	1.5	--	--	14	8.0	<.1	.28	.06	.06
10...	6.7	1.5	--	--	15	8.0	<.1	.27	.06	.10
11...	7.2	1.5	--	--	13	8.0	<.1	.29	.06	.10
12...	7.4	1.6	--	--	14	8.0	<.1	.29	.06	.08
13...	7.4	1.6	--	--	15	8.0	<.1	.28	.08	.06
13...	7.5	1.5	54	0	17	8.0	<.1	.29	.06	.28
14...	7.4	1.5	--	--	14	8.0	<.1	.28	.09	.43
15...	7.2	1.5	--	--	14	8.0	<.1	.29	.07	.09
16...	7.4	1.5	--	--	16	8.0	<.1	.32	.06	.16
17...	7.2	1.5	--	--	16	8.0	<.1	.32	.06	.12
18...	7.4	1.5	--	--	15	8.0	<.1	.32	.06	.22
19...	7.3	1.5	--	--	15	8.0	<.1	.34	.06	.21
20...	7.2	1.6	--	--	18	8.0	<.1	.32	.06	.24
21...	7.4	1.5	--	--	16	8.0	<.1	.32	.06	.22
22...	7.8	1.6	--	--	16	8.0	<.1	.37	.06	.14
23...	7.8	1.7	--	--	12	8.0	<.1	.37	.09	.11
24...	7.6	1.7	--	--	15	8.0	<.1	.37	.08	.14
25...	7.4	1.6	--	--	14	8.0	.1	.37	.09	.26
26...	7.6	1.7	--	--	13	8.0	<.1	.44	.07	.09
27...	7.2	1.7	--	--	15	7.0	<.1	.37	.10	.32
28...	7.5	1.6	--	--	17	7.0	<.1	.35	.06	.20
29...	7.3	1.7	--	--	15	8.0	<.1	.35	.07	.15
30...	7.2	1.5	--	--	27	8.0	<.1	.38	.07	.15
DEC.										
01...	7.3	1.5	--	--	18	8.0	<.1	.38	.06	.10
02...	7.6	1.4	--	--	19	7.0	<.1	.38	.05	.10
03...	7.4	1.6	--	--	16	8.0	<.1	.40	.19	.27
04...	7.7	1.5	--	--	16	8.0	<.1	.42	.08	.10
05...	7.7	1.5	--	--	16	8.0	<.1	.41	.06	.10
06...	7.6	1.5	--	--	15	8.0	<.1	.39	.05	.15
07...	7.2	1.5	--	--	15	8.0	<.1	.40	.06	.11
08...	7.1	1.5	--	--	15	8.0	<.1	.44	.05	.09
09...	7.1	1.4	--	--	16	8.0	<.1	.47	.11	.09
10...	6.9	1.5	--	--	14	8.0	<.1	.42	.06	.13
11...	7.0	1.7	--	--	12	8.0	<.1	.43	.09	.07
12...	7.1	1.8	--	--	24	8.0	.1	.45	.06	.14
13...	7.2	1.8	--	--	12	8.0	<.1	.48	.07	.17
14...	7.0	1.8	--	--	14	8.0	<.1	.64	.02	.22
15...	6.8	1.7	--	--	14	8.0	<.1	.44	.08	.08

TENNESSEE RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)
NOV.										
08...	.02	--	90	.12	7650	2	64	--	17.0	10
09...	.02	--	90	.12	3240	<1	62	--	14.0	10
10...	.02	--	90	.12	5910	<1	65	--	14.0	10
11...	.03	--	90	.12	7650	<1	65	--	16.0	10
12...	.03	--	90	.12	7530	2	62	--	15.0	10
13...	.02	--	100	.14	8510	1	67	--	15.0	10
13...	.06	.01	--	--	--	--	64	7.2	15.0	10
14...	.03	--	100	.14	8100	3	65	--	15.0	10
15...	.02	--	100	.14	8370	2	65	--	14.0	10
16...	.04	--	100	.14	8070	4	57	--	15.0	10
17...	.03	--	100	.14	7880	4	58	--	14.0	10
18...	.04	--	100	.14	8370	4	60	--	13.0	10
19...	.03	--	100	.14	8910	3	59	--	14.0	10
20...	.07	--	110	.15	9360	4	56	--	14.0	10
21...	.05	--	90	.12	7050	5	61	--	13.0	10
22...	.02	--	100	.14	7830	5	61	--	12.0	10
23...	.04	--	90	.12	7410	6	64	--	14.0	15
24...	.02	--	90	.12	8260	4	64	--	13.0	10
25...	.03	--	90	.12	7780	4	64	--	13.0	15
26...	.03	--	90	.12	8020	3	62	--	12.0	10
27...	.05	--	90	.12	8510	3	62	--	12.0	15
28...	.04	--	90	.12	8510	4	68	--	11.0	15
29...	.04	--	100	.14	7970	2	65	--	11.0	15
30...	.02	--	90	.12	8990	2	68	--	11.0	15
DEC.										
01...	.02	--	90	.12	3400	2	65	--	10.0	15
02...	.02	--	90	.12	7290	<1	64	--	10.0	10
03...	.01	--	100	.14	7560	2	68	--	9.0	15
04...	.02	--	90	.12	7050	2	64	--	9.0	10
05...	.02	--	100	.14	11900	<1	64	--	8.0	15
06...	.01	--	100	.14	11900	1	64	--	8.0	10
07...	.03	--	90	.12	9620	2	63	--	11.0	15
08...	.02	--	90	.12	8600	2	60	--	10.0	15
09...	.01	--	90	.12	9960	3	63	--	8.0	15
10...	.03	--	90	.12	9960	3	60	--	8.0	15
11...	.01	--	90	.12	9230	3	63	--	8.0	15
12...	.02	--	170	.23	19900	4	60	--	8.0	15
13...	.02	--	90	.12	10400	2	61	--	8.0	15
14...	.04	--	80	.11	9050	2	63	--	13.0	25
15...	.03	--	80	.11	3020	3	60	--	8.0	15

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)
NOV.										
08...	4	--	6	--	--	--	--	--	--	--
09...	4	--	2	--	--	--	--	--	--	--
10...	5	--	2	--	--	--	--	--	--	--
11...	5	8.1	2	--	--	--	--	--	--	--
12...	5	--	6	--	--	--	--	--	--	--
13...	4	--	4	--	--	--	--	--	--	--
13...	5	8.2	5	<1.0	<10	<10	2.6	<5	<100	<10
14...	7	--	5	--	--	--	--	--	--	--
15...	3	--	2	--	--	--	--	--	--	--
16...	6	--	2	--	--	--	--	--	--	--
17...	5	--	4	--	--	--	--	--	--	--
18...	5	8.4	3	--	--	--	--	--	--	--
19...	4	--	4	--	--	--	--	--	--	--
20...	5	--	5	--	--	--	--	--	--	--
21...	3	--	7	--	--	--	--	--	--	--
22...	4	--	3	--	--	--	--	--	--	--
23...	4	--	6	--	--	--	--	--	--	--
24...	5	--	6	--	--	--	--	--	--	--
25...	6	8.9	6	--	--	--	--	--	--	--
26...	6	--	6	--	--	--	--	--	--	--
27...	4	--	4	--	--	--	--	--	--	--
28...	5	--	7	--	--	--	--	--	--	--
29...	5	--	3	--	--	--	--	--	--	--
30...	6	--	7	--	--	--	--	--	--	--
DEC.										
01...	4	--	6	--	--	--	--	--	--	--
02...	5	8.9	4	--	--	--	--	--	--	--
03...	5	--	6	--	--	--	--	--	--	--
04...	5	--	5	--	--	--	--	--	--	--
05...	5	--	--	--	--	--	--	--	--	--
06...	3	--	5	--	--	--	--	--	--	--
07...	2	--	9	--	--	--	--	--	--	--
08...	3	--	7	--	--	--	--	--	--	--
09...	3	9.7	6	--	--	--	--	--	--	--
10...	4	--	7	--	--	--	--	--	--	--
11...	5	--	9	--	--	--	--	--	--	--
12...	2	--	3	--	--	--	--	--	--	--
13...	2	--	6	--	--	--	--	--	--	--
14...	9	--	2	--	--	--	--	--	--	--
15...	3	--	3	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.									
08...	1	--	20	<10	<.2	--	--	--	10
09...	<1	--	20	<10	<.2	--	--	--	10
10...	<1	--	<10	<10	<.2	--	--	--	10
11...	<1	--	<10	<10	<.2	--	--	--	10
12...	<1	--	<10	<10	<.2	--	--	--	20
13...	<1	--	<10	<10	<.2	--	--	--	20
13...	<1	<5	20	<10	1.2	<50	<2	<10	20
14...	<1	--	10	<10	<.2	--	--	--	80
15...	<1	--	<10	<10	<.2	--	--	--	20
16...	<1	--	20	<10	<.2	--	--	--	20
17...	1	--	10	<10	<.2	--	--	--	30
18...	<1	--	10	<10	<.2	--	--	--	20
19...	<1	--	20	<10	2.9	--	--	--	20
20...	<1	--	20	<10	<.2	--	--	--	30
21...	1	--	20	<10	<.2	--	--	--	20
22...	<1	--	10	<10	<.2	--	--	--	20
23...	2	--	20	<10	<.2	--	--	--	40
24...	1	--	30	<10	<.2	--	--	--	30
25...	<1	--	20	<10	<.2	--	--	--	40
26...	<1	--	20	<10	<.2	--	--	--	20
27...	<1	--	20	<10	<.2	--	--	--	30
28...	<1	--	10	<10	<.2	--	--	--	20
29...	<1	--	<10	<10	<.2	--	--	--	30
30...	<1	--	10	<10	<.2	--	--	--	20
DEC.									
01...	<1	--	20	<10	.5	--	--	--	30
02...	<1	--	20	<10	2.1	--	--	--	20
03...	<1	--	<10	<10	<.2	--	--	--	20
04...	<1	--	30	<10	.2	--	--	--	20
05...	1	--	40	<10	<.2	--	--	--	30
06...	<1	--	40	<10	--	--	--	--	10
07...	<1	--	<10	<10	<.2	--	--	--	40
08...	<1	--	<10	<10	<.2	--	--	--	30
09...	<1	--	40	<10	<.2	--	--	--	20
10...	<1	--	<10	<10	<.2	--	--	--	20
11...	<1	--	2300	<10	<.2	--	--	--	30
12...	<1	--	10	<10	<.2	--	--	--	20
13...	<1	--	20	<10	<.2	--	--	--	20
14...	<1	--	400	<10	<.2	--	--	--	80
15...	<1	--	<10	<10	<.2	--	--	--	40

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
DEC.											
16...	0825	42000	--	--	390	--	50	--	18	4.2	6.9
23...	0730	37500	--	--	--	--	--	--	--	--	--
30...	0825	58300	--	--	--	--	--	--	--	--	--
JAN.											
20...	0825	57500	--	--	130	--	60	--	17	3.7	5.7
FEB.											
05...	1100	42500	--	300	340	100	90	20	17	3.5	4.6
MAR.											
17...	0830	107400	5.7	--	370	--	80	--	10	2.8	2.9
APR.											
14...	0830	34000	6.0	--	140	--	40	--	13	3.5	2.0
MAY											
20...	0953	43100	4.0	400	530	70	50	20	21	4.2	6.7
JUNE											
16...	0830	36000	4.8	--	1000	--	60	--	18	4.0	2.8
JULY											
21...	0835	36000	5.0	--	330	--	50	--	27	4.7	4.9
AUG.											
06...	1115	42300	--	690	460	<50	90	<10	19	4.2	4.6
SEP.											
15...	0835	26000	6.4	--	280	--	40	--	19	4.4	7.6

DATE	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)
DEC.											
16...	1.7	34	0	14	7.0	<.1	.46	.10	.04	.03	--
23...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
20...	1.4	48	0	16	7.0	--	.48	.13	.03	.04	--
FEB.											
05...	1.4	49	0	16	5.0	<.1	.63	.06	.12	.03	.03
MAR.											
17...	1.0	38	0	12	5.0	<.1	.53	.03	.12	.05	--
APR.											
14...	.8	48	0	12	4.0	<.1	.39	.06	.30	.03	--
MAY											
20...	1.1	55	0	10	4.0	<.1	.32	.08	.10	.02	<.01
JUNE											
16...	1.3	51	0	12	4.0	<.1	1.0	.12	.10	.03	--
JULY											
21...	1.4	58	0	11	6.0	<.1	.27	.04	.13	.02	--
AUG.											
06...	1.2	--	--	12	7.0	<.1	.25	.05	.14	.02	<.01
SEP.											
15...	1.4	58	0	13	9.0	<.1	.25	.02	.12	.03	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47)--Continued

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
DEC.											
16...	80	.11	9070	2	62	160	7.6	8.0	15	4	9.7
23...	--	--	--	--	--	--	--	8.0	--	--	9.8
30...	--	--	--	--	--	--	--	8.0	--	--	9.6
JAN.											
20...	90	.12	14000	8	58	160	7.5	7.0	20	11	10.5
FEB.											
05...	100	.14	11500	18	57	150	6.8	9.0	18	28	9.9
MAR.											
17...	70	.10	20300	19	36	120	7.3	8.0	29	--	10.5
APR.											
14...	80	.11	7340	6	47	130	7.4	12.0	20	12	9.4
MAY											
20...	70	.10	8150	9	70	140	7.0	20.8	12	9	7.5
JUNE											
16...	120	.16	11700	5	61	150	7.4	23.0	18	10	7.2
JULY											
21...	90	.12	8750	3	87	170	7.4	26.0	13	5	6.4
AUG.											
06...	100	.14	11400	8	65	--	--	--	11	5	--
SEP.											
15...	100	.14	7020	3	66	150	7.6	24.0	17	7	6.6

DATE	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
DEC.										
16...	1	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
JAN.										
20...	8	--	--	--	--	--	--	--	--	--
FEB.										
05...	6	<1.0	80	20	2.4	<5	100	<10	<100	<1
MAR.										
17...	7	--	--	--	--	--	--	--	--	--
APR.										
14...	7	--	--	--	--	--	--	--	--	--
MAY										
20...	7	<1.0	<10	<10	1.9	<5	<100	<10	<100	<1
JUNE										
16...	15	--	--	--	--	--	--	--	--	--
JULY										
21...	4	--	--	--	--	--	--	--	--	--
AUG.										
06...	7	<1.0	<10	<10	2.0	8	<100	<10	<100	2
SEP.										
15...	7	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03566510 - TENNESSEE RIVER AT CHICKAMAUGA DAM (TW), TENN (LAT 35 06 11 LONG 085 13 47) --Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC.										
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
JAN.										
20...	--	--	--	--	--	--	--	--	--	--
FEB.										
05...	<5	<10	22	<10	<.2	<50	--	<10	<1000	30
MAR.										
17...	--	--	--	--	--	--	--	--	--	--
APR.										
14...	--	--	--	--	--	--	--	--	--	--
MAY										
20...	<5	290	<10	<10	<.2	<50	<2	<10	<1000	90
JUNE										
16...	--	--	--	--	--	--	--	--	--	--
JULY										
21...	--	--	--	--	--	--	--	--	--	--
AUG.										
06...	<5	20	<10	<10	<.2	<50	<2	<10	<1000	20
SEP.										
15...	--	--	--	--	--	--	--	--	--	--

03570525 - TENNESSEE RIVER AT NICKAJACK DAM (TAILWATER), TN (LAT 35 00 09 LONG 085 37 16)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
OCT.											
07...	1030	--	31200	--	--	--	--	--	--	--	--
21...	0830	--	28400	--	--	--	--	--	--	--	--
23...	0930	--	29300	--	--	290	--	50	--	18	4.7
NOV.											
04...	0800	--	28700	--	--	--	--	--	--	--	--
11...	0900	--	29600	--	--	--	--	--	--	--	--
14...	1435	1.0	29800	--	400	310	50	60	40	19	4.8
25...	1145	--	29000	--	--	--	--	--	--	--	--
DEC.											
16...	0800	--	40400	--	--	390	--	50	--	18	4.5
23...	1000	--	40000	--	--	--	--	--	--	--	--
30...	0800	--	40700	--	--	--	--	--	--	--	--
JAN.											
20...	0830	--	59900	--	--	190	--	60	--	18	3.9
FEB.											
03...	1000	--	76400	--	--	--	--	--	--	--	--
06...	1100	--	40200	--	400	460	100	120	20	17	3.2
MAR.											
10...	0915	--	53100	--	--	--	--	--	--	--	--
12...	0830	--	61200	3.9	--	190	--	50	--	13	3.6
APR.											
14...	0830	--	41250	6.1	--	380	--	60	--	13	3.4
MAY											
22...	0940	--	30000	4.3	600	670	<50	70	60	20	4.1
JUNE											
16...	0830	--	37750	5.0	--	650	--	70	--	18	4.0
JULY											
21...	0830	--	40750	5.3	--	100	--	50	--	22	4.9
AUG.											
06...	1235	--	36900	5.4	750	260	<50	60	<10	19	4.4
SEP.											
16...	1200	--	40250	6.0	--	300	--	50	--	19	4.4

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03570525 - TENNESSEE RIVER AT NICKAJACK DAM (TAILWATER), TN (LAT 35 00 09 LONG 085 37 16)--Continued

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.											
07...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
23...	7.5	1.5	46	0	15	8.0	.1	.38	.09	.09	.04
NOV.											
04...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
14...	7.9	1.6	58	0	17	8.0	<.1	.32	.09	.16	.04
25...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
16...	7.4	1.8	47	0	2.0	8.0	<.1	.44	.06	.13	.05
23...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
20...	6.1	1.5	50	0	12	8.0	--	.50	.07	.11	.03
FEB.											
03...	--	--	--	--	--	--	--	--	--	--	--
06...	4.8	1.3	52	0	11	6.0	<.1	.63	.10	.10	.05
MAR.											
10...	--	--	--	--	--	--	--	--	--	--	--
12...	4.1	1.0	53	0	10	6.0	<.1	.50	.03	.12	.03
APR.											
14...	3.6	.9	49	0	7.0	4.0	<.1	.41	.08	.07	.04
MAY											
22...	6.7	1.2	49	0	8.0	4.0	<.1	.34	.06	.11	.03
JUNE											
16...	6.7	1.2	53	0	12	5.0	<.1	.33	.06	.12	.02
JULY											
21...	4.8	1.3	50	0	12	6.0	.1	.30	.08	.10	.02
AUG.											
06...	4.9	1.2	--	--	12	7.0	<.1	.27	.06	.17	.04
SEP.											
16...	7.0	1.3	59	0	13	8.0	<.1	.26	.03	.17	.03

DATE	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
OCT.											
07...	--	--	--	--	--	--	--	--	19.0	--	--
21...	--	--	--	--	--	--	--	--	18.0	--	--
23...	--	100	.14	7910	3	64	170	7.7	17.0	10	5
NOV.											
04...	--	--	--	--	--	--	--	--	18.0	--	--
11...	--	--	--	--	--	--	--	--	16.0	--	--
14...	.02	--	--	--	--	67	180	7.4	13.5	10	5
25...	--	--	--	--	--	--	--	--	13.0	--	--
DEC.											
16...	--	90	.12	9820	3	63	160	7.3	8.0	10	3
23...	--	--	--	--	--	--	--	--	8.0	--	--
30...	--	--	--	--	--	--	--	--	9.0	--	--
JAN.											
20...	--	100	.14	16200	8	61	160	7.4	7.0	15	12
FEB.											
03...	--	--	--	--	--	--	--	--	9.0	--	--
06...	.02	100	.14	10900	38	56	150	7.3	9.0	23	16
MAR.											
10...	--	--	--	--	--	--	--	--	9.0	--	--
12...	--	80	.11	13200	4	47	24	7.3	10.0	4	2
APR.											
14...	--	70	.10	7800	8	46	130	7.5	14.0	15	20
MAY											
22...	.02	80	.11	6480	6	67	--	7.0	21.4	10	9
JUNE											
16...	--	90	.12	9170	4	61	140	7.4	25.0	17	5
JULY											
21...	--	90	.12	9900	2	75	160	7.2	27.0	28	4
AUG.											
06...	.01	100	.14	9960	9	66	--	--	--	10	5
SEP.											
16...	--	100	.14	10900	5	66	150	7.6	26.0	20	2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03570525 - TENNESSEE RIVER AT NICKAJACK DAM (TAILWATER), TN (LAT 35 00 09 LONG 085 37 16)--Continued

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.											
07...	7.0	--	--	--	--	--	--	--	--	--	--
21...	7.2	--	--	--	--	--	--	--	--	--	--
23...	--	6	--	--	--	--	--	--	--	--	--
NOV.											
04...	6.8	--	--	--	--	--	--	--	--	--	--
11...	7.6	--	--	--	--	--	--	--	--	--	--
14...	5.7	5	<1.0	40	10	2.6	<5	<100	<10	--	6
25...	8.2	--	--	--	--	--	--	--	--	--	--
DEC.											
16...	9.5	10	--	--	--	--	--	--	--	--	--
23...	9.6	--	--	--	--	--	--	--	--	--	--
30...	9.4	--	--	--	--	--	--	--	--	--	--
JAN.											
20...	10.2	7	--	--	--	--	--	--	--	--	--
FEB.											
03...	10.0	--	--	--	--	--	--	--	--	--	--
06...	12.0	10	1.1	370	80	2.2	<5	<100	<10	<100	<1
MAR.											
10...	10.3	--	--	--	--	--	--	--	--	--	--
12...	--	7	--	--	--	--	--	--	--	--	--
APR.											
14...	9.5	12	--	--	--	--	--	--	--	--	--
MAY											
22...	6.6	--	1.0	>800	70	--	<5	<100	<10	<100	4
JUNE											
16...	6.9	12	--	--	--	--	--	--	--	--	--
JULY											
21...	6.2	2	--	--	--	--	--	--	--	--	--
AUG.											
06...	--	7	<1.0	30	10	2.0	8	<100	<10	<100	15
SEP.											
16...	6.2	6	--	--	--	--	--	--	--	--	--

DATE	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TI-TANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
07...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
NOV.										
04...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
14...	<5	<10	<10	--	.2	<50	<2	<10	--	20
25...	--	--	--	--	--	--	--	--	--	--
DEC.										
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
JAN.										
20...	--	--	--	--	--	--	--	--	--	--
FEB.										
03...	--	--	--	--	--	--	--	--	--	--
06...	<5	<10	20	<10	<.2	<50	<2	<10	<1000	40
MAR.										
10...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
APR.										
14...	--	--	--	--	--	--	--	--	--	--
MAY										
22...	8	370	<10	<10	<.2	<50	<2	<10	<1000	110
JUNE										
16...	--	--	--	--	--	--	--	--	--	--
JULY										
21...	--	--	--	--	--	--	--	--	--	--
AUG.										
06...	<5	80	<10	<10	<.2	<50	<2	<10	<1000	50
SEP.										
16...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03571000 - SEQUATCHIE RIVER NEAR WHITWELL, TENN. (LAT 35 12 22 LONG 085 29 48)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV.											
19...	1145	1.0	164	--	<200	280	--	40	20	28	6.1
JAN.											
22...	0900	1.0	1910	--	--	210	--	90	--	18	2.4
FEB.											
19...	1455	1.0	1820	--	--	350	80	80	10	19	2.1
MAR.											
18...	0910	1.0	2420	3.7	--	340	--	80	--	14	2.2
APR.											
17...	1035	1.0	523	5.7	--	200	200	40	110	21	3.7

