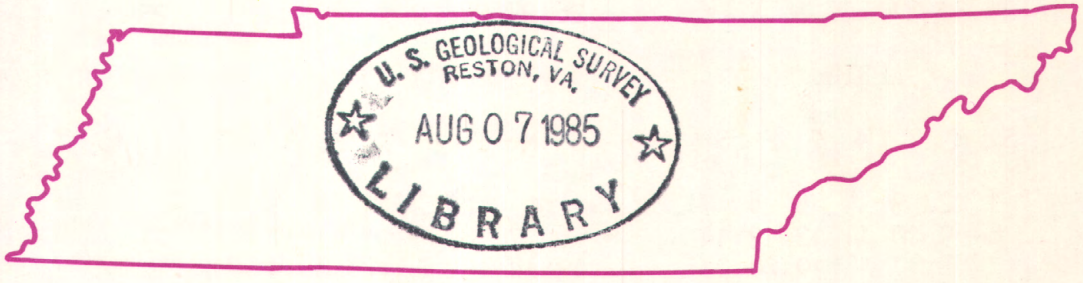
Water Resources Data Tennessee Water Year 1984



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-84-1
Prepared in cooperation with the Tennessee Department of Health and Environment, Division of Water Management; the Tennessee Valley Authority; and with other State, municipal, and Federal agencies.

CALENDAR FOR WATER YEAR 1984

1983

OCTOBER

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

NOVEMBER

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

DECEMBER

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

1984

JANUARY

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

FEBRUARY

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

MARCH

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

APRIL

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

MAY

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

JUNE

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

JULY

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

AUGUST

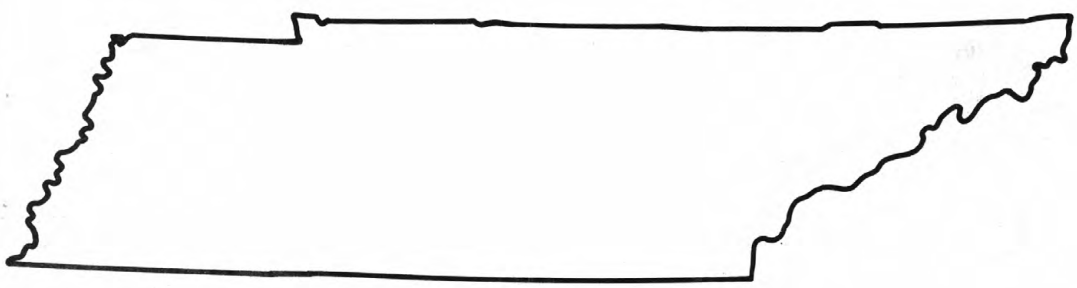
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

SEPTEMBER

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

Water Resources Data
Tennessee
Water Year 1984

by J.F. Lowery, P.H. Counts, H.L. Edmiston and F.D. Edwards



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-84-1
Prepared in cooperation with the Tennessee Department of Health and Environment, Division of Water Management; the Tennessee Valley Authority; and with other State, municipal, and Federal agencies.

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, SECRETARY

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Tennessee write to
District Chief, Water Resources Division
U.S. Geological Survey
A-413 Federal Building, U.S. Courthouse
Nashville, Tennessee 37203

1985

PREFACE

This volume of the annual hydrologic data report of Tennessee is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Tennessee are contained in this volume.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

V. J. May	R. D. Evaldi	C. L. Hundley
W. H. Doyle, Jr.	C. R. Gamble	S. S. Hutson
D. J. O'Connell	J. W. Garrett	G. L. Jones
R. D. Livesay	F. H. George	J. F. Kerestes
D. M. Brown	J. T. Hamilton	J. G. Lewis
J. K. Carmichael	B. B. Hill	G. B. Smith

This report was prepared in cooperation with the State of Tennessee and with other agencies under the general supervision of L. R. Hayes, District Chief, Tennessee.

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-85/216	2.	3. Recipient's Accession No.

4. Title and Subtitle

Water Resources Data Tennessee, Water Year 1984

5. Report Date March 1985

6.

7. Author(s)

J. F. Lowery, P. H. Counts, H. L. Edmiston, and F. D. Edwards

8. Performing Organization Rept. No. USGS-WRD-TN-84-1

9. Performing Organization Name and Address

U.S. Geological Survey, Water Resources Division
A-413 Federal Building - U.S. Courthouse
Nashville, Tennessee 37203

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.

(C)

(G)

12. Sponsoring Organization Name and Address

U.S. Geological Survey, Water Resources Division
A-413 Federal Building - U.S. Courthouse
Nashville, Tennessee 37203

13. Type of Report & Period Covered Annual - Oct. 1, 1983 to Sept. 30, 1984

14.

15. Supplementary Notes Prepared in cooperation with the Tennessee Department of Health and Environment, Division of Water Management; the Tennessee Valley Authority; and with other State, municipal, and Federal agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1984 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 91 gaging stations; stage only records for 2 lake gaging stations; elevation and contents for 28 lakes and reservoirs; water quality for 22 stations; and water levels for 32 observation wells. Also included are 93 crest-stage partial-record stations and 79 low-flow partial-record stations. Additional water data were collected at various stream and spring sites not involved in the systematic data collection program and are published as miscellaneous measurements and analyses, 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.

17. Document Analysis a. Descriptors

*Tennessee, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment analyses, Water temperatures, Sampling sites, Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement No restriction of distribution. This report may be purchased from: National Technical Information Service, Springfield, VA 22161

19. Security Class (This Report) UNCLASSIFIED

21. No. of Pages 331

20. Security Class (This Page) UNCLASSIFIED

22. Price

(See ANSI-Z39.18) *See Instructions on Reverse*

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

CONTENTS

ILLUSTRATIONS

TABLES

(Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (t) water temperature, (s) sediment, (e) elevation or contents, (p) pesticides.)

GROUND-WATER LEVELS

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

WATER RESOURCES DATA FOR TENNESSEE, 1984

INTRODUCTION

Water resources data for the 1983 water year for Tennessee consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 91 gaging stations; stage only at two gaging stations; stage and contents at 28 lakes and reservoirs; water quality for 22 stations; and water levels at 32 observation wells. Also included are data for 10 flood-hydrograph rainfall-runoff stations, 93 crest-stage partial-record stations, and 79 low-flow partial-record stations. Locations of these sites are shown on figures 5 and 6. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous stream and spring measurements and miscellaneous analyses or as seepage investigations. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Tennessee.

Records of discharge and 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 September 30, 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 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Eastern Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Arlington, VA 22304.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on the State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports 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 volume is identified as "U.S. Geological Survey Water-Data Report TN 83-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (615) 251-5424.

COOPERATION

The U.S. Geological Survey and organizations of the State of Tennessee have had cooperative agreements for the systematic collection of stream flow records since 1918, for ground-water levels since 1946, and for water-quality records since 1960. Organizations that assisted in collecting data contained in this report through cooperative agreement with the Survey are:

Tennessee Department of Conservation, Charles A. Howell, III, Commissioner.

Tennessee Department of Health and Environment, James E. Word, Commissioner, through Division of Water Management, Elmo Lunn, Director.

Tennessee Department of Transportation, Robert E. Farris, Commissioner, through Lewis Evans, State Transportation Engineer and Ray Terrell, Executive Director Bureau of Planning and Development and Clellon L. Loveall, Engineer Director Structures Division.

City of Lawrenceburg, Ivan Johnston, Mayor.

City of Memphis, Richard C. Hackett, Mayor.

Metropolitan Government of Nashville and Davidson County, Richard H. Fulton, Mayor, through Department of Public Works, Peter Heidenreich, Acting Director.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, Nashville District, in collecting records for 21 gaging stations and 8 water-quality stations and by the Tennessee Valley Authority for 22 gaging stations. All data are published in this report.

The following organization also aided in collecting records for publication in this report:

Bowaters Southern Paper Corporation

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Floods

In the northern half of Tennessee, significant flooding caused by intense thunderstorms occurred on May 6-8. These thunderstorms were spawned by a stalled frontal system lying along the Tennessee-Kentucky border. This frontal system remained in essentially the same position for 2 days causing thunderstorms over the same areas. The most intense of these storms occurred on May 6, causing peak rates of runoff with recurrence intervals up to 65 years. The large volumes of runoff from these thunderstorms, in combination with normally high summer pool levels, swelled some Cumberland River basin reservoirs to new peak levels. Wolf Creek, Center Hill, Old Hickory, J. Percy Priest, and Barkley reservoirs all had new record elevations. Wolf Creek, Center Hill, J. Percy Priest, and Old Hickory had new record contents.

Other storms occurred during the year causing some flooding in isolated areas. On May 2, Johns Creek tributary at Holmes Road near Memphis had a record peak discharge for the period 1975-84. On August 28, a thunderstorm hit some areas of northern middle Tennessee causing a new peak of record on Town Creek at Maple Street at Gallatin (record began in 1978). A thunderstorm on or about July 18, caused some flooding of businesses in Mt. Juliet, Tennessee.

Peak discharge data for selected sites having significantly high rates of runoff from these storms are shown in table 1.

Table 1.--Peak discharge data for selected sites

Station number	Stream and Location	Date of flood	Drainage area (mi^2)	Gage height (ft)	Peak discharge (ft^3/s)	Unit discharge [$(ft^3/s)/mi^2$]	Recurrence interval*
03414500	East Fork Obey River near Jamestown	5- 7-84	196	26.89	33,500	171	25
03425644	Town Creek above Gallatin	5- 6-84	2.25	5.94	780	347	<2
		8-28-84		9.2	2,310	1027	1.15 > 100
03425646	Town Creek at Maple Street at Gallatin	5- 6-84	5.0	9.73	2,300	460	a50
		8-28-84		11.27	2,720	544	a1.03 > 100
03430400	Mill Creek at Nolensville	5- 7-84	12.0	9.82	11,400	950	b30
03431340	Browns Creek at Factory Street at Nashville	5- 6-84	13.2	9.05	4,240	321	25
03431490	Pages Branch at Avondale	5- 6-84	2.0	5.45	1,690	841	a1.20 > 100
03434590	Jones Creek near Burns	5- 6-84	13.3	9.87	3,750	282	20
03434616	Hall Branch near Charlotte	5- 6-84	0.50	15.71	385	770	25
03436700	Yellow Creek near Shiloh	5- 6-84	124	17.75	16,200	131	a35
03535000	Bullrun Creek near Halls Crossroads	5- 7-84	68.5	12.04	10,500	153	30
03565500	Oostanaula Creek near Sanford	5- 8-84	57.0	12.81	7,090	124	b40
03602170	West Piney River near Dickson	5- 6-84	2.16	28.17	1,230	569	50
03605555	Trace Creek above Denver	5- 6-84	31.9	13.61	11,700	367	b65
07032222	Johns Creek tributary at Holmes Road near Memphis	5- 2-84	5.83	8.87	2,090	358	c5

* From regression equations in "Technique for estimating magnitude and frequency of floods in Tennessee" unless otherwise noted.

a From the station curve given in "Synthesized flood frequency for small urban streams in Tennessee."

b From updated station curve using all data including the May, 1984 peak.

c From the station curve given in "Flood frequency and storm runoff of urban areas of Memphis and Shelby County, Tennessee."

Mean Flow

Mean annual streamflow was near or above the long-term average at most gaging stations. In the Cumberland River basin, runoff ranged from a low of 104 percent of the long-term average at Sycamore Creek near Ashland City to a high of 155 percent at Harpeth River at Bellevue. At Tennessee River basin gages, runoff ranged from 93 percent of the long-term average at Big Creek near Rogersville to 133 percent at South Chickamauga Creek near Chickamauga, Tennessee. At gages in the Lower Mississippi River basin, runoff ranged from 107 percent at Nonconnah Creek near Germantown to 135 percent at South Fork Obion River near Greenfield.

As the Cumberland and Tennessee Rivers are highly regulated, natural runoff conditions are best represented in these basins by Harpeth River near Kingston Springs (Cumberland Basin), Emory River at Oakdale, and Buffalo River near Lobelville (Tennessee Basin). Runoff for various periods for these three gages is given in table 2. Comparison between monthly average and yearly average discharge for the 1984 water year and the base period 1951-80 is shown in figure 2 for these three gaging stations.

Table 2.--Comparison of monthly average and yearly average discharge at representative stations

(discharge in cubic feet per second)

Station Name	1984	1983	1951-80
Harpeth River near Kingston Springs	1,332	1,380	950
Emory River at Oakdale	1,881	1,711	1,516
Buffalo River near Lobelville	1,368	1,767	1,136

Low Flow

Base flows in the Cumberland and Tennessee River basins were below normal at most stations. In the Cumberland River basin, most streams had average recurrence intervals of annual minimum flows of from 2 to 5 years. In the Tennessee River basin, average recurrence intervals of annual minimum flow varied across the basin. In the eastern part of the basin in the 1984 water year, the daily average minimum was less than the 20-year recurrence interval flow at several stations. Comparison between the 1984 water year daily average minimum flow, the daily average minimum 20-year recurrence interval flow, and the 3-day average minimum 20-year recurrence interval flow is shown in table 3 for selected stations.

Table 3.--Comparison of 1984 daily average annual minimum with 1-day 20-year and 3-day 20-year average minimum recurrence interval flow

Station name	1984 daily average minimum (ft^3/s)	1-day 20-year average recurrence interval flow (ft^3/s)	3-day 20-year average recurrence interval flow (ft^3/s)
Little River above Townsend	30	30	31
Poplar Creek near Oak Ridge	4.6	4.8	4.9
Obed River near Lancing	0.88	0.73	0.75
Wolftever Creek near Ooltewah	1.5	2.1	2.2

In the central and western parts of the Tennessee River basin, flows were near the long-term average. Most streams had average recurrence intervals of daily average flows of less than 2 years.

In the western part of the State, flows were near the long-term average. However, Beaver Creek at Huntingdon had a flow equaling the second lowest flow for the period of record (1965-1984) of 20 ft^3/s.

Surface-water quality

Because "water quality" is evaluated primarily according to the intended use, such as for public supply, industry, domestic, or agriculture, few meaningful generalizations of water quality can be made on a statewide basis. Water quality is affected by physical characteristics and concentrations of many dissolved constituents: for example, water temperature; pH; concentrations of dissolved oxygen, major chemical constituents, sediment, trace constituents, pesticides and other organics; and biological parameters. On a statewide basis, budget considerations permit only selected parameters to be determined at a particular site and the determination of the suitability of water at that site is, therefore, limited.

Several water-quality data-collection sites located on major streams in Tennessee are downstream from impoundments. These impoundments can have a significant effect on water quality in at least two ways. First, the detention time in storage moderates the extreme constituent concentrations that would otherwise occur in a free-flowing stream. Some parameters such as suspended-sediment concentrations and turbidity values are drastically reduced as detention time increases. A second important factor involves the vertical position of the released water in the impoundment. Significant water-quality differences can occur between the surface, mid-depth and bottom of a lake or reservoir.

At main-stem stations on the Tennessee and Cumberland Rivers, observed dissolved-solids concentrations did not exceed 129 mg/L. Both streams contain calcium bicarbonate type water with most pH values ranging from 6.1 to 8.0 units and 7.2 to 8.6 units, respectively. Trace constituent concentrations were low in samples collected; none exceeded the public-supply standards established for water delivered to a consumer. When compared to data from previous years, no significant differences were observed.

Dissolved-oxygen concentrations are critical because of environmental considerations. Municipal and industrial development has caused concern regarding the proper treatment of wastes. Dissolved-oxygen monitors are operated on the Cumberland River at Old Hickory Dam and below Cordell Hull Dam to aid in the evaluation of water quality. Observed dissolved-oxygen concentrations during the year ranged from 4.0 to 13.9 mg/L at Old Hickory Dam and from 4.1 to 12.6 mg/L below Cordell Hull Dam.

Ground-water levels

The pattern of natural water-level fluctuations in various parts of the State are shown in the hydrographs of four widely scattered observation wells (fig. 3). The hydrographs for wells in Putnam and Hamilton Counties are indicative of conditions in the eastern half of the State, while those in Dickson and Lauderdale Counties reflect the conditions in the western half of the State.

At the beginning of the 1984 water year, ground-water levels throughout the State were below the average seasonal levels. Ground-water levels in Tennessee rose from October to March (fig. 3) in response to above normal rainfall over most of the State. In most network observation wells, the highest water levels occurred from January through March and the lowest water levels occurred in August or September.

Ground-water levels in the network of observation wells in Shelby County are strongly affected by pumping large volumes of water in Memphis and surrounding areas. Hence, the fluctuations throughout the year reflect changes in the rates of pumpage and location of the principal pumping centers. As pumping rates increase and new pumping centers are developed to keep pace with growing water demands, water levels in both confined and unconfined aquifers are prone to decline. Figure 4 shows that the Memphis index well (Sh:Q-1) has been steadily declining since 1969. This decline is a reflection of the response of the aquifer system to the additional stress of increased pumpage.

DEFINITION OF TERMS

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

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 meters.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, 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.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded 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 intestines of warm-blooded 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.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir or estuary bottom is composed.

Bottom material in tables of data, refers to the chemical analysis of unconsolidated matter described as bed material and specifically includes anthropogenic matter in addition to natural solid material.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Color unit is produced by one milligram per liter of platinum in the form of the chloro-platinate ion. Color is expressed in units of the platinum-cobalt scale.

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

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

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream.

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 (FT^3/s, ft^3/s) 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 or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved is that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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 river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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 hydrologic data are obtained.

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 ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Land-surface datum (LSD) is a datum plane that is approximately at land surface at each well.

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 gram (ug/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

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

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

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

Particle size is the diameter, in millimeters (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 of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

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 distributions 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.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

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 radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required to all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN, in) shows the depth in which the drainage area would be covered if all 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 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 liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) 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 volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day)is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

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. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in

dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be requred of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

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 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 year.

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

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

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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 indivudual 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.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

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

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record 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 other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete number for each station such as 03540500 . . . ., which appears just to the left of the station name, includes the 2-digit part number "03" plus the multi--digit downstream order number "540500 . . ." This downstream numbering system is used in most cases; however, in some cases latitude and longitude numbers are assigned to hydrologic stations and partial-record stations as a means of identification (See Numbering System for Wells).

NUMBERING SYSTEM FOR WELLS

Downstream order station numbers are not assigned to wells. The well numbering system of the U.S. Geological Survey is based on the grid system of lati- tude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

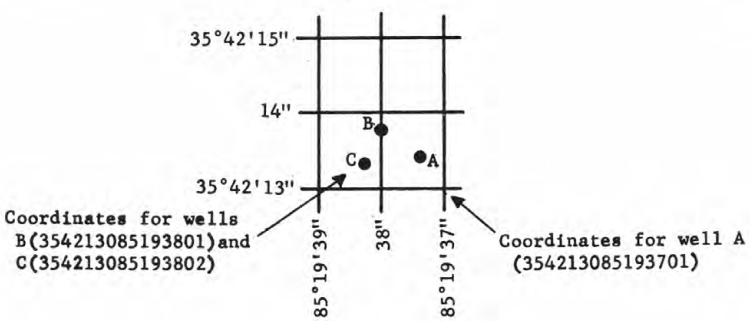


Figure 1.--System for numbering wells (latitude and longitude)

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.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE 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 readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

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), step-backwater techniques, 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 dischage is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affeced by the 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 necessary to compute the discharge considering the affects of ice in the channel and on gage heights. Discharge for periods of ice effect is computed on the basis of gage-height record and discharge measurements. Consideration is 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, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, 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 the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging stations gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Geological Survey, 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."

Previously published streamflow 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 "REVISED RECORDS" 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 are affected by the revision, the 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 type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 6.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, the purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period cause the figure to have little significance. Under "EXTREMES" are given first the extremes for the period of record, second, information available outside the period of record, and last those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding 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 on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030; 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

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 shown are the appropriate discharges for the calendar and water years.

Footnotes to the table of daily discharge 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.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations 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 are 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 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole number between 10 and 1,000 ft^3/s; and 3 significant figures above 1,000 ft^3/s. 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.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Tennessee for the period October 1960 to September 1965 are in Water-Supply Papers 1906, 1909, 1910, and 1920, and records for October 1965 to September 1970 are in Water-Supply Papers 2106, 2109, 2110, and 2120.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Tennessee are compiled in Water-Supply Papers 1304, 1306, and 1311 through September 1950, and in 1726 and 1731 for October 1950 through September 1960.

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

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, 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.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of discharge collected by agencies other than the Geological Survey

The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, National Center, Reston, Va., 22092, maintains an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

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 a 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 consituent 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 district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diel temperature change; 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 recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment

discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Revisions

If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Users of U.S. Geological Survey water-quality data should be aware of this update procedure because corrections are not documented in the State data-report series.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum of 1929 (NGVD) or land-surface datum (LSD). See "DEFINITION OF TERMS" on page 5. If known, the altitude of the land-surface datum (NGVD) is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

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 in 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.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

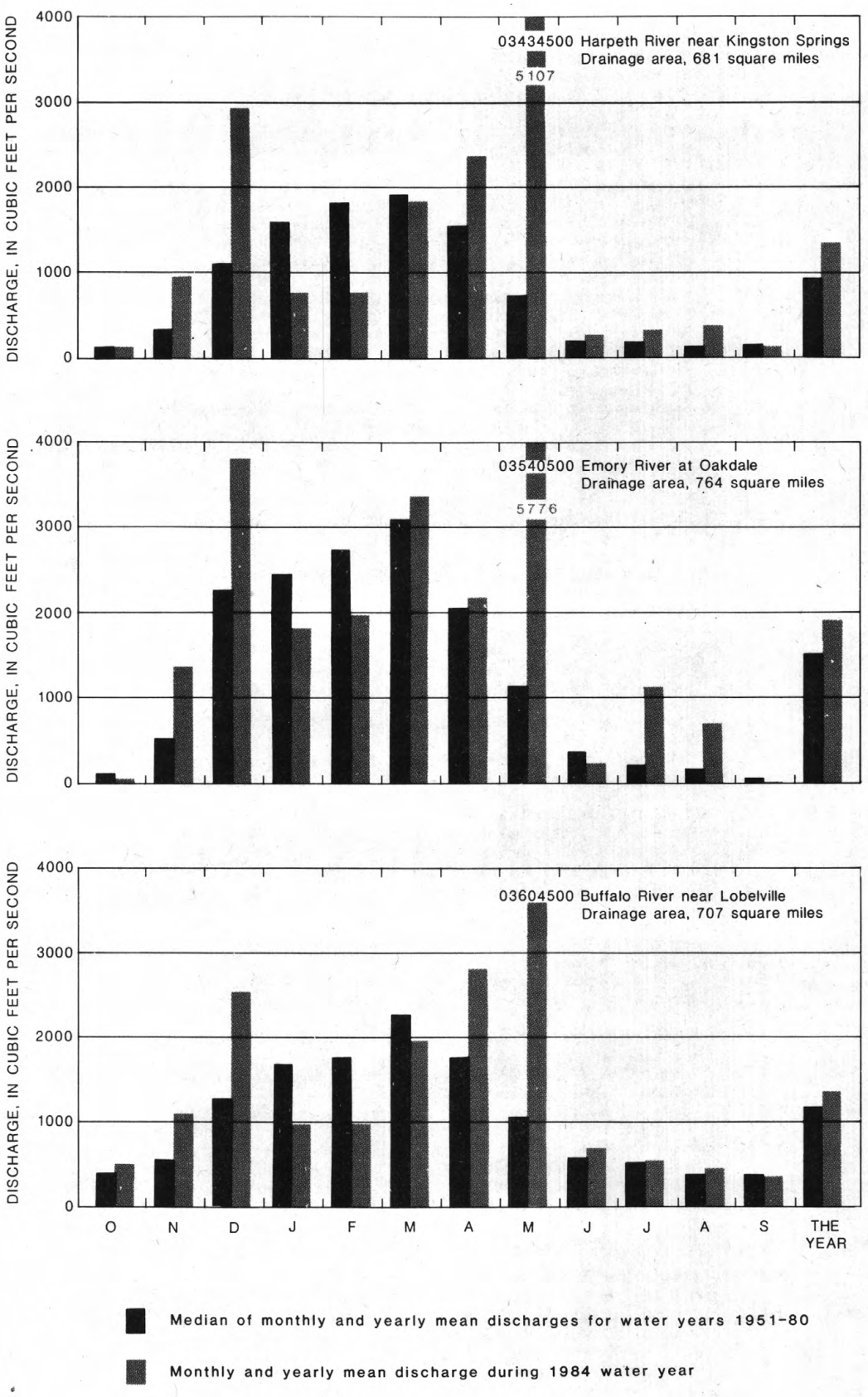
7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.


DISCHARGE, IN CUBIC FEET PER SECOND
4000
3000
2000
1000
0
03434500 Harpeth River near Kingston Springs
Drainage area, 681 square miles
5107
03540500 Emory River at Oakdale
Drainage area, 764 square miles
5776
03604500 Buffalo River near Lobelville
Drainage area, 707 square miles
O
N
D
J
F
M
A
M
J
J
A
S
THE YEAR
Median of monthly and yearly mean discharges for water years 1951-80
Monthly and yearly mean discharge during 1984 water year

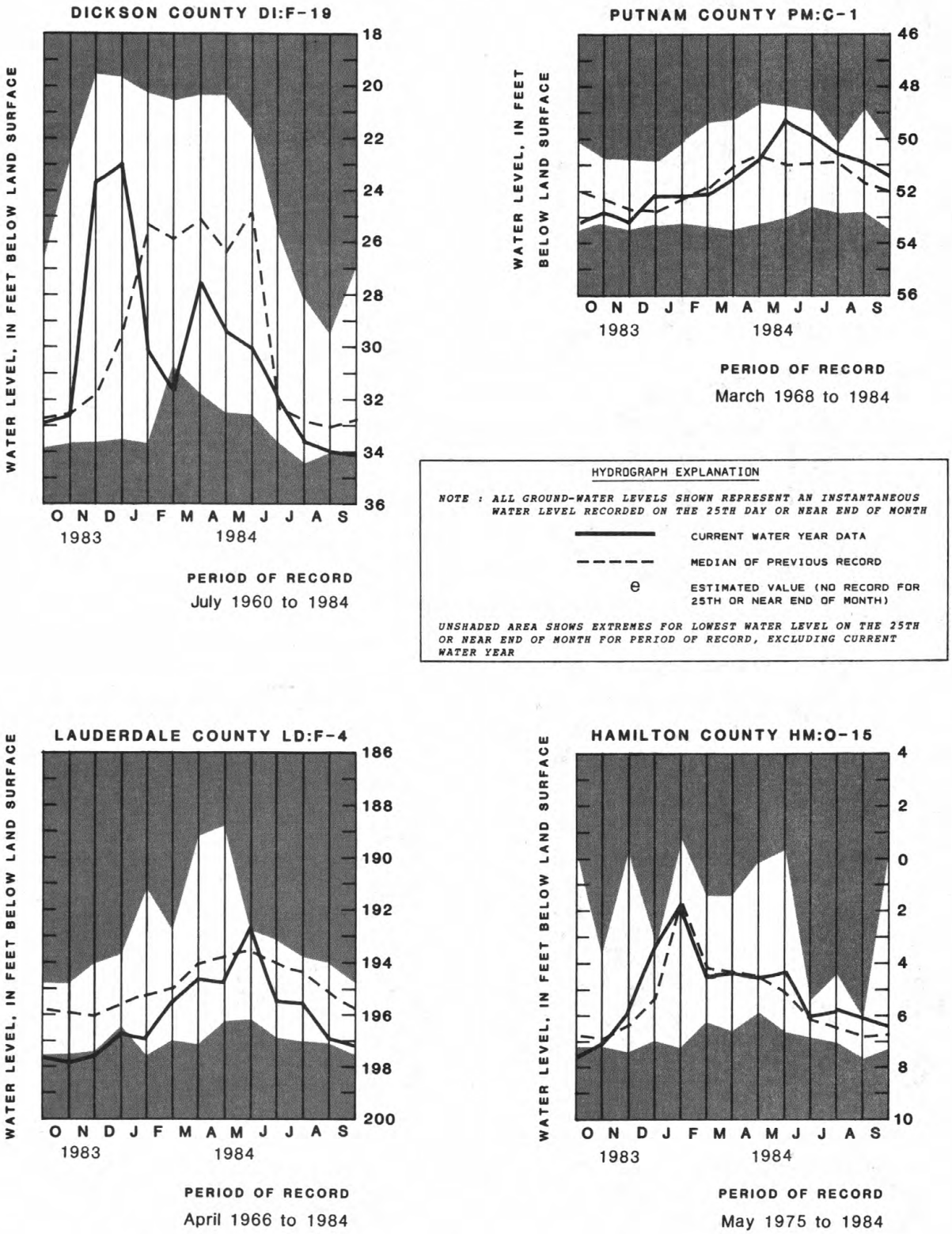


Figure 3.--Ground-water levels on the 25th of each month for the 1984 water year compared to the maximum, minimum, and median water levels on 25th of each month for the previous years of record.

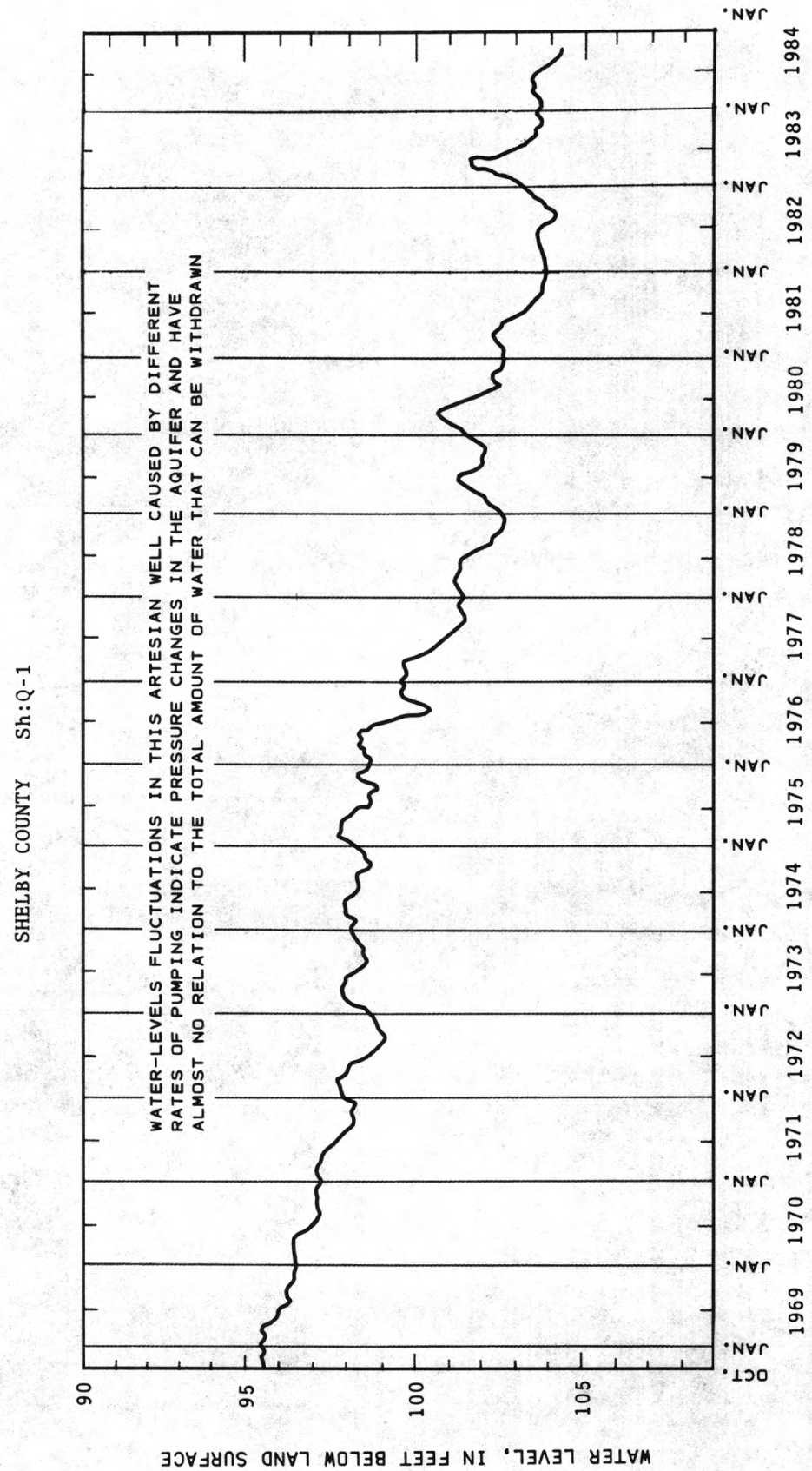


Figure 4.-- Hydrograph of well Sh:Q-1 showing long term decline in the water level.

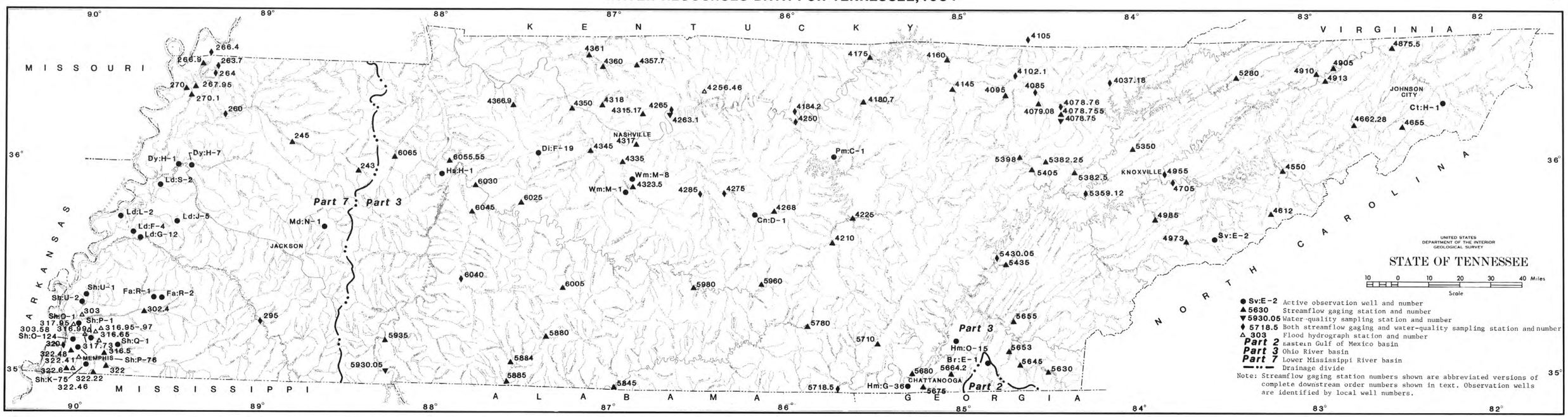


Figure 5.-- Location of streamflow gaging and water-quality sampling stations and observation wells.

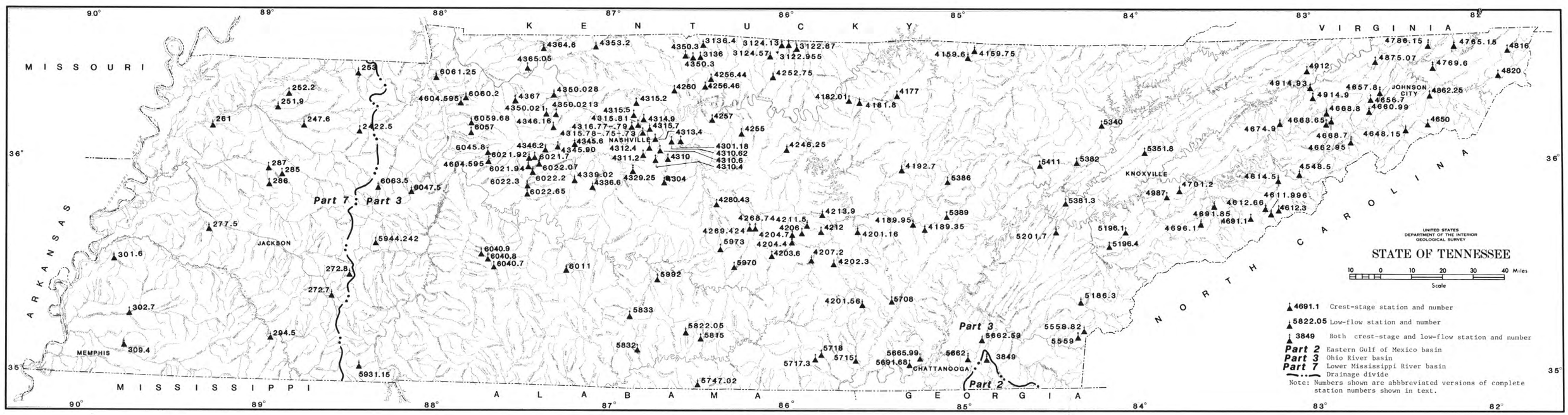


Figure 6.--Location of partial record stations.

03403718 CRABAPPLE BRANCH NEAR LA FOLLETTE, TN

LOCATION.--Lat 36°27'25", long 84°09'30", Campbell County, Hydrologic Unit 05130104, on left bank 5.6 mi west-southwest of Habersham, 4.6 mi north-northwest of LaFollette, and at mile 0.04.

DRAINAGE AREA.--1.07 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1981 to current year.

GAGE.--Water-stage recorder and trapezoidal flume. Altitude of gage is 1,300 ft from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34 ft^3/s July 28, 1981, gage height, 1.89 ft; no flow June 30, July 1, Sept. 25-30, 1981.

NOTE.--Records for the 1982,1983 and 1984 water years were collected and are being analyzed. These records will be published in a subsequent report.

03403718 CRABAPPLE BRANCH NEAR LA FOLLETTE, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--March 1981 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1981 to current year.
WATER TEMPERATURE: June 1981 to current year.

INSTRUMENTATION.--Two parameter water quality monitor.

NOTE.--Daily records for the 1982, 1983 and 1984 water-years were collected and are being analyzed. These records will be published in a subsequent report.

03407875 BILLS BRANCH NEAR HEMBREE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1980 to current year.
WATER TEMPERATURE: August 1980 to current year.
SUSPENDED SEDIMENT DISCHARGE: October 1980 to current year.

INSTRUMENTATION.--Two parameter water-quality monitor and sediment pumping sampler.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 307 micromhos May 13, 1981; minimum, 113 micromhos March 30, 1981.
WATER TEMPERATURE: Maximum, 24.0°C August 8, 9, 1980; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,780 mg/L July 24, 1981; minimum daily mean, 2 mg/L October 6, 27, November 12, 1981.
SEDIMENT LOADS: Maximum daily, 95 tons (86.5 tonnes) July 24, 1981; minimum daily, 0 ton (0 tonne) many days each year.

NOTE.--Daily records for the 1982 and 1983 water-years were collected and are being analyzed. These records will be published in a subsequent report.

361341084253900 SHACK CREEK AT HEMBREE (034078755), TN

LOCATION.--Lat 36°13'41", long 84°25'39", Scott County, Hydrologic Unit 05130104, on left bank 0.4 mi west of Hembree, 4.1 mi southeast of Lone Mountain, and 5.8 mi northwest of Braytown.

DRAINAGE AREA.--5.08 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,370 ft, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,620 ft^3/s May 21, 1983 gage height, 7.90 ft; minimum discharge, 0.13 ft^3/s Sept. 11, 1983.

NOTE.--Daily records for the 1984 water-year were collected and are being analyzed. These records will be published in a subsequent report.

361341084253900 - SHACK CREEK AT HEMBREE (034078755), TN

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1982 to current year.
WATER TEMPERATURE: April 1982 to current year.

NOTE.--Daily records for the 1982, 1983, and 1984 water-years were collected and are being analyzed. These records will be published in a subsequent report.

03407876 SMOKY CREEK AT HEMBREE, TN

LOCATION.--Lat 36°14'23", long 84°24'48", Scott County, Hydrologic Unit 05130104, on left bank 0.9 mi northeast of Hembree, 12.4 mi southeast of Huntsville, and at mile 5.7.

DRAINAGE AREA.--19.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1976 to November 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,310 ft, from topographic map. Prior to July 13, 1982, at site 175 ft upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--6 years, 47.9 ft³/s, 37.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s Apr. 4, 1977, gage height, 14.6 ft from floodmarks; minimum, 0.02 ft³/s Sept. 6-9, 18, 1980.

EXTREMES FOR CURRENT PERIOD.--October to November: Maximum discharge, 1,200 ft³/s Nov. 28, gage height, 5.36 ft, no peaks above base of 1,300 ft³/s; minimum discharge, .38 ft³/s Oct. 4,5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	2.2										
2	.49	2.1										
3	.47	2.2										
4	.47	8.7										
5	7.3	5.0										
6	1.5	3.8										
7	1.0	3.2										
8	.85	2.7										
9	.76	2.5										
10	.71	3.7										
11	.68	5.6										
12	1.5	5.5										
13	62	4.5										
14	9.5	3.7										
15	4.0	49										
16	2.7	26										
17	2.1	16										
18	1.7	11										
19	1.6	8.5										
20	1.4	81										
21	1.7	54										
22	2.9	26										
23	47	37										
24	14	110										
25	12	44										
26	8.0	27										
27	5.4	94										
28	3.9	426										
29	3.3	87										
30	2.7	46										
31	2.5	---										
TOTAL	204.65	1197.9										
MEAN	6.60	39.9										
MAX	62	426										
MIN	.47	2.1										
CFSM	.38	2.32										
IN.	.44	2.59										

03407876 SMOKY CREEK AT HEMBREE, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water year 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1980 to November 1983 (discontinued).
pH: May 1980 to March 1982.
WATER TEMPERATURE: May 1980 to November 1983 (discontinued).
DISSOLVED OXYGEN: May 1980 to March 1982.
SUSPENDED SEDIMENT DISCHARGE: October 1978 to November 1983 (discontinued).

INSTRUMENTATION.--Sediment pumping sampler since October 1978. Four parameter water-quality monitor from May 1980 to March 1982. Two parameter water-quality monitor since March 1982.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 505 micromhos Aug. 8, 1983; minimum, 86 micromhos May 21, 1983.
pH: Maximum, 9.3 units Oct. 3, 4, 1980; minimum, 6.2 units Oct. 19, 1980.
WATER TEMPERATURE: Maximum, 31.0°C July 16, 1980; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.5 mg/L Jan. 10, 11, 1981; minimum, 4.2 mg/L July 28, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,080 mg/L Aug. 7, 1981; minimum daily mean, 1 mg/L Nov. 20, 22, 1979, June 28, 29, 1980.
SEDIMENT LOADS: Maximum daily, 11,800 tons May 21, 1983; minimum daily, 0.00 ton many days.

EXTREMES FOR CURRENT PERIOD.--October to November:
SPECIFIC CONDUCTANCE: Maximum, 446 micromhos Nov. 11; minimum, 157 micromhos Nov. 28.
WATER TEMPERATURE: Maximum, 20.5°C Oct. 5; minimum 3.5°C Nov. 14.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,000 mg/L Nov. 28; minimum daily mean, 2 mg/L Nov 14.
SEDIMENT LOADS: Maximum daily, 1,500 tons Nov. 28; minimum daily, .01 ton Oct, 1-4.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	339	328	333	395	389	391						
2	329	325	328	395	390	392						
3	329	325	327	396	389	393						
4	327	323	325	421	385	403						
5	411	233	343	405	400	403						
6	386	365	370	401	398	399						
7	374	364	370	399	397	398						
8	365	357	362	408	397	402						
9	358	352	355	409	403	406						
10	352	347	350	424	392	405						
11	348	340	345	446	416	428						
12	345	305	328	428	413	421						
13	346	229	307	413	404	408						
14	374	342	362	406	386	403						
15	387	374	380	372	296	317						
16	393	384	387	330	315	324						
17	394	388	391	339	330	334						
18	395	388	391	347	338	342						
19	392	387	389	354	347	350						
20	391	385	388	355	238	299						
21	388	357	376	277	243	262						
22	401	370	390	298	278	289						
23	384	305	337	307	274	298						
24	369	356	364	290	241	251						
25	381	361	372	293	264	277						
26	382	379	381	302	294	299						
27	385	381	383	321	206	289						
28	388	383	385	206	157	181						
29	389	385	387	244	206	228						
30	391	385	388	274	245	261						
31	392	387	389	---	---	---						
MONTH	411	229	364	446	157	342						

03407876 SMOKY CREEK AT HEMBREE, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.0	14.5	16.0	15.5	10.5	12.5						
2	18.5	13.5	15.5	16.0	11.0	13.5						
3	19.0	14.0	16.0	16.0	14.0	15.0						
4	19.0	14.5	16.5	15.5	10.0	13.5						
5	20.5	17.0	18.0	11.5	6.5	8.5						
6	19.0	15.0	16.5	11.0	5.0	8.0						
7	17.5	13.0	15.0	10.0	6.5	8.5						
8	16.5	13.5	15.0	12.5	6.5	9.0						
9	18.0	13.5	15.5	13.0	6.5	9.5						
10	17.0	13.5	15.5	11.5	9.0	10.5						
11	16.0	14.0	15.0	9.0	6.5	8.0						
12	17.5	15.5	16.0	8.5	5.0	6.5						
13	17.0	12.0	15.0	8.5	5.5	6.5						
14	16.0	10.0	12.5	8.0	3.5	6.0						
15	16.5	10.0	12.5	10.0	8.0	9.0						
16	16.5	10.0	13.0	8.5	6.5	7.0						
17	17.5	13.0	15.0	9.5	5.5	7.0						
18	17.0	14.0	15.5	10.0	4.0	7.0						
19	18.5	15.5	17.0	12.0	7.5	9.5						
20	18.0	16.5	17.5	12.0	9.0	10.5						
21	17.0	16.0	16.5	11.0	7.5	9.0						
22	16.5	15.0	15.5	12.0	6.5	8.5						
23	15.5	14.0	14.5	13.0	9.0	11.0						
24	14.5	13.5	14.0	12.5	8.0	10.5						
25	14.0	12.5	13.5	9.5	5.5	7.0						
26	15.0	10.5	12.0	9.5	4.5	6.5						
27	14.0	8.5	11.0	---	---	---						
28	14.0	7.5	10.5	---	---	---						
29	14.5	9.0	11.5	---	---	---						
30	15.5	10.0	12.5	---	---	---						
31	14.0	10.0	12.0	---	---	---						
MONTH	20.5	7.5	14.5	16.0	3.5	9.0						

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.52	8	0.01	2.2	4	0.02			
2	.49	8	0.01	2.1	3	0.02			
3	.47	7	0.01	2.2	5	0.03			
4	.47	5	0.01	8.7	32	0.75			
5	7.3	100	1.97	5.0	7	0.09			
6	1.5	20	0.08	3.8	4	0.04			
7	1.0	10	0.03	3.2	5	0.04			
8	.85	10	0.02	2.7	7	0.05			
9	.76	10	0.02	2.5	5	0.03			
10	.71	10	0.02	3.7	5	0.05			
11	.68	10	0.02	5.6	5	0.08			
12	1.5	10	0.04	5.5	3	0.04			
13	62	637	251	4.5	3	0.04			
14	9.5	21	0.54	3.7	2	0.02			
15	4.0	7	0.08	49	165	33			
16	2.7	4	0.03	26	12	0.84			
17	2.1	9	0.05	16	11	0.48			
18	1.7	6	0.03	11	4	0.12			
19	1.6	6	0.03	8.5	4	0.09			
20	1.4	4	0.02	81	315	138			
21	1.7	6	0.03	54	36	5.25			
22	2.9	12	0.09	26	10	0.70			
23	47	214	54	37	77	16			
24	14	24	0.91	110	106	43			
25	12	14	0.45	44	11	1.31			
26	8.0	5	0.11	27	12	0.87			
27	5.4	5	0.07	94	201	132			
28	3.9	9	0.09	426	1000	1500			
29	3.3	6	0.05	87	50	11.75			
30	2.7	8	0.06	46	20	2.48			
31	2.5	5	0.03	---	---	---			
TOTAL	204.65	---	309.09	1197.9	---	1887.24			

CUMBERLAND RIVER BASIN

03407908 NEW RIVER AT CORDELL, TN

LOCATION.--Lat 36°20'10", long 84°27'06", Scott County, Hydrologic Unit 05130104, on right bank at Cordell Bridge, 3.4 mi south of Winona, and at mile 24.9.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1975 to April 1977 (discharge measurements only); May 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--7 years, 480 ft³/s, 32.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,900 ft³/s Mar. 21, 1980, gage height, 24.58 ft; minimum, 1.8 ft³/s Oct. 17, 1980, gage height, 1.72 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 3	0300	9780	13.84	May 7	1145	*14900	18.94
Mar. 21	0030	8190	12.16				

Minimum discharge, 8.2 ft³/s Oct. 4, Sept. 26-28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	31	322	448	230	702	636	786	142	151	140	23
2	9.4	28	945	344	208	550	470	2290	116	94	143	21
3	8.8	26	5390	289	196	440	428	5080	98	84	124	20
4	8.2	27	3550	252	195	366	1570	3490	85	62	184	87
5	19	46	1600	247	177	362	1920	1770	73	497	261	48
6	61	41	1020	224	164	410	1200	3990	62	900	188	28
7	29	34	643	201	129	373	776	11700	53	872	120	22
8	17	31	468	171	137	347	560	6620	49	463	1010	19
9	14	27	357	158	145	308	476	2610	43	216	529	17
10	12	26	292	217	178	271	433	1420	39	137	290	16
11	11	30	792	422	1650	252	349	889	34	101	300	15
12	10	52	2040	343	1870	225	307	593	33	151	179	15
13	283	50	1100	336	2960	280	283	452	34	204	123	14
14	187	44	812	306	4420	318	253	444	36	177	94	14
15	74	195	949	279	1590	280	231	300	39	130	76	13
16	45	289	649	278	958	407	217	249	69	100	68	12
17	33	179	455	256	636	536	231	212	93	102	74	11
18	26	126	354	253	459	539	207	186	64	153	57	11
19	22	100	301	230	374	470	183	165	41	148	49	10
20	19	172	256	175	316	1740	175	149	50	99	44	10
21	19	660	222	170	268	4770	173	132	50	77	36	9.7
22	21	285	544	165	236	1900	663	125	52	66	31	9.6
23	354	193	732	175	245	1320	1480	125	73	68	183	9.5
24	251	1020	512	3540	257	943	828	153	51	51	106	8.9
25	138	546	320	2320	238	760	528	108	36	39	59	8.6
26	99	293	294	1230	209	562	391	128	28	34	43	8.4
27	72	242	290	770	710	450	334	165	22	57	34	8.2
28	55	3950	1930	532	1690	2940	561	228	20	135	30	8.3
29	43	1310	1720	410	1130	3190	757	502	146	85	28	8.5
30	37	515	861	328	---	1570	971	247	213	252	28	8.5
31	33	---	549	270	---	959	---	179	---	185	27	---
TOTAL	2020.4	10568	30269	15339	21975	28540	17591	45487	1944	5890	4658	514.2
MEAN	65.2	352	976	495	758	921	586	1467	64.8	190	150	17.1
MAX	354	3950	5390	3540	4420	4770	1920	11700	213	900	1010	87
MIN	8.2	26	222	158	129	225	173	108	20	34	27	8.2
CFSM	.33	1.78	4.93	2.50	3.83	4.65	2.96	7.41	.33	.96	.76	.09
IN.	.38	1.99	5.69	2.88	4.13	5.36	3.30	8.55	.37	1.11	.88	.10

CAL YR 1983	TOTAL	178575.3	MEAN	489	MAX	7490	MIN	8.2	CFSM	2.47	IN.	33.55
WTR YR 1984	TOTAL	184795.6	MEAN	505	MAX	11700	MIN	8.2	CFSM	2.55	IN.	34.72

03408500 NEW RIVER AT NEW RIVER, TN

LOCATION.--Lat 36°23'08", long 84°33'17", Scott County, Hydrologic Unit 05130104, on left bank at town of New River, 700 ft downstream from Phillips Creek, 1,000 ft downstream from bridge on U. S. Highway 27, 1.7 mi downstream from Brimstone Creek, and at mile 8.6.

DRAINAGE AREA.--382 mi².

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1436: Drainage area. WRD TN-73: 1939(M), 1951(M), 1970(M).

GAGE.--Water-stage recorder. Datum of gage is 1,092.67 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--50 years, 743 ft³/s, 26.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,700 ft³/s May 27, 1973, gage height, 37.91 ft, from high water mark in gage well, from rating curve extended above 27,000 ft³/s on basis of slope-area and contracted-opening measurements of peak flow; no flow part of each day Aug. 12-15, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 23, 1929, reached a stage of 41.2 ft, discharge, 74,700 ft³/s, estimated, based on field survey at old U. S. Weather Bureau gage, 1,200 ft upstream at datum 3.41 ft higher.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 3	0530	12900	16.13	May 7	1300	*28000	23.71
Mar. 21	0500	12200	15.67				

Minimum discharge, 7.0 ft³/s Sept. 27, gage height 1.57 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	48	581	879	438	1120	1180	1320	329	208	196	37
2	14	45	1240	683	390	950	921	2510	256	151	199	33
3	12	42	8080	562	362	822	839	7900	204	276	176	29
4	10	42	4960	479	361	715	2520	7070	170	128	177	43
5	29	57	2370	473	331	716	3310	2950	143	293	289	92
6	75	74	1650	446	316	822	1930	4740	122	998	244	55
7	74	59	1260	408	251	798	1350	25000	106	1510	173	38
8	39	50	919	348	224	742	1050	14300	94	840	556	29
9	27	45	705	318	253	653	892	4680	86	382	772	24
10	20	42	553	383	297	561	823	2210	77	232	452	21
11	16	40	718	795	4780	510	680	1420	69	161	398	20
12	16	48	2810	689	4560	452	581	1030	64	219	265	18
13	207	68	1550	666	3790	484	519	812	59	416	180	18
14	495	65	1200	612	7500	615	466	799	76	248	133	17
15	152	291	1250	553	2610	520	417	569	81	214	106	16
16	88	559	1000	535	1550	691	390	450	79	154	91	14
17	63	312	776	508	1120	958	413	373	113	178	88	12
18	49	212	618	483	868	951	377	320	127	252	88	11
19	40	161	520	457	730	859	329	281	82	258	72	11
20	35	149	435	300	627	1720	309	252	67	164	68	10
21	32	815	377	300	522	8440	304	224	78	122	63	9.6
22	37	470	730	290	457	3200	453	204	193	102	58	9.0
23	206	304	1310	280	427	2030	1760	195	130	93	89	8.6
24	465	963	992	4410	464	1480	1170	232	119	88	206	8.4
25	214	866	550	3930	431	1250	865	179	83	71	97	8.4
26	155	476	530	1940	374	1030	683	155	62	59	68	8.1
27	117	416	525	1290	683	851	567	414	48	76	54	7.3
28	89	4730	2020	977	2130	4760	778	640	40	191	46	7.4
29	73	1990	2810	791	1630	7430	1380	1570	81	149	41	7.4
30	62	904	1450	647	---	2700	1510	720	313	186	41	7.9
31	53	---	939	529	---	1620	---	456	---	257	42	---
TOTAL	2978	14343	45428	25961	38476	50450	28766	83975	3551	8676	5528	630.1
MEAN	96.1	478	1465	837	1327	1627	959	2709	118	280	178	21.0
MAX	495	4730	8080	4410	7500	8440	3310	25000	329	1510	772	92
MIN	10	40	377	280	224	452	304	155	40	59	41	7.3
CFSM	.25	1.25	3.84	2.19	3.47	4.26	2.51	7.09	.31	.73	.47	.05
IN.	.29	1.40	4.42	2.53	3.75	4.91	2.80	8.18	.35	.84	.54	.06

CAL YR 1983	TOTAL	277624	MEAN	761	MAX	11400	MIN	10	CFSM	1.99	IN.	27.04
WTR YR 1984	TOTAL	308762.1	MEAN	844	MAX	25000	MIN	7.3	CFSM	2.21	IN.	30.07

03408500 NEW RIVER AT NEW RIVER, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1976 to current year.
pH: October 1976 to current year.
WATER TEMPERATURE: October 1976 to current year.
DISSOLVED OXYGEN: October 1976 to current year.
TURBIDITY: December 1976 to current year.
OXIDATION-REDUCTION POTENTIAL: December 1976 to September 1977.
SUSPENDED SEDIMENT DISCHARGE: October 1976 to current year.

INSTRUMENTATION.--Five parameter water-quality monitor and sediment pumping sampler since Oct. 21, 1976.

REMARKS.--Interruptions in the record were due to malfunction of the instruments.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 766 micromhos Sept. 24, 1983; minimum, 44 micromhos Apr. 4, 1977.
pH: 8.6 units May 16, 1983; minimum, 5.3 units Nov. 17, 1978.
WATER TEMPERATURE: Maximum, 32.5°C July 16, 1980, minimum, 0.0°C Jan. 1, 2, 13, 17, 19, Feb. 6, 1977, Dec. 21, 22, 1981, Jan. 19, Dec. 24, 30, 1983, Feb. 8, 1984.
DISSOLVED OXYGEN: Maximum, 14.4 mg/L Dec. 6, 1976; minimum, 5.6 mg/L July 26, 1977.
TURBIDITY: Maximum, 3,000 JTU Sept. 2, 1982; minimum, 0 JTU several days in 1982, 1983, 1984.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,190 mg/L Aug. 8, 1981; minimum daily mean, 1 mg/L on many days in 1976, Apr. 18, 1984.
SEDIMENT LOADS: Maximum daily, 262,000 tons Apr. 5, 1977; minimum daily, 0.00 ton Oct. 21-24, 27, 1980.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 618 micromhos Oct. 1; minimum, 114 micromhos Feb. 14.
pH: Maximum, 8.1 units July 22; minimum, 6.7 units Oct. 14.
WATER TEMPERATURE: Maximum, 28.0°C June 20, July 26; minimum, 0.0°C Dec. 24, 30, Feb. 8.
DISSOLVED OXYGEN: Maximum, 13.4 mg/L Jan. 12-14; minimum, 6.3 mg/L June 22.
TURBIDITY: Maximum, 1,900 JTU Aug. 9, but may have been higher during period of missing record in May when maximum discharge occurred; minimum, 0 JTU many days.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2000 mg/L May 7; minimum daily mean, 1 mg/L Apr. 18.
SEDIMENT LOADS: Maximum daily, 125,000 tons May 7; minimum daily, 0.27 ton Oct. 4.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	618	610	613	404	390	397	222	204	213	---	---	---
2	612	604	607	414	400	407	232	154	207	---	---	---
3	604	596	601	422	412	416	---	---	---	---	---	---
4	598	588	594	428	420	423	---	---	---	---	---	---
5	592	454	540	440	426	433	---	---	---	---	---	---
6	572	536	551	452	440	447	---	---	---	232	228	230
7	570	540	552	470	450	463	---	---	---	244	230	238
8	576	554	566	484	468	477	---	---	---	250	242	246
9	558	524	549	506	484	496	216	206	211	254	248	251
10	520	494	507	512	504	509	226	216	221	256	248	252
11	500	490	496	508	496	502	230	212	224	254	244	250
12	496	484	490	494	478	485	---	---	---	256	240	249
13	534	394	463	500	478	489	---	---	---	238	206	221
14	528	406	476	508	500	505	---	---	---	208	202	205
15	486	440	463	504	466	487	---	---	---	208	202	205
16	440	436	438	480	432	449	---	---	---	210	204	206
17	438	422	431	446	396	419	---	---	---	212	206	209
18	426	418	422	396	364	381	---	---	---	214	208	209
19	422	416	420	360	334	344	---	---	---	218	210	215
20	426	420	422	334	324	327	---	---	---	---	---	---
21	426	420	424	342	318	331	262	236	247	---	---	---
22	434	424	429	316	288	302	260	236	242	---	---	---
23	464	422	435	288	262	273	238	228	233	---	---	---
24	514	438	462	286	258	270	224	190	199	---	---	---
25	480	456	471	292	228	256	---	---	---	136	126	130
26	454	394	421	238	228	232	---	---	---	154	138	145
27	390	368	377	240	230	238	---	---	---	166	154	159
28	370	360	364	---	---	---	---	---	---	180	164	173
29	370	362	367	---	---	---	166	138	144	190	178	184
30	378	368	375	204	180	193	150	140	145	200	188	194
31	390	376	385	---	---	---	---	---	---	208	200	204
MONTH	618	360	475	512	180	391	---	---	---	---	---	---

03408500 NEW RIVER AT NEW RIVER, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	216	208	212	---	---	---	---	---	---	180	170	176
2	230	214	222	---	---	---	---	---	---	176	144	164
3	238	226	232	---	---	---	---	---	---	---	---	---
4	364	236	253	---	---	---	---	---	---	---	---	---
5	508	258	341	---	---	---	---	---	---	---	---	---
6	264	258	261	---	---	---	---	---	---	---	---	---
7	270	262	266	---	---	---	166	154	160	---	---	---
8	276	252	267	---	---	---	180	166	174	---	---	---
9	278	248	272	206	202	204	190	180	184	---	---	---
10	282	276	278	230	202	214	204	192	197	---	---	---
11	276	122	192	230	212	218	214	202	208	---	---	---
12	134	120	128	222	214	218	220	214	216	---	---	---
13	152	134	142	224	220	223	226	218	222	---	---	---
14	132	114	120	232	224	228	232	226	229	234	226	230
15	146	122	136	240	232	236	246	232	239	250	234	240
16	164	146	155	240	222	231	256	246	252	258	246	252
17	178	166	172	222	206	211	256	248	251	266	254	259
18	192	178	186	208	194	202	258	252	254	276	264	270
19	202	190	198	194	186	189	264	256	260	288	276	283
20	214	204	209	---	---	---	266	262	265	300	290	294
21	224	214	218	---	---	---	270	264	267	308	300	303
22	234	222	229	138	130	134	270	258	264	322	308	316
23	242	234	238	160	138	148	280	184	233	330	320	325
24	256	242	249	168	160	165	182	168	172	346	328	334
25	264	254	259	178	170	174	176	168	172	358	344	352
26	268	258	264	214	176	195	188	178	182	364	358	360
27	268	250	259	226	212	219	198	186	192	384	364	375
28	254	170	204	---	---	---	206	198	203	356	250	303
29	---	---	---	---	---	---	204	164	184	248	176	208
30	---	---	---	---	---	---	172	164	169	236	216	228
31	---	---	---	---	---	---	---	---	---	228	220	223
MONTH	508	114	220	---	---	---	---	---	---	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	240	222	232	488	466	476	470	398	441	416	394	407
2	252	242	248	472	446	465	396	360	375	394	380	388
3	260	250	255	446	380	411	362	340	352	384	372	379
4	278	260	269	380	250	320	338	320	327	380	372	376
5	294	276	285	336	238	272	344	320	332	384	374	380
6	302	292	297	414	282	339	354	340	348	390	382	388
7	316	304	309	270	158	202	338	316	326	394	386	390
8	328	314	322	236	198	221	328	302	316	402	390	395
9	344	326	334	220	204	210	298	176	207	418	398	406
10	356	340	348	222	208	213	216	176	195	430	412	419
11	364	354	359	234	218	226	244	218	230	440	424	430
12	380	364	373	256	232	246	260	242	249	448	436	440
13	388	376	385	290	238	258	276	262	271	466	448	458
14	396	386	392	298	244	273	278	262	270	474	464	468
15	416	396	406	328	298	319	264	256	260	474	464	470
16	428	414	420	322	312	316	278	264	271	482	464	473
17	430	416	426	320	312	315	290	276	283	488	482	485
18	430	408	419	320	300	311	302	288	296	488	484	486
19	452	428	438	318	298	308	316	302	308	488	482	485
20	476	450	464	308	294	299	326	314	321	---	---	---
21	480	474	476	334	310	322	366	326	333	---	---	---
22	558	474	512	346	332	338	348	338	342	---	---	---
23	564	502	544	360	344	351	368	344	351	---	---	---
24	492	330	384	376	360	368	410	370	392	---	---	---
25	370	330	350	384	374	379	432	414	424	---	---	---
26	394	368	381	390	378	384	432	428	430	---	---	---
27	404	388	396	382	366	374	444	430	438	---	---	---
28	410	400	404	370	354	362	452	442	447	---	---	---
29	408	402	404	388	360	373	450	446	448	---	---	---
30	472	400	434	392	366	378	446	434	443	---	---	---
31	---	---	---	464	384	420	440	416	431	---	---	---
MONTH	564	222	376	488	158	324	470	176	337	---	---	---

03408500 NEW RIVER AT NEW RIVER, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.5	7.4	7.4	7.4	7.3	7.3	---	---	7.4	7.4	---	---
2	7.5	7.4	7.4	7.3	7.4	7.1	---	---	7.6	7.4	---	---
3	7.4	7.4	7.4	7.3	---	---	---	---	7.6	7.6	---	---
4	7.5	7.4	7.4	7.3	---	---	---	---	7.6	7.6	---	---
5	7.4	7.3	7.5	7.3	---	---	---	---	7.7	7.6	---	---
6	7.4	7.3	7.5	7.4	---	---	7.8	7.5	7.7	7.7	---	---
7	7.3	7.2	7.6	7.5	---	---	7.8	7.7	7.8	7.7	---	---
8	7.3	7.3	7.6	7.5	---	---	7.7	7.6	7.7	7.7	---	---
9	7.3	7.3	7.6	7.5	7.7	7.4	7.7	7.6	7.8	7.7	7.6	7.5
10	7.4	7.3	7.5	7.4	7.7	7.4	7.7	7.5	7.7	7.7	7.6	7.5
11	7.3	7.3	7.4	7.4	7.5	7.3	7.8	7.6	7.7	6.9	7.6	7.5
12	7.5	7.2	7.6	7.4	---	---	8.0	7.8	7.1	6.9	7.6	7.5
13	7.6	6.9	7.6	7.5	---	---	7.8	7.6	7.3	7.1	7.5	7.5
14	7.4	6.7	7.7	7.6	---	---	7.6	7.4	7.3	6.9	7.5	7.5
15	7.4	7.3	7.7	7.5	---	---	7.4	7.3	7.1	7.0	7.5	7.5
16	7.5	7.4	7.6	6.8	---	---	7.4	7.4	7.2	7.1	7.5	7.4
17	7.4	7.4	7.6	7.6	---	---	7.4	7.4	7.3	7.2	7.4	7.4
18	7.4	7.4	7.6	7.5	---	---	7.4	7.4	7.3	7.2	7.4	7.3
19	7.4	7.3	7.6	7.5	---	---	7.5	7.4	7.3	7.3	7.3	7.3
20	7.4	7.3	7.5	7.4	---	---	---	---	7.5	7.3	---	---
21	7.3	7.3	7.4	7.3	7.6	7.5	---	---	7.5	7.4	---	---
22	7.3	7.2	7.5	7.4	7.6	7.5	---	---	7.4	7.4	7.2	7.1
23	7.3	7.1	7.4	7.4	7.6	7.4	---	---	7.5	7.4	7.2	7.1
24	7.3	7.0	7.4	7.3	7.6	7.5	---	---	7.5	7.4	7.2	7.2
25	7.4	7.3	7.4	7.4	---	---	7.1	7.0	7.6	7.5	7.2	7.2
26	7.4	7.4	7.4	7.4	---	---	7.2	7.1	7.6	7.6	7.3	7.2
27	7.4	7.4	7.5	7.4	---	---	7.2	7.1	7.6	7.4	7.3	7.3
28	7.5	7.4	---	---	---	---	7.3	7.2	7.5	7.4	---	---
29	7.4	7.4	---	---	7.5	7.1	7.3	7.2	---	---	---	---
30	7.4	7.4	7.3	7.2	7.7	7.4	7.3	7.3	---	---	---	---
31	7.4	7.3	---	---	---	---	7.4	7.3	---	---	---	---
MONTH	7.6	6.7	7.7	6.8	---	---	---	---	7.8	6.9	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	7.3	7.3	7.5	7.4	7.7	7.4	7.8	7.7	7.5	7.4
2	---	---	7.3	7.1	7.6	7.4	7.7	7.6	7.7	7.5	7.4	7.4
3	---	---	---	---	7.6	7.4	7.6	7.5	7.6	7.5	7.4	7.4
4	---	---	---	---	7.5	7.4	7.6	7.2	7.7	7.4	7.4	7.3
5	---	---	---	---	7.5	7.4	7.5	7.1	7.7	7.5	7.5	7.3
6	---	---	---	---	7.5	7.4	7.9	7.4	7.7	7.6	7.5	7.4
7	7.3	7.2	---	---	7.6	7.4	7.8	7.0	7.6	7.5	7.6	7.5
8	7.2	7.2	---	---	7.6	7.5	7.7	7.4	7.7	7.4	7.6	7.6
9	7.3	7.2	---	---	7.6	7.5	7.5	7.4	7.7	7.3	7.6	7.6
10	7.3	7.3	---	---	7.6	7.5	7.5	7.4	7.4	7.3	7.7	7.5
11	7.3	7.3	---	---	7.6	7.5	7.4	7.4	7.4	7.3	7.6	7.5
12	7.3	7.3	---	---	7.7	7.5	7.4	7.3	7.5	7.4	7.5	7.4
13	7.3	7.3	---	---	7.6	7.5	7.3	7.2	7.5	7.5	7.5	7.4
14	7.4	7.3	7.2	7.1	7.6	7.5	7.3	7.3	7.6	7.5	7.5	7.3
15	7.4	7.4	7.3	7.2	7.6	7.5	7.5	7.3	7.6	7.5	7.5	7.3
16	7.4	7.4	7.3	7.3	7.5	7.5	7.4	7.3	7.6	7.5	7.5	7.4
17	7.5	7.4	7.4	7.3	7.5	7.4	7.4	7.3	7.7	7.5	7.6	7.5
18	7.6	7.5	7.4	7.3	7.5	7.4	7.5	7.3	7.8	7.5	7.7	7.6
19	7.6	7.5	7.4	7.4	7.5	7.5	7.5	7.4	7.8	7.6	7.7	7.6
20	7.6	7.5	7.5	7.4	7.5	7.5	7.7	7.3	7.7	7.6	---	---
21	7.5	7.4	7.5	7.4	7.5	7.5	8.0	7.4	7.8	7.6	---	---
22	7.5	7.4	7.5	7.5	7.6	7.4	8.1	7.5	7.8	7.6	---	---
23	7.6	7.4	7.5	7.5	7.6	7.3	7.9	7.6	7.8	7.5	---	---
24	7.4	7.3	7.6	7.4	7.3	7.1	7.9	7.7	7.7	7.4	---	---
25	7.4	7.3	7.7	7.5	7.4	7.2	7.9	7.7	7.8	7.6	---	---
26	7.4	7.3	7.7	7.6	7.5	7.3	7.8	7.6	7.8	7.7	---	---
27	7.4	7.3	7.6	7.2	7.6	7.4	7.7	7.5	7.7	7.6	---	---
28	7.4	7.3	7.4	7.0	7.7	7.5	7.5	7.4	7.6	7.5	---	---
29	7.3	7.1	7.3	7.1	7.6	7.5	7.6	7.5	7.6	7.5	---	---
30	7.3	7.2	7.5	7.3	7.5	7.3	7.6	7.4	7.6	7.5	---	---
31	---	---	7.5	7.4	---	---	7.7	7.6	7.5	7.4	---	---
MONTH	---	---	---	---	7.7	7.1	8.1	7.0	7.8	7.3	---	---

03408500 NEW RIVER AT NEW RIVER, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.0	17.5	18.0	13.5	12.0	12.5	7.0	6.0	6.5	---	---	---
2	19.0	17.0	18.0	14.0	12.0	13.0	7.5	5.5	6.0	---	---	---
3	19.5	17.0	18.0	14.0	13.5	13.5	---	---	---	---	---	---
4	19.5	17.5	18.5	14.0	12.5	13.5	---	---	---	---	---	---
5	19.0	18.0	18.5	12.5	12.0	12.0	---	---	---	---	---	---
6	19.0	18.0	18.5	12.0	11.0	11.5	---	---	---	3.5	3.0	3.5
7	19.0	17.5	18.0	11.0	10.0	10.5	---	---	---	4.0	3.5	3.5
8	19.0	17.5	18.0	10.5	9.5	10.0	---	---	---	4.0	3.5	3.5
9	18.5	17.5	18.0	11.0	9.5	10.0	6.0	5.5	6.0	4.0	3.5	3.5
10	19.0	17.0	18.0	10.5	10.0	10.5	7.5	6.0	7.0	4.5	3.0	4.0
11	18.0	17.0	17.5	10.0	9.0	9.5	8.5	7.0	7.5	3.0	2.0	2.5
12	18.0	17.0	17.5	9.0	8.5	8.5	---	---	---	2.0	1.0	1.5
13	17.5	15.5	16.5	8.5	8.0	8.0	---	---	---	1.5	1.0	1.5
14	16.0	14.5	15.0	8.0	6.5	7.5	---	---	---	2.5	1.5	2.0
15	15.5	14.5	14.5	8.0	7.5	8.0	---	---	---	2.5	2.0	2.5
16	15.5	13.5	14.5	8.0	7.5	7.5	---	---	---	3.0	2.5	2.5
17	16.0	14.0	15.0	7.5	7.0	7.0	---	---	---	3.0	2.5	3.0
18	16.0	14.5	15.0	7.5	6.5	7.0	---	---	---	3.0	1.5	2.0
19	16.5	15.5	16.0	8.5	7.5	8.0	---	---	---	1.5	.5	1.0
20	17.0	16.5	17.0	9.5	8.5	9.0	---	---	---	---	---	---
21	17.0	16.5	17.0	9.5	9.0	9.0	4.0	3.0	3.5	---	---	---
22	16.5	16.5	16.5	9.5	9.0	9.5	5.0	4.0	4.5	---	---	---
23	16.5	16.0	16.0	10.0	9.0	9.5	5.0	4.0	4.5	---	---	---
24	16.0	15.5	15.5	10.5	10.0	10.5	4.0	.0	2.0	---	---	---
25	15.0	14.5	15.0	10.5	9.0	10.0	---	---	---	5.0	4.0	5.0
26	14.5	13.5	14.0	9.0	7.5	8.0	---	---	---	5.0	4.5	5.0
27	14.0	12.5	13.0	7.5	6.5	7.0	---	---	---	4.5	4.0	4.5
28	13.5	12.0	12.5	---	---	---	---	---	---	4.5	4.5	4.5
29	13.0	12.0	12.5	---	---	---	3.0	.5	2.0	5.0	4.5	4.5
30	13.0	12.0	12.5	8.0	6.5	7.0	2.0	.0	1.0	5.0	4.0	4.5
31	13.0	12.0	12.5	---	---	---	---	---	---	4.0	3.0	3.5
MONTH	19.5	12.0	16.0	14.0	6.5	9.5	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	2.5	3.0	---	---	---	---	---	---	16.0	15.0	15.5
2	3.5	2.5	3.0	---	---	---	---	---	---	15.5	12.5	14.0
3	4.0	3.5	4.0	---	---	---	---	---	---	---	---	---
4	4.5	4.0	4.5	---	---	---	---	---	---	---	---	---
5	4.5	3.5	4.0	---	---	---	---	---	---	---	---	---
6	3.0	1.5	2.5	---	---	---	---	---	---	---	---	---
7	1.5	.5	1.0	---	---	---	11.0	8.5	10.0	---	---	---
8	1.0	.0	.5	---	---	---	11.0	10.5	11.0	---	---	---
9	1.5	.5	1.0	5.5	4.5	5.0	11.5	11.0	11.5	---	---	---
10	2.0	1.0	1.5	4.5	4.0	4.5	12.0	11.0	11.5	---	---	---
11	6.5	2.0	4.5	4.5	4.0	4.0	13.5	11.5	12.5	---	---	---
12	8.0	6.0	7.0	4.0	3.5	4.0	14.0	12.5	13.5	---	---	---
13	9.0	8.0	8.5	5.5	4.0	4.5	16.0	14.0	15.0	---	---	---
14	9.0	8.0	8.5	7.5	5.0	6.5	15.5	14.5	15.0	17.5	17.0	17.5
15	8.0	7.5	7.5	9.5	7.0	8.5	14.5	13.5	14.0	17.0	16.5	17.0
16	8.0	6.5	7.0	11.0	9.5	10.5	13.5	12.0	12.5	17.0	15.5	16.5
17	8.5	7.5	8.0	11.0	10.5	10.5	12.0	11.0	11.5	16.5	15.0	16.0
18	8.5	7.5	8.0	11.5	10.5	11.0	11.0	10.0	10.5	17.0	15.5	16.5
19	9.0	8.5	9.0	12.5	11.5	12.0	10.5	9.5	10.0	18.0	16.5	17.5
20	9.0	8.0	8.5	---	---	---	10.5	9.5	10.0	19.5	18.0	18.5
21	8.0	7.5	8.0	---	---	---	13.0	11.0	12.0	20.0	19.0	19.5
22	7.5	7.0	7.5	7.5	7.0	7.0	15.0	13.5	14.0	20.5	19.5	20.0
23	8.0	7.0	7.5	8.5	7.0	8.0	15.0	12.0	13.5	21.0	20.0	20.5
24	8.0	7.0	7.5	9.5	7.5	8.5	12.0	11.0	11.0	21.0	19.5	20.5
25	8.0	7.5	7.5	10.0	9.0	9.5	13.0	10.5	11.5	22.0	20.0	21.0
26	7.0	6.5	7.0	10.5	10.0	10.0	15.5	13.0	14.0	22.5	21.0	22.0
27	7.5	6.0	7.0	11.0	10.0	10.5	17.0	15.5	16.0	23.0	21.5	22.0
28	7.5	5.5	6.5	---	---	---	17.0	16.5	17.0	22.0	21.0	21.0
29	---	---	---	---	---	---	17.0	15.0	15.5	20.5	16.5	18.5
30	---	---	---	---	---	---	16.5	15.0	15.5	16.5	15.0	15.5
31	---	---	---	---	---	---	---	---	---	15.0	14.0	14.5
MONTH	9.0	.0	5.5	---	---	---	---	---	---	---	---	---