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
NOV.											
19...	2.0	1.1	110	0	8.0	2.0	<.1	.26	.01	.12	.03
JAN.											
22...	.7	.7	51	0	8.0	2.0	--	.45	.04	.06	.03
FEB.											
19...	2.0	1.0	53	0	--	2.0	--	.42	<.01	.16	.02
MAR.											
18...	1.0	.7	58	0	8.0	--	<.1	.56	<.01	.08	.03
APR.											
17...	1.3	.6	79	0	7.0	3.0	<.1	.66	.05	.07	.03

DATE	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
NOV.											
19...	--	120	.16	53.1	4	95	220	7.2	11.5	5	3
JAN.											
22...	--	90	.12	464	15	55	130	7.6	8.0	10	17
FEB.											
19...	.01	--	--	--	14	56	120	6.9	11.5	13	22
MAR.											
18...	--	70	.10	457	26	44	130	7.4	11.3	7	22
APR.											
17...		100	.14	141	4	68	180	7.3	13.5	4	2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03571000 - SEQUATCHIE RIVER NEAR WHITWELL, TENN. (LAT 35 12 22 LONG 085 29 48)--Continued

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV. 19...	8.9	4	<1.0	90	70	1.9	<5	<100	<10	<100	2
JAN. 22...	11.2	5	<1.0	--	--	--	--	--	--	--	--
FEB. 19...	10.4	3	<1.0	10	10	--	--	--	--	--	--
MAR. 18...	9.2	6	--	--	--	--	--	--	--	--	--
APR. 17...	10.5	2	--	--	--	--	--	--	--	--	--

DATE	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TI-TANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 19...	<5	30	<10	<10	<.2	<50	<2	<10	<1000	20
JAN. 22...	--	--	--	--	--	--	--	--	--	--
FEB. 19...	--	<10	--	--	--	--	--	--	--	10
MAR. 18...	--	--	--	--	--	--	--	--	--	--
APR. 17...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03581300 - WARREN HOLLOW SPRING AT MT HERMAN, TENN (LAT 35 21 14 LONG 086 29 29)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 07...	25	2.2	1.1	.7	78	0	64	3.5	2.2

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 07...	.1	72	8	3	.1	160	7.7	16.0	2.5

03581434 - BUCKEYE SPRING NEAR LYNCHBURG, TENN (LAT 35 17 50 LONG 086 24 58)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 07...	73	7.8	2.0	1.3	237	0	194	12	3.1

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 07...	.2	210	20	2	.1	430	7.8	17.0	6.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03581474 - GIMLET SPRING NEAR BELLEVILLE, TENN (LAT 35 16 11 LONG 086 30 22)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV. 06...	--	--	8.0	88	8.8	1.8	1.1	280
JAN. 16...	1000	1.0	7.6	65	6.3	1.0	.7	212

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
NOV. 06...	0	230	19	2.2	.2	248	267	.34	--
JAN. 16...	--	174	11	1.6	.2	183	198	.25	.51

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 06...	260	26	2	.0	500	7.6	15.0	11
JAN. 16...	190	14	1	.0	380	7.2	14.5	21

03582045 - DITCH SPRING NEAR BELLEVILLE, TENN (LAT 35 17 06 LONG 086 32 00)

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV. 06...	67	11	1.5	1.7	242	0	198	9.4	1.8

DATE	DISSOLVED FLUORIDE (F) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 06...	.2	210	14	2	.0	440	7.8	15.5	6.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03582175 - JOHN GILL SPRING NEAR BELLEVILLE, TENN (LAT 35 15 21 LONG 086 34 00)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JAN. 16...	0930	1.5	47	4.7	1.1	.9	145	0	119	10

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 16...	1.7	.0	140	18	2	.0	280	7.4	13.0	9.2

03582203 - GILES HOLLOW SPRING NEAR HOWELL, TENN (LAT 35 14 11 LONG 086 34 26)

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV. 06...	84	8.3	2.3	1.8	275	0	226	19	2.4

DATE	DISSOLVED FLUORIDE (F) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 06...	.2	240	18	2	.1	480	7.6	18.0	11

03582505 - TELEPHONE LINE SPRING NEAR TALLEY, TENN (LAT 35 20 26 LONG 086 40 34)

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV. 08...	83	9.5	3.3	1.2	269	0	221	22	3.9

DATE	DISSOLVED FLUORIDE (F) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 08...	.3	250	26	3	.1	500	7.8	15.0	6.8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03582531 - SANDERS SPRING NEAR PETERSBURG, TENN (LAT 35 21 01 LONG 086 37 36)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JAN. 14...	1530	.10	74	8.3	1.7	.5	233	0	191	18

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 14...	1.6	.3	220	28	2	.1	420	7.4	14.0	15

03582533 - OLD ORCHARD SPRING AT PETERSBURG, TENN (LAT 35 19 17 LONG 086 37 36)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JAN. 14...	1230	.02	95	6.5	1.0	.2	277	0	227	16

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 14...	1.4	.1	260	37	1	.0	480	8.0	11.0	4.4

03582535 - STEED SPRING AT CHESTNUT RIDGE, TENN (LAT 35 19 24 LONG 086 32 32)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV. 06...	--	--	--	66	7.7	1.9	1.0	210
JAN. 15...	1600	.27	8.3	49	4.7	1.3	.8	158

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
NOV. 06...	0	172	16	2.2	.2	--	--	--	--
JAN. 15...	0	130	9.3	1.6	.0	152	153	.21	.11

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 06...	200	24	2	.1	380	7.8	17.0	5.3
JAN. 15...	140	12	2	.0	300	7.4	15.0	10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03582542 - FREEMAN SPRING AT CHESTNUT RIDGE, TENN (LAT 35 20 31 LONG 086 32 51)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 06...	70	6.5	1.7	1.4	223	0	183	8.9	3.1

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 06...	.1	200	19	2	.1	400	7.6	15.0	9.0

03582544 - HELTON HOLLOW SPRING NEAR CHESTNUT RIDGE, TENN (LAT 35 20 53 LONG 086 32 58)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 07...	65	6.1	1.2	.7	208	0	171	11	1.5

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 07...	.2	190	17	1	.0	420	8.2	15.0	2.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03582552 - BURCHETT SPRING NEAR PETERSBURG, TENN (LAT 35 17 59 LONG 086 35 34)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN.								
15...	1100	.06	9.4	56	6.2	1.0	.7	182
16...	0930	1.5	--	47	4.7	1.1	.9	145

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
JAN.									
15...	0	149	9.5	1.1	.0	166	174	.23	.03
16...	0	119	10	1.7	.0	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
JAN.								
15...	170	16	1	.0	330	7.6	15.0	7.3
16...	140	18	2	.0	280	7.4	13.0	9.2

03582560 - MCCRADY HILL SPRING NEAR PETERSBURG, TENN (LAT 35 17 12 LONG 086 37 58)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JAN.										
14...	1030	.04	56	3.4	1.4	.6	163	0	134	6.8

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
JAN.										
14...	3.9	.0	150	20	2	.1	330	7.3	15.8	13

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03582561 - FINLEY CEMETERY SPRING AT BROWNS SHOP, TENN (LAT 35 19 34 LONG 086 43 04)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 08...	68	6.3	1.5	1.9	226	0	185	10	1.7

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 08...	.2	200	10	2	.0	410	8.3	16.5	1.8

03582562 - DUCKWORTH HOLLOW SPRING AT BROWNS SHOP, TENN (LAT 35 18 44 LONG 086 42 42)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 08...	89	7.5	1.9	1.7	276	0	226	20	3.4

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 08...	.2	250	27	2	.1	500	7.6	15.5	11

03582564 - DRIVER CEMETERY SPRING NEAR BROWNS SHOP, TENN (LAT 35 18 25 LONG 086 41 30)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 08...	89	9.5	4.6	1.2	284	0	233	22	4.9

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 08...	.2	260	28	4	.1	500	7.8	16.5	7.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03582579 - PATTON HOLLOW SPRING NEAR HOWELL, TENN (LAT 35 15 27 LONG 086 36 01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV. 07...	--	--	9.3	83	8.4	2.0	2.3	265
JAN. 15...	1000	.36	7.9	51	5.7	1.1	.7	168

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
NOV. 07...	0	217	18	3.6	.2	248	257	.34	--
JAN. 15...	0	138	10	1.2	.1	156	161	.21	.15

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 07...	240	25	2	.1	470	7.5	16.5	13
JAN. 15...	150	13	2	.0	310	7.4	13.0	11

03582647 - BOONSHILL SPRING AT BOONSHILL, TENN (LAT 35 12 44 LONG 086 44 26)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV. 06...	--	--	--	80	9.2	4.0	1.6	261
JAN. 16...	1300	.83	6.6	63	6.2	1.2	.6	202

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
NOV. 06...	0	214	19	5.0	.3	--	--	--	--
JAN. 16...	0	166	13	1.7	.2	210	192	.29	.47

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 06...	240	24	4	.1	470	7.9	17.0	5.3
JAN. 16...	180	17	1	.0	365	7.1	15.0	26

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03583290 - SADDLE GAP CAVE SPRING NEAR BROWNS SHOP, TENN (LAT 35 18 32 LONG 086 44 01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV. 08...	--	--	8.3	7.2	1.1	.9	.3	21
JAN. 14...	1400	.02	7.7	5.0	.8	.7	.3	11

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
NOV. 08...	0	17	4.2	.9	.1	36	33	.05	--
JAN. 14...	--	9	3.5	1.1	.1	28	25	.04	.00

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 08...	23	5	8	.1	70	7.4	16.0	1.3
JAN. 14...	16	7	9	.1	55	7.2	13.8	1.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03584500 - ELK RIVER NEAR PROSPECT, TENN. (LAT 35 01 39 LONG 086 56 52)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
NOV. 18...	1300	4.0	1335	400	520	100	110	50	29	4.2	1.7

DATE	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)
NOV. 18...	1.3	85	0	7.0	3.0	<.1	.24	.04	.13	.11	.07

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
NOV. 18...	110	.15	396	7	90	210	7.5	13.2	10	4	10.4

DATE	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
NOV. 18...	9	1.2	<10	<10	2.2	<5	<100	<10	150	1

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 18...	5	20	<10	<10	.7	<50	<2	<10	<1000	100

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03588500 - SHOAL CREEK AT IRON CITY, TENN. (LAT 35 01 27 LONG 087 34 44)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV.											
18...	1015	2.0	264	--	300	230	50	30	10	15	2.6
DEC.											
10...	1056	1.0	620	--	--	--	--	--	--	--	--
JAN.											
15...	1100	2.0	1295	--	--	120	50	30	<10	13	1.7
FEB.											
05...	1000	3.0	3530	--	1000	290	100	60	<10	10	1.3
MAR.											
04...	1300	3.0	464	--	--	100	<50	20	<10	13	1.9
APR.											
08...	1030	2.0	720	6.0	--	<50	<50	20	10	11	1.5
MAY											
12...	1130	3.0	790	7.3	200	130	80	30	10	13	1.6
JUNE											
16...	1000	2.0	378	7.0	--	500	<50	30	10	16	1.8
JULY											
07...	1345	1.0	293	6.6	--	1200	120	60	10	16	1.8
07...	1450	1.0	293	6.6	--	1600	120	60	10	16	1.9
AUG.											
11...	1315	1.0	276	8.1	560	580	<50	30	<10	16	2.0
SEP.											
08...	1000	3.0	264	7.8	--	230	<50	50	10	17	2.1

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
NOV.											
18...	2.3	1.0	36	0	4.0	8.0	<.1	.21	.04	.12	.04
DEC.											
10...	--	--	43	0	--	--	--	--	--	--	--
JAN.											
15...	1.5	.9	33	0	3.0	3.0	--	.65	.08	.15	.03
FEB.											
05...	1.6	1.1	79	0	13	2.0	--	.33	.06	.24	.08
MAR.											
04...	1.4	.6	36	0	3.0	2.0	<.1	1.1	.03	.06	.03
APR.											
08...	.7	.5	40	0	4.0	3.0	<.1	.48	.06	.06	.03
MAY											
12...	1.7	1.0	31	--	3.0	3.0	<.1	.40	.02	.22	.03
JUNE											
16...	4.7	.8	38	--	2.0	3.0	<.1	.48	.04	.10	.05
JULY											
07...	1.5	1.1	5	0	--	4.0	<.1	.48	.04	.10	.05
07...	1.6	1.1	4	0	5.0	3.0	<.1	.47	.03	.11	.05
AUG.											
11...	2.2	1.0	63	0	2.0	3.0	<.1	.38	.02	.11	.03
SEP.											
08...	2.9	1.2	48	0	2.0	4.0	<.1	.44	.01	.09	.05

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03588500 - SHOAL CREEK AT IRON CITY, TENN. (LAT 35 01 27 LONG 087 34 44)--Continued

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
NOV.											
18...	.07	60	.08	42.7	2	48	120	7.4	12.4	5	2
DEC.											
10...	--	--	--	--	--	--	--	6.7	6.0	--	--
JAN.											
15...	.02	60	.08	210	6	39	91	7.3	7.2	10	8
FEB.											
05...	.02	70	.10	667	40	30	68	7.8	8.9	35	56
MAR.											
04...	.02	50	.07	62.6	<1	40	93	7.4	8.3	7	4
APR.											
08...	.03	60	.08	117	5	34	85	7.4	11.0	2	6
MAY											
12...	.02	70	.10	149	8	39	90	7.3	17.0	5	2
JUNE											
16...	.02	70	.10	71.4	6	47	110	7.4	22.8	20	10
JULY											
07...	.06	60	.08	47.5	11	47	110	7.2	23.9	12	11
07...	.03	70	.10	55.4	17	48	100	7.3	23.9	19	12
AUG.											
11...	.01	70	.10	52.1	7	48	100	6.4	27.8	14	4
SEP.											
08...	.04	70	.10	49.9	5	51	110	7.5	23.3	13	5

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV.											
18...	10.5	3	1.5	20	10	2.1	5	<100	<10	590	<1
DEC.											
10...	11.1	--	--	--	--	--	--	--	--	--	--
JAN.											
15...	11.4	2	--	--	--	--	--	--	--	--	--
FEB.											
05...	8.5	18	--	--	--	4.4	<5	<100	<10	<100	<1
MAR.											
04...	10.5	7	--	--	--	--	--	--	--	--	--
APR.											
08...	10.1	4	--	--	--	--	--	--	--	--	--
MAY											
12...	8.4	13	1.0	<10	<10	1.2	<5	<100	<10	<100	<1
JUNE											
16...	8.1	7	--	--	--	--	--	--	--	--	--
JULY											
07...	7.7	5	--	--	--	--	--	--	--	--	--
07...	7.6	<1	--	--	--	--	--	--	--	--	--
AUG.											
11...	8.5	4	--	--	--	1.7	<5	<100	<10	<100	<1
SEP.											
08...	7.3	4	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03588500 - SHOAL CREEK AT IRON CITY, TENN. (LAT 35 01 27 LONG 087 34 44) --Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 18...	8	20	<10	<10	.2	<50	<2	<10	<1000	50
DEC. 10...	--	--	--	--	--	--	--	--	--	--
JAN. 15...	--	--	--	--	--	--	--	--	--	--
FEB. 05...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	20
MAR. 04...	--	--	--	--	--	--	--	--	--	--
APR. 08...	--	--	--	--	--	--	--	--	--	--
MAY 12...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	20
JUNE 16...	--	--	--	--	--	--	--	--	--	--
JULY 07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
AUG. 11...	<5	150	<10	<10	<.2	<50	<2	<10	<1000	30
SEP. 08...	--	--	--	--	--	--	--	--	--	--

03595300 - LITTLE DUCK R AT ST HWY 55, AT MANCHESTER, TENN (LAT 35 28 49 LONG 086 04 46)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 31...	1245	77	4.7	180	0	12	2.9	.9	.5	44

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 31...	36	4.6	3.0	.1	52	51	.07	10.9	42

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 31...	6	4	.1	94	7.8	13.0	20	8	1.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03595495 - MANCHESTER TOWN SPRING AT MANCHESTER, TENN (LAT 35 29 08 LONG 086 05 17)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
FEB. 13...	0930	.30	5.7	--	10	--	60	19	3.0	2.7	1.2
APR. 16...	0900	E.10	6.0	10	0	10	0	19	3.7	2.6	1.2
JULY 15...	0945	.00	7.2	0	0	0	0	18	3.7	3.0	1.0

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)
FEB. 13...	50	--	41	11	5.5	.1	--	--	1.3	.05	--
APR. 16...	51	0	42	15	4.4	.0	1.4	.00	1.4	.02	.06
JULY 15...	59	0	48	8.8	4.3	.1	1.4	.00	1.4	.03	.09

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
FEB. 13...	98	73	.13	.08	60	19	9	.2	145	6.3	11.5
APR. 16...	88	77	.12	.02	63	21	8	.1	115	6.1	14.5
JULY 15...	70	75	.10	.00	60	12	10	.2	210	5.9	15.0

DATE	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
FEB. 13...	3	1	40	--	--	--	--	--	--	--
APR. 16...	2	5	65	97	B5	B17	1.6	.00	<1	.0
JULY 15...	3	5	119	311	B16	334	3.0	.00	<1	.0

DATE	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
FEB. 13...	--	--	--	--	--	--	--	--	--	--
APR. 16...	1	10	0	0	3	0	.0	0	0	20
JULY 15...	0	60	0	0	2	3	.2	0	0	30

B--Results based on colony count outside the acceptable range (non-ideal colony count).

E--Estimated value.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03596000 - DUCK RIVER BELOW MANCHESTER, TENN (LAT 35 28 15 LONG 086 07 18)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 31...	0845	221	4.7	70	0	12	2.1	1.5	.7	37

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 31...	30	4.3	3.7	.2	64	48	.09	38.2	39

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 31...	8	8	.1	84	7.6	13.0	20	6	1.5

03596090 - CRUMPTON CREEK AB WILEY CR, AT RUTLEDGE FALLS,TN (LAT 35 25 18 LONG 086 08 09)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 31...	1030	33	4.8	50	0	7.1	1.3	.4	.6	22

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 31...	18	3.1	1.9	.1	24	30	.03	2.14	23

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 31...	5	4	.0	52	7.1	17.0	20	5	2.8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03596100 - CRUMPTON CREEK AT RUTLEDGE FALLS, TENN (LAT 35 25 19 LONG 086 08 10)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 31...	1100	43	6.5	10	0	14	3.7	.4	.4	60

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 31...	49	2.4	1.5	.1	60	59	.08	7.03	50

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 31...	1	2	.0	106	7.2	13.0	4	3	6.1

03596130 - CRUMPTON CREEK NEAR TULLAHOMA, TENN (LAT 35 26 09 LONG 086 09 55)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 31...	0930	58	5.5	30	0	13	2.7	.4	.5	43

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 31...	35	3.0	2.0	.1	34	48	.05	5.37	44

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 31...	8	2	.0	83	7.4	12.5	8	4	2.7

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03596200 - CARROLL C ABOVE OVOCA LAKE, NEAR TULLAHOMA, TENN (LAT 35 24 23 LONG 086 12 14)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 30...	1615	9.1	4.6	50	35	12	1.8	.8	1.1	30

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 30...	25	3.7	2.5	.1	27	41	.04	.67	37

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 30...	13	4	.1	60	7.6	11.5	3	1	1.2

03596300 - SHORT SPRING NEAR TULLAHOMA, TENN (LAT 35 24 16 LONG 086 10 41)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
FEB. 13...	1030	.01	7.0	0	60	20	3.0	1.0	.2	66

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
FEB. 13...	54	3.3	2.2	.2	.33	.03	65	69	.09	.00

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
FEB. 13...	62	8	3	.1	140	6.3	13.0	3	1	53

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03596485 - CASCADE SPRING NEAR NORMANDY, TENN (LAT 35 25 10 LONG 086 14 26)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
FEB. 13...	1120	1.5	8.3	10	60	11	2.0	.4	.0	36

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
FEB. 13...	30	.7	1.4	.0	.64	.01	36	42	.05	.15

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
FEB. 13...	36	6	2	.0	80	6.1	14.0	3	0	46

03596700 - GARRISON FORK AT BEECHGROVE, TENN (LAT 35 37 36 LONG 086 14 22)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 31...	1430	18	5.8	0	16	48	4.8	1.0	.9	156

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 31...	128	9.8	2.6	.1	160	150	.22	8.04	140

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 31...	12	2	.0	267	7.8	13.5	4	2	4.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03596900 - NOAH FORK AT NOAH, TENN (LAT 35 34 27 LONG 086 11 30)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 31...	1400	12	6.8	0	0	30	2.7	1.1	.8	96

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 31...	79	7.7	1.8	.1	86	98	.12	3.00	86

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 31...	7	3	.1	175	7.8	13.0	0	6	2.4

03597500 - WARTRACE CREEK AT BELL BUCKLE, TENN. (LAT 35 35 16 LONG 086 20 22)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 30...	1300	19	4.2	0	22	69	5.8	1.4	.8	207

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 30...	170	14	2.8	.2	194	200	.26	9.95	200

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 30...	26	2	.0	337	8.0	12.0	9	9	3.3

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03597700 - GARRISON FORK NEAR BUGSCUFFLE, TENN (LAT 35 29 10 LONG 086 20 09)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 30...	1400	143	4.8	0	10	54	5.0	1.7	.9	170

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 30...	139	12	3.3	.2	162	166	.22	62.5	160

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 30...	16	2	.1	292	7.8	13.5	4	10	4.3

03597850 - DUCK RIVER AT SHELBYVILLE WATERWORKS, TENN (LAT 35 28 24 LONG 086 27 50)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
OCT. 02...	1256	1.0	125	--	--	--	--	--	--	--	--
NOV. 06...	1200	1.0	160	--	--	--	--	--	--	--	--
DEC. 10...	1225	1.0	890	--	1500	810	60	60	20	37	3.7
JAN. 20...	1215	--	3000	--	600	410	110	110	20	22	3.2
FEB. 19...	0955	1.0	1620	--	--	--	--	--	--	--	--
MAR. 12...	1300	1.0	680	4.1	--	220	--	50	--	20	2.8
APR. 17...	1350	--	360	2.3	800	140	<50	20	10	20	2.8
MAY 06...	1200	--	300	2.7	--	200	<50	50	30	18	3.2
JUNE 11...	1012	1.0	222	5.7	--	1000	<50	90	40	29	3.1
JULY 30...	1015	--	117	6.0	710	1000	<50	70	<10	30	4.3
AUG. 19...	1455	1.0	225	6.7	--	780	70	50	20	27	2.1
SEP. 26...	0930	--	1680	6.1	--	1700	60	110	20	29	2.7

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03597850 - DUCK RIVER AT SHELBYVILLE WATERWORKS, TENN (LAT 35 28 24 LONG 086 27 50)--Continued

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.											
02...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
06...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
10...	1.7	1.3	89	0	7.0	4.0	<.1	.70	.01	.07	.07
JAN.											
20...	.9	1.1	86	0	8.0	3.0	--	.66	.02	.26	.17
FEB.											
19...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
12...	1.7	.8	79	0	8.0	4.0	<.1	.47	.02	.19	.08
APR.											
17...	1.4	.7	67	0	6.0	3.0	<.1	.22	.11	<.01	.04
MAY											
06...	1.6	.7	72	0	4.0	4.0	<.1	.24	.07	.15	.06
JUNE											
11...	6.8	1.2	80	--	3.0	3.0	<.1	.45	.05	.13	.10
JULY											
30...	2.1	1.1	82	0	5.0	4.0	<.1	.24	.05	.11	.09
AUG.											
19...	2.4	1.3	71	0	3.0	3.0	<.1	.49	.03	.11	.11
SEP.											
26...	2.0	1.6	69	0	11	4.0	<.1	.78	.03	.15	--

DATE	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
OCT.											
02...	--	--	--	--	9	--	--	--	--	--	8
NOV.											
06...	--	--	--	--	12	--	--	--	--	--	11
DEC.											
10...	.05	100	.14	240	10	110	210	6.9	6.5	15	16
JAN.											
20...	.10	120	.16	972	51	68	180	7.6	8.0	20	46
FEB.											
19...	--	--	--	--	32	--	--	--	--	--	40
MAR.											
12...	--	120	.16	220	24	61	190	7.0	10.0	10	5
APR.											
17...	.03	100	.14	97.2	<1	61	170	7.8	14.4	3	1
MAY											
06...	--	100	.14	81.0	8	58	150	7.5	20.0	4	3
JUNE											
11...	.07	100	.14	59.9	15	85	180	7.1	25.0	18	15
JULY											
30...	.06	100	.14	31.6	7	93	190	7.4	26.7	13	10
AUG.											
19...	.07	100	.14	60.7	12	76	150	6.9	27.5	21	18
SEP.											
26...	.07	110	.15	499	26	84	150	7.2	15.0	39	37

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03597850 - DUCK RIVER AT SHELBYVILLE WATERWORKS, TENN (LAT 35 28 24 LONG 086 27 50)--Continued

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.											
02...	--	--	--	20	10	--	--	--	--	--	--
NOV.											
06...	--	--	--	<10	<10	--	--	--	--	--	--
DEC.											
10...	11.1	10	--	--	--	2.2	<5	<100	<10	<100	1
JAN.											
20...	10.5	12	<1.0	80	20	2.7	<5	100	<10	850	<1
FEB.											
19...	--	--	--	300	260	--	--	--	--	--	--
MAR.											
12...	10.3	7	<1.0	400	10	--	--	--	--	--	--
APR.											
17...	10.0	4	3.3	--	<10	1.7	<5	<100	<10	<100	<1
MAY											
06...	10.1	6	<1.0	140	30	--	--	--	--	--	--
JUNE											
11...	6.7	7	<1.0	280	140	--	--	--	--	--	--
JULY											
30...	6.6	5	<1.0	2000	320	1.0	6	<100	<10	5400	<1
AUG.											
19...	6.2	4	<1.0	--	--	--	--	--	--	--	--
SEP.											
26...	9.0	7	--	900	<10	--	--	--	--	--	--

DATE	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TI-TANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
02...	--	--	--	--	--	--	--	--	--	--
NOV.										
06...	--	--	--	--	--	--	--	--	--	--
DEC.										
10...	<5	10	<10	<10	<.2	<50	<2	<10	<1000	10
JAN.										
20...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	40
FEB.										
19...	--	--	--	--	--	--	--	--	--	--
MAR.										
12...	--	--	--	--	--	--	--	--	--	--
APR.										
17...	<5	<10	<10	<10	.3	<50	<2	<10	<1000	20
MAY										
06...	--	--	--	--	--	--	--	--	--	--
JUNE										
11...	--	--	--	--	--	--	--	--	--	--
JULY										
30...	<5	30	<10	<10	<.2	<50	<2	<10	<1000	30
AUG.										
19...	--	--	--	--	--	--	--	--	--	--
SEP.										
26...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03597870 - KIRBY HOLLOW SPRING NEAR MT HERMAN, TENN (LAT 35 20 49 LONG 086 28 16)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 07...	43	5.0	1.0	1.1	141	0	116	6.4	1.3

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 07...	.1	130	12	2	.0	300	7.8	16.0	3.6

03597875 - WARD CAVE SPRING NEAR MT HERMAN, TENN (LAT 35 19 55 LONG 086 25 02)

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 07...	43	4.0	.9	.7	138	0	113	4.5	1.0

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
NOV. 07...	.0	120	11	2	.0	320	7.9	14.5	2.8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

03597900 - FLAT CREEK AT SHELBYVILLE, TENN (LAT 35 28 17 LONG 086 28 39)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 30...	0920	53	4.3	0	0	48	4.8	1.0	.8	162

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
JAN. 30...	133	6.6	2.3	.2	164	148	.22	23.5	140

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 30...	7	2	.0	266	8.0	13.0	5	4	2.6

03598000 - DUCK RIVER NEAR SHELBYVILLE, TENN. (LAT 35 28 49 LONG 086 29 57)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
JAN. 30...	1030	750	5.1	10	0	30	3.5	1.5	.9	99

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
JAN. 30...	0	81	6.9	3.4	.1	92	100	.13	186

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN. 30...	89	8	3	.1	181	7.8	10	10	2.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03599482 - DUCK RIVER AT COLUMBIA WATERWORKS, TENN (LAT 35 37 34 LONG 087 01 13)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
OCT.											
02...	1521	--	268	--	--	--	--	--	--	--	--
NOV.											
06...	1345	1.0	494	--	--	--	--	--	--	--	--
DEC.											
11...	0730	--	2490	--	2600	1400	130	60	<10	61	4.7
JAN.											
20...	1405	--	8540	--	700	470	80	120	<10	29	3.9
FEB.											
19...	0742	--	5590	--	--	--	--	--	--	--	--
MAR.											
12...	1515	--	2590	3.1	--	3100	--	490	--	24	2.7
APR.											
17...	1152	--	958	3.6	700	120	<50	10	10	31	3.4
MAY											
06...	0845	--	646	1.4	--	300	<50	40	20	33	4.1
JUNE											
11...	0730	--	334	7.6	--	800	<50	60	<10	42	3.6
JULY											
30...	0735	--	173	6.3	660	330	<50	50	<10	41	3.5
AUG.											
19...	1715	--	770	5.6	--	730	<50	100	10	42	2.4
SEP.											
26...	0625	--	5110	6.3	--	4300	130	310	20	40	2.9

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.											
02...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
06...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
11...	1.8	1.6	150	0	10	4.0	<.1	.67	.02	.16	.18
JAN.											
20...	.9	1.0	120	0	9.0	4.0	--	.62	.03	.24	.25
FEB.											
19...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
12...	1.4	1.3	95	0	13	4.0	.1	.30	.03	.39	1.8
APR.											
17...	1.8	.6	110	0	11	3.0	<.1	.35	.03	.03	.09
MAY											
06...	1.9	.9	160	0	8.0	4.0	<.1	.25	.03	.13	.12
JUNE											
11...	7.5	1.4	100	--	6.0	6.0	<.1	.69	.01	.20	.16
JULY											
30...	1.9	1.7	100	--	23	5.0	--	.30	.03	.39	.12
AUG.											
19...	3.2	2.0	110	--	2.0	6.0	.1	.21	.02	.26	.19
SEP.											
26...	1.7	2.1	99	--	3.0	5.0	<.1	.76	.04	.14	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03599482 - DUCK RIVER AT COLUMBIA WATERWORKS, TENN (LAT 35 37 34 LONG 087 01 13)--Continued

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
OCT.											
02...	--	--	--	--	10	--	--	--	--	--	8
NOV.											
06...	--	--	--	--	10	--	--	--	--	--	10
DEC.											
11...	.12	170	.23	1140	19	170	330	7.1	10.0	25	25
JAN.											
20...	.08	60	.08	1380	72	88	280	6.9	10.0	20	48
FEB.											
19...	--	--	--	--	52	--	--	--	--	--	46
MAR.											
12...	--	150	.20	1050	330	71	220	7.0	13.5	33	175
APR.											
17...	.06	150	.20	388	1	91	270	7.3	18.3	5	2
MAY											
06...	--	150	.20	262	4	99	270	7.2	24.0	4	5
JUNE											
11...	.08	140	.19	126	17	120	220	7.0	25.0	17	15
JULY											
30...	.07	140	.19	65.3	10	120	240	7.6	25.6	17	10
AUG.											
19...	.13	150	.20	312	11	110	240	7.1	30.0	16	8
SEP.											
26...	.19	140	.19	1930	130	110	220	7.4	17.8	57	100

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.											
02...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
06...	--	--	--	340	60	--	--	--	--	--	--
DEC.											
11...	10.5	11	<1.0	390	80	7.8	<5	<100	<10	<100	<1
JAN.											
20...	10.4	16	<1.0	1800	450	2.7	<5	<100	<10	<100	<1
FEB.											
19...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
12...	9.9	32	2.0	7900	4000	--	--	--	--	--	--
APR.											
17...	8.8	4	<1.0	--	<10	1.5	<5	<100	<10	<100	<1
MAY											
06...	8.0	6	<1.0	10	<10	--	--	--	--	--	--
JUNE											
11...	6.4	9	<1.0	<10	<10	--	--	--	--	--	--
JULY											
30...	6.0	10	<1.0	<10	<10	3.3	7	<100	<10	200	<1
AUG.											
19...	7.0	10	<1.0	--	--	--	--	--	--	--	--
SEP.											
26...	9.0	21	--	6400	1450	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03599482 - DUCK RIVER AT COLUMBIA WATERWORKS, TENN (LAT 35 37 34 LONG 087 01 13)--Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
02...	--	--	--	--	--	--	--	--	--	--
NOV.										
06...	--	--	--	--	--	--	--	--	--	--
DEC.										
11...	<5	40	<10	<10	<.2	<50	<2	<10	<1000	<10
JAN.										
20...	<5	30	13	<10	<.2	<50	<2	<10	<1000	30
FEB.										
19...	--	--	--	--	--	--	--	--	--	--
MAR.										
12...	--	--	--	--	--	--	--	--	--	--
APR.										
17...	<5	60	<10	<10	<.2	<50	<2	<10	<1000	20
MAY										
06...	--	--	--	--	--	--	--	--	--	--
JUNE										
11...	--	--	--	--	--	--	--	--	--	--
JULY										
30...	<5	50	<10	<10	<.2	<50	<2	<10	<1000	30
AUG.										
19...	--	--	--	--	--	--	--	--	--	--
SEP.										
26...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03603000 - DUCK RIVER ABOVE HURRICANE MILLS, TENN. (LAT 35 55 48 LONG 087 44 35)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV. 18...	1130	1.0	1590	--	400	180	<50	30	20	40	4.8
JAN. 22...	1100	1.0	13000	--	--	590	130	100	<10	37	3.8
FEB. 11...	0945	1.0	7230	--	300	250	<50	40	500	37	2.8
MAR. 11...	1400	1.0	4540	5.3	--	280	50	50	10	28	3.1
APR. 15...	1130	1.0	3200	5.0	--	210	<50	40	240	29	3.0
MAY 13...	1115	1.0	5110	7.2	<200	550	100	90	30	30	2.9
JUNE 09...	1000	1.0	1570	3.4	--	410	<50	30	30	36	3.5
JULY 15...	0930	1.0	1160	7.0	--	550	60	40	<10	35	3.7
AUG. 12...	1030	1.0	1190	8.4	490	800	<50	50	50	32	3.2
SEP. 09...	0915	1.0	802	8.5	--	170	<50	20	<10	32	3.4
09...	1000	1.0	809	8.5	--	230	<50	40	--	32	3.4

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
NOV. 18...	3.2	1.4	52	0	10	4.0	.1	.27	.01	.16	.19
JAN. 22...	1.6	1.1	110	0	14	3.0	--	.58	.08	.18	.23
FEB. 11...	2.1	1.0	120	0	11	3.0	.1	.73	.02	.16	.22
MAR. 11...	2.1	.9	110	0	10	4.0	.1	.50	.04	.16	.24
APR. 15...	4.0	1.0	100	0	12	4.0	<.1	.45	.08	.10	.17
MAY 13...	1.3	1.0	94	0	8.0	3.0	<.1	.65	.04	.26	.30
JUNE 09...	5.9	1.1	98	0	9.0	3.0	<.1	.39	.05	.12	.19
JULY 15...	2.9	1.2	98	0	67	4.0	<.1	.32	.06	.07	.22
AUG. 12...	3.3	1.6	90	0	8.0	4.0	.2	.55	<.01	.20	.31
SEP. 09...	3.1	1.4	92	0	8.0	4.0	.1	.30	.02	.14	.24
09...	3.1	1.3	91	0	9.0	4.0	.1	.29	.03	.19	.23

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03603000 - DUCK RIVER ABOVE HURRICANE MILLS, TENN. (LAT 35 55 48 LONG 087 44 35)-- Continued

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
NOV. 18...	.16	160	.22	686	3	120	300	7.0	10.0	5	2
JAN. 22...	.15	150	.20	5270	50	110	240	7.4	7.8	20	40
FEB. 11...	.14	140	.19	2730	9	100	250	8.3	8.9	3	5
MAR. 11...	.15	130	.18	1590	17	83	230	7.3	8.3	12	15
APR. 15...	.13	120	.16	1040	7	85	230	7.0	13.3	3	4
MAY 13...	.15	140	.19	1930	30	87	210	7.9	19.4	19	17
JUNE 09...	.13	130	.18	550	5	100	220	7.9	22.2	18	3
JULY 15...	.18	120	.16	376	5	100	210	8.3	23.9	14	2
AUG. 12...	.25	110	.15	353	11	93	190	8.3	25.0	11	8
SEP. 09...	.18	110	.15	238	6	94	200	7.8	23.9	20	3
09...	.19	120	.16	262	3	94	200	7.8	23.9	14	2

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV. 18...	10.5	5	<1.0	<10	<10	2.3	<5	<100	<10	<100	2
JAN. 22...	11.0	9	--	--	--	--	--	--	--	--	--
FEB. 11...	11.4	4	--	--	--	1.0	<5	<100	<10	<100	<1
MAR. 11...	11.0	8	--	--	--	--	--	--	--	--	--
APR. 15...	9.7	1	--	--	--	--	--	--	--	--	--
MAY 13...	7.8	14	<1.0	10	10	4.3	<5	<100	<10	<100	<1
JUNE 09...	8.0	2	--	--	--	--	--	--	--	--	--
JULY 15...	7.9	1	--	--	--	--	--	--	--	--	--
AUG. 12...	8.0	2	--	--	--	2.7	<5	<100	<10	<100	<1
SEP. 09...	7.2	20	--	--	--	--	--	--	--	--	--
09...	7.3	7	--	--	--	--	--	--	--	--	--

TENNESSEE RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03603000 - DUCK RIVER ABOVE HURRICANE MILLS, TENN. (LAT 35 55 48 LONG 087 44 35)--Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 18...	<5	20	<10	<10	.5	<50	<2	<10	<1000	110
JAN. 22...	--	--	--	--	--	--	--	--	--	--
FEB. 11...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	<10
MAR. 11...	--	--	--	--	--	--	--	--	--	--
APR. 15...	--	--	--	--	--	--	--	--	--	--
MAY 13...	<5	10	<10	<10	<.2	<50	<2	<10	<1000	30
JUNE 09...	--	--	--	--	--	--	--	--	--	--
JULY 15...	--	--	--	--	--	--	--	--	--	--
AUG. 12...	<5	30	<10	<10	<.2	<50	<2	<10	<1000	<10
SEP. 09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03604500 - BUFFALO RIVER NEAR LOBELVILLE, TENN. (LAT 35 48 46 LONG 087 47 51)

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)
NOV.											
18...	1000	1.0	566	--	<200	160	50	60	800	14	2.1
JAN.											
22...	1000	1.0	2770	--	--	280	150	40	<10	14	1.4
FEB.											
11...	1100	1.0	1980	--	300	160	<50	20	20	12	1.3
MAR.											
11...	1300	1.0	140	5.7	--	160	100	20	20	10	1.4
APR.											
15...	1030	1.0	1190	6.3	--	110	<50	30	10	12	1.6
MAY											
13...	0930	1.0	1940	7.7	<200	330	<50	50	20	12	1.4
13...	1000	1.0	1930	7.7	<200	330	<50	40	20	12	1.4
JUNE											
09...	1100	1.0	707	3.5	--	520	50	40	10	18	2.3
JULY											
15...	1045	1.0	521	7.2	--	620	60	30	80	19	1.9
AUG.											
12...	0915	1.0	591	8.4	460	110	50	80	80	18	1.9
SEP.											
09...	1100	1.0	580	8.6	--	210	<50	20	10	17	2.0
24...	1050	1.0	970	7.2	--	530	<50	80	10	13	1.8

DATE	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBONATE ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
NOV.											
18...	1.3	.7	52	0	5.0	2.0	<.1	.04	.03	.11	.02
JAN.											
22...	.8	.8	32	0	10	2.0	--	.27	.05	.05	.04
FEB.											
11...	1.7	.7	73	0	5.0	2.0	<.1	.36	.02	.02	.02
MAR.											
11...	1.4	.6	52	0	6.0	4.0	<.1	.59	.04	.12	.01
APR.											
15...	1.4	.6	39	0	12	3.0	<.1	.22	.02	.06	.03
MAY											
13...	1.1	.7	33	0	4.0	3.0	<.1	.26	.05	.13	.03
13...	.9	.6	35	0	4.0	2.0	<.1	.25	.02	.05	.03
JUNE											
09...	3.8	.7	50	0	2.0	2.0	.1	--	--	--	--
JULY											
15...	1.2	.8	58	0	37	3.0	<.1	.15	.02	.13	.03
AUG.											
12...	1.7	.8	55	0	4.0	3.0	<.1	.22	<.01	.18	.02
SEP.											
09...	1.7	1.0	53	0	2.0	3.0	<.1	.20	.03	.13	.04
24...	2.0	.9	48	0	2.0	2.0	<.1	.19	.02	.14	.04

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03604500 - BUFFALO RIVER NEAR LOBELVILLE, TENN. (LAT 35 48 46 LONG 087 47 51)--Continued

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (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)	TUR-BID-ITY (JTU)
NOV.											
18...	.01	70	.10	107	2	44	120	7.0	11.7	5	1
JAN.											
22...	.02	60	.08	449	15	41	78	7.1	6.7	25	29
FEB.											
11...	.02	50	.07	267	3	35	88	8.0	8.3	6	3
MAR.											
11...	.01	70	.10	26.5	4	31	98	7.1	8.3	12	10
APR.											
15...	.02	50	.07	161	4	37	100	6.5	12.8	2	4
MAY											
13...	.02	70	.10	366	19	36	90	7.2	18.3	3	7
13...	.02	50	.07	260	15	36	90	7.2	18.3	6	8
JUNE											
09...	.01	60	.08	114	6	55	100	7.5	21.7	17	3
JULY											
15...	.01	70	.10	98.5	2	55	110	8.2	23.3	13	1
AUG.											
12...	.01	70	.10	112	8	53	100	8.0	23.9	11	3
SEP.											
09...	.03	70	.10	110	4	51	110	7.9	23.9	20	3
24...	.03	20	.03	52.4	33	40	100	7.5	16.5	23	15

DATE	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYL-LIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
NOV.											
18...	10.5	3	<1.0	<10	<10	1.5	<5	<100	<10	<100	1
JAN.											
22...	11.2	8	--	--	--	--	--	--	--	--	--
FEB.											
11...	11.2	2	--	--	--	.7	<5	<100	<10	<100	<1
MAR.											
11...	11.1	6	--	--	--	--	--	--	--	--	--
APR.											
15...	9.9	1	--	--	--	--	--	--	--	--	--
MAY											
13...	8.7	6	<1.0	<10	<10	1.8	<5	<100	<10	<100	<1
13...	8.8	5	<1.0	10	10	1.7	<5	<100	<10	<100	<1
JUNE											
09...	7.8	2	--	--	--	--	--	--	--	--	--
JULY											
15...	7.7	<1	--	--	--	--	--	--	--	--	--
AUG.											
12...	7.9	1	--	--	--	1.5	<5	<100	<10	<100	1
SEP.											
09...	7.1	6	--	--	--	--	--	--	--	--	--
24...	8.2	2	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(Analyses furnished by Tennessee Valley Authority)