03408500 NEW RIVER AT NEW RIVER, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	14.5	15.5	23.5	22.5	23.0	23.5	23.0	23.5	25.5	23.0	24.0
2	18.0	16.0	17.0	23.5	22.5	23.0	23.5	23.0	23.5	25.5	23.0	24.5
3	20.0	17.5	18.5	23.0	22.0	22.5	24.0	23.0	23.5	24.0	23.0	23.5
4	21.5	19.0	20.0	23.0	22.0	22.5	25.0	23.5	24.0	23.5	23.0	23.0
5	23.0	20.0	21.5	22.5	21.0	22.0	25.0	24.0	24.5	23.0	21.5	22.5
6	23.5	21.0	22.5	22.5	21.5	21.5	25.0	24.5	24.5	22.5	21.0	22.0
7	24.0	21.5	23.0	21.0	20.0	20.5	25.5	24.5	25.0	22.0	20.5	21.5
8	25.0	22.5	23.5	21.0	19.5	20.0	25.5	24.0	25.0	22.0	20.0	21.0
9	25.5	23.0	24.5	21.5	20.0	21.0	24.0	21.5	22.0	22.0	20.0	21.0
10	26.0	23.5	24.5	23.0	21.5	22.5	23.5	22.5	23.0	22.5	20.5	21.5
11	26.5	24.0	25.5	25.0	22.5	23.5	23.5	23.0	23.0	22.5	21.0	21.5
12	27.0	24.5	26.0	25.0	23.5	24.5	24.0	23.0	23.5	23.0	21.0	22.0
13	27.5	25.5	27.0	25.0	23.5	24.5	24.5	23.5	24.0	24.0	21.5	23.0
14	26.5	25.5	26.0	26.0	24.5	25.0	25.5	23.5	24.5	25.0	22.5	23.5
15	27.0	25.0	26.0	26.0	25.0	25.5	25.0	23.5	24.5	24.0	21.5	22.5
16	26.0	25.0	25.5	25.5	25.0	25.0	25.5	24.0	24.5	22.0	20.0	21.0
17	26.5	25.0	25.5	25.0	23.5	24.5	25.5	24.0	25.0	21.0	19.0	20.0
18	27.0	24.5	26.0	24.0	23.5	23.5	25.5	24.0	24.5	20.0	18.5	19.0
19	27.5	25.0	26.5	24.0	23.0	23.5	25.5	24.5	25.0	20.0	18.0	19.0
20	28.0	26.0	27.0	24.5	23.0	24.0	25.5	24.0	25.0	---	---	---
21	27.5	26.5	27.0	25.5	23.5	24.5	25.5	24.0	24.5	---	---	---
22	26.5	25.5	26.0	25.5	23.5	24.5	26.0	23.5	24.5	---	---	---
23	26.5	25.5	26.0	26.0	24.0	25.0	25.5	24.0	25.0	---	---	---
24	26.5	24.5	25.5	26.5	24.5	25.5	25.0	24.0	24.5	---	---	---
25	26.0	24.0	25.0	27.0	25.0	26.0	24.5	23.0	23.5	---	---	---
26	26.5	24.0	25.0	28.0	25.5	26.5	24.5	23.0	23.5	---	---	---
27	26.0	23.5	25.0	26.5	25.0	25.5	24.5	23.0	24.0	---	---	---
28	26.0	24.0	25.0	25.0	24.0	24.5	24.0	23.5	24.0	---	---	---
29	25.5	24.0	24.5	25.0	24.0	24.5	25.5	23.0	24.0	---	---	---
30	24.5	22.5	23.5	24.0	23.0	23.5	25.0	23.5	24.0	---	---	---
31	---	---	---	23.5	22.5	23.0	25.5	23.5	24.0	---	---	---
MONTH	28.0	14.5	24.0	28.0	19.5	23.5	26.0	21.5	24.0	---	---	---

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.8	8.1	8.4	9.6	9.2	9.4	11.9	11.4	11.6	---	---	---
2	8.6	8.0	8.3	9.5	9.0	9.3	12.1	11.3	11.9	---	---	---
3	8.5	8.0	8.2	9.4	8.9	9.1	---	---	---	---	---	---
4	8.4	7.8	8.1	9.2	8.7	8.9	---	---	---	---	---	---
5	8.3	7.8	8.0	9.4	8.7	9.1	---	---	---	---	---	---
6	7.9	7.2	7.6	9.5	8.7	9.1	---	---	---	13.1	12.8	13.0
7	7.6	7.0	7.3	9.9	9.3	9.6	---	---	---	12.8	12.6	12.7
8	8.0	7.4	7.7	10.4	9.6	10.0	---	---	---	12.7	12.6	12.6
9	8.1	7.7	7.9	10.3	10.0	10.2	9.2	9.0	9.1	12.8	12.6	12.7
10	8.3	7.8	8.0	10.2	9.9	10.1	9.2	8.9	9.0	12.7	12.5	12.6
11	8.2	7.7	7.9	10.3	10.0	10.1	8.9	8.5	8.7	13.0	12.5	12.8
12	8.0	7.4	7.7	10.5	10.1	10.3	---	---	---	13.4	13.0	13.2
13	8.1	7.1	7.6	10.4	10.1	10.2	---	---	---	13.4	13.3	13.4
14	8.5	7.6	8.3	11.0	10.4	10.8	---	---	---	13.4	13.1	13.3
15	8.6	8.4	8.5	11.0	10.2	10.8	---	---	---	13.1	13.0	13.0
16	8.6	8.5	8.6	10.6	10.1	10.5	---	---	---	13.0	12.8	12.9
17	8.5	8.3	8.4	10.8	10.5	10.7	---	---	---	12.8	12.8	12.8
18	8.5	8.1	8.3	10.9	10.7	10.8	---	---	---	12.9	12.7	12.8
19	8.2	8.0	8.1	11.0	10.6	10.9	---	---	---	13.2	12.9	13.1
20	8.1	7.7	7.9	10.8	10.3	10.6	---	---	---	---	---	---
21	8.0	7.6	7.8	10.3	9.7	10.1	13.0	12.6	12.8	---	---	---
22	7.7	7.3	7.5	10.3	9.9	10.1	12.8	11.9	12.3	---	---	---
23	7.7	6.7	7.4	10.4	10.2	10.3	12.2	11.9	12.1	---	---	---
24	8.3	7.7	8.1	10.1	9.4	9.8	13.3	12.3	12.7	---	---	---
25	8.5	8.2	8.3	10.2	9.1	9.7	---	---	---	12.0	11.4	11.7
26	8.8	8.3	8.5	10.8	10.2	10.6	---	---	---	12.0	11.3	11.8
27	9.1	8.5	8.8	11.1	10.8	11.0	---	---	---	12.1	11.6	12.0
28	9.3	8.7	9.1	---	---	---	---	---	---	12.0	11.9	11.9
29	9.5	9.0	9.2	---	---	---	---	---	---	11.9	11.8	11.8
30	9.6	9.0	9.4	11.5	10.6	11.2	---	---	---	11.9	11.8	11.8
31	9.6	9.0	9.4	---	---	---	---	---	---	12.3	11.9	12.1
MONTH	9.6	6.7	8.2	11.5	8.7	10.1	---	---	---	---	---	---

03408500 NEW RIVER AT NEW RIVER, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	12.3	12.4	---	---	---	---	---	---	9.5	9.0	9.3
2	12.5	12.3	12.4	---	---	---	---	---	---	9.7	9.5	9.5
3	12.4	12.0	12.3	---	---	---	---	---	---	---	---	---
4	12.0	11.8	12.0	---	---	---	---	---	---	---	---	---
5	11.9	11.8	11.9	---	---	---	---	---	---	---	---	---
6	12.4	11.9	12.1	---	---	---	---	---	---	---	---	---
7	12.9	12.4	12.7	---	---	---	10.4	10.0	10.3	---	---	---
8	12.9	12.7	12.9	---	---	---	10.2	9.7	10.1	---	---	---
9	12.9	12.8	12.8	10.5	10.1	10.3	10.1	9.9	10.0	---	---	---
10	12.8	12.6	12.7	10.7	10.5	10.6	10.1	9.8	10.0	---	---	---
11	12.6	10.6	11.7	10.8	10.7	10.8	9.9	9.7	9.8	---	---	---
12	11.3	10.7	11.1	11.0	10.9	10.9	9.7	9.5	9.6	---	---	---
13	11.0	10.1	10.6	11.1	10.7	11.0	9.6	9.3	9.4	---	---	---
14	10.8	10.1	10.6	11.0	10.7	10.8	9.3	9.0	9.1	9.1	8.9	9.0
15	11.3	10.2	10.8	10.8	10.3	10.5	9.5	9.3	9.4	9.0	8.8	8.9
16	11.2	10.5	10.9	10.4	9.8	10.1	9.8	9.5	9.6	9.1	9.0	9.0
17	11.0	10.8	10.9	10.1	9.9	10.0	10.3	9.9	10.0	9.2	9.1	9.2
18	10.9	10.7	10.8	10.3	10.1	10.2	10.6	10.2	10.4	9.3	9.1	9.2
19	10.8	10.5	10.6	10.2	10.0	10.1	10.7	10.5	10.6	9.2	9.0	9.0
20	10.7	10.5	10.6	---	---	---	10.8	10.7	10.8	8.9	8.7	8.8
21	10.9	10.7	10.8	---	---	---	10.7	10.2	10.5	8.7	8.4	8.6
22	11.1	10.9	11.0	11.5	11.3	11.4	10.2	9.3	9.8	8.6	8.4	8.5
23	11.1	10.9	11.0	11.5	11.0	11.3	9.8	9.0	9.4	8.4	8.2	8.3
24	11.0	10.9	10.9	11.4	10.1	11.1	10.3	9.8	10.1	8.4	7.8	8.2
25	10.9	10.9	10.9	11.0	10.5	10.8	10.5	10.1	10.3	8.6	8.3	8.4
26	11.2	11.0	11.1	10.8	10.6	10.7	10.1	9.7	9.9	8.7	8.3	8.4
27	11.3	10.9	11.2	10.8	10.6	10.7	9.6	9.2	9.3	8.2	7.7	8.0
28	11.2	10.5	10.9	---	---	---	9.2	8.8	9.0	8.0	7.7	7.8
29	---	---	---	---	---	---	9.3	8.8	9.2	8.8	8.0	8.4
30	---	---	---	---	---	---	9.4	9.0	9.3	9.3	8.8	9.1
31	---	---	---	---	---	---	---	---	---	9.6	9.3	9.4
MONTH	12.9	10.1	11.5	---	---	---	---	---	---	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.5	9.4	9.5	7.7	7.1	7.4	8.2	7.7	8.0	7.4	7.1	7.3
2	9.4	9.2	9.3	7.7	7.5	7.6	7.9	7.5	7.8	7.4	7.2	7.3
3	9.2	8.9	9.1	7.7	7.4	7.6	7.9	7.4	7.7	7.5	7.3	7.3
4	8.9	8.6	8.8	7.6	7.2	7.5	8.2	7.5	7.8	7.5	7.1	7.2
5	8.6	8.3	8.5	7.6	7.3	7.4	7.9	7.5	7.7	7.8	6.9	7.3
6	8.5	8.1	8.3	7.8	7.4	7.6	7.7	7.3	7.6	8.1	7.4	7.8
7	8.5	7.9	8.2	8.3	7.8	8.1	7.5	7.2	7.3	8.4	7.8	8.1
8	8.5	7.9	8.2	8.3	8.1	8.2	7.6	7.0	7.2	8.5	8.1	8.3
9	8.4	7.9	8.1	8.2	8.1	8.1	7.9	6.9	7.6	8.5	8.2	8.3
10	8.3	7.8	8.0	8.0	7.8	7.9	7.9	7.6	7.7	8.5	8.1	8.2
11	8.2	7.7	7.9	7.8	7.4	7.6	7.7	7.6	7.7	8.3	8.0	8.1
12	8.1	7.6	7.9	7.5	7.3	7.4	7.8	7.7	7.7	8.2	7.7	8.0
13	8.0	7.4	7.9	7.4	7.0	7.2	7.8	7.6	7.6	8.1	7.6	7.8
14	7.8	7.4	7.6	7.4	7.3	7.3	7.7	7.4	7.6	7.9	7.4	7.6
15	7.6	7.0	7.3	7.5	7.2	7.4	7.7	7.3	7.5	7.8	7.3	7.5
16	7.4	6.9	7.2	7.4	7.1	7.3	7.9	7.2	7.5	7.7	7.3	7.5
17	7.2	6.8	7.0	7.3	7.0	7.1	8.0	7.2	7.6	8.1	7.6	7.8
18	7.3	6.9	7.1	7.4	7.2	7.3	8.2	7.2	7.7	8.1	7.8	7.9
19	7.2	6.8	7.0	7.8	7.4	7.6	8.0	7.4	7.7	8.2	7.8	8.0
20	7.1	6.6	6.9	8.2	7.6	7.9	8.0	7.4	7.7	---	---	---
21	7.1	6.7	6.9	8.7	7.5	8.0	7.9	7.4	7.7	---	---	---
22	6.9	6.3	6.7	8.7	7.4	8.0	8.0	7.4	7.7	---	---	---
23	7.1	6.7	6.9	8.4	7.5	7.9	7.7	7.3	7.6	---	---	---
24	6.9	6.6	6.8	8.4	7.6	8.0	7.6	7.2	7.5	---	---	---
25	7.1	6.6	6.9	8.1	7.5	7.8	8.0	7.3	7.7	---	---	---
26	7.4	6.8	7.1	8.1	7.5	7.8	8.0	7.5	7.8	---	---	---
27	7.6	7.1	7.3	7.9	7.4	7.5	8.0	7.6	7.8	---	---	---
28	7.8	7.3	7.5	7.4	6.9	7.2	7.9	7.6	7.8	---	---	---
29	7.6	7.1	7.4	8.0	7.4	7.7	7.8	7.5	7.7	---	---	---
30	7.2	6.5	6.9	8.1	7.4	7.8	7.7	7.4	7.6	---	---	---
31	---	---	---	8.0	7.7	7.9	7.6	7.3	7.4	---	---	---
MONTH	9.5	6.3	7.7	8.7	6.9	7.7	8.2	6.9	7.7	---	---	---

03408500 NEW RIVER AT NEW RIVER, TN--Continued

TURBIDITY (JTU), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---							---	---	---	---
2	---	---							---	---	---	---
3	---	---							20	6	---	---
4	---	---							20	0	---	---
5	---	---							35	0	---	---
6	---	---							9	0	---	---
7	---	---							10	3	---	---
8	---	---							15	6	---	---
9	---	---							20	9	30	15
10	---	---							15	6	15	8
11	---	---							1400	0	15	10
12	9	0							1100	75	30	15
13	410	3							600	50	35	25
14	140	0							1200	110	30	25
15	120	0							---	---	30	20
16	65	35							45	35	30	20
17	35	0							35	20	35	25
18	55	0							25	9	40	25
19	9	0							15	3	50	35
20	6	0							15	0	---	---
21	40	0							20	0	---	---
22	25	0							6	0	---	---
23	140	20							6	0	300	35
24	180	30							6	0	45	20
25	65	25							6	0	25	15
26	55	40							6	0	25	15
27	40	20							70	0	20	6
28	10	0							200	75	---	---
29	---	---							---	---	---	---
30	---	---							---	---	---	---
31	---	---							---	---	---	---
MONTH	---	---							1400	0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	100	40	110	50	55	35	160	150	6	0
2	---	---	500	30	75	35	40	20	150	130	6	0
3	---	---	---	---	45	35	50	0	150	120	6	0
4	---	---	---	---	55	25	260	0	150	140	6	0
5	---	---	---	---	65	35	320	110	160	130	10	0
6	---	---	---	---	55	30	1100	80	170	110	20	3
7	35	20	---	---	60	45	1800	500	140	75	25	6
8	25	15	---	---	80	50	500	280	460	40	25	0
9	20	6	---	---	65	50	280	100	1900	600	20	0
10	75	3	---	---	85	35	100	70	500	160	25	9
11	15	6	---	---	95	45	85	55	170	10	25	0
12	10	0	---	---	95	55	80	3	15	0	20	3
13	9	0	---	---	85	10	450	0	40	3	25	0
14	3	0	190	95	55	0	230	0	40	0	25	0
15	6	0	160	65	55	6	25	3	40	0	25	9
16	10	0	95	45	50	20	20	9	25	0	20	6
17	30	0	45	20	60	15	15	0	30	9	20	3
18	70	20	25	9	55	20	70	0	40	20	20	3
19	35	20	30	9	70	25	35	0	40	25	20	3
20	40	15	35	3	50	3	50	25	40	10	---	---
21	45	15	40	6	55	15	55	40	40	9	---	---
22	40	15	60	10	55	20	65	50	95	3	---	---
23	420	45	55	15	50	25	65	55	45	6	---	---
24	110	45	50	15	70	30	70	50	25	0	---	---
25	65	25	60	25	65	20	70	55	20	9	---	---
26	40	20	70	40	60	20	170	60	20	3	---	---
27	35	15	90	55	55	25	170	160	25	9	---	---
28	220	9	340	80	100	25	160	150	25	3	---	---
29	1100	140	1200	350	80	50	160	150	15	0	---	---
30	750	90	340	190	55	20	170	150	15	0	---	---
31	---	---	220	110	---	---	160	140	10	0	---	---
MONTH	---	---	---	---	110	0	1800	0	1900	0	---	---

03408500 NEW RIVER AT NEW RIVER, TN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	14	9	.34	48	7	.91	581	29	45
2	14	11	.42	45	6	.73	1240	178	1620
3	12	9	.29	42	8	.91	8080	1000	30000
4	10	10	.27	42	8	.91	4960	400	5360
5	29	22	1.7	57	10	1.5	2370	100	640
6	75	11	2.2	74	7	1.4	1650	150	668
7	74	2	.40	59	3	.48	1260	100	340
8	39	3	.32	50	8	1.1	919	60	149
9	27	7	.51	45	10	1.2	705	40	76
10	20	6	.32	42	12	1.4	553	18	27
11	16	8	.35	40	10	1.1	718	34	105
12	16	10	.43	48	13	1.7	2810	202	1680
13	207	52	42	68	8	1.5	1550	40	167
14	495	41	72	65	24	4.2	1200	25	81
15	152	38	16	291	38	30	1250	22	74
16	88	42	10	559	38	57	1000	28	76
17	63	29	4.9	312	43	36	776	13	27
18	49	22	2.9	212	22	13	618	10	17
19	40	14	1.5	161	14	6.1	520	9	13
20	35	11	1.0	149	15	6.0	435	8	9.4
21	32	15	1.3	815	69	161	377	8	8.1
22	37	17	1.7	470	60	76	730	21	41
23	206	20	30	304	22	18	1310	64	226
24	465	40	61	963	122	444	992	24	64
25	214	24	14	866	90	210	550	15	22
26	155	30	13	476	26	33	530	10	14
27	117	20	6.3	416	25	28	525	10	14
28	89	16	3.8	4730	944	16000	2020	187	2030
29	73	16	3.2	1990	214	1350	2810	240	2100
30	62	8	1.3	904	50	122	1450	40	157
31	53	4	.57	---	---	---	939	30	76
TOTAL	2978	---	294.02	14343	---	18609.14	45428	---	45926.5
		JANUARY			FEBRUARY			MARCH	
1	879	30	71	438	7	8.3	1120	30	91
2	683	20	37	390	22	23	950	20	51
3	562	20	30	362	17	17	822	20	44
4	479	20	26	361	12	12	715	20	39
5	473	20	26	331	14	13	716	20	39
6	446	32	39	316	59	50	822	20	44
7	408	16	18	251	22	15	798	20	43
8	348	12	11	224	20	12	742	28	56
9	318	7	6.0	253	17	12	653	22	39
10	383	18	19	297	9	7.2	561	8	12
11	795	20	43	4780	1000	21600	510	2	2.8
12	689	41	76	4560	370	6010	452	3	3.7
13	666	23	41	3790	308	4090	484	15	20
14	612	6	9.9	7500	649	15600	615	18	30
15	553	7	10	2610	100	705	520	22	31
16	535	8	12	1550	56	234	691	23	43
17	508	30	41	1120	33	100	958	22	57
18	483	8	10	868	15	35	951	14	36
19	457	12	15	730	10	20	859	11	26
20	300	10	8.1	627	50	85	1720	182	1940
21	300	10	8.1	522	11	16	8440	777	21300
22	290	10	7.8	457	47	58	3200	100	911
23	280	10	7.6	427	9	10	2030	64	351
24	4410	732	12800	464	8	10	1480	52	208
25	3930	172	2080	431	7	8.1	1250	25	84
26	1940	120	629	374	10	10	1030	42	117
27	1290	52	181	683	54	100	851	14	32
28	977	23	61	2130	141	811	4760	526	10200
29	791	19	41	1630	40	176	7430	1000	20000
30	647	13	23	---	---	---	2700	50	364
31	529	10	14	---	---	---	1620	40	175
TOTAL	25961	---	16401.5	38476	---	49847.6	50450	---	56389.5

03408500 NEW RIVER AT NEW RIVER, TN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1180	30	96	1320	56	200	329	62	55
2	921	20	50	2510	172	2480	256	47	32
3	839	20	45	7900	760	17300	204	38	21
4	2520	400	4000	7070	300	5730	170	45	21
5	3310	200	1790	2950	150	1190	143	36	14
6	1930	64	334	4740	300	10000	122	66	22
7	1350	44	160	25000	2000	125000	106	52	15
8	1050	21	60	14300	600	25000	94	42	11
9	892	17	41	4680	500	6320	86	35	8.1
10	823	40	89	2210	300	1790	77	38	7.9
11	680	9	17	1420	200	767	69	39	7.3
12	581	9	14	1030	150	417	64	39	6.7
13	519	8	11	812	100	219	59	76	12
14	466	8	10	799	240	518	76	216	44
15	417	39	44	569	210	323	81	241	53
16	390	8	8.4	450	109	132	79	128	27
17	413	9	10	373	66	66	113	46	14
18	377	1	1.0	320	49	42	127	77	26
19	329	13	12	281	40	30	82	61	14
20	309	12	10	252	39	27	67	47	8.5
21	304	9	7.4	224	32	19	78	58	12
22	453	19	23	204	162	89	193	64	33
23	1760	151	718	195	64	34	130	42	15
24	1170	88	278	232	29	18	119	34	11
25	865	29	68	179	21	10	83	36	8.1
26	683	20	37	155	36	15	62	133	22
27	567	22	34	414	41	46	48	32	4.1
28	778	34	98	640	72	169	40	23	2.5
29	1380	261	1080	1570	496	2160	81	16	3.5
30	1510	162	660	720	111	216	313	35	30
31	---	---	---	456	98	121	---	---	---
TOTAL	28766	---	9805.8	83975	---	200448	3551	---	560.7
		JULY			AUGUST			SEPTEMBER	
1	208	25	14	196	29	15	37	18	1.8
2	151	40	16	199	30	16	33	32	2.9
3	276	29	22	176	89	42	29	22	1.7
4	128	90	31	177	50	24	43	20	2.3
5	293	136	108	289	37	29	92	25	6.2
6	998	388	1110	244	30	20	55	22	3.3
7	1510	906	4130	173	55	26	38	20	2.1
8	840	258	609	556	148	533	29	15	1.2
9	382	121	125	772	870	1870	24	18	1.2
10	232	69	43	452	221	270	21	15	.85
11	161	65	28	398	112	120	20	15	.81
12	219	61	36	265	62	44	18	16	.78
13	416	155	174	180	59	29	18	15	.73
14	248	130	87	133	69	25	17	16	.73
15	214	56	32	106	45	13	16	20	.86
16	154	53	22	91	33	8.1	14	16	.60
17	178	57	27	88	29	6.9	12	15	.49
18	252	67	46	88	25	5.9	11	14	.42
19	258	55	38	72	20	3.9	11	20	.59
20	164	39	17	68	18	3.3	10	15	.41
21	122	30	9.9	63	14	2.4	9.6	15	.39
22	102	27	7.4	58	44	6.9	9.0	15	.36
23	93	27	6.8	89	21	5.0	8.6	15	.35
24	88	21	5.0	206	26	14	8.4	15	.34
25	71	25	4.8	97	22	5.8	8.4	15	.34
26	59	40	6.4	68	19	3.5	8.1	15	.33
27	76	55	11	54	16	2.3	7.3	15	.30
28	191	24	12	46	17	2.1	7.4	15	.30
29	149	29	12	41	18	2.0	7.4	15	.30
30	186	38	19	41	61	6.8	7.9	15	.32
31	257	36	25	42	17	1.9	---	---	---
TOTAL	8676	---	6834.3	5528	---	3156.8	630.1	---	33.30

TOTAL LOAD FOR YEAR: 408307.16

03409500 CLEAR FORK NEAR ROBBINS, TN

LOCATION.--Lat 36°23'18", long 84°37'49", Scott County, Hydrologic Unit 05130104, on right bank 300 ft downstream from Burnt Mill Bridge, 3.3 mi northwest of Robbins, and at mile 3.7.

DRAINAGE AREA.--272 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1306: 1931(M), 1936-37(M), 1943-44(M). WSP 1436: Drainage area. WSP 1910: 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 1,081.46 ft Sandy Hook datum. Prior to Aug. 10, 1940, nonrecording gage at site 300 ft upstream at datum 1.00 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--50 years (water years 1931-71, 1976-84), 476 ft³/s, 23.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s Feb. 3, 1939, gage height, 18.5 ft from floodmarks, site and datum then in use, from rating curve extended above 14,000 ft³/s on basis of slope-area measurement of peak flow; minimum observed, 0.2 ft³/s Sept. 19-21, 1932; minimum gage height observed, 0.28 ft Oct. 1-3, 1936, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 23, 1929 reached a stage of 22.1 ft, former site and datum, from information by local residents, and flood of May 27, 1973, reached a stage of 18.92 ft, present site and datum, from floodmark; discharge 35,700 ft³/s, from rating curve extended above 14,000 ft³/s on basis of slope-area measurement at gage height 18.5 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Nov. 28	1200	8630	10.20	Mar. 28	0230	8750	10.26
Dec. 3	0400	10800	11.26	May 3	1630	6500	8.99
Feb. 11	1330	9160	10.47	May 7	2100	*22600	15.32
Mar. 21	0300	7010	9.30				

Minimum discharge, 2.7 ft³/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	16	520	472	365	743	1030	807	183	23	77	11
2	3.5	15	1340	445	323	681	773	1380	139	31	96	11
3	3.4	15	7390	401	302	610	716	5370	109	34	95	9.7
4	3.4	15	4120	355	301	527	1790	4200	92	43	75	11
5	8.0	16	2120	319	276	531	2570	2340	77	37	86	9.9
6	15	26	1850	318	259	648	1740	3310	65	44	142	9.0
7	33	26	1750	295	182	678	1230	18200	55	421	97	9.0
8	20	24	1080	260	250	601	907	13400	48	379	69	9.0
9	14	22	726	237	250	502	733	4040	42	162	55	8.2
10	11	20	539	277	236	420	646	1970	36	90	223	6.9
11	9.3	20	544	566	4780	375	522	1280	29	60	352	6.6
12	9.1	19	1400	472	3950	334	431	850	23	60	221	7.2
13	43	19	1080	479	2130	340	371	599	39	200	121	5.9
14	102	20	884	427	4280	451	327	936	35	216	78	5.4
15	81	50	897	407	2120	371	286	623	34	113	57	5.3
16	46	204	701	395	1320	461	261	471	36	77	46	5.0
17	31	151	533	376	944	756	273	368	38	101	40	4.9
18	22	105	428	366	701	877	271	299	80	149	36	4.7
19	18	79	365	338	578	780	232	245	51	188	31	4.4
20	15	83	314	230	531	1780	212	207	39	115	26	4.1
21	13	181	277	283	442	5470	213	175	36	75	23	3.8
22	14	195	480	260	379	2870	446	152	55	55	21	3.4
23	20	140	950	260	341	1710	1200	138	66	44	19	3.4
24	31	415	706	2050	313	1190	805	137	101	34	20	3.2
25	51	413	420	3150	307	966	597	122	103	30	25	3.0
26	44	233	350	1740	278	802	461	103	58	26	22	2.9
27	35	226	350	1200	330	645	374	104	40	29	19	2.9
28	28	5440	1020	868	926	4180	352	281	29	80	17	2.9
29	23	2100	2150	673	914	6060	534	590	23	106	15	2.8
30	20	895	1120	541	---	2450	860	396	21	72	13	3.0
31	18	---	634	438	---	1450	---	253	---	56	12	---
TOTAL	788.5	11183	37038	18898	28308	40259	21163	63346	1782	3150	2229	179.5
MEAN	25.4	373	1195	610	976	1299	705	2043	59.4	102	71.9	5.98
MAX	102	5440	7390	3150	4780	6060	2570	18200	183	421	352	11
MIN	3.4	15	277	230	182	334	212	103	21	23	12	2.8
CFSM	.09	1.37	4.39	2.24	3.59	4.78	2.59	7.51	.22	.38	.26	.02
IN.	.11	1.53	5.07	2.58	3.87	5.51	2.89	8.66	.24	.43	.30	.02

CAL YR 1983	TOTAL	191583.9	MEAN	525	MAX	7390	MIN	2.9	CFSM	1.93	IN.	26.20
WTR YR 1984	TOTAL	228324.0	MEAN	624	MAX	18200	MIN	2.8	CFSM	2.29	IN.	31.23

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1977-82, October 1983 to September 1984.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to September 1984.
pH: October 1983 to September 1984.
WATER TEMPERATURE: October 1983 to September 1984.
DISSOLVED OXYGEN: October 1983 to September 1984.
TURBIDITY: October 1983 to September 1984.
SUSPENDED SEDIMENT DISCHARGE: October 1983 to September 1984.

INSTRUMENTATION.--Five parameter water-quality monitor and sediment pumping sampler since Oct. 1, 1983.

REMARKS.--Interruptions in the record were due to malfunction of the instruments.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 254 micromhos July 29, 1984; minimum, 28 micromhos May 8, 1984.
pH: Maximum, 8.1 units Sept. 11, 1984; minimum, 5.2 units April 6, 1977.
WATER TEMPERATURE: Maximum observed, 34.0°C July 16, 1980; maximum recorded, 29.0°C June 15, 20, July 26, 1984; minimum 0.5°C many days December 1983, January, February, 1984.
DISSOLVED OXYGEN: Maximum, 14.2 mg/l Dec. 25, 26, 30, 31, 1983, Jan. 20, 21, 1984; minimum, 6.6 mg/l June 12-15, 21, July 1, 27, 28, 1984.
TURBIDITY: Maximum, 370 JTU May 6, 1984; minimum, 0 JTU many days 1983, 1984.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 353 mg/l May 7, 1984; minimum daily mean, 1 mg/l Nov. 9-11, 1983, Jan. 31, Apr. 9-11, 1984.
SEDIMENT LOADS: Maximum daily, 16,900 tons May 7, 1984; minimum daily, 0.03 tons Sept. 25, 29, 30, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: MAXIMUM, 254 micromhos July 29; minimum, 28 micromhos May 8.
pH: Maximum, 8.1 units Sept. 11; minimum 6.3 units May 7, 8.
WATER TEMPERATURE: Maximum, 29.0°C June 15, 20, July 26; minimum, 0.5°C many days December, January, February.
DISSOLVED OXYGEN: Maximum, 14.2 mg/l Dec. 25, 26, 30, 31, Jan. 20, 21,; minimum, 6.6 mg/l June 12-15, 21, July 1, 27, 28.
TURBIDITY: Maximum, 370 JTU May 6; minimum, 0 JTU many days.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 353 mg/l May 7; minimum daily mean, 1 mg/l Nov. 9-11, Jan. 31, Apr. 9-11.
SEDIMENT LOADS: Maximum daily, 16,900 tons May 7; minimum daily, 0.03 tons Sept. 25, 29, 30.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	104	102	103	---	---	---	58	56	58	44	42	43
2	104	102	103	---	---	---	62	56	60	44	44	44
3	104	102	103	---	---	---	---	---	---	46	44	46
4	102	100	102	---	---	---	---	---	---	48	46	47
5	106	86	97	---	---	---	---	---	---	52	48	50
6	96	94	95	---	---	---	48	46	46	60	54	57
7	94	90	92	---	---	---	48	46	47	66	58	63
8	92	90	90	---	---	---	48	46	47	60	54	57
9	92	90	90	114	106	111	50	48	49	60	54	58
10	90	86	89	106	104	106	52	50	50	56	54	55
11	86	84	85	108	106	107	54	52	52	64	54	60
12	84	80	82	116	108	111	56	50	52	64	56	58
13	86	72	77	122	116	119	50	48	49	64	56	59
14	98	72	77	---	---	---	50	48	49	64	54	57
15	188	102	161	---	---	---	52	50	50	54	52	54
16	180	154	170	---	---	---	52	52	52	54	54	54
17	152	144	149	---	---	---	52	52	52	54	54	54
18	144	138	142	---	---	---	52	52	52	54	52	53
19	138	130	135	---	---	---	54	52	54	54	52	54
20	130	124	126	---	---	---	56	54	55	56	54	55
21	124	118	121	---	---	---	58	56	56	60	56	59
22	120	118	119	---	---	---	58	56	57	64	60	61
23	118	112	117	---	---	---	58	54	56	64	64	64
24	112	106	109	98	86	92	56	50	53	64	46	55
25	110	102	106	88	80	84	52	50	52	46	42	43
26	100	90	96	88	86	88	54	52	52	42	40	41
27	96	90	92	86	76	84	54	54	54	42	40	42
28	---	---	---	---	---	---	54	46	51	44	42	42
29	---	---	---	---	---	---	50	42	46	44	44	44
30	---	---	---	56	52	54	42	42	42	48	44	46
31	---	---	---	---	---	---	42	42	42	50	48	49
MONTH	188	72	108	---	---	---	62	42	51	66	40	52

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	52	48	49	54	46	49	40	38	39	48	46	46
2	52	50	50	50	46	48	42	40	41	46	40	44
3	50	50	50	52	46	48	44	42	42	40	34	38
4	52	50	50	54	46	50	44	42	43	36	36	36
5	52	50	52	52	46	49	44	38	40	38	36	37
6	62	52	53	48	48	48	38	38	38	42	36	38
7	64	56	59	52	48	50	40	40	40	36	30	33
8	58	56	57	50	48	50	40	40	40	34	28	31
9	68	58	62	48	48	48	42	40	42	36	34	36
10	60	58	59	48	48	48	44	42	43	40	38	38
11	---	---	---	52	48	48	46	44	44	42	40	40
12	---	---	---	52	48	49	48	46	46	44	42	42
13	---	---	---	50	48	50	48	46	48	46	44	44
14	---	---	---	54	50	51	50	48	49	50	44	46
15	---	---	---	60	52	54	50	50	50	48	44	46
16	---	---	---	62	52	56	52	50	52	46	46	46
17	46	42	43	54	50	51	52	52	52	46	46	46
18	46	44	44	52	48	50	62	52	55	48	46	48
19	46	44	46	52	46	47	54	54	54	50	48	49
20	48	46	46	46	36	45	56	54	56	52	50	51
21	50	48	49	40	36	38	58	56	56	54	52	52
22	52	50	51	40	38	40	58	50	55	56	52	54
23	52	50	51	40	40	40	52	48	50	56	56	56
24	54	50	52	46	40	40	48	44	46	60	56	59
25	54	52	52	46	42	42	44	44	44	60	58	59
26	54	52	53	44	42	44	44	44	44	62	60	62
27	54	52	53	46	44	46	46	44	46	66	62	63
28	56	52	53	46	36	43	46	46	46	70	62	66
29	54	50	52	36	34	35	60	46	53	80	66	73
30	---	---	---	38	36	36	54	46	48	70	56	64
31	---	---	---	42	38	40	---	---	---	56	54	55
MONTH	---	---	---	62	34	46	62	38	47	80	28	48
		JUNE			JULY			AUGUST			SEPTEMBER	
1	56	54	55	110	100	107	92	90	92	94	92	93
2	58	56	56	110	102	106	90	80	86	96	94	95
3	58	56	58	110	96	103	92	80	84	96	94	95
4	60	58	59	154	98	123	92	90	91	96	94	95
5	62	60	61	156	126	146	102	90	94	98	94	96
6	64	62	62	124	86	110	102	76	87	98	96	96
7	64	62	64	118	80	93	82	76	78	96	94	95
8	68	64	66	88	74	80	86	82	84	96	94	95
9	70	66	68	74	74	74	96	90	93	96	92	94
10	72	68	70	74	72	72	98	76	88	96	94	95
11	72	70	71	72	72	72	90	62	73	98	92	95
12	72	70	72	74	72	73	88	70	75	98	94	96
13	72	72	72	98	74	79	70	70	70	100	96	97
14	72	72	72	94	74	78	72	70	71	100	98	99
15	74	68	71	78	74	76	74	72	73	100	96	98
16	82	74	77	74	72	73	74	74	74	100	96	97
17	88	82	85	74	66	72	76	74	75	98	94	96
18	10[illegible]	86	92	72	68	71	76	76	76	96	96	96
19	116	100	105	94	68	83	84	76	78	98	96	97
20	118	114	117	88	80	84	88	84	85	100	96	98
21	118	114	116	84	78	80	102	90	92	100	98	99
22	122	114	119	94	80	85	126	104	116	98	98	98
23	148	120	136	98	92	96	134	126	129	100	98	98
24	126	106	115	92	84	89	136	128	133	100	96	99
25	208	112	166	112	86	94	136	114	128	102	98	99
26	164	148	155	114	106	111	114	102	108	100	98	100
27	146	106	134	106	94	99	102	96	99	102	100	101
28	108	92	101	146	94	113	96	92	95	100	98	99
29	100	92	94	254	134	196	94	92	93	100	98	99
30	108	100	104	130	92	106	94	92	92	100	96	98
31	---	---	---	92	90	90	94	90	92	---	---	---
MONTH	208	54	90	254	66	95	136	62	90	102	92	97

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.7	7.2	---	---	6.8	6.7	6.6	6.6	6.8	6.7	6.9	6.8
2	7.6	7.2	---	---	7.0	6.8	6.7	6.6	6.9	6.7	6.9	6.8
3	7.5	7.1	---	---	---	---	6.7	6.6	6.9	6.8	6.9	6.8
4	7.6	7.1	---	---	---	---	6.8	6.7	6.9	6.8	6.9	6.8
5	8.0	7.1	---	---	---	---	6.9	6.7	6.9	6.8	6.9	6.8
6	7.3	7.1	---	---	6.7	6.6	6.9	6.9	6.9	6.9	6.9	6.8
7	7.2	7.1	---	---	6.7	6.7	6.9	6.9	6.9	6.9	6.9	6.8
8	7.3	7.1	---	---	6.7	6.7	6.9	6.9	7.0	6.9	6.9	6.8
9	7.3	7.1	7.4	7.2	6.8	6.7	6.9	6.9	7.0	6.9	6.9	6.8
10	7.3	7.1	7.3	7.2	6.8	6.7	6.9	6.8	7.0	6.9	6.9	6.8
11	7.2	7.0	7.3	7.2	6.9	6.8	7.0	6.9	---	---	6.9	6.8
12	7.2	7.0	7.3	7.2	6.9	6.8	7.0	6.9	---	---	6.9	6.8
13	7.3	6.9	7.4	7.2	6.8	6.8	7.0	6.9	---	---	6.9	6.8
14	7.2	6.9	---	---	6.8	6.7	7.0	6.8	---	---	7.0	6.8
15	7.5	7.2	---	---	6.8	6.8	6.9	6.8	---	---	7.0	6.8
16	7.5	7.4	---	---	6.9	6.8	6.9	6.8	---	---	7.0	6.8
17	7.5	7.3	---	---	6.9	6.8	6.9	6.8	6.8	6.6	6.9	6.8
18	7.4	7.2	---	---	6.9	6.8	6.9	6.8	6.8	6.7	6.9	6.7
19	7.4	7.2	---	---	6.9	6.8	6.9	6.8	6.8	6.7	7.0	6.7
20	7.4	7.1	---	---	6.9	6.9	6.9	6.8	6.9	6.7	6.8	6.5
21	7.3	7.1	---	---	6.9	6.8	7.0	6.9	6.9	6.8	6.6	6.5
22	7.2	7.1	---	---	6.9	6.9	7.0	6.9	7.0	6.8	6.6	6.5
23	7.2	7.0	---	---	6.9	6.8	7.0	6.9	7.0	6.8	6.8	6.6
24	7.1	7.0	7.2	7.1	6.9	6.8	6.9	6.5	7.0	6.8	6.8	6.6
25	7.1	7.0	7.1	7.1	6.8	6.8	6.5	6.5	7.0	6.8	6.8	6.7
26	7.2	7.1	7.1	7.0	6.8	6.8	6.6	6.5	7.0	6.9	6.9	6.7
27	7.3	7.1	7.2	7.0	6.8	6.8	6.6	6.5	7.0	6.9	7.0	6.7
28	---	---	---	---	6.8	6.7	6.7	6.6	6.9	6.9	6.8	6.6
29	---	---	---	---	6.7	6.6	6.7	6.6	6.9	6.8	6.6	6.4
30	---	---	6.7	6.6	6.6	6.6	6.7	6.7	---	---	6.6	6.5
31	---	---	---	---	6.6	6.6	6.8	6.6	---	---	6.7	6.6
MONTH	8.0	6.9	---	---	7.0	6.6	7.0	6.5	---	---	7.0	6.4
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.8	6.6	7.1	6.7	7.3	7.0	7.1	6.9	7.3	7.2	7.4	7.0
2	6.8	6.6	6.9	6.7	7.3	7.0	7.2	7.0	7.3	7.2	7.4	7.0
3	6.8	6.7	6.7	6.5	7.3	7.0	7.2	7.1	7.2	7.1	7.3	7.0
4	6.8	6.7	6.6	6.5	7.2	7.0	7.2	7.1	7.2	7.1	7.3	7.0
5	6.7	6.6	6.7	6.6	7.2	7.0	7.2	7.1	7.2	7.1	7.4	7.0
6	6.8	6.6	6.9	6.6	7.1	6.9	7.2	7.0	7.2	7.1	7.4	7.0
7	6.9	6.6	6.7	6.3	7.1	6.9	7.2	7.1	7.2	7.1	7.5	7.1
8	6.9	6.7	6.4	6.3	7.1	6.9	7.1	7.0	7.4	7.1	7.5	7.1
9	6.9	6.7	6.5	6.4	7.1	6.9	7.1	7.0	7.4	7.2	7.5	7.1
10	7.0	6.7	6.7	6.5	7.1	6.9	7.1	6.9	7.4	7.1	7.5	7.1
11	7.0	6.7	6.7	6.6	7.1	6.9	7.1	7.0	7.2	7.0	8.1	7.1
12	7.0	6.7	6.8	6.6	7.1	6.8	7.1	7.1	7.2	7.1	7.5	7.1
13	7.1	6.7	6.8	6.7	7.0	6.8	7.3	7.0	7.2	7.1	7.5	7.1
14	7.0	6.7	6.9	6.6	7.1	6.8	7.2	7.1	7.3	7.1	7.5	7.0
15	7.0	6.8	7.0	6.8	7.0	6.8	7.2	7.0	7.3	7.1	7.4	7.0
16	7.1	6.8	7.0	6.8	7.0	6.8	7.1	7.0	7.3	7.0	7.5	7.1
17	7.1	6.9	7.0	6.8	7.2	6.9	7.0	6.9	7.4	7.1	7.5	7.1
18	7.1	6.9	7.1	6.8	7.1	6.9	7.2	7.0	7.4	7.0	7.4	7.1
19	7.1	6.9	7.1	6.9	7.1	7.0	7.3	7.1	7.4	7.0	7.4	7.1
20	7.1	6.9	7.2	6.9	7.2	7.0	7.4	7.1	7.4	7.0	7.4	7.1
21	7.1	6.9	7.1	6.9	7.2	6.9	7.3	7.1	7.3	7.0	7.5	7.1
22	7.0	6.8	7.1	6.9	7.1	6.9	7.3	7.1	7.4	7.0	7.5	7.1
23	6.9	6.8	7.1	6.9	7.1	6.9	7.3	7.1	7.6	7.0	7.5	7.0
24	7.0	6.8	7.1	6.9	7.2	7.0	7.4	7.0	7.4	7.0	7.4	7.0
25	7.0	6.8	7.1	6.9	7.4	7.1	7.5	7.0	7.4	7.0	7.6	7.0
26	7.0	6.7	7.1	6.9	7.3	7.2	7.6	7.0	7.5	7.1	7.3	7.0
27	7.0	6.7	7.1	6.9	7.4	7.1	7.2	6.9	7.6	7.1	7.3	7.0
28	7.0	6.7	7.4	7.0	7.3	7.1	7.3	6.9	7.4	7.1	7.2	7.0
29	6.9	6.7	7.0	7.0	7.3	7.0	7.4	7.3	7.4	7.0	7.5	7.1
30	7.0	6.8	7.1	7.0	7.2	7.0	7.3	7.2	7.4	7.0	7.3	7.1
31	---	---	7.3	7.0	---	---	7.4	7.2	7.5	7.0	---	---
MONTH	7.1	6.6	7.4	6.3	7.4	6.8	7.6	6.9	7.6	7.0	8.1	7.0

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.0	17.0	19.0	---	---	---	7.5	6.5	7.0	1.0	.5	.5
2	22.0	15.5	18.5	---	---	---	7.0	6.0	6.0	.5	.5	.5
3	22.5	16.0	19.0	---	---	---	---	---	---	1.0	.5	.5
4	22.0	17.5	19.5	---	---	---	---	---	---	1.0	.5	.5
5	22.0	19.0	20.0	---	---	---	---	---	---	1.5	.5	1.0
6	21.5	18.0	19.0	---	---	---	10.5	10.0	10.5	2.0	1.0	1.5
7	20.5	17.5	18.5	---	---	---	10.0	8.0	9.0	2.5	2.0	2.0
8	20.0	16.5	18.0	---	---	---	8.0	7.0	7.5	2.5	2.0	2.0
9	20.5	17.0	18.0	11.5	8.5	10.0	7.5	6.5	7.0	3.0	2.0	2.5
10	20.5	16.0	18.0	10.5	9.5	10.0	8.0	7.0	7.5	3.5	2.5	3.0
11	17.5	16.5	17.0	9.5	8.5	9.0	9.0	8.0	8.5	2.5	1.5	2.0
12	19.0	17.0	17.5	10.0	8.0	8.5	10.0	9.0	9.5	1.5	.5	1.0
13	18.0	15.5	16.5	9.0	7.0	8.0	9.5	9.0	9.5	1.5	1.0	1.0
14	15.5	14.5	15.0	---	---	---	9.5	9.0	9.0	2.0	1.5	2.0
15	15.0	13.5	14.0	---	---	---	9.0	8.0	8.5	2.5	2.0	2.0
16	15.5	13.0	14.0	---	---	---	8.0	7.0	7.5	2.5	2.0	2.5
17	16.0	14.0	14.5	---	---	---	7.0	6.0	6.5	3.0	2.5	2.5
18	16.0	14.5	15.0	---	---	---	5.5	5.0	5.0	2.5	1.5	2.0
19	17.0	15.5	16.0	---	---	---	5.0	3.5	4.0	1.5	.5	1.0
20	17.5	16.5	17.0	---	---	---	3.0	2.5	3.0	1.0	.5	.5
21	17.0	16.5	17.0	---	---	---	4.0	3.0	3.5	1.0	.5	.5
22	17.0	16.0	16.5	---	---	---	4.5	4.0	4.5	1.0	.5	.5
23	16.5	16.0	16.0	---	---	---	4.5	3.5	4.0	.5	.5	.5
24	16.0	15.0	15.5	10.0	9.5	10.0	3.5	.5	2.0	1.0	.5	.5
25	15.0	14.5	15.0	9.0	7.5	8.5	.5	.5	.5	4.0	1.0	3.0
26	15.5	13.5	14.5	7.5	7.0	7.0	.5	.5	.5	5.0	4.0	4.5
27	15.0	12.5	13.5	7.0	6.0	6.5	.5	.5	.5	4.5	4.0	4.0
28	---	---	---	---	---	---	.5	.5	.5	4.5	4.0	4.0
29	---	---	---	---	---	---	1.0	.5	.5	5.0	4.5	4.5
30	---	---	---	8.0	7.0	7.5	1.0	.5	.5	4.5	4.0	4.5
31	---	---	---	---	---	---	.5	.5	.5	3.5	3.0	3.5
MONTH	22.5	12.5	16.5	---	---	---	10.5	.5	5.0	5.0	.5	2.0
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	2.5	3.0	4.5	3.0	4.0	9.5	7.5	8.5	16.0	14.0	15.5
2	3.5	2.0	3.0	5.5	4.0	4.5	10.0	7.5	9.0	15.5	12.5	13.5
3	4.0	3.0	3.5	6.0	5.0	5.5	10.0	9.0	9.5	13.0	12.0	12.5
4	4.0	3.5	4.0	6.5	5.0	5.5	11.0	9.5	10.0	13.0	12.5	13.0
5	4.0	2.5	3.5	7.0	6.0	7.0	10.5	9.0	10.0	12.5	12.0	12.0
6	2.5	1.5	2.0	7.0	6.5	6.5	9.5	8.5	9.0	13.5	12.0	12.5
7	1.0	.5	1.0	7.0	5.5	6.0	10.5	8.5	9.5	14.0	13.5	14.0
8	1.0	.5	.5	6.5	5.5	6.0	11.0	9.5	10.5	14.5	13.0	14.0
9	1.0	.5	1.0	6.0	4.5	5.0	10.5	10.5	10.5	13.0	12.0	12.5
10	1.5	.5	1.0	5.0	4.0	4.5	12.0	10.5	11.0	13.5	12.0	12.5
11	---	---	---	4.5	4.0	4.0	13.0	11.0	12.0	15.5	12.5	14.0
12	---	---	---	4.5	3.5	4.0	13.5	11.5	12.5	16.0	14.5	15.0
13	---	---	---	5.0	4.0	4.5	15.0	13.0	14.0	16.0	15.0	15.5
14	---	---	---	7.5	5.0	6.0	15.0	13.5	14.0	17.5	15.5	16.5
15	---	---	---	9.0	6.5	8.0	14.0	12.5	13.0	17.0	15.0	16.0
16	---	---	---	10.0	9.0	9.5	12.5	11.0	11.5	16.5	14.5	15.5
17	9.0	7.5	8.5	10.0	9.5	9.5	11.0	10.0	10.5	16.0	14.0	15.5
18	8.5	7.0	8.0	11.0	9.5	10.0	10.5	9.5	10.0	15.5	14.5	15.0
19	9.0	8.0	8.5	12.0	10.0	11.0	10.0	9.0	9.5	18.0	16.0	17.0
20	8.5	7.5	8.0	12.0	10.0	11.5	10.5	9.0	10.0	19.0	17.5	18.0
21	8.0	7.0	7.5	10.0	8.0	9.0	13.0	10.5	11.5	19.5	18.5	19.0
22	7.0	6.0	6.5	8.0	7.5	8.0	14.0	13.0	13.5	20.5	19.0	20.0
23	8.0	7.0	7.5	9.0	7.0	8.0	13.0	11.5	12.5	21.0	19.5	20.5
24	7.5	6.5	7.0	9.0	7.0	8.0	12.0	11.0	11.5	21.5	19.5	20.5
25	7.5	7.0	7.5	9.0	8.5	9.0	14.0	10.5	12.5	21.5	20.0	21.0
26	7.0	6.0	6.5	9.5	9.0	9.0	15.5	12.5	14.0	22.0	21.0	21.5
27	7.0	6.0	6.5	10.5	9.0	9.5	16.0	15.0	15.5	23.0	21.5	22.0
28	7.0	5.5	6.0	10.5	10.0	10.5	16.5	15.0	16.0	22.0	20.5	21.0
29	5.5	4.0	4.5	11.0	8.5	9.5	16.0	15.0	15.5	20.5	17.0	18.5
30	---	---	---	9.0	8.0	8.5	16.5	15.0	15.5	17.0	15.5	16.0
31	---	---	---	9.0	7.5	8.5	---	---	---	16.0	14.5	15.5
MONTH	---	---	---	12.0	3.0	7.5	16.5	7.5	12.0	23.0	12.0	16.5

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.0	15.0	16.0	26.5	23.0	24.0	24.5	23.0	24.0	28.0	22.5	25.0
2	19.0	16.5	17.5	25.5	23.5	24.0	25.0	24.0	24.5	28.5	22.0	25.0
3	21.0	18.0	19.5	26.5	23.0	24.5	25.0	24.0	24.5	26.0	23.5	24.5
4	22.0	20.0	21.0	25.0	23.5	24.0	26.0	24.5	25.0	25.5	22.5	24.0
5	23.5	21.0	22.0	25.5	23.5	24.0	26.0	24.5	25.0	26.5	21.5	23.5
6	23.5	21.5	23.0	26.0	23.0	24.5	25.5	24.5	25.0	26.0	21.0	23.0
7	24.0	22.5	23.0	23.5	20.5	22.0	25.5	24.5	25.0	25.5	20.0	22.5
8	25.5	22.5	24.0	22.5	20.5	21.5	26.0	24.5	25.5	25.5	20.0	22.5
9	26.5	23.0	24.5	23.0	21.5	22.5	27.0	25.0	25.5	25.0	19.5	21.0
10	27.0	24.0	25.0	25.0	23.0	24.5	26.0	22.5	25.0	25.0	21.0	22.5
11	28.0	24.5	26.0	26.5	24.5	26.0	23.0	21.5	22.0	25.0	21.0	22.5
12	28.5	24.5	26.5	27.0	25.5	26.5	23.5	22.5	23.0	26.5	21.5	23.5
13	28.0	25.0	26.5	26.5	25.5	26.0	24.5	23.0	24.0	27.5	21.5	24.0
14	28.0	25.5	26.0	25.5	24.0	24.5	26.0	23.5	24.5	27.0	22.5	24.5
15	29.0	25.0	26.5	26.0	24.0	25.0	25.5	24.5	25.0	25.0	21.0	23.0
16	26.5	25.5	26.0	25.0	24.5	25.0	25.5	24.0	25.0	25.0	19.0	21.0
17	28.5	25.0	26.5	24.5	23.5	24.0	26.5	24.0	25.0	23.5	17.5	20.0
18	27.5	25.5	26.5	24.5	23.0	23.5	26.0	24.5	25.0	22.5	18.0	19.5
19	28.5	26.0	27.0	24.0	23.0	23.5	27.0	24.5	25.5	24.0	17.5	20.0
20	29.0	26.5	27.5	24.5	23.0	23.5	27.5	24.0	25.5	24.5	17.5	20.5
21	28.0	26.0	27.0	25.5	23.5	24.5	27.0	24.5	25.5	25.0	18.0	21.0
22	27.5	26.0	26.0	25.5	24.0	25.0	27.5	24.0	25.5	25.0	18.5	21.5
23	26.5	25.0	25.5	27.0	24.5	25.5	28.0	24.5	26.0	24.5	19.5	21.5
24	27.0	25.0	26.0	28.0	24.5	26.0	27.5	23.5	25.0	23.0	20.0	21.5
25	26.0	25.0	25.5	28.5	25.5	27.0	27.0	23.5	24.5	25.5	19.5	22.0
26	26.5	24.0	25.5	29.0	26.0	27.0	27.0	23.0	24.5	21.5	19.0	20.0
27	27.5	24.0	25.5	26.5	25.0	26.0	27.0	23.5	25.0	19.0	17.5	18.0
28	27.5	24.0	25.5	25.5	24.5	25.0	25.5	23.5	24.5	17.5	16.5	17.0
29	26.0	24.0	25.0	25.0	23.5	24.0	27.5	23.0	25.0	20.0	15.5	17.0
30	24.5	23.5	24.0	24.0	23.0	23.5	27.0	24.0	25.0	16.5	15.5	16.0
31	---	---	---	24.5	23.0	23.5	28.0	24.0	25.5	---	---	---
MONTH	29.0	15.0	24.5	29.0	20.5	24.5	28.0	21.5	25.0	28.5	15.5	21.5

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.2	7.6	8.3	---	---	---	11.3	11.0	11.1	14.1	14.0	14.1
2	9.2	7.7	8.3	---	---	---	11.4	11.2	11.3	14.0	13.9	14.0
3	9.1	7.7	8.3	---	---	---	---	---	---	14.0	13.8	13.9
4	9.2	7.5	8.2	---	---	---	---	---	---	13.9	13.7	13.8
5	8.9	7.6	8.2	---	---	---	---	---	---	13.6	13.4	13.5
6	8.6	7.8	8.1	---	---	---	10.3	9.9	10.2	13.5	13.3	13.4
7	8.3	7.7	8.0	---	---	---	10.9	10.4	10.7	13.5	13.3	13.4
8	8.6	7.9	8.2	---	---	---	11.5	11.0	11.3	13.5	13.3	13.4
9	8.7	7.9	8.2	10.8	10.4	10.5	11.7	11.3	11.6	13.5	13.2	13.3
10	8.6	7.8	8.2	10.7	10.3	10.4	11.5	11.2	11.4	13.2	12.9	13.0
11	8.6	7.8	8.1	10.5	10.2	10.3	11.3	10.8	11.2	13.7	13.1	13.5
12	8.5	7.5	8.0	10.6	10.2	10.4	10.9	10.6	10.7	14.0	13.6	13.8
13	7.8	7.8	8.2	10.8	10.3	10.6	10.8	10.7	10.7	13.9	13.7	13.8
14	9.4	8.5	8.9	---	---	---	10.9	10.6	10.8	13.7	13.5	13.6
15	9.7	9.4	9.5	---	---	---	11.3	10.9	11.1	13.6	13.3	13.5
16	9.7	9.4	9.5	---	---	---	11.8	11.3	11.6	13.4	13.1	13.2
17	9.7	9.2	9.4	---	---	---	12.3	11.7	12.0	13.4	13.1	13.2
18	9.6	8.9	9.2	---	---	---	12.7	12.3	12.5	13.6	13.0	13.3
19	9.4	8.6	9.0	---	---	---	13.2	12.5	12.9	13.9	13.4	13.7
20	9.3	8.3	8.8	---	---	---	13.5	13.2	13.4	14.2	13.9	14.1
21	9.0	8.2	8.5	---	---	---	13.4	13.0	13.3	14.2	14.1	14.1
22	8.8	8.0	8.3	---	---	---	13.0	12.7	12.8	14.1	14.0	14.1
23	8.6	7.9	8.2	---	---	---	13.0	12.8	12.9	14.0	13.8	13.9
24	8.6	8.0	8.2	10.5	10.2	10.3	14.0	13.0	13.5	13.8	13.2	13.6
25	8.8	8.2	8.5	11.0	10.4	10.8	14.2	14.1	14.2	13.3	12.7	12.9
26	9.2	8.7	9.0	11.2	10.9	11.1	14.2	14.0	14.1	12.8	12.5	12.7
27	9.7	9.0	9.3	11.2	11.0	11.2	14.0	13.8	13.9	12.8	12.5	12.6
28	---	---	---	---	---	---	13.8	13.5	13.7	12.8	12.4	12.6
29	---	---	---	---	---	---	13.9	13.6	13.8	12.6	12.4	12.5
30	---	---	---	11.2	10.8	11.0	14.2	13.8	14.1	12.6	12.4	12.5
31	---	---	---	---	---	---	14.2	14.1	14.2	13.2	12.6	12.9
MONTH	9.7	7.5	8.5	---	---	---	14.2	9.9	12.3	14.2	12.4	13.4

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.3	12.9	13.1	12.7	11.7	12.3	11.9	11.2	11.5	10.3	9.6	9.9
2	13.3	13.0	13.1	12.1	11.5	11.8	11.8	11.0	11.4	10.4	9.6	10.0
3	13.0	12.6	12.8	12.0	11.4	11.7	11.3	10.8	11.0	10.4	9.9	10.2
4	12.9	12.5	12.7	11.8	11.2	11.6	10.8	10.4	10.7	10.3	9.9	10.1
5	12.8	12.4	12.6	11.3	10.9	11.1	11.1	10.5	10.8	10.7	10.4	10.5
6	13.5	12.7	13.2	11.6	11.1	11.3	11.5	11.1	11.2	10.4	10.0	10.4
7	13.9	13.4	13.7	12.1	11.5	11.8	11.5	10.8	11.2	10.0	9.9	10.0
8	14.0	13.8	13.9	12.0	11.7	11.8	11.2	10.6	10.9	10.3	9.9	10.1
9	13.9	13.6	13.8	12.7	11.9	12.4	11.0	10.6	10.8	10.7	10.3	10.6
10	13.7	13.4	13.6	12.8	12.3	12.6	11.0	10.3	10.7	10.8	10.4	10.6
11	---	---	---	12.8	12.4	12.6	10.7	10.0	10.4	10.6	9.9	10.3
12	---	---	---	12.9	12.4	12.7	10.6	9.9	10.3	10.1	9.7	9.9
13	---	---	---	12.5	12.2	12.4	10.2	9.5	9.9	10.0	9.6	9.8
14	---	---	---	12.3	11.6	12.1	10.1	9.4	9.8	9.9	9.4	9.6
15	---	---	---	11.8	11.0	11.5	10.4	9.6	10.1	10.0	9.5	9.7
16	---	---	---	11.0	10.7	10.9	10.7	10.0	10.4	10.3	9.5	9.9
17	11.1	10.3	10.8	11.0	10.7	10.8	11.0	10.3	10.7	10.4	9.6	10.0
18	11.4	10.4	11.0	11.0	10.4	10.7	11.3	10.8	11.1	10.3	9.6	9.9
19	11.0	10.8	10.9	10.7	10.0	10.4	11.5	10.8	11.2	9.9	9.3	9.6
20	11.3	10.8	11.1	10.5	9.9	10.1	11.3	10.8	11.1	9.6	9.0	9.3
21	11.5	11.1	11.2	11.3	10.5	10.9	10.8	10.1	10.6	9.3	8.7	9.0
22	11.7	11.1	11.5	11.5	11.3	11.4	10.1	9.8	9.9	9.1	8.7	8.9
23	11.3	11.0	11.2	11.7	11.3	11.5	10.3	9.9	10.1	9.0	8.6	8.8
24	11.3	10.9	11.1	11.7	11.0	11.4	10.8	10.3	10.5	9.1	8.6	8.8
25	11.4	10.8	11.1	11.1	10.8	11.0	10.9	9.9	10.5	9.0	8.5	8.7
26	11.7	11.2	11.4	11.3	10.8	11.0	10.4	9.4	10.0	8.7	8.4	8.5
27	11.4	10.8	11.2	11.2	10.3	10.9	9.9	9.4	9.6	8.5	8.1	8.3
28	11.5	10.9	11.3	10.3	10.1	10.2	9.8	9.3	9.5	8.6	8.0	8.3
29	12.3	11.5	12.0	11.4	10.3	11.0	9.7	9.3	9.5	9.2	8.4	8.9
30	---	---	---	11.7	11.4	11.6	9.8	9.4	9.6	9.8	9.2	9.6
31	---	---	---	11.9	11.4	11.6	---	---	---	10.3	9.5	9.9
MONTH	---	---	---	12.9	9.9	11.5	11.9	9.3	10.5	10.8	8.0	9.6
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.1	9.6	9.8	7.4	6.6	7.1	8.5	7.8	8.2	7.9	6.8	7.3
2	9.6	9.2	9.4	7.9	7.1	7.4	7.9	7.5	7.7	7.9	6.7	7.2
3	9.3	8.9	9.1	7.8	7.3	7.5	7.8	7.5	7.7	7.9	6.7	7.1
4	8.9	8.6	8.7	7.7	7.1	7.4	7.9	7.5	7.6	7.9	6.7	7.2
5	8.6	8.3	8.4	7.7	7.0	7.3	7.7	7.4	7.5	8.3	6.8	7.4
6	8.3	8.0	8.2	7.6	7.0	7.3	7.8	7.4	7.6	8.2	7.0	7.5
7	8.2	7.9	8.0	8.1	7.2	7.7	7.7	7.5	7.6	8.4	7.2	7.7
8	8.1	7.7	7.9	8.1	7.5	7.8	7.8	7.5	7.6	8.4	7.3	7.8
9	8.0	7.4	7.7	7.8	7.4	7.6	7.7	7.3	7.5	8.4	7.5	7.7
10	7.9	7.1	7.5	7.6	7.0	7.3	7.8	6.8	7.4	8.6	7.4	7.9
11	7.8	6.9	7.3	7.2	6.7	7.0	8.0	7.9	8.0	8.7	7.4	7.9
12	7.7	6.6	7.1	7.6	7.3	7.4	8.2	7.7	7.9	8.5	7.3	7.8
13	7.5	6.6	7.1	7.7	7.1	7.4	8.1	7.6	7.9	8.6	7.0	7.7
14	7.6	6.6	7.1	7.9	7.4	7.6	8.0	7.6	7.8	8.4	7.0	7.6
15	7.5	6.6	7.0	7.9	7.4	7.6	7.9	7.3	7.6	8.6	7.1	7.7
16	7.4	6.7	7.1	7.6	7.3	7.5	8.0	7.3	7.6	8.8	7.6	8.1
17	7.6	6.8	7.2	7.7	7.3	7.5	8.0	7.3	7.6	9.0	7.8	8.3
18	7.6	6.9	7.2	8.2	7.6	7.9	7.9	7.0	7.4	9.1	7.8	8.3
19	7.5	7.1	7.3	8.5	7.7	8.1	7.9	6.9	7.3	9.0	7.7	8.3
20	7.6	6.9	7.2	8.3	7.8	8.1	7.9	6.9	7.3	9.0	7.8	8.2
21	7.7	6.6	7.1	8.1	7.8	7.9	7.9	6.8	7.3	8.8	7.3	8.1
22	7.4	6.7	7.0	8.0	7.5	7.8	7.8	6.7	7.2	8.8	7.3	7.9
23	7.5	6.9	7.2	8.0	7.3	7.7	8.2	6.7	7.4	8.9	7.3	7.9
24	7.6	7.2	7.4	8.0	7.1	7.5	7.9	6.9	7.3	8.8	7.2	7.8
25	7.9	7.1	7.5	8.0	6.9	7.4	7.9	7.0	7.4	8.9	7.1	7.8
26	7.8	7.5	7.6	7.9	6.7	7.3	8.2	7.2	7.6	8.8	6.9	7.7
27	8.0	7.2	7.6	7.6	6.6	7.1	8.3	7.2	7.6	9.0	7.4	8.0
28	7.8	7.1	7.4	7.9	6.6	7.2	8.1	7.1	7.5	8.7	7.4	7.9
29	7.8	6.9	7.3	8.2	7.7	8.0	8.1	6.8	7.4	9.5	7.5	8.3
30	7.7	6.8	7.2	8.3	8.0	8.2	8.0	6.8	7.3	8.9	7.6	8.1
31	---	---	---	8.5	8.1	8.3	8.0	6.9	7.3	---	---	---
MONTH	10.1	6.6	7.7	8.5	6.6	7.6	8.5	6.7	7.6	9.5	6.7	7.8

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

TURBIDITY (JTU), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6	1	---	---	3	0	4	2	2	0	7	4
2	5	0	---	---	---	---	3	1	4	0	5	4
3	10	2	---	---	---	---	3	1	2	0	7	3
4	15	1	---	---	---	---	3	0	3	1	4	2
5	95	0	---	---	---	---	7	1	4	2	3	1
6	5	0	---	---	30	10	2	0	7	3	4	2
7	1	0	---	---	30	10	2	0	8	4	5	2
8	1	0	---	---	10	8	4	0	7	4	5	2
9	3	0	5	3	9	5	3	0	15	4	4	0
10	1	0	5	1	7	3	4	0	15	7	5	0
11	1	0	6	3	10	3	8	3	---	---	3	1
12	1	0	7	5	20	10	15	4	---	---	3	2
13	55	0	9	5	10	4	5	0	---	---	6	2
14	45	6	---	---	6	4	1	0	---	---	6	2
15	9	5	---	---	6	5	1	0	---	---	6	0
16	9	5	---	---	7	3	1	0	---	---	8	3
17	6	5	---	---	5	3	4	0	5	3	4	0
18	7	5	---	---	5	3	2	0	7	3	3	0
19	7	3	---	---	6	0	1	0	4	2	7	0
20	4	0	---	---	4	1	6	0	3	2	110	0
21	3	0	---	---	6	0	2	0	7	3	95	20
22	1	0	---	---	7	1	3	1	8	3	20	9
23	4	1	---	---	9	4	4	0	7	0	20	15
24	3	0	20	3	9	3	75	0	4	0	20	15
25	2	0	20	9	5	2	75	10	3	1	15	8
26	2	0	15	10	8	3	10	3	3	1	10	9
27	1	0	30	9	6	2	5	0	10	1	10	8
28	---	---	---	---	25	2	1	0	15	3	100	8
29	---	---	---	---	40	15	2	0	10	7	120	30
30	---	---	15	1	15	5	3	0	---	---	30	15
31	---	---	---	---	6	3	2	0	---	---	20	10
MONTH	95	0	---	---	40	0	75	0	---	---	120	0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15	8	15	7	15	10	5	0	1	0	3	0
2	10	9	85	7	15	3	10	0	1	0	3	0
3	10	8	90	45	3	0	2	0	3	0	3	0
4	40	8	75	25	2	0	3	0	2	0	3	0
5	45	15	25	15	3	0	7	0	3	0	6	0
6	15	10	370	10	7	1	80	0	2	0	2	0
7	10	6	180	110	3	0	140	40	4	0	3	1
8	7	3	120	40	4	0	110	70	2	0	3	1
9	10	4	150	20	6	2	70	30	3	0	4	1
10	7	3	20	15	6	3	30	10	210	0	3	1
11	6	3	15	10	4	1	10	4	190	25	8	1
12	5	2	10	6	3	1	6	0	30	10	3	1
13	5	1	10	6	5	0	5	0	9	4	3	0
14	3	1	35	6	5	1	55	2	---	---	8	0
15	4	3	30	10	3	0	45	15	---	---	4	0
16	7	4	10	6	5	0	15	9	---	---	10	2
17	7	5	10	6	3	0	10	7	---	---	10	3
18	8	6	8	3	3	0	7	3	---	---	10	5
19	10	6	5	2	3	1	7	2	---	---	15	5
20	8	5	4	2	3	1	6	2	---	---	30	5
21	15	4	6	0	3	1	4	0	---	---	9	0
22	20	5	3	1	15	0	2	0	---	---	3	0
23	25	15	3	0	2	0	2	0	---	---	1	0
24	15	7	2	0	2	0	4	0	1	0	2	0
25	20	4	1	0	1	0	4	1	1	0	2	0
26	6	3	3	0	4	0	4	1	2	0	3	0
27	6	0	70	0	15	3	4	2	2	0	2	0
28	6	1	180	4	15	15	2	0	3	0	6	2
29	55	2	55	25	15	8	3	0	2	0	6	4
30	25	10	35	25	10	4	2	0	3	1	9	5
31	---	---	25	15	---	---	2	0	3	0	---	---
MONTH	55	0	370	0	15	0	140	0	---	---	30	0

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	3.8	13	.13	16	5	.22	520	11	15
2	3.5	13	.12	15	5	.20	1340	67	543
3	3.4	18	.17	15	5	.20	7390	135	2990
4	3.4	11	.10	15	5	.20	4120	45	501
5	8.0	25	.54	16	5	.22	2120	32	183
6	15	14	.57	26	5	.35	1850	36	180
7	33	13	1.2	26	5	.35	1750	28	132
8	20	12	.65	24	2	.13	1080	15	44
9	14	14	.53	22	1	.06	726	12	24
10	11	16	.48	20	1	.05	539	6	8.7
11	9.3	11	.28	20	1	.05	544	12	18
12	9.1	13	.32	19	3	.15	1400	22	83
13	43	14	1.6	19	5	.26	1080	10	29
14	102	20	5.5	20	6	.32	884	6	14
15	81	12	2.6	50	10	1.4	897	7	17
16	46	10	1.2	204	15	8.3	701	5	9.5
17	31	10	.84	151	10	4.1	533	5	7.2
18	22	9	.53	105	10	2.8	428	4	4.6
19	18	4	.19	79	10	2.1	365	6	5.9
20	15	6	.24	83	10	2.2	314	7	5.9
21	13	17	.60	181	10	4.9	277	9	6.7
22	14	4	.15	195	10	5.3	480	12	16
23	20	3	.16	140	8	3.0	950	10	26
24	31	6	.50	415	9	10	706	8	15
25	51	11	1.5	413	15	17	420	12	14
26	44	13	1.5	233	14	8.8	350	10	9.5
27	35	8	.76	226	11	6.7	350	10	9.5
28	28	5	.38	5440	200	3000	1020	18	84
29	23	5	.31	2100	59	387	2150	37	225
30	20	5	.27	895	17	41	1120	11	33
31	18	5	.24	---	---	---	634	9	15
TOTAL	788.5	---	24.16	11183	---	3507.36	37038	---	5268.5
		JANUARY			FEBRUARY			MARCH	
1	472	6	7.6	365	3	3.0	743	2	4.0
2	445	5	6.0	323	2	1.7	681	2	3.7
3	401	2	2.2	302	6	4.9	610	4	6.6
4	355	3	2.9	301	59	48	527	3	4.3
5	319	5	4.3	276	18	13	531	8	11
6	318	17	15	259	54	38	648	4	7.0
7	295	12	9.6	182	27	13	678	4	7.3
8	260	11	7.7	167	11	5.0	601	11	18
9	237	8	5.1	197	8	4.3	502	11	15
10	277	8	6.0	236	10	6.4	420	25	28
11	566	17	26	4780	100	2000	375	18	18
12	472	11	14	3950	40	427	334	33	30
13	479	17	22	2130	20	115	340	16	15
14	427	9	10	4280	50	1000	451	8	9.7
15	407	7	7.7	2120	15	86	371	12	12
16	395	8	8.5	1320	9	32	461	14	17
17	376	9	9.1	944	10	25	756	20	41
18	366	7	6.9	701	5	9.5	877	13	31
19	338	7	6.4	578	4	6.2	780	17	36
20	230	12	7.5	531	5	7.2	1780	64	653
21	283	4	3.1	442	6	7.2	5470	116	1860
22	260	4	2.8	379	7	7.2	2870	41	318
23	260	3	2.1	341	3	2.8	1710	22	102
24	2050	66	592	313	3	2.5	1190	13	42
25	3150	66	599	307	2	1.7	966	8	21
26	1740	20	94	278	2	1.5	802	9	19
27	1200	7	23	330	4	3.6	645	7	12
28	868	2	4.7	926	8	20	4180	121	1950
29	673	2	3.6	914	4	9.9	6060	105	1870
30	541	6	8.8	---	---	---	2450	31	205
31	438	1	1.2	---	---	---	1450	16	63
TOTAL	18898	---	1518.8	28172	---	3901.6	40259	---	7429.6

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1030	11	31	807	10	22	183	14	6.9
2	773	10	21	1380	42	272	139	10	3.8
3	716	12	23	5370	114	1620	109	6	1.8
4	1790	41	279	4200	57	646	92	9	2.2
5	2570	38	264	2340	28	177	77	10	2.1
6	1740	16	75	3310	118	2060	65	8	1.4
7	1230	7	23	18200	353	16900	55	6	.89
8	907	3	7.3	13400	162	6830	48	7	.91
9	733	1	2.0	4040	70	764	42	7	.79
10	646	1	1.7	1970	32	170	36	4	.39
11	522	1	1.4	1280	18	62	29	7	.55
12	431	10	12	850	12	28	23	6	.37
13	371	7	7.0	599	18	29	39	5	.53
14	327	2	1.8	936	18	45	35	14	1.3
15	286	14	11	623	34	57	34	10	.92
16	261	4	2.8	471	14	18	36	8	.78
17	273	5	3.7	368	9	8.9	38	11	1.1
18	271	5	3.7	299	8	6.5	80	9	1.9
19	232	5	3.1	245	8	5.3	51	9	1.2
20	212	5	2.9	207	6	3.4	39	8	.84
21	213	5	2.9	175	7	3.3	36	6	.58
22	446	10	12	152	7	2.9	55	5	.74
23	1200	10	32	138	10	3.7	66	8	1.4
24	805	5	11	137	12	4.4	101	6	1.6
25	597	5	8.1	122	10	3.3	103	6	1.7
26	461	5	6.2	103	24	6.7	58	8	1.3
27	374	5	5.0	104	9	2.5	40	7	.76
28	352	5	4.8	281	77	58	29	16	1.3
29	534	10	14	590	41	65	23	11	.68
30	860	10	23	396	32	34	21	10	.57
31	---	---	---	253	16	11	---	---	---
TOTAL	21163	---	895.4	63346	---	29918.9	1782	---	41.30
		JULY			AUGUST			SEPTEMBER	
1	23	7	.43	77	8	1.7	11	6	.18
2	31	7	.59	96	9	2.3	11	6	.18
3	34	5	.46	95	6	1.5	9.7	7	.18
4	43	10	1.2	75	4	.81	11	13	.39
5	37	5	.50	86	5	1.2	9.9	6	.16
6	44	5	.59	142	5	1.9	9.0	10	.24
7	421	85	101	97	15	3.9	9.0	5	.12
8	379	85	87	69	11	2.0	9.0	8	.19
9	162	51	22	55	9	1.3	8.2	8	.18
10	90	21	5.1	223	44	80	6.9	5	.09
11	60	13	2.1	352	102	103	6.6	29	.52
12	60	12	1.9	221	29	17	7.2	7	.14
13	200	15	8.1	121	16	5.2	5.9	6	.10
14	216	20	12	78	12	2.5	5.4	6	.09
15	113	32	9.8	57	10	1.5	5.3	25	.36
16	77	18	3.7	46	15	1.9	5.0	5	.07
17	101	12	3.3	40	10	1.1	4.9	4	.05
18	149	12	4.8	36	12	1.2	4.7	4	.05
19	188	10	5.1	31	12	1.0	4.4	4	.05
20	115	10	3.1	26	22	1.5	4.1	7	.08
21	75	10	2.0	23	10	.62	3.8	8	.08
22	55	8	1.2	21	7	.40	3.4	6	.06
23	44	5	.59	19	10	.51	3.4	8	.07
24	34	4	.37	20	8	.43	3.2	6	.05
25	30	4	.32	25	6	.41	3.0	4	.03
26	26	7	.49	22	7	.42	2.9	5	.04
27	29	7	.55	19	6	.31	2.9	7	.05
28	80	10	2.2	17	6	.28	2.9	5	.04
29	106	8	2.3	15	5	.20	2.8	4	.03
30	72	6	1.2	13	6	.21	3.0	4	.03
31	56	6	.91	12	5	.16	---	---	---
TOTAL	3150	---	284.90	2229	---	236.46	179.5	---	3.90

TOTAL LOAD FOR YEAR: 53030.88

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN

LOCATION.--Lat 36°28'38", long 84°40'09", Scott County, Hydrologic Unit 05130104, on left bank at bridge on State Route 297, 1.0 mile above Anderson Branch, 1.3 miles below North White Oak Creek, 10.1 miles southwest of Oneida, and at mile 70.1.