03604500 - BUFFALO RIVER NEAR LOBELVILLE, TENN. (LAT 35 48 46 LONG 087 47 51)--Continued

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV.										
18...	<5	240	<10	<10	.2	1200	<2	<10	<1000	40
JAN.										
22...	--	--	--	--	--	--	--	--	--	--
FEB.										
11...	<5	<10	27	<10	<.2	<50	<2	<10	<1000	<10
MAR.										
11...	--	--	--	--	--	--	--	--	--	--
APR.										
15...	--	--	--	--	--	--	--	--	--	--
MAY										
13...	<5	10	<10	<10	<.2	<50	<2	<10	<1000	20
13...	<5	<10	<10	<10	<.2	<50	<2	<10	<1000	10
JUNE										
09...	--	--	--	--	--	--	--	--	--	--
JULY										
15...	--	--	--	--	--	--	--	--	--	--
AUG.										
12...	<5	20	<10	<10	<.2	<50	<2	<10	<1000	20
SEP.										
09...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
07026500 - REELFOOT CREEK NEAR SAMBURG, TENN. (LAT 36 26 32 LONG 089 17 47)									
FEB., 1975									
26...	1415	--	415	--	--	6.0	536	601	99
26...	1420	.5	415	--	--	6.0	1230	1380	99
MAY									
16...	1035	.5	19	350	7.9	20.0	58	3.1	99
07026650 - RUNNING SLOUGH AT LEDFORD, KY (LAT 36 31 45 LONG 089 18 02)									
FEB., 1975									
26...	1015	--	117	--	--	--	273	86	100
26...	1020	.5	119	--	--	4.5	248	80	99
MAY									
15...	1500	.5	35	510	8.0	22.5	110	10	99
15...	1510	--	35	510	8.0	22.5	766	72	88
07026700 - BAYOU DU CHIEN AT WALNUT LOG, TENN (LAT 36 28 01 LONG 089 19 07.01)									
FEB., 1975									
26...	1330	--	--	175	7.1	4.5	--	--	--
MAY									
15...	1630	--	--	470	7.9	22.0	--	--	--
07026750 - BIG SANDY CREEK AT NEW MARKHAM, TENN (LAT 36 27 52 LONG 089 23 34)									
FEB., 1975									
26...	0850	--	5.9	--	--	4.5	1200	19	100
26...	0855	.5	5.9	--	--	4.5	443	7.1	100
MAY									
15...	1335	.5	28	530	8.1	23.0	93	7.0	98
15...	1336	--	28	530	8.1	23.0	93	7.0	98
07026800 - INDIAN CREEK AT SAMBURG, TENN (LAT 36 23 09 LONG 089 20 35)									
FEB., 1975									
26...	1645	--	10	--	--	5.5	27	.73	68
26...	1650	.5	10	--	--	5.5	9	.24	100
MAY									
16...	0915	.5	3.1	500	8.2	18.0	12	.10	100
16...	0916	--	3.1	500	8.2	18.0	12	.10	100
362109089250702 - REELFOOT LAKE NEAR TIPTONVILLE, TENN (LAT 36 21 09 LONG 089 25 07.02)									
FEB., 1975									
25...	1515	--	--	--	--	6.0	--	--	--
27...	1030	--	--	200	7.1	4.5	--	--	--
MAY									
15...	0900	--	--	200	8.1	24.0	--	--	--
362304089264500 - REELFOOT LAKE AT KEYSTONE POCKET, TENN (LAT 36 23 04 LONG 089 26 45)									
FEB., 1975									
25...	1600	--	--	210	7.9	6.5	--	--	--
MAY									
15...	0920	--	--	180	8.5	24.0	--	--	--
362419089200100 - REELFOOT LAKE (BUCK BASIN) NEAR SAMBURG, TENN (LAT 36 24 19 LONG 089 20 01)									
FEB., 1975									
26...	1550	--	--	280	7.1	7.5	--	--	--
MAY									
15...	1010	--	--	250	7.6	21.0	--	--	--

OBION RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DEPTH (FT)	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
362423089263500 - REELFOOT LAKE AT CHAMPEY POCKET, TENN (LAT 36 24 23 LONG 089 26 35)									
FEB., 1975									
27...	1110	--	--	215	7.7	4.5	--	--	--
MAY									
15...	1000	--	--	190	7.9	22.5	--	--	--
362642089225600 - REELFOOT LAKE NEAR NEW MARKHAM, TENN (LAT 36 26 42 LONG 089 22 56)									
FEB., 1975									
25...	1745	--	--	195	7.3	7.0	--	--	--
MAY									
15...	1050	--	--	475	7.7	21.5	--	--	--
362727089213200 - REELFOOT LAKE (UPPER BLUE BASIN), GRAYS CAMP, TN (LAT 36 27 27 LONG 089 21 32)									
FEB., 1975									
25...	1830	--	--	255	11.1	5.0	--	--	--
MAY									
15...	1140	--	--	375	8.0	24.5	--	--	--
362815089204000 - REELFOOT LAKE (UPPER BLUE BASIN) NR PHILLIPPY,TN (LAT 36 28 15 LONG 089 20 40)									
FEB., 1975									
27...	1200	--	--	215	6.9	6.0	--	--	--
MAY									
15...	1255	--	--	400	7.6	23.5	--	--	--
07027002 - REELFOOT LAKE SPILLWAY NEAR TIPTONVILLE, TENN (LAT 36 21 09 LONG 089 24 39)									
FEB., 1975									
27...	0920	--	1430	--	--	4.0	58	224	97
27...	0925	.5	1430	--	--	4.0	54	208	99
MAY									
16...	1030	.5	10	200	8.1	21.5	16	.43	95

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

07032219 - JOHNS CREEK AT HOLMES ROAD, AT CAPLEVILLE, TENN (LAT 35 00 21 LONG 089 54 58)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
APR. 25...	1315	4.6	9.0	6.5	1.3	10	1.4	28	23	8.0	4.9	.4

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM
APR. 25...	.38	2.8	3.2	14	.63	66	55	.09	.83	22	0	48

DATE	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
APR. 25...	.9	58	7.6	23.0	40	1.1	31000	14800	18300	227	98

07032220 - JOHNS CREEK AT SHELBY DRIVE, AT CAPLEVILLE, TENN (LAT 35 01 14 LONG 089 54 06)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
APR. 25...	1530	5.4	9.0	3.4	1.6	9.7	1.7	27	22	8.7	5.2

DATE	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)
APR. 25...	.4	.41	2.7	3.1	14	.56	75	53	.10	1.10	15

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
APR. 25...	0	55	1.1	64	7.4	24.5	55	1.7	41000	23000

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

STATION NUMBER	GEO-LOGIC UNIT[1]	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF WELL (FT)	INSTANTANEOUS FLOW RATE (GPM)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
Bedford County											
352233086235800	364LBNN	75-02-14	--	--	--	75	--	9.3	--	20	--
352530086163000	364BGBC	75-02-13	--	--	--	281	--	8.8	--	10	--
352652086253100	364LBNN	75-02-14	--	--	--	86	--	5.7	--	10	--
352844086261400	364RDLY	75-02-14	--	--	--	88	--	6.8	--	10	--
353223086222100	364CRRS	75-02-14	--	--	--	91	--	6.1	--	30	--
353727086165600	364BGBC	75-02-14	--	--	--	45	--	6.6	--	10	--
Cannon County											
354816086085900	--	75-02-21	--	--	620	200	90	--	--	--	--
	--	75-03-27	150	--	620	200	75	5.2	440	90	40
Coffee County											
352719086035000	337FRPN	75-01-07	300	23	--	146	300	8.5	930	500	210
	337FRPN	75-04-16	60	--	--	146	10	8.5	650	600	200
	337FRPN	75-07-16	60	--	--	146	10	8.4	--	2300	--
352821086050700	337FRPN	75-02-06	1	--	1040	83	350	--	3200	1400	--
	337FRPN	75-02-06	10	--	1040	83	350	--	--	180	--
	337FRPN	75-03-25	--	--	1040	83	--	--	--	110	--
	337FRPN	75-04-15	180	--	1040	83	350	6.9	140	90	50
	337FRPN	75-07-21	60	--	1040	83	350	7.0	650	210	200
352823086050800	337FRPN	75-02-06	1	--	1040	122	350	--	1300	1100	--
	337FRPN	75-02-06	10	--	1040	122	350	--	--	80	--
	337FRPN	75-03-25	--	--	1040	122	--	--	--	150	--
	337FRPN	75-04-15	720	--	1040	122	250	7.6	70	90	80
	337FRPN	75-07-15	180	--	1040	122	250	8.4	180	180	70
352848086035300	337FRPN	74-12-12	--	--	--	95	121	--	--	100	--
	337FRPN	75-01-06	--	35	--	95	--	8.5	710	10	300
	337FRPN	75-04-15	66	--	--	95	10	8.6	460	40	40
	337FRPN	75-07-16	60	--	--	95	10	8.6	--	50	--
352940086041200	337FRPN	75-01-08	210	76	--	125	100	8.6	260	240	850
352916086050000	337FRPN	75-04-16	60	--	--	--	10	11	20	30	290
	337FRPN	75-07-15	60	--	--	--	10	12	--	10	--
353430086104500	364HRMG	75-02-13	--	--	--	45	--	7.2	--	10	--
Franklin County											
351835086120300	337FRPN	75-02-14	--	--	950	75	15	--	--	--	--
Hamilton County											
351424085003900	367KNOX	75-06-26	1320	--	--	--	900	7.1	0	0	0
Lawrence County											
350440087254000	--	75-09-03	29	60	--	--	150	8.6	5700	4800	510
Lincoln County											
350034086422800	337FRPN	75-08-26	59	--	905	87	10	8.4	--	0	--
351358086311300	364BGBC	75-04-21	--	--	--	125	25	--	--	--	--
	364BGBC	75-05-08	30	--	--	125	20	8.9	350	40	20
351528086340200	364BGBC	75-04-28	--	--	--	100	80	--	--	--	--
	364BGBC	75-05-06	80	--	--	100	100	7.4	350	30	80
351530086340300	364BGBC	75-04-14	--	--	--	100	69	--	--	--	--
351548086342300	364BGBC	75-04-15	--	--	--	100	16	--	--	--	--
	364BGBC	75-05-09	30	--	--	100	15	11	1100	280	20
352031086322800	364BGBC	75-04-25	--	--	--	75	18	--	--	--	--
Rutherford County											
354736086212700	364PIRC	75-02-18	--	--	620	200	13	--	--	--	--
354816086223700	--	75-06-10	--	20	620	250	8.0	--	--	--	--
354957086283200	--	75-06-11	--	59	620	250	57	--	--	--	--
	--	75-06-19	150	--	--	250	100	8.6	100	100	10
355025086250200	--	75-02-19	--	--	575	175	37	--	--	--	--
	--	75-03-11	200	--	575	175	50	8.1	240	260	30
355032086280400	--	75-02-26	--	--	615	175	40	--	--	--	--
	--	75-03-26	225	--	615	175	50	9.7	170	180	60
355135086203100	--	75-02-27	--	--	605	175	121	--	--	--	--
	--	75-03-12	--	--	605	175	150	5.4	3400	40	120
355215086213800	364MRFB	75-02-25	--	--	605	150	25	--	--	--	--
	364MRFB	75-02-25	--	--	605	150	25	--	--	--	--
355815086280400	--	75-02-11	--	--	504	175	10	--	--	--	--

[1] See footnote at end of table, p. 427.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE OF SAMPLE	DIS-SOLVED 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)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)
					Bedford County--Continued							
75-02-14	60	46	4.8	.4	.3	146	--	120	3.2	.8	.1	--
75-02-13	60	31	3.4	1.5	.7	86	--	71	9.6	3.0	.1	--
75-02-14	60	34	3.2	2.1	1.1	62	--	51	30	5.5	1.0	--
75-02-14	60	98	7.3	8.3	4.6	318	--	261	23	3.5	.1	--
75-02-14	60	83	29	73	3.1	373	--	306	93	47	.6	--
75-02-14	60	75	3.0	2.4	.1	220	--	180	5.2	3.8	.1	--
					Cannon County--Continued							
75-02-21	--	56	11	200	7.0	373	--	306	92	140	1.7	--
75-03-27	10	92	6.2	2.3	.8	282	--	231	12	3.4	.1	.79
					Coffee County--Continued							
75-01-07	190	63	9.9	3.2	1.0	183	--	150	38	7.0	.1	.23
75-04-16	160	53	8.9	2.6	.8	185	0	152	12	6.7	.0	.06
75-07-16	190	79	10	3.7	.9	188	0	154	86	7.0	.2	--
75-02-06	--	--	--	--	--	--	--	--	7.9	--	--	--
75-02-06	--	--	--	--	--	--	--	--	6.8	--	--	--
75-03-25	30	--	5.2	--	--	--	--	--	--	--	--	--
75-04-15	60	18	4.4	1.6	.7	68	0	56	6.2	2.4	.1	.46
75-07-21	180	16	2.5	3.5	1.1	55	0	45	5.4	3.0	.2	.30
75-02-06	--	--	--	--	--	--	--	--	51	--	--	--
75-02-06	--	--	--	--	--	--	--	--	55	--	--	--
75-03-25	110	--	13	--	--	--	--	--	--	--	--	--
75-04-15	70	61	11	1.5	.3	149	0	122	70	2.2	.1	.23
75-07-15	60	61	9.8	2.0	.3	157	0	129	56	1.8	.1	.12
74-12-12	--	98	29	6.0	.2	124	0	102	270	3.8	.2	--
75-01-06	100	88	26	6.0	.2	110	--	90	230	3.4	.2	.84
75-04-15	30	150	39	11	.4	130	0	107	430	3.0	.5	.28
75-07-16	20	130	30	7.0	.4	127	0	104	340	1.8	.3	--
75-01-08	700	89	32	4.2	.5	160	--	131	210	3.5	.2	.56
75-04-16	290	35	12	15	.6	177	0	145	12	7.4	.0	.82
75-07-15	210	34	12	16	.6	181	0	148	11	7.6	.2	--
75-02-13	70	76	7.6	15	4.6	240	--	197	20	16	.3	--
					Franklin County--Continued							
75-02-14	--	27	8.4	4.9	.9	135	--	111	3.2	.7	.2	--
					Hamilton County--Continued							
75-06-26	0	25	9.3	.9	.6	125	0	103	1.5	1.4	.1	.35
					Lawrence County--Continued							
75-09-03	560	44	3.7	2.8	.6	153	0	126	1.5	1.5	.1	.04
					Lincoln County--Continued							
75-08-26	4	16	1.8	25	.2	68	0	56	2.3	32	.4	--
75-04-21	--	13	12	240	6.0	298	0	244	130	180	1.1	--
75-05-08	0	28	13	170	4.5	312	0	256	160	59	1.4	.01
75-04-28	--	66	18	7.8	1.3	239	0	196	48	8.9	.2	--
75-05-06	80	57	12	3.5	1.4	206	0	169	24	4.5	.2	.58
75-04-14	--	76	18	11	1.7	220	0	180	58	9.2	.3	--
75-04-15	--	50	18	8.0	1.8	209	0	171	21	3.9	.4	--
75-05-09	20	91	25	87	2.6	252	0	207	210	73	.3	--
75-04-25	--	45	5.2	4.7	1.5	140	0	115	13	2.6	.1	--
					Rutherford County--Continued							
75-02-18	--	36	23	22	6.5	265	--	217	7.8	4.9	1.0	--
75-06-10	--	6.2	5.0	110	8.0	305	0	250	21	9.7	1.5	--
75-06-11	--	46	24	13	6.1	270	0	221	12	3.8	1.6	--
75-06-19	0	48	24	12	5.4	276	0	226	13	4.6	1.3	.00
75-02-19	--	54	23	36	10	292	--	240	16	5.0	1.0	--
75-03-11	0	37	25	28	7.9	292	--	240	17	6.1	1.0	.00
75-02-26	--	71	23	29	4.1	329	--	270	11	27	.4	--
75-03-26	40	70	16	33	2.6	279	--	229	12	51	.2	.19
75-02-27	--	95	14	16	1.5	315	--	258	31	8.0	.3	--
75-03-12	40	77	8.9	9.0	1.2	269	--	221	23	5.4	.3	.13
75-02-25	--	79	2.8	6.2	.8	203	--	167	17	5.0	.2	--
75-02-25	--	79	2.8	6.2	.8	203	--	167	17	5.0	.2	--
75-02-11	--	37	27	16	5.2	274	--	225	3.9	4.5	2.0	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE OF SAMPLE	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)
					Bedford County--Continued							
75-02-14	--	.27	3.4	--	141	137	.19	130	15	1	.0	260
75-02-13	--	.28	.04	--	79	101	.11	91	21	3	.1	185
75-02-14	--	.65	.19	--	110	113	.15	98	47	4	.1	220
75-02-14	--	.52	.02	--	322	308	.44	270	14	6	.2	650
75-02-14	--	.14	.18	--	459	519	.62	330	21	32	1.8	650
75-02-14	--	1.8	.06	--	206	205	.28	200	20	3	.1	250
					Cannon County--Continued							
75-02-21	--	--	--	--	--	--	--	190	0	69	6.4	1200
75-03-27	.00	.79	.04	--	260	261	.35	260	24	2	.1	480
					Coffee County--Continued							
75-01-07	.01	.24	.06	--	250	222	.34	200	48	3	.1	420
75-04-16	.00	.06	.03	.09	190	184	.26	170	17	3	.1	330
75-07-16	--	.03	.16	.49	328	290	.45	240	84	3	.1	560
75-02-06	--	--	--	--	--	--	--	--	--	--	--	--
75-02-06	--	--	--	--	--	--	--	--	--	--	--	--
75-03-25	--	--	--	--	--	--	--	--	--	--	--	--
75-04-15	.00	.46	.00	.00	68	74	.09	63	7	5	.1	140
75-07-21	.01	.31	.12	.37	65	66	.09	50	5	13	.2	120
75-02-06	--	--	--	--	--	--	--	--	--	--	--	--
75-02-06	--	--	--	--	--	--	--	--	--	--	--	--
75-03-25	--	--	--	--	--	--	--	--	--	--	--	--
75-04-15	.01	.24	.00	.00	246	227	.33	200	75	2	.0	365
75-07-15	.01	.13	.08	.25	231	217	.31	190	64	2	.1	320
74-12-12	--	--	--	--	--	--	--	360	260	3	.1	625
75-01-06	.01	.85	.04	--	454	417	.62	330	240	4	.1	615
75-04-15	.00	.28	.00	.00	763	707	1.04	540	430	4	.2	950
75-07-16	--	.42	.01	.03	630	581	.86	450	340	3	.1	840
75-01-08	.00	.56	.01	--	460	428	.63	350	220	3	.1	700
75-04-16	.00	.82	.01	.03	172	181	.23	140	0	19	.6	320
75-07-15	--	.75	.02	.06	157	183	.21	130	0	21	.6	350
75-02-13	--	6.0	.06	--	288	265	.39	220	24	13	.4	540
					Franklin County--Continued							
75-02-14	--	--	--	--	--	--	--	100	0	9	.2	50
					Hamilton County--Continued							
75-06-26	.00	.35	.01	.03	93	108	.13	100	0	2	.0	205
					Lawrence County--Continued							
75-09-03	.00	.04	.07	.21	146	144	.20	130	0	5	.1	270
					Lincoln County--Continued							
75-08-26	--	--	--	--	126	120	.17	47	0	53	1.6	220
75-04-21	--	--	--	--	--	--	--	82	0	85	12	1400
75-05-08	.00	.01	.03	.09	572	599	.78	120	0	74	6.7	1400
75-04-28	--	--	--	--	--	--	--	240	43	7	.2	500
75-05-06	.01	.59	.07	.21	235	212	.32	190	23	4	.1	300
75-04-14	--	--	--	--	--	--	--	260	83	8	.3	500
75-04-15	--	--	--	--	--	--	--	200	28	8	.2	400
75-05-09	--	--	--	--	655	624	.89	330	120	36	2.1	825
75-04-25	--	--	--	--	--	--	--	130	19	7	.2	280
					Rutherford County--Continued							
75-02-18	--	--	--	--	--	--	--	180	0	20	.7	470
75-06-10	--	--	--	--	--	--	--	36	0	84	8.0	520
75-06-11	--	--	--	--	--	--	--	210	0	11	.4	450
75-06-19	.00	.00	.01	.03	256	253	.35	220	0	10	.4	450
75-02-19	--	--	--	--	--	--	--	230	0	24	1.0	500
75-03-11	.00	.00	.01	--	252	274	.34	200	0	23	.9	510
75-02-26	--	--	--	--	--	--	--	270	2	19	.8	600
75-03-26	.00	.19	.02	--	321	332	.44	240	12	23	.9	600
75-02-27	--	--	--	--	--	--	--	300	37	11	.4	580
75-03-12	.00	.13	.09	--	271	263	.37	230	8	8	.3	478
75-02-25	--	--	--	--	--	--	--	210	42	6	.2	440
75-02-25	--	--	--	--	--	--	--	210	42	6	.2	440
75-02-11	--	--	--	--	--	--	--	200	0	14	.5	460

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE OF SAMPLE	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
					Bedford County--Continued							
75-02-14	6.9	7.0	5	100	29	--	--	--	--	--	--	--
75-02-13	6.6	12.0	2	1	35	--	--	--	--	--	--	--
75-02-14	7.6	8.0	0	0	2.5	--	--	--	--	--	--	--
75-02-14	6.4	15.0	8	0	203	--	--	--	--	--	--	--
75-02-14	7.2	8.0	0	4	38	--	--	--	--	--	--	--
75-02-14	6.9	7.0	0	2	44	--	--	--	--	--	--	--
					Cannon County--Continued							
75-02-21	8.3	16.0	--	--	3.0	--	--	--	--	--	--	--
75-03-27	7.0	15.0	7	10	45	198	74	54	.8	.00	4	.0
					Coffee County--Continued							
75-01-07	7.5	16.0	4	20	9.3	26	B19	B7	5.0	.00	0	.0
75-04-16	6.8	15.5	1	10	47	B1	<1	<1	1.1	.00	0	--
75-07-16	6.6	15.5	0	20	76	32	B8	B17	--	--	--	--
75-02-06	6.1	14.5	--	--	--	--	--	--	--	--	--	--
75-02-06	6.4	14.5	--	--	--	--	--	--	--	--	--	--
75-03-25	--	--	--	--	--	--	--	--	--	--	--	--
75-04-15	5.9	14.5	0	20	137	75	B2	B4	1.0	.00	0	.0
75-07-21	5.3	15.5	14	7	441	97	40	77	.8	.00	0	.0
75-02-06	6.7	14.5	--	--	--	--	--	--	--	--	--	--
75-02-06	7.0	14.5	--	--	--	--	--	--	--	--	--	--
75-03-25	--	--	--	--	--	--	--	--	--	--	--	--
75-04-15	7.2	14.5	1	10	15	B9	B1	B3	.3	.00	0	.0
75-07-15	6.7	19.0	3	2	50	B10	B1	B5	5.0	.01	0	.0
74-12-12	7.6	14.0	--	--	5.0	--	--	--	--	--	--	--
75-01-06	7.4	15.0	2	10	7.0	B3	<1	B3	1.3	.00	0	.0
75-04-15	6.7	15.0	1	20	42	B6	<1	<1	.7	.00	0	.0
75-07-16	6.9	16.5	0	2	26	<1	<1	<1	--	--	--	--
75-01-08	7.0	15.5	3	10	26	B2	<1	B2	1.3	.00	0	.0
75-04-16	7.3	17.5	2	6	14	<1	<1	<1	.3	.00	0	.1
75-07-15	7.1	16.0	3	40	23	<1	<1	B3	--	--	--	.0
75-02-13	6.4	13.5	1	0	153	--	--	--	--	--	--	--
					Franklin County--Continued							
75-02-14	8.0	18.0	--	--	2.2	--	--	--	--	--	--	--
					Hamilton County--Continued							
75-06-26	7.2	15.0	3	0	13	--	--	--	5.9	.00	0	.0
					Lawrence County--Continued							
75-09-03	6.2	16.0	2	55	154	--	--	--	18	.00	0	.0
					Lincoln County--Continued							
75-08-26	6.4	16.5	0	10	43	--	--	--	--	--	--	--
75-04-21	8.5	16.0	--	--	1.5	--	--	--	--	--	--	--
75-05-08	8.5	16.9	8	10	1.6	--	--	--	2.5	.00	1	.0
75-04-28	8.0	17.0	--	--	3.8	--	--	--	--	--	--	--
75-05-06	7.7	15.9	1	7	6.6	--	--	--	2.9	.00	0	.0
75-04-14	7.7	16.0	--	--	7.0	--	--	--	--	--	--	--
75-04-15	7.9	16.0	--	--	4.2	--	--	--	--	--	--	--
75-05-09	7.8	18.7	5	10	6.4	--	--	--	--	.00	--	--
75-04-25	7.9	17.0	--	--	2.8	--	--	--	--	--	--	--
					Rutherford County--Continued							
75-02-18	8.3	21.5	--	--	2.1	--	--	--	--	--	--	--
75-06-10	8.0	28.0	--	--	4.9	--	--	--	--	--	--	--
75-06-11	8.0	21.0	--	--	4.3	--	--	--	--	--	--	--
75-06-19	7.3	17.0	0	1	22	<1	<1	<1	.2	.00	3	.1
75-02-19	8.0	17.0	--	--	4.7	--	--	--	--	--	--	--
75-03-11	8.0	17.5	1	4	4.7	23	B1	B1	4.7	.00	0	.0
75-02-26	8.3	16.0	--	--	2.6	--	--	--	--	--	--	--
75-03-26	7.1	16.0	3	1	35	B9	B3	B4	2.7	.00	0	.0
75-02-27	8.3	16.0	--	--	2.5	--	--	--	--	--	--	--
75-03-12	7.5	15.0	10	100	14	6000	1800	5400	8.3	.00	0	.0
75-02-25	8.3	17.0	--	--	1.6	--	--	--	--	--	--	--
75-02-25	8.3	17.0	--	--	1.6	--	--	--	--	--	--	--
75-02-11	8.0	23.0	--	--	4.4	--	--	--	--	--	--	--