DRAINAGE AREA.--806 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to September 1984. Occasional discharge measurements, water years 1961-62, 1979-80.

GAGE.--Water stage recorder. Datum of gage is 862.79 ft Sandy Hook datum.

REMARKS.--Records fair. No gage height record Oct. 1 to Dec. 20.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 56,100 ft³/s at 0800 hours May 7, gage height, 31.22 ft; minimum, 19 ft³/s Sept. 23-26, gage height, 3.46 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	93	1600	1800	1070	2220	2960	2630	706	285	294	66
2	31	88	1300	1460	961	1860	2180	3490	527	254	312	61
3	30	90	13500	1190	877	1640	1870	15100	419	296	303	63
4	28	105	10000	1050	871	1430	4280	13800	347	252	259	64
5	50	96	6700	1010	804	1450	7740	6240	293	216	317	75
6	100	90	4000	1000	762	1700	4620	8120	251	1020	428	104
7	84	95	3700	917	585	1810	3420	49300	232	2000	324	77
8	112	110	2700	792	488	1630	2510	31800	200	1600	266	65
9	90	100	1900	700	590	1400	2020	11600	180	700	1070	52
10	74	95	1500	861	687	1190	1810	5320	160	413	609	44
11	58	92	1200	1740	13100	1090	1500	3550	150	295	878	42
12	80	90	3500	1590	12000	977	1260	2580	135	265	540	43
13	150	88	3100	1470	7000	1010	1100	1950	130	512	338	44
14	470	94	2500	1360	13000	1390	1020	2150	130	526	245	40
15	410	250	2200	1250	6600	1290	894	1580	150	343	181	38
16	250	650	2000	1200	3600	1450	795	1260	152	273	154	32
17	160	600	1600	1160	2570	2280	874	1060	192	259	137	26
18	110	450	1300	1100	1870	2530	845	894	225	335	134	23
19	95	320	1100	1060	1540	2190	719	750	189	394	125	25
20	88	290	920	678	1390	2900	677	644	140	280	106	25
21	77	540	840	573	1190	17100	658	556	123	216	106	24
22	79	880	1200	519	1050	8410	1060	488	207	180	122	22
23	115	600	2870	620	937	4740	3520	453	298	158	100	20
24	320	800	2200	6430	928	3520	2620	457	254	146	171	20
25	410	1700	1200	9390	886	2920	1860	444	258	131	156	21
26	270	900	1050	4550	790	2400	1450	382	180	116	110	20
27	200	700	1100	3250	871	1890	1200	1110	147	142	96	22
28	160	7700	2350	2370	3280	9040	1140	1480	127	191	96	27
29	130	6000	6170	1850	3170	18600	2260	2890	114	352	80	25
30	110	2100	3330	1510	---	7040	2760	1500	280	264	74	30
31	100	---	1920	1260	---	3980	---	990	---	355	71	---
TOTAL	4474	25806	90550	55710	83467	113077	61622	174568	6896	12769	8202	1240
MEAN	144	860	2921	1797	2878	3648	2054	5631	230	412	265	41.3
MAX	470	7700	13500	9390	13100	18600	7740	49300	706	2000	1070	104
MIN	28	88	840	519	488	977	658	382	114	116	71	20
CFSM	.18	1.07	3.62	2.23	3.57	4.53	2.55	6.99	.29	.51	.33	.05
IN.	.21	1.19	4.18	2.57	3.85	5.22	2.84	8.06	.32	.59	.38	.06

WTR YR 1984 TOTAL 638381 MEAN 1744 MAX 49300 MIN 20 CFSM 2.16 IN. 29.46

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to July 1980, February 1984 to September 1984.

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB									
03...	1530	861	--	--	4.0	--	--	--	--
11...	2030	25500	--	--	--	--	803	55300	--
11...	2200	25100	--	--	6.0	--	--	--	--
12...	1110	12000	--	--	--	--	265	8590	--
16...	1145	3570	96	7.1	7.0	10.7	--	--	--
16...	1500	3420	--	--	7.0	--	25	231	--
MAR									
21...	1145	20700	93	7.1	8.5	11.4	--	--	--
23...	1000	4850	92	6.9	7.0	12.1	--	--	--
29...	1430	18100	74	6.8	9.0	11.5	--	--	--
APR									
06...	1400	4390	91	7.0	9.0	11.3	--	--	--
12...	1500	1210	149	--	11.0	--	3	9.8	--
17...	1430	850	149	7.3	11.5	9.8	--	--	--
25...	1400	1800	112	7.2	12.0	10.8	12	58	--
MAY									
04...	1015	14600	84	7.1	13.0	10.4	333	13100	89
07...	1730	49100	65	6.9	13.5	12.8	807	107000	--
17...	1345	1060	136	7.1	15.5	9.9	--	--	--
17...	1430	1050	136	--	15.5	--	8	23	--
25...	0915	431	195	7.3	20.0	8.7	1	1.2	--
29...	1315	3040	172	6.9	18.5	9.2	212	1740	--
JUN									
06...	1100	252	155	7.5	22.0	8.4	--	--	--
06...	1215	252	--	--	22.0	--	4	2.7	--
15...	1330	151	211	7.3	26.5	8.0	2	.82	--
21...	1510	120	260	7.1	27.5	7.5	2	.65	--
25...	1015	269	330	7.2	26.0	7.6	288	209	--
JUL									
10...	1015	419	172	7.0	23.0	8.3	97	110	--
16...	1430	266	194	7.0	25.5	7.7	38	27	--
23...	1415	185	205	7.2	26.0	8.3	2	1.0	--
AUG									
01...	1400	316	304	7.1	24.5	8.2	7	6.0	--
07...	1315	310	240	7.1	25.5	7.8	7	5.9	--
22...	1300	110	195	6.9	25.5	7.8	9	2.7	--
30...	1000	73	260	7.0	24.5	7.8	6	1.2	--
SEP									
06...	1430	100	310	7.1	23.5	8.3	8	2.2	--
10...	1500	43	312	7.1	23.0	8.6	12	1.4	--
20...	0910	25	249	6.9	19.0	8.3	12	.80	--
26...	1015	20	224	7.0	20.5	8.3	7	.38	--

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY

LOCATION.--Lat 36°37'37", long 84°32'00", McCreary County, Hydrologic Unit 05130104, on right bank 1,000 ft below confluence of Bear Creek, 400 ft upstream from Salt Branch, 5.5 mi southwest of Stearns, and at mile 49.6. Records include flow of Bear Creek.

DRAINAGE AREA.--954 mi², includes that of Bear Creek.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1113: 1946(M). WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 763.83 ft National Geodetic Vertical Datum of 1929; prior to Oct. 1, 1980 at site 1,000 ft upstream at datum 0.98 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--42 years, 1,792 ft³/s, 25.51 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 93,200 ft³/s May 28, 1973, gage height, 46.29 ft present datum, from floodmarks; minimum discharge, 11 ft³/s Oct. 4, 1948, Sept. 17, 18, 19, 20, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929, reached a stage of 52.9 ft from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 22,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 3	1200	24900	22.00	Mar. 29	0400	26800	22.90
Feb. 11	2300	30500	24.57	May 7	1100	*62200	36.30
Mar. 21	1200	23800	21.47				

Minimum discharge, 26 ft³/s Sept. 27, gage height, 0.88 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	112	1710	1980	1260	2670	3360	2760	921	368	382	79
2	40	106	1540	1730	1100	2250	2560	2620	707	276	352	77
3	38	105	18100	1370	1020	2030	2190	15200	562	255	357	75
4	36	129	12500	1160	994	1840	3670	17200	458	346	319	76
5	49	116	7700	1110	946	1910	9010	8800	383	270	306	75
6	124	105	4470	1090	878	2200	5660	6810	322	738	440	84
7	101	114	4520	1010	728	2300	3950	53800	277	2070	413	105
8	140	132	2980	902	567	2070	2920	42100	244	2190	316	82
9	114	120	2150	812	609	1790	2380	15500	216	952	947	72
10	87	115	1650	974	703	1510	2120	7060	191	557	720	67
11	73	111	1390	1910	11400	1330	1800	4300	171	383	1100	63
12	69	108	4110	1980	18100	1180	1510	3000	154	324	773	54
13	150	106	3770	1740	7450	1210	1320	2280	143	409	496	51
14	559	110	2790	1580	16300	1500	1170	2210	142	679	346	50
15	539	279	2690	1450	8030	1400	1040	1880	170	463	259	45
16	290	737	2350	1360	4470	1570	955	1410	167	379	218	40
17	190	785	1850	1290	3160	2370	941	1130	202	306	184	38
18	144	538	1470	1210	2390	2560	942	950	231	371	165	37
19	119	403	1240	1160	1970	2370	846	818	261	487	160	34
20	106	345	1080	853	1740	3350	772	719	194	455	140	33
21	92	591	956	776	1490	18800	759	634	155	328	124	33
22	94	1080	1190	828	1270	10400	1130	562	142	245	138	35
23	134	701	2810	807	1130	5960	3540	512	344	198	146	33
24	381	937	2500	4400	1070	4090	3070	485	310	172	116	32
25	495	2080	1580	11600	1050	3220	2240	490	285	157	238	32
26	334	1150	1130	5830	972	2740	1760	448	228	140	168	27
27	252	826	1260	3800	979	2230	1420	554	165	154	130	27
28	202	9610	1870	2840	2970	7490	1250	2330	131	169	119	28
29	165	7910	6900	2230	3660	22600	2070	3090	116	304	119	32
30	142	2880	4000	1830	---	8940	2560	2220	119	360	99	32
31	125	---	2320	1520	---	4850	---	1330	---	331	88	---
TOTAL	5430	32441	106576	63132	98406	130730	68915	203202	8111	14836	9878	1548
MEAN	175	1081	3438	2037	3393	4217	2297	6555	270	479	319	51.6
MAX	559	9610	18100	11600	18100	22600	9010	53800	921	2190	1100	105
MIN	36	105	956	776	567	1180	759	448	116	140	88	27
CFSM	.18	1.13	3.60	2.14	3.56	4.42	2.41	6.87	.28	.50	.33	.05
IN.	.21	1.26	4.16	2.46	3.84	5.10	2.69	7.92	.32	.58	.39	.06

CAL YR 1983	TOTAL	639683	MEAN	1753	MAX	24700	MIN	33	CFSM	1.84	IN.	24.94
WTR YR 1984	TOTAL	743205	MEAN	2031	MAX	53800	MIN	27	CFSM	2.13	IN.	28.98

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-72, 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1980 to current year.
pH: May 1980 to current year.
WATER TEMPERATURE: May 1980 to current year.
DISSOLVED OXYGEN: May 1980 to current year.
TURBIDITY: May 1980 to current year.
SUSPENDED SEDIMENT DISCHARGE: May 1980 to current year.

INSTRUMENTATION.--Five parameter water quality monitor and sediment pumping sampler since May 1980.

REMARKS.--Miscellaneous samples prior to 1979. Interruptions in daily record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 378 micromhos Nov. 28, 1980; minimum, 40 micromhos May 7, 1984.
pH: Maximum, 7.9 units June 13, 1984; minimum, 5.2 units May 19, Nov. 24, 1980.
WATER TEMPERATURE: Maximum, 33.0°C July 17, 1980; minimum, 0.0°C many days in Dec. 25-27, 1983.
DISSOLVED OXYGEN: Maximum, 14.3 mg/L Dec. 21, 1981, Jan. 1, 2, 1984; minimum, 4.5 mg/L May 22, 1980.
TURBIDITY: Maximum, >1,000 JTU Aug. 1, 1982; minimum, 0 JTU many days.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,980 mg/L Aug. 9, 1981; minimum daily mean, 1 mg/L Jan. 29, 31, 1983, Feb. 25, Mar. 9, 11, 14, 15, 1984.
SEDIMENT LOADS: Maximum daily, 200,000 tons Sept. 2, 1982; minimum daily, 0.48 tons Oct. 23, 1980.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 370 micromhos Nov. 3; minimum, 40 micromhos May 7.
pH: Maximum, 7.9 units June 13; minimum, 5.4 units Apr. 6.
WATER TEMPERATURE: Maximum, 29.0°C July 26; minimum, 0.0°C Dec. 25-27.
DISSOLVED OXYGEN: Maximum, 14.3 mg/L Jan. 1, 2; minimum, 6.6 mg/L June 26.
TURBIDITY: Maximum, 900 JTU May 7; minimum, 0 JTU several days.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,000 mg/L May 7; minimum daily mean, 1 mg/L Feb. 25, Mar. 9, 11, 14, 15.
SEDIMENT LOADS: Maximum daily, 150,000 tons May 7; minimum daily, 0.60 tons Nov. 1.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	269	263	266	360	346	353	---	---	---	76	74	75
2	263	261	263	368	360	365	---	---	---	80	76	79
3	261	259	261	370	366	369	---	---	---	82	78	81
4	259	259	259	366	352	361	---	---	---	84	82	83
5	259	243	252	352	332	342	---	---	---	92	84	87
6	257	251	255	332	318	324	---	---	---	92	88	90
7	261	257	260	318	310	315	94	90	92	96	92	94
8	263	259	262	310	304	306	93	91	93	102	96	100
9	257	253	255	304	298	301	100	96	98	108	104	106
10	269	257	262	298	288	294	105	103	104	112	106	109
11	286	271	280	288	280	284	110	106	108	108	94	98
12	300	288	294	280	272	276	163	109	126	108	90	97
13	308	276	293	272	262	267	162	116	135	108	106	106
14	322	264	305	262	246	255	120	114	116	110	106	108
15	340	244	278	262	220	242	117	113	114	108	100	104
16	358	332	350	220	204	211	118	114	116	98	94	96
17	330	286	304	266	222	244	125	117	121	94	94	94
18	286	280	281	326	268	292	126	122	124	96	92	93
19	300	282	289	352	330	346	125	121	124	94	92	93
20	322	302	312	344	316	329	124	108	115	92	90	91
21	340	324	332	314	284	303	112	108	110	92	92	92
22	348	342	346	284	242	267	114	110	113	98	92	96
23	348	338	344	250	234	241	124	108	113	98	96	98
24	336	286	320	252	218	238	126	118	122	---	---	---
25	286	282	283	214	168	187	118	112	117	---	---	---
26	292	280	288	198	186	194	114	102	107	---	---	---
27	278	256	266	194	186	191	114	94	98	---	---	---
28	272	256	262	---	---	---	116	88	96	---	---	---
29	304	274	290	---	---	---	---	---	---	---	---	---
30	330	306	319	---	---	---	---	---	---	---	---	---
31	346	332	339	---	---	---	---	---	---	86	84	85
MONTH	358	243	289	370	168	285	---	---	---	---	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	88	86	87	102	88	94	78	72	76	132	120	125
2	92	88	90	88	82	84	84	78	80	120	114	117
3	94	92	92	84	82	83	88	84	86	---	---	---
4	96	92	95	84	82	83	90	84	88	---	---	---
5	96	94	96	84	82	83	102	84	91	76	70	73
6	98	94	96	86	82	84	86	74	77	82	72	77
7	104	98	100	88	84	85	78	72	75	58	40	51
8	126	102	109	88	86	87	84	78	81	---	---	---
9	136	120	130	90	88	89	88	84	86	---	---	---
10	118	108	111	92	90	90	94	88	91	---	---	---
11	---	---	---	90	88	90	102	94	97	---	---	---
12	---	---	---	90	88	89	106	102	104	---	---	---
13	---	---	---	98	90	95	116	106	111	---	---	---
14	---	---	---	96	92	94	120	114	117	114	104	109
15	---	---	---	104	94	100	120	118	118	116	112	114
16	---	---	---	104	104	104	120	120	120	118	116	116
17	84	78	81	112	104	106	120	120	120	122	116	119
18	90	84	87	112	104	108	124	120	122	126	120	123
19	94	90	91	104	102	103	128	124	126	132	126	129
20	96	94	95	102	68	94	132	126	129	138	130	133
21	100	96	98	---	---	---	130	124	127	142	136	138
22	100	98	99	66	64	65	130	122	127	148	142	145
23	104	100	103	72	66	68	136	102	113	156	148	152
24	106	104	105	80	72	75	152	126	140	162	152	158
25	112	106	109	86	80	84	124	100	109	164	160	162
26	120	112	116	92	86	89	100	98	99	176	166	171
27	120	118	118	96	92	93	102	100	101	182	176	178
28	142	114	120	---	---	---	108	102	105	190	104	152
29	142	102	124	---	---	---	130	108	115	168	102	134
30	---	---	---	---	---	---	158	132	144	164	138	153
31	---	---	---	---	---	---	---	---	---	135	115	120
MONTH	---	---	---	112	64	89	158	72	106	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	130	120	125	277	247	263	214	202	209	---	---	---
2	132	126	128	298	278	287	232	212	218	---	---	---
3	131	125	128	299	287	294	244	234	241	---	---	---
4	134	128	131	287	255	269	252	236	242	---	---	---
5	135	129	131	254	244	247	284	252	267	---	---	---
6	138	132	135	329	251	283	292	284	288	---	---	---
7	144	136	139	331	209	259	310	288	298	---	---	---
8	149	143	146	316	168	234	306	288	298	---	---	---
9	154	146	150	165	135	142	284	254	268	---	---	---
10	157	151	154	149	137	142	258	252	254	---	---	---
11	160	154	157	166	150	157	284	260	277	---	---	---
12	164	156	160	175	165	169	262	148	198	250	236	243
13	165	159	162	180	174	177	146	128	137	260	248	254
14	164	160	162	177	167	171	130	124	127	263	249	256
15	168	158	164	165	161	162	138	130	133	261	249	257
16	163	161	162	180	160	169	148	138	143	250	238	245
17	165	159	162	195	181	190	154	148	151	248	238	241
18	162	156	159	194	180	187	156	154	155	243	235	238
19	174	158	165	179	173	175	160	154	157	245	233	239
20	173	169	171	194	170	181	162	156	160	250	236	242
21	179	171	174	208	192	201	162	158	160	258	242	249
22	182	176	179	209	205	207	164	160	162	263	251	256
23	188	180	184	208	200	204	170	162	166	263	253	258
24	195	177	185	216	203	209	170	164	167	262	258	260
25	227	195	216	214	208	212	176	166	170	268	258	262
26	238	224	231	214	208	211	178	174	176	265	259	261
27	241	233	237	208	202	205	180	176	177	261	251	255
28	243	235	240	206	200	203	---	---	---	252	248	250
29	244	234	241	204	198	202	---	---	---	252	246	249
30	247	245	246	198	192	194	---	---	---	251	243	247
31	---	---	---	200	188	192	---	---	---	---	---	---
MONTH	247	120	171	331	135	206	310	124	200	---	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.5	7.7	7.6	---	---	7.0	6.9	7.1	7.1	7.2	7.1
2	7.6	7.5	7.6	7.6	---	---	7.0	7.0	7.1	7.1	7.1	7.1
3	7.6	7.5	7.6	7.5	---	---	7.0	7.0	7.1	7.1	7.1	7.1
4	7.6	7.5	7.5	7.5	---	---	7.1	7.0	7.1	7.1	7.1	7.0
5	7.5	7.3	7.5	7.5	---	---	7.1	7.1	7.1	7.1	7.0	7.0
6	7.5	7.4	7.6	7.5	---	---	7.1	7.1	7.2	7.1	7.0	7.0
7	7.5	7.4	7.6	7.5	7.1	7.0	7.1	7.1	7.2	7.2	7.1	7.0
8	7.5	7.5	7.6	7.6	7.0	7.0	7.2	7.1	7.2	7.2	7.1	7.1
9	7.5	7.5	7.6	7.6	7.1	7.0	7.2	7.2	7.2	7.2	7.1	7.1
10	7.6	7.5	7.6	7.6	7.1	7.1	7.1	6.8	7.2	7.1	7.1	7.1
11	7.6	7.5	7.6	7.6	7.1	7.0	7.1	6.9	---	---	7.1	7.1
12	7.6	7.5	7.6	7.6	7.3	7.0	7.2	7.1	---	---	7.1	7.1
13	7.5	7.0	7.6	7.6	7.3	7.1	7.2	7.2	---	---	7.1	7.0
14	7.5	7.2	7.6	7.6	7.1	7.1	7.2	7.2	---	---	7.1	7.0
15	7.5	7.4	7.6	7.1	7.2	7.1	7.2	7.2	---	---	7.1	7.1
16	7.6	7.5	7.4	7.3	7.2	7.2	7.2	7.1	---	---	7.1	7.0
17	7.5	7.5	7.6	7.4	7.3	7.2	7.1	7.1	6.9	6.9	7.2	7.0
18	7.5	7.5	7.6	7.6	7.3	7.3	7.2	7.1	7.0	6.9	7.1	7.1
19	7.5	7.5	7.6	7.6	7.3	7.3	7.2	7.1	7.0	6.9	7.1	7.1
20	7.6	7.5	7.6	7.5	7.3	7.1	7.2	7.1	7.0	7.0	7.1	6.6
21	7.6	7.5	7.5	7.5	7.1	7.1	7.2	7.1	7.0	7.0	---	---
22	7.5	7.5	7.6	7.5	7.1	7.0	7.2	7.2	7.1	7.0	6.9	6.8
23	7.5	7.4	7.6	7.5	7.2	7.0	7.2	7.1	7.1	7.0	6.9	6.8
24	7.4	7.3	7.5	7.3	7.2	7.2	---	---	7.1	7.1	6.9	6.9
25	7.4	7.3	7.4	7.4	7.3	7.2	---	---	7.1	7.1	6.9	6.9
26	7.5	7.4	7.4	7.4	7.2	7.1	---	---	7.2	7.1	7.0	6.9
27	7.5	7.5	7.5	7.2	7.1	7.1	---	---	7.2	7.1	7.0	7.0
28	7.6	7.5	---	---	7.1	6.8	---	---	7.3	7.1	---	---
29	7.6	7.5	---	---	---	---	---	---	7.3	7.2	---	---
30	7.6	7.6	---	---	---	---	---	---	---	---	---	---
31	7.7	7.6	---	---	---	---	7.1	7.0	---	---	---	---
MONTH	7.7	7.0	7.7	7.1	---	---	---	---	---	---	7.2	6.6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.9	6.9	7.2	7.1	7.1	6.9	7.6	7.4	7.5	7.3	---	---
2	7.0	6.9	7.1	7.0	7.2	6.9	7.6	7.4	7.5	7.4	---	---
3	7.0	6.9	---	---	7.3	6.6	7.6	7.5	7.5	7.4	---	---
4	7.0	6.8	---	---	7.4	6.9	7.5	7.4	7.5	7.4	---	---
5	7.1	6.3	7.1	7.0	7.5	7.0	7.4	7.3	7.6	7.4	---	---
6	7.1	5.4	7.1	6.5	7.6	7.2	7.4	7.3	7.6	7.4	---	---
7	6.9	6.7	6.6	6.2	7.7	7.4	7.4	6.6	7.6	7.5	---	---
8	6.9	6.7	---	---	7.6	7.4	7.4	7.2	7.6	7.5	---	---
9	6.9	6.8	---	---	7.4	6.9	7.3	7.1	7.5	7.4	---	---
10	7.0	6.9	---	---	7.6	7.1	7.1	7.1	7.4	6.8	---	---
11	7.0	6.9	---	---	7.8	7.5	7.2	7.1	7.5	7.0	---	---
12	7.0	7.0	---	---	7.7	6.9	7.3	7.2	7.5	7.4	7.7	7.4
13	7.0	7.0	---	---	7.9	7.0	7.4	7.3	7.3	7.3	7.7	7.5
14	7.1	7.0	7.0	7.0	7.6	7.3	7.4	7.3	7.3	7.2	7.7	7.5
15	7.1	7.0	7.1	7.0	7.5	7.0	7.4	7.3	7.3	7.2	7.6	7.5
16	7.1	7.0	7.1	6.8	---	---	7.4	7.3	7.3	7.2	7.7	7.5
17	7.1	7.0	7.2	7.1	---	---	7.4	7.3	7.4	7.2	7.7	7.5
18	7.1	7.0	7.2	7.1	---	---	7.5	7.3	7.4	7.3	7.7	7.5
19	7.2	7.0	7.2	7.2	---	---	7.5	7.3	7.5	7.3	7.7	7.5
20	7.2	7.1	7.2	7.2	---	---	7.5	7.3	7.6	7.3	7.7	7.5
21	7.1	7.1	7.3	7.2	---	---	7.6	7.4	7.6	7.4	7.7	7.5
22	7.1	6.9	7.3	7.2	---	---	7.6	7.4	7.6	7.3	7.7	7.5
23	7.1	6.9	7.3	7.2	---	---	7.6	7.4	7.5	7.3	7.6	7.5
24	7.2	7.1	7.3	7.2	---	---	7.6	7.4	7.5	7.3	7.6	7.5
25	7.3	7.1	7.4	7.3	---	---	7.6	7.4	7.6	7.4	7.6	7.4
26	7.1	6.9	7.4	7.1	---	---	7.6	7.4	7.6	7.4	7.5	7.4
27	7.1	6.9	7.3	7.2	---	---	7.4	7.3	7.6	7.4	7.5	7.4
28	7.1	7.0	7.3	6.8	---	---	7.5	7.3	---	---	7.4	7.4
29	7.1	7.0	7.2	6.7	7.5	7.4	7.5	7.4	---	---	7.6	7.4
30	7.2	7.1	7.2	7.1	7.4	7.3	7.4	7.3	---	---	7.5	7.5
31	---	---	7.2	6.9	---	---	7.4	7.3	---	---	---	---
MONTH	7.3	5.4	---	---	---	---	7.6	6.6	7.6	6.8	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.0	19.0	20.0	15.0	13.5	14.0	---	---	---	.5	.5	.5
2	21.0	18.5	19.5	15.0	14.0	14.5	---	---	---	.5	.5	.5
3	21.0	18.5	19.5	15.0	14.5	15.0	---	---	---	.5	.5	.5
4	21.5	19.0	20.0	15.0	13.5	14.5	---	---	---	1.0	.5	.5
5	21.0	19.5	20.5	13.5	12.5	13.0	---	---	---	1.0	1.0	1.0
6	20.5	19.0	19.5	13.0	11.5	12.0	---	---	---	1.5	1.0	1.5
7	20.5	18.0	19.0	12.0	11.5	12.0	9.0	8.5	8.5	2.0	1.5	1.5
8	20.0	18.5	19.0	12.5	11.0	11.5	8.0	7.0	7.5	2.0	1.5	2.0
9	20.0	18.0	19.0	12.5	11.0	11.5	7.0	6.5	6.5	3.0	2.0	2.5
10	20.0	18.0	19.0	12.0	11.0	11.5	7.0	6.5	6.5	3.0	2.5	2.5
11	19.0	18.0	18.5	11.0	10.5	11.0	7.0	6.5	7.0	2.5	2.0	2.0
12	19.0	18.0	18.5	10.0	9.5	10.0	8.5	7.0	7.5	2.0	1.5	1.5
13	18.5	16.5	17.5	9.5	9.0	9.5	9.0	8.5	9.0	1.5	1.5	1.5
14	17.5	16.5	17.0	9.5	8.5	9.0	9.0	8.5	8.5	2.0	1.5	2.0
15	17.0	15.5	16.5	9.5	9.0	9.5	8.5	8.0	8.0	2.0	1.5	2.0
16	17.0	15.5	16.5	9.0	8.5	9.0	7.5	7.0	7.0	2.0	2.0	2.0
17	17.0	16.0	16.5	8.0	7.5	8.0	7.0	5.5	6.0	2.5	2.0	2.5
18	17.0	16.5	16.5	7.5	7.0	7.5	5.5	5.0	5.5	2.5	2.0	2.0
19	17.5	16.5	17.0	8.5	7.5	8.0	5.0	4.0	4.5	2.0	1.5	1.5
20	17.5	17.0	17.0	8.5	8.0	8.5	3.5	3.0	3.5	1.0	.5	.5
21	17.5	17.0	17.0	8.5	8.0	8.5	3.5	3.5	3.5	.5	.5	.5
22	17.0	17.0	17.0	8.5	8.0	8.5	4.0	3.5	3.5	.5	.5	.5
23	17.0	16.5	16.5	9.5	8.5	9.0	3.5	3.0	3.5	.5	.5	.5
24	16.5	16.0	16.5	9.5	9.0	9.5	3.5	2.0	2.5	1.0	.5	.5
25	16.0	15.5	16.0	9.0	8.5	9.0	1.5	.0	1.0	---	---	---
26	15.5	15.0	15.5	8.5	8.0	8.5	.5	.0	.0	---	---	---
27	15.0	14.0	14.5	8.0	8.0	8.0	.5	.0	.5	---	---	---
28	14.5	13.5	14.0	---	---	---	.5	.5	.5	---	---	---
29	14.5	13.5	14.0	---	---	---	---	---	---	---	---	---
30	14.5	13.5	14.0	---	---	---	---	---	---	---	---	---
31	14.5	13.5	14.0	---	---	---	---	---	---	4.0	4.0	4.0
MONTH	21.5	13.5	17.5	15.0	7.0	10.5	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	4.0	3.5	3.5	5.0	4.5	4.5	9.5	8.5	9.0	17.0	15.5	16.5
2	4.0	3.0	3.5	4.5	4.0	4.0	10.0	8.5	9.5	16.0	15.0	15.5
3	4.0	3.5	4.0	5.0	4.0	4.5	10.0	9.5	10.0	---	---	---
4	4.0	4.0	4.0	5.0	4.5	5.0	11.0	10.0	10.5	---	---	---
5	4.0	3.0	4.0	6.0	5.0	5.5	11.0	10.5	11.0	13.0	12.5	12.5
6	3.0	2.5	3.0	6.0	6.0	6.0	10.5	9.5	10.0	13.0	12.5	12.5
7	2.5	2.0	2.0	6.5	6.0	6.0	10.5	9.5	10.0	13.5	13.0	13.5
8	2.0	1.5	2.0	6.5	6.0	6.0	11.0	10.0	10.5	---	---	---
9	2.0	1.5	1.5	6.0	5.5	5.5	11.0	11.0	11.0	---	---	---
10	2.0	1.5	2.0	5.5	5.0	5.5	12.0	11.0	11.5	---	---	---
11	---	---	---	5.5	5.0	5.0	12.5	11.5	12.0	---	---	---
12	---	---	---	5.0	4.5	4.5	13.5	12.5	13.0	---	---	---
13	---	---	---	5.0	4.5	5.0	15.0	13.5	14.0	---	---	---
14	---	---	---	6.5	5.0	5.5	15.0	14.0	14.5	17.0	16.0	16.5
15	---	---	---	7.5	6.0	7.0	14.5	14.0	14.5	17.0	16.0	16.5
16	---	---	---	9.0	7.5	8.5	14.0	13.5	13.5	17.5	16.5	17.0
17	8.0	7.5	8.0	10.0	9.0	9.5	13.0	12.5	13.0	17.5	16.0	16.5
18	8.5	7.5	8.0	11.0	10.0	10.5	12.5	11.5	12.0	17.5	16.0	17.0
19	8.5	8.5	8.5	12.0	10.5	11.5	12.0	11.0	11.5	18.5	16.5	17.5
20	8.5	8.0	8.5	12.0	11.0	11.5	12.5	11.0	11.5	19.5	17.5	18.5
21	8.5	8.0	8.0	---	---	---	12.5	11.5	12.0	20.0	18.5	19.0
22	8.0	7.5	8.0	8.5	8.0	8.0	13.0	12.0	12.5	20.5	19.0	20.0
23	8.5	8.0	8.0	8.5	7.5	8.0	13.5	12.5	13.0	21.5	20.0	20.5
24	8.0	7.5	8.0	9.0	8.0	8.5	13.0	12.5	13.0	22.0	20.0	21.0
25	8.0	7.5	8.0	9.0	8.5	9.0	13.5	12.0	12.5	22.0	20.5	21.0
26	7.5	7.0	7.5	10.0	9.0	9.5	14.5	13.0	13.5	22.0	21.0	21.5
27	7.5	7.0	7.5	10.5	9.5	10.0	15.5	14.5	15.0	22.5	21.5	22.0
28	7.5	6.5	7.0	---	---	---	16.5	15.0	16.0	22.0	19.5	21.0
29	6.5	5.0	5.5	---	---	---	16.5	16.0	16.5	19.0	18.5	19.0
30	---	---	---	---	---	---	17.0	16.5	16.5	18.5	17.0	17.5
31	---	---	---	---	---	---	---	---	---	16.5	16.0	16.5
MONTH	---	---	---	12.0	4.0	7.0	17.0	8.5	12.5	---	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.0	15.5	16.5	26.5	25.0	25.5	26.0	25.0	25.5	---	---	---
2	18.5	16.5	17.5	26.0	25.0	25.5	26.0	25.5	26.0	---	---	---
3	19.5	17.5	18.5	27.0	24.5	25.5	26.0	25.5	26.0	---	---	---
4	20.5	18.5	19.5	26.0	25.5	25.5	26.5	25.5	26.0	---	---	---
5	22.0	20.0	21.0	25.5	25.0	25.5	27.0	25.5	26.0	---	---	---
6	22.5	21.0	22.0	25.5	24.5	25.0	27.0	26.0	26.5	---	---	---
7	23.0	21.5	22.5	24.5	23.0	23.5	27.0	26.0	26.5	---	---	---
8	24.5	22.5	23.5	23.0	22.0	22.5	27.5	26.5	27.0	---	---	---
9	25.5	23.5	24.5	23.0	22.0	22.5	27.0	26.5	27.0	---	---	---
10	26.0	24.0	25.0	24.5	22.5	23.5	27.0	26.0	26.5	---	---	---
11	26.5	24.5	25.5	25.5	23.5	24.5	26.0	25.5	26.0	---	---	---
12	27.0	25.0	26.0	26.0	24.5	25.0	25.5	24.5	25.0	26.0	23.0	24.5
13	27.5	26.0	26.5	26.5	25.0	25.5	25.5	24.0	24.5	26.5	23.5	25.0
14	27.0	26.0	26.5	27.0	25.0	26.0	26.5	24.5	25.5	26.5	24.0	25.5
15	28.0	25.5	26.5	27.0	26.0	26.5	26.0	25.0	25.5	25.5	24.0	24.5
16	27.0	26.0	26.5	27.0	26.5	26.5	26.5	25.0	26.0	24.0	22.0	23.0
17	27.5	25.5	26.5	26.5	26.0	26.5	27.0	25.0	26.0	23.0	21.0	22.0
18	28.0	26.0	27.0	27.0	25.5	26.5	26.5	26.0	26.0	22.5	20.5	21.5
19	28.0	26.5	27.5	27.0	25.5	26.0	27.0	25.5	26.0	23.0	20.0	21.5
20	28.5	26.5	27.5	26.5	25.0	26.0	27.0	25.5	26.5	23.5	20.5	21.5
21	28.5	27.0	27.5	27.5	25.5	26.5	27.0	25.5	26.0	24.0	20.5	22.0
22	28.0	27.0	27.5	27.0	25.5	26.5	27.0	26.0	26.5	23.5	21.0	22.5
23	27.5	26.5	27.0	27.5	25.5	26.5	27.0	26.0	26.5	23.5	21.5	22.5
24	28.0	26.5	27.0	28.0	26.0	27.0	27.0	25.0	26.0	23.0	22.0	22.5
25	28.0	26.0	27.0	28.5	26.5	27.5	26.5	24.5	25.5	24.0	22.0	22.5
26	28.0	25.5	26.5	29.0	27.0	28.0	26.5	24.5	25.5	23.0	21.0	22.0
27	28.0	25.5	27.0	27.5	26.5	27.0	26.5	25.0	25.5	21.0	19.5	20.0
28	28.0	26.0	27.0	27.0	25.5	26.5	---	---	---	19.5	18.5	19.0
29	27.0	26.5	27.0	26.5	25.5	26.0	---	---	---	19.0	17.5	18.0
30	26.5	25.5	26.0	26.0	25.0	25.5	---	---	---	18.0	17.0	17.5
31	---	---	---	25.5	24.5	25.0	---	---	---	---	---	---
MONTH	28.5	15.5	25.0	29.0	22.0	25.5	27.5	24.0	26.0	---	---	---

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.3	7.9	8.1	9.7	9.4	9.5	---	---	---	14.3	13.9	14.1
2	8.3	7.9	8.1	9.7	9.4	9.6	---	---	---	14.3	14.1	14.2
3	8.2	8.0	8.1	9.6	9.3	9.5	---	---	---	14.2	14.1	14.2
4	8.2	7.9	8.0	9.6	9.3	9.4	---	---	---	14.2	14.0	14.2
5	8.1	7.8	7.9	9.8	9.4	9.7	---	---	---	14.0	13.7	13.8
6	8.1	7.9	8.0	10.0	9.8	9.9	---	---	---	13.7	13.5	13.6
7	8.3	8.0	8.1	10.1	9.9	10.0	11.0	10.7	10.9	13.5	13.4	13.5
8	8.3	8.1	8.2	10.2	10.0	10.1	11.2	10.8	11.1	13.4	13.3	13.4
9	8.4	8.2	8.3	10.3	10.1	10.2	11.4	11.2	11.3	13.4	13.2	13.3
10	8.4	8.2	8.3	10.1	10.0	10.1	11.5	11.3	11.4	13.2	13.1	13.1
11	8.3	8.1	8.2	10.2	10.0	10.1	11.3	11.1	11.2	13.3	13.1	13.2
12	8.2	7.9	8.1	10.5	10.2	10.4	11.1	10.7	11.0	13.6	13.2	13.4
13	8.5	7.9	8.2	10.6	10.4	10.5	10.9	10.6	10.8	13.6	13.5	13.5
14	8.3	8.2	8.3	10.7	10.5	10.6	10.8	10.5	10.7	13.6	13.5	13.5
15	8.5	8.3	8.4	10.7	10.5	10.6	11.0	10.6	10.8	13.5	13.4	13.5
16	8.6	8.4	8.5	10.8	10.6	10.7	11.4	11.0	11.2	13.4	13.3	13.4
17	8.6	8.5	8.5	11.2	10.8	11.1	11.8	11.4	11.6	13.3	13.2	13.3
18	8.5	8.4	8.4	11.3	11.2	11.3	12.0	11.7	11.8	13.5	13.1	13.3
19	8.5	8.3	8.4	11.3	11.1	11.2	12.2	12.0	12.1	13.7	13.5	13.6
20	8.5	8.2	8.3	11.1	10.9	11.0	12.3	12.2	12.3	13.9	13.6	13.8
21	8.4	8.1	8.3	11.1	10.9	11.0	12.5	12.3	12.4	14.1	13.9	14.0
22	8.4	8.1	8.2	11.1	10.3	10.9	12.4	12.3	12.3	14.2	14.1	14.1
23	8.4	8.2	8.3	10.9	10.7	10.9	12.4	12.3	12.3	14.1	13.9	14.0
24	8.3	8.2	8.3	10.7	10.6	10.7	12.7	12.5	12.6	---	---	---
25	8.6	8.3	8.4	10.8	10.6	10.7	13.3	12.8	13.0	---	---	---
26	8.8	8.6	8.7	11.1	10.9	11.0	13.6	13.4	13.6	---	---	---
27	9.0	8.8	8.9	11.1	11.0	11.1	13.7	13.5	13.6	---	---	---
28	9.2	9.0	9.1	---	---	---	13.6	13.3	13.5	---	---	---
29	9.4	9.2	9.3	---	---	---	---	---	---	---	---	---
30	9.5	9.3	9.4	---	---	---	---	---	---	---	---	---
31	9.6	9.4	9.5	---	---	---	---	---	---	12.9	12.5	12.8
MONTH	9.6	7.8	8.4	11.3	9.3	10.4	---	---	---	---	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.1	12.9	13.0	12.2	11.9	12.1	11.3	11.1	11.2	9.4	9.1	9.3
2	13.2	13.1	13.1	12.4	11.9	12.3	11.2	10.9	11.1	9.6	9.3	9.4
3	13.1	12.8	13.0	12.3	12.0	12.2	11.0	10.7	10.9	---	---	---
4	13.0	12.8	12.9	12.1	11.9	12.0	10.7	10.5	10.6	---	---	---
5	12.8	12.7	12.8	11.8	11.5	11.7	10.8	10.0	10.5	10.8	10.5	9.0
6	13.1	12.7	12.9	11.6	11.4	11.5	11.0	10.6	10.8	10.7	10.5	10.6
7	13.4	13.0	13.2	11.7	11.4	11.6	11.0	10.6	10.8	10.7	10.0	10.4
8	13.6	13.3	13.5	11.7	11.6	11.7	10.9	10.4	10.7	---	---	---
9	13.7	13.5	13.6	11.9	11.6	11.8	10.6	10.4	10.5	---	---	---
10	13.7	13.6	13.6	12.1	11.8	12.0	10.5	10.3	10.4	---	---	---
11	---	---	---	12.1	12.0	12.0	10.4	10.1	10.2	---	---	---
12	---	---	---	12.2	12.1	12.1	10.1	9.9	10.0	---	---	---
13	---	---	---	12.1	12.0	12.1	9.9	9.7	9.8	---	---	---
14	---	---	---	12.1	11.8	12.0	9.7	9.5	9.6	9.0	8.5	9.0
15	---	---	---	11.9	11.5	11.7	9.7	9.5	9.6	9.0	8.4	8.9
16	---	---	---	11.5	11.0	11.2	9.8	9.6	9.7	9.1	8.7	8.9
17	11.6	11.4	11.5	11.1	10.7	10.9	10.0	9.7	9.9	8.7	8.6	8.7
18	11.4	11.1	11.3	10.7	10.5	10.7	10.3	9.9	10.1	8.8	8.6	8.7
19	11.2	11.0	11.1	10.5	10.3	10.5	10.6	10.3	10.4	8.7	8.5	8.6
20	11.1	11.0	11.0	10.5	10.0	10.3	10.6	10.5	10.5	8.5	8.3	8.5
21	11.2	10.9	11.1	---	---	---	10.5	10.4	10.5	8.4	8.2	8.3
22	11.3	11.2	11.2	11.6	10.7	11.4	10.4	10.2	10.3	8.3	8.1	8.2
23	11.2	11.1	11.2	11.6	11.1	11.5	10.1	9.2	9.8	8.2	8.1	8.1
24	11.3	11.1	11.2	11.6	11.2	11.3	10.0	9.8	9.9	8.3	8.1	8.1
25	11.2	11.1	11.1	11.3	10.9	11.0	10.2	10.0	10.1	8.2	8.0	8.1
26	11.4	11.1	11.3	10.9	10.8	10.9	10.2	9.8	10.0	8.1	7.9	8.0
27	11.3	11.2	11.2	10.8	10.6	10.8	9.8	9.6	9.7	8.1	7.9	8.0
28	11.4	11.1	11.2	---	---	---	9.6	9.3	9.4	8.3	7.7	8.0
29	11.9	11.4	11.7	---	---	---	9.3	8.4	9.2	8.5	8.3	8.4
30	---	---	---	---	---	---	9.3	9.1	9.1	8.7	8.5	8.6
31	---	---	---	---	---	---	---	---	---	9.0	8.7	8.9
MONTH	---	---	---	12.4	10.0	11.5	11.3	8.4	10.2	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.1	8.9	9.0	8.7	8.2	8.5	8.1	7.8	7.9	---	---	---
2	9.1	8.8	9.0	8.8	8.4	8.6	8.0	7.7	7.9	---	---	---
3	8.9	8.7	8.9	8.8	8.4	8.6	8.1	7.7	7.9	---	---	---
4	8.8	8.5	8.7	8.6	8.3	8.5	8.0	7.7	7.8	---	---	---
5	8.7	8.4	8.6	8.6	8.2	8.4	7.9	7.5	7.7	---	---	---
6	8.6	8.3	8.4	8.7	8.3	8.5	7.8	7.5	7.6	---	---	---
7	8.5	8.2	8.3	9.0	8.5	8.8	7.7	7.4	7.6	---	---	---
8	8.4	8.1	8.2	9.2	8.9	9.1	7.6	7.3	7.5	---	---	---
9	8.3	7.9	8.1	9.1	8.9	9.0	7.5	7.2	7.3	---	---	---
10	8.2	7.8	8.0	9.0	8.7	8.8	7.7	7.4	7.5	---	---	---
11	8.2	7.7	7.9	8.7	8.5	8.6	7.5	7.4	7.5	---	---	---
12	8.0	7.6	7.8	8.5	8.3	8.4	7.6	7.5	7.6	8.4	7.7	8.0
13	7.9	7.4	7.7	8.4	8.3	8.3	7.7	7.5	7.6	8.3	7.7	7.9
14	7.6	7.0	7.4	8.3	8.2	8.3	7.8	7.5	7.6	8.2	7.6	7.8
15	7.3	6.9	7.1	8.4	8.1	8.2	7.8	7.7	7.7	8.2	7.5	7.8
16	7.2	6.9	7.0	8.4	8.0	8.2	7.8	7.5	7.7	8.5	7.7	8.1
17	7.3	6.9	7.1	8.4	8.1	8.2	8.0	7.6	7.7	8.7	8.0	8.3
18	7.2	6.9	7.0	8.5	8.1	8.3	7.9	7.5	7.7	8.8	8.2	8.5
19	7.1	6.9	7.0	8.5	8.2	8.3	8.1	7.5	7.8	8.8	8.3	8.5
20	7.2	6.8	7.0	8.6	8.2	8.4	8.4	7.6	7.9	8.6	8.3	8.4
21	7.2	6.7	6.9	8.7	8.2	8.4	8.4	7.6	8.0	8.6	8.2	8.4
22	7.1	6.8	7.0	8.7	8.2	8.4	8.2	7.6	7.9	8.5	8.1	8.3
23	7.1	6.8	7.0	8.6	8.0	8.3	8.1	7.5	7.8	8.5	8.0	8.2
24	7.2	6.9	7.0	8.4	7.8	8.1	8.3	7.6	7.9	8.4	8.0	8.1
25	7.3	7.0	7.1	8.0	7.5	7.8	8.2	7.7	7.9	8.4	7.9	8.1
26	7.4	6.6	7.0	8.0	7.4	7.7	8.3	7.7	8.0	8.3	7.9	8.1
27	7.2	6.7	7.0	7.7	7.3	7.5	8.3	7.6	7.9	8.4	8.1	8.2
28	8.5	7.0	7.7	8.1	7.4	7.7	---	---	---	8.5	8.1	8.3
29	8.5	8.0	8.3	8.0	7.6	7.8	---	---	---	9.1	8.4	8.7
30	8.5	8.0	8.2	8.1	7.7	7.9	---	---	---	8.9	8.7	8.8
31	---	---	---	8.2	7.8	8.0	---	---	---	---	---	---
MONTH	9.1	6.6	7.7	9.2	7.3	8.3	8.4	7.2	7.7	---	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TURBIDITY (JTU), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3	0	0	0	---	---	10	9	5	4	50	15
2	5	1	1	0	---	---	9	5	4	3	15	7
3	7	1	0	0	---	---	6	4	5	3	8	5
4	7	0	0	0	---	---	5	3	3	3	5	4
5	3	1	1	0	---	---	4	3	4	2	5	4
6	2	1	1	0	---	---	4	3	4	3	5	4
7	1	0	1	0	---	---	4	3	3	2	6	4
8	1	0	1	0	30	25	4	2	4	3	7	6
9	1	0	1	0	25	10	3	2	4	2	8	4
10	1	0	1	0	10	9	20	3	3	2	5	4
11	5	0	0	0	10	5	15	6	---	---	4	3
12	2	1	0	0	70	6	15	7	---	---	3	2
13	10	1	0	0	120	40	9	6	---	---	5	3
14	15	2	0	0	35	15	15	6	---	---	5	3
15	4	1	6	0	15	9	15	7	---	---	6	3
16	2	1	4	1	10	8	8	4	---	---	6	4
17	2	1	3	2	20	10	4	3	20	10	10	4
18	2	1	7	4	20	8	3	2	10	9	10	8
19	1	1	8	6	8	5	3	2	9	7	10	8
20	1	1	9	7	5	3	3	2	7	5	140	6
21	1	0	9	4	4	3	3	2	7	5	---	---
22	1	0	10	8	6	3	3	2	7	4	110	40
23	1	0	9	6	15	5	3	2	7	4	40	20
24	3	0	15	7	20	15	---	---	4	3	20	10
25	2	1	55	20	25	20	---	---	4	3	20	10
26	1	0	35	30	20	9	---	---	5	3	15	9
27	1	0	75	35	8	5	---	---	4	3	9	7
28	1	0	---	---	20	4	---	---	20	3	---	---
29	0	0	---	---	---	---	---	---	60	20	---	---
30	0	0	---	---	---	---	---	---	---	---	---	---
31	0	0	---	---	---	---	6	5	---	---	---	---
MONTH	15	0	75	0	---	---	---	---	---	---	140	2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15	10	160	25	45	25	3	3	9	7	---	---
2	10	7	25	15	25	15	4	3	9	6	---	---
3	7	6	---	---	15	15	4	3	8	6	---	---
4	25	6	---	---	15	10	4	2	8	6	---	---
5	130	35	110	30	10	7	3	3	8	6	---	---
6	80	20	130	15	7	6	7	2	8	6	---	---
7	20	15	900	270	6	4	600	7	7	6	---	---
8	15	9	---	---	5	2	490	70	7	6	---	---
9	9	8	---	---	5	3	700	360	20	5	---	---
10	9	5	---	---	5	4	400	150	100	8	---	---
11	6	4	---	---	5	4	160	65	110	25	---	---
12	6	4	---	---	5	3	60	40	500	140	20	7
13	5	3	---	---	4	3	55	40	320	85	10	7
14	5	3	7	3	5	2	45	30	80	40	10	7
15	4	3	5	3	4	2	35	20	40	25	8	4
16	4	2	7	4	4	2	25	15	30	20	6	4
17	3	1	7	3	4	2	15	15	25	20	5	4
18	3	2	3	2	4	2	15	10	20	15	5	4
19	5	2	3	2	4	2	20	15	15	10	5	3
20	3	2	2	0	4	2	20	15	15	10	5	4
21	3	2	0	0	4	2	15	10	15	8	6	4
22	5	2	1	0	3	2	15	10	10	7	5	4
23	15	6	---	---	4	2	10	9	9	7	5	4
24	80	10	---	---	3	2	10	7	9	7	6	4
25	50	10	---	---	3	2	9	6	10	6	4	4
26	10	6	---	---	5	2	10	6	9	6	4	4
27	6	4	---	---	4	4	10	8	7	5	5	4
28	5	3	---	---	4	3	10	7	---	---	5	4
29	5	3	---	---	6	3	9	7	---	---	5	3
30	150	4	---	---	4	3	9	7	---	---	5	4
31	---	---	---	---	---	---	25	7	---	---	---	---
MONTH	150	1	---	---	45	2	700	2	500	5	---	---

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	46	52	6.5	112	2	.60	1710	35	162
2	40	12	1.3	106	11	3.1	1540	36	199
3	38	9	.92	105	3	.85	18100	87	3780
4	36	12	1.2	129	2	.70	12500	58	1940
5	49	18	2.4	116	2	.63	7700	26	575
6	124	13	4.4	105	4	1.1	4470	4	48
7	101	16	4.4	114	3	.92	4520	32	375
8	140	15	5.7	132	2	.71	2980	32	257
9	114	15	4.6	120	18	5.8	2150	23	134
10	87	17	4.0	115	7	2.2	1650	19	85
11	73	10	2.0	111	6	1.8	1390	21	79
12	69	14	2.6	108	6	1.7	4110	80	1080
13	150	27	11	106	5	1.4	3770	246	2560
14	559	23	35	110	6	1.8	2790	145	1090
15	539	16	23	279	10	7.5	2690	100	726
16	290	10	7.8	737	13	26	2350	70	444
17	190	14	7.2	785	11	23	1850	66	330
18	144	12	4.7	538	13	19	1470	53	210
19	119	8	2.6	403	12	13	1240	58	194
20	106	11	3.1	345	28	26	1080	37	108
21	92	12	3.0	591	14	22	956	9	23
22	94	21	5.3	1080	18	52	1190	16	51
23	134	12	4.3	701	13	25	2810	16	121
24	381	8	8.2	937	15	38	2500	20	135
25	495	8	11	2080	54	314	1580	30	128
26	334	3	2.7	1150	38	118	1130	21	64
27	252	3	2.0	826	35	78	1260	12	41
28	202	2	1.1	9610	343	11900	1870	27	170
29	165	3	1.3	7910	518	12200	6900	146	2820
30	142	4	1.5	2880	113	948	4000	56	629
31	125	3	1.0	---	---	---	2320	35	219
TOTAL	5430	---	175.82	32441	---	25832.81	106576	---	18777
		JANUARY			FEBRUARY			MARCH	
1	1980	17	91	1260	3	10	2670	14	101
2	1730	17	79	1100	5	15	2250	11	67
3	1370	12	44	1020	13	36	2030	50	274
4	1160	12	38	994	8	21	1840	12	60
5	1110	5	15	946	9	23	1910	3	15
6	1090	7	21	878	5	12	2200	3	18
7	1010	12	33	728	6	12	2300	3	19
8	902	26	63	567	6	9.2	2070	3	17
9	812	5	11	609	6	9.9	1790	1	4.8
10	974	14	37	703	4	7.6	1510	2	8.2
11	1910	14	72	11400	306	16800	1330	1	3.6
12	1980	18	96	18100	617	35700	1180	2	6.4
13	1740	8	38	7450	111	2230	1210	3	9.8
14	1580	11	47	16300	431	19600	1500	1	4.1
15	1450	31	121	8030	245	5750	1400	1	3.8
16	1360	5	18	4470	70	845	1570	13	55
17	1290	7	24	3160	55	469	2370	4	26
18	1210	22	72	2390	13	84	2560	8	55
19	1160	4	13	1970	7	37	2370	9	58
20	853	4	9.2	1740	2	9.4	3350	95	1360
21	776	2	4.2	1490	3	12	18800	609	32400
22	828	3	6.7	1270	9	31	10400	205	6240
23	807	6	13	1130	3	9.2	5960	102	1640
24	4400	102	2500	1070	2	5.8	4090	42	464
25	11600	501	16900	1050	1	2.8	3220	38	330
26	5830	106	1740	972	2	5.2	2740	31	229
27	3800	32	328	979	3	7.9	2230	30	181
28	2840	19	146	2970	33	265	7490	141	5030
29	2230	17	102	3660	24	237	22600	479	30000
30	1830	17	84	---	---	---	8940	230	6040
31	1520	10	41	---	---	---	4850	97	1270
TOTAL	63132	---	22807.1	98406	---	82256.0	130730	---	85989.7

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	3360	52	472	2760	43	320	921	71	177
2	2560	19	131	2620	34	241	707	38	73
3	2190	16	95	15200	128	5350	562	24	36
4	3670	50	643	17200	189	8380	458	19	23
5	9010	219	5590	8800	100	3000	383	12	12
6	5660	73	1120	6810	100	3000	322	19	17
7	3950	31	331	53800	1000	150000	277	16	12
8	2920	22	173	42100	700	80000	244	18	12
9	2380	15	96	15500	336	14300	216	11	6.4
10	2120	15	86	7060	170	3430	191	7	3.6
11	1800	13	63	4300	78	906	171	9	4.2
12	1510	10	41	3000	43	348	154	32	13
13	1320	8	29	2280	28	172	143	33	13
14	1170	9	28	2210	36	215	142	44	17
15	1040	10	28	1880	32	162	170	38	17
16	955	8	21	1410	102	388	167	35	16
17	941	13	33	1130	86	262	202	25	14
18	942	10	25	950	61	156	231	32	20
19	846	8	18	818	42	93	261	28	20
20	772	7	15	719	32	62	194	35	18
21	759	7	14	634	24	41	155	30	13
22	1130	10	31	562	20	30	142	29	11
23	3540	26	249	512	20	28	344	34	32
24	3070	64	530	485	20	26	310	40	33
25	2240	20	121	490	20	26	285	34	26
26	1760	21	100	448	20	24	228	27	17
27	1420	16	61	554	25	37	165	21	9.4
28	1250	7	24	2330	117	737	131	16	5.7
29	2070	10	56	3090	98	818	116	17	5.3
30	2560	60	415	2220	184	1100	119	16	5.1
31	---	---	---	1330	174	625	---	---	---
TOTAL	68915	---	10639	203202	---	274277	8111	---	681.7
		JULY			AUGUST			SEPTEMBER	
1	368	16	16	382	15	15	79	20	4.3
2	276	16	12	352	14	13	77	20	4.2
3	255	15	10	357	18	17	75	20	4.1
4	346	13	12	319	14	12	76	20	4.1
5	270	11	8.0	306	17	14	75	20	4.1
6	738	151	548	440	14	17	84	50	11
7	2070	130	758	413	16	18	105	50	14
8	2190	405	2430	316	14	12	82	50	11
9	952	385	990	947	21	54	72	50	9.7
10	557	240	361	720	35	68	67	50	9.0
11	383	105	109	1100	86	255	63	90	15
12	324	80	70	773	290	605	54	75	11
13	409	66	73	496	124	166	51	46	6.3
14	679	58	106	346	61	57	50	53	7.2
15	463	41	51	259	50	35	45	41	5.0
16	379	39	40	218	32	19	40	31	3.3
17	306	40	33	184	27	13	38	26	2.7
18	371	32	32	165	24	11	37	28	2.8
19	487	35	46	160	48	21	34	25	2.3
20	455	39	48	140	17	6.4	33	34	3.0
21	328	28	25	124	40	13	33	26	2.3
22	245	24	16	138	14	5.2	35	46	4.3
23	198	28	15	146	19	7.5	33	23	2.0
24	172	28	13	116	17	5.3	32	17	1.5
25	157	40	17	238	16	10	32	13	1.1
26	140	19	7.2	168	20	9.1	27	12	.87
27	154	23	9.6	130	19	6.7	27	29	2.1
28	169	23	10	119	21	6.7	28	43	3.3
29	304	37	30	119	20	6.4	32	34	2.9
30	360	17	17	99	20	5.3	32	30	2.6
31	331	16	14	88	20	4.8	---	---	---
TOTAL	14836	---	5926.8	9878	---	1508.4	1548	---	157.07

TOTAL LOAD FOR YEAR: 529028.4

03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TN

LOCATION.--Lat 36°24'58", long 85°01'35", Fentress County, Hydrologic Unit 05130105, on right bank 200 ft upstream from bridge on State Highway 52, 0.5 mi upstream from Poplar Cove Creek, 5.3 mi west of Jamestown, and at mile 12.7.

DRAINAGE AREA.--202 mi², includes 6.0 mi² without surface drainage.

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

REVISED RECORDS.--WSP 1276: 1944, 1946(M). WSP 1506: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.30 ft Sandy Hook datum. Feb. 24 to Apr. 7, 1943, nonrecording gage 200 ft upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--42 years, 426 ft³/s, 28.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,800 ft³/s May 27, 1973, gage height, 30.46 ft, from rating curve extended above 32,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s Sept. 26-28, 1948; minimum gage height, 0.55 ft Sept. 12-17, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of about 30.7 ft from flood profile by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 11	1315	8970	13.77	May 7	1200	*33500	26.89
Mar. 29	0145	8280	13.15				

Minimum discharge, 5.2 ft³/s Sept 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	19	310	458	286	771	833	884	150	25	46	12
2	11	18	750	366	253	675	621	2350	124	24	51	11
3	11	19	2900	312	225	597	593	5230	104	23	48	12
4	12	21	2200	276	205	528	1850	4020	89	24	40	12
5	23	75	1000	267	190	534	2190	2050	77	32	37	11
6	40	60	750	265	175	618	1700	4540	66	47	30	11
7	37	41	600	245	165	612	1170	19700	57	150	26	11
8	27	32	430	222	165	539	858	8200	51	147	24	9.6
9	21	28	395	206	179	461	677	2990	46	86	24	9.0
10	17	25	360	336	212	396	563	1650	41	55	25	8.7
11	16	26	340	461	4290	354	447	1110	37	42	23	8.3
12	16	27	540	398	2220	318	376	812	45	41	23	7.8
13	26	28	812	364	3370	345	328	653	45	47	21	7.5
14	26	27	747	340	3910	407	289	746	50	36	20	7.3
15	29	68	817	317	1690	381	257	542	41	31	19	7.1
16	25	201	605	303	1120	696	239	450	42	47	18	6.8
17	21	147	439	285	841	1180	255	400	46	54	23	6.5
18	19	102	353	273	640	1100	265	350	37	60	24	6.5
19	19	80	300	256	543	906	240	300	31	110	19	6.4
20	18	80	252	189	530	1210	225	250	28	67	16	6.2
21	18	182	224	191	465	2120	225	210	28	47	15	6.0
22	19	155	369	170	406	1700	1470	190	45	36	15	5.8
23	27	144	632	181	363	1280	1550	170	98	31	15	5.5
24	32	426	480	2300	332	993	952	155	84	26	14	5.6
25	37	390	327	2300	314	862	671	131	58	25	20	5.7
26	33	350	262	1390	286	746	488	111	43	23	16	5.5
27	30	300	249	949	415	619	389	105	34	31	15	5.4
28	27	3800	1330	686	1140	4160	385	148	29	49	14	5.9
29	24	1600	1490	520	979	5170	465	277	26	47	14	5.6
30	22	650	877	410	---	1960	1060	260	28	37	13	5.9
31	20	---	561	338	---	1180	---	187	---	36	12	---
TOTAL	714	9121	21701	15574	25909	33418	21631	59171	1680	1536	720	234.6
MEAN	23.0	304	700	502	893	1078	721	1909	56.0	49.5	23.2	7.82
MAX	40	3800	2900	2300	4290	5170	2190	19700	150	150	51	12
MIN	11	18	224	170	165	318	225	105	26	23	12	5.4
CFSM	.11	1.50	3.47	2.49	4.42	5.34	3.57	9.45	.28	.25	.11	.04
IN.	.13	1.68	4.00	2.87	4.77	6.15	3.98	10.90	.31	.28	.13	.04

CAL YR 1983	TOTAL	154035.5	MEAN	422	MAX	4650	MIN	9.0	CFSM	2.09	IN.	28.37
WTR YR 1984	TOTAL	191409.6	MEAN	523	MAX	19700	MIN	5.4	CFSM	2.59	IN.	35.25

03416000 WOLF RIVER NEAR BYRDSTOWN, TN

LOCATION.--Lat 36°33'37", long 85°04'23", Pickett County, Hydrologic Unit 05130105; on right bank 0.3 mi upstream from bridge on county road, 0.5 mi upstream from Widow Creek, 3.2 mi east of Byrdstown, 5.4 mi upstream from Lick Creek, and at mile 26.2.

DRAINAGE AREA.--106 mi².

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

REVISED RECORD.--WSP 1276: 1943. WSP 1910: Drainage area. WDR TN-82: 1944-81(M).

GAGE.--Water-stage recorder. Datum of gage is 707.54 ft Sandy Hook datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--42 years, 193 ft³/s, 24.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft³/s Sept. 2, 1982, gage height, 17.14 ft, from rating curve extended above 7,300 ft³/s on basis of slope-area measurement at gage height 10.09 ft and 17.14 ft; minimum, 2.0 ft³/s Sept. 17, 1954, gage height, 0.50 ft result of construction at mill dam upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of about 10.8 ft, discharge, about 12,400 ft³/s from information by local resident. From flood marks, flood of June 30, 1928, reached a stage 1.5 ft higher than that in March 1929 at a point 12.5 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 11	1645	7970	8.64	Apr. 22	1515	3730	6.27
Mar. 29	0145	3680	6.24	May 7	0600	*10400	10.09

Minimum discharge, 5.9 ft³/s, Sept. 22, 24, 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	11	104	168	124	314	381	210	140	22	16	8.2
2	8.3	11	312	140	111	289	303	264	113	19	15	7.9
3	8.3	11	810	120	108	262	279	1510	94	19	14	9.5
4	7.9	14	643	108	105	277	568	1800	80	23	14	11
5	16	14	372	102	99	403	730	898	68	24	13	8.8
6	14	14	268	99	92	438	597	963	58	35	13	8.8
7	14	13	241	92	77	376	446	7430	52	49	13	8.3
8	11	13	191	82	70	310	355	3690	48	47	12	7.7
9	9.9	12	149	76	75	253	303	1360	44	32	11	7.4
10	9.3	12	123	105	125	220	293	715	40	26	11	7.6
11	9.3	14	118	196	3750	193	253	480	38	24	11	7.6
12	9.3	13	198	166	1610	168	224	361	37	29	20	7.5
13	16	14	208	154	1590	172	201	286	33	30	14	7.3
14	21	15	198	140	1740	170	179	250	33	24	13	7.2
15	20	37	203	128	717	155	161	205	43	22	24	6.9
16	13	45	170	124	476	297	153	171	36	22	27	6.4
17	11	29	137	113	357	363	153	145	35	21	16	6.2
18	11	22	115	106	278	363	147	126	32	22	14	6.4
19	10	17	101	95	250	318	137	112	33	19	14	6.3
20	9.6	20	88	81	230	548	130	101	31	18	12	6.4
21	10	29	80	69	201	1290	128	90	28	16	11	6.3
22	12	29	196	70	178	926	1890	80	27	15	11	6.2
23	19	27	242	71	161	658	1060	76	29	14	11	6.2
24	23	86	188	628	149	486	556	71	33	14	10	6.2
25	21	65	244	602	142	425	396	63	27	13	9.6	6.5
26	17	40	181	414	126	363	303	113	24	14	9.1	6.0
27	14	66	114	311	218	310	251	162	22	23	8.9	6.3
28	13	1050	442	249	556	1370	218	817	21	19	8.9	7.1
29	12	306	420	210	407	2070	205	375	20	18	8.9	7.2
30	12	162	267	176	---	780	240	245	22	15	8.8	7.4
31	11	---	202	145	---	499	---	182	---	17	8.7	---
TOTAL	401.6	2211	7325	5340	14122	15066	11240	23351	1341	705	402.9	218.8
MEAN	13.0	73.7	236	172	487	486	375	753	44.7	22.7	13.0	7.29
MAX	23	1050	810	628	3750	2070	1890	7430	140	49	27	11
MIN	7.9	11	80	69	70	155	128	63	20	13	8.7	6.0
CFSM	.12	.70	2.23	1.62	4.59	4.58	3.54	7.10	.42	.21	.12	.07
IN.	.14	.78	2.57	1.87	4.96	5.29	3.94	8.19	.47	.25	.14	.08

CAL YR 1983	TOTAL	67532.5	MEAN	185	MAX	2840	MIN	7.9	CFSM	1.75	IN.	23.70
WTR YR 1984	TOTAL	81724.3	MEAN	223	MAX	7430	MIN	6.0	CFSM	2.10	IN.	28.68

03417500 CUMBERLAND RIVER AT CELINA, TN

LOCATION.--Lat 36°33'15", long 85°30'52", Clay County, Hydrologic Unit 05130106, on right bank at State Highway 52 bridge, 0.5 mi northwest of courthouse in Celina, 600 ft downstream from Obey River, and at mile 380.8.

DRAINAGE AREA.--7,307 mi².

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.

REVISED RECORDS.--WSP 893: 1923-38. WSP 1276: 1924. WSP 1306: 1943 (monthly runoff). WSP 2110: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 489.00 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1930, nonrecording gage at site 400 ft downstream at same datum. Since Feb. 2, 1973, auxiliary water-stage recorder 15.8 mi downstream from base gage at same datum.

REMARKS.--Records good, except those for periods of low fall which are fair. Flow regulated by Lake Cumberland and Dale Hollow Lake (see page 107).

AVERAGE DISCHARGE.--61 years (water years 1922-1980, 1982-1984), 11,840 ft³/s, 22.00 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 145,000 ft³/s Dec. 29, 1926, maximum gage height, 57.25 ft, Dec. 29, 1926, from graph based on gage readings; minimum daily, 69 ft³/s Sept. 2, 11-14, 1925; minimum gage height observed, 0.20 ft Sept. 2, 11-14, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, 59.2 ft in March 1826, from Cumberland River profile.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 64,800 ft³/s May 7, gage height 35.35 ft; minimum daily, 272 ft³/s Dec. 7; minimum recorded gage height, 10.25 ft Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6330	3570	1000	11900	4650	12600	23700	19100	33800	10200	14400	13000
2	4560	2610	1840	3710	4560	11900	23800	18200	33100	9060	15200	9000
3	5900	2330	3250	3540	3870	9540	27900	23500	32600	11800	14700	6500
4	8180	2220	11400	3280	3760	9000	26600	28600	32000	12700	14100	9000
5	8030	3680	3200	2790	3800	13000	27400	29200	32600	13200	11400	10600
6	7730	5250	720	3200	3650	14300	21400	32300	33500	12800	10000	11000
7	4550	5130	272	3770	5620	12400	20400	57100	32600	12600	13200	12400
8	3120	2760	837	1610	5000	10900	22900	60300	30800	9950	14300	10100
9	2950	2210	1560	1390	2720	9510	22800	47700	27600	8800	14700	6800
10	2990	2760	1800	2850	2310	11100	25500	38800	25100	10500	14400	5240
11	5700	3150	1280	6480	18700	6810	23400	38800	25700	11600	14400	6610
12	6850	5220	3830	11000	18300	4860	20800	39800	25900	11600	11500	7360
13	5830	3610	2790	7870	6020	7810	20800	39500	26100	12700	8230	7680
14	6760	1800	1940	2860	12100	6850	21200	39200	23800	11600	12000	7860
15	5710	2110	726	2320	10900	6300	22100	39100	19500	9260	13200	6530
16	2820	2380	2010	1830	10300	4920	22200	39300	20100	9700	13400	5270
17	2450	2360	2210	2400	9800	6420	23100	38900	18700	11000	13200	5850
18	2880	2280	923	2430	8810	5350	21600	38500	15900	12200	12000	5940
19	3260	1460	772	3490	5880	5320	19100	38300	16300	12100	7830	6290
20	3650	1470	3080	14300	3330	9110	18200	38100	16900	11900	8350	6410
21	3900	1260	6500	19600	6730	16400	15300	38200	17000	11400	12700	6480
22	3470	1540	5910	14900	8000	15700	26900	38000	15200	8850	14500	5520
23	6950	2350	8180	8000	7720	19800	24100	37700	15300	9500	15000	4490
24	4520	4790	5450	7820	7100	24000	23300	36700	13800	12200	14600	5450
25	2580	1900	7200	8580	6520	23500	26900	34800	10600	13700	13100	5770
26	3210	968	4710	5820	3980	25100	28400	33100	12000	14000	8450	5900
27	3170	1640	7780	4740	5810	23100	28800	33000	13700	14300	7960	5740
28	4920	17000	28200	3560	11800	15100	26700	32000	13700	12200	11500	5180
29	3110	7150	13100	3820	14200	15500	20000	33000	14300	8660	12500	4820
30	3000	2260	12000	3280	---	18500	19200	33200	12600	8850	13500	4300
31	3310	---	14900	3900	---	22800	---	34000	---	13800	13500	---
TOTAL	142390	99218	159370	177040	215940	397500	694500	1128000	660800	352730	387820	213090
MEAN	4593	3307	5141	5711	7446	12820	23150	36390	22030	11380	12510	7103
MAX	8180	17000	28200	19600	18700	25100	28800	60300	33800	14300	15200	13000
MIN	2450	968	272	1390	2310	4860	15300	18200	10600	8660	7830	4300

CAL YR 1983 TOTAL 4409468 MEAN 12080 MAX 42600 MIN 272 MEAN† 11340 CFSM† 1.55 IN.† 21.07
WTR YR 1984 TOTAL 4628398 MEAN 12650 MAX 60300 MIN 272 MEAN† 13470 CFSM† 1.84 IN.† 25.09

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

03418070 ROARING RIVER ABOVE GAINESBORO, TN

LOCATION.--Lat 36°21'04", long 85°32'45", Jackson County, Hydrologic Unit 05130106, near left bank of downstream end of county road bridge, 1.1 mi upstream from Blackburn Fork, 6.3 mi east of Gainesboro, and at mile 9.1.

DRAINAGE AREA.--210 mi², includes 34 mi² without surface drainage.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.56 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those below 5.0 ft³/s, which are poor.

AVERAGE DISCHARGE.--10 years, 288 ft³/s, 18.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s Mar. 12, 1975, gage height, 21.83 ft, from high-water marks; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 28	2400	6680	13.54	May 7	1100	*20600	21.30
May 3	1015	6560	13.41				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	96	218	154	495	681	694	.00	.00	.56	.00
2	.00	.00	1330	181	136	442	561	1540	.00	.00	.00	.00
3	.00	.00	2680	154	138	374	498	4950	.00	.00	.00	.00
4	.00	.55	1760	137	140	342	507	3040	.00	.00	.00	.00
5	.00	2.6	861	128	125	458	567	1430	.00	.39	.00	.00
6	.00	.00	583	118	125	502	586	3130	.00	.11	.00	.00
7	.00	.00	453	106	100	462	507	12400	.00	.00	.00	.00
8	.00	.00	317	92	104	385	429	6460	.00	.00	.00	.00
9	.00	.00	239	83	99	321	367	2340	.00	.00	.00	.00
10	.00	.00	187	122	116	272	349	1430	.00	.00	.00	.00
11	.00	.00	205	239	2430	248	287	1040	.00	.00	.00	.00
12	.00	.00	479	202	2730	225	230	780	.00	.00	.00	.00
13	19	.00	537	184	2840	236	203	620	.00	.00	.00	.00
14	5.8	.00	420	169	2510	239	174	450	.00	.00	.00	.00
15	.29	1.1	381	157	1100	219	147	350	.00	.00	.00	.00
16	.00	2.7	285	157	721	441	141	260	.00	.00	.00	.00
17	.00	.46	213	145	570	561	136	230	.00	.00	.00	.00
18	.00	.00	174	143	442	543	121	191	.00	.00	.00	.00
19	.00	.00	146	123	378	450	102	164	.00	.00	.00	.00
20	.00	.05	124	112	356	661	87	147	.00	.00	.00	.00
21	.00	.36	113	118	310	906	82	115	.00	.00	.00	.00
22	.00	.19	400	115	272	841	2230	107	.00	.00	.00	.00
23	3.3	7.0	518	99	242	632	1540	100	.00	.00	.00	.00
24	.04	127	329	1020	222	535	788	79	.00	.00	.00	.00
25	.00	41	205	978	214	471	553	63	.00	.00	.00	.00
26	.00	4.9	166	603	191	378	388	35	.00	.00	.00	.00
27	.00	35	154	450	331	331	299	25	.00	.00	.00	.00
28	.00	2670	905	341	738	2720	405	15	.00	.00	.00	.00
29	.00	734	737	275	601	4890	636	8.0	.00	.00	.00	.00
30	.00	217	404	222	---	1450	979	.00	.00	.00	.00	.00
31	.00	---	275	180	---	859	---	.00	---	1.3	.00	---
TOTAL	28.43	3843.91	15676	7371	18435	21889	14580	42193.00	.00	1.80	.56	.00
MEAN	.92	128	506	238	636	706	486	1361	.00	.06	.02	.00
MAX	19	2670	2680	1020	2840	4890	2230	12400	.00	1.3	.56	.00
MIN	.00	.00	96	83	99	219	82	.00	.00	.00	.00	.00
CFSM	.00	.61	2.41	1.13	3.03	3.36	2.31	6.48	.00	.00	.00	.00
IN.	.01	.68	2.78	1.31	3.27	3.88	2.58	7.47	.00	.00	.00	.00

CAL YR 1983	TOTAL	94054.10	MEAN	258	MAX	3810	MIN	.00	CFSM	1.23	IN.	16.66
WTR YR 1984	TOTAL	124018.70	MEAN	339	MAX	12400	MIN	.00	CFSM	1.61	IN.	21.97

NOTE.--No gage-height record Feb. 6 to Apr. 18.