B--Results based on colony count outside the acceptable range (non-ideal colony count).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE OF SAMPLE	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
Bedford County--Continued										
75-02-14	--	--	--	--	--	--	--	--	--	--
75-02-13	--	--	--	--	--	--	--	--	--	--
75-02-14	--	--	--	--	--	--	--	--	--	--
75-02-14	--	--	--	--	--	--	--	--	--	--
75-02-14	--	--	--	--	--	--	--	--	--	--
75-02-14	--	--	-	--	--	--	--	--	--	--
Cannon County--Continued										
75-02-21	--	--	--	--	--	--	--	--	--	--
75-03-27	0	50	0	0	10	4	.2	0	0	8
Coffee County--Continued										
75-01-07	2	0	0	0	3	6	.1	0	0	10
75-04-16	1	50	0	0	2	3	.0	0	0	120
75-07-16	--	--	--	--	--	--	--	--	--	--
75-02-06	--	--	--	--	--	--	--	--	--	--
75-02-06	--	--	--	--	--	--	--	--	--	--
75-03-25	--	--	--	--	--	--	--	--	--	--
75-04-15	1	20	0	0	1	0	.1	0	0	20
75-07-21	1	30	2	0	1	12	.1	0	0	0
75-02-06	--	--	--	--	--	--	--	--	--	--
75-02-06	--	--	--	--	--	--	--	--	--	--
75-03-25	--	--	--	--	--	--	--	--	--	--
75-04-15	0	10	0	0	1	1	.1	0	0	30
75-07-15	1	0	0	0	5	6	.1	0	0	20
74-12-12	--	--	--	--	--	--	--	--	--	--
75-01-06	1	0	0	2	4	4	.0	0	0	50
75-04-15	0	30	0	0	1	3	.2	0	0	30
75-07-16	--	--	--	--	--	--	--	--	--	--
75-01-08	1	0	1	1	2	1	.1	0	0	60
75-04-16	1	0	0	0	1	0	.0	0	0	140
75-07-15	--	--	--	--	--	--	--	--	--	--
75-02-13	--	--	--	--	--	--	--	--	--	--
Franklin County--Continued										
75-02-14	--	--	--	--	--	--	--	--	--	--
Hamilton County--Continued										
75-06-26	0	60	1	0	3	8	.0	0	0	40
Lawrence County--Continued										
75-09-03	5	0	0	0	5	10	.0	0	0	50
Lincoln County--Continued										
75-08-26	--	--	--	--	--	--	--	--	--	--
75-04-21	--	--	--	--	--	--	--	--	--	--
75-05-08	0	0	0	0	28	12	.2	0	0	40
75-04-28	--	--	--	--	--	--	--	--	--	--
75-05-06	1	80	0	1	5	2	.1	0	0	10
75-04-14	--	--	--	--	--	--	--	--	--	--
75-04-15	--	--	--	--	--	--	--	--	--	--
75-05-09	0	0	1	0	110	24	.1	0	0	40
75-04-25	--	--	--	--	--	--	--	--	--	--
Rutherford County--Continued										
75-02-18	--	--	--	--	--	--	--	--	--	--
75-06-10	--	--	--	--	--	--	--	--	--	--
75-06-11	--	--	--	--	--	--	--	--	--	--
75-06-19	0	300	0	0	6	2	.0	0	0	90
75-02-19	--	--	--	--	--	--	--	--	--	--
75-03-11	0	30	0	0	5	3	.1	0	0	20
75-02-26	--	--	--	--	--	--	--	--	--	--
75-03-26	1	0	0	4	10	9	.2	0	0	30
75-02-27	--	--	--	--	--	--	--	--	--	--
75-03-12	3	80	0	1	11	13	.1	0	0	50
75-02-25	--	--	--	--	--	--	--	--	--	--
75-02-25	--	--	--	--	--	--	--	--	--	--
75-02-11	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT OBSERVATION WELLS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[1] Geologic unit (aquifer):
337 FRPN -- Fort Payne Formation, Lower Mississippian age.
364 BGBC -- Bigby and Cannon Limestone, Middle Ordovician age.
364 CRRS -- Carters Limestone, Middle Ordovician age.
364 HRMG -- Hermitage Formation, Middle Ordovician age.
364 LBNN -- Lebanon Limestone, Middle Ordovician age.
364 MRFB -- Murfreesboro Limestone, Middle Ordovician age.
364 PIRC -- Pierce Limestone, Middle Ordovician age.
364 RDLY -- Ridley Limestone, Middle Ordovician age.
367 KNOX -- Knox Dolomite, Middle Ordovician age.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

CUMBERLAND RIVER BASIN

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
03408500 NEW RIVER AT NEW RIVER, TENN. (LAT 36 23 08 LONG 084 33 17)				
Oct. 1, 1974	1430	153	17.0	-
Nov. 21, 1974	1515	2,240	9.5	-
Jan. 6, 1975	1445	1,110	5.0	-
Feb. 27, 1975	1630	974	6.0	-
May 29, 1975	1525	187	23.5	-
Aug. 20, 1975	1240	152	25.0	-
03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TENN. (LAT 36 24 58 LONG 085 01 35)				
Oct. 2, 1974	1205	101	14.0	-
Nov. 7, 1974	1035	100	11.5	-
Jan. 9, 1975	1235	866	8.5	-
Apr. 16, 1975	1345	268	10.5	-
May 14, 1975	1435	166	18.0	-
July 2, 1975	1510	31	24.0	-
Aug. 15, 1975	1440	16	26.0	-
03416000 WOLF RIVER NEAR BYRDSTOWN, TENN. (LAT 36 33 37 LONG 085 04 23)				
Oct. 2, 1974	1000	60	11.0	-
Nov. 7, 1974	1330	35	11.0	-
Jan. 9, 1975	1015	242	9.0	-
Feb. 27, 1975	1025	224	7.5	-
Apr. 16, 1975	1130	173	10.0	-
May 14, 1975	1055	116	15.0	-
July 2, 1975	1135	24	25.8	-
Aug. 15, 1975	1130	14	27.4	-
03417500 CUMBERLAND RIVER AT CELINA, TENN. (LAT 36 33 15 LONG 085 30 52)				
Dec. 4, 1974	1400	8,560	10.0	-
Dec. 18, 1974	1230	16,900	9.0	-
Dec. 31, 1974	1115	10,000	10.0	-
Feb. 25, 1975	1335	27,100	7.0	-
Apr. 17, 1975	1010	45,000	13.0	-
May 28, 1975	1205	18,100	15.0	-
June 24, 1975	1310	7,320	18.0	-
July 3, 1975	1015	4,350	20.3	-
Aug. 14, 1975	1355	6,360	22.0	-
03418000 ROARING RIVER NEAR HILHAM, TENN. (LAT 36 20 27 LONG 085 25 35				
Nov. 6, 1974	1320	29	12.0	-
Jan. 8, 1975	1335	106	9.5	-
Feb. 26, 1975	1340	114	8.5	-
Apr. 15, 1975	1400	92	11.0	-
May 13, 1975	1555	71	19.0	-
July 1, 1975	1710	15	26.0	-
Aug. 15, 1975	1315	6.1	27.0	-
034180.70 ROARING RIVER NEAR GAINESBORO, TENN. (LAT 36 21 04 LONG 085 32 45)				
Oct. 1, 1974	1200	123	16.0	-
Nov. 6, 1974	1105	22	12.0	-
Jan. 8, 1975	1135	231	9.0	-
Feb. 26, 1975	1040	295	8.0	-
Apr. 15, 1975	1205	252	10.5	-
May 13, 1975	1225	127	19.0	-
03421000 COLLINS RIVER NEAR MCMINNVILLE, TENN. (LAT 35 42 32 LONG 085 43 46)				
Nov. 11, 1974	1230	2,350	12.0	-
Dec. 30, 1974	1505	5,300	11.0	-
Feb. 27, 1975	1600	1,600	9.5	-
Apr. 17, 1975	1330	722	16.5	-
June 25, 1975	1810	260	24.0	-
Aug. 21, 1975	1500	144	27.5	-

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
03422500 CANEY FORK RIVER NEAR ROCK ISLAND, TENN. (LAT 35 48 26 LONG 085 37 44)				
Nov. 22, 1974	0945	5,750	10.0	-
June 24, 1975	1100	1,380	21.0	-
03426500 CUMBERLAND RIVER BELOW OLD HICKORY, TENN. (LAT 36 15 39 LONG 086 40 30)				
Mar. 20, 1975	1030	84,700	11.0	-
03426800 EAST FORK STONES RIVER AT WOODBURY, TENN. (LAT 35 49 41 LONG 086 04 36)				
Oct. 3, 1974	1130	20	13.0	-
Nov. 6, 1974	1035	18	11.7	-
Dec. 23, 1974	1045	26	9.0	-
Feb. 18, 1975	1230	173	12.4	-
Apr. 8, 1975	1330	72	13.0	-
May 15, 1975	1115	26	17.5	-
June 27, 1975	1020	14	21.0	-
Aug. 14, 1975	0915	9.8	22.0	-
03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TENN. (LAT 35 55 06 LONG 086 20 02)				
Oct. 3, 1974	0935	76	13.0	-
Nov. 6, 1974	1350	115	13.8	-
Dec. 23, 1974	1420	107	8.8	-
Feb. 21, 1975	1140	512	9.0	-
Apr. 7, 1975	1400	291	13.0	-
May 15, 1975	1405	163	21.0	-
June 26, 1975	1035	42	26.0	-
Aug. 14, 1975	1200	29	28.0	-
03428200 WEST FORK STONES RIVER AT MURFREESBORO, TENN. (LAT 35 54 10 LONG 086 25 48)				
Oct. 4, 1974	1000	50	14.5	-
Dec. 30, 1974	1105	1,060	12.4	-
Feb. 24, 1975	1420	536	11.4	-
Apr. 8, 1975	1010	262	13.0	-
May 13, 1975	1110	96	20.0	-
June 27, 1975	1305	49	26.0	-
Aug. 14, 1975	1415	19	27.5	-
03428500 WEST FORK STONES RIVER NEAR SMYRNA, TENN. (LAT 35 56 25 LONG 086 27 54)				
Oct. 4, 1974	1235	92	14.4	-
Nov. 7, 1974	1325	97	13.0	-
Dec. 26, 1974	1315	1,330	9.2	-
Feb. 21, 1975	1435	625	10.6	-
May 13, 1975	0915	165	18.0	-
June 26, 1975	1400	92	26.0	-
Aug. 15, 1975	1005	30	25.5	-
03431000 MILL CREEK NEAR ANTIOCH, TENN. (LAT 36 04 54 LONG 086 40 50)				
Oct. 7, 1974	1305	16	14.5	-
Nov. 7, 1974	1205	28	11.0	-
Dec. 12, 1974	1045	86	7.0	-
Jan. 8, 1975	1325	58	9.5	-
Feb. 19, 1975	1255	147	9.0	-
Mar. 11, 1975	1350	178	8.0	-
Mar. 13, 1975	0955	3,690	10.0	-
Apr. 9, 1975	1035	58	12.0	-
May 5, 1975	1100	26	18.0	-
June 9, 1975	1320	7.5	22.0	-
July 3, 1975	1015	1.5	26.0	-
Aug. 6, 1975	1020	57	22.0	-

CUMBERLAND RIVER BASIN--Continued

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
03431300 BROWNS CREEK AT STATE FAIRGROUNDS AT NASHVILLE, TENN. (LAT 36 07 47 LONG 086 45 40)				
Oct. 9, 1974	1345	3.8	17.5	-
Nov. 7, 1974	1430	3.2	14.0	-
Dec. 11, 1974	1005	16	9.5	-
Jan. 8, 1975	0915	8.4	11.5	-
Feb. 19, 1975	0905	22	10.0	-
Mar. 11, 1975	1015	21	9.5	-
Mar. 13, 1975	1140	435	10.0	-
Mar. 13, 1975	1325	667	8.5	-
Apr. 10, 1975	1115	12	13.0	-
May 5, 1975	1430	6.8	21.0	-
May 15, 1975	0950	304	18.0	-
June 9, 1975	0940	3.8	19.0	-
July 2, 1975	0925	1.4	25.0	-
03431600 WHITES CREEK AT TUCKER ROAD NEAR BORDEAUX, TENN. (LAT 36 12 45 LONG 086 49 29)				
Oct. 7, 1974	1015	19	14.0	-
Nov. 6, 1974	1040	25	12.0	-
Dec. 10, 1974	1120	112	6.5	-
Jan. 7, 1975	1015	56	6.0	-
Feb. 10, 1975	1210	102	5.5	-
Mar. 6, 1975	1100	50	8.0	-
Apr. 8, 1975	1050	51	10.5	-
May 6, 1975	1100	33	17.5	-
03431700 RICHLAND CREEK AT CHARLOTTE AVENUE, AT NASHVILLE, TENN. (LAT 36 09 04 LONG 086 51 16)				
Oct. 3, 1974	1310	5.9	13.0	-
Nov. 6, 1974	1345	8.3	12.0	-
Dec. 12, 1974	1315	23	9.0	-
Jan. 7, 1975	1305	16	8.0	-
Feb. 10, 1975	1415	50	8.0	-
Mar. 6, 1975	1330	19	10.0	-
Apr. 8, 1975	1305	21	12.0	-
May 7, 1975	1440	32	19.0	-
June 5, 1975	1130	5.8	22.0	-
July 2, 1975	1210	3.3	26.0	-
Aug. 6, 1975	1235	7.3	25.0	-
Sept. 5, 1975	1340	.50	27.0	-
03431800 SYCAMORE CREEK NEAR ASHLAND CITY, TENN. (LAT 36 19 12 LONG 087 03 04)				
Oct. 4, 1974	1000	75	11.0	-
Nov. 6, 1974	1250	57	12.0	-
Jan. 6, 1975	0900	131	5.0	-
Feb. 21, 1975	1320	128	8.0	-
Feb. 24, 1975	1125	944	8.5	-
Apr. 7, 1975	1445	110	12.5	-
May 15, 1975	1455	192	17.0	-
July 1, 1975	1015	30	22.0	-
Aug. 21, 1975	1225	25	25.2	-
03432350 HARPETH RIVER AT FRANKLIN, TENN. (LAT 35 55 14 LONG 086 51 56)				
Oct. 3, 1974	1350	71	13.0	-
Dec 27, 1974	0855	454	8.5	-
Jan. 23, 1975	1350	552	8.0	-
Feb. 18, 1975	1410	692	11.2	-
Apr. 11, 1975	1335	213	13.7	-
June 25, 1975	1055	14	22.8	-
July 30, 1975	0945	8.2	24.0	-
Aug. 18, 1975	1405	28	24.8	-
Aug. 28, 1975	0905	3.5	23.0	-
Sept. 24, 1975	1035	861	14.8	-
03433500 HARPETH RIVER AT BELLEVUE, TENN. (LAT 36 03 16 LONG 086 55 42)				
Nov. 8, 1974	1425	172	11.5	-
Dec. 26, 1974	1405	1,140	8.5	-
Feb. 14, 1975	1415	1,530	8.2	-
May 16, 1975	0955	3,380	17.0	-
Aug. 13, 1975	1215	49	26.0	-
03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TENN. (LAT 36 07 19 LONG 087 05 56)				
Oct. 4, 1974	1400	320	13.3	-
Oct. 28, 1974	1500	174	16.0	-
Jan. 7, 1975	1320	1,010	7.2	-
Feb. 27, 1975	1425	1,810	8.8	-
Apr. 10, 1975	1235	985	13.0	-
May 16, 1975	1305	5,520	17.5	-
June 25, 1975	1420	157	27.0	-
July 30, 1975	1310	111	27.0	-
Aug. 1, 1975	1150	105	25.0	-
Aug. 28, 1975	1005	85	25.5	-
03435030 RED RIVER NEAR PORTLAND, TENN. (LAT 36 33 24 LONG 086 34 14)				
Oct. 18, 1974	0945	10	12.0	-
Nov. 22, 1974	1035	36	7.0	-
Dec. 18, 1974	1035	23	2.5	-
Feb. 12, 1975	1010	34	7.5	-
Mar. 14, 1975	1250	206	6.0	-
Apr. 18, 1975	0930	14	15.0	-
May 14, 1975	1005	9.6	17.5	-
June 11, 1975	1030	5.6	21.0	-
July 10, 1975	0950	2.1	25.0	-
July 29, 1975	1040	1.8	25.5	-
03435770 SULPHUR FORK RED RIVER ABOVE SPRINGFIELD, TENN. (LAT 36 30 47 LONG 086 51 44)				
June 10, 1975	1020	24	19.8	-
Aug. 28, 1975	1520	4.5	26.0	-
Sept. 25, 1975	1115	83	14.0	-
03436000 SULPHUR FORK RED RIVER NEAR ADAMS, TENN. (LAT 36 30 55 LONG 087 03 32)				
Oct. 1, 1974	1030	405	14.0	-
Nov. 6, 1974	1050	99	12.0	-
Jan. 3, 1975	1010	430	8.0	-
Feb. 19, 1975	1330	279	9.0	-
Apr. 9, 1975	1540	283	12.0	-
May 14, 1975	1205	130	18.0	-
July 2, 1975	1030	34	25.0	-
Aug. 29, 1975	1005	14	26.0	-
03436100 RED RIVER AT PORT ROYAL, TENN. (LAT 36 33 17 LONG 087 08 31)				
Oct. 1, 1974	1250	1,900	15.0	-
Jan. 3, 1975	1255	2,130	8.0	-
Feb. 19, 1975	1130	1,460	9.5	-
Apr. 9, 1975	1050	2,240	12.0	-
May 14, 1975	1020	1,050	18.0	-
July 2, 1975	1250	210	27.0	-
03436700 YELLOW CREEK NEAR SHILOH, TENN. (LAT 36 20 55 LONG 087 32 20)				
Dec. 31, 1974	1435	217	13.0	-
Jan. 30, 1975	1255	173	11.1	-
Feb. 20, 1975	1045	207	7.5	-
Apr. 10, 1975	1715	237	13.5	-
May 15, 1975	1110	234	16.5	-
July 1, 1975	1400	55	23.0	-
Aug. 21, 1975	1015	35	24.0	-

PERIODIC DETERMINATIONS OF WATER TEMPERATURE AND SPECIFIC CONDUCTANCE

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TENNESSEE RIVER BASIN

03455000 FRENCH BROAD RIVER NEAR NEWPORT, TENN.
(LAT 35 58 54 LONG 083 09 40)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Nov. 21, 1974	1330	6,590	9.0	-
Dec. 31, 1974	1245	4,130	10.5	-
Feb. 12, 1975	1200	4,850	8.0	-
May 14, 1975	1150	3,550	20.0	-
July 2, 1975	1515	1,990	26.0	-
July 3, 1975	1240	2,020	26.0	-
Aug. 21, 1975	1145	1,540	25.5	-

03461200 COSBY CREEK ABOVE COSBY, TENN.
(LAT 35 47 02 LONG 083 13 08)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 7, 1974	1620	15	13.0	-
Dec. 6, 1974	1250	31	5.0	-
Mar. 21, 1975	1400	53	8.0	-
Aug. 8, 1975	1530	17	17.5	-

03461500 PIGEON RIVER AT NEWPORT, TENN.
(LAT 35 57 38 LONG 083 10 28)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Nov. 21, 1974	1135	3,160	11.0	-
Feb. 12, 1975	1345	3,160	9.5	-
July 7, 1975	1155	239	26.0	-
July 7, 1975	1155	71	26.0	-
July 7, 1975	1155	168	26.0	-

03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TENN.
(LAT 36 10 35 LONG 082 27 27)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 9, 1974	1500	587	11.0	-
Nov. 20, 1974	1530	5,220	11.5	-
Jan. 1, 1975	1445	2,420	9.5	-
Feb. 18, 1975	1610	2,380	9.5	-
July 10, 1975	1255	842	24.0	-
Aug. 27, 1975	1255	401	26.5	-

03470000 LITTLE PIGEON RIVER AT SEVIERVILLE, TENN.
(LAT 35 52 42 LONG 083 34 40)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 3, 1974	1030	145	11.0	-
Nov. 24, 1974	1255	394	9.0	-
Jan. 7, 1975	1440	676	6.5	-
Feb. 26, 1975	1510	1,010	10.0	-
May 8, 1975	1500	319	22.5	-
June 24, 1975	1000	181	23.0	-
Aug. 13, 1975	1005	163	23.0	-

03484000 WATAUGA RIVER BELOW WILBUR DAM, TENN.
(LAT 36 20 39 LONG 082 07 46)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Jan. 2, 1975	1045	2,200	6.5	-
July 9, 1975	1645	3,020	10.0	-

03485500 DOE RIVER AT ELIZABETHTON, TENN.
(LAT 36 20 40 LONG 082 12 37)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 8, 1974	1615	100	16.0	-
Nov. 20, 1974	0930	709	11.5	-
Jan. 1, 1975	1825	553	8.5	-
Feb. 19, 1975	1420	333	10.0	-
May 7, 1975	0915	219	15.0	-
July 10, 1975	1030	319	18.0	-
Aug. 26, 1975	1600	71	25.5	-