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN

LOCATION.--Lat 36°17'12", long 85°56'27", Smith County, Hydrologic Unit 05130108, on right bank in powerhouse at Cordell Hull Dam, 2.7 mi north of Carthage, and at mile 313.5.

DRAINAGE AREA.--8,095 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year. Equivalent record prior to 1981 published in annual reports of Tennessee Valley Authority entitled "Operation of TVA Reservoirs".

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by Lake Cumberland (station 03413500) and Dale Hollow Lake (station 03416500).

AVERAGE DISCHARGE.--12 years, 14,620 ft³/s, unadjusted.

COOPERATION.--Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 116,000 ft³/s Mar. 13, 1975; no flow Nov. 2, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 85,200 ft³/s May 8; minimum daily, 1,620 ft³/s Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4680	3250	4880	11600	9000	15100	25900	19900	33000	8400	11800	9050
2	4680	3570	11500	6420	7600	15400	24100	23300	28500	6110	12700	5450
3	4340	2930	16900	6340	6120	13400	25900	27900	32200	9120	9950	4700
4	5390	2950	19500	6100	5720	13400	26500	36000	30000	9450	11200	5080
5	7100	5260	11700	5250	4350	14400	27500	34500	27900	10800	9760	8050
6	6530	5710	4710	5260	4320	18700	16900	34800	30100	11000	9050	8040
7	7080	6820	3460	5530	9480	16600	18800	70200	33700	10700	8130	9650
8	3150	3600	4210	3780	9550	14800	26400	85200	28600	9100	9380	8470
9	4120	2950	2720	2420	7420	14800	19300	74800	23000	8880	12900	5440
10	2830	5350	4800	8150	3700	15300	23000	43100	22700	7410	11900	3700
11	4330	3350	3460	7030	23100	7920	24200	35700	21100	8270	10900	4190
12	4130	6300	7090	12500	39800	9190	21500	37800	23500	8160	8730	4730
13	5870	3260	12300	10300	9030	12900	18900	38700	24400	10800	7310	5410
14	11800	3260	8950	3780	23000	9350	19200	36800	24800	8800	8630	6830
15	6290	1960	4480	2680	18900	11200	19400	34000	16100	7080	9570	5380
16	1900	3610	5490	3000	15800	8290	22100	37000	17100	8130	11800	3700
17	3210	3580	6430	5760	11400	9520	20200	37200	19600	8550	14700	3390
18	2240	4600	4480	6190	12700	8320	20800	34900	11800	10100	9140	4000
19	2860	2600	3930	6300	10400	8380	20600	34900	15200	11000	5550	4610
20	1920	2630	5210	13100	7710	15200	18200	34700	13500	10500	6120	4600
21	3500	2310	5580	15800	9580	25900	14400	34900	16100	9540	8310	5260
22	3800	2960	9690	13400	12800	19500	29000	35800	14700	6760	11800	4250
23	4870	1640	13900	9390	10100	22200	33800	35800	10800	6810	13200	2730
24	4840	13000	8570	9380	10100	32400	27400	36300	10700	8960	11800	3640
25	2580	6890	16200	15600	9260	22700	25400	34400	7720	11800	11500	3030
26	3870	1830	29100	12200	6540	25900	26400	26600	10500	11700	7080	4920
27	4250	3320	32000	7750	8010	31600	28200	31100	12400	11200	6830	4920
28	4920	22200	22800	5890	16800	21300	24400	26500	10700	9530	7160	4040
29	4870	13700	14500	5760	15800	33500	24300	32400	11400	7100	9990	2730
30	1620	9230	14300	6850	---	22600	16400	29400	11400	6060	14400	2130
31	5520	---	20000	7750	---	28200	---	30600	---	8930	12500	---
TOTAL	139090	154620	332840	241260	338090	537970	689100	1165200	593220	280750	313790	152120
MEAN	4487	5154	10740	7783	11660	17350	22970	37590	19770	9056	10120	5071
MAX	11800	22200	32000	15800	39800	33500	33800	85200	33700	11800	14700	9650
MIN	1620	1640	2720	2420	3700	7920	14400	19900	7720	6060	5550	2130

CAL YR 1983 TOTAL 4739630 MEAN 12990 MAX 47800 MIN 1620
WTR YR 1984 TOTAL 4938050 MEAN 13490 MAX 85200 MIN 1620

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1980 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to current year.
WATER TEMPERATURE: October 1980 to current year.
DISSOLVED OXYGEN: October 1980 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1980.

REMARKS.--Flow regulated by Cordell Hull Dam and other reservoirs above station. Interruptions in the record were due to monitor malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 255 micromhos Dec. 30, 31, 1981; minimum, 140 micromhos Sept. 3, 1984.
WATER TEMPERATURE: Maximum, 23.0°C Aug. 7, 1981; minimum, 2.0°C Jan. 12, 15-21, 1981.
DISSOLVED OXYGEN: Maximum, 15.5 mg/L Mar. 4, 1983, minimum, 4.1 mg/L Sept. 13, 23, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 222 micromhos Dec. 1; minimum, 140 micromhos Sept. 3.
WATER TEMPERATURE: Maximum, 22.5°C July 19, 24, Aug.17; minimum, 3.0°C Jan. 21,22.
DISSOLVED OXYGEN: Maximum, 12.6 mg/L Dec. 24; minimum, 4.1 mg/L Sept. 13,23.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	171	165	167	199	157	170	222	192	196	185	182	184
2	176	165	167	202	161	174	197	193	195	189	182	184
3	---	---	---	200	162	173	197	184	192	187	183	185
4	---	---	---	186	161	166	185	181	183	---	---	---
5	---	---	---	197	164	172	183	180	181	---	---	---
6	---	---	---	192	164	166	193	178	182	---	---	---
7	---	---	---	195	164	170	210	178	188	---	---	---
8	---	---	---	183	165	172	191	176	181	---	---	---
9	---	---	---	195	161	174	187	174	178	---	---	---
10	---	---	---	194	166	173	184	173	176	---	---	---
11	---	---	---	181	167	171	184	175	178	---	---	---
12	---	---	---	184	167	172	187	176	179	---	---	---
13	---	---	---	190	170	177	187	180	182	---	---	---
14	---	---	---	191	173	180	200	181	184	---	---	---
15	---	---	---	194	172	176	190	182	185	---	---	---
16	---	---	---	188	171	175	188	183	186	---	---	---
17	175	173	174	190	170	174	190	184	186	190	187	188
18	177	168	171	178	171	173	190	184	187	190	187	188
19	191	168	174	203	171	176	190	185	187	189	187	188
20	188	167	175	182	170	174	194	187	190	190	187	189
21	188	163	174	184	170	174	198	192	195	190	188	189
22	181	163	166	180	171	174	200	195	197	189	188	189
23	170	162	164	177	172	174	201	195	197	191	189	190
24	172	161	163	175	170	171	201	197	199	194	191	192
25	166	160	163	189	171	174	199	195	197	194	189	191
26	168	159	161	191	171	176	197	190	192	192	186	188
27	201	159	166	179	170	173	190	181	187	189	185	187
28	202	168	186	175	171	173	183	180	181	190	187	188
29	195	158	174	184	172	178	186	180	181	193	187	188
30	198	157	173	207	184	193	183	179	181	191	184	186
31	195	157	174	---	---	---	183	180	181	187	185	186
MONTH	---	---	---	207	157	174	222	173	187	---	---	---

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	187	186	186	194	193	193	190	181	185	195	192	193
2	190	187	189	195	193	194	191	189	190	198	194	195
3	192	190	191	196	194	195	191	189	190	200	196	198
4	192	188	190	198	196	197	190	189	189	203	199	201
5	192	189	190	205	193	196	189	186	188	201	197	199
6	194	190	191	213	195	204	188	186	187	200	198	199
7	193	190	192	214	202	210	190	185	188	201	196	200
8	197	194	194	216	208	213	190	188	189	195	169	180
9	196	193	195	213	200	206	192	189	191	166	159	161
10	196	193	194	203	197	199	192	190	191	179	163	172
11	195	191	194	201	195	197	190	188	189	189	179	184
12	195	191	194	203	196	198	189	186	187	195	188	192
13	189	185	187	201	197	198	185	184	184	194	192	193
14	184	165	171	203	198	200	186	184	185	191	189	190
15	166	155	160	203	199	201	187	185	186	189	187	188
16	160	155	157	203	193	199	189	186	187	186	185	186
17	167	159	162	209	198	201	195	188	189	185	183	184
18	171	163	167	210	199	203	190	187	189	182	181	181
19	177	171	174	209	202	205	189	187	187	180	179	179
20	177	172	174	210	200	203	190	186	188	179	178	178
21	179	174	175	204	200	201	189	186	188	176	176	176
22	184	175	179	205	202	203	195	186	188	175	174	175
23	188	183	185	206	200	203	187	185	186	175	174	174
24	189	186	188	200	193	196	187	181	185	174	171	173
25	190	187	188	196	193	195	181	178	180	171	169	169
26	193	188	189	196	194	195	184	176	179	174	170	172
27	193	187	190	196	193	195	195	185	191	174	172	173
28	191	189	190	195	192	193	196	195	195	172	170	171
29	193	191	192	193	190	192	196	194	195	169	166	168
30	---	---	---	195	190	193	196	193	194	188	164	175
31	---	---	---	189	175	179	---	---	---	174	166	171
MONTH	197	155	184	216	175	199	196	176	188	203	159	182
		JUNE			JULY			AUGUST			SEPTEMBER	
1	176	173	175	164	156	158	168	158	163	162	156	158
2	176	173	175	165	157	159	168	160	163	166	150	157
3	176	172	174	163	157	159	170	160	163	168	140	156
4	176	171	174	165	158	160	168	156	161	178	152	157
5	172	168	170	164	157	159	169	153	160	164	152	156
6	168	163	165	166	157	160	167	155	160	164	152	156
7	162	159	161	167	158	159	167	159	161	156	150	153
8	164	159	162	167	157	159	169	157	162	156	150	153
9	167	159	163	162	156	158	169	157	161	158	150	154
10	166	158	162	160	153	156	170	156	161	153	149	151
11	164	158	160	166	159	161	170	156	162	157	149	153
12	159	156	157	165	159	161	173	155	162	157	149	153
13	160	156	158	165	159	161	167	159	163	161	153	155
14	159	154	157	167	160	162	174	154	164	161	153	155
15	163	156	159	168	160	162	168	154	161	161	153	157
16	164	155	157	168	160	163	171	153	159	161	157	157
17	183	156	164	168	160	163	161	155	159	161	157	157
18	167	156	158	168	162	164	166	154	159	161	157	157
19	175	155	158	166	160	163	166	160	162	168	157	160
20	164	155	158	166	162	163	171	159	161	165	155	158
21	166	155	158	166	158	162	165	158	161	159	153	155
22	165	154	158	166	160	163	170	150	161	160	152	153
23	165	154	157	164	160	161	162	150	154	156	150	152
24	160	154	156	164	160	162	160	150	154	159	151	152
25	166	155	158	168	162	163	162	150	153	188	148	169
26	168	156	157	166	162	163	162	152	154	190	154	182
27	164	156	157	166	160	162	160	150	155	185	171	180
28	164	156	157	168	160	164	158	152	156	182	170	176
29	163	156	158	166	160	162	160	152	157	172	160	170
30	163	156	158	164	158	161	160	152	156	171	161	166
31	---	---	---	164	160	161	166	152	158	---	---	---
MONTH	183	154	161	168	153	161	174	150	160	190	140	159

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	19.0	19.0	16.5	16.0	16.0	10.5	10.0	10.0	6.0	5.5	6.0
2	19.5	19.0	19.0	16.0	16.0	16.0	10.0	9.5	10.0	6.0	5.5	6.0
3	19.5	19.0	19.5	16.0	16.0	16.0	10.5	10.0	10.0	5.5	5.5	5.5
4	19.5	19.0	19.5	16.0	15.0	15.5	10.5	10.0	10.5	---	---	---
5	19.5	19.0	19.5	15.5	15.0	15.0	10.5	10.0	10.5	---	---	---
6	20.0	18.5	19.5	15.0	14.5	15.0	11.0	10.0	10.5	---	---	---
7	19.5	18.5	19.0	15.0	14.5	14.5	10.0	9.5	10.0	---	---	---
8	19.5	18.5	19.0	14.5	14.5	14.5	9.5	9.0	9.5	---	---	---
9	19.5	18.5	19.0	14.5	14.0	14.5	9.5	9.0	9.5	---	---	---
10	19.5	18.5	19.0	14.0	14.0	14.0	9.5	9.5	9.5	---	---	---
11	19.5	19.0	19.0	13.5	13.0	13.5	10.0	9.5	9.5	---	---	---
12	19.5	19.0	19.0	13.0	12.5	12.5	10.0	9.5	10.0	---	---	---
13	19.0	18.5	18.5	12.5	12.0	12.5	10.0	9.5	9.5	---	---	---
14	18.5	18.0	18.5	12.0	11.5	12.0	10.0	9.5	9.5	---	---	---
15	18.5	18.0	18.0	12.0	11.5	12.0	9.5	9.0	9.5	---	---	---
16	19.0	17.5	18.0	11.5	11.0	11.5	9.5	9.0	9.0	---	---	---
17	18.0	17.5	18.0	11.0	11.0	11.0	9.0	9.0	9.0	5.0	5.0	5.0
18	18.0	18.0	18.0	11.0	10.5	11.0	9.0	8.5	8.5	5.0	4.5	5.0
19	18.0	18.0	18.0	11.5	11.0	11.0	8.5	8.0	8.0	5.0	4.0	4.5
20	18.0	17.5	18.0	11.5	11.0	11.0	8.0	7.5	8.0	4.5	3.5	4.0
21	18.0	17.5	18.0	11.5	10.5	11.0	7.5	7.5	7.5	3.5	3.0	3.5
22	18.0	17.5	18.0	11.5	10.5	11.0	7.5	7.0	7.5	3.5	3.0	3.5
23	18.0	17.5	18.0	11.5	11.0	11.5	7.0	6.5	7.0	3.5	3.5	3.5
24	17.5	17.0	17.5	11.5	11.0	11.5	6.5	5.5	6.0	3.5	3.5	3.5
25	17.5	17.0	17.0	11.0	10.5	11.0	6.0	4.5	5.0	3.5	3.5	3.5
26	17.0	16.5	17.0	11.5	10.5	11.0	5.0	4.0	4.5	4.0	3.5	4.0
27	17.0	16.0	16.5	11.5	10.5	11.0	5.5	4.5	5.0	4.5	4.0	4.0
28	16.5	16.0	16.5	11.5	10.5	11.0	6.5	5.5	6.0	4.5	4.0	4.5
29	16.5	16.0	16.5	10.5	10.5	10.5	6.5	6.0	6.5	4.5	4.0	4.5
30	17.0	16.0	16.5	10.5	10.0	10.5	6.5	6.0	6.0	4.5	4.5	4.5
31	16.0	16.0	16.0	---	---	---	6.0	6.0	6.0	5.0	4.0	4.5
MONTH	20.0	16.0	18.0	16.5	10.0	12.5	11.0	4.0	8.5	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	4.5	4.5	6.5	6.0	6.5	9.0	8.5	9.0			
2	5.5	4.5	5.0	6.5	6.0	6.5	8.5	8.0	8.0			
3	5.5	5.0	5.0	6.5	6.0	6.5	8.0	8.0	8.0			
4	5.5	5.0	5.0	6.5	6.0	6.5	8.5	8.0	8.5			
5	5.0	4.5	5.0	6.5	6.0	6.5	8.5	8.0	8.5			
6	5.0	4.5	4.5	6.0	6.0	6.0	8.5	8.0	8.5			
7	4.5	4.5	4.5	6.5	6.0	6.5	9.0	8.5	8.5			
8	4.5	4.5	4.5	6.5	6.5	6.5	9.0	9.0	8.5			
9	4.5	4.5	4.5	6.5	6.5	6.5	9.0	8.5	8.5			
10	5.0	4.5	5.0	6.5	6.5	6.5	9.0	8.5	8.5			
11	5.5	5.0	5.0	6.5	6.5	6.5	9.0	8.5	8.5			
12	6.0	5.0	5.5	6.5	6.0	6.5	9.5	8.5	9.0			
13	6.5	6.0	6.0	6.5	6.5	6.5	10.0	9.0	9.5			
14	8.0	6.5	7.5	7.0	6.5	6.5	10.5	10.0	10.5			
15	8.5	8.0	8.0	7.5	6.0	7.0	11.0	10.5	10.5			
16	9.0	8.0	8.5	8.0	7.5	7.5	10.5	10.0	10.5			
17	9.0	8.5	9.0	8.0	7.5	7.5	10.0	9.5	10.0			
18	10.0	9.0	9.5	8.5	7.5	8.0	9.5	9.0	9.5			
19	10.0	9.5	10.0	9.0	8.0	8.5	9.5	9.0	9.5			
20	9.5	9.5	9.5	9.5	8.5	9.0	9.0	9.0	9.0			
21	9.5	9.0	9.5	9.5	8.5	9.0	9.5	9.0	9.5			
22	9.0	9.0	9.0	10.0	9.5	9.5	10.0	9.5	10.0			
23	8.5	8.5	8.5	10.0	9.5	9.5	10.0	10.0	10.0			
24	8.5	8.0	8.5	10.0	9.0	9.5	11.0	10.0	10.5			
25	8.5	8.5	8.5	9.0	8.0	8.5	12.0	11.5	12.0			
26	8.5	8.0	8.5	8.5	7.5	8.0	12.5	12.0	12.5			
27	8.5	8.0	8.0	7.5	7.5	7.5	12.5	11.5	12.0			
28	8.0	7.0	7.5	8.0	7.5	8.0	11.5	11.0	11.5			
29	7.0	6.5	6.5	8.0	7.5	8.0	---	---	---			
30	---	---	---	8.5	7.5	8.0	---	---	---			
31	---	---	---	9.0	8.5	9.0	---	---	---			
MONTH	10.0	4.5	7.0	10.0	6.0	7.5	12.5	8.0	9.5			

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	19.0	17.5	18.5	21.5	19.5	20.5	20.0	18.5	19.5
2	---	---	---	21.0	17.0	18.5	21.0	19.0	20.0	20.0	18.0	19.0
3	---	---	---	19.0	17.5	18.5	20.0	18.5	19.5	19.0	18.0	18.5
4	---	---	---	19.5	18.0	18.5	20.0	18.5	19.5	19.5	18.0	18.5
5	---	---	---	19.5	18.5	19.0	19.5	18.5	19.5	19.5	18.0	19.0
6	---	---	---	20.0	18.0	19.0	21.5	18.5	19.5	20.0	18.5	19.0
7	---	---	---	19.5	18.0	18.5	20.5	17.5	19.5	20.5	18.5	19.5
8	---	---	---	19.5	16.5	18.5	20.5	18.0	19.0	20.5	18.5	19.5
9	---	---	---	19.5	16.0	18.5	21.0	18.0	19.5	20.5	18.0	19.5
10	---	---	---	20.5	18.0	19.0	20.5	18.0	19.0	20.0	19.0	19.5
11	---	---	---	20.0	19.0	19.5	20.5	18.5	19.0	21.0	19.0	19.5
12	---	---	---	20.0	18.5	19.0	20.0	18.5	19.0	20.0	19.0	19.5
13	---	---	---	21.5	18.5	19.5	21.5	11.5	19.5	20.0	18.0	19.0
14	---	---	---	20.5	19.0	19.5	21.5	18.5	20.0	20.0	19.0	19.5
15	---	---	---	20.5	19.0	19.5	20.5	18.5	20.0	19.0	17.0	18.5
16	17.5	16.5	17.0	20.5	19.0	19.5	21.5	18.5	20.0	19.0	18.0	18.5
17	17.5	16.5	17.0	21.0	19.5	20.0	22.5	18.5	20.5	19.5	18.0	19.0
18	17.5	16.5	17.0	21.5	19.5	20.0	20.5	19.5	20.0	19.0	18.5	19.0
19	18.5	16.5	17.5	22.5	19.5	20.5	20.5	19.5	20.0	19.5	17.5	19.0
20	18.5	17.5	18.0	22.0	20.0	20.5	20.5	18.5	20.0	19.5	18.0	19.0
21	18.5	17.0	18.0	22.0	20.0	20.5	21.0	18.5	20.0	20.0	18.0	19.0
22	18.5	17.5	18.0	21.0	19.5	20.5	21.5	18.5	20.0	20.5	18.0	19.5
23	18.5	17.5	18.0	22.0	19.0	20.5	21.5	18.5	20.0	20.5	18.0	19.5
24	19.5	18.0	18.5	22.5	20.0	20.5	20.5	18.0	18.5	21.5	17.5	19.0
25	19.0	15.5	18.0	22.0	20.0	21.0	21.5	19.0	20.0	21.0	18.0	19.5
26	18.0	14.5	17.0	21.5	20.0	21.0	20.0	18.0	19.5	19.5	19.0	19.0
27	18.5	16.5	17.5	21.5	19.5	20.5	20.5	18.0	19.5	19.5	19.0	19.0
28	18.5	17.0	17.5	22.0	20.0	20.5	20.0	18.5	19.5	19.5	18.5	19.0
29	18.5	17.5	18.0	21.0	10.5	19.5	21.0	18.5	20.0	19.5	17.5	18.5
30	19.0	17.0	18.5	20.5	20.0	20.0	21.0	19.0	20.0	19.0	16.5	18.0
31	---	---	---	21.5	20.0	20.5	20.0	18.5	19.0	---	---	---
MONTH	---	---	---	22.5	10.5	19.5	22.5	11.5	19.5	21.5	16.5	19.0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.5	7.0	7.4	8.6	7.0	7.8	9.7	9.1	9.5	11.0	10.8	10.9
2	7.5	7.0	7.2	8.6	6.5	7.4	9.6	9.5	9.5	11.4	10.7	10.9
3	7.6	6.9	7.3	8.7	7.0	8.1	9.6	9.2	9.3	11.2	10.9	11.0
4	7.7	6.7	7.1	---	---	---	9.3	9.2	9.3	---	---	---
5	7.8	6.8	7.3	---	---	---	9.4	9.3	9.3	---	---	---
6	8.5	7.0	7.5	---	---	---	9.5	9.2	9.4	---	---	---
7	8.6	7.3	7.8	---	---	---	9.8	9.3	9.6	---	---	---
8	8.0	6.9	7.7	---	---	---	9.8	9.2	9.5	---	---	---
9	8.1	7.4	7.7	---	---	---	9.8	9.1	9.5	---	---	---
10	7.9	7.0	7.6	---	---	---	9.6	8.7	9.3	---	---	---
11	7.9	7.2	7.6	---	---	---	9.6	9.2	9.5	---	---	---
12	8.0	7.4	7.7	---	---	---	9.8	9.4	9.6	---	---	---
13	7.8	6.7	7.3	---	---	---	10.0	9.4	9.8	---	---	---
14	7.9	7.2	7.7	---	---	---	10.0	9.5	9.9	---	---	---
15	7.8	7.3	7.7	---	---	---	9.9	9.7	9.8	---	---	---
16	7.6	6.6	7.3	---	---	---	10.6	9.8	10.1	---	---	---
17	---	---	---	9.0	8.4	8.5	10.2	9.9	10.1	12.0	11.5	12.2
18	---	---	---	8.6	7.8	8.4	10.2	9.9	10.1	11.7	11.4	11.6
19	---	---	---	8.6	7.8	8.4	10.3	9.7	10.1	11.8	11.3	11.5
20	---	---	---	8.9	8.2	8.6	10.4	9.8	10.2	11.7	11.3	11.6
21	---	---	---	9.1	8.1	8.8	10.8	10.5	10.7	11.7	11.6	11.7
22	---	---	---	9.0	8.5	8.8	10.9	10.5	10.7	11.7	11.6	11.6
23	---	---	---	9.0	8.5	8.7	10.9	10.6	10.8	11.7	11.2	11.6
24	---	---	---	9.2	8.7	9.1	12.6	10.9	11.2	---	---	---
25	---	---	---	9.3	8.9	9.1	12.0	11.7	11.8	---	---	---
26	---	---	---	9.3	9.0	9.2	12.0	11.6	11.8	---	---	---
27	---	---	---	9.4	8.8	9.2	12.4	11.3	11.8	---	---	---
28	---	---	---	9.6	9.3	9.4	11.3	10.5	11.1	---	---	---
29	---	---	---	9.7	9.5	9.6	11.8	10.8	11.1	---	---	---
30	---	---	---	9.6	9.1	9.4	11.5	11.0	11.2	12.5	11.9	12.2
31	---	---	---	---	---	---	11.8	10.9	11.1	12.2	11.7	12.0
MONTH	---	---	---	---	---	---	12.6	8.7	10.2	---	---	---

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	10.9	10.5	10.7	10.8	10.6	10.7
2	---	---	---	---	---	---	11.4	11.0	11.2	10.7	10.5	10.6
3	---	---	---	---	---	---	11.3	11.2	11.3	10.6	10.3	10.4
4	---	---	---	---	---	---	11.3	11.2	11.2	10.3	10.2	10.3
5	---	---	---	---	---	---	11.2	11.1	11.1	10.2	10.1	10.1
6	---	---	---	11.7	11.3	11.5	11.1	11.0	11.0	10.1	10.0	10.0
7	---	---	---	11.3	11.2	11.2	11.1	11.0	11.0	10.6	10.0	10.3
8	---	---	---	11.4	11.2	11.2	11.1	11.0	11.0	10.3	9.4	9.8
9	---	---	---	11.3	11.1	11.2	11.0	10.9	11.0	9.8	9.0	9.2
10	---	---	---	11.2	10.8	11.0	11.1	11.0	11.0	9.3	9.0	9.2
11	---	---	---	11.1	10.7	10.9	11.2	11.1	11.1	9.8	9.3	9.5
12	---	---	---	11.2	10.7	11.1	11.3	11.0	11.1	10.1	9.8	10.0
13	---	---	---	11.5	10.8	11.3	11.0	10.9	11.0	10.4	10.1	10.3
14	---	---	---	11.6	11.2	11.5	11.0	10.8	10.9	10.7	10.4	10.4
15	---	---	---	12.0	11.0	11.7	10.9	10.7	10.8	10.5	10.4	10.4
16	8.2	7.5	7.9	11.9	11.0	11.7	10.8	10.8	10.8	10.5	10.4	10.4
17	8.2	7.4	7.9	11.9	11.6	11.8	10.8	10.5	10.7	10.5	10.3	10.4
18	8.6	7.7	8.1	12.3	11.3	12.0	10.8	9.2	10.1	10.5	10.4	10.5
19	8.8	7.5	8.1	12.4	11.6	12.2	11.1	10.9	11.0	10.6	10.5	10.5
20	10.4	7.6	9.2	12.5	11.5	12.0	11.1	11.0	11.1	10.6	10.5	10.5
21	10.1	8.9	9.3	11.8	11.2	11.6	11.2	11.0	11.1	10.6	10.4	10.5
22	11.3	9.5	10.5	11.1	10.7	10.9	11.0	10.6	10.9	10.4	10.3	10.4
23	11.9	10.1	11.3	11.0	10.7	10.8	11.0	10.8	10.9	10.3	10.2	10.2
24	11.3	10.0	10.8	10.9	10.7	10.8	10.8	10.1	10.5	10.3	10.1	10.2
25	11.1	9.8	10.7	11.2	10.9	11.1	10.1	9.8	10.0	10.2	10.0	10.1
26	12.2	9.9	11.1	11.5	11.2	11.3	9.9	9.7	9.8	10.1	10.0	10.0
27	11.3	9.4	10.4	11.5	11.4	11.4	10.6	9.9	10.3	10.2	10.0	10.1
28	---	---	---	11.4	11.3	11.3	10.8	10.5	10.7	10.0	9.8	9.9
29	---	---	---	11.3	11.2	11.2	10.8	10.7	10.7	9.9	9.7	9.8
30	---	---	---	11.2	10.8	11.1	10.7	10.6	10.6	9.9	9.8	9.9
31	---	---	---	10.8	10.4	10.5	---	---	---	10.0	9.8	9.9
MONTH	---	---	---	12.5	10.4	11.3	11.4	9.2	10.8	10.8	9.0	10.2
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.1	9.9	10.0	7.4	6.6	6.9	9.4	8.2	8.6	8.7	5.5	7.8
2	10.2	10.0	10.1	7.1	6.2	6.6	9.4	7.3	8.6	8.6	5.8	7.7
3	10.1	10.0	10.0	7.0	6.3	6.5	9.0	7.7	8.5	8.0	5.4	7.3
4	10.0	9.8	10.0	6.9	6.2	6.4	9.9	8.1	9.2	8.1	6.1	7.5
5	9.9	9.8	9.8	6.7	6.0	6.4	9.8	8.4	9.2	8.6	6.9	7.8
6	9.9	9.7	9.8	6.7	6.0	6.4	9.8	7.6	8.8	8.7	6.9	8.1
7	10.1	9.6	9.8	6.6	6.1	6.5	10.3	8.2	9.4	8.5	6.6	7.8
8	9.6	9.4	9.6	7.1	6.1	6.4	9.8	8.2	9.3	8.5	7.6	8.0
9	9.7	9.3	9.5	6.7	6.0	6.3	9.6	8.2	8.9	8.6	5.8	7.7
10	9.7	9.4	9.5	6.7	6.0	8.1	9.3	8.2	8.8	8.3	4.9	7.4
11	9.7	9.4	9.5	8.3	6.0	7.9	9.2	7.7	8.6	8.6	4.7	6.8
12	9.6	9.5	9.5	8.2	7.7	8.0	8.7	7.5	8.3	8.2	5.5	7.4
13	9.9	9.3	9.5	7.9	7.6	7.8	9.2	7.5	8.3	8.2	4.1	6.9
14	9.5	9.3	9.4	7.9	7.6	7.8	9.9	7.8	8.7	8.3	4.2	7.0
15	9.8	8.9	9.4	7.9	7.6	7.7	9.3	7.9	8.7	7.6	5.2	7.0
16	9.5	8.5	9.2	7.9	7.6	7.8	9.4	7.6	8.6	7.7	6.0	7.2
17	9.4	8.2	9.1	7.7	7.5	7.6	9.4	7.9	8.7	7.7	6.3	7.4
18	9.4	8.3	9.1	7.6	7.4	7.5	8.4	7.6	8.2	7.8	6.7	7.2
19	9.5	8.3	9.1	7.7	7.5	7.5	8.5	6.6	7.8	7.5	6.5	6.9
20	9.3	8.5	9.0	7.7	7.5	7.6	8.4	5.2	7.7	7.2	5.8	6.8
21	9.1	8.3	8.8	7.7	7.5	7.6	9.4	7.2	8.1	8.1	6.2	7.2
22	8.8	8.0	8.6	7.7	7.5	7.6	9.3	7.4	8.3	9.3	6.5	7.3
23	9.0	7.9	8.4	7.8	7.6	7.7	8.8	6.7	8.1	9.6	4.1	7.3
24	9.0	7.9	8.3	7.9	7.7	7.8	8.9	7.5	8.3	9.7	6.3	7.6
25	8.8	7.6	8.1	7.8	7.7	7.8	8.8	7.2	8.2	9.0	6.1	6.5
26	8.5	7.4	8.0	7.9	7.7	7.8	8.5	7.0	8.1	---	---	---
27	8.6	8.0	8.4	7.9	7.8	7.8	8.7	6.2	8.0	---	---	---
28	8.6	7.8	8.0	8.0	7.8	7.9	8.4	6.5	7.8	---	---	---
29	8.2	7.4	7.6	8.0	7.9	8.0	8.9	5.5	7.6	---	---	---
30	7.8	6.9	7.3	8.2	8.1	8.2	8.7	5.4	7.9	---	---	---
31	---	---	---	8.3	8.1	8.2	8.5	5.6	7.7	---	---	---
MONTH	10.2	6.9	9.1	8.3	6.0	7.4	10.3	5.2	8.4	9.7	4.1	7.3

03421000 COLLINS RIVER NEAR MCMINNVILLE, TN

LOCATION.--Lat 35°42'32", long 85°43'46", Warren County, Hydrologic Unit 05130107, on left bank at downstream side of bridge on U. S. Highway 70S, 1.8 mi downstream from Barren Fork River, 2.5 mi northeast of McMinnville, and at mile 19.5.

DRAINAGE AREA.--640 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 825.78 ft Sandy Hook datum. Prior to Oct. 16, 1926, nonrecording gage on upstream side of bridge at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.-- 60 years, 1,167 ft³/s, 24.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,300 ft³/s Mar. 23, 1929, gage height, 39.1 ft, from rating curve extended above 42,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 35 ft³/s Sept. 21, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1854 is believed to have been about equal to that of Mar. 23, 1929, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	1730	13400	16.07	May 3	2400	17800	19.20
Dec. 4	1400	11300	14.46	May 8	1430	*20000	20.61

Minimum discharge, 76 ft³/s Oct. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	89	1610	1510	942	2250	2630	2100	946	421	745	154
2	84	88	1250	1240	854	1860	2030	3330	758	268	658	142
3	81	93	5230	1080	805	1610	1890	12600	634	326	563	135
4	79	140	10400	958	801	1390	3180	13600	549	310	476	135
5	92	172	6030	885	769	1320	3740	5990	480	403	411	134
6	100	152	4060	845	716	1520	2980	6220	418	420	361	129
7	91	125	3460	799	644	1480	2280	12900	367	419	337	124
8	84	112	2430	732	586	1280	1830	18400	333	450	447	120
9	84	107	1810	678	573	1130	1590	11100	308	405	333	118
10	79	110	1430	724	623	993	1560	5420	290	346	315	117
11	79	109	1270	1180	991	915	1430	3540	270	278	307	118
12	82	104	2360	1170	1130	848	1280	2600	256	953	332	117
13	364	104	2250	1090	1570	862	1150	2020	270	576	293	115
14	294	107	1960	1080	4520	981	1030	1650	266	423	247	114
15	162	621	1980	1080	3520	893	927	1380	261	360	215	111
16	134	401	1700	1060	2430	938	858	1180	271	2410	203	109
17	117	250	1380	1020	1850	1090	867	1030	277	1570	193	109
18	109	194	1190	1090	1490	1410	869	917	234	3430	183	106
19	104	167	1050	1740	1300	1570	795	824	218	2030	177	106
20	103	190	941	1610	1160	1700	761	749	226	1260	168	106
21	101	313	848	1300	1040	3430	873	684	237	871	159	106
22	100	347	1080	1070	927	3210	2010	630	311	679	155	104
23	112	394	2160	961	855	2470	4070	646	261	588	190	102
24	109	1760	1860	2430	803	1950	3030	733	266	487	165	101
25	103	977	1360	3570	755	1760	2040	679	233	510	153	100
26	100	734	1070	2880	719	1670	1530	600	211	469	152	100
27	96	807	913	2200	1150	1440	1270	877	200	417	144	99
28	95	9880	3590	1750	3210	5220	1350	1760	189	409	145	103
29	93	6340	4630	1460	3000	8320	2120	1580	295	362	145	104
30	94	2740	3030	1260	---	5880	2690	1600	323	379	159	105
31	90	---	2010	1080	---	3660	---	1230	---	518	181	---
TOTAL	3499	27727	76342	41532	39733	65050	54660	118569	10158	22747	8712	3443
MEAN	113	924	2463	1340	1370	2098	1822	3825	339	734	281	115
MAX	364	9880	10400	3570	4520	8320	4070	18400	946	3430	745	154
MIN	79	88	848	678	573	848	761	600	189	268	144	99
CFSM	.18	1.44	3.85	2.09	2.14	3.28	2.85	5.98	.53	1.15	.44	.18
IN.	.20	1.61	4.44	2.41	2.31	3.78	3.18	6.89	.59	1.32	.51	.20

CAL YR 1983	TOTAL	472045	MEAN	1293	MAX	26800	MIN	79	CFSM	2.02	IN.	27.44
WTR YR 1984	TOTAL	472172	MEAN	1290	MAX	18400	MIN	79	CFSM	2.02	IN.	27.44

03422500 CANEY FORK NEAR ROCK ISLAND, TN

LOCATION.--Lat 35°48'26", long 85°37'44", White County, Hydrologic Unit 05130108, on right bank 180 ft downstream from powerhouse of Tennessee Valley Authority, 0.8 mi downstream from Great Falls Dam, 0.9 mi downstream from Collins River, 1.5 mi northwest of Rock Island, and at mile 90.3.

DRAINAGE AREA.--1,678 mi².

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.

REVISED RECORDS.--WSP 1276: 1934, 1937. WSP 1910: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 647.09 ft National Geodetic Vertical Datum of 1929. Prior to Mar. 30, 1924, at sites from 80 ft to 0.5 mi upstream at different datums. Apr. 12, 1925, to Sept. 9, 1930, at present site at datum 5.00 ft higher and Sept. 10, 1930, to Sept. 18, 1964, 3.00 ft higher.

REMARKS.--Records good, except for periods of no gage-height record, Nov. 19 to Dec. 14, May 7-12, May 27 to June 26, and backwater from Center Hill Dam, May 12-24, which are poor. Flow regulated since Dec. 8, 1916, by Great Falls Lake (station 03422000).

AVERAGE DISCHARGE.--70 years (1915-84), 3,181 ft³/s, 25.74 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 210,000 ft³/s Mar. 23, 1929, gage height, 43.6 ft, present datum, from floodmark, from rating curve extended above 110,000 ft³/s; minimum daily, 25 ft³/s several days in August to October 1951.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1902 reached a stage about 10 ft lower than the flood of Mar. 23, 1929, at a point 8 mi downstream, from profile by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined, about May 8, gage-height, 34.36 ft (from highwater mark in well, backwater from Center Hill Dam); minimum, 41 ft³/s Sept. 22; minimum daily, 42 ft³/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	287	3600	3970	3300	5480	6510	6640	3000	66	3000	453
2	60	214	3100	3500	3300	4610	4730	11100	1600	495	2140	71
3	60	217	16200	3360	3280	4180	5130	35200	1300	487	1950	76
4	700	219	25800	3340	3260	3860	9720	31100	1300	71	513	72
5	58	50	13800	3320	3240	3600	11600	15700	1700	479	76	74
6	58	50	8800	3290	3250	3560	7720	17000	1400	466	1060	228
7	58	213	7800	3280	3220	3650	6620	65000	1400	73	975	247
8	61	219	5300	3270	3170	3480	5160	68000	1300	74	946	75
9	58	340	4300	3240	2710	3340	4290	33000	60	1040	1080	66
10	59	500	3600	3220	2480	3310	3870	16000	60	1390	1550	260
11	58	639	3200	3210	2750	3300	3790	8500	300	1490	1560	285
12	241	49	4800	3180	3100	3300	3510	7600	300	1420	84	68
13	1190	49	5600	3180	3120	3290	3370	4800	300	1920	860	415
14	1140	58	4700	3130	8660	3290	3370	5200	300	1230	586	79
15	56	208	5160	3130	10000	3260	3360	3500	300	87	602	66
16	56	876	4310	3120	6720	3190	3350	3500	60	1010	612	73
17	422	1310	3710	3100	4730	3270	3330	3200	60	1530	589	266
18	415	1030	3390	3090	4100	3300	3300	3100	300	7950	77	261
19	638	51	3360	3120	3800	3500	3270	3100	300	5070	84	264
20	380	884	3310	3090	3460	5950	3250	3100	400	3520	574	263
21	53	1270	3260	3120	3320	11800	3200	3100	300	3320	1120	253
22	54	410	3280	3090	3270	9390	3010	3100	300	3290	1030	42
23	53	1490	3300	3040	3280	6950	3320	3100	60	1530	1050	46
24	542	1930	3330	3080	3280	5970	3380	3250	60	1710	286	48
25	518	2400	3330	3280	3270	4860	3520	3190	500	1670	72	48
26	681	1280	3310	7200	3240	4070	3660	2730	500	1380	74	47
27	542	1020	3290	6080	3190	4040	3430	600	481	2030	185	66
28	391	9600	5540	4860	3300	17300	3390	900	477	1140	1050	71
29	51	13400	11400	3870	5680	23800	5700	2500	485	1060	844	74
30	59	5200	6950	3610	---	14200	10800	2800	68	1620	808	73
31	392	---	4980	3330	---	8730	---	3000	---	2030	726	---
TOTAL	9164	45463	185810	109700	113480	185830	142660	372610	18971	50648	26163	4430
MEAN	296	1515	5994	3539	3913	5995	4755	12020	632	1634	844	148
MAX	1190	13400	25800	7200	10000	23800	11600	68000	3000	7950	3000	453
MIN	51	49	3100	3040	2480	3190	3010	600	60	66	72	42
(†)	-5000	+15000	- 100	-1000	+ 900	- 100	- 200	-8400	+1700	+2100	-3100	+ 200
MEAN†	134	2015	5991	3506	3944	5991	4749	11749	689	1702	744	154
CFSM†	.08	1.20	3.57	2.09	2.35	3.57	2.83	7.00	.41	1.01	.44	.09
IN.†	.09	1.34	4.12	2.41	2.54	4.12	3.16	8.07	.46	1.17	.51	.10

CAL YR 1983 TOTAL 1120444 MEAN 3070 MAX 67000 MIN 49 MEAN† 3069 CFSM† 1.83 IN.† 24.83
WTR YR 1984 TOTAL 1264929 MEAN 3456 MAX 68000 MIN 42 MEAN† 3462 CFSM† 2.06 IN.† 28.08

† Change in contents, in cfs-days, in Great Falls Lake.
† Adjusted for change in contents.

Note.--No gage-height record Nov. 19 to Dec. 14, May 7-12, May 27 to June 26.

03425000 CUMBERLAND RIVER AT CARTHAGE, TN
(National stream-quality accounting network station)

LOCATION.--Lat 36°14'53", long 85°57'19", Smith County, Hydrologic Unit 05130201, on left bank of Cordell Hull Bridge on State Highway 25, at Carthage, 1.0 mi downstream from Caney Fork River, and at mile 308.2.

DRAINAGE AREA.--10,690 mi².

WATER-DISCHARGE RECORDS

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.

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

GAGE.--Water-stage recorder. Datum of gage is 437.53 ft National Geodetic Vertical Datum of 1929. Prior to MAY 12,1936 nonrecording gage at site 1,000 ft downstream at same datum. May 12 to July 17, 1936, non-recording gage at present site and datum. Since Oct. 1, 1957, auxiliary water-stage recorder 15.8 mi down-stream from base gage at same datum.

REMARKS.--Records good. Flow regulated by five upstream lakes or reservoirs, (see p.107).

AVERAGE DISCHARGE.--62 years, 17,610 ft³/s, 22.36 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 210,000 ft³/s Dec. 30, 1926; maximum gage height, 59.8 ft Dec. 30, 1926; minimum daily discharge, 366 ft³/s Oct. 29, 1940; minimum gage height since filling of Old Hickory Lake on Dec. 30, 1956, 4.3 ft Oct. 28, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, that of Dec. 30, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; maximum gage height, 40.75 ft May 8 from high water mark; minimum daily discharge, 2,280 ft³/s Sept. 30; minimum gage height, 4.44 ft Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6590	5070	5000	20200	13800	22100	34700	26900	42400	8400	17200	9500
2	6140	4420	17300	13200	11800	19700	33000	31500	34600	8120	19500	5450
3	7020	4220	26600	14000	10300	18500	34600	48400	39000	11200	16600	5120
4	7430	4930	26300	13800	8730	18500	34900	57100	36600	11500	16100	6610
5	9300	6980	13700	12900	6810	17400	36400	53300	34100	12900	11500	9480
6	8730	8450	9610	12900	5810	25800	25800	55500	36900	13100	11500	9520
7	8840	9440	7390	11400	13900	25600	27700	71700	41500	12000	11700	11200
8	4540	5850	7690	9950	10800	20700	35900	85200	34900	9100	13100	10200
9	5910	5200	6600	9610	9830	22200	28800	94200	27800	10100	16800	6790
10	4130	6310	8550	15600	7540	18200	32000	67500	25100	8560	16400	4860
11	6310	7440	8080	15300	15500	8510	33500	63000	23000	11600	13700	6490
12	6310	8650	17700	19800	47400	11500	30000	69200	26600	10300	9770	7080
13	8110	4710	17900	18100	18600	15100	28200	72500	27000	12600	9050	7900
14	13600	4630	14000	10700	24000	14600	24200	71100	28300	12100	13000	9980
15	8820	3740	9060	7180	30200	12800	22800	66900	20200	8280	13600	5520
16	3510	5690	10700	7160	23300	11300	26800	68100	18400	9450	15300	3700
17	4980	5580	12500	9710	17000	13800	27000	68900	18500	9350	17700	4570
18	4490	5160	10600	9590	16300	10800	24200	66400	13100	15600	12600	5200
19	4870	3890	9530	12700	11900	11200	26500	67500	15500	12400	6510	5360
20	4420	4230	11100	20200	10300	17500	22900	67900	15900	13400	6610	5450
21	6230	4440	12500	22000	13400	33700	16500	67500	17500	11200	10300	5980
22	5940	4660	16400	18200	15600	28700	33200	66900	16300	7400	13600	5060
23	6720	6140	20500	14000	11900	26900	45900	63100	12600	8450	15500	2830
24	6180	15700	18900	15500	12700	42600	35100	59700	12000	13700	14200	3560
25	4720	5710	23700	21800	11500	33500	32200	55700	9010	16300	13300	3840
26	5530	3480	33500	17000	9060	33200	31200	41000	11100	16400	8250	5940
27	5850	10000	42800	13000	10000	39400	34100	43200	13500	17900	7610	5750
28	7120	29300	34000	11000	20600	36500	28200	36100	12100	14000	9290	5080
29	6590	14100	27200	11000	21200	51500	29800	38100	12500	7600	12400	3570
30	3570	9240	22400	12100	---	42100	28800	37600	12800	8160	16400	2280
31	6340	---	28200	12200	---	42500	---	39500	---	14800	15200	---
TOTAL	198840	217360	530010	431800	439780	746410	904900	1821200	688810	355970	404290	183870
MEAN	6414	7245	17100	13930	15160	24080	30160	58750	22960	11480	13040	6129
MAX	13600	29300	42800	22000	47400	51500	45900	94200	42400	17900	19500	11200
MIN	3510	3480	5000	7160	5810	8510	16500	26900	9010	7400	6510	2280

CAL YR 1983	TOTAL	6671150	MEAN	18280	MAX	66900	MIN	3480	MEAN†	17440	CFSM†	1.63	IN.†	22.15
WTR YR 1984	TOTAL	6923240	MEAN	18920	MAX	94200	MIN	2280	MEAN†	19780	CFSM†	1.85	IN.†	25.18

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

NOTE.--No gage-height record May 7-8.

03425000 CUMBERLAND RIVER AT CARTHAGE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to September 1981.
WATER TEMPERATURE: October 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 338 micromhos Sept. 5, 1981; minimum, 89 micromhos July 2, 1980.
WATER TEMPERATURES: Maximum, 29.5°C Oct. 10, 1977; minimum, 2.0°C Jan 20, 22, 23, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV												
17...	0930	8580	182	7.6	12.0	759	3.6	7.7	71	K5	75	84
DEC												
07...	1300	8140	176	7.7	11.5	758	9.8	9.7	89	160	--	91
FEB												
15...	1130	26000	188	7.2	8.0	759	70	11.2	95	420	4700	84
APR												
26...	1000	29800	168	8.1	13.0	--	38	9.6	--	1100	880	77
JUN												
19...	1100	14800	160	7.5	17.0	759	13	9.5	99	17	20	66
AUG												
21...	1000	6190	162	7.4	19.0	759	6.4	7.5	81	--	140	60

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV												
17...	20	25	5.3	3.7	9	.2	1.5	64	3.1	27	4.2	.20
DEC												
07...	15	30	3.9	2.2	5	.1	1.2	76	2.9	12	2.9	.10
FEB												
15...	15	26	4.6	2.6	6	.1	1.2	69	8.4	17	3.3	1.8
APR												
26...	17	23	4.8	4.1	10	.2	1.1	60	.9	22	2.8	<.10
JUN												
19...	28	18	5.0	3.6	10	.2	1.3	38	2.3	30	3.1	.10
AUG												
21...	14	18	3.7	2.4	8	.1	1.2	46	3.5	20	2.7	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV												
17...	3.7	112	110	.15	2590	.190	.050	.06	2.3	.050	.020	.010
DEC												
07...	3.6	112	100	.15	2460	.580	.200	.26	.40	.160	.050	.040
FEB												
15...	3.8	119	100	.16	8350	.710	.080	.10	.60	.060	.020	.040
APR												
26...	4.6	105	99	.14	8450	.400	.070	.09	.40	.060	.020	.020
JUN												
19...	4.2	101	88	.14	4040	.350	.020	.03	.50	<.010	<.010	<.010
AUG												
21...	3.9	98	80	.13	1640	.450	.080	.10	.70	.010	<.010	.010

K--Results based on non-ideal colony count.

03425000 CUMBERLAND RIVER AT CARTHAGE, TENN.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV												
17...	.03	<10	<1	35	<.5	2	3	<3	2	9	1	<4
DEC												
07...	.12	--	--	--	--	--	--	--	--	--	--	--
FEB												
15...	.12	20	1	27	<.5	1	<1	<3	3	42	2	5
APR												
26...	.06	<10	1	30	<1	<1	<1	<3	3	54	2	<4
JUN												
19...	--	30	<1	27	<.5	<1	<1	<3	1	21	6	8
AUG												
21...	.03	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV												
17...	10	<.1	<10	<1	<1	<1	95	<6	9	9	208	67
DEC												
07...	--	--	--	--	--	--	--	--	--	46	1010	54
FEB												
15...	6	.2	<10	5	<1	<1	74	<6	8	59	4140	94
APR												
26...	14	2.3	<10	1	<1	<1	74	<6	14	54	4340	66
JUN												
19...	18	.1	<10	3	<1	<1	74	<6	5	29	1160	64
AUG												
21...	--	--	--	--	--	--	--	--	--	13	217	70

03425646 TOWN CREEK AT MAPLE STREET AT GALLATIN, TN

LOCATION.--Lat 36°22'50", long 86°27'15", Sumner County, Hydrologic Unit 05130201, on right downstream wingwall of bridge on Maple Street at Gallatin, and at mile 1.6.

DRAINAGE AREA.--5.00 mi².

PERIOD OF RECORD.--October 1978 to September 1983, peaks above 5.00 ft at datum 0 .9 ft higher, published in open-file report 84-242. October 1983 to September 1984 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 482 ft from topographic map.

REMARKS.--Records good, except those for periods of missing record, Oct. 1-18, Nov. 29 to Dec. 13, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft³/s Aug. 28, 1984, gage height, 11.27 ft, from rating curve extended above 1500 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 2720 ft³/s Aug. 28, gage height 11.27 ft, from rating curve extended as explained above; minimum discharge, not determined, occurred prior to Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.25	4.0	4.4	3.4	9.2	9.7	21	.84	.57	2.3	4.4
2	.10	.35	46	3.8	3.0	7.5	7.3	32	.84	.61	2.8	3.5
3	.10	.57	100	3.4	8.5	6.0	17	64	.77	.47	1.9	14
4	.12	2.4	40	3.1	5.9	27	32	44	.71	1.1	19	7.7
5	.22	.88	19	2.9	5.2	74	27	23	.71	4.9	11	4.6
6	.18	.80	14	2.8	4.5	29	17	268	.65	2.5	6.4	3.6
7	.15	.68	10	2.5	3.8	18	12	331	.51	5.8	7.0	2.9
8	.15	.48	8.6	2.3	3.6	13	9.3	162	.51	1.5	4.6	2.4
9	.15	.40	7.5	2.3	3.6	9.4	9.1	38	.51	1.1	3.6	2.0
10	.15	.77	6.5	3.8	8.0	7.6	6.7	30	.51	.90	9.3	1.7
11	.20	.48	60	3.4	42	6.2	5.4	19	.45	12	4.9	1.4
12	.80	.45	40	3.1	24	6.1	4.4	13	2.3	3.0	3.6	1.3
13	1.1	.42	28	2.9	37	9.5	3.8	10	.92	1.5	2.8	1.1
14	.75	3.4	24	2.6	24	6.3	3.2	8.6	.51	1.1	2.3	.97
15	.60	3.7	16	2.5	15	9.1	3.5	6.1	.34	3.0	1.9	.93
16	.45	1.6	11	2.5	11	111	3.1	4.5	.25	1.8	1.6	.81
17	.35	1.3	8.2	2.3	8.3	29	2.6	3.4	.21	7.0	1.3	.73
18	.29	1.1	6.6	2.4	7.0	19	2.3	2.9	.21	2.8	1.1	.67
19	.21	1.1	5.4	2.2	5.7	13	2.0	2.5	.18	1.7	.93	.63
20	.19	14	4.5	2.1	4.5	68	2.0	2.1	.14	1.3	.81	.58
21	.44	3.5	8.5	2.0	4.0	37	53	1.9	2.9	1.1	.69	.56
22	10	2.5	33	1.7	3.5	24	201	1.5	3.5	.92	.60	.51
23	2.4	64	15	5.3	3.2	16	33	9.9	7.3	.76	.50	.51
24	1.4	16	9.1	20	3.2	12	18	3.4	2.0	.63	.46	.51
25	1.1	7.2	6.3	12	2.8	11	11	2.3	1.2	.52	.40	.52
26	.85	4.3	5.0	9.0	2.5	7.9	10	1.9	.87	9.2	.37	.50
27	.64	89	4.8	7.4	24	7.2	7.1	1.6	.71	4.3	.35	.45
28	.47	46	69	6.0	17	90	16	1.4	.87	1.7	270	.46
29	.36	18	13	5.0	12	32	60	1.3	.58	1.3	17	.45
30	.31	7.0	7.3	4.3	---	18	50	1.2	1.5	1.4	15	.50
31	.27	---	5.7	3.7	---	13	---	1.0	---	5.4	7.1	---
TOTAL	24.60	292.63	636.0	133.7	300.2	746.0	638.5	1112.5	33.50	81.88	401.61	60.89
MEAN	.79	9.75	20.5	4.31	10.4	24.1	21.3	35.9	1.12	2.64	13.0	2.03
MAX	10	89	100	20	42	111	201	331	7.3	12	270	14
MIN	.10	.25	4.0	1.7	2.5	6.0	2.0	1.0	.14	.47	.35	.45
CFSM	.16	1.95	4.10	.86	2.08	4.82	4.26	7.18	.22	.53	2.60	.41
IN.	.18	2.18	4.73	.99	2.23	5.55	4.75	8.28	.25	.61	2.99	.45

WTR YR 1984 TOTAL 4462.01 MEAN 12.2 MAX 331 MIN .10 CFSM 2.44 IN. 33.20

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°17'47", long 86°39'28", Davidson County, Hydrologic Unit 05130202, at end of lock wall near left downstream bank, at Old Hickory Dam, 2.0 mi west of Hendersonville, and at mile 216.2.

DRAINAGE AREA.--11,673 mi².

PERIOD OF RECORD.--April 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1979 to current year.
pH: April 1979 to current year.
WATER TEMPERATURE: April 1979 to current year.
DISSOLVED OXYGEN: April 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1979.

REMARKS.--Flow regulated by Old Hickory Dam and other reservoirs above station. Continuous discharge records are published under station 03426500 Cumberland River below Old Hickory, Tn. Periods of missing record due to monitor malfunction and loss of gage house, May 8 to Aug. 23, due to May flood.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 254 micromhos Dec. 14, 1983; minimum, 146 micromhos May 6, 1979.
pH: Maximum, 8.9 units Feb. 10,11, 1984; minimum, 6.8 units Sept. 15, 1980, Sept. 26, 1984.
WATER TEMPERATURE: Maximum, 27.5°C July 5, 6, Sept. 7, 1980, Aug. 13, 1981; minimum, 2.5°C Jan. 12-14, 1981, Jan. 21,22, 1984.
DISSOLVED OXYGEN: Maximum, 15.2 mg/L April 6, 1983; minimum, 3.0 mg/L Sept. 15, 1980.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 254 micromhos Dec. 14; minimum, not determined.
pH: Maximum, 8.9 units Feb. 10,11; minimum, 6.8 units Sept. 26, 1984.
WATER TEMPERATURE: Maximum, not determined; minimum, 2.5°C Jan. 21,22.
DISSOLVED OXYGEN: Maximum, not determined; minimum, not determined.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	174	171	173	176	168	172	218	214	216	178	174	177
2	175	173	174	178	169	172	218	211	215	190	173	176
3	176	172	174	180	171	175	215	211	213	197	186	190
4	175	173	174	182	174	177	218	213	215	188	177	184
5	175	173	174	178	174	176	215	209	213	186	176	184
6	174	173	173	186	173	175	213	202	206	185	174	181
7	176	172	171	192	182	187	204	199	202	187	181	184
8	174	171	172	188	181	185	202	200	201	---	---	---
9	172	169	171	184	176	180	206	199	203	---	---	---
10	170	168	169	183	173	175	207	202	205	---	---	---
11	169	167	168	180	171	174	212	205	208	---	---	---
12	169	168	168	173	171	172	217	205	212	---	---	---
13	168	165	166	189	171	177	229	216	221	---	---	---
14	168	160	166	208	178	186	254	224	235	---	---	---
15	167	163	165	190	179	182	247	219	233	---	---	---
16	166	162	164	185	180	182	221	207	216	---	---	---
17	---	---	---	186	178	180	206	199	202	---	---	---
18	---	---	---	179	173	177	200	194	197	---	---	---
19	---	---	---	181	171	177	194	191	193	---	---	---
20	---	---	---	177	173	175	195	188	190	---	---	---
21	180	174	177	188	173	175	214	203	207	---	---	---
22	177	172	174	179	173	176	230	205	215	---	---	---
23	178	174	176	179	173	175	235	208	216	---	---	---
24	187	176	178	187	178	182	209	187	197	---	---	---
25	180	174	176	182	177	179	188	179	185	---	---	---
26	180	175	177	183	179	181	180	170	173	---	---	---
27	179	174	176	186	178	182	202	168	181	---	---	---
28	178	172	175	190	181	184	214	187	195	---	---	---
29	180	171	174	206	188	198	202	178	185	---	---	---
30	183	173	179	215	208	212	178	174	176	---	---	---
31	176	172	174	---	---	---	179	176	177	---	---	---
MONTH	187	160	173	215	168	180	254	168	203	---	---	---

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	177	173	174	202	195	199	---	---	---
2	---	---	---	181	177	179	201	199	201	200	200	200
3	---	---	---	185	182	183	---	---	---	200	196	199
4	---	---	---	189	186	188	192	188	189	208	204	205
5	---	---	---	194	189	191	---	---	---	204	200	202
6	---	---	---	197	195	196	196	192	193	204	200	201
7	---	---	---	199	195	196	196	192	195	204	192	198
8	---	---	---	202	199	201	200	196	199	---	---	---
9	---	---	---	204	202	203	204	200	202	---	---	---
10	---	---	---	206	203	204	204	200	201	---	---	---
11	---	---	---	205	202	204	196	196	196	---	---	---
12	---	---	---	203	200	202	196	196	196	---	---	---
13	---	---	---	202	197	200	196	196	196	---	---	---
14	---	---	---	199	197	198	196	196	196	---	---	---
15	182	172	176	199	197	198	196	192	194	---	---	---
16	206	182	199	197	194	196	192	192	192	---	---	---
17	212	204	207	199	196	197	192	188	191	---	---	---
18	220	207	212	201	196	198	188	184	187	---	---	---
19	221	216	218	205	202	204	188	184	185	---	---	---
20	219	210	213	208	205	206	188	188	188	---	---	---
21	209	202	206	212	207	210	192	188	190	---	---	---
22	201	192	196	221	206	211	188	188	188	---	---	---
23	192	189	190	229	223	226	192	188	191	---	---	---
24	189	186	188	227	220	222	188	184	186	---	---	---
25	187	179	185	220	214	217	196	188	192	---	---	---
26	179	176	177	215	213	214	200	196	200	---	---	---
27	177	175	176	212	205	209	204	200	201	---	---	---
28	175	173	174	204	195	199	200	196	196	---	---	---
29	175	174	175	201	195	197	196	188	192	---	---	---
30	---	---	---	203	195	201	188	184	186	---	---	---
31	---	---	---	196	194	195	---	---	---	---	---	---
MONTH	---	---	---	229	173	201	204	184	194	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1							---	---	---	---	---	---
2							---	---	---	---	---	---
3							---	---	---	---	---	---
4							---	---	---	---	---	---
5							---	---	---	---	---	---
6							---	---	---	---	---	---
7							---	---	---	---	---	---
8							---	---	---	---	---	---
9							---	---	---	---	---	---
10							---	---	---	---	---	---
11							---	---	---	---	---	---
12							---	---	---	---	---	---
13							---	---	---	---	---	---
14							---	---	---	---	---	---
15							---	---	---	---	---	---
16							---	---	---	---	---	---
17							---	---	---	---	---	---
18							---	---	---	---	---	---
19							---	---	---	---	---	---
20							---	---	---	---	---	---
21							---	---	---	---	---	---
22							---	---	---	---	---	---
23							---	---	---	---	---	---
24							167	165	166	---	---	---
25							167	165	166	---	---	---
26							167	165	166	176	173	174
27							167	165	166	175	174	175
28							167	164	166	177	175	176
29							167	166	167	177	175	176
30							166	165	165	177	175	176
31							166	164	165	---	---	---
MONTH							---	---	---	---	---	---

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.8	7.6	8.0	7.7	7.6	7.6	7.8	7.6	8.3	8.2	7.9	7.9
2	7.9	7.4	7.8	7.6	7.7	7.6	7.6	7.6	8.3	8.2	8.0	7.9
3	8.4	7.4	7.6	7.5	7.7	7.6	7.6	7.6	8.4	8.3	8.0	7.9
4	8.4	7.6	7.6	7.5	7.6	7.6	7.6	7.6	8.4	8.3	8.0	8.0
5	8.1	7.4	7.6	7.5	7.6	7.6	7.7	7.6	8.4	8.0	8.0	8.0
6	7.6	7.3	7.6	7.5	7.6	7.6	7.7	7.7	8.5	8.1	8.1	8.0
7	7.5	7.4	7.6	7.5	7.6	7.6	7.7	7.7	8.7	8.2	8.2	8.1
8	7.9	7.6	7.5	7.5	7.7	7.6	7.7	7.7	8.8	8.3	8.3	8.1
9	7.6	7.4	7.5	7.5	7.6	7.6	7.7	7.7	8.8	8.3	8.1	8.0
10	7.8	7.4	7.5	7.5	7.6	7.6	7.7	7.7	8.9	8.4	8.1	8.0
11	8.2	7.8	7.6	7.5	7.6	7.6	7.8	7.7	8.9	8.4	8.2	8.0
12	8.1	7.8	7.5	7.5	7.6	7.6	7.8	7.8	8.7	8.1	8.2	8.1
13	7.8	7.4	7.5	7.5	7.6	7.6	7.8	7.7	8.4	8.1	8.1	8.1
14	7.5	7.4	7.6	7.5	7.6	7.6	7.8	7.7	8.4	8.1	8.3	8.0
15	7.5	7.5	7.5	7.5	7.7	7.6	7.8	7.8	8.2	8.0	8.5	8.2
16	7.5	7.4	7.6	7.5	7.7	7.6	7.8	7.8	8.2	8.1	8.4	8.3
17	---	---	7.6	7.5	7.6	7.6	7.8	7.8	8.2	8.1	8.3	8.3
18	---	---	7.6	7.5	7.7	7.6	7.9	7.8	8.2	8.1	8.3	8.2
19	---	---	7.6	7.5	7.7	7.6	7.9	7.9	8.1	8.0	8.4	8.2
20	---	---	7.6	7.6	7.7	7.7	7.9	7.9	8.0	7.9	8.4	8.1
21	7.7	7.5	7.6	7.6	7.7	7.7	8.0	7.9	8.0	7.9	8.1	8.0
22	7.7	7.5	7.7	7.5	7.8	7.7	8.0	7.9	7.9	7.8	8.0	7.9
23	7.6	7.5	7.7	7.6	7.8	7.8	8.0	7.9	7.8	7.8	7.9	7.8
24	7.5	7.4	7.7	7.6	7.9	7.8	8.0	7.9	7.8	7.8	7.9	7.9
25	7.4	7.3	7.7	7.7	7.9	7.8	8.0	7.9	7.8	7.7	7.9	7.9
26	7.5	7.4	7.7	7.6	7.8	7.8	8.0	7.9	7.8	7.8	7.9	7.8
27	7.6	7.4	7.7	7.6	7.8	7.8	8.2	8.0	7.8	7.8	7.9	7.8
28	7.7	7.5	7.7	7.6	7.8	7.8	8.1	8.0	7.9	7.8	7.8	7.8
29	7.7	7.6	7.7	7.6	7.8	7.8	8.2	8.1	7.9	7.8	7.9	7.8
30	7.7	7.5	7.6	7.6	7.8	7.8	8.2	8.1	---	---	7.8	7.7
31	7.8	7.5	---	---	7.8	7.8	8.3	8.1	---	---	7.7	7.7
MONTH	8.4	7.3	8.0	7.5	7.9	7.6	8.3	7.6	8.9	7.7	8.5	7.7

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.7	7.7	---	---					---	---	---	---
2	7.8	7.7	7.7	7.6					---	---	---	---
3	---	---	7.6	7.6					---	---	---	---
4	7.7	7.7	7.7	7.6					---	---	---	---
5	---	---	7.7	7.6					---	---	---	---
6	7.8	7.8	7.6	7.6					---	---	---	---
7	7.8	7.8	7.6	7.5					---	---	---	---
8	7.8	7.8	---	---					---	---	---	---
9	7.8	7.8	---	---					---	---	---	---
10	7.8	7.8	---	---					---	---	---	---
11	7.8	7.8	---	---					---	---	---	---
12	7.8	7.8	---	---					---	---	---	---
13	7.8	7.8	---	---					---	---	---	---
14	7.8	7.8	---	---					---	---	---	---
15	7.9	7.8	---	---					---	---	---	---
16	7.9	7.8	---	---					---	---	---	---
17	7.8	7.8	---	---					---	---	---	---
18	7.8	7.8	---	---					---	---	---	---
19	7.8	7.8	---	---					---	---	---	---
20	7.8	7.8	---	---					---	---	---	---
21	7.8	7.8	---	---					---	---	---	---
22	7.8	7.8	---	---					---	---	---	---
23	7.8	7.7	---	---					---	---	---	---
24	7.7	7.6	---	---					8.2	7.5	---	---
25	7.7	7.6	---	---					8.3	7.5	7.1	6.9
26	7.7	7.6	---	---					8.0	7.6	7.3	6.8
27	7.7	7.6	---	---					7.9	7.5	7.5	7.1
28	7.6	7.6	---	---					7.8	7.4	7.5	7.3
29	7.6	7.6	---	---					7.8	7.5	7.4	7.2
30	7.7	7.6	---	---					7.6	7.5	7.4	7.2
31	---	---	---	---					7.5	7.4	---	---
MONTH	7.9	7.6	---	---					---	---	---	---

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.0	21.0	21.5	18.0	17.5	18.0	11.5	11.5	11.5	4.5	3.5	4.0
2	22.5	21.0	21.5	18.0	18.0	18.0	11.0	11.0	11.0	5.0	4.5	4.5
3	22.5	21.5	22.0	18.0	18.0	18.0	12.0	11.0	11.5	5.5	4.5	5.0
4	22.5	21.5	22.0	18.0	17.0	17.5	12.0	11.0	11.5	5.5	4.5	5.0
5	22.5	21.5	22.0	17.0	16.5	17.0	11.0	10.5	11.0	6.0	5.5	5.5
6	22.0	21.0	21.5	17.0	16.0	16.5	11.0	10.0	10.5	---	---	---
7	22.0	21.0	21.5	16.5	16.0	16.0	10.5	10.0	10.0	---	---	---
8	22.0	21.0	21.5	16.5	16.0	16.5	10.0	9.5	10.0	---	---	---
9	22.0	21.0	21.5	16.5	16.0	16.5	10.0	9.5	10.0	---	---	---
10	22.0	21.0	22.0	16.5	15.5	16.0	10.5	10.0	10.0	---	---	---
11	22.5	22.0	22.0	15.5	14.5	15.0	10.5	10.5	10.5	---	---	---
12	22.0	21.0	21.5	14.5	14.0	14.5	11.0	10.5	10.5	---	---	---
13	21.0	20.0	20.5	14.0	13.5	14.0	11.0	11.0	11.0	---	---	---
14	20.5	19.5	20.0	13.5	13.0	13.5	11.0	10.5	11.0	---	---	---
15	20.5	19.5	20.0	13.5	13.0	13.5	10.5	10.0	10.5	---	---	---
16	20.5	19.5	20.0	13.0	12.5	13.0	10.0	9.5	9.5	---	---	---
17	---	---	---	13.0	12.5	12.5	9.5	9.0	9.5	---	---	---
18	---	---	---	12.5	12.5	12.5	9.0	9.0	9.0	---	---	---
19	---	---	---	13.0	12.5	12.5	9.0	8.0	8.5	---	---	---
20	---	---	---	13.0	12.5	13.0	8.0	7.5	7.5	3.5	3.0	3.5
21	21.0	20.5	21.0	13.0	12.5	13.0	8.0	7.5	7.5	3.0	2.5	3.0
22	20.5	20.0	20.5	13.5	12.5	13.0	8.0	7.0	7.5	3.0	2.5	2.5
23	20.0	19.5	20.0	13.5	13.5	13.5	7.0	6.0	6.5	3.5	3.0	3.5
24	19.5	19.0	19.5	13.5	12.5	13.0	6.5	4.5	5.5	4.5	3.5	4.0
25	19.0	18.5	19.0	13.0	12.5	13.0	4.5	3.5	4.0	4.5	4.0	4.0
26	18.5	18.0	18.5	13.0	12.5	12.5	4.0	4.0	4.0	4.5	4.0	4.0
27	18.5	17.5	18.0	13.0	12.5	13.0	5.0	4.0	4.5	4.5	4.0	4.5
28	18.5	17.5	18.0	13.0	12.5	12.5	5.0	5.0	5.0	4.5	4.0	4.0
29	18.5	18.0	18.0	12.5	12.0	12.0	5.0	3.5	4.5	4.5	4.0	4.5
30	18.0	17.5	18.0	12.0	11.5	12.0	3.5	3.0	3.5	5.0	4.0	4.5
31	18.0	17.5	18.0	---	---	---	3.5	3.0	3.0	4.5	4.0	4.0
MONTH	22.5	17.5	20.5	18.0	11.5	14.5	12.0	3.0	8.5	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	4.0	4.5	10.5	9.5	10.0	11.0	10.0	10.5	---	---	---
2	6.0	4.5	5.0	10.5	9.5	10.0	10.5	9.5	10.0	15.5	15.5	15.5
3	6.5	5.5	6.0	11.0	10.0	10.5	---	---	---	15.5	15.5	15.5
4	6.5	6.0	6.5	11.0	10.5	10.5	12.5	11.0	12.0	15.5	13.5	14.5
5	7.0	6.0	6.5	10.5	10.0	10.5	---	---	---	13.5	13.5	13.5
6	6.0	5.5	6.0	10.0	9.0	9.5	11.5	11.0	11.0	14.0	13.5	14.0
7	6.0	5.5	6.0	9.0	8.5	8.5	12.0	10.5	11.5	13.5	13.5	13.5
8	6.5	5.5	6.0	9.0	8.0	8.5	12.5	11.5	12.0	---	---	---
9	7.5	6.0	7.0	8.5	8.0	8.0	12.5	12.0	12.0	---	---	---
10	8.5	7.5	8.0	8.0	8.0	8.0	12.5	12.0	12.0	---	---	---
11	9.0	8.5	9.0	8.5	8.0	8.0	13.0	12.0	12.5	---	---	---
12	9.5	7.5	9.0	7.5	7.5	7.5	14.0	12.5	13.0	---	---	---
13	9.5	9.0	9.0	8.0	7.5	7.5	14.5	13.0	14.0	---	---	---
14	10.0	9.0	9.5	8.5	7.5	8.0	15.0	14.0	14.5	---	---	---
15	10.0	9.0	9.5	10.0	8.0	9.0	15.0	14.5	14.5	---	---	---
16	10.5	9.5	10.0	10.0	9.0	9.5	14.5	14.0	14.0	---	---	---
17	10.5	9.5	10.0	10.0	9.5	9.5	14.0	13.5	13.5	---	---	---
18	11.5	10.0	10.5	10.5	9.5	10.0	14.5	13.5	14.0	---	---	---
19	12.0	11.5	11.5	11.5	10.0	10.5	15.5	13.5	14.5	---	---	---
20	12.0	11.5	11.5	11.0	10.0	10.5	15.5	14.5	15.0	---	---	---
21	12.5	11.5	12.0	10.5	9.5	10.0	16.5	15.5	16.0	---	---	---
22	13.0	11.5	12.5	10.5	10.0	10.0	17.5	16.0	16.5	---	---	---
23	12.5	12.5	12.5	11.0	10.0	10.5	16.5	15.5	16.0	---	---	---
24	13.0	12.0	12.5	11.0	10.5	10.5	16.5	15.0	15.5	---	---	---
25	13.0	12.0	12.5	10.5	10.0	10.5	16.5	15.0	16.0	---	---	---
26	13.0	12.5	12.5	11.0	10.0	10.5	17.5	16.0	16.5	---	---	---
27	12.5	12.0	12.5	11.5	10.5	11.0	17.5	16.5	17.0	---	---	---
28	12.0	11.0	11.5	11.5	10.5	11.0	18.0	17.0	17.5	---	---	---
29	11.0	10.0	10.5	10.5	9.5	10.0	19.0	18.0	18.5	---	---	---
30	---	---	---	10.0	9.5	9.5	19.0	15.5	17.5	---	---	---
31	---	---	---	11.0	10.0	10.5	---	---	---	---	---	---
MONTH	13.0	4.0	9.5	11.5	7.5	9.5	19.0	9.5	14.0	---	---	---

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1							---	---	---	---	---	---
2							---	---	---	---	---	---
3							---	---	---	---	---	---
4							---	---	---	---	---	---
5							---	---	---	---	---	---
6							---	---	---	---	---	---
7							---	---	---	---	---	---
8							---	---	---	---	---	---
9							---	---	---	---	---	---
10							---	---	---	---	---	---
11							---	---	---	---	---	---
12							---	---	---	---	---	---
13							---	---	---	---	---	---
14							---	---	---	---	---	---
15							---	---	---	---	---	---
16							---	---	---	---	---	---
17							---	---	---	---	---	---
18							---	---	---	---	---	---
19							---	---	---	---	---	---
20							---	---	---	---	---	---
21							---	---	---	---	---	---
22							---	---	---	---	---	---
23							---	---	---	---	---	---
24							25.5	24.5	25.0	---	---	---
25							25.5	24.0	24.5	---	---	---
26							25.0	24.0	24.5	23.5	23.0	23.0
27							25.0	24.0	24.5	23.0	22.5	23.0
28							25.0	24.0	24.5	22.5	21.5	22.0
29							25.0	24.5	25.0	21.5	21.0	21.0
30							24.5	24.0	24.5	20.5	20.0	20.5
31							24.5	24.0	24.0	---	---	---
MONTH							---	---	---	---	---	---

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.4	6.7	7.1	9.1	8.2	8.7	9.1	8.8	8.9	11.4	10.8	11.1
2	7.7	6.4	7.2	9.1	8.1	8.6	9.2	8.8	9.0	11.0	10.8	10.9
3	8.7	6.4	7.4	8.2	7.7	7.9	12.2	10.3	11.5	---	---	---
4	8.6	6.8	7.5	8.0	7.5	7.8	11.9	9.2	10.6	---	---	---
5	7.8	6.2	6.7	8.3	7.8	8.0	9.4	9.0	9.2	---	---	---
6	7.2	5.6	6.4	8.4	7.7	8.1	9.6	8.9	9.2	---	---	---
7	7.8	6.7	7.3	8.0	7.2	7.8	9.8	9.2	9.3	11.6	11.4	11.5
8	7.6	6.2	7.1	---	---	---	9.4	9.2	9.3	11.6	11.4	11.5
9	7.1	6.2	6.7	---	---	---	9.3	9.1	9.1	11.6	11.3	11.4
10	7.6	6.3	7.1	6.8	6.3	6.6	9.3	9.0	9.1	11.7	11.4	11.5
11	8.2	7.3	7.8	7.8	5.6	6.4	9.1	8.9	9.0	11.9	11.6	11.7
12	7.4	6.9	7.2	8.8	7.9	8.4	9.0	8.8	8.9	11.9	11.6	11.7
13	6.9	6.3	6.7	8.7	8.2	8.4	8.9	8.8	8.8	11.8	11.6	11.7
14	7.0	6.6	6.8	8.3	8.0	8.2	8.9	8.8	8.9	11.8	11.7	11.7
15	7.1	6.8	7.0	8.4	8.2	8.3	9.2	9.0	9.1	11.9	11.4	11.7
16	7.4	6.7	7.0	9.2	8.2	8.5	9.3	9.1	9.2	11.9	11.1	11.5
17	---	---	---	9.3	8.4	8.7	9.3	9.1	9.2	11.4	11.2	11.3
18	---	---	---	9.0	8.6	8.8	9.5	9.3	9.4	11.6	11.3	11.5
19	---	---	---	9.2	8.8	9.0	9.8	9.4	9.6	11.9	11.6	11.7
20	---	---	---	9.2	9.1	9.2	9.8	9.6	9.7	12.4	11.6	11.8
21	7.8	7.0	7.5	9.4	9.2	9.3	9.9	9.7	9.8	---	---	---
22	7.8	6.9	7.6	9.3	9.0	9.2	10.1	10.0	10.1	---	---	---
23	7.4	7.1	7.3	9.2	9.0	9.0	10.2	10.1	10.2	---	---	---
24	7.1	6.3	6.7	9.1	8.9	9.0	10.7	10.2	10.4	---	---	---
25	6.9	6.1	6.5	9.4	9.1	9.2	11.0	10.7	10.9	---	---	---
26	7.1	6.6	6.8	9.3	9.0	9.2	10.9	10.7	10.8	---	---	---
27	7.4	6.8	7.0	9.2	9.1	9.2	10.8	10.7	10.7	---	---	---
28	7.3	6.5	6.8	10.3	9.0	9.1	12.2	10.8	10.9	12.5	12.2	12.4
29	---	---	---	10.5	9.0	9.6	---	---	---	12.7	12.4	12.5
30	---	---	---	9.0	8.8	8.9	11.5	11.4	11.5	12.8	12.5	12.6
31	10.7	8.5	9.3	---	---	---	11.5	11.4	11.4	12.8	12.5	12.7
MONTH	10.7	5.6	7.1	10.5	5.6	8.5	12.2	8.8	9.8	---	---	---

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.0	12.5	12.7	10.9	10.5	10.7	9.8	9.4	9.6	---	---	---
2	12.9	12.4	12.6	11.3	10.9	11.1	10.8	9.7	10.2	9.3	9.1	9.2
3	13.9	12.2	13.0	11.6	11.3	11.4	---	---	---	10.9	8.9	10.0
4	13.7	12.0	12.9	11.8	11.4	11.5	9.8	9.4	9.6	10.8	10.3	10.6
5	---	---	---	11.5	11.3	11.4	---	---	---	11.0	10.0	10.6
6	---	---	---	11.7	11.5	11.6	10.6	9.6	10.1	10.9	9.7	10.4
7	---	---	---	12.1	11.7	11.9	9.6	9.4	9.5	10.4	10.0	10.2
8	---	---	---	12.0	11.8	11.9	9.3	8.6	9.0	---	---	---
9	---	---	---	11.9	11.7	11.8	8.7	8.5	8.6	---	---	---
10	---	---	---	11.8	11.5	11.7	8.6	8.4	8.5	---	---	---
11	---	---	---	12.0	11.7	11.8	8.7	8.3	8.5	---	---	---
12	---	---	---	12.1	11.7	11.9	8.6	8.3	8.4	---	---	---
13	---	---	---	12.1	11.9	12.0	8.4	8.1	8.3	---	---	---
14	13.1	11.6	12.3	12.1	11.8	11.9	8.3	7.8	8.1	---	---	---
15	12.0	11.3	11.7	12.4	11.7	12.0	8.0	7.8	7.8	---	---	---
16	12.1	11.8	12.0	12.2	11.5	11.7	7.9	7.4	7.7	---	---	---
17	11.9	11.6	11.7	11.5	11.2	11.4	7.4	7.1	7.3	---	---	---
18	11.8	11.3	11.6	11.4	11.0	11.1	7.8	7.1	7.4	---	---	---
19	11.3	10.6	11.0	11.5	10.9	11.1	7.4	7.1	7.3	---	---	---
20	10.5	10.1	10.2	11.1	10.3	10.6	7.2	6.9	7.1	---	---	---
21	10.3	9.8	10.0	10.4	9.8	10.1	7.4	6.8	7.1	---	---	---
22	9.8	9.3	9.5	11.7	9.4	10.2	9.3	6.8	8.0	---	---	---
23	9.5	9.1	9.3	10.4	9.4	9.8	9.5	9.1	9.3	---	---	---
24	9.5	9.2	9.4	10.6	10.1	10.4	9.5	6.9	7.9	---	---	---
25	9.4	9.2	9.3	11.9	10.3	11.2	7.0	6.6	6.8	---	---	---
26	9.5	9.2	9.3	10.5	10.1	10.3	7.0	6.4	6.8	---	---	---
27	9.7	9.5	9.6	11.0	10.1	10.6	7.1	6.8	6.9	---	---	---
28	10.0	9.7	9.9	12.0	10.7	11.5	7.1	6.7	6.8	---	---	---
29	10.6	10.1	10.3	12.0	11.2	11.6	6.7	6.3	6.4	---	---	---
30	---	---	---	12.3	11.1	12.0	10.0	6.2	8.1	---	---	---
31	---	---	---	11.0	9.6	10.5	---	---	---	---	---	---
MONTH	---	---	---	12.4	9.4	11.3	10.8	6.2	8.1	---	---	---

		JUNE			JULY			AUGUST			SEPTEMBER	
1							---	---	---	---	---	---
2							---	---	---	---	---	---
3							---	---	---	---	---	---
4							---	---	---	---	---	---
5							---	---	---	---	---	---
6							---	---	---	---	---	---
7							---	---	---	---	---	---
8							---	---	---	---	---	---
9							---	---	---	---	---	---
10							---	---	---	---	---	---
11							---	---	---	---	---	---
12							---	---	---	---	---	---
13							---	---	---	---	---	---
14							---	---	---	---	---	---
15							---	---	---	---	---	---
16							---	---	---	---	---	---
17							---	---	---	---	---	---
18							---	---	---	---	---	---
19							---	---	---	---	---	---
20							---	---	---	---	---	---
21							---	---	---	---	---	---
22							---	---	---	---	---	---
23							---	---	---	---	---	---
24							7.7	6.5	7.0	---	---	---
25							7.9	6.3	7.1	---	---	---
26							7.7	6.7	7.1	5.7	4.0	4.8
27							7.4	6.3	6.9	6.3	5.4	5.9
28							7.1	6.3	6.7	6.6	6.0	6.3
29							6.9	6.2	6.5	6.6	6.2	6.4
30							6.7	6.2	6.5	7.4	6.5	6.8
31							6.7	5.8	6.3	---	---	---
MONTH							---	---	---	---	---	---

03426500 CUMBERLAND RIVER BELOW OLD HICKORY, TN

LOCATION.--Lat 36°15'39", long 86°40'30", Davidson County, Hydrologic Unit 05130202, near left bank on downstream end of pier of bridge on State Highway 45, 1.5 mi west of Old Hickory, 2.1 mi east of Madison, 3.3 mi downstream from Mansker Creek, 4.1 mi downstream from Old Hickory Dam, and at mile 212.1.