03486000 WATAUGA RIVER AT ELIZABETHTON, TENN.
(LAT 36 21 21 LONG 082 13 26)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Feb. 19, 1975	0940	631	9.5	-
Feb. 19, 1975	0920	607	9.5	-
July 10, 1975	0935	458	13.0	-

03487550 REEDY CREEK AT OREBANK, TENN.
(LAT 36 33 42 LONG 082 27 36)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 7, 1974	1615	9.2	14.0	-
Nov. 18, 1974	1500	20	9.5	-
Jan. 2, 1975	1640	74	6.5	-
Feb. 18, 1975	1625	64	12.0	-
May 6, 1975	1245	40	15.5	-
July 8, 1975	1630	21	23.0	-
Aug. 25, 1975	1720	12	24.5	-

03491300 BEECH CREEK AT KEPLER, TENN.
(LAT 36 24 06 LONG 082 53 09)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 9, 1974	1230	5.0	9.0	-
Jan. 3, 1975	1145	56	4.0	-
Feb. 18, 1975	1250	69	10.0	-
Mar. 19, 1975	1300	119	9.0	-
May 5, 1975	1400	60	16.0	-
July 8, 1975	1200	8.7	23.0	-
Aug. 25, 1975	1225	3.9	24.5	-

03495500 HOLSTON RIVER NEAR KNOXVILLE, TENN.
(LAT 36 00 56 LONG 083 49 54)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Nov. 24, 1974	1030	472	11.0	-
Feb. 11, 1975	1030	14,400	8.0	-
Apr. 9, 1975	1530	11,900	13.0	-
July 14, 1975	1015	7,520	20.5	-

03498500 LITTLE RIVER NEAR MARYVILLE, TENN.
(LAT 35 47 10 LONG 083 53 04)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 2, 1974	1615	127	15.5	-
Nov. 16, 1974	1000	182	7.0	-
Mar. 6, 1975	1630	481	11.0	-
May 23, 1975	0930	280	23.0	-
June 26, 1975	0910	172	24.0	-
Aug. 12, 1975	1000	205	21.0	-

03519640 BAKER CREEK NEAR GREENBACK, TENN.
(LAT 35 40 21 LONG 084 06 28)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 7, 1974	1300	11	8.0	-
Dec. 2, 1974	1520	24	8.0	-
Mar. 25, 1975	1315	110	12.5	-
May 2, 1975	1235	34	15.5	-
June 19, 1975	1125	17	17.5	-
July 14, 1975	1250	13	17.0	-

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TENN.
(LAT 36 06 52 LONG 083 59 16)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 4, 1974	1225	14	9.0	-
Nov. 20, 1974	1300	553	12.5	-
Jan. 14, 1975	1440	219	5.0	-
Feb. 14, 1975	1400	185	7.5	-
Apr. 24, 1975	1050	60	15.5	-
July 24, 1975	1145	12	23.5	-
Sept. 2, 1975	1045	7.9	22.0	-

03538225 POPLAR CREEK NEAR OAK RIDGE, TENN.
(LAT 35 59 55 LONG 084 20 23)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Nov. 12, 1974	1245	60	11.0	-
Feb. 5, 1975	1100	1,210	8.0	-
May 28, 1975	1220	32	21.0	-
July 16, 1975	1110	19	22.5	-
Sept. 5, 1975	1130	8.3	22.0	-

03538250 EAST FORK POPLAR CREEK NEAR OAK RIDGE, TENN.
(LAT 35 57 58 LONG 084 21 30)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Nov. 12, 1974	1450	27	11.5	-
Feb. 5, 1975	1300	208	9.0	-
May 28, 1975	1025	19	20.5	-
July 16, 1975	1305	18	22.0	-

03539800 OBED RIVER NEAR LANCING, TENN.
(LAT 36 04 53 LONG 084 40 15)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
Oct. 1, 1974	1200	297	17.0	-
Nov. 23, 1974	1110	1,650	8.0	-
Jan. 6, 1975	1135	1,490	4.5	-
Feb. 27, 1975	1245	1,530	7.0	-
June 30, 1975	1250	107	27.5	-

TENNESSEE RIVER BASIN--Continued

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
03540500 EMORY RIVER AT OAKDALE, TENN. (LAT 35 58 59 LONG 084 33 29)				
Oct. 8, 1974	1355	124	14.5	-
Nov. 23, 1974	1355	2,150	8.0	-
Mar. 28, 1975	1050	2,600	11.0	-
June 25, 1975	1200	118	27.0	-
July 28, 1975	1150	76	27.0	-
Sept. 2, 1975	1345	32	27.0	-
03541300 BITTER CREEK NEAR OAKDALE, TENN. (LAT 35 59 22 LONG 084 29 16)				
Dec. 4, 1974	1405	29	5.0	-
Feb. 11, 1975	1430	21	6.0	-
Apr. 16, 1975	1505	9.6	11.0	-
03543500 SEWEE CREEK NEAR DECATUR, TENN. (LAT 35 34 53 LONG 084 44 53)				
Oct. 1, 1974	1130	25	14.5	280
Nov. 6, 1974	1150	30	13.0	250
Feb. 5, 1975	1020	1,400	8.5	115
Mar. 4, 1975	1330	196	7.0	200
Apr. 1, 1975	1100	705	13.0	130
May 1, 1975	1135	98	18.0	240
June 2, 1975	1115	83	18.5	230
July 1, 1975	1115	42	22.0	265
Aug. 1, 1975	1010	34	23.0	270
Sept. 2, 1975	1010	22	22.0	250
03556500 HIWASSEE RIVER NEAR MCFARLAND, TENN. (LAT 35 10 48 LONG 084 26 36)				
Oct. 9, 1974	1415	2,410	18.0	31
Nov. 8, 1974	1335	2,440	16.0	26
Feb. 10, 1975	1200	7,970	6.5	25
Apr. 16, 1975	1400	3,190	10.0	21
Aug. 15, 1975	1230	2,970	19.0	24
03563000 OCOEE RIVER AT EMF, TENN. (LAT 35 05 48 LONG 084 32 07)				
Oct. 10, 1974	1430	675	17.0	210
Oct. 25, 1974	1235	1,000	15.0	160
Dec. 30, 1974	1100	1,150	11.0	250
Feb. 25, 1975	1330	1,940	9.0	110
May 23, 1975	1120	1,500	17.5	110
July 25, 1975	1000	996	22.0	160
03564500 OCOEE RIVER AT PARKSVILLE, TENN. (LAT 35 05 48 LONG 084 39 15)				
Oct. 10, 1974	1140	2,400	17.0	150
Nov. 26, 1974	1210	2,180	11.0	210
Jan. 24, 1975	1145	2,540	7.0	-
Mar. 26, 1975	1155	3,820	11.0	95
Apr. 25, 1975	1340	88	15.0	100
Aug. 25, 1975	1500	2,210	25.0	125
03565000 HIWASSEE RIVER ABOVE CHARLESTON, TENN. (LAT 35 12 33 LONG 084 39 31)				
Oct. 15, 1974	1040	3,830	17.0	38
Feb. 11, 1975	1340	10,600	8.5	31
Mar. 11, 1975	1635	6,720	7.5	-
May 12, 1975	1215	3,520	16.0	35
Aug. 4, 1975	0945	1,740	19.5	25
Sept.17, 1975	1100	1,110	20.0	50
03565300 SOUTH CHESTUEE CREEK NEAR BENTON, TENN. (LAT 35 10 02 LONG 084 42 59)				
Oct. 9, 1974	1115	3.5	11.0	295
Nov. 25, 1974	1110	7.8	8.0	290
Jan. 2, 1975	1505	34	7.0	260
Jan. 29, 1975	1550	64	12.5	-
Mar. 6, 1975	1050	49	6.0	220
Apr. 16, 1975	1520	32	12.5	255
May 19, 1975	1300	16	18.0	290
June 27, 1975	1015	9.4	21.0	270
July 25, 1975	1400	5.5	23.0	280
Aug. 25, 1975	1030	4.9	23.0	305
Sept.15, 1975	1045	5.7	16.5	315
03565500 OOSTANAULA CREEK NEAR SANFORD, TENN. (LAT 35 19 39 LONG 084 42 19)				
Oct. 8, 1974	1130	31	12.5	185
Nov. 6, 1974	1450	38	14.0	300
Dec. 10, 1974	1400	84	7.0	300
Jan. 31, 1975	1400	142	13.0	250
Mar. 6, 1975	1415	115	9.0	290
Apr. 15, 1975	1145	127	13.0	250
June 4, 1975	1015	54	17.5	325
Aug. 22, 1975	1355	31	22.5	290
03566000 HIWASSEE RIVER AT CHARLESTON, TENN. (LAT 35 17 16 LONG 084 45 07)				
Oct. 8, 1974	1530	3,410	19.0	100
Jan. 31, 1975	1305	5,220	9.5	100
June 4, 1975	1345	2,670	20.0	120
Sept.19, 1975	1500	3,540	22.0	65
03566420 WOLFTEVER CREEK NEAR OOLTEWAH, TENN. (LAT 35 03 43 LONG 085 03 59)				
Oct. 1, 1974	1500	3.6	16.5	300
Oct. 31, 1974	1030	3.8	16.0	470
Nov. 7, 1974	0950	6.2	11.0	350
Jan. 7, 1975	1630	23	7.5	360
Feb. 19, 1975	1000	139	10.0	110
Mar. 4, 1975	1435	24	7.0	230
Apr. 17, 1975	1535	14	16.0	320
May 5, 1975	1435	9.6	18.5	330
June 13, 1975	1450	14	21.0	280
July 15, 1975	1415	5.0	23.0	450
Aug. 13, 1975	1405	6.8	23.5	350
Sept.15, 1975	1345	5.1	19.0	410
03567500 SOUTH CHICKAMAUGA CREEK NEAR CHICKAMAUGA, TENN. (LAT 35 00 50 LONG 085 12 27)				
Oct. 31, 1974	1430	131	16.0	320
Nov. 7, 1974	1220	162	13.0	320
Nov. 19, 1974	1050	148	11.0	320
Nov. 29, 1974	1255	158	6.5	260
Dec. 5, 1974	1045	272	5.5	220
Jan. 6, 1975	1555	649	7.5	320
Jan. 21, 1975	1455	877	7.5	360
Feb. 4, 1975	1245	2,750	9.5	150
Feb. 27, 1975	1515	1,080	10.0	190
Mar. 14, 1975	1710	9,610	9.5	65
Mar. 21, 1975	1120	2,030	11.0	160
Mar. 31, 1975	1015	11,000	10.5	80
Apr. 9, 1975	1105	647	12.5	230
Apr. 17, 1975	1425	415	14.5	250
Apr. 24, 1975	1525	342	18.0	250
May 6, 1975	1430	266	18.5	265
June 27, 1975	1520	191	24.0	280
July 21, 1975	0910	165	23.0	265
Aug. 29, 1975	1535	147	24.5	280
03568000 TENNESSEE RIVER AT CHATTANOOGA, TENN. (LAT 35 05 12 LONG 085 16 43)				
Feb. 14, 1975	1505	79,200	8.0	150
03571000 SEQUATCHIE RIVER NEAR WHITWELL, TENN. (LAT 35 12 22 LONG 085 29 48)				
Oct. 22, 1974	1210	105	11.0	240
Nov. 25, 1974	1115	435	10.0	198
Feb. 14, 1975	1225	1,100	8.0	150
Apr. 2, 1975	1140	2,760	13.0	125
May 5, 1975	1030	409	16.0	160
June 19, 1975	1045	291	21.0	200
July 14, 1975	1020	120	21.0	240
Aug. 14, 1975	0955	90	24.0	225
Sept.10, 1975	1225	58	23.5	240

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TENNESSEE RIVER BASIN--Continued

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
03578000 ELK RIVER NEAR PELHAM, TENN. (LAT 35 17 48 LONG 085 52 12)				
Oct. 3, 1974	1420	4.8	12.0	280
Nov. 14, 1974	1350	49	9.5	165
Dec. 27, 1974	1635	544	8.5	124
Feb. 13, 1975	1115	167	8.0	145
Apr. 11, 1975	1245	80	11.0	-
June 18, 1975	1020	46	17.5	160
July 14, 1975	1250	8.3	20.5	220
Aug. 14, 1975	1235	30	22.5	255
Sept.10, 1975	1010	3.8	22.0	255
03579100 ELK RIVER NEAR ESTILL SPRINGS, TENN. (LAT 35 17 08 LONG 086 06 20)				
Oct. 3, 1974	1145	44	15.0	150
Nov. 21, 1974	1100	1,240	13.0	150
Dec. 27, 1974	1215	2,770	7.5	150
Feb. 13, 1975	1025	825	7.5	155
Apr. 9, 1975	1210	498	13.0	125
June 10, 1975	1325	156	23.5	150
Aug. 11, 1975	1025	44	19.5	160
Sept. 9, 1975	1410	45	22.0	150
03580750 ELK RIVER BELOW TIMS FORD DAM, TENN. (LAT 35 11 32 LONG 086 16 52)				
Nov. 21, 1974	1415	3,390	14.0	170
Dec. 17, 1974	1420	3,390	9.5	135
Mar. 11, 1975	1555	41	11.0	175
Apr. 7, 1975	1520	3,370	10.5	-
June 11, 1975	0845	36	14.0	205
June 11, 1975	0845	37	14.0	205
June 11, 1975	1500	276	17.5	170
June 11, 1975	1500	276	17.5	170
Sept. 9, 1975	1100	37	17.0	200
03582000 ELK RIVER ABOVE FAYETTEVILLE, TENN. (LAT 35 08 04 LONG 086 32 23)				
Oct. 2, 1974	1705	194	14.0	180
Oct. 2, 1974	1735	177	14.0	180
Mar. 16, 1975	1045	6,570	9.0	185
Apr. 7, 1975	1210	3,730	10.0	180
July 9, 1975	0845	166	23.0	200
Aug. 11, 1975	1445	339	21.0	190
03584000 RICHLAND CREEK NEAR PULASKI, TENN. (LAT 35 12 51 LONG 087 06 05)				
Oct. 2, 1974	1240	114	14.5	265
Nov. 13, 1974	1000	286	9.0	280
Dec. 19, 1974	1005	331	7.0	270
Mar. 10, 1975	1500	434	7.0	225
July 8, 1975	1125	192	23.0	290
03584500 ELK RIVER NEAR PROSPECT, TENN. (LAT 35 01 39 LONG 086 56 52)				
Nov. 13, 1974	1250	2,180	11.0	210
Dec. 18, 1974	1615	2,890	7.0	150
Mar. 10, 1975	1310	1,640	8.0	260
Mar. 16, 1975	1425	25,600	9.0	180
Apr. 8, 1975	0900	5,200	11.0	200
Aug. 12, 1975	0900	391	24.0	225
03588000 SHOAL CREEK AT LAWRENCEBURG, TENN. (LAT 35 14 40 LONG 087 21 02)				
Oct. 1, 1974	1345	40	15.5	-
Nov. 13, 1974	1155	36	9.3	-
Dec. 31, 1974	1305	151	13.5	-
Feb. 20, 1975	1410	146	11.5	-
Apr. 7, 1975	1545	115	14.3	-
May 14, 1975	1555	77	18.3	-
July 1, 1975	1650	60	21.0	-
Aug. 18, 1975	1535	40	21.0	

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. MICROMHOS)
03588400 CHISHOLM CREEK AT WESTPOINT, TENN. (LAT 35 08 04 LONG 087 31 45)				
Oct. 1, 1974	1110	29	15.0	-
Jan. 15, 1975	1510	113	6.6	-
Feb. 20, 1975	1220	165	8.2	-
Apr. 8, 1975	1225	89	11.2	-
May 14, 1975	1345	71	16.5	-
July 2, 1975	1045	30	21.5	-
Aug. 19, 1975	1055	65	20.5	-
03588500 SHOAL CREEK AT IRON CITY, TENN. (LAT 35 01 27 LONG 087 34 44)				
Oct. 1, 1974	1040	217	16.0	-
Nov. 13, 1974	1340	280	10.0	-
Jan. 15, 1975	1255	1,090	7.0	-
Feb. 20, 1975	0945	1,590	9.0	-
Apr. 8, 1975	1000	811	11.3	-
May 14, 1975	1145	659	17.1	-
July 2, 1975	0855	254	23.0	-
03596000 DUCK RIVER BELOW MANCHESTER, TENN. (LAT 35 28 15 LONG 086 07 18)				
Oct. 2, 1974	1240	30	15.0	180
Nov. 14, 1974	0940	40	8.5	170
Dec. 20, 1974	1335	76	6.0	110
Feb. 12, 1975	1330	494	7.5	88
Mar. 12, 1975	1110	191	9.0	95
Mar. 13, 1975	1145	11,400	10.0	50
Apr. 11, 1975	0910	121	13.5	85
May 8, 1975	1325	235	18.0	90
June 18, 1975	1200	67	23.0	130
July 14, 1975	0930	26	21.5	165
Aug. 14, 1975	1025	25	25.0	170
Sept.10, 1975	1325	26	23.0	200
03596500 DUCK RIVER AT NORMANDY, TENN. (LAT 35 27 26 LONG 086 15 25)				
Oct. 10, 1974	1130	78	12.5	160
Nov. 11, 1974	1100	85	12.0	160
Dec. 20, 1974	1025	158	7.5	170
Feb. 12, 1975	0950	583	8.0	105
Mar. 15, 1975	1420	2,360	7.5	-
May 7, 1975	0930	276	16.0	130
July 2, 1975	1200	108	25.0	155
Aug. 14, 1975	1155	74	26.0	170
Aug. 21, 1975	1050	108	24.0	160
Sept. 4, 1975	1000	72	25.0	170
Sept.10, 1975	0925	62	24.0	170
03597500 WARTRACE CREEK AT BELL BUCKLE, TENN. (LAT 35 35 16 LONG 086 20 22)				
Nov. 20, 1974	1445	87	15.5	-
Dec. 16, 1974	1415	11	7.5	-
Jan. 17, 1975	1330	32	8.5	-
Feb. 13, 1975	1435	34	7.0	-
Apr. 2, 1975	1040	33	13.0	-
Apr. 21, 1975	1500	10	17.0	-
May 20, 1975	1500	13	22.0	-
June 17, 1975	1430	3.8	24.5	-
July 15, 1975	1450	.77	26.0	-
Aug. 13, 1975	1410	.29	28.0	-
03598000 DUCK RIVER NEAR SHELBYVILLE, TENN. (LAT 35 28 49 LONG 086 29 57)				
Oct. 2, 1974	1625	146	17.0	220
Nov. 13, 1974	1300	196	10.0	238
Dec. 19, 1974	1545	329	8.0	230
Feb. 5, 1975	1105	4,700	9.0	200
Mar. 15, 1975	1305	13,000	7.5	125
June 10, 1975	1150	193	22.5	200
July 2, 1975	1050	161	26.0	205
Aug. 12, 1975	1310	124	27.0	200
Sept. 9, 1975	1415	98	27.0	200

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TENNESSEE RIVER BASIN--Continued

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (°C)	SPEC. COND. (MICROMHOS)
03599500 DUCK RIVER AT COLUMBIA, TENN. (LAT 35 37 05 LONG 087 01 56)				
Oct. 2, 1974	1250	271	19.0	-
Feb. 19, 1975	1130	6,110	12.0	-
May 13, 1975	1230	1,440	20.1	-
July 1, 1975	0910	279	26.0	-
Aug. 18, 1975	1155	179	27.0	-
03600500 BIG BIGBY CREEK AT SANDY HOOK, TENN. (LAT 35 29 19 LONG 087 13 59)				
Oct. 2, 1974	1005	6.8	12.5	-
Nov. 13, 1974	1425	12	12.6	-
Dec. 31, 1974	1030	53	12.0	-
Feb. 19, 1975	1545	59	9.8	-
Feb. 28, 1975	1150	37	8.0	-
Apr. 7, 1975	1235	32	10.3	-
May 13, 1975	1000	31	14.5	-
July 1, 1975	1225	8.3	24.0	-
Aug. 18, 1975	1300	8.1	24.5	-
03602500 PINEY RIVER AT VERNON, TENN. (LAT 35 52 16 LONG 087 30 05)				
Oct. 4, 1974	1035	162	11.6	-
Nov. 8, 1974	1110	121	11.0	-
Dec. 26, 1974	1115	200	8.0	-
Feb. 14, 1975	1055	917	7.7	-
May 16, 1975	1445	1,050	15.5	-
June 27, 1975	1325	155	20.7	-
Aug. 20, 1975	1350	122	21.8	-
03603000 DUCK RIVER ABOVE HURRICANE MILLS, TENN. (LAT 35 55 48 LONG 087 44 35)				
Jan. 8, 1975	1115	5,160	8.8	-
Feb. 26, 1975	1145	9,520	9.4	-
May 16, 1975	1325	6,900	18.0	-
03604500 BUFFALO RIVER NEAR LOBELVILLE, TENN. (LAT 35 48 46 LONG 087 47 51)				
Oct. 3, 1974	1340	576	15.6	-
Nov. 20, 1974	1450	1,400	13.5	-
Jan. 8, 1975	1425	1,400	9.0	-
Feb. 27, 1975	1015	2,460	9.0	-
Apr. 15, 1975	0955	1,190	12.5	-
May 16, 1975	1030	1,750	17.1	-
June 27, 1975	0935	531	23.6	-
Aug. 19, 1975	1315	569	24.2	-
03605555 TRACE CREEK ABOVE DENVER, TENN. (LAT 36 03 08 LONG 087 54 27)				
Oct. 2, 1974	1500	24	16.0	-
Nov. 18, 1974	1335	18	12.0	-
Dec. 19, 1974	1315	32	8.5	-
Feb. 4, 1975	1205	240	9.2	-
Feb. 26, 1975	1450	110	8.5	-
Apr. 11, 1975	1055	45	13.0	-
May 14, 1975	1335	54	19.0	-
June 26, 1975	1520	15	24.8	-
Aug. 8, 1975	1440	15	22.7	-

PERIODIC DETERMINATION OF WATER TEMPERATURES

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OBION RIVER BASIN

07024300 BEAVER CREEK AT HUNTINGDON, TENN.
(LAT 35 59 36 LONG 088 26 01)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (C)	SPEC. COND. (MICROMHOS)
Oct. 7, 1974	1550	41.3	13.0	-
Nov. 19, 1974	1355	332	13.5	-
Jan. 21, 1975	1530	94.4	5.0	-
Mar. 19, 1975	1400	117	11.0	-
Apr. 8, 1975	1435	58.8	12.0	-
May 13, 1975	1235	57.2	16.0	-
June 30, 1975	1700	31.0	20.0	-
Sept. 5, 1975	1410	32.5	20.0	-

07024500 SOUTH FORK OBION RIVER NEAR GREENFIELD, TENN.
(LAT 36 07 05 LONG 088 48 39)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (C)	SPEC. COND. (MICROMHOS)
Nov. 21, 1974	1030	966	11.0	-
Jan. 23, 1975	1235	670	3.5	-
Mar. 20, 1975	1045	1,130	11.0	-
Apr. 9, 1975	1130	379	11.5	-
May 14, 1975	1155	1,360	17.0	-
July 1, 1975	1635	148	24.5	-
Sept. 4, 1975	1325	157	25.0	-

07026000 OBION RIVER AT OBION, TENN.
(LAT 36 15 04 LONG 089 11 33)

DATE	TIME (24 HR	DISCHARGE (CFS)	TEMP. (C)	SPEC. COND. (MICROMHOS)
Nov. 22, 1974	1100	2,060	12.0	-
Jan. 24, 1975	1045	1,630	5.0	-
Mar. 21, 1975	1315	8,670	11.0	-
Apr. 10, 1975	1200	3,360	13.5	-
May 28, 1975	1130	1,230	24.0	-
July 2, 1975	1430	634	28.0	-
Sept. 4, 1975	1100	787	30.0	-

HATCHIE RIVER BASIN

07029500 HATCHIE RIVER AT BOLIVAR, TENN.
(LAT 36 15 31 LONG 088 58 36)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (C)	SPEC. COND. (MICROMHOS)
Nov. 20, 1974	0830	1,920	11.5	-
Jan. 21, 1975	0900	6,260	6.5	-
Mar. 18, 1975	1200	21,600	10.5	-
Apr. 7, 1975	1520	6,010	13.0	-
May 12, 1975	1310	3,280	19.0	-
June 30, 1975	1000	585	25.0	-
Sept. 15, 1975	1030	1,100	19.0	-

LOOSAHATCHIE RIVER BASIN

07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON, TENN.
(LAT 35 18 37 LONG 089 38 23)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (C)	SPEC. COND. (MICROMHOS)
Oct. 25, 1974	1600	91.4	16.0	-
Nov. 29, 1974	1520	113	11.0	-
Apr. 18, 1975	1045	140	17.5	-
May 21, 1975	1010	109	21.0	-
June 17, 1975	1100	106	21.5	-
Aug. 13, 1975	1030	93.8	21.0	-

WOLF RIVER BASIN

07031650 WOLF RIVER NEAR GERMANTOWN, TENN.
(LAT 35 06 59 LONG 089 48 05)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (C)	SPEC. COND. (MICROMHOS)
Nov. 27, 1974	1535	800	8.0	-
Mar. 10, 1975	1610	2,040	5.5	-
Apr. 18, 1975	1250	652	17.0	-
Aug. 12, 1975	1630	384	27.0	-
Sept. 26, 1975	1550	326	17.5	-

NONCONNAH CREEK BASIN

07032200 NONCONNAH CREEK NEAR GERMANTOWN, TENN.
(LAT 35 02 59 LONG 089 49 08)

DATE	TIME (24 HR)	DISCHARGE (CFS)	TEMP. (C)	SPEC. COND. (MICROMHOS)
Oct. 24, 1974	1220	1.13	17.0	-
Nov. 27, 1974	1305	5.87	7.0	-
Jan. 15, 1975	1200	50.6	2.5	-
Mar. 10, 1975	1200	720	4.5	-
Apr. 3, 1975	1240	13.7	8.5	-
May 19, 1975	1445	14.2	25.0	-
June 17, 1975	1635	1.33	29.0	-
Aug. 12, 1975	1235	0.23	30.0	-
Sept. 26, 1975	1215	0.12	20.0	-

PART 3. GROUND WATER RECORDS

Bradley County

350503084505000. Local number Br: E-1. F. G. Trewhitt. Near Cleveland. Dug unused water-table well in Conasauga shale of Middle and Late Cambrian age, diam 36 in (91 cm), depth 25 ft (8 m), casing information not available. Lsd 850 ft (259 m) above msl. MP top of front shelter panel, 1.50 ft (0.46 m) above lsd. Highest water level 7.38 ft (2.25 m) below lsd, Dec. 19, 1967; lowest 24.97 ft (7.61 m) below lsd, Dec. 7, 8, 1954. Records available: 1950-55, 1964-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Oct. 25, 1973	20.72	Apr. 25, 1974	12.52
Nov. 26	21.30	May 24	13.94
Dec. 3	20.20	June 12	14.28
Jan. 31, 1974	9.62	July 26	18.40
Mar. 26	12.68	Aug. 23	19.50

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Oct. 16, 1974	20.80	Apr. 15, 1975	12.10
Nov. 6	22.18	May 12	14.93
Dec. 30	21.50	June 17	16.99
Jan. 24, 1975	19.30	July 29	19.32
Feb. 25	10.70	Aug. 28	20.37
Mar. 26	9.22	Sept.26	20.06

Cannon County

354823086104400. Local number Cn:D-1. Ray Barker. Near Readyville. Drilled unused water-table well in Lebanon Limestone of Middle Ordovician age, diam 6 in (15 cm), depth 30 ft (9 m), cased with steel. Lsd 715 ft (218 m) above msl. MP top of casing, 1.00 ft (0.30 m) above lsd. Highest water level 0.91 ft (0.28 m) below lsd, Mar. 11, 1968; lowest 19.38 ft (5.91 m) below lsd, Dec. 9, 10, 1968. Records available: 1967-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Nov. 15, 1973	15.49	May 7, 1974	14.10
Jan. 8, 1974	12.14	July 9	16.14

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Feb. 18, 1975	12.60	June 27, 1975	14.30
May 15	15.63		

Carter County

361738082132900. Local number Ct: H-1. Gap Creek Community. Near Elizabethton. Dug unused water-table well in Honaker Dolomite of Middle Cambrian age, diam 24 in (61 cm), depth 31 ft (9 m), casing information not available. Lsd 1,820 ft (555 m) above msl. MP top of concrete tile, 2.50 ft (0.76 m) above lsd. Highest water level 2.25 ft (0.69 m) below lsd, Mar. 16, 1973; lowest 26.01 ft (7.93 m) below lsd Dec. 22, 23, 1970. Records available: 1964-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	15.06	15.68	14.82	3.57	4.02	9.06	3.79	9.90	7.79	11.31	12.25	11.71
10	14.99	15.07	13.99	3.37	4.32	6.72	4.26	9.43	10.15	7.47	13.37	6.86
15	15.07	15.65	14.56	3.66	5.83	6.84	4.49	8.33	11.54	11.03	13.87	10.28
20	15.77	15.73	14.52	6.62	5.40	5.64	6.01	8.54	12.44	13.00	10.45	12.62
25	15.84	15.04	11.63	8.53	5.79	4.26	7.36	7.97	11.44	13.94	14.07	13.59
EOM	15.21	9.50	10.21	6.97	7.04	4.74	9.00	6.28	7.42	12.72	13.66	14.11

361738082132900--Continued

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	14.82	14.96	11.88	7.85	4.11	9.07	4.94	9.12	12.01	14.49	14.65	15.02
10	14.88	14.95	12.66	10.06	5.08	8.08	5.91	8.68	13.49	14.21	13.73	15.01
15	14.90	14.38	13.76	6.41	6.05	3.80	7.39	9.26	13.85	14.24	14.50	14.94
20	14.47	11.95	14.25	8.28	7.01	3.98	8.04	8.84	14.52	14.85	14.89	14.53
25	14.92	12.13	14.03	6.77	7.85	4.63	8.51	9.31	14.83	11.25	14.97	13.43
EOM	14.93	14.00	6.16	6.54	8.28	4.06	8.66	11.55	13.15	14.70	14.86	15.00

Crockett County

354253089051300. Local number Ck: B-5. Winter Garden Freezer Co. Bells. Drilled unused artesian well in sand of Claiborne Group of middle Eocene age, diam 10 to 6 in (25 to 15 cm), depth 537 ft (164 m), cased to 523 ft (159 m), screened 523 to 537 ft (159 to 164 m). Lsd 350 ft (107 m) above msl. MP top of casing, 1.10 ft (0.34 m) above lsd. Highest water level 37.96 ft (11.57 m) below lsd, Mar. 14, 1975; lowest 43.92 ft (13.39 m) below lsd, Nov. 4, 1971. Records available: 1961-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Oct. 8, 1973	42.88	May. 7, 1974	40.16
Nov. 15	42.39	June 18	40.11
Jan. 8, 1974	40.85	Aug. 7	41.54
Mar. 13	40.46		

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Oct. 9, 1974	41.88	Apr. 8, 1975	38.94
Nov. 19	41.37	May 13	39.29
Jan. 22, 1975	39.95	July 1	40.72
Mar. 18	38.34	Sep. 3	41.49

Cumberland County

354922085053500. Local number Cu:C-1. Hubert Roy. Near Lantana. Drilled unused artesian well in rocks of Pennsylvania age, diam 6 in (15 cm), depth 69 ft (21 m), cased to 69 ft (21 m). Lsd 1,970 ft (600 m) above msl. MP top of casing, 1.00 ft (0.30 m) above lsd. Highest water level 13.15 ft (4.01 m) below lsd Mar. 17, 1973; lowest 24.92 ft (7.60 m) below lsd Nov. 16, 1968. Records available: 1964-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	22.74	22.60	16.98	14.95	14.66	17.19	15.76	20.30	17.60	20.81	22.83	23.67
10	22.83	22.11	17.85	14.94	15.76	16.03	16.47	20.66	18.64	21.18	23.06	23.55
15	22.95	21.51	18.59	14.89	16.13	16.87	17.34	20.37	19.56	21.56	23.34	22.36
20	23.11	20.94	19.01	15.78	15.02	17.26	18.46	19.79	19.71	21.94	23.55	21.93
25	23.35	18.33	17.49	14.95	15.15	15.83	19.26	16.31	20.09	22.20	23.83	21.96
EOM	23.06	16.06	15.67	14.74	16.01	15.76	19.93	16.68	20.21	22.56	23.79	22.01

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	21.89	20.95	15.99	14.79	.....	.....	.....	.....	20.14	21.40	22.87	24.07
10	22.00	21.09	15.26	14.99	.....	.....	.....	.....	20.69	21.82	22.98	24.23
15	22.28	20.54	16.38	14.45	.....	13.77	.....	20.71	20.29	22.19	23.15	24.53
20	20.25	17.93	16.87	13.96	.....	13.97	.....	20.11	20.36	22.42	23.34	24.17
25	20.11	16.87	16.87	14.45	.....	13.84	.....	20.11	20.77	22.57	23.53	21.41
EOM	20.34	16.87	14.69	14.45	.....	.....	.....	19.98	21.17	22.76	23.82	19.69

DeKalb County

355807085511800. Local number Dk:F-1. Tennessee Dept. of Highways at Smithville. Drilled test water-table well in Fort Payne Chert of Early Mississippian age, diam 6 in (15 cm), depth 186 ft (57 m), cased to 55 ft (17 m). Lsd 1,128 ft (344 m) above msl. MP top of shelter, 1.50 ft (0.46 m) above lsd. Highest water level 18.32 ft (5.58 m) below lsd, Mar. 24, 1973; lowest 35.18 ft (10.72 m) below lsd, Dec. 17, 1968. Records available: 1968-75. Recording gage removed Dec. 29, 1973.

Lowest water level for the day, from water-stage recorder, October to December, 1973

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	29.03	29.32	26.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	29.00	29.38	26.38	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	29.03	29.16	26.43	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	29.19	29.31	26.75	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	29.42	29.05	26.47	.....	.....	.....	.....	.....	.....	.....	.....	.....
EOM	29.43	28.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Measured water levels, October 1973 to September 1974

Date	Water level
Feb. 19, 1974	18.76

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Jan. 23, 1975	22.16	Aug. 1, 1975	29.40
May 7	23.21		

Dickson County

360429087233602. Local number Di:F-19. City of Dickson. Drilled unused artesian well in Fort Payne Chert of Early Mississippian age, diam 6 in (15 cm), depth 387 ft (118 m), cased to 22 ft (7 m). Lsd 755 ft (230 m) above msl. MP top of casing, at lsd. Highest water level 7.52 ft (2.29 m) below lsd, Mar. 12, 13, 1975; lowest 33.78 ft (10.30 m) below lsd, Sept. 11, 12, 1964. Records available: 1960-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	32.35	32.08	.....	.....	.....	.....	26.79	30.26	24.01	32.58	32.83	28.20
10	32.33	.....	.....	.....	25.09	24.05	24.39	30.56	20.25	32.68	32.56	29.36
15	32.38	32.38	.....	.....	28.00	26.10	25.14	30.76	24.65	32.94	32.52	31.44
20	32.67	32.12	.....	.....	26.76	25.64	27.99	31.41	28.38	33.12	32.75	32.77
25	39.92	27.47	.....	.....	.....	25.90	26.25	23.55	30.08	32.49	33.09	32.94
EOM	32.29	.....	.....	.....	26.02	28.30	29.52	28.78	31.81	32.70	32.43	24.28

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	29.13	32.51	30.87	27.66	18.77	27.46	25.01	30.74	30.73	33.07	30.51	33.43
10	32.39	32.70	29.06	25.99	24.43	29.23	26.89	23.16	28.98	32.98	32.57	33.44
15	32.85	32.50	30.46	24.30	24.59	10.35	29.22	26.35	29.95	33.20	32.88	32.92
20	32.22	22.58	30.90	22.32	26.73	23.81	29.48	23.57	31.86	33.11	32.63	32.79
25	32.78	26.48	32.19	25.31	21.30	23.70	30.21	27.57	32.80	33.04	33.11	26.87
EOM	32.94	29.78	28.73	28.84	24.26	20.77	30.88	29.69	32.60	33.19	33.18	30.62

WATER YEARS OCTOBER 1973 TO SEPTEMBER 1974, AND OCTOBER 1974 TO SEPTEMBER 1975

Dyer County

360200089280100. Local number Dy: H-1. U.S. Geol. Survey. Finley. Drilled observation artesian well in sand and gravel of Pleistocene age, diam 4 in (10 cm), depth 70 ft (21 m), cased to 60 ft (18 m), screened 60-70 ft (18-21 m). Lsd 278 ft (85 m) above msl. MP top of casing, 1.00 ft (0.30 m) above lsd. Highest water level 3.69 ft (1.12 m) below lsd, Feb. 28, 1962; lowest 18.93 ft (5.77 m) below lsd, Jan. 18-21, 1957. Records available: 1955-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Nov. 2, 1973	14.13	May 9, 1974	6.88
Jan. 17, 1974	5.40	June 20	7.03
Mar. 15	6.98	Aug. 6	12.40

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Oct. 10, 1974	13.13	Apr. 9, 1975	5.36
Nov. 21	14.64	May 29	8.64
Jan. 24, 1975	8.80	July 2	11.42
Mar. 20	4.22	Sep. 3	13.13

360147089230700. Local number Dy: H-7. City of Dyersburg. Drilled unused artesian well in sand of Claiborne Group of middle Eocene age, diam 24 to 10 in (61 to 25 cm), depth 656 ft (200 m), cased to 605 ft (184 m), screened 605-655 ft (184-200 m). Lsd 270.07 ft (82.32 m) above msl. MP top of casing, 3.10 ft (0.94 m) above lsd (since Feb. 12, 1969). Highest water level 2.69 ft (0.82 m) above lsd, Mar. 1, 2, Apr. 19, 1962; lowest 17.1 ft (5.2 m) below lsd, Aug. 10, 1956. Record available: 1954-75. (Negative values indicate water levels above ground level.)

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Nov. 2, 1973	5.94	May 9, 1974	5.38
Jan. 17, 1974	4.35	June 20	5.29
Mar. 15	5.47	Aug. 6	6.24

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Oct. 11, 1974	5.55	Apr.	0.29
Nov. 21	3.32	May 29	3.09
Jan. 24, 1975	1.90	July 3	3.88
Mar. 20	-0.20	Sep. 3	4.08

Fayette County

352226089330101. Local number Fa: R-1. Tennessee Division of Geology and U.S. Geol. Survey. Near Braden. Drilled observation artesian well in sand of Wilcox Group of early Eocene age, diam 6 to 4 in (15 to 10 cm), depth 1,025 ft (312 m), cased to 1,008 ft (307 m), screened 1,008-1,025 ft (307-312 m). Lsd 317.50 ft (96.77 m) above msl. MP top of casing, 3.70 ft (1.13 m) above lsd. Highest water level 64.89 ft (19.78 m) below lsd, Aug. 31, 1964; lowest 76.98 ft (23.46 m) below lsd, November 1971. Records available: 1949-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Oct. 29, 1973	75.64	Apr. 26, 1974	74.96
Nov. 28	75.60	June 28	74.74
Dec. 28	75.32	July 30	74.78
Jan. 29, 1974	75.28	Aug. 28	74.79

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Jan. 2, 1975	74.56	July 29, 1975	74.04
Apr. 29	73.89	Aug. 27	74.19

352226089330102. Local number Fa: R-2. Tennessee Division of Geology and U.S. Geol. Survey. Near Braden. Drilled observation artesian well in sand of Claiborne Group of middle Eocene age, diam 6 to 4 in (15 to 10 cm), depth 365 ft (111 m), cased to 345 ft (105 m), screened 345-365 ft (105-111 m). Lsd 317.20 ft (96.68 m) above msl. MP top of casing, 4.20 ft (1.28 m) above lsd. Highest water level 37.25 ft (11.35 m) below lsd, Mar. 10, 1952; lowest 42.12 ft (12.84 m) below lsd, Nov. 30, 1967. Records available: 1949-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Oct. 29, 1973	40.64	Apr. 26, 1974	39.88
Nov. 28	40.77	June 28	39.71
Dec. 28	40.40	July 30	39.78
Jan. 29, 1974	40.12	Aug. 28	39.81

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Jan. 2, 1975	39.82	July 29, 1975	39.44
Apr. 29	39.00	Aug. 27	39.76

Hamilton County

351428085003600. Local number Hm: 0-15 Savannah Valley, Tenn. Drilled artesian test well in Knox Dolomite of the Cambrian and Ordovician age, diam 10 in (25 cm), depth 262 ft (80 m), cased to 50 ft (15 m). Lsd 735 ft (224 m) above msl. MP top of back shelter panel, 8.00 ft (2.44 m) above lsd or 743 ft (226 m) msl. Highest water level 0.59 ft (0.18 m) above lsd, Sept. 24, 1975; lowest 6.31 ft (1.92 m) below lsd, Sept. 15, 16, 17, 1975. Records available May to September 1975.

Lowest water level for the day, from water-stage recorder, May to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	....	....	....	....	....	....	....	5.12	5.00	5.58	5.89	6.21
10	....	....	....	....	....	....	....	5.27	5.25	5.35	5.95	6.25
15	....	....	....	....	....	....	....	5.37	4.92	5.65	5.98	6.31
20	....	....	....	....	....	....	....	.40	5.25	5.73	6.04	5.86
25	....	....	....	....	....	....	....	2.91	a5.98	5.79	6.10	-.28
EOM	....	....	....	....	....	....	....	4.40	5.48	5.86	6.15	2.59

a Pumping test, pump rate 900 gpm for 24 hrs.

WATER YEARS OCTOBER 1973 TO SEPTEMBER 1974, AND OCTOBER 1974 TO SEPTEMBER 1975

Humphreys County

360020087573300. Local number Hs:H-1. A. M. Powers. Near New Johnsonville. Drilled unused artesian well in Camden Chert of early Devonian age, diam 8 in (20 cm), depth 187 ft (57 m), cased to 187 ft (57 m). Lsd 470 ft (143 m) above msl. MP top of casing, 1.00 ft (0.30 m) above lsd. Highest water level 85.02 ft (25.91 m) below lsd, Mar. 25, 1973; lowest 90.20 ft (27.49 m) below lsd, Nov. 25, 1968. Records available: 1962-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	87.60	.....	.....	.....	.....	86.58	86.50	86.33	86.30	86.59	87.04	86.94
10	.....	.....	.....	.....	.....	86.56	86.43	86.36	85.80	86.69	87.00	87.00
15	.....	.....	.....	.....	.....	86.48	86.32	86.45	86.01	86.79	86.96	87.08
20	.....	.....	.....	.....	86.50	86.44	86.40	86.52	86.27	86.88	86.93	87.12
25	.....	.....	.....	.....	86.57	86.50	86.21	86.45	86.46	86.90	87.02	87.14
EOM	.....	.....	.....	.....	86.53	86.45	86.30	86.34	86.58	87.01	86.97	87.08

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	87.14	87.19	87.04	86.66	86.21	86.29	85.77	86.12	86.22	86.67	86.82	87.23
10	87.16	87.18	87.04	86.50	86.23	86.34	85.86	85.86	86.30	86.73	86.94	87.22
15	87.14	87.30	86.96	86.43	86.27	85.78	86.04	85.90	86.33	86.84	86.99	87.23
20	87.22	86.89	86.21	86.43	86.33	85.65	86.18	86.05	86.51	86.82	87.06	87.11
25	87.15	87.03	87.00	86.38	86.15	85.91	86.15	86.21	86.55	86.87	87.09	86.96
EOM	87.19	86.99	86.69	86.55	86.15	85.61	86.16	86.10	86.61	86.96	87.13	87.04

Lauderdale County

353839089493500. Local number Ld: F-4. Tennessee Division of Geology and U.S. Geol. Survey. Near Fort Pillow. Drilled observation artesian well in sand of Claiborne Group of middle Eocene age, diam 8 to 6 to 3 in (20 to 15 to 7.6 cm), depth 879 ft (268 m), cased to 869 ft (265 m), screened 869-879 ft (265-268 m). Lsd 437.05 ft (133.21 m) above msl. MP top of casing, 2.80 ft (0.85 m) above lsd. Highest water level 187.76 ft (57.23 m) below lsd, Mar. 7, 1975; lowest 196.48 ft (59.89 m) below lsd, Nov. 16, 1969. Records available: 1966-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	194.90	194.95	192.5	.....	191.30	193.10	.....	.....	.....	.....	193.95	.....
10	194.60	194.87	.....	.....	194.10	193.68	.....	.....	.....	.....	194.04	.....
15	194.37	195.15	.....	.....	193.87	192.90	.....	.....	.....	.....	.....	.....
20	194.40	194.97	.....	191.36	193.62	.....	.....	.....	.....	.....	.....	.....
25	194.67	194.82	.....	191.22	193.61	.....	.....	.....	.....	.....	.....	.....
EOM	194.84	193.80	.....	190.35	193.30	.....	.....	.....	.....	.....	.....	.....