DRAINAGE AREA.--11,735 mi².

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."

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

GAGE.--Water-stage recorder. Datum of gage is 380.00 ft National Geodetic Vertical Datum of 1929. See WSP 1726 for history of changes prior to Oct. 1, 1956. Since Apr. 1, 1957, auxiliary gage at Old Hickory dam 4.1 mi upstream from base gage at same datum.

REMARKS.--Records good. Flow regulated by six lakes or reservoirs (see p.107).

AVERAGE DISCHARGE.--48 years (water years 1932-42, 1948-84), 19,240 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 173,000 ft³/s Jan. 29, 1937; maximum gage height, 48.13 ft Mar. 14, 1975; minimum daily discharge, 86 ft³/s Aug. 15, 1936; minimum gage height since filling of Cheatham Lake on Oct. 1, 1956, 3.49 ft Sept. 10, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, 57.4 ft Dec. 31, 1926, present site and datum, from profile by Corps of Engineers, discharge, 200,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 99,600 ft³/s May 7; maximum gage height, 43.88 ft May 7; minimum daily discharge, 3,130 ft³/s Sept. 30; minimum gage height, 3.61 ft Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4200	6150	8530	26500	18500	26100	41400	36500	34500	11000	18500	16000
2	4200	4350	18000	19100	16500	24400	40800	33500	37900	7960	20600	9680
3	5500	3500	58400	14100	11000	21700	40700	52700	33400	9190	19800	5930
4	7500	7220	55900	14400	11000	19900	34100	74700	37500	12300	18900	6640
5	9500	6320	34900	14700	8000	26400	41800	61500	36500	13700	12300	8980
6	10000	6700	18000	14500	9000	32400	42700	66600	37500	14500	13800	10600
7	10500	9590	10400	14200	14000	31700	40100	90000	38200	14700	14100	11300
8	5200	7870	8790	11800	17000	31800	40600	95800	39900	15600	15600	10200
9	5500	6690	8410	10800	12500	26200	33200	94900	31100	6710	15700	7310
10	4000	5910	7060	15600	12000	18600	35000	90700	25100	7750	16400	6960
11	7000	5920	21500	19300	18000	13400	39800	86500	26300	8400	20300	6110
12	5000	10800	36100	22000	55000	15600	35200	83500	25100	8030	13000	5240
13	4000	5740	26800	21100	35000	20600	31600	78500	17100	15000	11100	6840
14	14500	5540	26500	15600	23500	16200	26700	75400	23800	15500	13100	9510
15	12600	5610	16700	9700	34500	15100	25900	72800	23900	9330	12400	10400
16	3950	10900	13300	9710	31500	24200	26500	71100	24600	8580	14900	6180
17	5700	5810	13000	13400	17500	19800	26000	72200	25100	13100	19000	9650
18	4990	5860	12900	15200	18000	18000	27900	69400	20100	21100	17900	8990
19	4100	4270	14300	14000	15500	13500	28900	67600	16800	13600	8740	10500
20	4260	4320	15200	17500	12500	16000	27400	67200	14200	12400	6980	8240
21	4110	5770	15000	25800	17000	37400	27200	66800	17100	13900	11800	6110
22	4480	5680	20100	22100	16000	41800	45600	67400	18800	9360	12300	5460
23	7860	12300	26400	17600	14900	33800	58100	67500	19000	8250	15900	5470
24	6650	21000	23500	18000	14700	38400	46200	62200	14000	13100	17200	3850
25	5000	16300	34100	23500	13900	48200	39800	58700	9000	13800	13900	4350
26	5980	8560	34200	23000	9860	32000	36400	53200	13000	19400	10500	5510
27	5770	4280	38500	19000	14300	39300	31900	40400	12000	23600	7960	5850
28	7180	34900	38900	15000	19700	49000	35900	39900	12000	15700	9860	6990
29	6250	38600	40400	13000	24700	65900	35500	40900	14000	12700	17000	4490
30	4500	17800	32300	11500	---	56000	42300	41200	11100	11400	18300	3130
31	5560	---	32900	12000	---	46200	---	38700	---	11600	17100	---
TOTAL	195540	294260	760990	513710	535560	919600	1085200	2018000	708600	391260	454940	226470
MEAN	6308	9809	24550	16570	18470	29660	36170	65100	23620	12620	14680	7549
MAX	14500	38600	58400	26500	55000	65900	58100	95800	39900	23600	20600	16000
MIN	3950	3500	7060	9700	8000	13400	25900	33500	9000	6710	6980	3130

CAL YR 1983 TOTAL 7779330 MEAN 21310 MAX 91000 MIN 3500
WTR YR 1984 TOTAL 8104130 MEAN 22140 MAX 95800 MIN 3130

NOTE.--No gage-height record Jan. 19 to Feb. 22.

03426800 EAST FORK STONES RIVER AT WOODBURY, TN

LOCATION.--Lat 35°49'41", long 86°04'36", Cannon County, Hydrologic Unit 05130203, on center pier on downstream side of bridge on U. S. Highway 70S, at Woodbury, 0.4 mi downstream from Doolittle Branch, and at mile 45.6.

DRAINAGE AREA.--39.1 mi².

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

REVISED RECORDS.--WSP 1910; Drainage area. WSP 2110: 1963, 1964(M), 1965.

GAGE.--Water-stage recorder. Datum of gage is 676.23 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--22 years, 68.8 ft³/s, 23.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft³/s Mar. 15, 1973, gage height, 16.75 ft, from rating curve extended above 3,000 ft³/s on basis of velocity-area study and contracted-opening measurement at gage height 16.52 ft at bridge 4.6 mi downstream; minimum, 2.1 ft³/s Nov. 13, 1980 (result of unnatural regulation upstream).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1902, that of Mar. 15, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	0530	3560	11.69	May 7	1045	*6990	14.41
May 6	1715	2270	9.47	May 7	1745	4460	12.67
May 7	0530	3550	11.68				

Minimum discharge, 5.7 ft³/s Oct. 9, 10, 11, may have been less during period of missing record Oct. 1-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	7.7	47	54	41	96	90	153	27	24	34	10
2	6.0	7.8	306	48	38	86	73	542	26	17	25	9.6
3	6.0	14	567	42	40	73	76	1430	24	18	20	9.7
4	6.0	43	443	39	38	65	164	591	23	19	18	10
5	6.5	25	161	36	36	103	127	251	23	28	18	9.6
6	9.0	16	193	35	33	108	100	581	22	25	23	8.8
7	7.4	12	119	31	30	90	79	3180	21	38	37	8.4
8	6.7	10	79	29	30	76	68	1380	20	22	36	8.2
9	6.3	9.5	59	28	30	63	64	453	19	16	26	8.2
10	6.2	11	48	47	44	56	57	246	19	14	22	8.4
11	6.3	13	346	59	65	52	52	159	18	18	24	8.3
12	7.9	12	381	51	64	48	48	112	17	31	18	8.0
13	56	10	189	50	263	55	44	87	18	23	16	7.8
14	22	103	122	48	255	52	42	73	18	16	14	7.8
15	13	300	82	49	139	49	39	61	18	16	14	7.8
16	10	59	61	50	94	74	40	55	20	195	14	7.8
17	8.9	34	50	45	72	84	39	49	16	168	13	7.6
18	8.6	26	44	49	60	83	35	45	15	177	13	7.5
19	8.6	21	40	45	55	75	34	42	16	51	13	7.4
20	8.5	53	36	40	47	247	33	40	17	32	12	7.4
21	8.3	48	34	36	43	266	34	38	17	26	12	7.3
22	10	32	111	34	40	174	315	36	17	21	15	7.2
23	17	213	85	57	38	116	174	38	23	18	19	7.4
24	14	188	61	230	36	90	94	34	17	16	13	7.4
25	11	67	48	162	34	87	68	31	15	15	11	7.2
26	9.8	42	43	113	31	73	57	31	13	15	10	7.6
27	9.2	334	45	86	120	67	51	30	13	34	10	8.0
28	8.8	545	345	69	176	947	57	34	13	25	11	8.2
29	8.5	129	159	60	116	471	520	33	13	18	12	8.4
30	8.4	66	88	53	---	208	319	29	17	17	14	8.4
31	8.2	---	65	45	---	128	---	28	---	43	13	---
TOTAL	329.1	2451.0	4457	1820	2108	4262	2993	9892	555	1196	550	245.4
MEAN	10.6	81.7	144	58.7	72.7	137	99.8	319	18.5	38.6	17.7	8.18
MAX	56	545	567	230	263	947	520	3180	27	195	37	10
MIN	6.0	7.7	34	28	30	48	33	28	13	14	10	7.2
CFSM	.27	2.09	3.68	1.50	1.86	3.50	2.55	8.16	.47	.99	.45	.21
IN.	.31	2.33	4.24	1.73	2.01	4.05	2.85	9.41	.53	1.14	.52	.23

CAL YR 1983	TOTAL	26714.7	MEAN	73.2	MAX	1490	MIN	6.0	CFSM	1.87	IN.	25.42
WTR YR 1984	TOTAL	30858.5	MEAN	84.3	MAX	3180	MIN	6.0	CFSM	2.16	IN.	29.36

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN

LOCATION.--Lat 35°55'06", long 86°20'02", Rutherford County, Hydrologic Unit 05130203, on left bank 100 ft upstream from highway bridge, 2.5 mi southwest of Lascassas, 3.7 mi downstream from Bradley Creek, 6.0 mi northeast of the courthouse in Murfreesboro, and at mile 15.4.

DRAINAGE AREA.--262 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1910: Drainage Area. WDR-TN-75-1: 1955(M), 1963(M), 1970(M), 1973 (M)(P).

GAGE.--Water-stage recorder. Datum of gage is 507.88 ft Sandy Hook datum (levels by Corps of Engineers). Prior to Oct. 1, 1973, water-stage recorder 100 ft downstream at same datum.

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

AVERAGE DISCHARGE.--29 years (water years 1950-57, 1964-84), 468 ft³/s, 24.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,200 ft³/s Mar. 13, 1975, gage height, 39.48 ft; minimum, 0.2 ft³/s Oct. 23, 1953, gage height, 2.22 ft; minimum daily, 0.4 ft³/s Aug. 31, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1902, that of Mar. 13, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 15	0715	8370	18.86	Apr. 29	1830	9810	20.58
Nov. 28	0430	12200	23.22	May 2	1830	8380	18.87
Dec. 2	2400	7710	18.02	May 3	1600	11100	22.01
Dec. 4	0130	7750	18.07	May 6	2200	13900	25.14
Mar. 28	0900	10700	21.59	May 7	2245	*21800	31.92

Minimum discharge, 11 ft³/s Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	26	509	376	240	610	722	1200	63	28	809	38
2	13	26	2050	306	215	520	572	3770	60	32	390	36
3	12	52	6290	260	208	423	574	8570	58	37	245	35
4	12	1420	5150	228	226	353	1480	5360	53	37	164	34
5	16	605	1660	207	212	695	982	1950	49	34	126	32
6	24	260	1420	194	197	895	731	4730	41	85	388	31
7	30	147	1050	180	168	724	574	16200	39	72	247	30
8	24	99	703	160	155	567	464	16100	36	76	2440	26
9	21	73	522	148	155	432	400	3750	34	52	596	25
10	18	61	402	221	212	350	345	1670	34	41	447	24
11	17	61	2930	608	495	300	287	1020	32	38	446	24
12	18	63	4680	453	516	262	245	728	32	33	242	22
13	630	59	1750	397	1780	286	198	575	31	72	149	17
14	348	54	1140	380	2190	367	186	458	34	51	108	14
15	122	3930	845	355	1040	316	172	361	34	41	104	12
16	66	889	614	330	698	569	161	294	33	1380	102	11
17	47	440	459	300	535	624	162	246	31	501	81	15
18	40	263	361	284	406	605	144	209	30	2670	63	17
19	36	180	298	290	339	509	124	182	133	514	55	17
20	32	1200	254	242	286	2920	115	160	181	248	48	19
21	30	876	226	206	244	2600	122	143	67	148	45	19
22	29	454	1070	183	215	1370	3850	133	69	103	41	19
23	80	1900	859	230	194	856	1600	126	121	77	54	18
24	91	2960	549	1860	177	644	785	125	229	62	64	17
25	68	883	367	1220	162	615	536	106	96	54	43	17
26	51	516	292	808	143	563	387	92	56	48	40	17
27	42	1400	258	628	426	474	308	83	48	232	38	17
28	36	7400	3180	506	905	7080	353	76	48	184	37	17
29	33	1470	1420	412	734	4840	3750	80	32	108	40	17
30	30	750	728	337	---	1750	3210	79	30	80	37	20
31	29	---	497	278	---	1010	---	69	---	1190	38	---
TOTAL	2059	28517	42533	12587	13473	34129	23539	68645	1834	8328	7727	657
MEAN	66.4	951	1372	406	465	1101	785	2214	61.1	269	249	21.9
MAX	630	7400	6290	1860	2190	7080	3850	16200	229	2670	2440	38
MIN	12	26	226	148	143	262	115	69	30	28	37	11
CFSM	.25	3.63	5.24	1.55	1.77	4.20	3.00	8.45	.23	1.03	.95	.08
IN.	.29	4.05	6.04	1.79	1.91	4.85	3.34	9.75	.26	1.18	1.10	.09

CAL YR 1983	TOTAL	219691.2	MEAN	602	MAX	9380	MIN	4.7	CFSM	2.30	IN.	31.19
WTR YR 1984	TOTAL	244028	MEAN	667	MAX	16200	MIN	11	CFSM	2.55	IN.	34.65

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURE: October 1975 to current year.
DISSOLVED OXYGEN: January 1980 to September 1981.

INSTRUMENTATION.--Water-quality monitor since October 1975.

REMARKS.--Interruptions in the record were due to monitor malfunction.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 697 micromhos Dec. 6, 1979; minimum, 72 micromhos Aug. 16, 1978.
WATER TEMPERATURES: Maximum, 31.5°C July 8, 14-16, 1977, July 16, 1980, July 17, 1982; minimum, 0.0°C Jan. 21, 1977.
DISSOLVED OXYGEN: Maximum recorded, 13.6 mg/L Feb. 14, 25, 26, 1981; minimum, 4.4 mg/L July 18, 19, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 498 micromhos Oct. 25; minimum, not determined.
WATER TEMPERATURE: Maximum, not determined; minimum, 1.0° Dec. 26; JAN. 21,22.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	323	282	303	421	362	391	376	365	371	352	343	347
2	312	263	293	429	348	376	377	179	318	355	350	352
3	328	272	293	425	341	384	250	173	221	356	350	353
4	321	259	288	406	312	354	290	219	249	354	350	352
5	313	272	283	383	354	369	323	292	309	359	352	355
6	303	241	264	403	386	395	328	307	321	360	356	357
7	290	245	264	410	405	408	333	306	321	358	354	356
8	289	247	265	419	409	415	346	334	342	356	353	354
9	300	247	270	418	409	415	352	339	347	353	349	351
10	295	244	269	421	411	418	358	340	350	360	345	350
11	305	248	274	418	416	417	362	197	278	356	349	352
12	304	257	274	418	414	416	304	203	258	363	356	360
13	309	246	270	417	415	415	338	308	324	373	362	368
14	306	249	276	419	398	415	345	327	339	374	369	371
15	337	272	309	392	151	255	356	347	352	376	370	373
16	359	314	333	372	319	350	364	346	357	375	367	370
17	371	317	343	392	373	384	368	355	363	373	364	368
18	379	296	353	404	394	399	371	357	366	370	359	363
19	389	340	360	408	405	407	374	351	361	365	350	358
20	390	349	369	407	322	362	366	351	354	364	350	357
21	399	332	370	372	326	350	372	353	369	368	356	362
22	397	348	365	398	375	388	365	300	331	369	350	361
23	427	330	380	400	204	340	348	302	324	365	343	357
24	471	349	406	344	209	290	358	338	352	343	243	272
25	498	418	468	373	338	361	367	356	362	329	284	314
26	484	387	463	388	365	379	371	365	367	341	330	336
27	492	393	455	390	219	355	374	364	369	346	341	344
28	475	381	433	306	158	229	362	191	256	350	346	348
29	451	355	407	351	309	333	317	259	295	349	346	348
30	444	380	408	364	351	359	334	319	326	353	346	348
31	433	348	396	---	---	---	344	334	340	352	341	347
MONTH	498	241	339	429	151	371	377	173	329	376	243	352

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	351	340	346	343	334	340	360	304	333	340	319	330
2	350	337	344	348	338	343	372	323	350	341	183	275
3	346	337	342	345	338	341	377	360	370	264	168	218
4	345	334	340	341	334	337	375	362	370	299	215	265
5	345	334	340	351	320	341	361	318	342	323	302	315
6	346	333	339	358	349	354	352	304	330	327	130	265
7	341	327	336	363	356	360	364	322	347	---	---	---
8	340	328	336	362	354	359	366	347	354	---	---	---
9	341	333	337	355	346	353	356	344	351	---	---	---
10	346	333	340	350	346	348	369	344	355	---	---	---
11	350	344	347	350	340	345	400	346	372	---	---	---
12	357	351	355	350	340	345	418	361	390	---	---	---
13	360	270	335	349	338	344	450	376	413	---	---	---
14	322	271	303	349	342	345	438	385	412	---	---	---
15	338	313	327	352	343	347	400	369	386	---	---	---
16	344	338	342	361	338	347	378	341	356	---	---	---
17	350	342	346	393	351	373	340	318	325	---	---	---
18	347	341	345	406	395	401	323	315	320	---	---	---
19	346	341	343	417	404	411	325	315	320	---	---	---
20	347	337	342	417	209	333	323	315	319	---	---	---
21	348	331	339	332	254	310	321	311	316	---	---	---
22	343	327	336	351	325	342	302	229	251	---	---	---
23	342	323	333	356	351	353	346	278	324	---	---	---
24	335	321	327	361	353	357	354	346	352	---	---	---
25	331	316	324	361	355	358	360	354	357	---	---	---
26	324	311	317	363	358	360	356	351	353	---	---	---
27	319	308	314	363	356	361	356	346	350	---	---	---
28	326	312	320	353	157	221	356	323	346	---	---	---
29	336	327	331	303	230	269	350	149	272	---	---	---
30	---	---	---	333	305	320	317	189	281	---	---	---
31	---	---	---	334	313	324	---	---	---	---	---	---
MONTH	360	270	335	417	157	343	450	149	344	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	350	303	326	---	---	---
2	---	---	---	---	---	---	378	352	366	---	---	---
3	---	---	---	---	---	---	385	379	383	---	---	---
4	---	---	---	---	---	---	390	384	386	---	---	---
5	---	---	---	---	---	---	392	386	389	---	---	---
6	---	---	---	---	---	---	389	335	367	---	---	---
7	284	281	282	---	---	---	---	---	---	---	---	---
8	285	282	283	---	---	---	---	---	---	---	---	---
9	285	283	284	---	---	---	---	---	---	---	---	---
10	286	284	285	---	---	---	---	---	---	---	---	---
11	287	285	286	---	---	---	---	---	---	---	---	---
12	288	286	288	---	---	---	---	---	---	---	---	---
13	289	287	288	---	---	---	---	---	---	---	---	---
14	289	279	286	286	281	283	---	---	---	---	---	---
15	286	280	284	286	266	282	---	---	---	---	---	---
16	292	286	288	261	147	203	---	---	---	---	---	---
17	289	287	288	295	219	259	---	---	---	---	---	---
18	290	285	289	292	140	218	---	---	---	335	327	330
19	294	137	262	328	295	315	---	---	---	329	322	325
20	---	---	---	341	329	334	---	---	---	325	317	320
21	---	---	---	347	342	345	---	---	---	328	314	319
22	---	---	---	351	346	348	---	---	---	330	316	320
23	---	---	---	347	345	347	---	---	---	335	317	322
24	---	---	---	349	344	347	---	---	---	336	318	322
25	---	---	---	344	341	343	---	---	---	331	320	324
26	---	---	---	343	328	341	---	---	---	327	321	323
27	---	---	---	327	265	292	---	---	---	324	319	322
28	---	---	---	316	302	309	---	---	---	323	320	322
29	---	---	---	327	305	319	---	---	---	323	319	321
30	---	---	---	333	306	326	---	---	---	322	319	320
31	---	---	---	336	243	299	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.0	17.5	19.0	15.5	14.0	15.0	11.5	10.5	11.0	5.0	4.0	4.5
2	20.0	17.5	19.0	16.0	15.0	15.5	10.5	9.5	10.0	6.0	5.0	5.5
3	20.5	18.0	19.5	16.5	16.0	16.0	13.5	10.0	12.0	6.5	5.0	5.5
4	21.0	19.0	20.0	16.5	15.5	16.5	14.0	13.5	13.5	6.5	5.0	6.0
5	21.5	20.5	21.0	15.5	13.0	14.0	14.0	13.0	13.5	7.0	5.5	6.5
6	20.5	19.0	20.0	13.5	12.5	13.0	14.5	12.5	13.5	7.5	6.0	7.0
7	19.5	18.0	19.0	12.5	12.0	12.5	12.0	10.5	11.0	7.5	6.0	7.0
8	19.5	18.0	19.0	13.0	11.5	12.5	10.5	9.5	10.5	7.5	6.0	6.5
9	19.5	18.0	19.0	13.5	12.0	13.0	11.0	10.0	10.5	8.0	6.0	7.0
10	19.5	18.0	19.0	13.0	12.0	12.5	12.5	11.0	12.0	8.0	6.0	7.0
11	19.5	19.0	19.5	12.0	10.5	11.0	13.0	12.0	12.5	6.0	5.0	5.5
12	20.0	19.5	20.0	10.5	9.5	10.0	13.0	12.5	12.5	5.0	4.5	5.0
13	19.5	16.0	17.5	10.5	9.5	10.0	12.5	12.0	12.5	6.0	5.0	6.0
14	16.0	15.0	15.5	10.0	8.5	9.0	12.0	11.5	12.0	7.0	6.0	6.5
15	16.0	14.0	15.0	13.0	10.0	12.0	11.5	10.5	11.0	7.0	6.5	6.5
16	17.0	15.0	16.0	13.0	12.0	12.5	10.5	9.5	10.0	7.0	6.5	6.5
17	18.0	16.0	17.0	11.5	11.0	11.5	9.5	8.5	9.0	7.0	6.5	6.5
18	18.0	17.5	17.5	12.5	11.0	11.5	8.5	7.5	8.0	6.5	5.0	6.0
19	19.0	18.0	18.5	14.0	12.0	13.0	7.5	6.5	7.0	4.5	2.5	4.0
20	19.0	18.5	19.0	15.0	14.0	14.5	6.0	6.0	6.0	3.0	2.0	2.5
21	19.5	19.0	19.5	14.0	13.0	13.0	8.0	6.0	7.0	2.0	1.0	1.0
22	19.5	18.0	19.0	13.5	12.5	13.0	9.5	8.0	8.5	2.0	1.0	1.0
23	18.0	17.0	17.5	15.5	13.5	14.5	8.0	6.5	7.5	4.0	1.5	2.5
24	17.0	16.5	17.0	15.5	13.0	14.5	6.5	3.0	4.5	7.5	3.5	5.5
25	16.5	15.5	16.0	12.5	11.5	12.0	3.0	1.5	2.0	9.0	8.0	8.5
26	15.5	14.5	15.0	11.5	11.0	11.5	2.0	1.0	1.5	9.0	8.0	8.0
27	14.5	13.5	14.0	14.0	11.5	12.5	3.5	2.0	2.5	8.5	7.5	8.5
28	14.5	13.0	14.0	14.5	13.0	14.0	7.0	3.5	4.5	8.5	8.0	8.5
29	14.5	13.5	14.0	13.0	11.5	12.0	7.5	6.0	6.5	9.0	8.0	8.5
30	15.0	14.0	14.5	11.0	10.5	11.0	5.5	4.5	5.0	9.0	7.5	8.5
31	15.0	14.5	14.5	---	---	---	4.5	3.5	4.0	7.5	6.5	7.0
MONTH	21.5	13.0	17.5	16.5	8.5	13.0	14.5	1.0	9.0	9.0	1.0	6.0
		FEBRUARY			MARCH			APRIL			MAY	
1	7.5	5.5	6.5	8.5	6.5	7.5	---	---	---	16.5	15.5	16.0
2	8.0	5.5	7.0	10.0	8.0	9.0	---	---	---	16.0	15.0	15.0
3	9.0	7.5	8.0	10.5	9.5	10.0	---	---	---	15.5	14.5	15.5
4	9.0	7.5	8.0	11.5	10.5	11.0	13.5	10.5	12.0	15.5	14.0	14.5
5	8.0	6.0	7.5	12.5	11.0	12.0	13.5	11.5	13.0	14.0	13.5	13.5
6	6.0	4.0	5.0	11.0	10.0	10.5	13.5	13.5	13.5	17.0	14.0	15.0
7	4.5	2.5	3.5	10.0	8.5	9.5	14.0	13.5	13.5	---	---	---
8	4.5	2.0	3.5	10.5	9.0	10.0	13.5	13.0	13.5	---	---	---
9	6.5	3.5	4.5	9.5	8.5	9.0	13.5	13.0	13.5	---	---	---
10	9.0	6.0	7.0	9.0	8.0	8.5	13.5	13.5	13.5	---	---	---
11	11.5	9.0	10.5	9.5	7.5	8.5	13.5	13.0	13.0	---	---	---
12	13.0	11.5	12.5	9.0	8.0	8.5	13.5	12.5	13.0	---	---	---
13	13.5	12.0	13.0	10.5	8.0	9.5	13.0	12.5	13.0	---	---	---
14	12.5	11.5	12.0	12.0	10.0	11.0	13.0	12.0	12.5	---	---	---
15	12.0	11.5	12.0	14.5	11.0	13.0	13.0	12.0	12.5	---	---	---
16	13.0	10.5	12.0	15.0	13.5	14.0	12.5	12.0	12.5	---	---	---
17	13.0	11.5	12.5	14.0	13.0	13.5	13.5	12.0	13.0	---	---	---
18	13.0	12.0	12.5	14.5	13.5	14.0	14.5	12.0	13.0	---	---	---
19	14.0	12.5	13.0	15.5	14.0	15.0	15.0	12.5	13.5	---	---	---
20	12.5	11.0	12.0	16.0	11.5	14.0	14.5	13.5	14.0	---	---	---
21	11.5	10.0	10.5	11.5	10.5	11.0	17.0	14.0	15.5	---	---	---
22	11.0	9.0	10.0	12.0	10.5	11.0	17.5	16.0	17.0	---	---	---
23	12.0	9.5	11.0	13.5	11.0	12.5	17.0	12.5	14.5	---	---	---
24	12.0	10.0	11.0	13.5	11.5	12.5	14.5	12.0	13.5	---	---	---
25	11.5	10.0	10.5	13.5	12.5	13.0	16.5	14.0	15.0	---	---	---
26	10.5	9.0	10.0	13.0	12.0	12.5	18.5	16.5	17.5	---	---	---
27	11.0	9.5	10.5	13.5	12.5	13.0	19.0	17.0	18.0	---	---	---
28	10.0	8.0	9.0	14.0	13.0	13.5	20.0	17.5	18.5	---	---	---
29	8.0	7.0	7.5	13.5	11.5	12.0	19.0	17.5	18.0	---	---	---
30	---	---	---	13.0	11.0	12.5	17.5	16.0	16.5	---	---	---
31	---	---	---	13.5	13.0	13.0	---	---	---	---	---	---
MONTH	14.0	2.0	9.5	16.0	6.5	11.5	20.0	10.5	14.5	---	---	---

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	20.0	19.0	19.5	---	---	---
2	---	---	---	---	---	---	21.0	20.0	20.5	---	---	---
3	---	---	---	---	---	---	21.5	20.0	20.5	---	---	---
4	---	---	---	---	---	---	23.0	20.5	21.5	---	---	---
5	---	---	---	---	---	---	24.0	21.5	22.5	---	---	---
6	---	---	---	---	---	---	23.5	22.5	23.0	---	---	---
7	25.0	23.0	24.0	---	---	---	23.0	22.0	22.5	---	---	---
8	26.0	23.5	25.0	---	---	---	---	---	---	---	---	---
9	26.5	24.0	25.5	---	---	---	---	---	---	---	---	---
10	26.0	24.0	25.5	---	---	---	---	---	---	---	---	---
11	27.0	24.0	25.5	---	---	---	---	---	---	24.5	22.5	23.5
12	27.0	25.0	26.0	---	---	---	---	---	---	25.0	23.5	24.5
13	27.5	25.0	26.5	---	---	---	---	---	---	25.5	23.5	24.5
14	27.0	25.0	26.5	28.5	25.5	27.0	---	---	---	26.5	23.5	25.0
15	26.5	24.5	25.5	27.5	26.0	27.0	---	---	---	25.0	22.0	23.5
16	27.5	24.5	26.0	26.0	21.5	23.0	---	---	---	21.5	20.0	21.0
17	27.5	25.5	26.5	21.5	21.0	21.5	---	---	---	20.0	18.5	19.5
18	28.0	25.5	27.0	21.5	20.5	21.0	---	---	---	19.5	18.5	19.0
19	28.0	24.0	26.5	21.5	19.5	20.5	---	---	---	19.5	17.5	18.5
20	---	---	---	23.5	20.5	22.0	---	---	---	20.5	18.0	19.5
21	---	---	---	24.5	21.0	22.5	---	---	---	21.0	19.0	20.0
22	---	---	---	25.0	23.0	24.0	---	---	---	21.5	20.0	21.0
23	---	---	---	25.5	23.0	24.5	---	---	---	22.5	21.0	21.5
24	---	---	---	27.0	24.0	25.5	---	---	---	22.5	21.5	22.0
25	---	---	---	27.5	25.0	26.5	---	---	---	23.0	21.5	22.0
26	---	---	---	27.5	25.5	26.5	---	---	---	22.5	19.5	21.0
27	---	---	---	26.5	22.5	24.0	---	---	---	19.5	17.5	18.5
28	---	---	---	23.5	22.5	23.0	---	---	---	17.5	16.0	17.0
29	---	---	---	24.0	22.0	22.5	---	---	---	16.5	15.0	16.0
30	---	---	---	22.5	21.5	22.0	---	---	---	15.5	14.5	15.5
31	---	---	---	21.5	18.5	20.0	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN

LOCATION.--Lat 35°56'25", long 86°27'54", Rutherford County, Hydrologic Unit 05130203, near right bank at county bridge on Sulphur Springs Road, 400 ft upstream from Nice's Mill dam, 1.6 mi downstream from Overall Creek, 4.2 mi southeast of Smyrna, and at mile 6.4.

DRAINAGE AREA.--237 mi², includes 43 mi² without surface drainage.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--19 years, 447 ft³/s, 25.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,800 ft³/s Mar. 13, 1975, gage height, 19.18 ft from rating curve extended above 14,000 ft³/s on basis of area-velocity study at gage height 17.11 ft and flood routing from Murfreesboro gage and Overall Creek at gage heights 16.65 ft and 17.39 ft; no flow Aug. 9, 10, Sept. 12, 13, 1983, result of upstream regulation and diversion; minimum natural discharge, 2.2 ft³/s Nov. 6-8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft³/s at 1800 hours, May 7, gage height, 13.11 ft, no other peak above base of 10,000 ft³/s; minimum discharge, 2.3 ft³/s Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	23	772	417	253	395	969	1120	104	30	881	99
2	10	24	1090	353	230	350	760	2620	96	27	405	82
3	9.0	36	5030	309	234	304	715	6060	93	25	313	65
4	9.0	410	5170	278	270	273	1210	4300	80	21	247	62
5	32	455	1970	256	251	571	980	1820	71	20	205	53
6	26	223	1710	240	230	844	730	3640	64	28	262	49
7	20	154	1300	227	205	664	578	10000	57	31	260	43
8	10	120	987	209	191	506	476	11700	52	23	420	40
9	5.5	96	773	199	186	404	422	3960	53	19	247	37
10	4.5	82	649	224	209	344	378	1950	43	23	243	37
11	5.3	73	3520	497	469	302	332	1350	45	22	497	35
12	7.6	69	5310	411	474	274	294	1060	44	21	274	41
13	59	67	2070	364	903	293	265	846	47	18	199	43
14	53	68	1550	378	1360	382	238	695	43	16	160	30
15	58	2240	1220	380	801	332	220	580	62	15	134	26
16	42	808	939	356	590	347	210	502	53	43	128	17
17	32	440	749	324	466	423	198	437	44	42	100	16
18	32	303	626	306	383	428	181	390	39	970	89	16
19	31	236	527	299	331	400	168	350	46	255	83	17
20	25	1510	447	250	290	1720	158	313	90	137	75	19
21	24	1180	401	230	256	2000	160	275	75	89	67	18
22	23	614	776	215	231	1160	1990	255	59	68	64	18
23	37	1240	846	208	213	804	1280	256	110	55	59	7.0
24	39	3090	566	1220	196	636	735	224	124	43	54	2.7
25	39	1110	450	1000	183	630	523	204	78	38	51	12
26	34	727	430	684	168	583	402	184	68	34	45	15
27	31	978	400	538	242	484	337	166	49	94	43	20
28	31	6150	2140	449	522	4060	383	151	41	87	92	22
29	29	1700	1330	384	447	4500	1670	142	36	77	208	19
30	24	1060	742	327	---	1820	2110	134	31	73	141	16
31	21	---	523	283	---	1240	---	118	---	1190	110	---
TOTAL	813.9	25286	45013	11815	10784	27473	19072	55802	1897	3634	6156	976.7
MEAN	26.3	843	1452	381	372	886	636	1800	63.2	117	199	32.6
MAX	59	6150	5310	1220	1360	4500	2110	11700	124	1190	881	99
MIN	4.5	23	400	199	168	273	158	118	31	15	43	2.7
CFSM	.11	3.56	6.13	1.61	1.57	3.74	2.68	7.59	.27	.49	.84	.14
IN.	.13	3.97	7.07	1.85	1.69	4.31	2.99	8.76	.30	.57	.97	.15

CAL YR 1983	TOTAL	215447.70	MEAN	590	MAX	7120	MIN	.00	CFSM	2.49	IN.	33.82
WTR YR 1984	TOTAL	208722.6	MEAN	570	MAX	11700	MIN	2.7	CFSM	2.41	IN.	32.76

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURE: March 1974 to current year.

INSTRUMENTATION.--Water-temperature recorder March 1974 to September 1975, water-quality monitor October 1975 to current year.

REMARKS.--Interruptions in the record due to monitor malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 631 micromhos Nov. 18, 1980; minimum, 83 micromhos May 19, 1983.
WATER TEMPERATURES: Maximum, 30.0°C July 12, 1976; minimum, 2.5°C Dec. 20, 21, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 628 micromhos Oct. 8; minimum, 120 micromhos Nov. 28.
WATER TEMPERATURES: Maximum, 25.0°C several days in July; minimum, 4.0°C Dec. 25,26,28,Jan. 22.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	449	434	441	525	497	507	380	363	373	357	345	349
2	462	446	452	518	485	498	385	287	358	365	355	360
3	489	448	462	525	495	514	305	197	227	370	354	363
4	492	450	466	501	375	436	249	186	204	377	363	369
5	539	493	518	399	377	390	314	247	288	378	373	375
6	569	483	512	410	393	405	323	308	319	387	372	378
7	595	534	565	419	404	413	332	319	324	387	371	381
8	628	582	608	455	412	425	354	331	344	394	371	387
9	627	492	576	458	427	440	364	351	358	387	370	379
10	553	472	506	496	443	473	369	362	365	384	371	377
11	544	442	473	491	474	481	374	146	283	389	369	382
12	556	482	510	498	475	488	235	148	191	375	358	370
13	567	475	535	517	487	502	287	240	266	374	357	366
14	497	383	433	532	487	513	306	286	297	384	357	371
15	476	385	444	519	232	313	328	307	315	380	366	372
16	466	413	447	341	249	298	338	326	331	376	365	369
17	486	436	465	407	340	375	346	336	342	379	364	370
18	510	439	473	456	402	430	349	346	347	376	364	370
19	473	420	444	522	452	490	354	344	349	393	373	381
20	485	448	464	528	397	464	358	354	356	388	372	376
21	500	459	480	387	344	363	360	354	357	384	372	378
22	502	458	470	418	365	391	358	342	350	392	368	382
23	529	458	484	448	338	420	352	342	346	387	370	378
24	512	478	501	329	274	293	362	351	356	374	270	338
25	481	457	471	375	309	351	364	350	357	290	259	273
26	504	457	483	391	359	376	373	359	366	324	290	308
27	519	486	497	395	342	386	379	369	374	341	319	333
28	567	496	539	330	120	206	381	208	302	351	339	346
29	596	527	560	331	252	297	278	217	245	356	351	355
30	607	486	530	365	332	349	323	277	303	365	350	358
31	572	495	519	---	---	---	346	326	336	371	360	365
MONTH	628	383	494	532	120	410	385	146	320	394	259	363

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	375	360	365	368	301	322	339	312	325	---	---	---
2	371	360	366	365	321	334	350	333	340	---	---	---
3	376	360	371	364	322	336	379	354	364	---	---	---
4	385	361	373	365	313	332	386	374	380	---	---	---
5	377	373	375	365	323	342	398	375	385	---	---	---
6	376	361	370	370	324	337	433	396	413	---	---	---
7	376	361	370	356	319	335	476	426	451	---	---	---
8	376	362	373	370	326	344	512	477	494	---	---	---
9	377	361	370	366	336	350	535	508	524	---	---	---
10	373	352	365	367	317	345	551	529	542	---	---	---
11	367	351	361	379	344	357	556	549	552	---	---	---
12	363	342	351	385	349	366	557	540	552	---	---	---
13	349	333	344	382	345	358	548	542	544	356	335	344
14	348	303	315	384	350	363	537	521	530	367	350	358
15	336	302	320	386	334	360	528	503	516	378	356	370
16	349	332	343	396	361	368	503	473	491	387	371	379
17	358	342	352	387	362	370	480	464	474	386	324	348
18	365	353	358	393	352	371	471	464	468	---	---	---
19	370	353	360	388	350	365	485	466	476	---	---	---
20	367	353	361	359	214	333	499	485	490	---	---	---
21	370	359	366	292	196	238	517	496	506	---	---	---
22	369	353	361	342	292	313	519	298	424	---	---	---
23	364	348	357	341	326	334	311	297	304	---	---	---
24	374	343	356	349	337	346	335	308	321	---	---	---
25	367	343	357	352	348	349	361	329	347	---	---	---
26	370	334	356	358	349	353	383	360	370	379	358	368
27	379	334	353	355	351	353	397	380	389	388	363	377
28	379	335	348	349	180	242	434	391	412	388	358	377
29	381	300	328	233	191	207	455	303	416	386	373	382
30	---	---	---	284	231	259	308	282	293	375	368	371
31	---	---	---	314	281	298	---	---	---	364	344	354
MONTH	385	300	357	396	180	332	557	282	436	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	354	338	344	463	447	453	369	295	329	382	360	376
2	---	---	---	483	457	471	---	---	---	391	380	385
3	---	---	---	497	478	487	---	---	---	397	390	394
4	---	---	---	498	477	482	---	---	---	406	400	403
5	---	---	---	488	448	466	482	407	444	415	400	407
6	---	---	---	480	457	468	469	386	436	422	414	416
7	365	352	357	---	---	---	449	380	419	437	420	426
8	367	353	358	---	---	---	426	312	368	441	430	434
9	366	353	359	---	---	---	393	343	381	437	430	435
10	359	343	353	---	---	---	377	310	343	446	431	441
11	346	325	337	---	---	---	363	271	316	450	440	444
12	329	314	319	---	---	---	377	320	348	450	440	445
13	345	305	322	---	---	---	344	330	335	450	440	445
14	322	305	314	---	---	---	360	340	347	444	430	439
15	---	---	---	---	---	---	374	360	366	447	440	444
16	---	---	---	---	---	---	392	360	377	457	440	447
17	---	---	---	---	---	---	404	390	397	471	460	465
18	---	---	---	---	---	---	407	400	402	487	470	480
19	---	---	---	---	---	---	415	410	413	491	471	483
20	---	---	---	---	---	---	417	410	414	496	480	490
21	---	---	---	362	286	321	417	410	415	494	460	488
22	358	327	343	362	315	333	417	410	415	494	481	492
23	381	248	328	428	355	381	423	410	416	507	490	501
24	---	---	---	419	365	389	423	410	420	507	502	505
25	---	---	---	411	355	372	422	410	417	507	491	505
26	---	---	---	391	365	376	427	420	422	517	500	508
27	---	---	---	388	336	358	433	420	425	534	510	522
28	418	377	394	349	316	330	433	330	410	555	531	547
29	488	402	471	362	336	354	385	301	324	574	550	562
30	479	427	444	379	355	367	350	330	342	586	570	580
31	---	---	---	389	286	355	367	350	356	---	---	---
MONTH	---	---	---	---	---	---	482	271	386	586	360	464

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.0	19.5	20.0	17.0	15.5	16.5	12.0	11.5	11.5	6.5	5.0	6.0
2	21.0	19.5	20.0	17.0	16.0	16.5	11.5	11.0	11.0	7.0	6.0	6.5
3	21.0	19.5	20.5	17.5	16.5	17.0	12.5	10.5	11.5	7.5	6.5	7.0
4	21.5	20.0	21.0	18.0	16.0	17.0	13.0	12.5	13.0	8.0	7.0	7.5
5	21.5	21.0	21.0	16.5	15.0	15.5	14.0	12.5	13.0	8.5	8.0	8.0
6	21.0	16.0	20.5	15.0	14.0	14.5	14.0	13.0	13.5	9.0	8.5	8.5
7	21.0	19.5	20.5	14.5	14.0	14.0	12.5	11.0	12.0	9.0	8.5	8.5
8	20.5	19.0	20.0	14.5	13.5	13.5	11.5	10.5	11.0	9.0	8.5	8.5
9	20.0	19.0	19.5	15.0	14.0	14.5	11.5	10.5	11.0	9.5	8.5	8.5
10	20.5	19.0	19.5	15.0	14.5	15.0	12.5	11.5	12.0	9.5	8.5	9.5
11	20.5	19.5	20.0	14.5	13.0	13.5	13.0	12.5	12.5	8.5	7.0	7.5
12	20.5	19.5	20.0	13.0	12.0	12.5	12.5	11.5	12.0	6.5	6.0	6.5
13	20.0	18.0	19.0	12.5	12.0	12.5	12.0	11.5	12.0	7.0	6.5	6.5
14	18.5	16.5	17.5	12.5	11.5	12.0	12.0	11.5	12.0	7.0	7.0	7.0
15	17.0	16.0	16.5	13.0	12.0	12.5	12.0	11.0	11.5	7.5	7.0	7.0
16	17.5	16.5	17.0	13.0	12.5	12.5	11.0	10.5	11.0	7.5	7.0	7.5
17	18.5	17.0	17.5	12.5	12.0	12.5	10.5	9.5	10.0	7.5	7.5	7.5
18	19.0	18.5	19.0	13.0	12.0	12.5	10.0	9.5	9.5	8.0	7.0	7.5
19	19.5	18.5	19.5	14.0	12.5	13.5	10.0	8.5	9.0	7.0	5.5	6.0
20	20.0	19.0	20.0	15.0	14.0	14.5	8.5	8.0	8.5	5.5	5.0	5.0
21	20.5	19.5	20.0	14.5	13.5	14.0	9.0	8.0	8.5	5.0	4.5	4.5
22	20.5	19.0	19.5	14.5	13.5	14.0	9.5	8.5	9.0	4.5	4.0	4.5
23	19.5	18.0	19.0	15.5	14.5	15.0	8.5	7.0	8.0	5.5	4.5	5.0
24	18.5	17.5	18.0	15.5	14.5	15.0	7.5	5.0	6.5	6.5	5.5	6.0
25	17.5	16.5	17.5	14.0	13.0	13.5	5.5	4.0	4.5	7.5	6.0	7.0
26	17.0	15.5	16.5	13.5	12.5	13.0	4.5	4.0	4.5	8.5	7.5	8.0
27	16.0	15.5	16.0	13.5	12.5	13.0	5.5	4.5	5.0	8.5	8.0	8.0
28	16.0	15.0	15.5	14.0	13.0	13.5	6.0	4.0	5.5	9.0	8.0	8.5
29	16.0	16.0	16.0	12.5	12.0	12.0	6.0	4.5	5.5	9.0	8.5	8.5
30	16.5	15.5	16.0	12.0	11.0	11.5	5.5	5.0	5.5	9.0	8.5	9.0
31	17.0	16.0	16.5	---	---	---	5.5	4.5	5.0	8.5	8.0	8.0
MONTH	21.5	15.0	18.5	18.0	11.0	14.0	14.0	4.0	9.5	9.5	4.0	7.0
		FEBRUARY			MARCH			APRIL			MAY	
1	8.5	7.5	8.0	8.0	6.5	7.0	12.5	10.5	11.5	---	---	---
2	9.0	8.0	8.0	9.0	7.0	8.0	13.5	11.0	12.0	---	---	---
3	9.5	8.5	9.0	9.5	8.0	9.0	14.0	12.5	13.0	---	---	---
4	9.5	8.5	9.0	10.0	9.0	9.5	14.5	13.0	14.0	---	---	---
5	9.5	8.0	9.0	10.5	10.0	10.5	14.0	12.0	13.0	---	---	---
6	8.5	7.0	7.5	10.5	9.0	9.5	13.5	11.5	12.5	---	---	---
7	7.0	6.0	6.5	9.5	8.0	9.0	14.0	12.5	13.0	---	---	---
8	6.5	5.5	6.0	9.5	8.5	9.0	13.5	12.5	13.0	---	---	---
9	7.5	6.0	6.5	9.5	8.0	8.5	13.5	12.5	13.0	---	---	---
10	9.0	7.0	8.0	9.0	8.0	8.5	14.0	13.0	13.5	---	---	---
11	10.5	8.5	9.5	9.0	8.0	8.5	15.0	13.0	14.0	---	---	---
12	11.5	10.0	10.5	9.0	8.0	8.5	15.5	14.5	15.0	---	---	---
13	13.0	11.5	12.0	9.5	8.0	9.0	17.0	15.0	15.5	17.5	16.0	17.0
14	12.5	11.5	12.0	10.5	9.0	9.5	16.5	15.5	16.0	18.5	16.5	17.5
15	11.5	11.0	11.5	12.0	9.5	10.5	16.0	15.0	15.0	18.0	16.5	17.5
16	12.0	11.0	11.5	12.5	12.0	12.5	15.0	14.0	14.5	17.5	16.0	17.0
17	12.5	11.5	12.0	12.5	12.0	12.5	14.0	13.0	13.5	17.5	15.5	16.5
18	12.5	11.5	12.0	13.5	12.0	12.5	14.5	12.5	13.0	18.0	16.0	17.0
19	13.0	12.0	12.5	14.5	12.0	13.0	14.5	13.5	14.0	18.5	16.5	17.5
20	13.0	11.0	12.0	14.5	11.0	13.5	14.5	14.0	14.0	19.0	17.0	18.0
21	11.5	10.0	11.0	10.5	9.5	10.0	16.0	14.0	14.5	19.5	18.0	18.5
22	11.0	10.0	10.5	11.0	9.0	10.0	17.5	15.0	16.0	19.5	17.0	18.0
23	11.5	10.5	11.0	12.0	10.0	11.0	16.5	14.5	15.5	20.0	17.0	19.0
24	11.5	11.0	11.0	12.5	11.0	11.5	15.0	13.5	14.0	20.0	17.5	18.5
25	11.5	10.5	11.0	12.5	11.5	12.0	16.5	14.0	15.0	20.0	18.0	19.0
26	11.0	10.0	10.5	12.0	11.0	12.0	17.0	15.0	16.0	20.5	19.0	19.5
27	11.0	10.0	10.5	13.0	11.5	12.0	17.0	16.5	16.5	20.5	19.0	20.0
28	10.5	8.5	9.5	13.0	12.0	13.0	17.5	16.5	17.0	20.5	19.0	20.0
29	8.5	7.0	7.5	12.5	10.0	11.0	17.5	17.0	17.0	20.5	17.5	19.0
30	---	---	---	11.5	9.5	10.5	17.5	16.5	17.0	17.5	16.0	17.0
31	---	---	---	11.5	10.0	11.0	---	---	---	17.5	15.5	16.5
MONTH	13.0	5.5	10.0	14.5	6.5	10.5	17.5	10.5	14.5	---	---	---

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.0	16.5	17.0	23.0	21.5	22.5	20.0	18.5	19.0	22.5	20.5	21.5
2	19.0	17.5	18.0	23.0	21.5	22.0	20.5	19.0	20.0	23.0	20.5	21.5
3	20.0	17.5	18.5	23.0	22.0	22.5	20.5	20.0	20.5	22.5	20.5	21.5
4	20.5	19.0	20.0	23.0	22.0	22.5	21.5	20.0	20.5	21.0	20.0	20.5
5	21.0	19.5	20.0	23.0	22.0	22.5	22.0	20.5	21.0	20.5	19.0	19.5
6	22.0	20.0	21.0	23.5	21.5	22.5	23.0	21.0	22.0	20.5	18.5	19.5
7	22.0	21.0	21.5	25.0	21.0	23.0	23.0	22.0	22.5	20.5	18.5	19.5
8	22.5	20.5	21.5	25.0	21.0	22.5	23.5	22.0	22.5	20.5	18.5	19.5
9	23.5	20.5	22.0	---	---	---	23.5	22.0	22.5	20.5	19.0	20.0
10	23.0	21.5	22.0	---	---	---	23.0	22.5	22.5	21.0	19.5	20.0
11	23.5	21.5	22.5	---	---	---	23.5	22.0	22.5	22.5	20.0	21.0
12	23.5	22.0	22.5	---	---	---	22.5	21.0	22.0	23.0	21.0	22.0
13	23.5	22.5	23.0	---	---	---	23.0	21.5	22.0	23.0	21.5	22.5
14	24.0	22.5	23.0	---	---	---	23.5	22.0	22.5	23.5	22.0	22.5
15	24.0	22.0	23.0	---	---	---	24.0	22.0	23.0	23.5	21.0	22.0
16	24.0	22.5	23.0	---	---	---	23.5	22.0	22.5	21.0	19.5	20.5
17	24.0	22.5	23.0	---	---	---	23.5	21.5	22.5	19.5	18.0	19.0
18	24.0	22.5	23.5	---	---	---	23.0	21.5	22.5	18.5	17.5	18.0
19	24.0	23.0	23.5	---	---	---	23.0	21.5	22.0	18.0	17.0	17.5
20	23.5	22.0	23.0	---	---	---	23.5	21.5	22.5	19.0	17.0	18.0
21	22.5	21.0	21.5	24.5	22.0	23.0	23.0	21.5	22.5	20.0	18.0	19.0
22	23.0	21.0	22.0	25.0	22.5	23.5	23.0	21.5	22.5	20.5	18.0	19.5
23	23.0	21.0	22.5	24.5	22.5	23.5	24.0	22.0	22.5	21.0	19.0	20.0
24	23.0	20.5	22.0	24.5	22.5	23.5	23.5	21.0	22.0	21.0	20.0	20.5
25	23.0	20.0	21.5	24.5	23.0	24.0	22.0	20.5	21.0	21.5	20.0	20.5
26	23.5	20.5	21.5	25.0	23.0	24.0	22.5	20.5	21.0	21.5	19.0	19.5
27	23.5	21.5	22.5	25.0	22.0	23.5	22.5	20.5	21.5	19.0	18.0	18.5
28	23.5	21.5	22.5	23.0	21.0	22.0	22.0	20.0	21.0	18.0	16.5	17.0
29	23.0	21.5	22.0	23.0	21.0	22.0	22.5	20.5	21.0	16.5	15.5	15.5
30	23.5	21.5	22.5	22.5	21.0	21.5	22.0	21.0	21.5	15.5	15.0	15.0
31	---	---	---	21.0	18.5	20.0	23.0	20.5	21.5	---	---	---
MONTH	24.0	16.5	21.5	---	---	---	24.0	18.5	22.0	23.5	15.0	19.5

03431517 CUMMINGS BRANCH AT LICKTON, TN

LOCATION.--Lat 36°18'25", long 86°48'00", Davidson County, Hydrologic Unit 05130202, on right downstream wingwall of bridge, on Shaw Road, 900 ft above confluence with Shaw Branch, 0.8 mi northeast of Lickton, and at mile 0.2.

DRAINAGE AREA.--2.40 mi².

PERIOD OF RECORD.--December 1975 to current year.

GAGE.--Water-stage recorder and V-notch wier. Datum of gage is 532.25 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those below 1.0 ft³/s, which are fair.

AVERAGE DISCHARGE.--8 years (water years 1977-84), 3.35 ft³/s, 18.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 881 ft³/s Sept. 13, 1979; gage height, 5.21 ft; no flow many days, 1980, 1983, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 16	0310	476	4.44	May 7	0525	*551	4.61
May 6	1410	505	4.51	May 7	1225	138	3.29
May 7	0300	146	3.33	May 7	1520	379	4.18

No flow Oct. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.09	1.2	2.4	1.8	2.8	6.1	11	.75	.14	12	.41
2	.00	.09	10	2.0	1.6	2.7	5.1	12	.69	.15	13	.32
3	.00	.12	40	1.8	2.0	2.5	6.0	25	.65	.14	6.2	.54
4	.00	.32	20	1.7	2.2	3.6	6.9	32	.59	.17	3.6	.66
5	.01	.26	10	1.6	2.1	15	6.7	16	.53	.94	2.4	.43
6	.01	.18	7.0	1.5	1.9	11	5.9	64	.48	1.1	1.7	.33
7	.01	.16	5.0	1.3	1.7	7.8	5.1	152	.44	.56	1.3	.28
8	.01	.15	3.0	1.2	1.6	5.9	4.3	65	.39	.37	.94	.25
9	.01	.13	2.5	1.1	1.6	4.6	3.9	25	.35	.29	.67	.24
10	.01	.14	10	1.3	2.4	3.9	3.2	15	.30	.24	.58	.24
11	.01	.16	20	1.5	3.4	3.1	2.7	10	.25	.20	.59	.23
12	.03	.15	10	1.3	4.2	2.7	2.6	6.7	.22	.26	.51	.22
13	.05	.14	8.0	1.3	5.5	2.6	2.4	5.3	.20	.22	.42	.21
14	.08	.15	6.0	1.2	5.0	2.4	2.3	4.4	.18	.18	.37	.19
15	.07	.58	4.9	1.2	4.3	2.5	2.2	3.4	.17	.20	.35	.19
16	.06	.44	3.9	1.2	3.5	69	2.1	2.9	.17	1.2	.36	.17
17	.05	.29	3.1	1.2	2.9	19	2.0	2.5	.16	1.0	.33	.17
18	.05	.22	2.6	1.2	2.6	11	1.8	2.3	.16	1.9	.30	.16
19	.05	.19	2.6	1.1	2.4	8.0	1.6	2.1	.13	1.4	.31	.15
20	.05	.76	2.5	1.1	2.1	9.9	1.5	1.9	.13	.64	.29	.14
21	.05	.68	1.9	.98	1.9	9.8	1.9	1.7	.17	.44	.25	.14
22	.19	.40	2.3	.93	1.8	8.4	30	1.5	.21	.34	.24	.12
23	.34	1.7	6.5	1.1	1.6	6.7	15	1.9	.35	.28	.21	.11
24	.20	2.2	5.0	2.3	1.5	5.9	8.9	1.6	.34	.26	.21	.11
25	.15	2.1	3.7	2.8	1.5	5.3	6.3	1.3	.21	.23	.22	.10
26	.12	1.3	2.3	3.2	1.3	4.6	5.2	1.1	.17	3.1	.21	.10
27	.11	1.7	2.1	2.8	2.9	4.2	4.8	1.0	.15	13	.20	.10
28	.10	2.2	10	2.6	3.4	21	5.4	.99	.15	9.0	1.6	.09
29	.09	2.2	7.0	2.4	3.1	17	19	.92	.15	5.0	1.3	.09
30	.09	1.9	4.0	2.2	---	11	18	.88	.15	6.0	.69	.09
31	.09	---	3.0	1.9	---	7.8	---	.82	---	9.0	.63	---
TOTAL	2.09	21.10	220.1	51.41	73.8	291.7	188.9	472.21	8.99	57.95	51.98	6.58
MEAN	.07	.70	7.10	1.66	2.54	9.41	6.30	15.2	.30	1.87	1.68	.22
MAX	.34	2.2	40	3.2	5.5	69	30	152	.75	13	13	.66
MIN	.00	.09	1.2	.93	1.3	2.4	1.5	.82	.13	.14	.20	.09
CFSM	.03	.29	2.96	.69	1.06	3.92	2.63	6.33	.13	.78	.70	.09
IN.	.03	.33	3.41	.80	1.14	4.52	2.93	7.32	.14	.90	.81	.10

CAL YR 1983	TOTAL	1356.60	MEAN	3.72	MAX	169	MIN	.00	CFSM	1.55	IN.	21.03
WTR YR 1984	TOTAL	1446.81	MEAN	3.95	MAX	152	MIN	.00	CFSM	1.65	IN.	22.43

03431700 RICHLAND CREEK AT CHARLOTTE AVENUE, AT NASHVILLE, TN

LOCATION.--Lat 36°09'04", long 86°51'16", Davidson County, Hydrologic Unit 05130202, near left bank on downstream end of pier of Charlotte Avenue bridge on U. S. Highway 70, 3.7 mi upstream from mouth and 4.0 mi southwest of the State Capitol in Nashville, and at mile 3.6.

DRAINAGE AREA.--24.3 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 409.56 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those below 5.0 ft³/s which are fair. Diversions above station used for irrigation of golf courses and water supply.

AVERAGE DISCHARGE.--20 years, 35.2 ft³/s, 19.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,470 ft³/s Sept. 13, 1979, gage height, 15.13 ft; minimum, 0.05 ft³/s Oct. 7-9, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	1915	2880	8.49	May 7	0820	2170	7.41
Apr. 29	1200	2560	8.01	May 7	1645	1930	7.01
May 6	1645	*6670	12.77				

Minimum daily discharge, 1.4 ft³/s Oct. 2, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.5	16	21	16	29	47	100	4.5	2.5	18	6.1
2	1.4	2.8	227	18	14	26	42	163	4.1	1.9	189	5.0
3	1.6	26	562	16	29	22	50	227	4.0	2.1	53	38
4	1.4	34	203	16	20	31	53	174	3.6	9.9	75	16
5	2.4	11	97	14	19	100	43	92	3.4	11	40	9.4
6	1.9	7.3	70	13	17	66	34	1060	3.0	5.0	23	7.3
7	1.6	6.1	52	12	16	51	27	851	3.1	3.3	16	6.2
8	1.7	5.0	42	11	15	44	24	613	3.0	2.5	11	5.2
9	1.9	4.5	35	10	15	36	29	227	2.9	2.7	8.9	4.5
10	1.9	5.9	28	45	28	28	23	129	2.7	1.8	11	4.2
11	1.8	4.9	241	40	40	24	20	81	4.4	2.0	7.4	4.3
12	8.4	4.4	145	27	36	22	18	56	3.7	1.7	6.1	3.9
13	12	4.2	81	24	48	30	16	42	2.5	1.6	5.8	3.1
14	3.6	5.6	73	20	42	22	16	32	6.7	1.6	4.6	3.2
15	2.7	15	55	18	35	20	14	26	2.8	69	5.6	3.1
16	2.4	8.5	44	16	27	33	12	22	2.3	68	4.4	2.8
17	2.3	7.0	36	15	23	25	22	18	1.9	35	4.0	2.8
18	2.2	6.2	29	14	20	21	14	16	2.0	20	3.9	2.7
19	2.2	5.7	25	13	19	21	12	14	2.0	12	3.4	2.6
20	2.3	51	21	12	17	80	11	12	3.7	8.7	3.5	2.6
21	2.3	16	25	11	16	66	11	11	18	6.1	2.9	2.7
22	8.3	10	49	10	15	52	21	10	16	4.9	3.0	2.4
23	5.7	254	35	20	14	45	224	23	10	4.0	3.5	2.2
24	4.1	72	25	53	13	40	55	11	6.4	3.5	2.9	2.4
25	3.4	38	22	42	12	35	43	9.4	4.1	3.2	2.6	2.2
26	3.3	22	19	32	11	32	39	7.9	3.5	44	2.5	2.2
27	3.1	70	18	27	57	29	31	7.3	2.9	43	2.5	2.4
28	3.0	67	116	23	42	226	170	6.7	2.7	14	64	2.2
29	2.7	37	46	20	33	118	485	6.0	2.7	10	12	2.2
30	2.5	23	33	18	---	78	238	5.5	2.2	14	14	2.4
31	2.5	---	25	16	---	60	---	5.1	---	29	8.1	---
TOTAL	98.1	826.6	2495	647	709	1512	1844	4057.9	134.8	438.0	611.6	156.3
MEAN	3.16	27.6	80.5	20.9	24.4	48.8	61.5	131	4.49	14.1	19.7	5.21
MAX	12	254	562	53	57	226	485	1060	18	69	189	38
MIN	1.4	2.5	16	10	11	20	11	5.1	1.9	1.6	2.5	2.2
CFSM	.13	1.14	3.31	.86	1.00	2.01	2.53	5.39	.18	.58	.81	.21
IN.	.15	1.27	3.82	.99	1.09	2.31	2.82	6.21	.21	.67	.94	.24

CAL YR 1983	TOTAL	12959.94	MEAN	35.5	MAX	902	MIN	.39	CFSM	1.46	IN.	19.84
WTR YR 1984	TOTAL	13530.3	MEAN	37.0	MAX	1060	MIN	1.4	CFSM	1.52	IN.	20.71

03431800 SYCAMORE CREEK NEAR ASHLAND CITY, TN

LOCATION.--Lat 36°19'12", long 87°03'04", Cheatham County, Hydrologic Unit 05130202, near right bank on downstream end of pier of bridge on State Highway 49, at Sycamore, 3.2 mi north of Ashland City, and 4.4 mi upstream from Spring Creek, and at mile 8.6.

DRAINAGE AREA.--97.2 mi².

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--23 years, 145 ft³/s, 20.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s May 19, 1983, gage height, 13.24 ft; minimum, 7.5 ft³/s Sept. 15, 16, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0045	3910	8.86	May 6	2145	4410	9.26
Mar. 16	1015	4420	9.27	May 7	1100	*4870	9.61
Apr. 22	0700	3220	8.25	May 7	2130	4370	9.23

Minimum discharge, 9.0 ft³/s Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	16	58	154	55	113	210	316	49	25	47	55
2	10	17	500	96	53	105	177	348	47	27	335	42
3	11	31	1260	58	73	89	236	622	45	21	179	75
4	11	59	1190	56	81	215	222	695	43	35	113	100
5	15	43	333	56	71	1540	198	403	41	71	100	62
6	13	28	287	56	61	541	173	1820	38	93	106	46
7	12	23	203	52	53	332	148	3620	37	46	75	36
8	12	20	155	47	54	241	136	2310	36	30	58	29
9	13	19	123	45	51	185	158	699	36	22	49	26
10	13	24	114	56	71	155	145	406	36	20	43	25
11	14	29	599	53	220	136	131	277	35	17	41	25
12	21	27	960	45	237	121	121	209	35	109	40	22
13	126	24	354	49	286	117	117	176	35	34	35	21
14	45	24	322	45	222	103	106	155	34	21	31	21
15	20	83	246	41	164	96	99	129	35	46	30	26
16	15	62	175	42	132	1820	109	111	33	147	30	21
17	13	37	133	41	109	510	115	99	31	210	28	17
18	14	28	109	41	88	319	101	89	30	168	28	17
19	15	25	91	39	84	235	91	82	31	69	29	17
20	15	142	78	39	68	298	86	77	36	43	27	17
21	16	103	79	39	59	301	90	73	75	31	24	17
22	25	53	243	39	53	254	1350	71	65	25	23	17
23	54	407	190	43	49	200	435	185	85	20	22	17
24	34	302	152	232	45	177	261	105	82	17	21	19
25	23	117	150	195	42	191	190	80	42	16	20	21
26	18	69	150	141	37	164	154	71	30	31	20	21
27	16	134	150	115	172	151	140	66	29	196	20	21
28	16	295	283	96	185	1080	210	64	25	67	250	21
29	16	132	199	86	134	796	728	59	26	36	150	21
30	16	80	188	74	---	414	569	55	25	25	103	22
31	15	---	181	62	---	275	---	52	---	47	85	---
TOTAL	666.6	2453	9255	2233	3009	11274	7006	13524	1227	1765	2162	897
MEAN	21.5	81.8	299	72.0	104	364	234	436	40.9	56.9	69.7	29.9
MAX	126	407	1260	232	286	1820	1350	3620	85	210	335	100
MIN	9.6	16	58	39	37	89	86	52	25	16	20	17
CFSM	.22	.84	3.08	.74	1.07	3.74	2.41	4.49	.42	.59	.72	.31
IN.	.26	.94	3.54	.85	1.15	4.31	2.68	5.18	.47	.68	.83	.34

CAL YR 1983	TOTAL	64485.6	MEAN	177	MAX	6820	MIN	8.1	CFSM	1.82	IN.	24.68
WTR YR 1984	TOTAL	55471.6	MEAN	152	MAX	3620	MIN	9.6	CFSM	1.56	IN.	21.23

03432350 HARPETH RIVER AT FRANKLIN, TN

LOCATION.--Lat 35°55'14", long 86°51'56", Williamson County, Hydrologic Unit 05130204, on left bank 15 ft downstream from left downstream end of State Highway 96 bridge, 0.4 mi southeast of the courthouse in Franklin, and at mile 88.1.

DRAINAGE AREA.--191 mi², includes 15 mi² without surface drainage.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 604.42 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those below 5.0 ft³/s which are poor. The Franklin Utility District diverts part of its municipal water supply from the river above the gage. This water along with other water is returned to the river through the sewage treatment plant below the gage.

AVERAGE DISCHARGE.--10 years, 327 ft³/s, 23.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft³/s Mar. 13, 1975, gage height, 33.65 ft; minimum daily, 0.30 ft³/s Oct. 14, 20, 22, 23, 26, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	2300	3440	15.58	Mar. 28	1415	4500	18.11
Nov. 28	0600	3830	16.57	Apr. 22	1415	7920	23.75
Dec. 3	0100	3530	15.83	Apr. 29	1930	3370	15.39
Dec. 4	0815	6980	22.41	May 3	1715	5600	20.22
Dec. 11	2030	4440	17.99	May 7	2300	*13200	29.49

Minimum daily discharge, 0.65 ft³/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.76	364	280	164	237	572	802	48	21	381	12
2	2.1	.72	1050	250	148	219	455	1730	46	13	571	8.9
3	2.0	5.4	3600	220	181	199	444	4410	41	11	302	9.3
4	1.9	148	5520	200	228	190	748	2980	33	9.2	185	8.4
5	2.7	108	1270	185	203	459	557	1210	26	12	139	6.7
6	2.5	53	863	170	176	576	425	3430	23	17	153	6.9
7	2.4	28	618	169	148	462	348	10800	21	14	140	10
8	2.1	21	473	155	139	365	299	10800	18	14	99	6.4
9	2.3	17	388	144	140	291	284	3940	17	5.3	73	1.1
10	2.5	14	345	245	222	252	276	1180	16	5.1	55	.65
11	2.3	13	2390	270	330	229	251	789	16	10	268	.91
12	3.8	12	2960	250	284	206	222	571	68	2.4	155	.88
13	5.5	11	1170	191	497	317	199	444	105	1.9	107	.86
14	1.0	9.0	844	202	577	342	184	365	32	3.5	81	.81
15	13	942	637	203	432	285	167	303	43	8.5	59	4.2
16	3.4	373	480	196	350	361	153	270	37	716	39	4.7
17	.87	188	396	183	293	365	142	243	27	132	56	4.7
18	2.4	138	342	175	251	335	128	213	18	324	43	2.6
19	1.0	99	280	170	231	291	119	197	12	115	27	1.3
20	.91	748	244	160	199	1030	108	183	13	62	22	1.2
21	1.0	536	270	160	175	1080	239	165	40	41	18	1.6
22	.81	259	380	200	159	682	6440	156	16	31	19	1.1
23	1.6	1180	450	450	149	502	1910	179	16	26	17	1.0
24	6.0	1780	330	800	142	413	848	156	16	17	16	1.3
25	11	539	290	485	127	433	584	140	14	16	8.4	1.7
26	4.8	343	280	359	115	356	439	122	13	29	6.4	2.3
27	1.6	773	260	300	195	302	344	101	15	231	6.5	2.6
28	.83	2760	1300	257	330	3310	486	95	10	79	41	2.5
29	.67	844	1000	229	266	3030	1620	77	5.4	41	104	2.2
30	.69	498	480	204	---	1130	1600	70	4.7	32	28	2.1
31	.70	---	360	182	---	756	---	53	---	545	17	---
TOTAL	86.58	12440.88	29634	7644	6851	19005	20591	46174	810.1	2584.9	3236.3	110.91
MEAN	2.79	415	956	247	236	613	686	1489	27.0	83.4	104	3.70
MAX	13	2760	5520	800	577	3310	6440	10800	105	716	571	12
MIN	.67	.72	244	144	115	190	108	53	4.7	1.9	6.4	.65
CFSM	.01	2.17	5.01	1.29	1.24	3.21	3.59	7.80	.14	.44	.54	.02
IN.	.02	2.42	5.77	1.49	1.33	3.70	4.01	8.99	.16	.50	.63	.02

CAL YR 1983 TOTAL 146354.12 MEAN 401 MAX 5910 MIN .67 CFSM 2.10 IN. 28.50
WTR YR 1984 TOTAL 149168.67 MEAN 408 MAX 10800 MIN .65 CFSM 2.14 IN. 29.05

03433500 HARPETH RIVER AT BELLEVUE, TN

LOCATION.--Lat 36°03'16", long 86°55'42", Davidson County, Hydrologic Unit 05130204, on right bank 45 ft upstream from bridge on State Highway 100, 0.1 mi downstream from Little Harpeth River, 0.9 mi southeast of Bellevue, and at mile 62.1.