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	.....	.....	194.35	.....	193.31	.....	187.93	191.76	193.02	193.20	193.95	194.71
10	.....	.....	.....	.....	192.52	.....	188.50	191.49	193.03	193.23	.....	194.70
15	.....	.....	.....	.....	192.51	.....	191.22	191.65	193.07	193.46	.....	194.77
20	.....	.....	.....	.....	192.73	.....	194.34	192.84	193.15	193.59	.....	194.72
25	.....	194.37	.....	193.27	192.97	189.27	194.25	192.92	.....	193.69	.....	194.78
EOM	.....	194.33	.....	193.50	192.70	188.75	193.06	192.92	.....	193.81	.....	194.76

Madison County

353726088483600. Local number Md: G-45. Piggly Wiggly Co. Jackson. Drilled unused artesian well in sand of Wilcox Group of early Eocene age, diam 6 in (15 cm), depth 133 ft (41 m), cased to 112 ft (34 m), screened 112-133 ft (34-41 m). Lsd 435 ft (133 m) above msl. MP top of recorder-house floor, 3.80 ft (1.16 m) above lsd. Highest water level 62.22 ft (18.96 m) below lsd, Dec. 3, 4, 1958; lowest 76.74 ft (23.39 m) below lsd, April 1972. Records available: 1958-74.
Discontinued Aug. 1974 (well discontinued because of construction on the site).

Measured water levels, October 1973 to August 1974

Date	Water level	Date	Water level
Nov. 15, 1973	72.10	May 7, 1974	72.84
Jan. 8, 1974	72.26	June 18	72.58
Mar. 13	72.75	Aug. 7	72.27

354223088380200 (revised). Local number Md: N-1. Tennessee Division of Geology and U.S. Geol. Survey. Near Claybrook. Drilled observation artesian well in McNairy Sand Member of Ripley formation of late Cretaceous age, diam 6 to 4 in (15 to 10 cm), depth 659 ft (201 m), cased to 639 (195 m), screened 639-659 ft (195-201 m). Lsd 562.70 ft (171.51 m) above msl. MP top of casing 2.80 ft (0.85 m) above lsd. Highest water level 124.50 ft (37.95 m) below lsd, Mar. 10, 1952; lowest 129.13 ft (39.36 m) below lsd, Nov. 15, 1963. Records available: 1949-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Nov. 15, 1973	126.33	May 7, 1974	125.61
Jan. 8, 1974	125.99	June 18	125.34
Mar. 13	125.75	Aug. 7	125.74

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Oct. 2, 1974	125.75	Apr. 8	125.04
Nov. 19	125.52	May 13	125.11
Jan. 21, 1975	125.45	June 30	125.41
Mar. 19	125.05	Sep. 5	125.51

WATER YEARS OCTOBER 1973 TO SEPTEMBER 1974, AND OCTOBER 1974 TO SEPTEMBER 1975

Putnam County

360521085432600. Local number Pm:C-1. Tennessee Dept. of Highways at Silver Point. Drilled test water-table well in Fort Payne Chert of Early Mississippian age, diam 6 in (15 cm), depth 175 ft (53 m), cased to 60 ft (18 m). Lsd 1,030 ft (314 m) above msl. MP top of shelter, 1.50 ft (0.46 m) above lsd. Highest water level 48.30 ft (14.72 m) below lsd, May 2, 1974; lowest 53.48 ft (16.30 m) below lsd, Dec. 23, 1969. Records available: 1968-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	50.48	50.99	.....	.....	49.82	49.22	48.89	48.53	48.66	.....	.....	50.39
10	50.57	51.13	.....	50.70	49.62	49.15	48.73	48.57	48.72	.....	.....	50.35
15	50.64	51.09	.....	50.51	49.48	49.11	48.57	48.67	48.66	.....	50.03	50.35
20	50.73	.....	.....	50.37	49.51	49.09	48.55	48.72	48.81	.....	50.13	50.33
25	50.78	.....	.....	50.29	49.41	49.19	48.55	48.71	48.88	.....	50.22	50.33
EOM	50.87	.....	.....	50.00	49.20	48.94	48.46	48.76	48.99	.....	50.33	50.43

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	50.51	50.90	51.03	50.82	50.37	49.75	49.13	48.79	49.31	49.87	50.50	51.05
10	50.54	50.93	50.97	50.10	50.30	49.75	49.13	48.88	49.47	49.97	50.61	51.12
15	50.57	51.05	50.90	51.04	50.08	49.61	48.63	48.92	49.52	50.15	50.69	51.22
20	50.74	50.99	50.91	50.94	49.93	49.43	48.74	49.06	49.62	50.19	50.80	51.30
25	50.73	51.06	51.05	50.67	49.92	49.37	48.67	49.15	49.66	50.32	50.86	51.30
EOM	50.81	51.02	50.82	50.64	49.71	49.13	48.74	49.22	49.77	50.46	50.94	51.37

Sevier County

353841083345500. Local number Sv:E-1. Elkmont. Near Gatlinburg. Drilled unused water-table well in phyllite, sandstone, dia 6 1/4 in (16 cm), depth 215 ft (66 m), cased to 30 ft (9 m). Lsd 2,400 ft (730 m) above msl. MP is floor of recorder shelter, 2.00 ft (0.61 m) above lsd. Highest water level 18.02 ft (5.49 m) below lsd, Mar. 16, 1973; lowest 27.75 ft (8.46 m) below lsd Oct. 28, 29, 1970. Records available: 1970-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	26.11	26.56	25.28	22.24	23.17	24.20	22.56	24.56	24.16	25.69	25.99	26.40
10	26.20	26.64	25.59	22.07	23.24	24.32	22.75	24.69	24.64	25.38	26.11	26.46
15	26.28	26.66	25.69	22.54	23.74	24.54	22.65	24.47	24.96	25.21	26.15	25.45
20	26.35	26.71	25.77	23.44	23.86	24.54	23.25	24.77	25.19	25.44	26.13	25.70
25	26.44	26.37	25.19	24.17	23.51	24.54	23.94	24.79	25.34	25.66	26.19	25.89
EOM	26.48	24.62	24.23	24.00	23.67	22.71	24.32	24.40	25.55	25.84	26.30	26.08

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	26.21	26.66	25.45	23.44	23.18	23.98	22.53	24.83	25.67	26.39	26.94	27.19
10	26.34	26.74	25.02	24.01	23.39	23.03	23.34	25.02	25.80	26.47	26.90	27.26
15	26.47	26.78	25.23	23.66	23.83	21.62	24.03	25.14	25.91	26.57	26.97	27.31
20	26.49	26.62	25.52	23.97	23.82	22.50	24.31	25.27	26.05	26.65	26.95	27.40
25	26.54	25.82	25.67	23.77	23.57	22.38	24.45	25.39	26.15	26.73	27.01	27.26
EOM	26.62	25.97	22.64	23.06	23.55	21.43	24.61	25.55	26.27	26.88	27.10	27.29

Shelby County

350514089553700. Local number Sh: K-75. Memphis Light, Gas, and Water Division. Willowview Ave. and Getwell Rd. Drilled observation water-table well in terrace deposits, diam 6 in (15 cm), depth 91 ft (28 m), cased to 81 ft (25 m), screened 81-91 ft (25-28 m). Lsd 260 ft (79 m) above msl. MP top of casing, 1.20 ft (0.37 m) above lsd. Highest water level 21.28 ft (6.49 m) below lsd, Apr. 2, 1950; lowest 49.62 ft (15.12 m) below lsd, Aug. 9, 1972. Records available: 1948-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	48.28	48.54	.....	48.42	48.44	48.21	48.26	47.70	47.60	47.10	47.14	46.89
10	48.26	48.56	.....	48.37	48.51	48.23	48.30	47.68	47.78	47.18	47.06	47.09
15	48.20	48.58	.....	48.45	48.44	48.12	47.99	47.75	47.44	46.99	47.30	46.85
20	48.32	48.54	.....	48.54	48.54	48.16	47.88	47.81	47.41	47.32	47.23	47.01
25	48.39	48.46	.....	48.56	48.61	48.22	48.04	47.63	47.33	47.03	46.94	46.66
EOM	48.46	.....	48.61	48.53	48.34	47.96	47.80	47.70	47.22	47.20	46.82	46.89

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	46.71	47.01	46.46	46.47	46.22	46.09	.....	45.82	45.52	45.62	45.28	45.44
10	46.69	46.78	46.40	47.02	46.28	46.11	.....	45.93	45.39	45.73	45.21	45.49
15	46.65	46.82	46.53	46.95	46.27	46.21	.....	45.82	45.21	45.60	45.36	45.38
20	46.81	46.76	46.64	46.58	46.28	46.03	.....	45.95	45.51	45.40	45.44	45.59
25	46.93	46.75	46.71	46.59	46.43	46.37	.....	45.94	45.52	45.48	45.43	45.40
EOM	46.87	46.43	46.47	46.65	46.07	45.95	46.03	45.56	45.44	45.28	45.38	45.29

351435090005200. Local number Sh: O-1. Memphis Light, Gas, and Water Division. O.K. Robertson Rd., Frayser. Drilled observation artesian well in sand of Claiborne Group of middle Eocene age, diam 6 in (15 cm), depth 434 ft (132 m) cased to 424 ft (129 m), screened 424-434 ft (129-132 m). Lsd 228.70 ft (69.71 m) above msl. MP top of casing, 4.30 ft (1.31 m) above lsd. Highest water level 12.65 ft (3.86 m) below lsd, Sept. 3, 1940; lowest 56.23 ft (17.14 m) below lsd, Sept. 4, 1972. Records available: 1940-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	54.19	55.04	50.44	49.50	46.97	48.68	49.27	.....	50.00	51.59	52.70	53.80
10	53.88	55.00	51.39	49.28	47.02	48.96	49.35	.....	49.73	51.91	52.80	53.30
15	54.18	54.93	51.71	49.32	47.28	48.90	49.09	.....	49.63	52.92	52.61	54.47
20	54.48	54.91	52.01	48.46	48.16	48.47	49.19	.....	50.04	53.93	53.23	52.57
25	54.64	54.62	51.84	47.93	48.68	48.56	49.40	.....	50.94	53.88	53.67	52.83
EOM	54.81	53.72	50.93	47.16	48.45	48.56	49.87	49.85	51.33	52.55	53.97	54.95

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	55.22	55.67	53.52	51.12	49.98	48.44	43.25	.....	.....	.....	51.80	54.09
10	55.51	55.33	53.31	50.34	49.87	48.00	43.20	.....	.....	.....	52.18	53.96
15	55.82	54.71	53.06	50.42	49.95	47.43	44.45	.....	.....	.....	52.62	54.34
20	55.94	54.14	53.00	50.13	49.69	46.88	.....	.....	.....	.....	52.89	54.19
25	55.96	54.18	52.76	50.13	49.17	45.24	.....	.....	.....	.....	53.13	52.58
EOM	55.98	53.81	51.89	50.28	49.13	43.95	.....	.....	.....	51.34	53.97	51.94

WATER YEARS OCTOBER 1973 TO SEPTEMBER 1974, AND OCTOBER 1974 TO SEPTEMBER 1975

Shelby County

350923090023500. Local number Sh: O-124. Memphis Light, Gas, and Water Division. Fifth St. and Sycamore Ave. Unused work shaft connected to artesian wells in sand of Claiborne Group of middle Eocene age, diam 30 in (76 cm), depth 98 ft (30 m), cased to 80 ft (24 m). Lsd 229.70 ft (70.01 m) above msl. MP top of casing, 0.40 ft (0.12 m) above lsd. Highest water level 19.09 ft (5.82 m) below lsd, Apr. 1, 1933; lowest 73.4 ft (22.4 m) below lsd, July 30 to Aug. 1, 1954. Records available: 1927-33, 1936-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	69.27	69.48	.....	62.75	.....	65.50	66.48	67.50	66.50	69.43	71.62	72.83
10	69.20	69.42	.....	62.75	.....	65.68	66.49	67.44	66.52	69.43	71.80	72.68
15	69.40	69.02	.....	64.18	.....	.....	.....	67.34	.....	69.64	71.81	72.54
20	69.40	.....	.....	64.44	.....	.....	.....	67.45	.....	69.64	71.96	72.28
25	69.59	.....	.....	64.63	.....	.....	.....	.....	.....	69.65	71.99	72.11
EOM	69.35	68.03	63.80	.....	65.12	66.28	67.20	66.28	69.32	71.43	72.91	71.93

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	71.85	71.48	69.64	65.64	65.82	64.82	59.86	.....	.....	69.34	.....	69.60
10	71.76	71.43	69.83	65.55	66.15	64.50	59.56	.....	.....	69.06	.....	69.77
15	71.76	70.82	.....	66.55	65.90	63.95	59.75	62.68	.....	69.14	.....	70.05
20	71.76	70.43	.....	66.31	65.91	63.40	59.81	62.76	.....	68.82	.....	69.82
25	71.76	70.13	.....	65.38	65.94	63.56	59.99	63.98	.....	68.98	.....	69.86
EOM	71.77	69.92	66.64	66.01	65.56	60.34	.....	.....	69.33	69.32	69.72	69.46

351320089535800. Local number Sh: P-1. Memphis Light, Gas, and Water Division. Raleigh. Drilled observation artesian well in sand of Claiborne Group of middle Eocene age, diam 6 in (15 cm), depth 344 ft (105 m), cased to 334 ft (102 m), screened 334-344 ft (102-105 m). Lsd 299.80 ft (91.38 m) above msl. MP top of casing, 3.00 ft (0.91 m) above lsd. Highest water level 63.33 ft (19.30 m) below lsd, Sept. 27, 1940; lowest 114.11 ft (34.78 m) below lsd, Aug. 27, 1973. Records available: 1940-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	112.27	111.59	111.88	110.16	109.81	109.57	109.82	110.69	111.18	111.90	112.82	112.19
10	112.14	.....	111.92	109.85	109.72	109.26	109.75	110.89	110.79	112.09	.....	112.11
15	112.07	.....	111.64	109.65	109.45	109.18	109.64	110.88	110.92	112.46	.....	112.20
20	112.03	.....	111.28	109.67	109.05	109.31	109.85	111.07	110.86	111.07	.....	.....
25	112.10	.....	110.98	109.88	109.22	109.47	109.78	111.20	111.21	111.04	.....	.....
EOM	111.98	111.53	110.48	109.79	109.49	109.33	110.31	111.42	111.70	112.85	112.26	111.37

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	111.41	111.97	110.74	109.75	109.30	108.38	106.02	106.69	107.86	109.48	110.08	112.08
10	111.33	111.76	110.46	109.48	109.42	108.06	105.86	107.60	107.82	109.50	110.71	111.67
15	111.61	111.42	110.64	109.23	109.46	107.18	105.62	107.52	107.92	109.59	.....	111.55
20	111.96	110.96	110.84	109.25	109.36	107.44	106.18	107.83	108.38	110.06	.....	111.74
25	112.12	111.21	110.60	109.48	109.68	106.81	106.61	108.18	108.79	110.08	.....	111.47
EOM	111.84	111.24	110.23	109.50	108.56	106.24	106.41	108.07	109.43	110.07	111.96	111.06

Shelby County

350735089593300. Local number Sh: P-76. Memphis Light, Gas, and Water Division. Central Ave. and Tanglewood St. Drilled unused artesian well in sand of Claiborne Group of middle Eocene age, diam 12 in (30 cm), depth 488 ft (149 m), cased to 428 ft (130 m), screened 428-488 ft (130-149 m). Lsd 286.70 ft (87.39 m) above msl. MP top of casing, 1.30 ft (0.40 m) above lsd. Highest water level 58.65 ft (17.88 m) below lsd, Apr. 3, 1933; lowest 143.55 ft (43.75 m) below lsd, Aug. 30, 1974. Records available: 1928-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	137.75	136.46	134.01	131.03	130.51	130.27	131.97	134.52	135.25	137.95	140.84	141.94
10	137.30	136.69	133.40	133.32	130.86	131.43	132.20	134.54	135.04	139.71	141.12	140.79
15	137.42	136.36	133.00	133.09	130.78	131.55	132.20	134.91	135.80	140.53	142.35	140.70
20	137.62	135.40	133.43	132.69	131.18	130.69	133.06	135.13	136.22	142.76	143.11	140.20
25	137.60	133.80	132.77	131.10	131.33	130.21	133.54	134.85	136.87	142.96	143.44	.....
EOM	136.78	135.00	130.44	131.02	131.25	130.88	133.85	134.90	137.40	142.02	140.10	139.55

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	139.36	.....	134.23	132.75	132.24	130.92	129.43	128.24	132.45	133.46	133.91	138.25
10	139.57	.....	133.96	133.00	132.07	130.64	129.17	129.07	132.10	132.77	135.03	138.00
15	139.34	136.10	133.39	.....	132.58	130.86	128.24	129.17	133.04	133.63	136.28	136.46
20	139.86	135.40	133.47	.....	131.95	130.17	129.65	128.87	132.51	135.63	136.92	137.27
25	138.30	135.62	.....	.....	131.66	129.75	130.15	130.05	132.54	135.43	138.16	135.98
EOM	137.25	133.62	130.23	133.83	131.70	128.29	129.51	132.14	134.06	134.22	137.80	135.14

350900089482300. Local number Sh: Q-1. Memphis Light, Gas. and Water Division. Cordova. Drilled observation artesian well in sand of Claiborne Group of middle Eocene age, diam 6 in (15 cm), depth 384 ft (117 m), cased to 375 ft (114 m), screened 375-384 ft (114-117 m). Lsd 330.40 ft (100.71 m) above msl. MP top of casing, 2.40 ft (0.73 m) above lsd. Highest water level 74.08 ft (22.58 m) below lsd, Dec. 27, 1940; lowest 99.38 ft (30.29 m) below lsd, Oct. 20, 1972. Records available: 1940-75.

Lowest water level for the day, from water-stage recorder, October 1973 to September 1974

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	98.74	98.64	98.37	98.62	98.40	98.10	98.20	98.01	98.19	98.29	98.50	98.44
10	98.66	98.72	98.55	98.56	98.35	98.11	98.19	98.02	98.07	98.23	98.52	98.44
15	98.66	98.55	98.58	98.43	98.24	98.05	98.12	98.07	98.10	98.38	98.51	98.47
20	98.66	98.55	98.56	98.26	98.12	97.94	98.19	98.20	98.07	98.51	98.37	98.47
25	98.60	98.44	98.51	98.42	98.45	98.18	98.19	98.25	98.10	98.51	98.43	98.49
EOM	98.35	98.68	98.56	98.30	98.35	97.77	98.16	98.12	98.22	98.52	98.43	98.39

Lowest water level for the day, from water-stage recorder, October 1974 to September 1975

Day	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
5	98.46	98.47	98.79	98.68	98.48	98.46	97.93	97.81	98.06	98.37	98.53	98.98
10	98.33	98.63	98.78	98.48	98.52	98.19	97.73	97.97	98.05	98.34	98.62	98.99
15	98.35	98.77	98.77	98.74	98.34	98.02	97.76	97.94	98.08	98.49	98.64	98.92
20	98.49	98.60	98.77	98.54	98.42	97.84	97.86	97.91	98.21	98.51	98.77	98.87
25	98.48	98.78	98.86	98.35	98.45	98.00	97.80	97.96	98.28	98.49	98.85	98.96
EOM	98.43	98.77	98.69	98.62	98.48	97.82	97.73	97.94	98.30	98.51	98.97	98.97

WATER YEARS OCTOBER 1973 TO SEPTEMBER 1974, AND OCTOBER 1974 TO SEPTEMBER 1975

Shelby County

352112089571200. Local number Sh: U-1. T. D. Ervin. Sloanville. Drilled unused artesian well in sand of Wilcox Group of early Eocene age, diam 24 to 16 in (61 to 41 cm), depth 1,558 ft (475 m), cased to 1,497 ft (456 m), screened 1,497-1,558 ft (456-475 m). Lsd 264.20 ft (80.53 m) above msl. MP top of casing, 0.60 ft (0.18 m) above lsd. Highest water level 33.20 ft (10.12 m) below lsd, Apr. 21. 1974; lowest 60.42 ft (18.42 m) below lsd, Dec. 20, 1970. Records available: 1946-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Oct. 30, 1973	55.09	May 28, 1974	54.49
Nov. 30	55.15	June 26	54.50
Dec. 26	54.07	July 31	56.11
Jan. 29, 1974	54.01	Aug. 29	56.77
Apr. 30	54.01	Sep. 26	56.84

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Oct. 31, 1974	55.59	Apr. 30, 1975	50.72
Nov. 25	55.13	May 28	51.07
Jan. 3, 1975	54.45	June 27	51.81
Jan. 29	53.53	July 29	53.53
Feb. 27	52.88	Aug. 27	54.92
Mar. 27	51.09	Sep. 26	55.12

352110089571300. Local number Sh: U-2. T. D. Ervin. Sloanville. Drilled unused artesian well in sand of Claiborne Group of middle Eocene age, diam 18 to 12 in (46 to 30 cm), depth 440 ft (134 m), cased to 360 ft (110 m), screened 360-440 ft (110-134 m). Lsd 268.76 ft (81.92 m) above msl. MP top of casing, 1.60 ft (0.49 m) above lsd. Highest water level 39.59 ft (12.07 m) below lsd, June 29, 1953; lowest 60.22 ft (18.36 m) below lsd, April 1971. Records available: 1953-75.

Measured water levels, October 1973 to September 1974

Date	Water level	Date	Water level
Oct. 30, 1973	57.02	May 28, 1974	55.07
Nov. 30	56.84	June 26	55.17
Dec. 26	56.43	July 31	56.08
Jan. 29, 1974	55.05	Aug. 29	55.33
Apr. 30	55.22	Sep. 26	55.41

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Oct. 31, 1974	55.67	Apr. 30, 1975	54.10
Nov. 25	55.52	May 28	53.96
Jan. 3, 1975	54.90	June 27	54.05
Jan. 29	54.39	July 29	53.58
Feb. 27	54.49	Aug. 28	53.93
Mar. 27	53.43	Sep. 26	54.69

WATER YEARS OCTOBER 1973 TO SEPTEMBER 1974, AND OCTOBER 1974 TO SEPTEMBER 1975

Williamson County

355505086541100. Local number Wm:M-1. Tennessee Division of Geology and U.S. Geological Survey. Near Franklin. Drilled observation artesian well in Knox Dolomite of Late Cambrian and Early Ordovician age, diam 6 in (15 cm), depth 1,160 ft (354 m) cased to 473 ft (144 m). Lsd 712 ft (217 m) above msl. MP top of casing, 2.80 ft (0.85 m) above lsd. Highest water level 84.21 ft (25.67 m) below lsd, Mar. 10, 1952; lowest 114.81 ft (34.99 m) below lsd, Jan. 31, 1950. Records available: 1950-75.

Measured water levels, October 1973 to September 1974

Date	Water level
Nov. 13, 1973	86.15
Feb. 19, 1974	85.43
May 13	85.90

Measured water levels, October 1974 to September 1975

Date	Water level	Date	Water level
Jan. 23, 1975	86.80	July 8, 1975	86.29
Apr. 11	86.47	Aug.18	86.46

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