DRAINAGE AREA.--408 mi², includes 15 mi² without surface drainage.

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

REVISED RECORDS.--WSP 953: 1920-30, 1932-35. WSP 1386: 1948. WSP 1556: Drainage area. WSP 1910: 1960.

GAGE.--Water-stage recorder. Datum of gage is 541.04 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Apr. 11, 1920, to Oct. 31, 1929, Jan. 1, 1932, to Sept. 30, 1933, non-recording gage at site 2.8 mi downstream at datum 7.85 ft lower.

REMARKS.--Records good.

AVERAGE DISCHARGE.--64 years, 587 ft³/s, 19.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft³/s Feb. 13, 1948, gage height, 24.34 ft from floodmark; no flow Oct. 5-10, 1922.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Feb. 13, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	1600	12200	16.12	Apr. 23	0100	14500	17.54
Dec. 12	0200	7840	12.48	May 4	0300	9490	14.07
Mar. 28	2230	10000	14.49	May 8	0930	*23800	21.02

Minimum discharge, 5.4 ft³/s Oct. 3, 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	13	836	619	397	539	1560	2680	140	28	811	51
2	5.9	13	1880	535	361	510	1270	3300	130	58	1150	42
3	5.5	22	7620	478	402	462	1210	7380	127	69	875	39
4	5.4	132	11800	425	531	435	1660	7600	127	63	456	44
5	6.5	311	4530	392	488	1190	1540	3440	124	57	316	44
6	6.8	191	2170	360	437	1600	1180	6330	114	45	261	38
7	7.7	110	1590	340	368	1320	979	16200	100	41	324	33
8	9.7	82	1200	312	337	1060	839	22300	89	41	246	29
9	8.5	65	970	298	329	855	807	14000	78	41	185	29
10	8.5	63	840	402	386	725	763	3710	67	40	143	26
11	8.5	56	3380	580	723	635	702	2340	61	40	186	20
12	9.8	50	6480	534	691	563	617	1690	61	39	325	18
13	26	45	3220	477	935	689	541	1310	139	38	199	18
14	60	45	2130	481	1230	898	489	1060	119	32	154	18
15	34	1190	1720	488	985	759	442	880	80	25	127	17
16	25	817	1280	477	810	901	415	755	65	1060	102	14
17	28	341	1040	444	679	1000	391	641	69	394	83	13
18	19	257	873	428	573	897	353	545	64	467	95	14
19	15	203	750	391	512	797	321	478	56	316	82	15
20	24	651	634	335	450	1360	300	433	47	158	64	15
21	22	1220	571	318	388	2520	299	393	42	105	55	14
22	20	507	790	320	350	1630	9920	353	45	79	51	13
23	26	1780	976	319	322	1250	8760	383	51	62	49	12
24	36	4140	717	1180	303	1040	2470	392	52	55	49	12
25	38	1400	619	1280	276	997	1650	304	55	42	43	11
26	46	789	616	943	245	906	1250	277	50	42	35	11
27	38	1010	560	788	395	777	1090	248	42	418	30	9.7
28	29	4530	2810	664	676	5630	1380	224	38	322	38	9.2
29	20	2200	2200	581	613	7360	3650	203	36	133	138	9.2
30	16	1160	1040	506	---	3230	5570	177	33	91	124	8.6
31	14	---	780	443	---	2060	---	162	---	280	72	---
TOTAL	625.2	23393	66622	16138	15192	44595	52418	100188	2301	4681	6868	646.7
MEAN	20.2	780	2149	521	524	1439	1747	3232	76.7	151	222	21.6
MAX	60	4530	11800	1280	1230	7360	9920	22300	140	1060	1150	51
MIN	5.4	13	560	298	245	435	299	162	33	25	30	8.6
CFSM	.05	1.91	5.27	1.28	1.28	3.53	4.28	7.92	.19	.37	.54	.05
IN.	.06	2.13	6.07	1.47	1.39	4.07	4.78	9.13	.21	.43	.63	.06

CAL YR 1983	TOTAL	345327.1	MEAN	946	MAX	13200	MIN	5.2	CFSM	2.32	IN.	31.49
WTR YR 1984	TOTAL	333667.9	MEAN	912	MAX	22300	MIN	5.4	CFSM	2.24	IN.	30.42

03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN

LOCATION.--Lat 36°07'19", long 87°05'56", Cheatham County, Hydrologic Unit 05130204, on right bank 400 ft upstream from bridge on U. S. Highway 70, 1.7 mi northeast of Kingston Springs, 3.0 mi downstream from Turnbull Creek, and at mile 32.4.

DRAINAGE AREA.--681 mi², includes 15 mi² without surface drainage.

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

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Datum of gage is 448.04 ft National Geodetic Vertical Datum of 1929. July 8, 1925, to Jan. 22, 1939, nonrecording gage at site 150 ft downstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--60 years, 991 ft³/s, 19.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,000 ft³/s Jan. 7, 1946, gage height, 32.20 ft from high-water mark in gage house; minimum, 12 ft³/s Sept. 18, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Jan. 7, 1946. Flood of March 1902 reached a stage about 3 ft lower than that of Jan. 7, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0430	20600	20.91	May 4	0900	10700	13.55
Mar. 29	0430	10700	13.57	May 6	2330	33500	25.79
Apr. 23	1530	12800	15.46	May 7	1600	*34500	26.09
Apr. 29	2030	10300	13.15				

Minimum discharge, 61 ft³/s Oct. 4,5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	100	990	919	623	880	2130	4500	365	177	745	185
2	64	102	2510	809	587	837	1780	4260	336	139	1000	151
3	64	144	9060	731	646	767	1660	8530	322	158	1460	212
4	64	381	15200	669	763	734	1760	9990	306	185	860	278
5	73	319	8080	632	763	1800	2050	5380	288	229	906	180
6	87	391	3090	605	692	2410	1650	11900	268	207	596	155
7	78	264	2200	574	605	1970	1390	29400	250	182	501	137
8	71	207	1700	545	564	1540	1210	30600	237	171	462	124
9	69	180	1370	518	555	1210	1160	22600	222	162	368	115
10	71	166	1200	678	652	1010	1120	8430	211	152	310	115
11	73	168	2340	889	984	892	1050	3620	202	147	269	112
12	83	155	7240	848	1100	804	956	2540	193	140	352	104
13	274	142	4600	767	1230	862	871	2030	188	136	355	97
14	178	134	2950	730	1570	1070	786	1710	251	129	288	95
15	139	185	2450	716	1380	979	725	1450	234	128	255	93
16	130	1090	1840	703	1140	1060	687	1250	213	1190	264	89
17	114	533	1460	673	982	1290	662	1110	191	1140	222	85
18	110	350	1230	647	843	1160	617	987	185	558	191	84
19	116	288	1080	595	766	1050	574	881	169	654	195	83
20	110	569	941	520	689	1180	548	804	160	398	182	83
21	100	1350	854	520	620	2710	598	737	153	298	162	82
22	118	773	1120	620	573	2030	8580	678	476	246	150	80
23	174	2740	1340	900	549	1540	11600	737	1150	214	156	73
24	153	4940	1090	1100	518	1260	3740	734	590	191	144	72
25	128	2190	810	1880	490	1230	2290	615	338	179	137	73
26	128	1080	900	1370	456	1160	1790	564	280	167	129	70
27	122	928	1500	1130	711	1010	1640	527	235	711	124	69
28	125	3620	2300	983	987	5210	3190	494	210	652	206	73
29	118	3210	3380	873	995	9680	6020	459	199	393	399	73
30	110	1460	1520	775	---	4870	8830	420	189	281	274	70
31	104	---	1100	684	---	2850	---	391	---	265	259	---
TOTAL	3412	28159	87445	24603	23033	57055	71664	158328	8611	9979	11921	3312
MEAN	110	939	2821	794	794	1840	2389	5107	287	322	385	110
MAX	274	4940	15200	1880	1570	9680	11600	30600	1150	1190	1460	278
MIN	64	100	810	518	456	734	548	391	153	128	124	69
CFSM	.16	1.38	4.14	1.17	1.17	2.70	3.51	7.50	.42	.47	.57	.16
IN.	.19	1.54	4.78	1.34	1.26	3.12	3.91	8.65	.47	.55	.65	.18

CAL YR 1983 TOTAL 513717 MEAN 1407 MAX 25100 MIN 62 CFSM 2.07 IN. 28.06
WTR YR 1984 TOTAL 487522 MEAN 1332 MAX 30600 MIN 64 CFSM 1.96 IN. 26.63

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN

LOCATION.--Lat 36°19'26", long 87°13'32", Cheatham County, Hydrologic Unit 05130205, on downstream end of lower lock wall at Cheatham Dam, 2.0 mi southwest of Neptune, 3.0 mi upstream from Half Pone Creek, 9.7 mi west of Ashland City, and at mile 148.4.

DRAINAGE AREA.--14,163 mi².

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

REVISED RECORDS.--WSP 1726: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 350.00 ft National Geodetic Vertical Datum of 1929. Prior to May 5, 1966, at National Geodetic Vertical Datum. Auxiliary water-stage recorder 15.3 mi downstream from base gage at same datum. Prior to June 3, 1966, auxiliary water-stage recorder and non-recording gage on upper lock wall at former dam B, at site 8.1 mi downstream from base gage at datum 1.76 ft lower.

REMARKS.--Records good. Flow regulated by eight lakes or reservoirs above station (see p.107).

AVERAGE DISCHARGE.--30 years, 23,880 ft³/s , unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 204,000 ft³/s Mar. 15, 1975; maximum gage height, 48.39 ft Mar. 1, 1962; minimum daily discharge, 700 ft³/s Oct. 29, 1969; minimum gage height, 1.55 ft Nov. 26, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, 53.5 ft; Jan. 25, 1937, from profile by Corps of Engineers, discharge, about 200,000 ft³/s on Jan. 24, 1937. Flood of Jan. 1, 1927, reached a stage of 51.7 ft, from profile, discharge about 205,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined, recorder inundated; maximum gage height, 45.62 ft from floodmark inside gage shelter, May 9; minimum daily discharge, 2,700 ft³/s July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2970	5940	21000	32400	20400	29700	50600	53500	34900	9230	16800	17000
2	2970	4350	27000	25100	20000	28200	47800	44900	37500	8940	28900	10100
3	4620	3480	68100	16300	17600	27800	47100	47600	34800	8050	26100	7220
4	6000	10900	100000	19900	10900	24100	46000	90500	34100	10400	23600	9900
5	6890	8750	61400	17900	8640	30600	42900	96100	36900	12700	14100	5820
6	9530	5330	40900	15600	13300	42000	46600	65400	36700	17500	12600	10400
7	10100	8480	27000	14300	18500	39800	48500	126000	37300	12900	15000	12800
8	6310	8300	25400	13400	19400	37000	44800	174000	38900	14600	15800	10900
9	3500	6980	15000	12700	15200	35700	42700	181000	37500	12900	17700	8960
10	4620	9240	23200	17500	12100	28400	35000	175000	23500	2700	18900	5150
11	5130	8170	29100	20800	16100	18900	39100	160000	24800	9860	24100	4960
12	3770	11400	57300	24200	42700	16800	38800	144000	24700	7500	16400	7320
13	8970	4390	50300	24800	48400	24500	33900	124000	23400	10200	12500	7300
14	14000	5450	40000	22900	29700	21300	29300	108000	20100	15500	10800	7220
15	13100	9730	37100	11100	41100	19200	25900	97000	19700	10900	13000	9520
16	5330	15200	23700	11800	39500	26300	29900	89100	23300	10900	15600	8060
17	4990	6900	24400	18000	30800	31000	26600	84600	23300	13600	18900	7090
18	6400	12700	24800	16300	24500	22700	26600	79900	21900	22800	19800	7390
19	5080	6600	19300	18500	20200	16600	31300	71200	18900	28000	14400	9900
20	4670	6910	21500	21800	18100	16500	28900	69700	15900	13400	6760	9490
21	3420	12600	21500	22100	12700	37600	27300	67900	14400	9810	8470	7140
22	4110	9120	27300	24400	21900	48100	47900	68700	17500	11600	12000	5410
23	7330	17400	32000	23300	19900	42000	75600	70500	19000	12200	15100	4970
24	6140	38100	32500	20300	16800	39800	69000	67200	18600	10000	16700	4040
25	6970	26000	33200	30700	14700	49400	48900	56500	12100	12600	15800	2880
26	7920	16800	41300	34800	9420	42300	45100	59100	12200	17000	13800	3910
27	5970	11400	40800	25300	15600	37600	40100	44400	12200	23200	6400	5630
28	7350	34800	43400	22100	24800	58200	39600	39000	11500	23700	8740	6320
29	7100	49400	54000	13100	27200	84200	48400	40600	12600	13900	16300	5110
30	4160	35300	41500	11700	---	73200	63300	41400	15100	12000	18000	3780
31	6140	---	38300	18700	---	55700	---	41600	---	10100	19500	---
TOTAL	195560	410120	1142300	621800	630160	1105200	1267500	2678400	713300	408690	492570	225690
MEAN	6308	13670	36850	20060	21730	35650	42250	86400	23780	13180	15890	7523
MAX	14000	49400	100000	34800	48400	84200	75600	181000	38900	28000	28900	17000
MIN	2970	3480	15000	11100	8640	16500	25900	39000	11500	2700	6400	2880

CAL YR 1983 TOTAL 9912740 MEAN 27160 MAX 143000 MIN 2970
WTR YR 1984 TOTAL 9891290 MEAN 27030 MAX 181000 MIN 2700

NOTE.--No gage-height record May 8-11.

03435770 SULPHUR FORK RED RIVER ABOVE SPRINGFIELD, TN

LOCATION.--Lat 36°30'47", long 86°51'44", Robertson County, Hydrologic Unit 05130206, on left bank 150 ft downstream from new bridge on State Highway 49, 1.2 mi downstream from Beaver Dam Creek, 1.3 mi northeast of Springfield, and at mile 30.8.

DRAINAGE AREA.--65.6 mi², includes 9.0 mi² without surface drainage.

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 538.17 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair, except those for period of no gage-height record Nov. 21 to Feb. 17, which are poor.

AVERAGE DISCHARGE.--9 years, 109 ft³/s, 22.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft³/s Dec. 8, 1978, gage height, 14.14 ft; minimum, 2.4 ft³/s Oct. 1-4, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 5	0130	1940	8.58	May 7	0730	*7180	12.70
Apr. 22	0445	1810	8.25	May 7	1815	2310	9.41

Minimum discharge, 2.4 ft³/s Oct. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	5.6	38	96	64	116	172	269	35	28	21	19
2	2.4	6.3	110	62	55	109	147	308	32	22	111	15
3	2.4	7.7	410	58	57	96	197	548	31	19	55	22
4	2.4	13	790	61	68	344	181	505	30	21	33	25
5	2.7	11	255	61	66	1180	179	321	35	181	36	17
6	2.9	8.5	300	58	63	512	158	1030	24	110	31	14
7	2.9	7.5	240	56	53	320	131	3240	25	41	26	12
8	2.5	7.1	175	53	48	236	116	1470	24	29	22	11
9	2.7	7.5	133	51	46	181	117	726	23	25	21	10
10	2.7	7.8	118	52	64	155	106	459	23	23	36	10
11	2.8	8.3	300	54	720	133	92	318	22	48	88	9.9
12	4.1	8.7	690	50	530	116	84	229	21	145	29	9.4
13	22	8.3	380	47	400	106	83	198	21	36	23	9.1
14	7.5	9.6	250	46	330	90	74	169	21	28	21	9.1
15	4.5	21	192	43	245	83	67	127	20	29	27	9.9
16	3.6	17	163	42	200	458	76	103	21	139	25	9.1
17	3.5	11	150	42	149	242	70	85	20	130	19	8.3
18	3.9	8.9	125	45	132	184	62	76	20	126	17	8.3
19	3.9	8.1	115	44	118	158	58	68	20	49	17	7.9
20	4.0	31	108	41	98	301	54	64	20	30	17	7.9
21	4.1	45	104	41	85	280	58	58	23	26	15	7.9
22	6.1	25	210	43	78	234	880	53	24	22	15	7.7
23	17	84	225	100	75	185	351	268	66	21	15	7.1
24	8.3	200	170	204	69	165	225	91	44	20	14	7.3
25	6.2	65	135	280	64	168	171	64	27	19	14	7.9
26	5.7	38	128	158	56	138	134	56	22	18	14	7.4
27	5.1	57	112	110	201	124	119	50	22	24	13	7.1
28	5.2	160	248	96	178	572	214	46	23	21	202	7.1
29	5.1	85	185	84	135	462	604	40	25	18	63	7.1
30	5.4	55	115	73	---	282	468	39	52	17	53	7.1
31	5.2	---	104	69	---	208	---	36	---	20	30	---
TOTAL	159.2	1027.9	6778	2320	4447	7938	5448	11114	816	1485	1123	317.6
MEAN	5.14	34.3	219	74.8	153	256	182	359	27.2	47.9	36.2	10.6
MAX	22	200	790	280	720	1180	880	3240	66	181	202	25
MIN	2.4	5.6	38	41	46	83	54	36	20	17	13	7.1
CFSM	.08	.52	3.34	1.14	2.33	3.90	2.77	5.47	.41	.73	.55	.16
IN.	.09	.58	3.84	1.32	2.52	4.50	3.09	6.30	.46	.84	.64	.18

CAL YR 1983	TOTAL	48739.0	MEAN	134	MAX	5570	MIN	2.4	CFSM	2.04	IN.	27.64
WTR YR 1984	TOTAL	42973.7	MEAN	117	MAX	3240	MIN	2.4	CFSM	1.78	IN.	24.37

Note.--No gage-height record Nov. 21 to Feb. 17.

03436000 SULPHUR FORK RED RIVER NEAR ADAMS, TN

LOCATION.--Lat 36°30'55", long 85°03'32", Robertson County, Hydrologic Unit 05130206, on left bank 600 ft downstream from county highway bridge, 2.8 mi downstream from Millers Creek, 4.1 mi southwest of Cedar Hill, 4.6 mi south of Adams, and at mile 10.2.

DRAINAGE AREA.--186 mi², includes 21 mi² without surface drainage.

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

REVISED RECORDS.--WSP 1910: Drainage area.

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--46 years, 253 ft³/s, 18.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,400 ft³/s Mar. 12, 1975, gage height, 30.86 ft, from floodmarks; minimum, 1.8 ft³/s Sept. 27, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1934 reached a stage of 25.1 ft, from floodmarks, discharge not determined. Flood in January 1937 reached a stage of about 22.6 ft, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0115	4090	11.63	Mar. 5	0530	4920	12.84
Feb. 11	1430	3630	10.92	May 7	1800	*10400	19.27

Minimum discharge, 14 ft³/s Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	104	222	148	272	465	835	105	90	64	91
2	16	20	337	130	140	257	386	804	100	64	183	72
3	15	21	1540	140	150	228	547	1460	96	58	203	76
4	14	30	2260	145	166	484	576	1430	92	56	132	120
5	18	40	832	141	154	3480	481	912	88	135	104	81
6	20	34	902	137	145	1400	414	3020	83	422	111	65
7	17	27	645	131	126	857	342	7840	79	119	84	58
8	16	24	488	121	127	655	299	4490	76	86	73	52
9	16	23	385	118	119	498	316	2050	74	70	65	48
10	16	24	334	124	134	401	292	1170	71	64	60	48
11	16	27	1060	128	1920	344	258	822	68	62	121	46
12	19	26	1850	116	1190	296	237	640	68	198	82	43
13	108	24	853	111	923	274	236	535	65	98	65	41
14	72	23	742	108	703	236	211	479	64	70	57	39
15	40	41	621	103	553	211	194	366	101	72	55	44
16	30	60	460	102	444	999	198	302	130	206	65	41
17	26	45	359	103	369	685	199	249	73	317	56	36
18	25	36	297	104	302	522	181	216	65	410	51	33
19	24	30	265	100	272	425	166	193	61	182	48	33
20	24	78	227	95	230	536	156	179	61	101	46	33
21	22	106	247	100	202	589	157	170	79	83	43	31
22	29	64	683	100	186	519	1580	166	99	72	40	30
23	57	296	554	100	177	416	840	600	169	65	41	28
24	51	504	403	316	169	361	590	330	208	61	39	29
25	37	164	314	416	158	402	443	190	101	57	36	33
26	30	105	303	306	143	337	351	170	80	56	34	29
27	26	166	269	262	357	311	309	150	71	74	33	26
28	23	364	590	224	452	1090	946	140	66	72	838	26
29	21	210	432	203	328	1240	1510	122	68	59	426	26
30	19	138	269	183	---	760	1560	117	69	53	142	27
31	19	---	240	162	---	587	---	110	---	60	155	---
TOTAL	882	2769	18865	4851	10487	19672	14440	30257	2630	3592	3552	1385
MEAN	28.5	92.3	609	156	362	635	481	976	87.7	116	115	46.2
MAX	108	504	2260	416	1920	3480	1580	7840	208	422	838	120
MIN	14	19	104	95	119	211	156	110	61	53	33	26
CFSM	.15	.50	3.27	.84	1.95	3.41	2.59	5.25	.47	.62	.62	.25
IN.	.18	.55	3.77	.97	2.10	3.93	2.89	6.05	.53	.72	.71	.28

CAL YR 1983	TOTAL	132640	MEAN	363	MAX	12200	MIN	14	CFSM	1.95	IN.	26.53
WTR YR 1984	TOTAL	113382	MEAN	310	MAX	7840	MIN	14	CFSM	1.67	IN.	22.68

03436100 RED RIVER AT PORT ROYAL, TN

LOCATION.--Lat 36°33'17", long 87°08'31", Montgomery County, Hydrologic Unit 05130206, on left bank at county road bridge at Port Royal, 250 ft downstream from Sulphur Fork, and at mile 25.5.

DRAINAGE AREA.--935 mi² includes 437 mi² without surface drainage.

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

GAGE.--Water-stage recorder. Datum of gage is 376.25 ft National Geodetic Vertical Datum of 1929. July 13, 1961, to Oct. 9, 1963, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--23 years, 1,369 ft³/s, 19.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,300 ft³/s Mar. 13, 1975, gage height, 48.26 ft; minimum, 54 ft³/s Sept. 17, 18, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 23, 1937, reached a stage of 44.4 ft; from flood profile of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 12	0800	12300	25.13	May 8	0945	*37100	40.54
Apr. 30	1115	12000	24.78				

Minimum discharge, 89 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	100	1140	1250	961	1640	2390	5990	1220	642	287	774
2	102	108	1220	1160	886	1540	2100	4410	1130	585	342	539
3	99	108	3940	1080	865	1460	2640	7000	1040	545	703	421
4	95	122	9050	1030	929	1560	4380	8640	994	518	585	493
5	107	144	5530	1010	976	8340	3640	6180	955	661	644	460
6	107	161	4730	990	889	7560	3080	8540	913	1530	496	358
7	103	180	4070	964	783	4590	2510	26700	872	909	388	306
8	100	144	3090	914	712	3560	2180	35600	837	654	378	275
9	98	131	2540	850	681	2870	2070	23500	805	542	385	254
10	100	122	2230	829	735	2390	1970	11000	779	453	344	252
11	101	116	2690	843	4870	2110	1810	7270	756	402	1000	240
12	106	113	7090	808	10700	1890	1660	5610	728	792	890	221
13	276	113	4970	749	5920	1740	1590	4530	700	763	534	207
14	337	133	3990	715	4490	1590	1500	3990	671	541	396	195
15	266	265	3680	674	3590	1450	1380	3310	686	465	343	194
16	187	456	2940	646	3010	2940	1300	2830	915	1010	319	239
17	157	481	2380	631	2630	3600	1260	2520	788	888	290	195
18	152	358	2070	621	2300	2620	1180	2330	649	1220	264	175
19	131	286	1850	573	2120	2230	1090	2140	606	785	260	169
20	120	463	1660	487	2050	2230	1020	2000	776	562	239	164
21	114	754	1610	417	1820	3150	988	1870	1230	427	221	156
22	143	761	3510	485	1670	2730	3620	1760	1420	387	208	147
23	180	999	3970	493	1560	2360	4480	2650	1270	348	201	133
24	224	3060	2800	1410	1480	2050	2750	2520	1460	327	195	133
25	224	1810	2180	2590	1380	2130	2140	1860	1000	303	189	209
26	188	1120	1890	1910	1270	2190	1790	1670	822	292	177	419
27	154	1090	1700	1610	1430	1890	1600	1640	739	398	172	205
28	137	2660	2060	1440	2300	2890	2490	1700	679	442	1100	159
29	119	2290	2680	1290	1950	5280	4840	1530	732	352	3400	139
30	113	1470	1750	1180	---	3810	10500	1390	677	297	1560	129
31	113	---	1410	1060	---	2860	---	1290	---	290	1110	---
TOTAL	4554	20118	96420	30709	64957	89250	75948	193970	26849	18330	17620	7960
MEAN	147	671	3110	991	2240	2879	2532	6257	895	591	568	265
MAX	337	3060	9050	2590	10700	8340	10500	35600	1460	1530	3400	774
MIN	95	100	1140	417	681	1450	988	1290	606	290	172	129
CFSM	.16	.72	3.33	1.06	2.40	3.08	2.71	6.69	.96	.63	.61	.28
IN.	.18	.80	3.84	1.22	2.58	3.55	3.02	7.72	1.07	.73	.70	.32

CAL YR 1983	TOTAL	692579	MEAN	1897	MAX	37900	MIN	95	CFSM	2.03	IN.	27.56
WTR YR 1984	TOTAL	646685	MEAN	1767	MAX	35600	MIN	95	CFSM	1.89	IN.	25.73

03436690 YELLOW CREEK AT ELLIS MILLS, TN

LOCATION.--Lat 36°18'39", long 87°33'15", Houston County, Hydrologic Unit 05130205, on right bank at downstream end of bridge on county road, 0.3 mi northeast of Ellis Mills, 1.0 mi upstream from Leatherwood Creek, 1.0 mi downstream from Williamson Branch.

DRAINAGE AREA.--103 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 417 ft, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s May 6, 1984, gage height, 18.47 ft recorded; 18.95 ft, from floodmarks, from rating curve extended above 9,500 ft³/s on basis of regression formula and peak discharge at Station No. 03436700 Yellow Creek near Shiloh, TN; minimum, 12 ft³/s Sept. 9, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 2	1900	2330	9.23	May 4	0245	2360	9.27
Dec. 3	2200	4580	12.19	May 6	2045	*14400	18.47
Mar. 5	0230	2150	8.90	May 7	2245	6300	13.54
Mar. 28	0830	2190	8.98	July 16	0500	2330	9.13
May 3	0900	2680	9.80				

Minimum discharge, 14 ft³/s Oct. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	21	129	116	96	114	350	550	85	45	39	27
2	16	21	817	111	90	120	291	537	81	44	39	25
3	15	25	2030	104	93	124	308	1840	79	43	38	32
4	15	69	1640	99	91	232	307	1740	75	42	44	41
5	17	50	591	97	88	1620	275	905	71	49	51	34
6	18	38	442	94	85	800	245	5240	68	47	46	30
7	18	34	320	88	79	488	216	4570	65	43	42	28
8	17	31	251	83	74	356	200	3400	63	41	40	25
9	17	30	211	79	72	285	199	1300	61	39	39	26
10	17	32	182	78	77	242	192	726	59	39	37	29
11	17	29	189	75	91	223	181	496	58	55	38	30
12	18	27	458	72	107	199	176	383	55	57	37	30
13	28	26	331	70	121	187	170	316	55	45	36	28
14	27	26	283	68	127	169	162	270	54	41	35	27
15	23	36	252	64	128	162	155	229	53	55	46	25
16	21	35	214	63	126	306	149	199	52	787	45	24
17	21	31	183	63	121	326	144	176	51	210	38	23
18	24	29	162	63	113	294	135	162	49	146	36	23
19	24	28	146	60	115	269	128	152	49	96	36	23
20	22	58	131	56	108	304	122	142	49	77	35	24
21	22	66	140	54	103	336	127	135	47	66	32	24
22	28	54	303	52	100	299	581	128	65	52	31	22
23	36	141	293	57	99	262	435	169	67	47	31	20
24	30	277	238	116	97	240	323	142	58	44	30	26
25	26	163	196	145	92	256	261	125	51	41	29	26
26	24	120	172	144	86	251	227	116	48	42	28	22
27	22	143	159	137	102	260	206	111	46	60	26	22
28	22	276	180	129	120	1420	229	107	48	48	27	24
29	21	209	168	123	119	1010	490	98	50	43	30	25
30	23	159	140	113	---	633	816	92	47	41	32	25
31	21	---	125	102	---	443	---	88	---	40	31	---
TOTAL	666	2284	11076	2775	2920	12230	7800	24644	1759	2525	1124	790
MEAN	21.5	76.1	357	89.5	101	395	260	795	58.6	81.5	36.3	26.3
MAX	36	277	2030	145	128	1620	816	5240	85	787	51	41
MIN	15	21	125	52	72	114	122	88	46	39	26	20
CFSM	.21	.74	3.46	.87	.98	3.83	2.52	7.71	.57	.79	.35	.25
IN.	.24	.82	3.99	1.00	1.05	4.41	2.81	8.89	.63	.91	.41	.28

CAL YR 1983	TOTAL	81364	MEAN	223	MAX	4430	MIN	15	CFSM	2.16	IN.	29.35
WTR YR 1984	TOTAL	70593	MEAN	193	MAX	5240	MIN	15	CFSM	1.87	IN.	25.46

RESERVOIRS IN CUMBERLAND RIVER BASIN, TN

03413500 LAKE CUMBERLAND.--Lat 36°52'09", long 85°08'45", Russel County, Hydrologic Unit 05130103, in pylon of Wolf Creek Dam on Cumberland River and 10 mi southwest of Jamestown, Ky. DRAINAGE AREA, 5,789 mi². 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. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum. Prior to Dec. 6, 1950, nonrecording gage at same site at datum 545.0 ft higher.

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

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 2,811,000 cfs-days May 13, 1984, elevation, 751.70 ft; minimum, after first filling, 934,400 cfs-days Jan. 1, 1956, elevation, 673.01 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents 2,811,000 cfs-days May 13, elevation, 751.70 ft; minimum, 1,045,500 cfs-days Nov. 14, elevation, 679.03 ft.

03416500 DALE HOLLOW LAKE.--Lat 36°32'19", long 85°27'05", Clay County, Hydrologic Unit 05130105, at Dale Hollow Dam on Obey River, 3 mi east of Celina, and 7.3 mi upstream from mouth. DRAINAGE AREA, 936 mi². PERIOD OF RECORD, August 1943 to current year. Prior to October 1965, published as Dale Hollow Reservoir. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum. Prior to June 25, 1946, nonrecording gage at same site and datum.

Reservoir is formed by concrete gravity dam. Spillway is equipped with six taintor gates, each 12 ft high by 60 ft wide. Closure of dam was made Aug. 30, 1943; water in reservoir first reached minimum pool elevation May 7, 1944. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 663.0 ft, top of gates, is 859,800 cfs-days of which 177,500 cfs-days between elevations 663.00 ft and 651.00 ft, crest of spillway, are reserved for flood control, and 250,200 cfs-days between elevations 651.00 ft and 631.00 ft, ordinary minimum pool, are used for power production. Contents of 432,100 cfs-days below elevation 631.00 ft is dead storage. Reservoir is used for flood control, navigation, and power. Records furnished by Corps of Engineers. Revisions.--WSP 1306: 1944. WSP 2110: Drainage area.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 828,600 cfs-days Mar. 15, 1975, elevation, 660.98 ft; minimum, after first filling, 428,000 cfs-days Sept. 11, 1944, elevation, 630.63 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 817,000 cfs-days May 9, elevation, 660.22 ft; minimum, 452,700 cfs-days Nov. 14, elevation, 632.84 ft.

03418400 CORDELL HULL RESERVOIR.--Lat 36°17'23", long 85°56'39", Smith County, Hydrologic Unit 05130108, at Cordell Hull Dam on Cumberland River, 2.7 mi north of Carthage, and at mile 313.5. DRAINAGE AREA, 8,095 mi². PERIOD OF RECORD, October 1972 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with five taintor gates, each 41 ft high and 45 ft 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, maximum surcharge pool, is 156,700 cfs-days, of which 53,400 cfs-days is controlled storage between elevations 508.0 ft and 499.0 ft, ordinary minimum pool. Contents of 5,000 cfs-days between elevation of 499.0 ft and 500.0 ft full winter pool, is available for power production. Contents of 48,400 cfs-days above 500.0 ft is available for flood control during the winter, and 26,100 cfs-days above 504.0 ft, full pool during spring to fall season, is available for flood control the rest of the year. Contents of 103,300 cfs-days below elevation 499.0 ft is dead storage. Reservoir is used for navigation, power, and flood control. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 156,700 cfs-days Mar. 13, 1975, May 8, 1984, elevation, 508.00 ft; minimum, after first filling to ordinary minimum pool, 96,700 cfs-days Apr. 18, 1974, elevation, 497.65 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 156,700 cfs-days May 8, elevation, 508.00 ft; minimum, 102,800 cfs-days Dec. 7, elevation, 498.90 ft.

03422000 GREAT FALLS LAKE.--Lat 35°48'21", long 85°38'09", Warren County, Hydrologic Unit 05130108, at penstock inlet on Collins River, 700 ft southwest of powerhouse of Tennessee Valley Authority, 1.5 mi northwest of Rock Island, 1.8 mi upstream from mouth of Collins River, and 2.0 mi upstream from Great Falls Dam on Caney Fork. DRAINAGE AREA, 1,677 mi². PERIOD OF RECORD, January 1917 to current year. GAGE, remote indicator gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete gravity dam. Spillway is equipped with 18 taintor gates, each 14 ft high by 25 ft wide. Closure of dam was made in 1916; dam redesigned and crest raised 35 ft in 1925. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 805.3 ft top of gates, is 25,900 cfs-days, of which 18,700 cfs-days are controlled storage above elevation 780.0 ft, normal minimum pool. Contents of 1,500 cfs-days below elevation 762.0 ft is dead storage. Reservoir is used primarily for power. Records furnished by Tennessee Valley Authority. Revisions.--WSP 2110: Drainage area.

EXTREMES FOR PERIOD OF RECORD: Maximum midnight elevation, 817.48 ft Mar. 23, 1929, contents not determined; minimum midnight contents, 1,700 cfs-days Aug. 19, 1918, elevation, 756.3 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 27,000 cfs-days Mar. 21, elevation, 806.28 ft; minimum, 9,800 cfs-days Nov. 23, elevation, 785.00 ft.

RESERVOIRS IN CUMBERLAND RIVER BASIN, TN--Continued

03424000 CENTER HILL LAKE.--Lat 36°05'48", long 85°49'38", DeKalb County, Hydrologic Unit 05130108, at Center Hill Dam on Caney Fork, 10 mi north of Smithville, 14 mi southeast of Carthage, and at mile 26.6. DRAINAGE AREA, 2,174 mi². PERIOD OF RECORD, October 1948 to current year. Prior to October 1965, published as Center Hill Reservoir. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum. Prior to Mar. 14, 1949, nonrecording gage at site 1,320 ft upstream at same datum.

Reservoir is formed by earth embankment and concrete gravity dam. Spillway is equipped with eight taintor gates, each 37 ft high by 50 ft wide. Closure of dam was made Nov. 27, 1948; water in reservoir first reached minimum pool elevation Jan. 11, 1949. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 685.0 ft, top of gates, is 1,054,800 cfs-days, of which 384,500 cfs-days between 685.0 ft and 648.0 ft, crest of spillway, are reserved for flood control, and 248,000 cfs-days between elevations 648.0 ft and 618.0 ft, ordinary minimum pool, are used for power production. Contents of 422,300 cfs-days below 618.0 ft is dead storage. Reservoir is used for flood control, navigation, and power. Records furnished by Corps of Engineers. Revisions.--WSP 1910: Drainage area.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,014,600 cfs-days May 10, 1984, elevation, 681.52 ft; minimum, after first filling, 171,000 cfs-days Dec. 1, 2, 1949, elevation 576.1 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,014,600 cfs-days, May 10, elevation, 681.52 ft; minimum, 468,600 cfs-days Nov. 17, elevation, 624.14 ft.

03426300 OLD HICKORY LAKE.--Lat 36°17'50", long 86°39'20", Sumner County, Hydrologic Unit 05130201, at Old Hickory Dam on Cumberland River, 2.0 mi west of Hendersonville, 10 mi northeast of the State Capitol in Nashville, and at mile 216.2. DRAINAGE AREA, 11,673 mi². PERIOD OF RECORD, June 1954 to current year. GAGE, water-stage recorder. Datum of gage is 408.5 ft National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Apr. 4, 1957, nonrecording gage at same site and datum.

Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with six taintor gates, each 41 ft high and 45 ft wide. Closure of dam was made in June 1954 and water in reservoir was raised sufficiently to maintain navigation through the lock. Water in reservoir first reached ordinary minimum pool elevation Dec. 30, 1956. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 450.0 ft, maximum surcharge pool, 274,600 cfs-days of which 63,000 cfs-days between elevations 450.0 ft and 445.0 ft, normal pool, are induced surcharge storage provided to compensate for loss of natural valley storage incurred by construction of the project, and 31,800 cfs-days between elevations 445.0 ft and 442.0 ft, ordinary minimum pool, are used for power production. Contents of 179,800 cfs-days below elevation 442.0 ft, is dead storage. Reservoir is used for navigation and power. Records furnished by Corps of Engineers. Revisions.--WSP 2110: Drainage area.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 277,200 cfs-days May 9, 1984, elevation, 450.18 ft; minimum, after first filling to ordinary minimum pool, 179,400 cfs-days Oct. 22, 1957, Oct. 28, 1969, elevation, 441.96 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 277,200 cfs-days, May 9, elevation, 450.18 ft; minimum, 182,500 cfs-days Dec. 6, elevation, 442.27 ft.

03430050 J. PERCY PRIEST RESERVOIR.--Lat 36°09'23", long 86°37'07", Davidson County, Hydrologic Unit 05130203, on upstream face of J. Percy Priest Dam on Stones River, 2.6 mi east of Donelson, and 6.8 mi above mouth. DRAINAGE AREA, 892 mi². PERIOD OF RECORD, September 1967 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Dec. 15, 1967, nonrecording gage at same site and datum.

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

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 336,600 cfs-days May 9, 1984, elevation, 505.18 ft; minimum, after first filling to ordinary minimum pool, 109,500 cfs-days Dec. 5, 1968, elevation, 474.75 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 336,600 cfs-days May 9, elevation, 505.18 ft; minimum, 142,000 cfs-days Jan. 23, elevation, 481.23 ft.

03434900 CHEATHAM LAKE.--Lat 36°18'56", long 87°13'10", Cheatham County, Hydrologic Unit 05130202, at Cheatham Dam on Cumberland River, 9.4 mi west of Ashland City, 16 mi southeast of the courthouse in Clarksville, and at mile 148.7. DRAINAGE AREA, 14,159 mi².

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

RESERVOIRS IN CUMBERLAND RIVER BASIN, TN--Continued

03438210 LAKE BARKLEY.--Lat 37°01'17", long 88°13'16", Lyon County, Hydrologic Unit 05130205, in powerhouse of Barkley Dam on Cumberland River, 1.4 mi northeast of Grand Rivers, Ky., and at mile 30.6. DRAINAGE AREA, 17,598 mi². PERIOD OF RECORD, July 1964 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to Jan. 1, 1966, nonrecording gage, 1,200 ft upstream from Barkley Dam at same datum.

Reservoir is formed by concrete gravity dam with earth embankments. Spillway is equipped with 12 taintor gates each 50 ft high by 55 ft wide. Construction cofferdam was closed and limited storage began July 1, 1964; reservoir reached ordinary minimum pool elevation of 354.0 ft Feb. 16, 1966. Total level pool capacity at elevation 375.0 ft, top of gates, is 1,049,600 cfs-days, of which 742,000 cfs-days is controlled storage above 354.0 ft, ordinary minimum pool. Contents of 130,500 cfs-days between ordinary minimum pool elevation, 354.0 ft, and full pool elevation, 359.0 ft, is available for power during the spring-to-fall season. Minimum pool elevation in advance of floods is 346.0 ft, contents 171,000 cfs-days. Reservoir is used for navigation, flood control, power, and recreation. Barkley-Kentucky Canal opened June 13, 1966, for navigation and power use. Canal is 1.75 mi long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 mi upstream from Barkley Dam. For daily discharges through the canal, see station 03438190, Kentucky reports. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation, 370.04 ft May 13, 1984; minimum after reaching permanent pool elevation, 353.20 ft Dec. 20, 1976.

EXTREMES FOR CURRENT YEAR: Maximum contents, 829,300 cfs-days May 13; maximum elevation, 370.04 ft May 13; minimum, 291,900 cfs-days Feb. 27, minimum, 353.29 ft. Contents based on backwater profile.

RESERVOIRS IN CUMBERLAND RIVER BASIN, TN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03413500 LAKE CUMBERLAND			03416500 DALE HOLLOW LAKE			03418400 CORDELL HULL RESERVOIR		
Sept. 30.....	684.16	1144100	-	634.73	474800	-	504.07	131100	-
Oct. 31.....	680.66	1076500	-67600	633.46	459700	-15100	501.75	117600	-13500
Nov. 30.....	684.08	1142500	+66000	635.25	480400	+20700	499.55	106000	-11600
Dec. 31.....	691.40	1289400	+146900	638.81	522900	+42500	499.62	106400	+400
CAL YR 1983			-242900			-27500			+600
Jan. 31.....	696.36	1393300	+103900	640.34	541700	+18800	500.10	108800	+2400
Feb. 28.....	711.34	1729100	+335800	646.85	625600	+83900	500.60	111400	+2600
Mar. 31.....	725.12	2067900	+338800	650.47	674900	+49300	499.00	103300	-8100
Apr. 30.....	723.97	2038500	-29400	650.92	681200	+6300	504.51	133800	+30500
May 31.....	737.28	2392300	+353800	650.89	680800	-400	504.34	132700	-1100
June 30.....	718.71	1906600	-485700	647.42	633200	-47600	503.79	129400	-3300
July 31.....	712.13	1747700	-158900	644.60	595900	-37300	504.32	132600	+3200
Aug. 31.....	702.17	1519600	-228100	640.78	547200	-48700	503.69	128800	-3800
Sept. 30.....	697.20	1411200	-108400	637.60	508200	-39000	504.13	131400	+2600
WTR YR 1984			+267100			+33400			+300
	03422000 GREAT FALLS LAKE			03424000 CENTER HILL LAKE			03426300 OLD HICKORY LAKE		
Sept. 30.....	794.91	16500	-	629.64	512000	-	443.87	199100	-
Oct. 31.....	787.81	11500	-5000	626.38	486100	-25900	444.49	205900	+6800
Nov. 30.....	805.85	26500	+15000	631.22	524800	+38700	444.34	204200	-1700
Dec. 31.....	805.82	26400	-100	641.07	608100	+83300	444.20	202700	-1500
CAL YR 1983			-200			-34000			-8300
Jan. 31.....	804.91	25400	-1000	634.28	550100	-58000	444.65	207700	+5000
Feb. 28.....	805.73	26300	+900	639.20	591900	+41800	444.68	208000	+300
Mar. 31.....	805.63	26200	-100	649.45	683700	+91800	444.67	207900	-100
Apr. 30.....	805.46	26000	-200	647.94	669700	-14000	444.74	208700	+800
May 31.....	796.21	17600	-8400	648.04	670600	+900	443.68	197100	-11600
June 30.....	798.29	19300	+1700	643.65	630900	-39700	444.50	206000	+8900
July 31.....	800.73	21400	+2100	642.46	620400	-10500	444.48	205800	-200
Aug. 31.....	797.09	18300	-3100	634.64	553100	-67300	444.67	207900	+2100
Sept. 30.....	797.38	18500	+200	631.10	523900	-29200	442.77	187600	-20300
WTR YR 1984			+2000			+11900			-11500
	03430050 J. PERCY PRIEST LAKE			03438210 LAKE BARKLEY†					
Sept. 30.....	489.04	190800	-	355.33	340000	-			
Oct. 31.....	487.26	178800	-12000	354.87	327900	-12100			
Nov. 30.....	488.00	183700	+4900	355.10	333400	+5500			
Dec. 31.....	482.18	147400	-36300	355.00	331000	-2400			
CAL YR 1983			-37200			-107000			
Jan. 31.....	482.38	148600	+1200	354.05	308700	-22300			
Feb. 28.....	481.95	146100	-2500	354.02	308100	-600			
Mar. 31.....	492.37	215200	+69100	358.77	431400	+123300			
Apr. 30.....	492.56	216600	+1400	362.57	549600	+118200			
May 31.....	490.04	197900	-18700	359.28	446200	-103400			
June 30.....	490.27	199600	+1700	359.03	438900	-7300			
July 31.....	490.69	202600	+3000	357.65	399800	-39100			
Aug. 31.....	490.12	198500	-4100	356.73	374800	-25000			
Sept. 30.....	489.69	195400	-3100	355.14	334400	-40400			
WTR YR 1984			+4600			-5600			

† Contents based on backwater profile.

03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN

LOCATION.--Lat 35°58'54", long 83°09'40", Cocke County, Hydrologic Unit 06010105, on left bank, 200 ft upstream from bridge on U. S. Highway 411, 1.0 mi northeast of Newport city limits, 3.7 mi upstream from Pigeon River, and at mile 77.5.

DRAINAGE AREA.--1,858 mi².

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.

REVISED RECORDS.--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).

GAGE.--Water-stage recorder. Datum of gage is 1,011.61 ft National Geodetic Vertical Datum of 1929. See WSP 1910 for history of changes prior to Mar. 31, 1934.

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

AVERAGE DISCHARGE.--66 years (water years 1904-05, 1921-84), 2,996 ft³/s, 21.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,300 ft³/s Aug. 30, 1940, gage height, 19.25 ft; minimum, 208 ft³/s Oct. 23, 1952, gage height, 0.97 ft; minimum daily, 240 ft³/s Sept. 9, 1925; minimum gage height, 0.91 ft Sept. 20, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--From reports of Tennessee Valley Authority, the flood of Mar. 7, 1867, gage height, 24 ft, present datum, discharge, estimated, 110,000 ft³/s, has not been exceeded since that date. From the same reports, other outstanding floods occurred Feb. 28, 1902, gage height, 23.0 ft present datum, discharge, estimated, 101,000 ft³/s; and July 17, 1916, gage height, 22.5 ft, present datum, discharge, estimated, 97,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 16,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Feb. 14	1200	39100	13.87	July 18	1200	21800	9.80
May 7	1900	*42800	14.55				

Minimum discharge, 662 ft³/s Oct. 9; minimum daily, 764 ft³/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	907	1340	3750	3650	2450	5630	4850	3370	2750	3150	4030	2020
2	893	1290	2740	3140	2390	4690	4300	3630	2610	2670	4030	1770
3	893	1230	2810	2950	2330	4240	4010	4390	2490	2800	3650	1690
4	884	1260	9470	2790	2300	3930	4580	7270	2400	2740	3190	1690
5	849	1270	8990	2760	2280	3750	8500	7270	2310	2460	2960	1620
6	884	1200	7670	2680	2240	4260	7920	7990	2250	3400	2730	1550
7	897	1170	8040	2600	2120	4510	6680	31200	2320	3420	2580	1500
8	927	1100	6180	2470	1970	4300	5210	31800	2200	2900	2500	1480
9	764	1080	4790	2360	2050	3920	4610	18900	2170	2370	2290	1500
10	821	1090	3720	2440	2110	3620	6260	12300	2040	2100	2430	1510
11	928	1110	3290	3280	2200	3450	7140	9150	2040	1940	3310	1470
12	849	1240	11000	3460	2350	3290	6480	6800	1970	1930	2860	1490
13	1710	1190	9580	2930	2720	3200	5100	5740	2470	2150	3650	1410
14	3250	1110	7870	2680	26700	3340	4610	5310	2370	2330	4090	1290
15	2840	1130	6550	2580	14700	3180	4330	4690	2370	2250	3630	1260
16	2090	1610	4660	2470	9500	3020	4130	4270	2500	2950	2870	1250
17	1500	2210	3720	2410	7030	2960	3930	3970	2520	2600	2640	1220
18	1480	1700	3330	2520	4820	2930	3810	3760	2470	15400	2620	1180
19	1350	1470	3090	3410	4140	2890	3640	3590	2330	8360	2550	1170
20	1250	1400	2920	3150	3760	2860	3570	3450	2020	5500	2680	1190
21	1190	1610	2570	2770	3490	11000	3520	3310	2370	4700	2300	1170
22	1110	1970	2810	2460	3260	8600	3480	3190	4030	4330	2130	1140
23	1170	1820	3700	2450	5060	6150	3730	3130	3860	5190	2230	1100
24	2560	1730	3140	2550	7640	4740	4290	2990	3560	3280	2130	1080
25	3310	4450	2560	3840	5720	4270	3770	2780	3090	2630	1950	1060
26	2440	4430	2040	4180	4680	4090	3430	2770	2580	2440	1900	1060
27	1970	3220	2410	3440	4600	3710	3290	2900	2290	2680	1870	1060
28	1690	3190	4690	3110	8980	4070	3870	3270	2500	3370	1920	1040
29	1560	5800	8310	2910	7720	8350	3590	3730	2830	3940	2150	1020
30	1480	4980	5540	2630	---	7920	3370	3520	3490	4070	2260	1060
31	1410	---	4190	2610	---	5860	---	3050	---	4230	2290	---
TOTAL	45856	59400	156130	89680	151310	142730	140000	213490	77200	114280	84420	40050
MEAN	1479	1980	5036	2893	5218	4604	4667	6887	2573	3686	2723	1335
MAX	3310	5800	11000	4180	26700	11000	8500	31800	4030	15400	4090	2020
MIN	764	1080	2040	2360	1970	2860	3290	2770	1970	1930	1870	1020
CFSM	.80	1.07	2.71	1.56	2.81	2.48	2.51	3.71	1.38	1.98	1.47	.72
IN.	.92	1.19	3.13	1.80	3.03	2.86	2.80	4.27	1.55	2.29	1.69	.80

CAL YR 1983	TOTAL	1296696	MEAN	3553	MAX	21500	MIN	704	CFSM	1.91	IN.	25.96
WTR YR 1984	TOTAL	1314546	MEAN	3592	MAX	31800	MIN	764	CFSM	1.93	IN.	26.32

03461200 COSBY CREEK ABOVE COSBY, TN

LOCATION.--Lat 35°46'58", long 83°13'03", Cocke County, Hydrologic Unit 06010106, in Great Smoky Mountains National Park on left retaining wall of creek, 400 ft downstream from Crying Creek, 600 ft upstream from bridge on State Highway 32, 3,600 ft upstream from Stillhouse Branch, 2.4 mi southeast of Cosby, and at mile 10.7.

DRAINAGE AREA.--10.1 mi².

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

REVISED RECORD.--WDR TN-82-1: 1977-78(M)(P), 1979, 1980-81(M)(P).

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 1,644.07 ft National Geodetic Vertical Datum of 1929. Oct. 15, 1958, to Sept. 30, 1966, crest-stage gage at site 600 ft downstream, at datum 1.08 ft lower (gage heights adjusted to present datum in WSP 2110). Oct. 1, 1966 to June 13, 1977, water-stage recorder at site 600 ft downstream at present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--18 years, 28.5 ft³/s, 38.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft³/s Mar. 16, 1973, gage height, 4.11 ft former site; about 17.1 ft present site; minimum, 1.4 ft³/s, Sept. 30, Oct. 1, 2, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 28	1145	508	15.01	May 8	0515	551	15.11
Feb. 14	0115	740	15.50	July 18	0745	*1220	16.26
Apr. 4	1430	555	15.12	Aug. 10	2245	463	14.90

Minimum discharge, 3.2 ft³/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	5.6	22	36	17	62	43	15	24	23	36	8.6
2	3.7	5.4	20	30	16	50	37	25	21	21	31	8.1
3	3.5	5.1	31	26	16	43	36	48	18	18	27	7.9
4	3.5	13	145	23	15	37	264	48	17	16	26	12
5	4.4	13	60	23	15	54	160	38	16	16	26	8.7
6	4.4	10	44	20	14	57	88	104	14	17	29	7.7
7	3.8	9.4	34	17	14	46	63	393	13	21	27	7.2
8	3.5	8.1	28	16	13	40	50	420	12	17	24	6.8
9	3.4	7.4	23	16	13	35	45	196	11	15	22	6.5
10	3.4	7.0	20	22	14	31	38	108	11	13	85	6.3
11	3.4	6.7	47	21	17	27	34	73	9.9	12	146	6.2
12	3.7	6.3	75	18	18	24	30	55	9.4	20	60	8.2
13	17	5.9	50	18	117	27	27	47	9.2	31	43	6.3
14	8.8	5.5	41	18	308	25	25	40	9.2	34	34	5.8
15	5.7	7.5	34	17	94	23	22	34	10	28	28	7.5
16	5.0	11	27	17	60	24	21	30	19	25	25	7.3
17	4.5	9.1	23	16	46	27	19	28	28	25	22	6.4
18	4.3	8.6	21	22	39	25	18	26	28	543	20	6.0
19	4.1	8.3	18	23	35	24	18	23	21	117	19	5.7
20	4.0	13	16	20	32	65	18	21	20	57	17	5.1
21	4.3	15	16	17	27	150	19	19	20	87	16	5.0
22	4.8	13	18	18	24	70	18	18	36	65	14	4.8
23	4.9	11	17	19	54	52	17	18	31	47	16	4.6
24	6.0	16	14	39	52	44	17	16	37	36	14	4.5
25	13	25	13	37	63	41	16	15	33	30	13	4.4
26	15	20	20	30	52	36	15	17	26	25	12	4.5
27	11	23	25	27	67	33	19	35	23	59	11	4.8
28	8.6	74	185	25	121	44	18	29	20	66	11	4.6
29	7.3	44	94	22	89	81	17	30	18	57	11	5.3
30	6.6	29	57	20	---	61	16	32	22	54	9.8	5.0
31	5.7	---	46	18	---	49	---	28	---	44	9.2	---
TOTAL	185.2	435.9	1284	691	1462	1407	1228	2029	586.7	1639	884.0	191.8
MEAN	5.97	14.5	41.4	22.3	50.4	45.4	40.9	65.5	19.6	52.9	28.5	6.39
MAX	17	74	185	39	308	150	264	420	37	543	146	12
MIN	3.4	5.1	13	16	13	23	15	15	9.2	12	9.2	4.4
CFSM	.59	1.44	4.10	2.21	4.99	4.50	4.05	6.49	1.94	5.24	2.82	.63
IN.	.68	1.61	4.73	2.55	5.38	5.18	4.52	7.47	2.16	6.04	3.26	.71

CAL YR 1983	TOTAL	9701.2	MEAN	26.6	MAX	292	MIN	3.4	CFSM	2.63	IN.	35.73
WTR YR 1984	TOTAL	12023.6	MEAN	32.9	MAX	543	MIN	3.4	CFSM	3.26	IN.	44.28

03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN

LOCATION.--Lat 36°10'35", long 82°27'27", Washington County, Hydrologic Unit 06010108, on left bank, at Embreeville, 1,000 ft upstream from bridge on State Highway 81, 3 mi northwest of Erwin, 5.2 mi downstream from North Indian Creek, and at mile 89.0.

DRAINAGE AREA.--805 mi².

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.

REVISED RECORDS.--WSP 803: 1935(M). WSP 823: Drainage area. WSP 1336: 1921-24, 1931(M).

GAGE.--Water-stage recorder. Datum of gage is 1,519.30 ft National Geodetic Vertical Datum of 1929. Sept. 1, 1900 to May 21, 1901, nonrecording gage at site 3 mi 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 down-stream at datum 6.33 ft lower.

REMARKS.--Records good.

AVERAGE DISCHARGE.--65 years (water years 1920-84), 1,373 ft³/s, 23.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 110,000 ft³/s Nov. 6, 1977, gage height, 21.52 ft, from rating curve extended above 48,000 ft³/s on basis of contracted-opening and slope-area measurements of peak flow; minimum, 85 ft³/s Sept. 8, 9, 1925; minimum gage height, 0.99 ft Oct. 10, 11, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 21, 1901, reached a stage of 24 ft, discharge, 120,000 ft³/s, present site and datum, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 12	0830	13600	6.03	Mar. 21	0900	9550	5.04
Feb. 14	0800	23800	8.21	May 7	1230	*29100	9.29

Minimum discharge, 270 ft³/s Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	524	1380	1700	825	2090	2290	1350	1050	1490	1360	547
2	322	507	1180	1300	845	1930	2040	1390	990	1160	1300	483
3	315	507	1400	1150	841	1820	1960	2000	932	1160	1060	469
4	297	507	5400	1050	842	1760	2540	2890	892	987	920	518
5	301	490	3600	1150	803	1820	5350	2430	884	1090	837	493
6	321	474	2630	1010	786	2460	3560	2350	864	1380	807	448
7	308	458	2600	968	704	2620	2850	19600	969	1100	750	419
8	289	450	1910	897	622	2380	2410	15600	860	928	707	400
9	277	442	1600	851	766	2130	2210	8630	844	788	673	389
10	277	450	1400	885	822	1890	3180	5320	774	716	822	387
11	276	641	1310	1170	867	1760	2930	3900	765	669	941	385
12	542	550	8870	1100	875	1620	2540	3160	820	645	937	376
13	2580	490	4360	1000	4140	1640	2260	2710	883	728	1120	366
14	3060	458	2910	950	18700	1710	2140	2470	889	776	1350	355
15	1130	550	2270	900	7130	1600	2280	2110	788	877	993	352
16	773	1080	1850	900	4050	1630	1990	1900	1070	862	797	360
17	636	932	1610	900	2960	1770	1960	1750	1160	755	741	346
18	571	710	1430	1300	2370	1700	2010	1630	1010	4610	715	333
19	531	647	1310	1500	2030	1710	1880	1530	805	3200	756	335
20	499	661	1210	1110	1890	1680	1880	1450	893	1680	693	339
21	490	1210	1120	916	1700	5740	1810	1370	1640	2110	622	328
22	490	1020	1370	828	1520	3740	1810	1320	1690	1820	612	313
23	613	814	1590	892	2970	2910	1900	1300	1300	1420	622	294
24	2150	1250	1250	1230	4230	2470	1760	1260	1230	1110	607	291
25	1060	3370	1150	1830	3750	2300	1600	1160	1270	920	549	292
26	817	1970	1100	1350	2840	2170	1480	1110	998	840	521	290
27	721	1450	1300	1180	2460	1880	1420	1130	842	891	533	286
28	641	1980	4500	1100	2760	2180	1450	1310	1070	895	576	277
29	594	2840	3270	1030	2510	3990	1380	1660	1370	1120	725	295
30	558	1750	2500	978	---	3450	1360	1370	1480	1610	673	320
31	541	---	2000	920	---	2680	---	1140	---	1480	668	---
TOTAL	22288	29182	71380	34045	77608	71230	66230	98300	31032	39817	24987	11086
MEAN	719	973	2303	1098	2676	2298	2208	3171	1034	1284	806	370
MAX	3060	3370	8870	1830	18700	5740	5350	19600	1690	4610	1360	547
MIN	276	442	1100	828	622	1600	1360	1110	765	645	521	277
CFSM	.89	1.21	2.86	1.36	3.32	2.85	2.74	3.94	1.28	1.60	1.00	.46
IN.	1.03	1.35	3.30	1.57	3.59	3.29	3.06	4.54	1.43	1.84	1.15	.51

CAL YR 1983	TOTAL	663938	MEAN	1819	MAX	17200	MIN	276	CFSM	2.26	IN.	30.68
WTR YR 1984	TOTAL	577185	MEAN	1577	MAX	19600	MIN	276	CFSM	1.96	IN.	26.67

03466228 SINKING CREEK AT AFTON, TN

LOCATION.--Lat 36°11'55", long 82°44'31", Greene County, Hydrologic Unit 06010108, on left bank 300 ft upstream from bridge on county road, 0.4 mi northwest of Afton, and at mile 3.1.

DRAINAGE AREA.--13.7 mi².

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,459.36 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--7 years, 13.9 ft³/s, 13.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s July 21, 1979, gage height, 7.79 ft from rating curve extended above 100 ft³/s on basis of area-velocity study; minimum, 1.7 ft³/s several days in December 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Feb. 14	Unknown	256	3.70	July 18	1100	193	3.30
May 7	0945	*1310	6.98	July 21	1145	1080	6.45

Minimum discharge, 1.9 ft³/s several days in November.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.5	2.4	6.7	7.0	26	16	12	16	17	21	8.3
2	3.5	2.5	3.9	6.4	7.0	24	15	16	15	14	30	8.0
3	3.3	2.5	13	6.1	7.0	22	15	27	15	13	24	8.1
4	3.3	2.5	29	5.8	7.0	21	46	23	14	12	20	11
5	3.8	2.7	11	6.1	6.8	20	40	18	14	25	18	8.5
6	3.7	2.7	13	6.3	6.6	21	26	39	14	13	17	7.9
7	3.4	2.7	9.6	6.7	6.1	21	22	561	13	10	16	7.6
8	3.3	2.7	7.4	6.7	5.8	19	20	223	13	9.9	15	7.4
9	3.1	2.6	6.4	6.4	5.5	17	19	78	12	9.3	15	7.3
10	3.1	2.4	5.9	6.6	5.8	17	18	52	12	9.0	14	7.1
11	2.9	2.4	5.5	8.2	7.6	16	17	42	12	8.7	18	7.1
12	3.2	2.4	9.5	7.9	7.9	15	16	37	12	9.0	14	7.3
13	4.2	2.4	8.0	7.3	17	15	16	34	12	11	21	6.8
14	4.2	2.4	6.9	7.0	155	15	19	31	12	9.3	27	6.8
15	3.5	2.6	6.1	6.7	34	15	17	28	11	13	15	6.6
16	3.3	2.7	5.5	6.7	25	14	16	26	11	19	14	6.4
17	3.3	2.3	5.2	6.7	21	14	17	25	10	13	13	6.4
18	3.2	2.2	4.8	13	19	14	26	22	10	115	12	6.5
19	3.1	1.9	4.7	16	17	14	19	22	10	30	13	6.4
20	3.1	1.9	4.6	12	16	19	18	21	11	20	12	6.2
21	2.9	1.9	4.5	9.9	15	52	17	20	12	257	11	5.9
22	2.9	1.9	5.2	8.8	14	29	16	20	14	37	10	5.6
23	2.9	1.9	6.1	8.3	71	22	16	20	13	25	10	5.6
24	2.9	2.8	5.4	8.3	45	20	15	19	23	21	10	5.6
25	2.9	3.7	4.2	8.6	29	19	14	18	15	20	9.7	5.6
26	2.9	2.6	4.0	8.6	24	18	14	17	11	18	9.3	5.4
27	2.7	3.0	5.0	8.6	22	17	14	21	10	36	9.0	5.3
28	2.7	4.6	22	8.2	45	18	14	37	10	35	8.9	5.1
29	2.7	3.4	16	8.2	32	24	13	24	28	38	8.7	5.1
30	2.7	2.6	9.4	7.6	---	20	13	18	19	35	8.7	5.1
31	2.5	---	7.3	7.5	---	17	---	17	---	23	8.6	---
TOTAL	98.8	77.4	251.5	247.9	681.1	615	564	1568	404	925.2	452.9	202.0
MEAN	3.19	2.58	8.11	8.00	23.5	19.8	18.8	50.6	13.5	29.8	14.6	6.73
MAX	4.2	4.6	29	16	155	52	46	561	28	257	30	11
MIN	2.5	1.9	2.4	5.8	5.5	14	13	12	10	8.7	8.6	5.1
CFSM	.23	.19	.59	.58	1.72	1.45	1.37	3.69	.99	2.18	1.07	.49
IN.	.27	.21	.68	.67	1.85	1.67	1.53	4.26	1.10	2.51	1.23	.55

CAL YR 1983	TOTAL	3703.9	MEAN	10.1	MAX	98	MIN	1.9	CFSM	.74	IN.	10.06
WTR YR 1984	TOTAL	6087.8	MEAN	16.6	MAX	561	MIN	1.9	CFSM	1.21	IN.	16.53

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°57'30", long 83°46'26", Knox County, Hydrologic Unit 06010107, on left bank, 0.7 mi downstream from Johnson Hollow, 7.5 mi upstream from confluence with Holston River, and 8 mi east of Knoxville.

DRAINAGE AREA.--5,101 miP.

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929. Dec. 10, 1945, to Sept. 30, 1957, at site 200 ft upstream on right bank at same datum.

REMARKS.--Records good. Flow regulated by Douglas Lake (station 03468500), 24.6 mi upstream.

AVERAGE DISCHARGE.--39 years, 7,925 ft³/s, 21.10 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,600 ft³/s May 8, 1984, elevation, 834.60 ft; minimum, 67 ft³/s Oct. 25, 1953, elevation, 813.38 ft; minimum daily, 68 ft³/s Oct. 23-26, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1867 reached a stage of 855.0 ft, from floodmarks, estimated discharge, 160,000 ft³/s, from investigations by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,600 ft³/s May 8, elevation, 834.60 ft; minimum, 391 ft³/s Oct. 30; elevation, 814.94 ft; minimum daily, 897 ft³/s Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2660	4090	5950	6230	10200	13200	3050	3700	9140	4440	16100	11200
2	2670	4950	8480	3240	9700	10200	4980	3400	8390	8200	16000	9530
3	2990	5650	4860	7270	9220	11700	6380	4500	9530	9450	16100	10000
4	4460	5800	3800	11500	6880	12800	7340	4600	9530	8990	16000	13800
5	4830	3710	9400	12600	4250	13800	9140	3300	10000	8440	15900	14100
6	4090	5600	11900	12700	6750	13400	8370	5200	11200	7810	15400	14100
7	3750	5350	12500	11200	5630	12800	7590	28000	9610	8510	16300	13500
8	3170	7420	16500	6830	2510	7390	5800	70000	5810	5090	15700	12500
9	2920	7670	18500	7960	3890	7300	10500	68700	5700	4630	8510	11200
10	3750	7100	16300	8080	3790	6070	10900	58000	3620	8180	16600	14400
11	3210	10500	9620	11100	3120	6120	10900	46200	5450	10800	12900	13600
12	4800	9510	15600	10500	4670	8570	9000	28400	5980	11200	9850	12600
13	5980	4860	18600	10700	5680	7450	6900	18500	6370	13400	12100	12200
14	9000	5470	18300	6090	14000	8380	3530	18400	6260	10200	14000	10600
15	4440	6240	18000	3560	19500	8050	2790	18100	7350	7300	13700	12100
16	1130	6790	17800	4400	18800	7160	4150	16900	7080	10200	13500	11700
17	2450	7650	14800	4360	18500	7320	7090	13100	4330	11400	13300	11600
18	4440	4090	17400	4870	18300	6530	5350	13400	7390	15500	11800	11900
19	6460	1290	17700	10400	18100	7660	6120	12100	9640	5250	9840	11400
20	5650	1150	17600	11200	17900	9170	4660	11200	9340	5830	13100	11600
21	3940	5480	17300	10400	17700	14700	2700	10800	9640	9490	14300	11700
22	2450	5620	17400	5600	12700	8950	1950	11800	9280	10500	14500	12700
23	1980	4390	17400	5080	17500	4060	9030	11100	6690	12300	15000	6170
24	2500	4410	16300	2960	16900	2450	5720	11000	5030	14300	12700	4740
25	2220	4720	16700	1750	11000	1490	5560	10000	8350	14900	10800	7190
26	4000	2010	16500	5530	11300	7130	2550	10000	9740	15600	9430	6810
27	4550	1120	8910	5810	15700	8800	4100	6060	9800	17200	14200	5820
28	3550	2810	3230	5500	22000	7660	4100	6050	10200	15000	15300	6350
29	1740	2910	8800	5150	15900	7700	3200	9220	9690	14100	15700	3680
30	897	3760	17400	7410	---	7590	3800	9070	9570	17200	14500	1970
31	3670	---	15100	10400	---	2770	---	9460	---	16900	15200	---
TOTAL	114347	152120	428650	230380	342090	258370	177250	550260	239710	332310	428330	310760
MEAN	3689	5071	13830	7432	11800	8335	5908	17750	7990	10720	13820	10360
MAX	9000	10500	18600	12700	22000	14700	10900	70000	11200	17200	16600	14400
MIN	897	1120	3230	1750	2510	1490	1950	3300	3620	4440	8510	1970
(†)	-14700	-12200	-58000	-14400	+61800	+135700	+166500	+173700	-48800	+26700	-188400	-197400
MEAN*	3214	4664	11960	6967	13930	12710	11460	23350	6364	11580	7740	3779
CFSM*	.63	.91	2.34	1.37	2.73	2.49	2.25	4.58	1.25	2.27	1.52	.74
IN.*	.73	1.02	2.70	1.56	2.94	2.87	2.50	5.28	1.39	2.62	1.75	.83

CAL YR 1983 TOTAL 3309737 MEAN 9068 MAX 22200 MIN 897 MEAN* 8974 CFSM* 1.76 IN* 23.88
WTR YR 1984 TOTAL 3564577 MEAN 9739 MAX 70000 MIN 897 MEAN* 9823 CFSM* 1.93 IN* 26.21

(†) Change in contents, in cfs-days, in Douglas Lake, furnished by TVA.
(*) Adjusted for change in contents in Douglas Lake.

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TN--Continued

WATER-QUALITY

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1975 to September 1981.
WATER TEMPERATURE: June 1975 to September 1981.

REMARKS.--Flow regulated by Douglas Lake (station 03468500), 24.6 mi upstream.

EXTREMES FOR PERIOD OF DAIILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 303 micromhos June 25, 1978; minimum, 34 micromhos Oct. 23, 1978.
WATER TEMPERATURE: Maximum, 33.0°C Aug. 11, 12, 1977; minimum, 0.0°C Jan. 19, 1977, Feb. 11, 12, 20, 1979.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--A specific conductance of 310 micromhos was observed on Dec. 18, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC												
13...	1230	18600	180	7.8	9.0	737	7.6	9.9	89	47	180	49
FEB												
27...	1130	17400	110	7.6	9.0	730	35	10.0	90	K14	62	40
APR												
25...	1130	1630	137	7.8	12.0	740	2.9	11.5	110	K4	K1	49
JUL												
20...	1200	2220	105	7.5	20.5	744	25	7.8	89	280	740	44

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC												
13...	9	15	2.7	17	42	1	2.0	40	1.2	19	18	.10
FEB												
27...	9	12	2.4	6.7	26	.5	1.6	31	1.5	12	7.2	<.10
APR												
25...	7	15	2.9	7.0	23	.5	1.3	43	1.3	16	7.8	<.10
JUL												
20...	5	14	2.2	2.6	11	.2	1.4	39	2.4	9.7	2.9	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
13...	6.7	110	110	.15	5520	.530	.150	.19	.10	.080	.030	.030
FEB												
27...	7.0	75	68	.10	3520	.690	.240	.31	.40	.160	.030	.030
APR												
25...	6.5	88	82	.12	387	.580	.040	.05	1.6	.030	.010	<.010
JUL												
20...	6.2	69	63	.09	414	.480	.020	.03	.30	.060	.020	<.010

K--Results based on non-ideal colony count.

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
DEC 13...	.09	40	1	36	<.5	1	6	<3	3	78	1	<4
FEB 27...	.09	30	1	27	<.5	<1	<1	<3	2	82	5	<4
APR 25...	--	<10	1	34	<.5	1	<1	<3	<1	50	3	<4
JUL 20...	--	20	<1	22	<.5	<1	<1	<3	1	30	3	7

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 13...	16	<.1	<10	<1	<1	<1	64	<6	6	18	904	70
FEB 27...	22	<.1	<10	2	<1	<1	51	<6	14	35	1640	77
APR 25...	8	<.1	<10	1	<1	<1	60	<6	7	7	31	62
JUL 20...	10	.2	<10	<1	<1	<1	62	<6	30	39	234	94

03487550 REEDY CREEK AT OREBANK, TN

LOCATION.--Lat 36°33'42", long 82°27'36", Sullivan County, Hydrologic Unit 06010102, on left bank, 50 ft upstream from Anderson Bridge, 0.1 mi south of U. S. Highway 11W, 0.3 mi north of Orebank, 1.0 mi upstream from Gaines Branch, and at mile 9.8.

DRAINAGE AREA.--36.3 mi².

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

REVISED RECORDS.--WRD TN 1973: 1971(P), 1972(M); WRD TN 1980: 1979(M), 1982(P)(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,232.61 ft National Geodetic Vertical Datum of 1929. Prior to Mar. 4, 1975, at site 50 ft downstream at same datum.

REMARKS.--Records good. The Bloomingdale Utility District diverts an average of about 0.6 ft³/s for water supply, 0.8 mi upstream from the gage.

AVERAGE DISCHARGE.--21 years, 45.6 ft³/s, 17.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,940 ft³/s Oct. 2, 1977, gage height, 11.61 ft from rating curve extended above 1,300 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 2.2 ft³/s July 27, 1982, gage height, 0.93 ft, result of upstream pumpage.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1927, reached a stage of 11.4 ft, discharge, about 11,000 ft³/s, datum then in use and before flood plain development, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Feb. 14	1030	779	6.38	May 7	1245	*2170	10.65

Minimum discharge, 5.8 ft³/s Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	7.0	17	32	26	101	64	29	46	46	24	12
2	7.5	6.6	21	28	24	88	56	31	40	24	31	13
3	7.0	7.5	80	25	25	76	53	36	36	26	29	14
4	6.9	7.5	237	23	24	67	212	59	34	26	24	16
5	7.2	7.2	76	25	23	67	216	54	30	215	22	14
6	7.3	6.8	75	24	23	69	137	135	28	110	19	13
7	6.6	6.6	54	23	20	63	105	1400	26	67	18	12
8	6.5	6.7	38	21	19	57	87	587	24	46	17	12
9	6.1	6.3	31	20	22	52	78	287	24	33	16	11
10	6.1	7.4	27	24	26	48	69	180	23	20	16	12
11	7.6	8.6	26	32	56	45	60	138	21	19	15	10
12	16	8.0	72	26	82	42	54	112	20	20	14	9.7
13	28	7.0	47	23	181	44	49	95	20	16	16	8.9
14	19	6.7	37	21	512	42	56	85	19	14	17	9.3
15	11	14	30	20	165	39	48	73	19	15	15	8.6
16	9.1	13	25	20	110	38	45	66	20	42	15	8.6
17	8.1	10	23	20	86	36	49	56	20	25	14	8.6
18	7.7	8.9	21	83	70	36	61	51	16	100	17	8.6
19	9.7	8.2	19	81	62	38	53	47	16	44	15	8.2
20	8.6	8.3	18	48	59	43	49	44	16	27	14	7.8
21	8.9	10	17	34	50	213	48	41	23	168	13	7.8
22	9.9	8.8	27	29	46	147	47	40	22	60	11	7.8
23	17	8.2	28	26	300	106	53	46	18	34	10	8.2
24	16	42	21	47	200	85	49	39	43	31	12	7.5
25	12	68	17	55	144	75	42	34	30	27	10	7.5
26	10	28	16	45	109	64	38	37	19	31	9.0	7.5
27	8.6	26	17	39	91	56	36	68	15	126	8.5	9.3
28	7.9	51	169	34	160	87	34	66	15	97	8.0	10
29	7.7	32	103	30	134	124	32	220	23	50	17	9.7
30	7.2	22	53	30	---	94	33	80	44	35	13	11
31	7.2	---	37	29	---	74	---	59	---	27	13	---
TOTAL	306.1	458.3	1479	1017	2849	2216	2013	4295	750	1621	492.5	303.6
MEAN	9.87	15.3	47.7	32.8	98.2	71.5	67.1	139	25.0	52.3	15.9	10.1
MAX	28	68	237	83	512	213	216	1400	46	215	31	16
MIN	6.1	6.3	16	20	19	36	32	29	15	14	8.0	7.5
CFSM	.27	.42	1.31	.90	2.71	1.97	1.85	3.83	.69	1.44	.44	.28
IN.	.31	.47	1.52	1.04	2.92	2.27	2.06	4.40	.77	1.66	.50	.31

CAL YR 1983	TOTAL	13045.3	MEAN	35.7	MAX	353	MIN	6.1	CFSM	.98	IN.	13.37
WTR YR 1984	TOTAL	17800.5	MEAN	48.6	MAX	1400	MIN	6.1	CFSM	1.34	IN.	18.24

03490500 HOLSTON RIVER AT SURGOINSVILLE, TN

LOCATION.--Lat 36°28'19", long 82°50'50", Hawkins County, Hydrologic Unit 06010104, on right bank 1,500 ft upstream from Surgoinsville Creek and county bridge at Surgoinsville, 9.8 mi upstream from Big Creek, and at mile 118.7. Records include flow of Surgoinsville Creek.

DRAINAGE AREA.--2,874 mi², 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for growing season, which are fair. Flow partly regulated by four reservoirs (see p.177).

AVERAGE DISCHARGE.--44 years, 3,802 ft³/s, 17.96 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,600 ft³/s Feb. 18, 1944, gage height, 17.48 ft; minimum, 470 ft³/s, Oct. 21, 1941; minimum daily, 528 ft³/s Oct. 21, 1941. Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 59,300 ft³/s Mar. 13, 1963, gage height, 17.13 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 56,900 ft³/s MAY 8, gage height, 16.90 ft; minimum, 897 ft³/s Oct. 11; minimum daily, 1,170 ft³/s Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2260	3560	5050	2910	2440	5770	5390	2230	4220	1780	3090	3410
2	1380	5040	3970	2680	2200	5450	4240	1990	2850	1640	3550	2700
3	1200	5220	2930	2860	2220	4980	2910	2570	2690	2700	3450	1810
4	2460	6310	6170	2640	2320	4500	3830	3290	2630	3080	3370	3610
5	2210	5160	8490	2230	1940	3770	8140	3210	2810	2940	2390	4210
6	2180	1910	7060	2820	2470	4190	8510	3700	2650	3160	1490	4160
7	2430	3570	6560	2910	4280	3880	4470	25600	2780	2640	2690	4740
8	2520	4600	5130	1460	1750	3050	3400	46600	2620	1700	2900	2570
9	1240	3670	4070	1430	1820	5270	3390	22200	2080	1550	3620	1170
10	1430	4430	3330	1400	1620	2590	3880	13800	1880	2610	2410	2140
11	1450	5370	1790	2070	1630	2180	3680	10500	1260	2010	3260	4300
12	3410	7160	2830	1790	2570	2020	3800	9710	2070	2320	1860	4790
13	4530	1660	7420	1850	4280	1920	2770	9500	2150	2480	1420	4740
14	4410	3820	5080	1750	14500	1900	2180	8770	2270	2120	2690	4260
15	3770	4610	3560	1620	17600	1830	2090	8300	2460	1370	4220	3700
16	3550	4750	3590	1560	10200	1910	2530	7610	2220	1560	3930	2620
17	1560	4570	3220	1920	7550	2100	2760	6940	1390	2830	4080	2590
18	2840	4350	2200	2150	6240	2160	2780	6150	1330	3770	3550	3260
19	2670	1820	2300	3830	3980	2010	2380	4660	2350	5340	1830	4060
20	3570	1180	1950	3890	3300	2720	2260	3870	3000	2820	1390	3820
21	3930	2410	2140	4050	3120	6440	2050	3590	3100	3130	3370	3980
22	3750	3710	1620	3090	3490	5880	2040	3610	2680	1720	3660	3970
23	3620	1930	2020	1650	4710	4360	2940	3850	2000	1780	3680	1300
24	2510	3500	3310	1760	13900	4420	2880	4700	1300	4210	3780	1970
25	5030	4110	8270	2540	11000	3240	3890	3860	1630	3900	4010	2340
26	5070	5340	5260	3480	8310	3380	3370	4380	2710	4230	3730	2880
27	4920	4710	3290	3240	6090	3010	3700	3580	2480	4230	3900	2140
28	3240	4690	2380	2630	8000	3900	3240	4280	2480	3950	4830	2070
29	3100	5530	4660	2090	7490	4460	1840	4790	3200	2310	4830	1270
30	2680	5180	4980	2230	---	7100	1950	3800	2600	1820	3980	1260
31	2500	---	4670	3610	---	7070	---	4290	---	3210	3870	---
TOTAL	91420	123870	129300	76140	161020	117460	103290	245930	71890	84910	100830	91840
MEAN	2949	4129	4171	2456	5552	3789	3443	7933	2396	2739	3253	3061
MAX	5070	7160	8490	4050	17600	7100	8510	46600	4220	5340	4830	4790
MIN	1200	1180	1620	1400	1620	1830	1840	1990	1260	1370	1390	1170

CAL YR 1983	TOTAL	1479350	MEAN	4053	MAX	10900	MIN	1170	MEAN†	3619	CFSM†	1.26	IN†	17.04
WTR YR 1984	TOTAL	1397900	MEAN	3819	MAX	46600	MIN	1170	MEAN†	3992	CFSM†	1.39	IN†	18.85

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

03491000 BIG CREEK NEAR ROGERSVILLE, TN

LOCATION.--Lat 36°25'34", long 82°57'07", Hawkins County, Hydrologic Unit 06010104, on left bank 300 ft upstream from county road bridge, 3 mi northeast of Rogersville, and at mile 2.0.

DRAINAGE AREA.--47.3 mi².

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.

REVISED RECORDS.--WSP 1436: 1945.

GAGE.--Water-stage recorder. Datum of gage is 1,128.9 ft National Geodetic Vertical Datum of 1929 (levels based on City of Rogersville construction plans for pumping station). Dec. 7, 1954, to Sept. 30, 1957, crest-stage gage at same site and datum.

REMARKS.--Records good. Maximum gage height from flood marks.

AVERAGE DISCHARGE.--34 years (water years 1942-48, 1958-84), 59.8 ft³/s, 17.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,760 ft³/s Mar. 12, 1963, gage height, 9.40 ft from rating curve extended above 3,000 ft³/s on basis of contracted-opening measurement of peak flow; maximum gage height, 10.68 ft Dec. 30, 1969, backwater from log jam; minimum discharge observed, 1.3 ft³/s Sept. 23, 1955; minimum gage height, 1.32 ft Sept. 12, Oct. 2, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Feb. 14	0530	1870	5.43	May 7	Unknown	*5240	8.90
Mar. 21	0615	1550	5.06				

Minimum discharge, 2.3 ft³/s several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.8	7.5	28	25	143	94	33	22	20	9.5	4.7
2	3.2	3.8	8.8	22	23	111	79	32	21	15	8.6	4.3
3	3.3	3.9	57	19	22	90	70	60	19	13	9.6	4.1
4	3.3	4.4	178	17	23	74	405	198	18	12	14	4.2
5	3.8	4.5	58	17	22	69	428	138	16	36	9.5	4.8
6	4.1	4.3	47	17	21	76	204	173	16	38	8.0	4.2
7	5.1	4.1	48	16	18	77	147	2270	14	27	7.6	3.8
8	4.1	4.2	27	14	18	67	117	820	14	22	7.0	3.5
9	3.7	3.9	20	13	18	58	104	406	14	15	7.3	3.2
10	3.6	4.1	16	15	19	51	93	242	13	12	7.7	3.1
11	3.7	4.3	16	46	147	47	78	177	12	11	15	3.1
12	4.7	5.2	184	34	216	43	69	139	12	13	10	4.2
13	9.8	5.0	64	28	541	42	63	113	11	15	8.8	5.1
14	20	4.6	38	24	1180	43	58	98	11	11	7.6	4.1
15	9.5	5.7	27	21	274	37	54	79	11	10	7.2	3.4
16	5.6	9.3	20	20	163	37	50	66	11	14	6.4	2.9
17	4.5	9.1	16	20	120	36	48	58	10	17	6.3	2.8
18	4.1	6.5	14	76	93	35	45	52	9.8	58	11	2.7
19	3.6	5.5	13	130	76	33	40	47	9.5	39	9.9	2.7
20	3.8	5.5	11	65	66	39	39	42	11	22	7.6	2.8
21	4.0	6.3	11	45	55	795	37	38	18	17	6.3	2.7
22	4.3	6.8	12	45	48	240	36	36	21	19	5.4	3.0
23	5.1	6.5	18	30	149	150	41	33	14	14	6.0	2.7
24	8.3	8.0	15	44	186	113	38	31	15	11	7.5	2.6
25	9.0	16	11	76	116	100	35	28	17	10	5.8	2.5
26	6.0	12	9.0	64	85	86	32	28	12	9.3	5.0	2.6
27	5.1	8.7	9.2	51	77	73	33	64	9.7	10	4.8	2.5
28	4.6	9.0	195	43	403	269	42	36	8.9	13	4.5	2.5
29	4.3	11	131	37	238	226	36	34	12	11	5.4	2.6
30	4.2	9.7	56	32	---	148	35	29	20	11	6.1	4.1
31	3.8	---	44	29	---	114	---	25	---	11	5.2	---
TOTAL	165.3	195.7	1381.5	1138	4442	3522	2650	5625	422.9	556.3	240.6	101.5
MEAN	5.33	6.52	44.6	36.7	153	114	88.3	181	14.1	17.9	7.76	3.38
MAX	20	16	195	130	1180	795	428	2270	22	58	15	5.1
MIN	3.1	3.8	7.5	13	18	33	32	25	8.9	9.3	4.5	2.5
CFSM	.11	.14	.94	.78	3.23	2.41	1.87	3.83	.30	.38	.16	.07
IN.	.13	.15	1.09	.90	3.49	2.77	2.08	4.42	.33	.44	.19	.08

CAL YR 1983	TOTAL	17011.7	MEAN	46.6	MAX	758	MIN	3.1	CFSM	.99	IN.	13.38
WTR YR 1984	TOTAL	20440.8	MEAN	55.8	MAX	2270	MIN	2.5	CFSM	1.18	IN.	16.08

03491300 BEECH CREEK AT KEPLER, TN

LOCATION.--Lat 36°24'06", long 82°53'09", Hawkins County, Hydrologic Unit 06010104, on upstream right wingwall of county road bridge, at Kepler, 5.9 mi east of intersection of U. S. Highway 11W and Burem Road, and at mile 6.6.

DRAINAGE AREA.--47.0 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 1,107.83 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Peaks probably occurred on Feb. 14 and Mar. 21, during period of no gage-height record from Nov. 8 to Mar. 27.

AVERAGE DISCHARGE.--19 years, 51.0 ft³/s, 14.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,480 ft³/s; Mar. 30, 1975, gage height, 13.38 ft from rating curve extended above 1,300 ft³/s; minimum observed, 0.97 ft³/s Sept. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 12, 1963, reached a stage of 14.6 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft³/s and maximum (*)

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Apr. 4	2015	1250	8.38	May 7	1045	*3230	13.04

Minimum discharge 2.3 ft³/s, several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.9	7.0	20	19	100	50	42	19	68	15	5.7
2	2.8	3.8	8.0	15	17	80	39	72	18	33	14	5.3
3	2.7	4.1	50	13	17	70	35	206	17	22	18	5.0
4	2.7	4.6	150	12	18	60	591	251	16	17	13	5.6
5	2.7	4.8	80	12	17	55	383	139	14	301	12	5.6
6	2.9	4.3	40	12	15	60	159	250	13	73	11	5.0
7	3.0	4.0	35	11	14	60	116	2400	12	48	11	4.6
8	3.0	4.0	20	10	15	50	92	1170	12	31	11	4.3
9	2.8	3.7	15	9.0	14	45	85	305	13	22	10	4.1
10	2.7	4.0	13	11	16	40	70	118	12	17	18	3.8
11	2.9	4.2	12	40	100	37	54	79	11	15	19	4.2
12	3.8	4.7	150	30	200	33	42	61	11	16	12	7.0
13	16	4.5	50	25	400	31	35	51	10	15	11	5.8
14	16	4.2	30	20	1000	33	57	43	12	14	10	4.3
15	7.7	5.0	20	18	250	29	46	33	11	13	9.2	3.7
16	5.0	9.0	14	17	130	28	46	28	10	92	8.6	3.4
17	4.4	8.0	12	16	80	27	136	24	14	38	8.3	3.2
18	4.1	6.0	10	60	70	26	128	22	10	403	64	3.0
19	4.1	5.5	9.0	100	60	25	99	20	9.4	72	19	3.0
20	4.2	5.0	8.0	50	50	30	83	19	15	41	14	3.0
21	4.2	6.0	7.5	40	45	500	72	19	37	78	11	2.9
22	4.5	6.5	9.0	40	40	200	67	18	35	61	9.7	2.8
23	5.7	6.0	15	25	120	100	89	17	17	34	9.6	2.6
24	7.1	7.0	12	30	180	85	67	15	62	24	8.4	2.4
25	6.6	15	9.0	60	100	70	50	14	29	19	7.4	2.5
26	5.5	10	8.0	50	80	60	39	17	15	17	6.8	2.6
27	5.0	8.0	8.5	40	70	55	71	26	13	24	6.6	2.5
28	4.6	8.5	170	30	300	114	102	40	11	27	8.1	2.5
29	4.3	10	60	28	150	118	68	115	208	16	7.5	2.9
30	4.3	9.0	40	25	---	84	58	33	77	20	6.5	4.4
31	4.3	---	30	22	---	64	---	24	---	17	6.3	---
TOTAL	152.4	183.3	1102.0	891.0	3587	2369	3029	5671	763.4	1688	396.0	117.7
MEAN	4.92	6.11	35.5	28.7	124	76.4	101	183	25.4	54.5	12.8	3.92
MAX	16	15	170	100	1000	500	591	2400	208	403	64	7.0
MIN	2.7	3.7	7.0	9.0	14	25	35	14	9.4	13	6.3	2.4
CFSM	.10	.13	.76	.61	2.64	1.63	2.15	3.89	.54	1.16	.27	.08
IN.	.12	.15	.87	.71	2.84	1.88	2.40	4.49	.60	1.34	.31	.09

CAL YR 1983	TOTAL	12659.1	MEAN	34.7	MAX	516	MIN	2.7	CFSM	.74	IN.	10.02
WTR YR 1984	TOTAL	19949.8	MEAN	54.5	MAX	2400	MIN	2.4	CFSM	1.16	IN.	15.79

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN
(National stream-quality accounting network station)

LOCATION.--Lat 36°00'56", 83°49'54", Knox County, Hydrologic Unit 06010104, on right bank at bridge on U. S. Highway 70, at Knoxville city limits, and 5.5 mi upstream from confluence with French Broad River.

DRAINAGE AREA.--3,747 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to June 1976, January 1978 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.

REVISED RECORDS.--WSP 893: 1935(M). WSP 1336: 1939.

GAGE.--Water-stage recorder. Datum of gage is 815.84 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1930, to June 8, 1931, nonrecording gage, and June 9, 1931, to Sept. 30, 1948, water-stage recorder, at site 12 mi upstream at datum 22.55 ft higher. June 19, 1945, to Oct. 4, 1960, 300 ft upstream at present datum.

REMARKS.--Records fair. Flow regulated by five reservoirs (see p. 177).

AVERAGE DISCHARGE.--51 years (water years 1931-75, 1979-84), 4,765 ft³/s, 17.27 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 62,900 ft³/s Mar. 28, 1935, gage height, 20.20 ft site, and datum then in use; minimum, 44 ft³/s Dec. 12, 21, 22, 1941, gage height, -0.58 ft, site and datum then in use; minimum daily, 44 ft³/s Dec. 21, 22, 1941. Maximum discharge since closure of Cherokee Dam on Dec. 5, 1941, 31,400 ft³/s Mar. 22, 1963, gage height, 11.20 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1791, about 41 ft in March 1867, from profile by Tennessee Valley Authority. Flood in 1901 reached a stage of about 32 ft, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,900 ft³/s May 7, gage height, 10.42 ft; minimum, 142 ft³/s Oct. 25; minimum daily, 205 ft³/s Oct. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1930	2470	3600	5630	6680	4310	816	1040	5820	2570	4380	8230
2	2010	2480	3700	1910	6320	2640	2250	1150	5320	1880	2690	6470
3	3490	3420	3930	3430	6750	2880	1820	3180	5690	6120	2610	6420
4	6840	3510	2470	4760	6240	3800	2950	2560	5700	6790	3460	7830
5	5470	3510	887	5060	3920	4040	2810	1530	6810	4850	1190	9720
6	3680	3890	1010	5790	6140	7310	4560	4480	8840	5940	1170	8570
7	3680	2510	11000	4200	6230	8160	1780	23800	8510	6530	4460	9240
8	4120	5770	9260	2570	2750	4940	864	17500	7540	4090	4700	8640
9	3080	6300	4760	2570	2980	7250	1290	22000	5750	3420	5880	7190
10	3320	4970	5330	2850	1540	4930	6120	8350	2550	777	6560	9000
11	3590	9990	2680	8470	1890	3160	2000	5620	2650	6570	5900	10100
12	4330	7860	3750	5810	2070	3080	2950	9660	7110	7190	2930	10100
13	4660	4420	5520	3560	2830	2670	1140	9960	6380	6830	3040	9980
14	6330	3820	3560	4060	5950	3990	579	15500	6550	7240	8190	9750
15	5350	4640	5290	2230	2380	2870	524	15400	6440	4040	8100	9840
16	1860	5220	4930	2550	931	2730	495	15200	6350	3670	7780	8620
17	1320	5920	5080	3940	709	3200	471	12700	3680	7640	7920	9410
18	2300	4070	4490	2290	599	2260	1220	9870	2850	8160	7850	11100
19	2240	1900	4560	6940	541	2570	520	8900	6440	914	3060	11300
20	3790	1200	7520	7370	496	2830	388	7460	6880	466	3270	11700
21	3640	3260	7340	8200	1210	9540	368	5520	6220	1450	7930	11900
22	1590	4460	4980	5290	1360	5630	369	7800	6400	3230	7680	10600
23	830	3220	5810	4180	1720	3150	438	7330	6500	2060	7550	8010
24	319	3020	8530	3070	1550	2180	409	7250	3500	7860	7760	7290
25	205	3090	17500	1210	1390	831	361	7220	3300	7160	7460	12700
26	1470	2090	17800	1220	1470	767	408	7180	6620	5000	7310	11800
27	3700	1200	15900	2500	3120	2230	1570	6520	6980	4940	8360	10100
28	3140	1720	11600	1520	10400	2810	965	4680	6880	5170	10500	8450
29	2200	2130	4660	560	8730	4560	540	6200	6810	555	10400	4580
30	753	2940	16800	787	---	6780	477	5800	6670	254	9970	2350
31	551	---	16000	8810	---	2350	---	5610	---	4220	11500	---
TOTAL	91788	115000	220247	123337	98896	120448	41452	266970	177740	137586	191560	270990
MEAN	2961	3833	7105	3979	3410	3885	1382	8612	5925	4438	6179	9033
MAX	6840	9990	17800	8810	10400	9540	6120	23800	8840	8160	11500	12700
MIN	205	1200	887	560	496	767	361	1040	2550	254	1170	2350
CFSM	.79	1.02	1.90	1.06	.91	1.04	.37	2.30	1.58	1.18	1.65	2.41
IN.	.91	1.14	2.19	1.22	.98	1.20	.41	2.65	1.76	1.37	1.90	2.69

CAL YR 1983 TOTAL 1892788 MEAN 5186 MAX 17800 MIN 200 MEAN† 4714 CFSM† 1.26 IN.† 17.04
WTR YR 1984 TOTAL 1856014 MEAN 5071 MAX 23800 MIN 205 MEAN† 5387 CFSM† 1.44 IN.† 19.52

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

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1980 to current year.
WATER TEMPERATURE: February 1980 to current year.

INSTRUMENTATION.--Water quality monitor since Feb. 23, 1980.

REMARKS.--Flow regulated by five reservoirs (see p. 177).

EXTREMES FOR DAILY PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 365 micromhos Mar. 1, 1981; minimum, 121 micromhos July 31, 1982.
WATER TEMPERATURE: Maximum, 27.0°C Aug. 21, 1982; minimum, 1.5°C Feb. 3, 5, and 12, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 323 micromhos Apr. 25, 26; minimum, 169 micromhos May 3.
WATER TEMPERATURE: Maximum, 25.0°C Sept. 12-14; minimum, 2.5°C Feb. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC												
09...	1100	4300	260	8.1	10.0	749	5.0	9.4	85	38	67	110
JAN												
26...	1200	576	260	8.3	6.0	746	7.5	12.5	103	240	810	110
MAR												
29...	1345	3200	265	8.1	10.5	730	16	9.6	90	2200	2900	130
MAY												
17...	1200	11300	280	7.9	12.0	750	9.4	11.0	104	140	52	120
JUL												
16...	1315	3490	260	7.8	19.0	742	3.0	8.2	91	310	710	120
SEP												
20...	1000	11400	260	7.6	22.5	743	6.1	5.9	70	31	67	110

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC												
09...	17	30	7.4	11	18	.5	1.8	89	1.4	22	13	.10
JAN												
26...	13	34	7.2	7.8	13	.3	2.4	102	1.0	22	11	.10
MAR												
29...	18	37	8.1	8.2	12	.3	1.9	108	1.7	21	10	.20
MAY												
17...	16	35	7.9	8.5	13	.4	1.8	104	2.5	22	11	.10
JUL												
16...	15	36	7.9	6.8	11	.3	1.8	108	3.3	20	9.1	.10
SEP												
20...	16	31	8.4	9.8	16	.4	1.8	96	4.7	22	13	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
09...	3.6	154	140	.21	1790	.720	.190	.24	.50	.210	.060	.030
JAN												
26...	3.1	155	150	.21	241	.780	<.010	--	.40	--	.030	.010
MAR												
29...	1.1	165	150	.22	1430	.730	.060	.08	.40	.020	<.010	<.010
MAY												
17...	2.2	196	150	.27	5980	.980	.480	.62	3.3	<.010	.030	<.010
JUL												
16...	3.5	187	150	.25	1760	.710	<.010	--	.30	.030	.010	<.010
SEP												
20...	1.8	173	150	.24	5320	.190	.050	.06	.70	.040	.030	.020

TENNESSEE RIVER BASIN

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
DEC 09...	.09	20	2	37	<.5	<1	<1	<3	1	10	3	<4
JAN 26...	.03	--	--	--	--	--	--	--	--	--	--	--
MAR 29...	--	<10	1	34	<.5	2	<1	<3	2	7	1	5
MAY 17...	--	<10	1	44	<1	<1	8	<3	4	9	4	<4
JUL 16...	--	280	1	35	<.5	<1	<1	<3	1	4	2	<4
SEP 20...	.06	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 09...	3	1.5	<10	<1	<1	<1	110	<6	5	12	139	78
JAN 26...	--	--	--	--	--	--	--	--	--	11	17	71
MAR 29...	6	<.1	<10	1	<1	<1	110	<6	7	34	294	93
MAY 17...	6	.1	<10	5	<1	<1	110	<6	12	33	1010	74
JUL 16...	3	<.1	<10	<1	<1	<1	110	<6	8	11	104	77
SEP 20...	--	--	--	--	--	--	--	--	--	29	893	44

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	254	246	251	252	245	249	260	253	258	252	240	245
2	253	249	251	247	241	244	261	252	257	264	247	255
3	252	246	249	244	240	242	254	233	246	268	252	260
4	250	245	248	243	240	241	244	232	238	257	248	253
5	251	245	247	242	238	240	275	246	257	251	243	247
6	249	244	247	242	239	241	275	258	266	246	239	242
7	250	244	248	246	240	242	269	248	254	246	240	243
8	249	244	247	243	239	241	261	252	256	253	242	248
9	252	243	249	242	238	241	266	257	261	262	245	253
10	248	244	247	242	240	241	262	255	259	251	244	248
11	247	244	246	240	235	239	269	257	263	251	238	243
12	245	241	244	242	236	239	269	257	264	252	244	248
13	245	238	242	242	240	241	257	251	255	251	245	248
14	244	238	241	246	239	243	260	250	255	247	241	244
15	244	238	242	243	240	242	258	249	252	254	243	249
16	251	240	245	244	242	243	256	247	251	263	251	256
17	252	245	248	245	241	243	254	248	251	255	248	251
18	251	245	248	246	242	244	255	248	252	255	245	251
19	251	246	248	251	243	248	253	247	249	246	235	241
20	245	242	243	254	246	249	251	244	248	245	237	240
21	244	240	243	257	248	253	251	245	247	243	236	238
22	245	240	242	251	248	249	251	245	248	247	236	241
23	246	241	243	256	248	252	253	241	246	246	237	241
24	253	244	247	256	249	253	250	240	244	248	238	242
25	257	246	250	259	251	255	243	239	241	261	245	256
26	269	254	262	263	253	259	241	239	240	269	257	261
27	260	237	247	262	259	260	241	239	240	263	244	254
28	249	238	243	268	260	264	240	214	231	264	242	251
29	250	237	244	271	262	266	245	229	235	274	257	264
30	253	244	248	268	257	265	243	237	240	275	265	271
31	253	245	248	---	---	---	243	239	241	267	234	241
MONTH	269	237	247	271	235	248	275	214	250	275	234	249
		FEBRUARY			MARCH			APRIL			MAY	
1	243	238	240	250	242	246	297	275	282	306	287	296
2	246	239	242	266	246	257	290	268	275	304	271	293
3	248	242	244	268	241	259	292	262	284	268	169	206
4	251	244	246	260	250	256	283	208	260	220	172	203
5	253	248	251	261	249	257	256	230	247	245	221	234
6	254	247	250	262	253	257	277	233	267	---	---	---
7	253	247	250	262	255	260	292	270	280	---	---	---
8	264	253	258	267	261	265	296	279	286	---	---	---
9	265	255	262	268	256	262	299	273	282	---	---	---
10	275	256	267	267	256	264	293	274	278	---	---	---
11	277	267	272	271	260	267	290	272	282	---	---	---
12	278	264	271	273	259	267	288	268	280	---	---	---
13	271	253	263	276	260	271	300	278	290	---	---	---
14	245	223	234	276	262	271	299	288	292	---	---	---
15	261	235	253	280	263	274	303	292	297	---	---	---
16	268	255	259	284	260	275	295	292	294	---	---	---
17	273	259	263	276	263	272	303	293	300	---	---	---
18	282	265	273	282	270	276	305	301	304	---	---	---
19	293	272	280	282	268	274	306	300	303	---	---	---
20	296	278	288	282	264	273	310	296	302	---	---	---
21	286	276	283	265	253	258	315	298	306	---	---	---
22	285	262	273	268	252	263	313	301	304	298	289	293
23	277	259	268	284	268	277	310	302	306	301	289	293
24	270	255	261	293	257	281	316	309	311	298	287	292
25	268	251	257	298	284	290	323	312	316	300	286	292
26	263	250	257	302	278	287	323	314	319	298	287	291
27	258	237	250	300	270	285	315	303	308	298	288	292
28	239	197	215	283	258	268	309	259	276	299	290	293
29	241	225	234	272	252	261	285	275	281	296	285	289
30	---	---	---	274	260	270	295	284	286	294	287	290
31	---	---	---	287	263	278	---	---	---	293	287	290
MONTH	296	197	257	302	241	268	323	208	290	---	---	---

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	293	284	288	284	276	280	276	265	270	280	274	277
2	294	285	289	282	275	280	273	268	270	279	275	277
3	293	284	289	278	269	274	272	265	269	283	275	278
4	292	283	288	287	270	277	270	264	267	279	274	276
5	292	278	286	283	270	275	275	267	270	279	275	276
6	288	278	285	281	268	273	279	266	272	277	272	274
7	294	282	285	282	266	271	271	260	268	276	271	273
8	291	280	286	276	261	271	271	262	266	275	271	273
9	290	276	285	282	273	278	269	261	265	274	269	272
10	291	281	286	294	277	283	265	260	263	274	269	272
11	291	274	286	282	270	275	265	258	262	273	268	270
12	289	274	284	273	263	267	266	262	264	273	268	270
13	289	274	284	281	266	273	266	260	262	273	268	270
14	289	273	284	275	257	269	265	259	262	274	269	272
15	288	276	283	276	268	273	266	258	262	274	269	272
16	287	274	283	278	269	273	268	259	264	274	265	269
17	293	277	285	278	264	270	268	262	265	269	261	265
18	290	273	284	270	258	264	282	244	264	262	256	259
19	284	273	281	278	268	272	273	267	269	264	258	261
20	284	278	280	287	276	281	270	263	268	263	259	261
21	285	276	280	293	281	287	270	261	266	264	259	262
22	297	274	280	290	272	277	270	264	267	265	260	262
23	284	276	280	283	273	278	271	264	267	266	261	264
24	285	277	281	276	266	271	271	265	268	266	261	264
25	283	274	280	274	264	269	272	266	269	265	261	263
26	281	273	277	275	265	270	273	266	270	266	262	263
27	278	273	275	276	262	268	269	265	268	266	262	264
28	276	270	273	273	262	268	271	268	269	264	260	262
29	276	268	272	276	270	272	275	270	273	264	261	263
30	280	266	274	285	274	278	277	272	274	268	262	265
31	---	---	---	285	267	274	277	273	275	---	---	---
MONTH	297	266	282	294	257	274	282	244	267	283	256	268

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.0	21.5	22.0	17.0	16.0	16.5	11.5	10.0	10.5	6.0	5.5	5.5
2	21.5	20.5	21.5	17.5	16.5	17.0	11.5	10.0	10.5	5.5	5.0	5.5
3	23.0	21.0	21.5	18.0	17.5	18.0	10.5	9.0	10.0	5.5	4.5	5.0
4	23.0	22.0	22.5	18.5	17.5	18.0	11.0	10.5	11.0	6.0	5.0	5.5
5	23.0	22.5	22.5	17.5	16.0	16.0	12.0	11.0	11.5	7.0	5.5	6.0
6	22.5	21.5	22.0	16.0	14.5	15.5	12.0	11.0	11.5	6.5	6.0	6.0
7	22.0	21.0	21.5	16.0	15.5	16.0	11.5	10.5	11.0	6.5	5.5	6.0
8	22.0	20.5	21.5	17.0	15.5	16.0	11.0	10.0	10.5	6.5	5.5	6.0
9	22.0	20.5	21.0	17.5	16.0	17.0	11.0	10.0	10.0	7.0	6.0	6.5
10	21.5	20.5	21.0	17.5	17.0	17.5	12.0	10.5	11.0	7.0	6.0	6.5
11	21.5	20.5	21.0	17.0	15.5	16.0	11.5	11.0	11.0	6.0	5.0	5.5
12	22.0	20.5	21.0	16.0	15.0	15.5	11.0	10.5	10.5	5.5	5.0	5.0
13	22.0	20.5	21.5	15.0	14.0	14.5	11.5	11.0	11.0	5.5	5.0	5.0
14	20.5	20.0	20.0	14.5	13.5	14.0	11.0	10.5	10.5	6.0	5.0	5.5
15	20.5	19.0	20.0	15.0	14.0	14.5	10.5	9.5	10.0	5.5	5.0	5.5
16	20.5	19.0	20.0	14.5	13.5	14.0	9.5	9.0	9.5	5.0	5.0	5.0
17	20.0	19.0	19.5	14.0	13.0	13.5	10.0	8.5	9.5	5.5	5.0	5.5
18	20.5	19.5	20.0	14.0	13.5	13.5	9.5	8.5	9.0	5.5	5.0	5.0
19	21.5	20.5	21.0	13.5	13.0	13.5	9.0	8.5	9.0	5.0	4.5	4.5
20	21.5	20.5	21.0	14.0	13.0	13.5	9.0	8.5	9.0	4.0	3.5	4.0
21	21.0	20.0	20.5	13.5	12.5	13.0	10.0	9.0	9.5	4.0	3.5	4.0
22	20.0	19.0	19.5	14.0	13.0	13.5	10.0	8.5	9.5	4.0	3.0	3.5
23	19.0	18.5	18.5	14.0	13.0	13.5	9.0	8.5	8.5	4.5	3.5	4.0
24	18.5	17.5	18.0	14.5	13.0	14.0	8.5	6.0	7.0	5.0	4.0	4.5
25	18.5	17.5	18.0	13.0	12.0	12.5	7.0	6.5	7.0	6.0	5.0	5.5
26	17.5	16.0	16.5	12.0	11.0	11.5	7.0	6.5	7.0	6.5	5.5	6.0
27	18.0	16.0	16.5	11.0	10.5	11.0	7.0	7.0	7.0	6.0	5.5	5.5
28	18.0	16.5	17.0	11.5	10.5	11.0	7.0	5.0	6.5	6.0	5.5	5.5
29	18.0	16.5	17.0	11.5	9.5	10.5	6.0	5.0	6.0	6.5	5.5	6.0
30	18.0	16.5	17.0	9.5	9.0	9.5	6.0	5.5	6.0	6.5	5.5	5.5
31	18.0	16.0	17.0	---	---	---	6.0	5.5	6.0	5.5	4.0	4.5
MONTH	23.0	16.0	20.0	18.5	9.0	14.5	12.0	5.0	9.0	7.0	3.0	5.5

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	4.0	4.5	6.5	5.0	5.5	12.0	10.0	11.0	18.5	16.5	17.5
2	5.5	4.0	4.5	7.5	5.5	6.5	14.0	10.5	12.5	18.0	15.5	17.0
3	5.0	4.5	4.5	8.0	7.0	7.5	14.0	11.5	12.5	15.5	13.5	14.5
4	5.5	4.5	5.0	7.5	6.5	6.5	12.5	11.5	12.0	15.5	15.0	15.5
5	5.0	4.5	4.5	8.0	6.5	7.0	12.5	10.5	11.0	15.0	15.0	15.0
6	4.5	3.0	3.5	7.5	6.5	7.0	10.5	9.0	9.5	---	---	---
7	4.0	3.0	3.5	8.0	6.0	6.5	11.0	10.0	10.5	---	---	---
8	4.5	3.0	3.5	7.5	6.5	7.0	13.5	11.5	12.5	---	---	---
9	4.5	2.5	3.5	7.0	5.5	6.5	14.0	12.5	13.5	---	---	---
10	5.5	4.5	5.0	7.0	6.0	6.5	13.0	10.0	11.5	---	---	---
11	5.5	4.5	5.0	6.5	6.0	6.0	15.0	12.5	13.5	---	---	---
12	7.0	5.5	6.0	7.5	6.0	6.5	15.0	14.0	14.5	---	---	---
13	8.5	7.0	8.0	7.5	7.0	7.0	15.0	13.5	14.0	---	---	---
14	8.5	7.5	8.0	9.5	7.5	8.0	16.0	14.0	15.0	---	---	---
15	8.0	7.0	7.5	10.5	8.0	9.0	16.5	15.0	15.5	---	---	---
16	9.0	8.5	9.0	11.0	9.5	10.0	15.5	15.0	15.0	---	---	---
17	10.5	9.0	9.5	11.5	9.5	10.5	15.0	12.5	14.0	---	---	---
18	11.0	9.0	10.0	9.5	9.0	9.5	13.5	12.5	13.0	---	---	---
19	11.5	10.0	10.5	12.5	10.0	11.0	13.0	12.5	12.5	---	---	---
20	11.5	10.5	11.0	12.5	10.0	11.0	13.0	12.0	12.5	---	---	---
21	11.0	10.5	10.5	10.5	7.5	8.0	14.0	12.0	13.0	---	---	---
22	11.0	9.5	10.5	9.0	7.0	7.5	16.0	14.0	15.0	15.5	13.5	14.0
23	9.5	8.0	9.0	10.0	7.5	8.5	16.0	15.0	15.5	15.5	13.5	14.0
24	8.5	7.5	8.0	11.0	9.5	10.0	16.0	14.5	15.0	17.0	13.5	14.5
25	9.5	8.0	9.0	12.5	10.5	11.5	15.5	14.0	15.0	17.0	14.0	15.0
26	8.5	8.0	8.5	13.5	11.5	12.5	18.0	15.0	16.5	17.5	14.0	15.0
27	9.0	7.5	8.0	13.5	12.5	12.5	19.0	17.5	18.0	16.5	14.0	15.0
28	7.0	6.0	6.5	13.0	11.5	12.0	18.0	17.5	17.5	17.0	15.5	16.0
29	6.0	5.5	5.5	12.0	8.5	10.5	18.0	17.0	17.5	16.5	14.0	15.0
30	---	---	---	10.0	7.5	8.5	18.0	17.0	17.5	14.5	13.0	13.5
31	---	---	---	10.0	9.0	9.5	---	---	---	15.5	13.0	14.0
MONTH	11.5	2.5	7.0	13.5	5.0	8.5	19.0	9.0	14.0	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.0	14.0	15.0	17.0	15.5	16.0	18.5	17.0	17.5	22.0	20.5	21.0
2	16.5	14.5	15.5	20.0	17.0	18.5	20.0	18.0	19.0	22.5	21.0	22.0
3	17.5	14.5	16.0	20.5	15.5	17.0	20.5	19.5	20.0	23.0	21.5	22.0
4	17.5	15.0	16.0	18.5	15.5	16.5	21.0	19.5	20.0	22.0	21.0	21.5
5	18.5	14.5	16.0	18.5	16.0	17.0	22.0	19.5	21.0	22.5	21.0	21.5
6	18.0	14.5	15.5	19.5	16.0	17.0	24.0	22.0	22.5	23.0	21.5	22.0
7	17.0	14.5	15.5	18.5	16.0	17.0	24.0	18.0	20.0	23.0	21.5	22.0
8	17.5	14.5	15.5	18.5	17.0	18.0	20.0	17.0	18.0	23.0	22.0	22.5
9	18.5	15.5	16.5	19.0	18.0	18.5	20.0	17.5	18.5	23.5	22.0	22.5
10	20.0	17.0	18.5	21.0	18.5	19.5	19.5	17.0	17.5	24.0	22.5	23.0
11	21.0	19.0	19.5	23.0	16.5	18.5	20.0	17.0	18.0	24.5	23.0	23.5
12	20.5	15.0	16.0	20.0	16.0	17.5	20.0	18.5	19.5	25.0	23.0	23.5
13	18.5	15.0	16.5	18.5	16.0	17.0	20.5	19.5	20.0	25.0	23.0	24.0
14	18.5	15.0	16.0	18.5	16.0	17.0	20.5	17.0	18.0	25.0	23.5	24.0
15	18.0	15.0	16.0	19.5	18.0	18.5	19.5	17.0	18.0	24.5	23.0	23.5
16	18.0	15.0	16.0	19.5	17.5	18.5	19.0	17.0	17.5	23.5	22.5	23.0
17	17.5	16.5	17.0	17.5	15.5	16.0	19.0	17.0	18.0	23.5	22.0	23.0
18	20.0	17.5	19.0	18.0	16.0	17.0	20.0	17.0	18.0	23.5	22.5	23.0
19	20.0	15.5	17.0	20.5	18.5	19.5	19.5	18.0	18.5	24.0	22.5	23.0
20	18.0	15.0	16.0	23.0	20.0	21.5	20.5	19.5	20.0	24.0	22.5	23.0
21	18.0	15.5	16.0	24.5	22.0	23.0	21.0	17.5	18.5	24.0	22.5	23.0
22	17.0	15.0	16.0	24.5	19.5	21.5	20.0	18.0	19.0	24.0	23.0	23.5
23	17.0	15.0	16.0	21.5	19.5	20.5	20.5	18.0	19.0	24.0	23.0	23.5
24	18.5	17.0	18.0	23.0	16.0	18.0	20.5	18.0	19.0	23.5	23.0	23.5
25	20.0	17.5	18.5	19.5	16.0	17.5	20.5	18.5	19.0	24.5	23.0	23.5
26	19.5	15.5	16.5	19.0	17.0	18.0	21.0	18.5	19.5	23.5	22.0	23.0
27	18.5	15.5	16.5	19.5	17.0	18.0	21.0	19.0	19.5	23.0	22.0	22.5
28	18.0	15.5	16.5	18.0	16.0	17.0	20.5	19.0	19.5	23.0	21.5	22.5
29	18.5	15.5	16.5	20.0	18.0	19.0	22.0	19.5	20.0	21.5	21.0	21.0
30	18.0	15.5	16.0	21.5	19.5	20.5	21.5	20.0	20.5	21.0	19.0	20.0
31	---	---	---	21.5	16.5	18.5	22.0	20.0	21.0	---	---	---
MONTH	21.0	14.0	16.5	24.5	15.5	18.5	24.0	17.0	19.0	25.0	19.0	22.5

03497300 LITTLE RIVER ABOVE TOWNSEND, TN
(Hydrologic bench-mark station)

LOCATION.--Lat 35°39'52", long 83°42'41", Blount County, Hydrologic Unit 06010201, in Great Smoky Mountains National Park, on left bank along State Highway 73, 0.3 mi upstream from Rush Branch, 0.4 mi southeast of Park entrance, 2.2 mi southeast of Townsend, and at mile 35.3.

DRAINAGE AREA.--106 mi².

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

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 1,106.92 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--21 years, 291 ft³/s, 37.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s Mar. 16, 1973, gage height, 12.30 ft minimum, 21 ft³/s Jan. 18, 1981, gage height, 1.13 ft, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
May 6	2230	4470	6.72	May 8	unknown	*7,530	8.61

Minimum discharge, 30 ft³/s Oct. 4, 5, gage height 1.21 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	67	282	341	194	689	474	231	143	126	551	94
2	34	64	232	293	178	538	400	409	133	103	445	86
3	32	63	422	258	188	442	391	1080	124	114	350	86
4	30	109	1430	229	184	381	1110	943	119	96	303	124
5	43	109	727	227	149	548	1030	656	112	124	262	92
6	54	84	675	202	157	625	754	1500	107	155	226	82
7	38	78	499	183	138	531	587	4110	101	189	227	77
8	35	73	390	166	166	451	485	5420	107	144	216	72
9	33	68	316	156	152	383	465	2240	97	116	181	70
10	31	67	270	211	160	339	414	1220	93	104	256	68
11	32	67	430	260	218	306	368	829	87	93	844	67
12	35	65	760	213	201	278	331	636	88	145	473	65
13	282	60	653	200	566	296	303	524	96	993	363	62
14	166	56	530	189	1310	273	290	450	104	468	355	59
15	91	176	404	177	738	258	267	368	94	284	275	59
16	73	188	328	172	527	340	254	322	114	374	278	62
17	63	135	283	163	408	347	265	290	153	340	259	58
18	57	114	243	259	341	340	253	261	104	1590	215	54
19	53	106	217	272	304	323	235	241	90	800	194	54
20	52	241	196	230	299	659	236	223	84	477	171	53
21	49	273	179	198	257	1510	261	207	77	378	154	50
22	48	197	258	209	235	841	272	196	135	371	141	49
23	78	164	251	205	735	620	282	189	185	380	225	46
24	144	473	203	545	678	502	248	190	225	289	158	46
25	184	384	139	401	676	447	229	164	239	244	136	45
26	172	279	210	342	550	384	213	163	153	231	124	44
27	121	315	267	313	1150	341	231	202	122	440	116	46
28	99	869	1330	286	1480	514	237	181	111	794	115	46
29	87	569	917	260	990	1030	213	220	102	690	114	47
30	79	369	555	229	---	769	224	184	151	1060	105	49
31	72	---	418	211	---	594	---	154	---	725	99	---
TOTAL	2404	5882	14014	7600	13329	15899	11322	24003	3650	12437	7931	1912
MEAN	77.5	196	452	245	460	513	377	774	122	401	256	63.7
MAX	282	869	1430	545	1480	1510	1110	5420	239	1590	844	124
MIN	30	56	139	156	138	258	213	154	77	93	99	44
CFSM	.73	1.85	4.26	2.31	4.34	4.84	3.56	7.30	1.15	3.78	2.42	.60
IN.	.84	2.06	4.92	2.67	4.68	5.58	3.97	8.42	1.28	4.36	2.78	.67

CAL YR 1983	TOTAL	95734	MEAN	262	MAX	2190	MIN	30	CFSM	2.47	IN.	33.60
WTR YR 1984	TOTAL	120383	MEAN	329	MAX	5420	MIN	30	CFSM	3.10	IN.	42.25

TENNESSEE RIVER BASIN

03498500 LITTLE RIVER NEAR MARYVILLE, TN

LOCATION.--Lat 35°47'10", long 83°53'04", Blount County, Hydrologic Unit 06010201, on right bank on downstream side of bridge on U. S. Highway 411, 0.8 mi downstream from Crooked Creek, 5.0 mi east of Maryville, and at mile 17.3.

DRAINAGE AREA.--269 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 850.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records Good. Diurnal fluctuations at low flow caused by small mills above station. The town of Maryville diverted an average of about 2.8 ft³/s for municipal supply 300 ft upstream from gage.

AVERAGE DISCHARGE.--33 years, 536 ft³/s, 27.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft³/s Mar. 12, 1963, gage height, 24.20 ft from rating curve extended above 20,000 ft³/s on basis of area-velocity study and road overflow computations; minimum, 32 ft³/s Aug. 27, 1956; minimum gage height, 6.16 ft Aug. 11, 1980; minimum daily, 44 ft³/s Sept. 19, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1875, reached a stage of 31 ft, discharge, 50,000 ft³/s, and flood of April 1, 1896, reached a stage of 26 ft, discharge, 36,000 ft³/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 8	0630	*18500	20.48	July 18	1000	8600	14.86

Minimum discharge, 54 ft³/s Oct. 3-5, 10, 11, gage height, 6.16 ft; minimum daily 56 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	100	347	762	339	1170	732	383	297	245	819	177
2	60	95	290	490	320	915	635	889	277	181	696	164
3	57	94	571	431	314	773	609	2430	262	196	590	161
4	56	143	2310	388	329	671	1610	1980	248	172	494	212
5	62	179	1090	389	296	727	1710	1170	234	222	431	185
6	85	130	954	359	288	879	1150	3540	221	249	387	154
7	83	116	761	333	275	775	903	11600	213	487	382	144
8	69	111	590	301	267	682	759	14300	219	316	399	139
9	61	105	484	283	277	606	698	4970	204	220	353	133
10	57	105	413	330	269	547	652	2300	188	182	311	129
11	58	110	408	601	374	508	584	1510	179	162	971	128
12	63	108	1030	451	345	466	535	1130	171	335	723	127
13	195	101	887	409	595	472	496	932	180	1120	535	123
14	312	95	729	382	1960	451	471	855	182	778	544	119
15	148	141	583	359	1130	417	448	690	177	446	435	118
16	117	268	479	349	808	484	417	605	196	724	421	118
17	101	190	422	339	653	528	435	546	239	700	433	116
18	93	157	367	660	553	520	421	495	192	6180	360	110
19	87	143	333	730	492	510	389	460	164	1810	336	109
20	88	197	304	535	474	543	393	432	154	893	303	106
21	83	386	280	460	420	2380	411	404	147	699	275	104
22	80	262	446	490	387	1340	416	387	164	561	254	102
23	103	218	522	447	1430	967	439	371	266	616	365	98
24	184	514	407	587	1460	790	398	371	290	480	313	94
25	182	495	280	702	1100	706	372	332	375	414	253	93
26	237	356	420	598	883	623	349	325	239	402	232	94
27	168	326	530	540	1510	559	357	332	193	920	219	92
28	139	993	2100	489	2860	721	397	384	174	1480	216	94
29	123	725	1680	446	1830	1460	372	452	200	889	210	95
30	114	461	1050	405	---	1130	373	359	358	1350	199	100
31	108	---	1020	370	---	875	---	322	---	1010	190	---
TOTAL	3436	7424	22087	14415	22238	24195	17931	55256	6603	24439	12649	3738
MEAN	111	247	712	465	767	780	598	1782	220	788	408	125
MAX	312	993	2310	762	2860	2380	1710	14300	375	6180	971	212
MIN	56	94	280	283	267	417	349	322	147	162	190	92
CFSM	.41	.92	2.65	1.73	2.85	2.90	2.22	6.62	.82	2.93	1.52	.46
IN.	.48	1.03	3.05	1.99	3.08	3.35	2.48	7.64	.91	3.38	1.75	.52

CAL YR 1983	TOTAL	162236	MEAN	444	MAX	5790	MIN	56	CFSM	1.65	IN.	22.44
WTR YR 1984	TOTAL	214411	MEAN	586	MAX	14300	MIN	56	CFSM	2.18	IN.	29.65

03528000 CLINCH RIVER ABOVE TAZEWELL, TN

LOCATION.--Lat 36°25'30", long 83°23'54", Claiborne County, Hydrologic Unit 06010205, on right bank 0.4 mi upstream from Grissom Island, 4.6 mi downstream from Big War Creek, 10 mi east of Tazewell, and at mile 159.8.

DRAINAGE AREA.--1,474 mi².

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.

REVISED RECORDS.--WSP 803: Drainage area at site "near Tazewell". WSP 1306: Drainage area at site "near Lone Mountain". WSP 1336: 1928.

GAGE.--Water-stage recorder. Datum of gage is 1,060.7 ft National Geodetic Vertical Datum of 1929. Apr. 1, 1919 to Sept. 30, 1927, nonrecording gage on railroad bridge 23.3 mi downstream of datum 102.7 ft. lower. Aug. 8, 1927, to July 16, 1941, water-stage recorder at site 8.0 mi downstream at datum 47.2 ft lower. Water-stage recorder at present site and datum since July 29, 1935.

REMARKS.--Records good.

AVERAGE DISCHARGE.--66 years, 2,100 ft³/s, 19.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 98,100 ft³/s Apr. 5, 1977, gage height, 29.32 ft from floodmarks; minimum, 108 ft³/s Sept. 11, 1925; minimum gage height, at present site and datum, 0.33 ft Sept. 20, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1862 reached a stage of about 24 ft, present site and datum, from information by local resident; discharge, about 66,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 14,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Feb. 15	0330	18700	11.58	May 8	1600	*42000	18.32

Minimum discharge, 199 ft³/s Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	327	965	2030	1640	7820	4890	1420	2200	922	732	278
2	227	301	894	1640	1450	5460	3740	1370	1780	2040	645	262
3	221	288	1480	1390	1290	4290	3090	1950	1510	1860	598	260
4	218	288	2800	1260	1200	3650	3740	2760	1300	1340	596	276
5	218	272	4770	1070	1170	3090	8940	3180	1160	1390	553	263
6	218	261	3390	997	1160	3020	11000	3710	1030	1880	541	331
7	218	259	2930	931	1100	3840	8110	20300	934	2350	488	302
8	218	254	2400	899	990	4310	5700	39500	870	1720	487	300
9	218	248	1900	880	909	3580	4350	34900	838	1250	507	275
10	216	248	1480	888	866	3090	3620	17700	755	973	565	252
11	214	257	1210	1380	1600	2730	3200	9260	704	806	769	235
12	214	267	2270	2130	4610	2340	2970	6060	665	799	648	226
13	221	275	3800	2280	4220	2080	2670	4630	638	743	597	229
14	377	288	3470	1840	12700	1920	2430	3800	641	1030	634	238
15	411	343	2650	1550	17000	1810	2310	3160	633	1170	565	237
16	423	473	1950	1370	10600	1700	2120	2590	680	1360	493	212
17	381	645	1510	1250	6000	1710	1990	2220	734	1730	670	208
18	348	631	1210	1250	4040	1750	1920	1960	796	3520	556	206
19	314	557	1010	1530	3100	1730	1820	1770	715	2400	478	206
20	281	547	880	1350	2620	2200	1750	1620	760	1710	443	204
21	258	602	790	1030	2320	7450	1680	1500	750	1250	466	203
22	243	579	762	776	2080	10500	1740	1390	774	1020	538	203
23	270	541	808	897	2100	6480	1900	1300	715	973	540	203
24	347	603	791	1190	6610	4670	2190	1270	1180	846	446	203
25	687	766	599	3200	8510	3710	2390	1290	1480	765	378	203
26	750	1100	700	5700	8320	3300	2200	1310	881	656	352	203
27	639	1160	608	4560	6950	2950	1960	1760	696	636	340	203
28	532	1270	1110	3360	7480	3370	1780	2930	626	879	325	202
29	464	1180	3200	2640	9610	4990	1610	2870	654	1630	318	199
30	408	1080	4470	2170	---	6500	1490	3160	752	1250	308	199
31	362	---	2950	1860	---	6920	---	2940	---	908	292	---
TOTAL	10345	15910	59757	55298	132245	122960	99300	185580	27851	41806	15868	7021
MEAN	334	530	1928	1784	4560	3966	3310	5986	928	1349	512	234
MAX	750	1270	4770	5700	17000	10500	11000	39500	2200	3520	769	331
MIN	214	248	599	776	866	1700	1490	1270	626	636	292	199
CFSM	.23	.36	1.31	1.21	3.09	2.69	2.25	4.06	.63	.92	.35	.16
IN.	.26	.40	1.51	1.40	3.34	3.10	2.51	4.68	.70	1.06	.40	.18

CAL YR 1983	TOTAL	615452	MEAN	1686	MAX	11100	MIN	214	CFSM	1.14	IN.	15.53
WTR YR 1984	TOTAL	773941	MEAN	2115	MAX	39500	MIN	199	CFSM	1.43	IN.	19.53

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN

LOCATION.--Lat 36°06'52", long 83°59'16", Knox County, Hydrologic Unit 06010207, on left bank on downstream side of bridge on U. S. Highway 441, 2.1 mi downstream from Smith Branch, 4 mi northwest of Halls Crossroads, and at mile 16.3.

DRAINAGE AREA.--68.5 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 854.91 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--27 years, 102 ft³/s, 20.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,300 ft³/s Apr. 4, 1977, gage height, 13.28 ft, from rating curve extended above 5,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 2.5 ft³/s Aug. 12, 1974, caused by regulation upstream of unknown origin.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
May 3	1800	2420	9.30	May 7	0930	*10500	12.04

Minimum discharge, 5.6 ft³/s Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	11	41	99	56	255	200	124	100	138	29	14
2	5.8	11	170	94	52	192	150	471	85	65	34	13
3	5.9	11	566	67	52	149	400	1590	74	52	49	13
4	5.9	14	566	45	52	123	800	933	68	96	91	31
5	8.2	15	174	46	48	119	500	380	63	213	41	17
6	11	14	199	45	49	125	300	826	59	133	31	14
7	10	12	131	41	46	112	200	6130	56	399	28	12
8	8.4	12	90	38	46	96	130	2390	54	174	51	11
9	7.9	12	68	35	48	85	150	1040	50	104	35	10
10	8.8	12	57	56	54	79	120	504	47	74	27	10
11	9.9	14	110	99	144	73	98	356	45	59	36	9.9
12	8.7	14	160	70	205	68	87	278	43	103	27	10
13	23	13	100	62	223	79	80	240	48	67	22	9.5
14	31	13	79	56	565	77	73	223	39	81	21	9.5
15	13	34	64	54	259	66	70	170	38	51	20	9.6
16	10	38	52	55	171	76	65	145	36	45	20	9.3
17	9.2	24	45	60	131	76	66	130	34	43	19	8.7
18	9.3	20	40	96	106	74	62	119	32	130	20	9.1
19	9.4	18	38	137	90	73	57	110	33	72	25	9.0
20	9.9	39	35	108	79	287	55	102	54	50	19	8.6
21	10	78	33	103	68	1060	54	94	134	79	17	8.4
22	13	37	64	74	62	700	75	90	42	77	16	8.5
23	45	28	66	78	103	400	109	89	35	51	18	8.5
24	36	98	53	160	124	300	85	83	31	41	17	8.4
25	19	58	42	190	109	250	72	78	28	36	14	8.8
26	15	37	37	151	90	180	63	75	24	37	14	8.8
27	12	47	35	121	293	150	163	78	23	47	13	9.6
28	12	249	150	101	1050	800	183	263	22	72	25	9.9
29	11	96	237	85	466	1000	178	413	106	37	24	9.9
30	11	54	121	73	---	600	159	168	188	32	17	10
31	11	---	101	63	---	300	---	123	---	31	14	---
TOTAL	406.0	1133	3724	2562	4841	8024	4804	17815	1691	2689	834	329.0
MEAN	13.1	37.8	120	82.6	167	259	160	575	56.4	86.7	26.9	11.0
MAX	45	249	566	190	1050	1060	800	6130	188	399	91	31
MIN	5.7	11	33	35	46	66	54	75	22	31	13	8.4
CFSM	.19	.55	1.75	1.21	2.44	3.78	2.34	8.39	.82	1.27	.39	.16
IN.	.22	.62	2.02	1.39	2.63	4.36	2.61	9.67	.92	1.46	.45	.18

CAL YR 1983	TOTAL	31912.1	MEAN	87.4	MAX	1440	MIN	5.7	CFSM	1.28	IN.	17.33
WTR YR 1984	TOTAL	48852.0	MEAN	133	MAX	6130	MIN	5.7	CFSM	1.94	IN.	26.53

03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER), TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°53'07", long 84°18'03", Loudon County, Hydrologic Unit 06010201, at downstream side of Melton Hill Dam, 1.4 mi downstream from Hope Creek, and at mile 23.1.

DRAINAGE AREA.--3,343 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1936 to January 1941 (published as "near Wheat"), February 1941 to September 1960 (published as "near Scarboro"), October 1960 to September 1964 (published as "at Melton Hill Dam"), October 1967 to September 1968 (published as "near Oak Ridge"), October 1978 to current year. Equivalent record for the period October 1964 to December 1978 published in annual reports of Tennessee Valley Authority entitled "Operation of TVA Reservoirs".

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to February 1941, at site 8.7 miles downstream at datum 717.36 ft higher. February 1941 to September 1962 at site 15.9 miles upstream at datum 753.35 ft higher. October 1962 to September 1964, headwater gage at upstream side of dam at present datum. October 1967 to September 1968, at site 8.6 miles downstream at datum 731.62 ft higher.

REMARKS.--Records good. Flow regulated by Melton Hill Lake (station 03535900) and Norris Lake (station 03532500) above site.

COOPERATION.--Records furnished by Tennessee Valley Authority.

AVERAGE DISCHARGE.--35 years, (1936-64, 1967-68, 1978-84), 4,685 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 39,600 ft³/s Feb. 18, 1937; minimum daily, no flow, many days since closure of Melton Hill Dam in August 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 29,900 ft³/s May 10; minimum daily, no flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	888	2020	6850	4370	7350	5700	1950	7250	4010	5150	4230
2	2530	2100	2330	2950	4800	9380	6400	1480	6220	6340	4100	3670
3	3650	3100	2020	3240	4920	7380	2990	7950	5790	7270	5500	2980
4	3800	1670	4170	2470	4270	6480	2330	8590	7360	5940	2340	6680
5	4590	1820	4670	1830	3850	7000	7050	3440	7370	3620	2580	6940
6	2070	1790	2550	1640	6650	6770	4490	5080	6230	4950	3980	6520
7	1350	4340	2720	2120	7320	7350	4050	20700	5970	5790	4430	6790
8	433	2900	3050	2230	6490	7420	5050	22500	5020	4200	4720	5650
9	421	3220	2630	4020	2250	7050	3170	22200	4720	3080	4020	6090
10	404	2050	21	4950	50	4630	4340	29900	3130	3690	5870	5770
11	2080	854	1140	6000	21	4400	4040	29400	4920	5640	4970	7140
12	1270	567	5800	3780	2150	4450	3990	28400	5400	6700	3220	7120
13	2690	483	4070	1200	2070	4420	3440	28200	4820	5100	5680	5230
14	2140	421	3740	21	1820	3940	3150	28400	4700	4460	6290	7930
15	1580	1220	4230	0	21	2460	8020	26300	6830	3180	5020	5650
16	1720	450	4320	0	3200	2830	3280	24800	617	5630	6250	5540
17	3850	438	2080	21	1870	2350	2370	23700	704	6380	6310	7950
18	4970	1420	3470	1730	1150	2080	1170	19000	6240	3510	5170	8450
19	5120	1300	5940	3430	792	4890	1300	16000	6180	788	4440	8400
20	2850	1980	7400	5780	8420	4750	350	15000	4440	2490	5970	8540
21	1170	6100	6100	3900	7380	4730	2070	14500	5040	3280	7040	7960
22	450	4970	3740	3520	5530	6300	2630	10800	5230	1270	8540	5750
23	21	904	1450	4150	5250	4180	1700	9910	4040	6690	7720	4020
24	421	0	8090	2070	4820	3200	5230	10400	2870	6440	5040	8450
25	400	421	6600	5540	0	2690	1270	9530	5580	6000	4960	8320
26	417	0	5780	7740	21	3570	1760	6690	4970	6240	4150	6380
27	459	0	2300	2220	6370	4430	1780	5420	5780	5470	6430	6550
28	517	2650	2120	1180	4800	6200	1600	6850	5900	1620	7900	4890
29	500	2850	6740	21	12300	7520	2180	9900	5110	522	8950	2450
30	417	2820	6750	21	---	5570	2150	7620	5750	4340	9170	3130
31	488	---	7180	2220	---	5690	---	5420	---	5470	8450	---
TOTAL	54378	53726	125221	86844	112955	161460	99050	460030	154181	140110	174360	185170
MEAN	1754	1791	4039	2801	3895	5208	3302	14840	5139	4520	5625	6172
MAX	5120	1600	8090	7740	12300	9380	8020	29900	7370	7270	9170	8540
MIN	21	0	21	0	0	2080	350	1480	617	522	2340	2450

CAL YR 1983 1699201 MEAN 4655 MAX 13300 MIN 0 MEAN† 4442 CFSM† 1.33 IN† 18.00
WTR YR 1984 1807485 MEAN 4938 MAX 29900 MIN 0 MEAN† 5128 CFSM† 1.53 IN† 20.83

† Adjusted for change in contents in Norris and Melton Hill Lakes.

03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER), TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1981 to current year.
WATER TEMPERATURES: March 1981 to current year.

INSTRUMENTATION.--Water-quality monitor since March 21, 1981.

REMARKS.--Flow regulated by Melton Hill and Norris Lakes.

EXTREMES FOR PERIOD OF DAILY RECORD.--March 1981 to current year:
SPECIFIC CONDUCTANCE: Maximum, 449 micromhos Oct. 28, 1981; minimum, 186 micromhos May 29, 1982.
WATER TEMPERATURES: Maximum, 23.5°C May 17, 1982; minimum, 4.0°C Jan. 27, 1983, Jan. 21, 22, 1984.

EXTREMES FOR CURRENT YEAR:.--
SPECIFIC CONDUCTANCE: Maximum, 271 micromhos Oct. 2-6, Nov. 21; minimum, 201 micromhos Aug. 19, 22.
WATER TEMPERATURES: Maximum, 22.0°C July 25, 26, Aug. 11, 12, 14, 15; minimum, 4.0°C Jan. 21, 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC												
08...	1330	200	250	8.0	10.5	748	3.1	10.0	91	K14	22	130
JAN												
25...	1300	10000	265	8.0	5.0	745	2.7	12.5	100	K3	K5	120
MAR												
14...	1230	9600	250	8.0	7.0	753	3.1	12.1	101	K2	K4	130
MAY												
15...	1100	25000	248	7.8	11.0	749	7.0	12.0	111	110	41	120
JUL												
30...	1130	100	230	7.5	20.0	748	1.4	6.8	76	K8	K19	120
SEP												
24...	1315	5000	220	7.7	17.5	748	2.2	7.2	77	K16	47	120

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC												
08...	15	35	10	4.2	7	.2	1.5	114	2.2	18	3.8	<.10
JAN												
25...	10	32	10	4.4	7	.2	1.5	111	2.1	23	3.8	.10
MAR												
14...	20	35	10	4.4	7	.2	1.5	109	2.1	23	4.4	<.10
MAY												
15...	17	32	8.9	3.7	6	.2	1.3	100	3.1	21	3.9	<.10
JUL												
30...	15	32	8.5	3.6	6	.2	1.4	100	6.1	20	3.6	<.10
SEP												
24...	17	33	8.0	2.7	5	.1	1.4	99	3.8	19	2.9	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
08...	3.8	156	140	.21	84	.190	.010	.01	1.0	.050	.020	<.010
JAN												
25...	2.0	150	140	.20	4050	.240	.020	.03	.30	.020	.020	<.010
MAR												
14...	2.6	173	150	.24	4480	.380	.100	.13	.20	<.010	<.010	<.010
MAY												
15...	3.7	161	140	.22	10900	.660	.500	.64	3.8	<.010	<.010	<.010
JUL												
30...	4.9	145	130	.20	39	.550	<.010	--	.50	.020	<.010	<.010
SEP												
24...	5.0	140	130	.19	1890	.510	.020	.03	.60	<.010	<.010	<.010

K--Results based on non-ideal colony count.

TENNESSEE RIVER BASIN

03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER),TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)
DEC 08...	20	1	41	<.5	<1	<1	<3	3	<3	2	<4	2
JAN 25...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 14...	<10	1	38	<.5	<1	<1	<3	<1	<3	1	7	2
MAY 15...	<10	<1	46	<1	<1	7	<3	5	9	1	7	6
JUL 30...	20	1	35	<.5	<1	<1	<3	2	<3	4	<4	3
SEP 24...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 08...	<.1	<10	2	<1	<1	83	<6	3	9	4.9	75
JAN 25...	--	--	--	--	--	--	--	--	5	135	79
MAR 14...	<.1	<10	<1	<1	<1	90	<6	<3	6	156	80
MAY 15...	<.1	<10	3	<1	<1	84	<6	4	15	1010	91
JUL 30...	<.1	<10	<1	<1	7	81	<6	6	7	1.9	84
SEP 24...	--	--	--	--	--	--	--	--	7	95	69

03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER), TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	270	269	270	258	256	258	256	254	255	265	264	264
2	271	269	270	259	257	258	255	251	253	266	263	265
3	271	270	270	259	257	258	253	250	252	266	262	264
4	271	269	270	258	257	258	251	249	250	263	261	262
5	271	270	271	259	256	257	251	247	249	263	259	261
6	271	266	269	259	256	257	247	243	245	262	260	261
7	268	266	267	259	257	258	246	244	245	263	261	262
8	268	266	267	258	256	257	252	244	245	263	261	262
9	268	266	267	258	256	257	246	244	244	264	261	262
10	268	266	267	259	257	258	246	243	245	261	254	258
11	267	263	266	259	257	258	245	237	243	255	253	254
12	265	263	264	259	256	258	245	240	243	258	254	256
13	267	261	264	259	258	258	242	238	240	259	256	258
14	265	262	263	259	258	258	242	237	239	261	256	259
15	263	261	262	259	257	258	239	232	235	261	256	259
16	263	261	262	259	257	258	235	228	231	263	259	261
17	263	261	262	259	258	258	232	228	230	261	259	261
18	262	261	261	260	258	258	230	226	228	261	256	259
19	262	260	261	260	258	259	228	226	227	262	260	261
20	263	261	262	260	257	259	229	221	225	264	261	262
21	262	261	261	271	258	265	233	222	227	265	263	264
22	261	260	261	259	258	258	239	231	234	265	263	264
23	260	258	259	259	258	259	240	238	239	266	263	264
24	261	258	259	258	257	257	245	240	242	266	263	265
25	261	259	260	258	257	258	251	245	248	266	263	265
26	261	259	260	260	257	259	257	250	254	267	265	266
27	261	258	260	260	258	259	259	254	257	267	263	266
28	260	257	259	257	255	256	261	253	259	268	263	265
29	260	257	258	256	254	255	262	259	261	268	264	265
30	258	257	257	256	253	255	263	261	263	267	264	265
31	258	257	257	---	---	---	265	264	265	268	264	265
MONTH	271	257	263	271	253	258	265	221	244	268	253	262
		FEBRUARY			MARCH			APRIL			MAY	
1	266	262	264	252	246	249	234	228	230	249	247	248
2	264	262	263	254	250	252	235	230	232	249	246	248
3	264	261	263	255	253	254	238	235	236	248	245	246
4	265	262	263	254	249	251	239	233	236	249	242	247
5	265	262	263	250	242	246	239	233	236	248	245	246
6	264	260	262	242	240	241	236	233	234	247	245	246
7	265	258	261	245	241	243	236	233	234	247	245	246
8	261	257	259	247	245	246	---	---	---	---	---	---
9	260	256	258	249	246	248	---	---	---	---	---	---
10	260	257	259	251	249	250	---	---	---	---	---	---
11	259	255	257	251	248	250	---	---	---	---	---	---
12	259	256	258	252	249	250	---	---	---	---	---	---
13	259	255	258	250	248	250	---	---	---	---	---	---
14	258	255	257	251	249	250	---	---	---	---	---	---
15	256	251	254	251	248	250	---	---	---	---	---	---
16	255	254	255	250	245	249	---	---	---	249	244	246
17	255	250	253	250	247	248	---	---	---	244	243	243
18	256	252	255	249	243	246	---	---	---	244	241	243
19	255	251	253	248	246	248	---	---	---	242	241	242
20	255	254	255	249	246	248	---	---	---	241	240	240
21	258	254	256	249	246	248	---	---	---	242	240	240
22	256	254	255	249	246	247	---	---	---	242	240	241
23	257	252	255	248	245	247	---	---	---	241	239	240
24	256	251	253	250	247	249	---	---	---	243	239	240
25	254	252	253	252	247	249	---	---	---	242	240	241
26	254	249	252	251	248	250	---	---	---	244	240	242
27	253	245	248	251	248	249	250	247	249	246	243	245
28	247	245	246	250	244	247	249	247	248	246	244	245
29	246	244	245	246	239	243	249	247	248	246	243	245
30	---	---	---	240	233	237	249	247	248	245	242	243
31	---	---	---	236	228	232	---	---	---	245	243	244
MONTH	266	244	256	255	228	247	---	---	---	---	---	---

03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER), TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	245	242	243	243	241	242	235	207	228	214	212	213
2	244	242	243	244	241	243	232	226	228	213	212	213
3	244	239	241	243	239	242	230	226	228	213	211	212
4	241	235	237	242	239	240	230	226	229	213	211	212
5	238	235	237	242	239	241	230	226	227	214	213	213
6	240	237	239	241	239	240	228	225	227	214	213	214
7	240	237	238	242	239	241	229	225	227	215	213	214
8	241	238	239	243	235	239	227	225	226	216	214	215
9	243	239	240	239	237	237	228	204	221	216	214	215
10	241	238	239	239	236	237	228	224	225	217	215	216
11	241	235	240	239	235	237	226	222	224	216	215	216
12	243	239	240	237	233	235	227	203	222	217	215	216
13	242	239	240	236	233	235	225	221	222	217	216	216
14	241	238	239	240	235	236	224	221	222	217	216	217
15	239	238	239	242	236	238	222	214	219	218	217	217
16	242	239	241	238	236	237	222	214	219	219	217	218
17	242	240	241	241	236	238	222	214	217	218	217	218
18	248	242	243	237	234	236	221	211	216	219	218	218
19	244	242	243	236	235	236	221	201	215	220	218	219
20	246	242	243	239	231	234	218	211	214	220	219	219
21	244	243	243	238	212	232	218	210	212	220	219	220
22	244	242	243	239	212	232	215	201	213	221	220	220
23	244	242	243	238	230	234	214	212	213	221	219	220
24	245	242	244	235	229	232	214	212	213	221	220	220
25	245	242	244	235	209	230	214	213	213	222	220	221
26	244	242	243	231	209	218	214	212	213	222	221	222
27	244	243	243	236	208	229	213	211	212	224	222	223
28	244	242	243	236	210	231	213	211	212	225	223	224
29	243	240	241	239	234	236	213	211	212	226	224	225
30	243	240	241	235	227	232	213	211	212	225	223	224
31	---	---	---	235	227	230	213	212	213	---	---	---
MONTH	248	235	241	244	208	235	235	201	219	226	211	218

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.0	19.5	19.5	18.0	17.0	17.5	12.0	11.5	12.0	5.5	5.0	5.5
2	19.5	19.0	19.0	18.0	17.0	17.5	11.5	11.5	11.5	6.0	5.5	5.5
3	19.5	19.0	19.0	17.5	17.0	17.5	11.5	11.5	11.5	6.5	5.5	6.0
4	19.5	19.0	19.0	17.5	17.0	17.0	11.5	11.5	11.5	7.0	5.5	6.0
5	19.5	19.0	19.0	17.5	16.0	16.5	11.5	11.0	11.5	7.5	6.0	6.5
6	20.0	19.0	19.5	17.5	16.0	16.5	11.5	11.0	11.5	7.0	6.0	6.5
7	20.0	19.5	19.5	16.5	16.0	16.5	11.5	10.5	11.0	7.0	6.0	6.5
8	20.0	19.5	20.0	17.0	16.0	16.5	11.0	10.0	11.0	7.0	5.5	6.5
9	20.5	19.5	20.0	17.0	16.0	16.5	11.5	10.0	10.5	7.0	6.0	6.5
10	20.0	19.0	19.5	16.5	15.5	16.0	12.5	11.0	11.5	7.0	6.0	6.5
11	20.0	19.5	19.5	16.0	15.0	15.5	11.0	10.5	11.0	6.5	6.0	6.0
12	20.0	19.5	19.5	15.5	14.5	15.0	11.0	10.5	10.5	6.5	5.5	6.0
13	20.0	19.0	19.5	15.5	14.5	15.0	11.0	10.5	10.5	7.0	5.5	6.0
14	19.5	18.5	19.0	15.0	14.0	14.5	11.0	10.0	10.5	7.0	6.0	6.5
15	19.5	19.0	19.5	15.0	14.5	14.5	10.0	9.5	10.0	7.5	6.0	6.0
16	19.5	19.0	19.0	14.5	14.0	14.0	10.0	9.5	9.5	7.0	5.5	6.0
17	19.5	19.0	19.0	14.5	13.5	14.0	10.0	9.5	9.5	6.5	6.0	6.0
18	19.0	19.0	19.0	14.5	13.0	14.0	10.0	9.0	9.5	7.0	5.5	6.0
19	19.0	19.0	19.0	14.0	13.5	14.0	9.5	8.5	9.0	5.5	5.0	5.5
20	19.0	19.0	19.0	14.0	13.5	14.0	9.0	8.5	9.0	5.5	4.5	5.0
21	19.0	18.5	19.0	13.5	13.0	13.5	9.5	8.5	9.0	5.5	4.0	5.0
22	18.5	18.5	18.5	13.5	13.0	13.5	9.5	8.5	9.0	5.5	4.0	5.0
23	18.5	18.5	18.5	13.5	13.0	13.0	9.0	8.0	8.5	6.0	4.5	5.0
24	18.5	18.0	18.0	13.5	12.5	13.0	8.0	7.5	8.0	6.0	5.0	5.0
25	18.0	17.5	18.0	13.0	12.0	12.5	7.5	6.5	7.0	7.0	5.0	5.5
26	18.5	17.0	17.5	13.0	11.5	12.5	7.0	6.0	6.5	5.5	5.0	5.5
27	18.5	17.0	17.5	12.0	11.5	12.0	7.0	6.0	6.5	6.5	5.5	6.0
28	18.0	17.0	17.5	12.5	12.0	12.5	7.5	6.0	6.5	7.0	5.5	6.0
29	18.0	17.0	17.5	12.5	11.5	12.0	7.0	5.5	6.0	6.5	6.0	6.0
30	18.0	17.0	17.5	12.0	11.5	12.0	5.5	5.0	5.5	7.0	5.5	6.5
31	18.0	17.0	17.5	---	---	---	5.5	5.0	5.5	6.5	5.5	6.0
MONTH	20.5	17.0	19.0	18.0	11.5	14.5	12.5	5.0	9.5	7.5	4.0	6.0

TENNESSEE RIVER BASIN

03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER), TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.5	5.5	6.0	8.5	8.0	8.0	11.5	10.5	11.0	14.5	13.5	14.0
2	6.5	5.5	6.0	8.0	7.5	8.0	11.5	10.5	11.0	14.5	14.0	14.0
3	7.0	5.5	6.0	8.0	7.0	7.5	11.0	10.5	11.0	15.0	14.0	14.5
4	6.5	5.5	6.0	7.5	7.0	7.0	12.0	10.5	11.0	15.0	14.5	14.5
5	6.5	6.0	6.0	8.0	6.5	7.0	10.5	10.0	10.5	15.0	14.5	15.0
6	6.0	5.5	6.0	7.0	6.5	6.5	11.5	10.5	11.0	15.5	15.0	15.0
7	7.0	5.5	6.5	7.0	6.5	6.5	11.5	10.5	11.0	15.5	15.5	15.5
8	7.0	6.0	6.5	7.0	6.0	7.0	---	---	---	---	---	---
9	8.5	6.5	7.0	7.5	6.5	7.0	---	---	---	---	---	---
10	7.5	6.5	7.0	7.0	6.5	7.0	---	---	---	---	---	---
11	8.0	7.0	7.5	7.5	6.5	7.0	---	---	---	---	---	---
12	8.0	7.0	7.5	7.0	6.5	7.0	---	---	---	---	---	---
13	8.0	7.0	7.5	7.5	7.0	7.0	---	---	---	---	---	---
14	8.5	7.0	7.5	8.0	6.5	7.0	---	---	---	---	---	---
15	8.5	7.5	8.0	8.5	6.5	7.5	---	---	---	---	---	---
16	8.0	7.5	8.0	8.5	6.5	7.5	---	---	---	12.5	11.5	12.0
17	9.5	7.0	8.0	8.5	7.0	7.5	---	---	---	13.0	12.5	13.0
18	8.5	7.0	7.5	9.5	7.5	8.0	---	---	---	14.0	13.0	13.5
19	9.0	7.5	8.5	8.5	7.5	8.0	---	---	---	14.5	13.5	14.0
20	8.0	7.0	7.5	8.5	7.5	8.0	---	---	---	15.0	14.5	14.5
21	8.5	8.0	8.5	8.0	7.0	7.5	---	---	---	15.5	15.0	15.0
22	10.0	8.0	9.0	9.0	8.0	8.5	---	---	---	15.5	15.0	15.5
23	9.5	9.0	9.0	10.0	8.5	9.5	---	---	---	15.5	15.5	15.5
24	10.5	9.0	10.0	10.5	9.5	10.0	---	---	---	15.5	15.5	15.5
25	10.0	9.5	9.5	11.0	10.0	10.5	---	---	---	15.5	15.0	15.0
26	9.5	9.0	9.5	11.0	10.0	10.5	---	---	---	15.0	14.5	15.0
27	10.5	9.0	10.0	11.5	10.5	11.0	13.0	13.0	13.0	15.0	14.5	14.5
28	10.0	9.5	10.0	11.5	11.0	11.0	13.5	13.0	13.5	14.5	14.0	14.5
29	9.5	8.5	9.5	11.0	10.5	11.0	14.0	13.5	13.5	15.5	14.0	14.5
30	---	---	---	11.5	11.0	11.0	14.5	13.5	14.0	15.5	15.0	15.5
31	---	---	---	11.5	11.0	11.0	---	---	---	15.0	14.5	15.0
MONTH	10.5	5.5	8.0	11.5	6.0	8.5	---	---	---	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.5	14.5	15.0	19.0	18.5	18.5	21.0	19.5	20.5	20.0	19.5	19.5
2	15.0	15.0	15.0	19.0	18.0	18.5	20.5	20.0	20.0	19.5	19.0	19.0
3	15.5	15.0	15.0	19.0	18.5	19.0	20.5	20.0	20.0	19.5	18.5	19.0
4	15.5	15.0	15.5	19.0	18.5	19.0	21.0	20.0	20.5	19.0	18.5	19.0
5	16.0	15.0	15.5	19.0	18.0	18.5	20.5	19.5	20.0	19.5	19.0	19.0
6	16.0	15.5	16.0	18.5	18.0	18.5	20.0	19.5	20.0	19.5	19.0	19.5
7	16.5	16.0	16.5	19.0	18.5	18.5	20.0	19.5	20.0	19.5	19.0	19.5
8	17.0	16.0	16.5	19.5	18.5	19.0	20.5	20.0	20.0	20.0	19.0	19.5
9	17.0	16.5	16.5	19.5	19.0	19.0	21.0	20.0	20.5	19.5	19.0	19.5
10	17.0	16.5	17.0	19.5	19.0	19.0	21.5	20.5	21.0	19.5	19.0	19.5
11	17.5	17.0	17.0	19.5	19.0	19.0	22.0	20.0	21.0	19.5	19.0	19.0
12	17.5	17.0	17.5	20.5	19.0	19.5	22.0	20.0	21.0	19.5	19.0	19.5
13	18.0	17.0	17.5	20.5	20.0	20.5	21.5	20.0	21.5	19.5	19.5	19.5
14	18.5	17.5	18.0	20.5	20.0	20.5	22.0	21.0	21.5	19.5	19.0	19.5
15	18.5	18.0	18.0	20.5	19.5	20.0	22.0	20.0	21.5	20.0	19.0	19.5
16	19.0	18.0	18.5	20.0	19.5	19.5	21.5	21.0	21.5	19.5	19.0	19.5
17	19.5	17.5	18.5	20.0	19.5	20.0	21.5	20.0	21.0	19.5	19.0	19.0
18	19.0	17.5	18.0	20.5	19.5	20.0	21.5	20.0	21.0	19.0	18.5	19.0
19	19.0	17.5	18.0	20.5	20.0	20.5	21.0	20.0	20.5	18.5	18.5	18.5
20	19.0	18.5	19.0	20.5	19.0	19.5	21.0	20.0	20.5	18.5	18.5	18.5
21	19.5	19.0	19.5	20.5	19.0	19.5	21.0	20.0	20.5	18.5	18.0	18.5
22	20.0	19.0	19.5	21.5	20.0	20.5	20.5	20.0	20.0	18.5	18.0	18.0
23	19.5	18.5	19.0	21.5	19.5	20.5	20.5	20.0	20.5	18.0	18.0	18.0
24	19.0	18.5	18.5	21.5	20.5	21.0	21.0	20.5	20.5	18.0	17.5	18.0
25	19.5	18.5	18.5	22.0	20.5	21.5	20.5	20.0	20.5	18.5	18.0	18.5
26	19.0	18.5	18.5	22.0	20.0	21.0	20.5	19.5	20.0	19.0	18.5	18.5
27	18.5	18.0	18.5	21.0	20.0	21.0	20.0	19.5	19.5	18.5	18.5	18.5
28	18.5	18.0	18.0	21.0	20.0	20.5	19.5	19.5	19.5	18.5	18.5	18.5
29	19.0	18.0	18.5	21.0	20.0	20.5	20.0	19.5	19.5	18.5	18.0	18.0
30	19.0	18.0	18.5	20.5	20.0	20.0	20.0	19.5	19.5	18.0	18.0	18.0
31	---	---	---	21.0	20.0	20.0	20.0	19.5	20.0	---	---	---
MONTH	20.0	14.5	17.5	22.0	18.0	20.0	22.0	19.5	20.5	20.0	17.5	19.0

03538225 POPLAR CREEK NEAR OAK RIDGE, TN

LOCATION.--Lat 35°59'55", long 84°20'23", Roane County, Hydrologic Unit 06010207, on right bank, 1,000 ft upstream from county road bridge, 0.4 mi downstream from Indian Creek, 8.2 mi southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 13.8.

DRAINAGE AREA.--82.5 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 743.50 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--24 years, 176 ft³/s, 28.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s Apr. 5, 1977, gage height, 27.93 ft from floodmarks, from rating curve extended above 8,000 ft³/s; minimum, 4.0 ft³/s Oct. 14, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1928, at site about 5.0 mi upstream, drainage area, 55.9 mi², discharge, about 14,000 ft³/s was the greatest known since at least 1900, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	0930	1870	13.91	May 8	0100	*4910	20.24
May 3	2130	2240	15.03				

Minimum discharge, 4.4 ft³/s Sept. 27, 28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	14	120	187	128	270	250	134	158	49	51	12
2	5.3	13	166	162	116	227	200	600	127	31	45	11
3	5.3	13	1560	142	112	199	400	1870	105	25	38	11
4	5.1	30	1400	126	110	175	800	1370	90	51	37	13
5	8.3	25	527	122	100	175	500	561	77	268	33	11
6	8.2	21	385	117	97	190	350	987	67	203	28	9.3
7	6.7	19	296	106	82	180	200	3650	61	500	26	9.0
8	5.8	18	223	94	77	170	150	4270	56	197	25	8.8
9	6.1	16	178	87	79	160	160	1660	51	107	37	8.2
10	6.0	17	149	105	86	150	150	648	46	74	27	9.2
11	6.0	20	291	163	135	140	140	435	43	58	25	8.0
12	6.2	22	540	130	174	130	120	320	40	113	24	7.8
13	57	22	334	124	343	160	110	260	37	66	21	6.9
14	50	21	293	119	1220	140	100	235	36	61	19	6.9
15	17	72	290	112	490	119	90	187	54	43	17	6.7
16	11	79	234	114	318	162	80	163	36	47	25	6.5
17	9.8	43	190	115	251	179	70	143	34	46	38	6.9
18	8.4	32	161	156	206	217	75	129	31	208	22	6.5
19	7.9	26	141	197	184	215	79	119	49	110	20	6.4
20	7.9	60	124	162	171	360	75	111	59	71	17	6.8
21	8.4	132	111	144	145	1090	78	103	46	54	16	6.4
22	11	67	198	140	131	643	143	99	45	46	14	6.4
23	109	50	222	123	156	419	206	110	41	41	15	6.1
24	67	216	189	559	162	312	167	105	30	34	15	5.8
25	31	128	154	625	155	263	136	86	25	49	14	6.1
26	21	73	140	369	136	216	114	81	22	52	13	5.5
27	18	107	127	274	287	186	111	80	20	175	13	4.6
28	16	818	449	222	466	816	107	872	19	87	12	4.7
29	15	312	619	191	367	1030	105	570	48	57	13	4.7
30	14	166	324	165	---	600	156	287	53	60	12	4.9
31	14	---	223	143	---	350	---	203	---	53	11	---
TOTAL	567.5	2652	10358	5595	6484	9643	5422	20448	1606	3036	723	227.1
MEAN	18.3	88.4	334	180	224	311	181	660	53.5	97.9	23.3	7.57
MAX	109	818	1560	625	1220	1090	800	4270	158	500	51	13
MIN	5.1	13	111	87	77	119	70	80	19	25	11	4.6
CFSM	.22	1.07	4.05	2.18	2.72	3.77	2.19	8.00	.65	1.19	.28	.09
IN.	.26	1.20	4.67	2.52	2.92	4.35	2.44	9.22	.72	1.37	.33	.10

CAL YR 1983	TOTAL	58110.2	MEAN	159	MAX	3820	MIN	5.0	CFSM	1.93	IN.	26.20
WTR YR 1984	TOTAL	66761.6	MEAN	182	MAX	4270	MIN	4.6	CFSM	2.21	IN.	30.10

TENNESSEE RIVER BASIN

03538250 EAST FORK POPLAR CREEK NEAR OAK RIDGE, TN

LOCATION.--Lat 35°57'58", long 84°21'30", Roane County, Hydrologic Unit 06010207, near left bank, on upstream side of county road bridge, 0.3 mi north of State Highway 95, 1.7 mi upstream from Bear Creek, 5.8 mi southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 3.3.

DRAINAGE AREA.--19.5 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 754.16 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow includes effect of operations of the Department of Energy's Y-12 Plant, which may add up to 20 ft³/s, and the west end sewage treatment plant of the City of Oak Ridge, which may add up to 10 ft³/s.

AVERAGE DISCHARGE.--24 years, 51.9 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft³/s Nov. 28, 1973, gage height, 16.0 ft from floodmarks, backwater from low steel on bridge, on basis of runoff comparison with nearby stations; minimum daily, 12 ft³/s July 1, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1944, the greatest known since 1900, reached a discharge of about 4,600 ft³/s at site 5.1 mi upstream, from report of the Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
May 3	1415	959	7.55	May 8	0245	*1310	9.05
May 7	0200	1120	8.25				

Minimum daily discharge, 17 ft³/s several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	21	35	46	37	61	59	41	30	31	31	17
2	19	21	58	43	35	54	52	219	29	25	28	17
3	19	21	242	40	36	47	55	482	27	24	27	29
4	20	56	283	39	33	43	194	177	26	33	52	36
5	33	26	96	38	31	46	121	103	26	136	27	20
6	23	23	113	36	32	47	85	344	26	60	26	19
7	21	22	72	34	32	41	67	971	28	143	25	19
8	20	22	57	31	30	38	57	668	25	47	25	18
9	19	21	48	30	30	37	57	173	24	37	24	17
10	19	23	41	47	33	34	50	106	23	32	25	17
11	20	24	100	53	39	33	45	80	22	30	27	19
12	23	22	104	42	34	32	42	66	23	86	22	22
13	77	21	75	40	76	41	40	68	23	35	22	19
14	26	21	71	37	171	36	38	64	32	30	22	18
15	23	64	61	36	82	33	35	50	37	27	21	18
16	20	31	50	38	65	46	37	45	24	33	27	17
17	20	27	43	37	55	39	37	41	22	29	24	17
18	20	24	38	77	47	42	34	40	21	103	24	17
19	20	22	36	71	43	39	33	36	31	41	21	17
20	20	57	34	56	41	95	32	33	44	33	20	17
21	21	44	33	49	38	183	36	34	34	30	21	18
22	24	28	67	43	36	104	68	33	28	28	21	17
23	101	27	49	41	50	75	58	37	30	33	23	17
24	33	94	40	115	41	62	46	32	25	27	20	17
25	25	37	37	88	38	56	41	30	23	31	19	19
26	23	30	35	69	33	49	38	28	22	31	18	18
27	22	58	34	60	113	46	43	27	22	74	19	18
28	22	193	164	52	111	277	39	61	22	36	20	19
29	21	62	103	46	76	145	41	68	43	30	20	18
30	21	43	67	42	---	89	51	36	52	28	19	18
31	21	---	54	39	---	69	---	33	---	29	19	---
TOTAL	815	1185	2340	1515	1518	2039	1631	4226	844	1392	739	569
MEAN	26.3	39.5	75.5	48.9	52.3	65.8	54.4	136	28.1	44.9	23.8	19.0
MAX	101	193	283	115	171	277	194	971	52	143	52	36
MIN	19	21	33	30	30	32	32	27	21	24	18	17

CAL YR 1983	TOTAL	17554	MEAN	48.1	MAX	500	MIN	19
WTR YR 1984	TOTAL	18813	MEAN	51.4	MAX	971	MIN	17

03539800 OBED RIVER NEAR LANCING, TN

LOCATION.--Lat 36°04'53", long 84°40'15", Morgan County, Hydrologic Unit 06010208, on left bank at Alley Ford, 2.9 mi southwest of Lancing, 3.0 mi downstream from Clear Creek, and at mile 1.5.

DRAINAGE AREA.--518 mi².

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--23 years (water years 1957-68, 1974-84), 1,071 ft³/s, 28.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105,000 ft³/s, May 27, 1973, gage height, 29.51 ft, dross line in gage well, 30.5 ft, from floodmarks, from rating curve extended above 33,000 ft³/s on basis of slope conveyance study at gage height, 22.40 ft, and slope-area measurement of peak flow; minimum, 0.4 ft³/s Oct. 31, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 23, 1929, reached a stage of 33.9 ft, 35 ft downstream from gage, from high water marks by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 13,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 3	0400	14000	11.54	May 7	1445	*45200	20.62
May 3	1545	16400	12.50				

Minimum discharge, .88 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	13	1270	1200	800	1770	1940	2800	268	161	1300	54
2	1.0	12	1900	1000	700	1540	1510	4470	214	151	1120	56
3	1.1	12	11500	800	650	1310	1460	12600	174	156	815	51
4	1.1	15	9360	671	600	1110	4250	8560	144	134	587	43
5	2.2	26	4870	619	550	1030	5480	4790	122	172	470	37
6	2.5	32	3480	598	500	1150	3480	8620	103	398	406	32
7	2.5	45	3060	568	450	1160	2500	33300	92	3430	328	37
8	2.2	39	1980	504	400	992	1860	24000	80	2820	581	38
9	2.0	36	1440	457	450	836	1510	8330	68	1020	442	36
10	1.6	31	1100	480	500	689	1320	4230	59	511	391	34
11	1.6	27	1400	1200	900	606	1070	2700	53	323	368	35
12	1.8	24	3200	1300	1500	531	864	1840	48	408	286	34
13	15	22	2390	1200	4000	626	721	1390	46	1130	215	31
14	52	20	2030	1100	8000	1060	607	1480	67	763	168	29
15	45	28	2110	1050	3500	918	503	1110	60	428	134	28
16	33	261	1690	1000	2610	1160	437	826	55	470	231	25
17	27	248	1310	950	1930	2120	445	639	51	467	280	21
18	23	174	1030	900	1530	2180	462	498	45	1880	193	18
19	19	142	797	950	1250	1900	402	404	41	1760	145	16
20	15	136	664	900	1050	3280	365	332	50	881	116	15
21	13	447	566	800	865	8900	364	275	134	523	93	14
22	11	422	768	700	711	5600	507	235	228	355	78	14
23	14	288	1550	800	610	3530	1920	224	1000	274	80	17
24	16	805	1280	4000	540	2480	1480	252	553	225	94	15
25	14	1030	900	4500	522	1990	1140	233	275	175	98	14
26	13	601	800	3000	482	1660	873	186	176	149	77	13
27	14	513	900	2000	979	1380	761	167	123	163	62	13
28	15	13800	3500	1600	2710	5780	1280	201	93	776	58	12
29	18	5940	4950	1300	2320	8650	1960	511	75	522	68	12
30	17	2360	2000	1000	---	4320	4240	491	75	645	71	13
31	14	---	1500	900	---	2670	---	348	---	1190	59	---
TOTAL	408.48	27549	75295	38047	41609	72928	45711	126042	4572	22460	9414	807
MEAN	13.2	918	2429	1227	1435	2353	1524	4066	152	725	304	26.9
MAX	52	13800	11500	4500	8000	8900	5480	33300	1000	3430	1300	56
MIN	.88	12	566	457	400	531	364	167	41	134	58	12
CFSM	.03	1.77	4.69	2.37	2.77	4.54	2.94	7.85	.29	1.40	.59	.05
IN.	.03	1.98	5.41	2.73	2.99	5.24	3.28	9.05	.33	1.61	.68	.06

CAL YR 1983	TOTAL 391782.88	MEAN	1073	MAX	20300	MIN	.88	CFSM	2.07	IN.	28.14
WTR YR 1984	TOTAL 464842.48	MEAN	1270	MAX	33300	MIN	.88	CFSM	2.45	IN.	33.38

TENNESSEE RIVER BASIN

03540500 EMORY RIVER AT OAKDALE, TN

LOCATION.--Lat 35°58'59", long 84°33'29", Morgan County, Hydrologic Unit 06010208, on left bank, at Oakdale, 1,000 ft downstream from highway bridge, 1,100 ft downstream from Mud Lick Creek, and at mile 18.3.

DRAINAGE AREA.--764 mi².

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.

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

GAGE.--Water-stage recorder. Datum of gage is 761.38 ft National Geodetic Vertical Datum of 1929. Prior to Oct 1, 1929, nonrecording gage at site 5.8 mi downstream at datum 43.60 ft lower, and Oct. 1, 1929, to Dec. 29, 1969, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--57 years, 1,473 ft³/s, 26.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 195,000 ft³/s Mar. 23, 1929, gage height, 41.2 ft, present site and datum, 61.1 ft, site and datum then in use, from floodmarks and flood profile, from rating curve extended above 85,000 ft³/s, confirmed by slope-area measurement of May 28, 1973, flood at gage height 38.68 ft; no flow at times in 1944, 1952-53.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1857, that of Mar. 23, 1929, from report of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 19,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Nov. 28	0830	32000	20.35	May 3	1630	22600	17.66
Dec. 3	0530	22200	17.53	May 7	1530	*65100	26.99
Mar. 21	0300	19300	16.50				

Minimum discharge, 4.1 ft³/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	37	1830	1820	1210	2390	2680	3810	560	226	2430	89
2	4.7	33	2060	1450	1090	2040	2070	7000	438	267	2190	83
3	4.4	31	17600	1190	948	1780	1900	18400	351	238	1510	81
4	4.3	50	13500	1070	900	1540	6120	11800	284	385	1980	80
5	4.2	52	6690	1010	832	1440	7790	6340	235	1020	1440	74
6	4.5	68	4350	984	784	1540	4760	12000	194	1480	1070	62
7	5.0	75	3890	937	659	1580	3370	47700	163	4460	793	55
8	5.6	81	2570	837	552	1440	2530	32700	144	3880	977	55
9	6.2	75	1900	785	618	1280	2040	11300	118	1570	1080	56
10	6.2	71	1500	837	656	1120	1790	5670	100	915	991	55
11	5.9	66	1870	1520	1220	1010	1500	3600	88	613	1070	52
12	5.9	60	4990	1590	2570	917	1280	2480	78	497	773	64
13	75	56	3460	1460	3520	961	1120	1880	71	1190	549	55
14	220	56	2780	1380	11400	1410	981	1950	66	1220	401	49
15	129	96	2750	1280	5830	1330	859	1540	88	723	305	44
16	92	427	2310	1220	3580	1530	767	1230	80	757	390	41
17	70	483	1800	1190	2620	2670	746	1010	134	877	505	36
18	60	338	1480	1160	2050	2820	756	837	112	2170	369	29
19	49	266	1210	1220	1710	2530	697	708	86	2280	272	23
20	41	296	1050	1040	1450	5070	641	605	74	1270	213	19
21	32	781	917	920	1260	14400	632	509	157	841	171	16
22	31	775	1170	790	1100	7870	1000	440	354	611	141	14
23	45	586	2160	903	975	4960	2890	416	929	471	129	13
24	115	1550	1860	5620	896	3460	2250	445	813	374	129	13
25	94	1500	1240	8560	850	2810	1720	425	447	291	151	19
26	73	963	987	4740	806	2340	1400	419	280	240	130	17
27	64	1250	1040	3210	1120	1940	1230	595	189	367	103	13
28	54	20400	4670	2520	3360	8370	1820	500	137	929	190	11
29	48	7370	7610	2110	3120	12300	3150	1030	198	992	144	9.4
30	47	2980	9480	1740	---	6080	5260	985	203	1970	119	8.6
31	43	---	7810	1390	---	3690	---	722	---	1650	103	---
TOTAL	1443.9	40872	118534	56483	57686	104618	65749	179046	7171	34774	20818	1236.0
MEAN	46.6	1362	3824	1822	1989	3375	2192	5776	239	1122	672	41.2
MAX	220	20400	17600	8560	11400	14400	7790	47700	929	4460	2430	89
MIN	4.2	31	917	785	552	917	632	416	66	226	103	8.6
CFSM	.06	1.78	5.01	2.38	2.60	4.42	2.87	7.56	.31	1.47	.88	.05
IN.	.07	1.99	5.77	2.75	2.81	5.09	3.20	8.72	.35	1.69	1.01	.06

CAL YR 1983	TOTAL	597164.0	MEAN	1636	MAX	31600	MIN	4.2	CFSM	2.14	IN.	29.08
WTR YR 1984	TOTAL	688430.9	MEAN	1881	MAX	47700	MIN	4.2	CFSM	2.46	IN.	33.52

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°37'13", long 84°47'00", Rhea County, Hydrologic Unit 06020001, on right bank in powerhouse at Watts Bar Dam, 6.5 mi southeast of Spring City, and at mile 529.9.

DRAINAGE AREA.--17,310 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1934 to February 1940 (published as "at Breedenton"), October 1974 to current year. 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 National Geodetic Vertical Datum of 1929. Prior to March 1940 at site 6.7 mi downstream at datum 666.22 ft higher.

REMARKS.--Flow regulated since 1936 by many reservoirs above station (see p.177 and Water Resources Data for North Carolina).

COOPERATION.--Records furnished by Tennessee Valley Authority.

AVERAGE DISCHARGE.--15 years (water years 1935-39, 1975-84), 29,060 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 208,000 ft³/s May 8, 1984; minimum daily, 4,200 ft³/s Jan. 29, 30, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 208,000 ft³/s May 8; minimum daily, 8,170 ft³/s Apr. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11100	17300	28000	43800	29000	42200	24200	20700	33600	25800	35800	31900
2	13200	14500	29900	37300	34000	44100	28200	15700	25500	26800	35300	33600
3	13100	16700	39800	29500	27400	45100	19900	37400	25500	23400	34200	35400
4	14200	18000	47100	35900	29100	45300	19200	51800	32800	21400	27300	35500
5	19200	13900	47300	34800	19600	38300	25600	58600	34800	21400	32700	32300
6	18500	12800	43900	30800	24100	36000	30500	57000	35400	31200	34000	32500
7	18000	22400	40700	26800	23400	38400	29100	138000	26100	34200	34600	32000
8	11500	25800	40700	18100	16900	33300	29400	208000	23800	33800	29500	35700
9	10700	25800	36800	30200	16500	33000	19500	176000	22400	32000	27600	32600
10	14900	27000	37300	23300	16500	31800	19500	147000	19000	23100	31600	32200
11	15000	23700	35800	21700	17200	24800	16400	138000	18900	12500	32500	32500
12	15700	20600	36500	31600	17300	25200	13300	131000	20900	23100	32700	31700
13	15800	9250	40200	30300	17200	26700	8770	110000	20600	26700	32700	31900
14	20800	22100	43000	22600	30600	23100	8170	90200	21500	33200	32600	33500
15	18000	24400	39400	13400	40400	25700	8620	89800	19600	31500	33300	33900
16	11800	23800	32700	20700	44600	22000	13900	84900	17900	33000	33500	35000
17	15200	25600	32100	23900	45000	21300	10400	74700	23600	29200	26100	35000
18	15300	21600	37300	26600	36700	26700	10900	58800	24500	33600	30600	35200
19	19800	14600	37000	31000	31300	28500	11200	45800	24700	35600	32100	35200
20	21700	13000	37300	32800	36200	25600	9650	44000	24000	35700	33700	35100
21	14400	22400	36900	34400	34000	25800	11700	39900	24100	29800	34600	35000
22	9200	27200	37000	34400	27900	43500	13400	38600	22900	26400	34800	34100
23	9030	25800	37100	20900	29300	44800	18000	37800	22400	26900	31100	30600
24	9020	12700	39500	27300	29600	44800	17000	40200	27700	33300	29900	28600
25	8930	19500	44200	23400	33000	33700	14700	37300	21600	33000	34600	29600
26	8920	22400	44100	31200	32400	25800	16500	38100	27400	31000	34100	23400
27	14600	14500	41200	26100	37900	24000	16400	24000	27200	33500	34000	23100
28	14800	27800	39800	21000	45800	26900	12300	24900	26400	35400	33800	20000
29	9290	27900	46000	22000	42600	38300	22800	37200	25800	35000	33100	21900
30	9170	27800	50000	21700	---	28000	19300	37200	25900	35000	32500	9760
31	14300	---	49900	31800	---	27500	---	33600	---	35700	32800	---
TOTAL	435160	620850	1228500	859300	865500	1000200	518510	2166200	746500	922200	1007700	928760
MEAN	14040	20700	39630	27720	29840	32260	17280	69880	24880	29750	32510	30960
MAX	21700	27900	50000	43800	45800	45300	30500	208000	35400	35700	35800	35700
MIN	8920	9250	28000	13400	16500	21300	8170	15700	17900	12500	26100	9760

CAL YR 1983 TOTAL 10432210 MEAN 28580 MAX 84600 MIN 8900
WTR YR 1984 TOTAL 11299380 MEAN 30870 MAX 208000 MIN 8170

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1976 to September 1981.
WATER TEMPERATURE: February 1976 to September 1981.

REMARKS.--Flow regulated by many reservoirs above station (see p. 177 and Water Resources Data for North Carolina).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 270 micromhos July 27, 1978, and July 6, 1981; minimum, 88 micromhos June 14, 1979.
WATER TEMPERATURE: Maximum, 31.5°C Aug. 22, 1980; minimum, 2.0°C Jan. 23, 29, 1977, Feb. 7-10, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC												
14...	1300	43000	158	7.9	10.0	732	3.9	9.6	89	23	100	59
FEB												
28...	1215	46100	155	7.9	8.0	735	5.5	11.0	96	K1	<1	66
APR												
26...	1030	19200	140	7.9	13.5	746	3.1	10.0	98	120	K10	59
JUL												
17...	1200	33000	165	7.6	24.0	743	4.9	6.0	73	K1	K3	73

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC												
14...	9	17	4.0	8.4	23	.5	1.7	50	1.2	16	9.6	<.10
FEB												
28...	11	19	4.5	7.6	20	.4	1.3	55	1.3	16	8.2	<.10
APR												
26...	7	17	4.1	3.6	11	.2	1.2	52	1.3	13	5.0	<.10
JUL												
17...	9	21	5.0	5.0	13	.3	1.4	64	3.1	15	5.7	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
14...	4.5	93	91	.13	10800	.290	.060	.08	.20	.050	.030	<.010
FEB												
28...	4.4	97	94	.13	12100	.440	.070	.09	.20	<.010	.020	.010
APR												
26...	3.1	90	78	.12	4670	.280	.060	.08	1.8	<.010	<.010	<.010
JUL												
17...	4.4	123	96	.17	11000	.390	.240	.31	.80	.030	<.010	.020

K--Results based on non-ideal colony count.

03543005 TENNESSEE RIVER AT WATTS BAR DAM (TAILWATER), TN--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC 14...	--	<10	1	36	<.5	<1	<1	<3	1	13	<1	<4
FEB 28...	.03	<10	1	25	<.5	<1	<1	<3	1	35	2	<4
APR 26...	--	<10	1	35	<1	<1	<1	<3	1	23	<1	<4
JUL 17...	.06	<10	1	32	<.5	<1	<1	<3	1	9	1	<4

DATE	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDIMENT, SUS-PENDED (MG/L)	SEDIMENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 14...	12	<.1	<10	1	<1	<1	58	<6	<3	6	697	86
FEB 28...	24	<.1	<10	<1	<1	<1	60	<6	6	6	747	79
APR 26...	2	<.1	<10	<1	<1	<1	51	<6	--	6	311	79
JUL 17...	16	<.1	<10	<1	<1	<1	66	<6	15	8	713	59

03543500 SEWEE CREEK NEAR DECATUR, TN

LOCATION.--Lat 35°34'53", long 84°44'53", Meigs County, Hydrologic Unit 06020001, on right bank, 0.3 mi downstream from bridge on State Highway 58, 0.5 mi downstream from Dry Fork, 5.0 mi north of Decatur, and at mile 5.7.

DRAINAGE AREA.--117 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 694.32 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--50 years, 194 ft³/s, 22.52 in/yr.

EXTREMES FOR PERIOD RECORD.--Maximum discharge, 23,900 ft³/s Jan. 7, 1946, gage height, 23.97 ft from floodmarks, from rating curve extended above 11,300 ft³/s on basis of slope-area measurement at gage height 22.81 ft; minimum, 8.0 ft³/s Jan. 12, 1981, result of freezeup; minimum gage height, 0.15 ft Sept. 2, 3, 7-9, 13, 20, 1954, Jan. 12, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
May 3	1900	3330	8.42	July 18	1130	2450	6.63
May 7	2200	*8240	15.65				

Minimum discharge, 14 ft³/s Oct. 17-21, gage height, 0.24 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	116	220	140	333	298	339	113	57	167	42
2	16	18	92	187	122	278	248	1140	97	52	147	39
3	16	19	492	163	117	232	260	2930	87	48	134	95
4	18	22	988	146	111	200	839	1580	80	57	202	201
5	22	22	371	136	101	204	679	737	76	81	123	59
6	23	18	765	127	91	199	446	2460	71	61	104	49
7	21	17	401	114	84	167	342	6260	67	232	101	44
8	20	16	251	101	77	147	281	6470	64	91	88	39
9	19	16	183	90	74	130	319	2060	62	67	79	39
10	19	18	152	106	80	119	303	978	63	59	76	37
11	20	18	285	169	101	110	249	658	60	55	70	37
12	22	16	459	136	91	101	219	481	58	59	68	37
13	52	16	328	126	317	104	197	396	59	58	64	37
14	41	16	301	117	591	103	176	334	65	52	61	34
15	21	38	257	106	365	89	163	275	57	48	59	34
16	18	34	194	106	300	150	152	235	65	75	56	34
17	14	24	168	106	230	176	145	202	56	109	56	32
18	14	20	150	370	170	263	133	178	53	1820	52	34
19	14	19	135	377	140	232	122	161	50	354	52	33
20	14	48	124	259	120	464	122	147	50	187	51	33
21	14	67	113	206	110	932	120	137	55	144	48	33
22	16	35	361	170	100	665	282	132	56	119	47	32
23	36	31	327	156	350	398	319	121	64	109	45	29
24	34	194	227	595	200	318	225	110	57	90	45	28
25	23	74	169	481	170	284	184	99	54	79	42	28
26	19	40	146	365	130	235	158	96	49	86	42	29
27	18	90	133	301	800	205	190	136	47	307	42	30
28	18	1160	1210	252	650	702	225	191	47	138	42	31
29	18	272	795	215	435	903	343	481	59	109	42	32
30	17	154	394	185	---	495	524	172	62	117	44	33
31	18	---	277	163	---	372	---	136	---	176	45	---
TOTAL	651	2551	10364	6351	6367	9310	8263	29832	1903	5096	2294	1294
MEAN	21.0	85.0	334	205	220	300	275	962	63.4	164	74.0	43.1
MAX	52	1160	1210	595	800	932	839	6470	113	1820	202	201
MIN	14	16	92	90	74	89	120	96	47	48	42	28
CFSM	.18	.73	2.85	1.75	1.88	2.56	2.35	8.22	.54	1.40	.63	.37
IN.	.21	.81	3.30	2.02	2.02	2.96	2.63	9.49	.61	1.62	.73	.41

CAL YR 1983	TOTAL	64838	MEAN	178	MAX	4710	MIN	14	CFSM	1.52	IN.	20.62
WTR YR 1984	TOTAL	84276	MEAN	230	MAX	6470	MIN	14	CFSM	1.97	IN.	26.80

03563000 OCOEE RIVER AT EMF, TN

LOCATION.--Lat 35°05'48", long 84°32'07", Polk County, Hydrologic Unit 06020203, on left bank 700 ft downstream from Tennessee Valley Authority powerplant, 0.8 mi upstream from former village of Emf, 2.0 mi downstream from Goforth Creek, and at mile 19.6.

DRAINAGE AREA.--524 mi².

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

REVISED RECORDS.--WSP 783: 1913-34. WSP 853: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 837.88 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Blue Ridge Lake (station 03558500 in Water Resources Data for Georgia). Ocoee No. 3 Lake (station 03562500), and by powerplant above station.

AVERAGE DISCHARGE.--72 years, 1,250 ft³/s, 32.40 in/yr unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft³/s July 10, 1916, gage height, 13.7 ft, from rating curve extended above 17,000 ft³/s; minimum, 3.4 ft³/s Sept. 20, 1962, gage height, 2.12 ft; minimum daily, 4.6 ft³/s Sept. 14, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 19, 1906, discharge, 62,000 ft³/s was the greatest known since at least 1840, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,650 ft³/s May 3, gage height, 8.69 ft; minimum, 14 ft³/s Nov. 2, gage height, 2.32 ft; minimum daily, 16 ft³/s Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	16	1280	1540	1110	1450	2670	1450	2020	1300	1450	1260
2	1030	117	1030	1530	1120	1300	2400	1490	1450	1300	1530	1260
3	1040	867	2620	1530	1120	1410	2060	6460	1440	1190	1500	1260
4	1030	969	4070	1090	1120	1400	3830	4980	1440	1240	1480	1230
5	1040	546	1650	1500	1120	1410	3600	4070	1320	1220	1480	1030
6	1050	545	1680	1520	1120	1430	2880	3720	1340	2070	1480	1220
7	1050	724	1610	1500	1110	1440	2830	3380	1320	1570	1460	1230
8	1030	1090	1560	1500	1110	1420	2830	6610	1290	1420	1470	1280
9	1020	1060	1540	1510	1100	1400	2650	4450	1340	1260	1480	1270
10	1080	1050	1530	1440	1110	1380	1780	3830	1270	1200	1480	1110
11	1130	1040	1640	1850	1120	1390	1780	3750	1270	1190	1500	1090
12	1130	1030	1750	1120	1120	1390	1760	3100	1270	1250	1500	1090
13	1210	1030	1610	1180	1270	1400	1740	3100	1280	1180	1500	1100
14	1140	1020	1600	1160	2380	1390	1730	2890	1220	1250	1480	1100
15	1130	1380	1540	1170	1270	1390	1710	2520	1270	1250	1480	1210
16	1130	1150	1470	1170	1230	1410	1630	2290	1270	1260	1470	1210
17	1120	1070	1530	1160	1200	1430	1230	1410	1360	1200	1470	1110
18	1210	1050	1520	1210	1180	1430	1190	1480	1330	1180	1500	1060
19	929	882	1510	1220	1160	1440	1230	1440	1260	1240	1500	1110
20	1120	1120	1530	1200	1160	1900	1540	1430	1100	1240	1500	1100
21	1120	1570	1520	1180	1160	4150	2330	1360	1320	1270	1500	1110
22	1120	1060	1560	1180	1170	2000	2330	1380	1440	1260	1250	1190
23	1150	1050	1550	1150	2250	1890	2380	2100	1340	1260	1460	1200
24	1150	2340	1520	1280	1890	1580	2160	2080	1320	1250	1450	1110
25	1150	1370	1690	1710	1250	1560	1800	1870	1320	1280	1430	1110
26	1150	1180	2010	1170	1210	1540	1640	1870	1320	1280	1430	1090
27	1150	1200	1790	1130	2160	1540	1430	1870	1320	1440	1550	1100
28	1150	2380	3640	1180	2130	2380	1460	1890	1340	1300	1290	1080
29	1150	1460	2070	1160	1550	4590	1480	1650	1300	1300	1260	1180
30	1150	1250	1590	1150	---	3370	1460	1660	1310	1350	1240	1180
31	429	---	1560	1140	---	2760	---	1220	---	2190	1280	---
TOTAL	33528	32616	54770	40530	39000	55970	61540	82800	40190	41190	44850	34680
MEAN	1082	1087	1767	1307	1345	1805	2051	2671	1340	1329	1447	1156
MAX	1210	2380	4070	1850	2380	4590	3830	6610	2020	2190	1550	1280
MIN	429	16	1030	1090	1100	1300	1190	1220	1100	1180	1240	1030
(†)	-16000	-1400	+9900	+4400	+11300	+10200	+5900	+1200	-3300	-1800	-12000	-17500
MEAN†	565	1041	2086	1449	1734	2135	2248	2710	1230	1271	1060	573
CFSM†	1.08	1.99	3.98	2.77	3.31	4.07	4.29	5.17	2.35	2.43	2.02	1.09
IN.†	1.24	2.21	4.59	3.19	3.57	4.69	4.78	5.96	2.62	2.79	2.33	1.22

CAL YR 1983 TOTAL 478992 MEAN 1312 MAX 6420 MIN 16 CFSM 2.50 IN. 34.00 MEAN† 1309 CFSM† 2.50 IN† 33.88
WTR YR 1984 TOTAL 561664 MEAN 1535 MAX 6610 MIN 16 CFSM 2.93 IN. 39.87 MEAN† 1510 CFSM† 2.88 IN† 39.18

† 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, TN

LOCATION.--Lat 35°05'48", long 84°39'15", Polk County, Hydrologic Unit 06020203, on right bank 0.4 mi downstream from Lake Ocoee Dam and Ocoee No. 1 powerplant of Tennessee Valley Authority at Parksville, and at mile 11.5.

DRAINAGE AREA.--595 mi².

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

REVISED RECORDS.--WSP 823: Drainage area. WSP 1306: 1916, 1921-36 (adjusted runoff). WSP 1386: 1926.

GAGE.--Water-stage recorder. Datum of gage is 716.96 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Blue Ridge Lake (station 03558500 in Water Resources Data for Georgia, Ocoee No. 3 Lake (station 03562500), and Lake Ocoee (station 03564000).

AVERAGE DISCHARGE.--68 years, 1,337 ft³/s, 30.52 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,700 ft³/s, Mar. 29, 1951, gage height, 20.22 ft; minimum daily, 10 ft³/s Oct. 28, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.-- Flood of Nov. 19, 1906, discharge, 65,000 ft³/s was the greatest known flood since at least 1840, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,000 ft³/s May 3, gage height, 11.91 ft; minimum, 56 ft³/s Mar. 11, 12, gage height, 2.75 ft; minimum daily, 201 ft³/s Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	201	1780	2050	1150	2140	2620	1590	1490	1240	1530	1400
2	924	214	1330	2050	1150	2140	2600	1960	1470	1380	1750	1510
3	1010	1060	1540	2050	1150	2060	2630	7090	1540	1310	2110	1660
4	914	1260	3980	2050	1150	2020	4050	8010	1550	1300	1560	1390
5	866	1170	2870	2050	1150	1390	5400	5270	1590	1200	1500	1230
6	1040	604	2510	2050	700	1580	3580	4770	1420	1320	1450	1160
7	948	1590	2000	2050	1100	1690	3040	4310	1540	2130	1360	1180
8	1030	1190	2040	2050	1100	1670	3020	6570	1330	2120	1440	1120
9	872	1290	2070	2050	1150	1600	2850	6560	1100	1320	1540	1150
10	875	1160	1730	1500	1100	1430	2570	5030	1210	1360	1410	1140
11	1040	1040	1460	1350	1000	1320	2110	4610	1260	1320	1470	1040
12	1240	1040	2060	1800	1100	1440	2000	4040	1270	1290	1400	1040
13	1550	917	2080	700	1100	1520	1790	3690	1300	1190	1500	1060
14	1570	939	2080	750	1550	1500	1760	3490	1330	1170	1320	1070
15	1010	1330	1990	1150	2050	1080	1770	3290	1250	1130	1540	1220
16	1020	1560	2090	1400	2050	1350	1700	2980	1270	1260	1490	1210
17	1100	757	2100	1500	2050	1530	1220	2750	1310	1180	1480	1050
18	1090	1010	2000	1500	1350	1460	1330	1310	1290	1170	1610	1060
19	1100	903	2070	1600	1250	1240	1320	1440	1280	1220	1680	1080
20	997	936	1770	1500	1300	1450	1330	1590	1160	1160	1430	1060
21	984	1180	1710	1300	600	2180	2400	1610	1220	1160	1480	1180
22	1090	1220	1510	1300	1130	2140	1790	1490	1260	965	1520	1720
23	1110	1160	1680	1300	1470	2350	1690	1700	1280	1180	1490	1700
24	1100	1540	2130	1100	1950	2750	2170	642	1280	1270	1550	1180
25	1080	2030	2150	1250	2110	2450	1960	638	1290	1270	1500	824
26	1090	2190	1940	1850	2120	1930	1710	1520	1430	1260	1550	701
27	1080	1990	1470	1650	2170	1530	1330	1390	1390	1300	1330	693
28	1090	1920	1620	1250	2160	1810	1470	1380	1410	1580	1270	668
29	1100	2470	2050	1250	2110	2720	1570	1650	1300	2160	1260	1080
30	1050	2190	2050	1250	---	2690	1560	1660	1300	2010	1270	1090
31	452	---	2050	1150	---	2620	---	1440	---	1250	1410	---
TOTAL	32442	38061	61910	47850	41520	56780	66340	95470	40120	42175	46200	34666
MEAN	1047	1269	1997	1544	1432	1832	2211	3080	1337	1360	1490	1156
MAX	1570	2470	3980	2050	2170	2750	5400	8010	1590	2160	2110	1720
MIN	452	201	1330	700	600	1080	1220	638	1100	965	1260	668

CAL YR 1983 TOTAL 517157 MEAN 1417 MAX 5620 MIN 201 MEAN† 1428 CFSM† 2.40 IN† 32.57
WTR YR 1984 TOTAL 603534 MEAN 1649 MAX 8010 MIN 201 MEAN† 1624 CFSM† 2.73 IN† 37.14

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

03565300 SOUTH CHESTUEE CREEK NEAR BENTON, TN

LOCATION.--Lat 35°10'02", long 84°42'59", Bradley County, Hydologic Unit 06020002, on right bank 50 ft downstream from county highway bridge, 0.2 mi downstream from Climer Branch, 2.4 mi southwest of Benton Station, 2.8 mi north of Ocoee, 3.6 mi west of Benton, and at mile 9.3.

DRAINAGE AREA.--31.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 712.14 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--27 years, 52.7 ft³/s, 22.51 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s Mar. 16, 1973, gage height, 12.11 ft, from rating curve extended above 3,200 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 1.7 ft³/s Oct. 11, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 28	1515	1290	7.56	May 3	1315	1880	7.96
Feb. 14	0245	1010	7.31	May 8	0715	*2120	8.10

Minimum discharge, 2.7 ft³/s Oct. 2, 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	5.3	33	60	31	83	57	81	17	7.5	16	5.1
2	2.8	5.6	28	53	29	68	49	187	16	7.6	16	4.8
3	2.8	6.1	488	49	29	56	95	1100	15	7.1	13	6.0
4	2.8	10	558	44	28	49	363	580	15	7.0	10	7.1
5	3.6	11	127	41	25	69	185	168	14	12	8.5	5.2
6	3.7	8.0	211	39	23	62	101	110	13	21	7.9	4.8
7	3.6	7.4	100	35	21	49	72	431	13	79	7.8	4.5
8	3.8	7.2	66	31	19	42	60	1320	13	18	7.8	4.3
9	3.9	7.0	52	29	19	37	136	379	12	11	7.1	4.3
10	4.1	7.5	43	113	26	35	104	153	12	9.0	6.7	4.4
11	4.8	8.2	97	161	40	33	72	100	11	8.1	6.5	4.6
12	6.0	8.1	105	74	28	31	58	74	11	8.3	6.4	4.8
13	18	8.1	69	58	371	30	50	60	10	8.3	6.1	4.5
14	8.1	8.3	73	48	584	28	44	51	10	7.6	6.0	4.3
15	4.8	28	60	43	133	26	39	42	9.9	7.3	5.7	4.2
16	4.3	16	45	41	81	28	37	37	9.7	11	5.8	4.1
17	4.2	9.5	41	37	61	31	37	34	9.3	10	5.9	4.0
18	4.4	7.8	36	171	49	34	33	31	9.1	12	5.5	4.1
19	5.2	7.1	33	106	43	29	32	29	8.8	8.3	5.6	4.0
20	5.8	34	30	63	37	64	38	27	9.3	7.5	5.4	4.0
21	6.4	29	28	50	32	153	38	27	9.1	7.5	5.1	4.0
22	6.9	13	136	43	31	75	49	29	8.9	7.0	4.9	3.8
23	14	15	83	38	303	53	55	25	13	7.2	6.4	3.7
24	8.3	262	54	253	114	45	38	23	9.6	6.8	5.0	4.0
25	5.8	43	48	156	77	44	32	22	8.5	6.8	4.9	3.8
26	5.3	27	45	91	57	38	28	20	7.8	8.2	4.7	3.8
27	5.2	72	40	70	506	36	43	21	7.5	9.6	15	3.6
28	4.8	438	900	56	229	201	230	20	7.4	9.7	9.6	3.7
29	5.1	78	318	48	120	257	197	24	7.5	7.9	6.2	3.9
30	5.2	43	117	41	---	101	158	19	7.6	11	5.5	4.4
31	5.2	---	81	35	---	71	---	18	---	24	5.4	---
TOTAL	171.8	1230.2	4145	2177	3146	1958	2530	5242	325.0	373.3	232.4	131.8
MEAN	5.54	41.0	134	70.2	108	63.2	84.3	169	10.8	12.0	7.50	4.39
MAX	18	438	900	253	584	257	363	1320	17	79	16	7.1
MIN	2.8	5.3	28	29	19	26	28	18	7.4	6.8	4.7	3.6
CFSM	.17	1.29	4.21	2.21	3.40	1.99	2.65	5.31	.34	.38	.24	.14
IN.	.20	1.44	4.85	2.55	3.68	2.29	2.96	6.13	.38	.44	.27	.15

CAL YR 1983	TOTAL	17259.6	MEAN	47.3	MAX	958	MIN	2.8	CFSM	1.49	IN.	20.19
WTR YR 1984	TOTAL	21662.5	MEAN	59.2	MAX	1320	MIN	2.8	CFSM	1.86	IN.	25.34

03565500 OOSTANAULA CREEK NEAR SANFORD, TN

LOCATION.--Lat 35°19'39", long 84°42'19", McMinn County, Hydrologic Unit 06020002, on right bank 20 ft downstream from highway bridge, 1.3 mi southeast of Sanford, 3.5 mi northeast of Calhoun, and at mile 5.7.

DRAINAGE AREA.--57.0 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 716.51 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--30 years, 95.7 ft³/s, 22.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s Mar. 16, 1973, gage height, 13.43 ft from rating curve extended above 4,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 15 ft³/s Jan. 12, 1981, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	0815	1810	8.45	May 8	0700	*7090	12.81

Minimum discharge, 18 ft³/s Oct. 4, gage height, 2.22 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	22	45	100	74	199	155	183	95	51	86	37
2	20	21	40	86	71	174	139	196	91	49	74	36
3	21	21	70	82	69	158	132	913	88	47	70	36
4	20	21	206	76	67	146	287	1520	86	46	68	40
5	21	24	144	74	67	138	458	749	81	61	65	40
6	28	22	91	71	63	138	255	360	78	79	59	35
7	22	23	104	68	60	126	199	2400	75	84	56	34
8	21	22	75	67	56	114	176	5850	73	105	54	30
9	20	21	64	63	56	107	173	2350	71	63	52	29
10	21	20	58	63	56	101	196	1090	71	56	51	30
11	21	21	62	90	61	100	166	742	69	52	49	29
12	20	20	98	82	62	96	149	456	65	51	49	30
13	25	20	93	73	102	91	139	320	63	50	48	33
14	35	21	77	68	232	91	129	264	62	48	46	29
15	25	24	71	68	158	85	125	222	63	47	45	29
16	22	31	64	65	118	85	118	195	63	50	45	29
17	23	24	59	63	102	91	113	177	62	54	44	30
18	22	21	58	78	92	87	107	163	60	86	43	30
19	21	21	55	125	86	86	101	154	58	85	44	28
20	20	24	53	93	80	84	101	148	56	60	43	27
21	20	39	51	80	75	128	109	140	55	55	41	28
22	21	31	83	76	70	149	117	138	55	53	39	27
23	24	26	143	72	137	121	200	131	57	61	38	26
24	34	51	95	132	199	107	139	125	57	55	45	29
25	26	57	80	185	139	106	116	116	58	51	38	29
26	22	36	69	133	117	101	105	112	53	93	39	27
27	22	33	68	111	173	95	101	114	52	67	41	27
28	21	137	288	100	312	157	116	112	50	84	39	27
29	21	126	422	93	258	307	188	141	49	69	43	27
30	21	56	177	86	---	228	267	118	50	77	42	28
31	23	---	116	79	---	174	---	100	---	93	40	---
TOTAL	703	1036	3179	2702	3212	3970	4876	19799	1966	1982	1536	916
MEAN	22.7	34.5	103	87.2	111	128	163	639	65.5	63.9	49.5	30.5
MAX	35	137	422	185	312	307	458	5850	95	105	86	40
MIN	20	20	40	63	56	84	101	100	49	46	38	26
CFSM	.40	.61	1.81	1.53	1.95	2.25	2.86	11.2	1.15	1.12	.87	.54
IN.	.46	.68	2.07	1.76	2.10	2.59	3.18	12.92	1.28	1.29	1.00	.60

CAL YR 1983	TOTAL	29557	MEAN	81.0	MAX	1610	MIN	20	CFSM	1.42	IN.	19.29
WTR YR 1984	TOTAL	45877	MEAN	125	MAX	5850	MIN	20	CFSM	2.19	IN.	29.94

03566420 WOLFTEVER CREEK NEAR OOLTEWAH, TN

LOCATION.--Lat 35°03'43", long 85°03'59", Hamilton County, Hydrologic Unit 06020001, on right downstream wingwall of county road bridge, 0.6 mi downstream from Southern Railway bridge, 0.9 mi south of Ooltewah, 1.6 mi upstream from Little Wolftever Creek, and at mile 16.1.

DRAINAGE AREA.--18.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 755.08 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--20 years, 33.8 ft³/s, 24.42 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s Mar. 16, 1973, gage height, 9.75 ft; minimum, 1.4 ft³/s Aug. 31,1983 (result of unnatural regulation upstream).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	0815	904	5.68	Feb. 27	1130	765	5.16
Dec. 3	1900	745	5.07	May 3	1000	*1280	6.63
Dec. 28	1145	1090	6.17	May 8	0700	890	5.64

Minimum discharge, 1.5 ft³/s Oct. 1,2,3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.3	30	36	23	52	34	54	12	11	82	9.5
2	1.5	4.4	28	32	21	42	29	145	11	22	67	8.6
3	1.7	4.9	479	29	22	36	90	731	11	11	35	12
4	1.8	11	236	25	20	32	157	199	10	11	25	10
5	2.8	7.0	75	24	20	53	86	102	9.4	34	19	7.0
6	2.1	5.5	121	23	18	42	58	72	8.8	32	15	6.6
7	2.1	5.2	59	20	16	34	41	85	9.0	68	13	6.1
8	2.5	5.1	43	19	15	30	35	445	8.3	25	11	5.8
9	2.6	4.7	34	18	15	27	139	135	8.1	15	11	5.7
10	2.6	7.3	27	63	27	24	85	82	7.6	11	12	5.7
11	3.2	6.7	112	60	30	23	56	58	7.3	10	17	5.9
12	4.5	6.2	68	38	25	21	42	45	6.9	10	11	6.9
13	41	6.2	45	31	125	22	36	38	6.6	24	8.6	5.7
14	5.1	6.4	54	27	84	20	31	32	6.5	11	7.8	5.2
15	3.2	34	41	24	54	20	27	26	6.4	8.5	7.1	5.3
16	2.9	9.7	31	26	44	27	25	23	6.1	9.9	7.9	5.2
17	2.7	6.1	28	23	37	23	24	20	5.9	53	6.9	5.3
18	2.7	4.9	24	85	32	24	21	20	5.7	65	12	4.8
19	2.8	4.5	21	52	31	21	21	18	5.4	24	8.4	4.7
20	3.0	42	19	37	28	128	45	16	5.4	17	6.7	4.7
21	3.2	16	18	31	24	96	35	37	8.6	13	6.3	4.7
22	3.5	9.3	65	27	23	51	58	37	13	12	6.2	4.8
23	14	47	43	29	62	38	50	21	47	11	6.7	5.0
24	5.5	127	31	206	45	33	35	18	14	9.0	5.7	5.0
25	4.3	29	27	101	39	31	29	15	8.6	9.3	5.7	5.0
26	3.9	18	26	63	32	27	24	18	6.9	8.2	17	4.9
27	3.9	106	24	49	326	24	29	18	6.6	8.1	9.9	5.2
28	3.8	395	534	40	124	88	122	16	7.1	7.3	13	5.2
29	3.9	64	120	34	74	109	110	22	9.3	7.3	11	5.4
30	3.9	39	60	30	---	54	89	15	11	14	32	6.6
31	4.2	---	44	25	---	40	---	13	---	30	15	---
TOTAL	146.5	1036.4	2567	1327	1436	1292	1663	2576	289.5	601.6	511.9	182.5
MEAN	4.73	34.5	82.8	42.8	49.5	41.7	55.4	83.1	9.65	19.4	16.5	6.08
MAX	41	395	534	206	326	128	157	731	47	68	82	12
MIN	1.5	4.3	18	18	15	20	21	13	5.4	7.3	5.7	4.7
CFSM	.25	1.84	4.40	2.28	2.63	2.22	2.95	4.42	.51	1.03	.88	.32
IN.	.29	2.05	5.08	2.63	2.84	2.56	3.29	5.10	.57	1.19	1.01	.36

CAL YR 1983	TOTAL	12542.9	MEAN	34.4	MAX	534	MIN	1.5	CFSM	1.83	IN.	24.82
WTR YR 1984	TOTAL	13629.4	MEAN	37.2	MAX	731	MIN	1.5	CFSM	1.98	IN.	26.97

03567500 SOUTH CHICKAMAUGA CREEK NEAR CHICKAMAUGA, TN

LOCATION.--Lat 35°00'51", long 85°12'35", Hamilton County Hydrologic Unit 06020001, on left bank 0.1 mi upstream from bridge on U.S. Highway 11, 1.5 mi south of Chickamauga, 6.0 mi east of the city hall in Chattanooga, and at mile 12.2.

DRAINAGE AREA.--428 mi².

PERIOD OF RECORD.--October 1928 to September 1978, October 1980 to current year. Monthly discharge only for December 1930, published in WSP 1306. Gage-height record collected October 1978 to September 1980 (fragmentary). Prior to October 1937, published as Chickamauga Creek near Chickamauga.

REVISED RECORDS.--WSP 823: Drainage area. WSP 853: 1937. WSP 1386: 1932.

GAGE.--Water-stage recorder. Datum of gage is 644.12 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1930, nonrecording gage. Oct. 7, 1930, to Oct. 29, 1980, water-stage recorder at site 1,000 ft upstream at datum 7.00 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--54 years (water years 1929-78, 1981-84), 703 ft³/s, 22.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s Mar. 17, 1973, gage height, 28.70 ft; maximum gage height, 30.75 ft, Mar. 17, 1973, present datum from floodmarks (backwater from Tennessee River); minimum discharge, 61 ft³/s Oct. 8, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	1500	6700	16.21	May 4	1230	8850	17.96
Dec. 4	2300	*10600	19.23	May 9	0400	9350	18.33
Dec. 29	1100	8200	17.47				

Minimum discharge, 98 ft³/s Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	139	977	1070	579	1320	851	1090	320	302	2580	213
2	104	143	662	868	531	1030	719	1350	303	390	2700	203
3	101	135	4150	759	502	866	1350	6280	285	296	2350	196
4	102	181	9300	671	492	739	2700	8430	280	247	1150	254
5	113	178	8180	617	461	817	3660	5520	258	236	1800	237
6	106	164	5070	581	432	1060	1780	2490	248	558	1280	199
7	103	151	3830	531	397	847	1180	1550	244	813	636	187
8	102	145	2200	480	373	698	933	7040	239	720	650	183
9	104	141	1230	444	360	609	1580	8610	234	402	553	176
10	103	146	933	702	405	551	2210	5790	230	293	479	173
11	104	149	1270	2430	596	515	1400	3410	223	258	753	172
12	107	141	2830	1750	527	485	1030	2050	217	235	526	178
13	294	140	1790	1060	1670	473	853	1200	214	1240	386	179
14	273	135	1320	834	2890	463	734	905	217	907	333	170
15	173	343	1310	705	1960	415	651	643	207	370	299	166
16	151	366	941	658	1210	465	573	556	207	369	284	162
17	141	234	763	617	948	554	536	499	209	547	264	157
18	135	181	650	1160	785	505	502	465	212	931	261	157
19	134	165	583	1700	680	523	460	429	198	535	273	157
20	132	429	529	1040	613	892	735	407	218	345	250	156
21	132	613	483	798	548	2150	1240	390	212	292	232	156
22	132	332	879	664	499	1290	1300	465	212	264	220	155
23	189	375	1220	616	718	880	2410	409	333	278	216	149
24	172	3030	845	3170	820	720	1360	370	384	269	213	149
25	157	2110	618	3860	644	661	901	343	250	262	202	152
26	148	638	515	2090	552	596	712	329	219	278	197	152
27	141	967	496	1400	3050	533	632	589	206	275	247	147
28	136	5930	4300	1100	4370	1080	1190	647	199	279	240	149
29	136	5810	7610	910	2540	2850	2570	558	241	241	212	148
30	135	3220	4560	774	---	1710	1620	425	376	306	244	148
31	134	---	1810	658	---	1080	---	350	---	1190	237	---
TOTAL	4300	26831	71854	34717	30152	27377	38372	63589	7395	13928	20267	5180
MEAN	139	894	2318	1120	1040	883	1279	2051	247	449	654	173
MAX	294	5930	9300	3860	4370	2850	3660	8610	384	1240	2700	254
MIN	101	135	483	444	360	415	460	329	198	235	197	147
CFSM	.32	2.09	5.42	2.62	2.43	2.06	2.99	4.79	.58	1.05	1.53	.40
IN.	.37	2.33	6.25	3.02	2.62	2.38	3.34	5.53	.64	1.21	1.76	.45

CAL YR 1983	TOTAL	306594	MEAN	840	MAX	9300	MIN	100	CFSM	1.96	IN.	26.65
WTR YR 1984	TOTAL	343962	MEAN	940	MAX	9300	MIN	101	CFSM	2.20	IN.	29.90

03568000 TENNESSEE RIVER AT CHATTANOOGA, TN

LOCATION.--Lat 35°05'12", long 85°16'43", Hamilton County, Hydrologic Unit 06020001, on right bank at Rivermont Golf and Country Club, 0.5 mi downstream from South Chickamauga Creek, 3.0 mi downstream from Chickamauga Dam, 3.5 mi upstream from Walnut Street Bridge in Chattanooga, and at mile 467.6.

DRAINAGE AREA.--21,400 mi², 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.

REVISED RECORDS.--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).

GAGE.--Water-stage recorder. Datum of gage is 621.12 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 1, 1939, nonrecording or recording gages at several sites from 7.0 mi upstream from Chattanooga to Hales Bar Dam 33 mi downstream at or within 0.2 ft of present datum, except nonrecording gage at Bridgeport, AL, 49.9 mi 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 mi downstream from base gage at same datum.

REMARKS.--Records good. Flow regulated since 1936 by increasing number of upstream reservoirs (see p.177 and Water Resources Data for adjoining states, 1984).

AVERAGE DISCHARGE.--110 years, 37,120 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 410,000 ft³/s Mar. 1, 1875, gage height, 53.8 ft, present datum, at Walnut Street, from rating curve extended above 250,000 ft³/s; minimum daily, 1,200 ft³/s Nov. 1, 1953; minimum gage height, 0.0 ft Sept. 11-14, 1881, Sept. 19, 1883.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 57.9 ft Mar. 11, 1867, present datum at Walnut Street, discharge about 459,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 239,000 ft³/s May 9; maximum gage height, 36.90 ft May 9; maximum gage height at Walnut Street, 34.76 ft May 9; minimum daily discharge, 10,200 ft³/s Oct. 30; minimum gage height, 11.63 ft Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13500	17700	40700	60000	39100	60700	44800	30200	40200	17700	40600	33500
2	12800	17100	36100	50200	35500	55100	33900	27200	30700	31800	45200	30400
3	14700	21700	46400	43700	32700	54700	27200	60400	29600	31700	43800	37900
4	15500	21900	67100	43700	36100	54300	29500	84700	41200	29700	32700	40200
5	19000	16500	77300	43500	27300	52300	37000	91800	43200	30000	38000	41100
6	21200	17400	67100	43100	29500	46400	36000	90500	37900	40700	42900	39200
7	23000	24900	56000	36600	32000	43500	32800	134000	31800	34400	44100	43700
8	14900	25400	49700	27200	23000	39700	38400	223000	32200	38500	44300	34600
9	12000	25800	44200	36400	21100	39200	28800	228000	19200	33600	38700	26100
10	14500	25100	44000	31400	21600	35500	24300	214000	16900	31500	37100	34300
11	16600	26600	44500	28700	21200	31600	21100	189000	24700	37100	33700	35500
12	19600	28000	48600	39800	21100	29900	17900	165000	27300	31000	28900	40000
13	25000	13100	53100	39600	28400	39100	15100	148000	27300	34400	38800	41000
14	26700	26600	55000	29200	39600	29200	12400	127000	29600	29100	39500	42000
15	22900	26700	50400	19700	53300	28800	12800	102000	28100	24100	39800	33200
16	14800	28500	44300	26000	54800	25900	17400	94600	13000	37700	40700	28600
17	19300	31500	44100	31900	50600	24100	13700	80000	20600	40600	40700	40800
18	16400	32100	44300	35300	43600	35100	15600	68800	30700	40500	34400	44200
19	20100	19200	43400	40500	43300	30800	14200	58200	27800	40600	29300	41200
20	22000	17400	43600	39200	43100	27300	14600	47800	29900	41700	39000	40900
21	16700	27800	43800	39600	40900	38800	16300	44300	30500	40600	43400	44200
22	10600	31200	44200	42600	33400	49000	26100	44700	38600	39700	43800	32700
23	13900	26500	45200	26700	38500	54100	28900	44400	18600	33600	41500	27000
24	13700	26700	50100	39600	37600	53800	19700	44100	17700	42000	37500	33100
25	11200	27400	62400	37700	39400	49300	18000	43900	31100	39900	32500	34500
26	11700	30100	58600	41700	42800	31400	21400	43600	32800	35900	28300	31200
27	18200	32400	52500	38800	41400	26500	24000	29300	32400	37900	42800	33100
28	18200	48800	55700	33600	58100	31600	22300	35300	31500	38200	38500	29600
29	10400	51400	66600	33200	59700	47400	30300	43400	33900	40400	38800	18000
30	10200	44700	67600	28800	---	46200	27800	43600	24600	43700	42000	18100
31	18000	---	64400	39700	---	45300	---	43800	---	44400	42000	---
TOTAL	517300	810200	1611000	1147700	1088700	1256600	722300	2724600	873600	1112700	1203300	1049900
MEAN	16690	27010	51970	37020	37540	40540	24080	87890	29120	35890	38820	35000
MAX	26700	51400	77300	60000	59700	60700	44800	228000	43200	44400	45200	44200
MIN	10200	13100	36100	19700	21100	24100	12400	27200	13000	17700	28300	18000

CAL YR 1983 TOTAL 13058890 MEAN 35780 MAX 107000 MIN 9590
WTR YR 1984 TOTAL 14117900 MEAN 38570 MAX 228000 MIN 10200

03571000 SEQUATCHIE RIVER NEAR WHITWELL, TN

LOCATION.--Lat 35°12'22", long 85°29'48", Marion County, Hydrologic Unit 06020004, on right bank 15 ft downstream from county road bridge, 1.5 mi east of Whitwell, 3.0 mi upstream from bridge on State Highway 27, 4.5 mi downstream from Griffith Creek, and at mile 25.1.

DRAINAGE AREA.--402 mi², includes 18 mi² without surface drainage.

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

REVISED RECORDS.--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. WDR TN-76-1: 1973-75(P).

GAGE.--Water-stage recorder. Datum of gage is 632.73 ft Tennessee Valley Authority datum. Prior to Sept. 18, 1927, nonrecording gage at same site at datum 0.03 ft higher. Sept. 18, 1927, to Sept. 30, 1930, nonrecording gage at bridge 15 ft upstream at present datum.

REMARKS.--Records good. Prior to 1950 some diurnal fluctuation caused by small mills above station.

AVERAGE DISCHARGE.--64 years, 748 ft³/s, 25.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft³/s Mar. 16, 1973, gage height, 17.65 ft; minimum, 16 ft³/s Sept. 6-21, 27, 28, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1867 reached a stage of about 19 ft from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	2100	8530	13.78	May 4	0800	9680	14.04
Mar. 29	1630	5860	12.92	May 9	1000	*14000	14.84

Minimum discharge, 39 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	47	1140	1130	726	1580	1880	1440	744	255	1030	154
2	42	45	729	907	650	1300	1490	1780	618	433	871	147
3	42	46	1720	794	598	1110	1520	5970	532	339	762	142
4	41	57	4900	730	562	958	2580	9000	466	277	673	139
5	54	60	3870	663	522	902	3760	5390	417	331	555	135
6	47	54	2900	611	488	879	2930	3220	383	619	509	127
7	45	52	2180	556	483	810	2130	4010	355	1650	446	122
8	43	51	1550	501	483	739	1610	8080	335	2150	497	119
9	42	50	1170	483	483	669	1460	13200	317	1870	693	113
10	43	51	924	511	429	606	1470	9640	302	905	1340	109
11	42	51	903	646	407	564	1280	4720	289	573	1240	104
12	46	50	1650	671	424	524	1100	2480	276	485	881	102
13	69	49	1670	671	1120	501	954	1920	270	645	648	99
14	64	49	1460	631	3990	496	842	1500	266	681	489	96
15	60	59	1290	603	3050	477	754	1170	291	606	398	93
16	68	64	1100	595	2030	476	689	977	294	527	355	90
17	72	63	935	575	1490	544	652	854	334	466	337	88
18	66	61	800	944	1170	741	607	762	262	950	344	84
19	59	59	709	1570	979	915	556	689	229	1330	314	81
20	53	111	630	1340	856	1470	542	630	227	1160	280	81
21	50	143	563	1050	748	3300	556	584	220	806	254	80
22	48	130	924	852	668	3020	589	561	264	560	236	77
23	52	186	1360	774	612	2410	2320	582	328	444	261	74
24	52	505	1230	1590	564	1770	1600	576	309	380	224	74
25	49	486	933	2230	540	1460	1210	509	287	347	207	71
26	48	486	764	2180	499	1260	944	703	272	328	194	69
27	50	625	694	1800	1060	1090	824	1320	226	329	183	68
28	56	6480	2050	1410	2140	3320	858	900	205	288	173	66
29	53	5210	3120	1160	2030	5690	1220	1300	206	386	167	66
30	51	2090	2290	974	---	4600	1370	1220	244	460	169	74
31	49	---	1570	832	---	2740	---	951	---	972	167	---
TOTAL	1598	17470	47728	29984	29801	46921	40297	86638	9768	21552	14897	2944
MEAN	51.5	582	1540	967	1028	1514	1343	2795	326	695	481	98.1
MAX	72	6480	4900	2230	3990	5690	3760	13200	744	2150	1340	154
MIN	41	45	563	483	407	476	542	509	205	255	167	66
CFSM	.13	1.45	3.83	2.41	2.56	3.77	3.34	6.95	.81	1.73	1.20	.24
IN.	.15	1.62	4.42	2.77	2.76	4.34	3.73	8.02	.90	1.99	1.38	.27

CAL YR 1983	TOTAL	306222	MEAN	839	MAX	17900	MIN	41	CFSM	2.09	IN.	28.34
WTR YR 1984	TOTAL	349598	MEAN	955	MAX	13200	MIN	41	CFSM	2.38	IN.	32.35

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°00'41", long 85°41'51", Marion County, Hydrologic Unit 06030001, on right bank at South Pittsburg Ferry landing on Tennessee State Highway 156, 0.5 mi downstream from Battle Creek, 0.5 mi east of South Pittsburg, 4.6 mi downstream from Sequatchie River, 6.5 mi downstream from Nickajack Dam, and at mile 418.2.

DRAINAGE AREA.--22,640 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1930 to current year. Published as "at Hales Bar, near Chattanooga, Tenn." July 1930 to July 1966.

REVISED RECORDS.--WSP 853: Drainage area. WSP 973: 1942. WSP 1306 (monthly runoff). WSP 1386: 1932-34.

GAGE.--Water-stage recorder. Datum of gage is 581.01 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 13, 1932, at site 12.9 mi upstream at datum 7.85 ft higher. Feb. 13, 1932, to July 17, 1966, at site 11.5 mi upstream at datum 7.50 ft higher. Since Jan. 27, 1939, auxiliary water-stage recorder at site 10.6 mi downstream.

REMARKS.--Records good. Flow regulated since 1936 by increasing number of reservoirs above station (see p. 177 and Water Resources Data for adjoining states, 1984).

AVERAGE DISCHARGE.--54 years, 38,120 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 315,000 ft³/s Mar. 18, 1973, gage height, 34.33 ft; minimum daily, 2,900 ft³/s Nov. 1, 15, 1953; minimum gage height, 1.21 ft Oct. 27, 1931, site and datum used 1932-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 44.6 ft March 1867, site and datum used 1932-65. Flood of Mar. 8, 1917, reached a stage of 37.4 ft, site and datum used 1932-65, discharge, 320,000 ft³/s, from rating curve extended above 225,000 ft³/s .

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 267,000 ft³/s May 9; maximum gage height, 31.68 ft May 9; minimum daily discharge, 13,400 ft³/s Nov. 13; minimum gage height 12.23 ft Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15400	19000	51300	74200	43100	72700	56300	37500	49500	27900	54200	40500
2	14900	22200	46400	58900	45400	63200	46900	38500	35600	31200	57100	32700
3	19300	26000	61200	52300	38500	63400	37300	90200	31100	37000	54100	40900
4	22400	24600	91800	51500	37700	64000	43800	114000	45900	37200	40800	46600
5	24100	20100	103000	51800	32200	68300	55000	117000	47900	35900	46600	47700
6	23100	13800	93400	50300	34700	57800	47800	111000	48400	42100	54300	52400
7	23900	31400	72400	44300	38300	50500	44800	131000	34000	44700	52900	49700
8	16000	31800	58900	34500	27300	47300	45100	219000	37800	43600	51200	36200
9	13900	29900	56000	41300	26500	46400	45500	258000	25100	44100	48900	29000
10	20000	30600	49400	44000	26600	40300	33900	257000	23100	43100	41900	43100
11	20000	32900	48900	41800	25500	37500	27200	232000	30900	43500	38300	45100
12	24700	29100	63700	47300	23600	38400	29500	199000	36000	37800	39300	47100
13	31400	13400	67300	44400	35600	46900	30700	170000	34100	34800	44600	47800
14	29800	28600	68500	33400	57900	38800	20000	151000	33700	42500	46300	46000
15	20400	30800	58100	23900	72200	31900	18900	116000	28800	32600	47100	33000
16	14500	35600	54300	32700	70000	32200	25900	108000	24100	40700	47000	32000
17	25800	36300	51500	35600	55400	30500	23100	89200	24400	39800	47300	41000
18	22000	36500	47900	41300	51600	39500	20700	77200	36700	46000	38500	45000
19	25200	23600	54000	50200	51000	39900	19900	64200	39600	45900	35900	48500
20	25000	20600	54200	50900	52900	43400	20800	50800	36300	49700	42600	48700
21	19700	24100	50000	50300	51400	50900	25400	50900	31500	49600	47600	48600
22	13700	36000	53100	48100	42800	62100	30800	55300	40300	45900	48900	40000
23	14500	34200	55100	37000	39700	69500	42500	48000	26200	39200	50600	31700
24	20000	37100	65000	44000	43500	64500	36600	48100	25400	52600	45700	34000
25	15800	37100	60000	54400	46500	56200	29300	48600	35500	48900	36100	41000
26	14900	36700	70000	52700	48900	41600	26400	49500	36900	45200	32900	40700
27	22300	36400	64000	51100	62400	37600	32700	35700	37200	44100	45100	36700
28	20100	81400	68500	42800	71800	45900	29700	45100	42000	42600	44800	33700
29	14600	77600	89000	36600	71400	66400	40000	49300	38100	40200	45700	24000
30	14500	59200	83900	41000	---	59800	40200	51500	29600	51500	46500	20000
31	21700	---	78000	47000	---	58600	---	56400	---	52600	49400	---
TOTAL	623600	996600	1988800	1409600	1324400	1566000	1026700	3169000	1045700	1312500	1422200	1203400
MEAN	20120	33220	64150	45470	45670	50520	34220	102200	34860	42340	45880	40110
MAX	31400	81400	103000	74200	72200	72700	56300	258000	49500	52600	57100	52400
MIN	13700	13400	46400	23900	23600	30500	18900	35700	23100	27900	32900	20000

CAL YR 1983 TOTAL 15415000 MEAN 42230 MAX 135000 MIN 13400
WTR YR 1984 TOTAL 17088500 MEAN 46690 MAX 258000 MIN 13400

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to September 1981.
WATER TEMPERATURES: July 1975 to September 1981.

REMARKS.--Flow regulated by many reservoirs (see p. 177 and Water Resources Data for adjoining states, 1984).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 211 micromhos Sept. 27-28, 1981; minimum, 94 micromhos Dec. 31, 1975,
WATER TEMPERATURES: Maximum, 31.0°C Aug. 26-28, 30, 1975, June 15, 1978; minimum recorded, 2.0°C Jan. 22, 1977, Feb. 7, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC												
15...	0930	40000	145	7.8	10.0	744	6.1	9.8	89	410	100	57
FEB												
29...	0930	74600	138	7.7	8.0	750	16	10.9	94	440	910	57
APR												
27...	0915	37900	140	7.4	15.0	748	4.6	8.8	89	98	K6	57
JUL												
18...	0930	46800	165	7.4	26.0	746	4.8	5.7	72	28	100	72

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC												
15...	11	17	3.6	7.1	21	.4	1.5	46	1.4	16	7.7	<.10
FEB												
29...	10	17	3.6	6.8	20	.4	1.2	47	1.8	14	7.7	<.10
APR												
27...	9	17	3.5	3.7	12	.2	1.1	48	3.7	12	5.4	<.10
JUL												
18...	11	21	4.8	5.9	15	.3	1.4	61	4.7	15	7.1	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
15...	4.7	89	85	.12	9610	.330	<.010	--	.30	.050	.040	<.010
FEB												
29...	4.3	89	83	.12	17900	.380	.090	.12	.20	.020	<.010	.010
APR												
27...	4.2	88	76	.12	9010	.310	.190	.24	.50	.020	.010	.010
JUL												
18...	4.5	123	97	.17	15500	.310	.180	.23	.20	.030	.010	.020

K--Results based on non-ideal colony count.

TENNESSEE RIVER BASIN

03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC 15...	--	<10	<1	34	<.5	<1	<1	<3	2	27	<1	<4
FEB 29...	.03	10	1	23	<.5	<1	<1	<3	1	63	2	<4
APR 27...	.03	<10	1	33	<1	<1	<1	<3	2	27	1	<4
JUL 18...	.06	<10	1	31	<.5	<1	<1	<3	2	11	1	<4

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 15...	14	.1	<10	2	<1	<1	52	<6	5	11	1190	86
FEB 29...	17	.1	<10	<1	<1	<1	50	<6	6	27	5440	89
APR 27...	25	<.1	<10	1	<1	<1	48	<6	4	8	819	75
JUL 18...	3	<.1	<10	<1	<1	<1	62	<6	32	10	1260	75

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
FEB 29...	<1.6	1.6	1.1	1.5	1.6	1.3	1.4	.05	.10
JUL 18...	<2.1	<.4	--	1.7	<.4	1.4	<.4	.05	.13

TENNESSEE RIVER BASIN

03578000 ELK RIVER NEAR PELHAM, TN

LOCATION.--Lat 35°17'48", long 85°52'12", Grundy County, Hydrologic Unit 06030003, on right bank at downstream side of bridge on U. S. Highway 41, 1.1 mi southeast of Pelham, 1.8 mi upstream from Caldwell Creek, and at mile 194.2.

DRAINAGE AREA.--65.6 mi².

PERIOD OF RECORD.--October 1951 to current year. Prior to November 1951 monthly discharges only, published in WSP 1726.

REVISED RECORDS.--WRD TN 1973: 1963(P), 1965 (M), 1966(P), 1969(M), 1970-71(P).

GAGE.--Water-stage recorder. Datum of gage is 981.62 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for October and September, which are fair.

AVERAGE DISCHARGE.--33 years, 141 ft³/s, 29.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s Mar. 16, 1973, gage height, 14.08 ft; minimum, 1.0 ft³/s Sept. 27, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	0900	*3640	11.25	May 3	1400	2840	10.76
Dec. 4	0830	1890	9.99	May 8	1430	1540	9.65
Mar. 29	0900	1590	9.70				

Minimum discharge, 1.6 ft³/s Sept. 29,30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	4.8	200	164	90	236	257	256	57	8.6	60	5.6
2	2.1	4.6	145	132	81	205	192	929	46	12	35	5.4
3	2.1	5.3	703	114	76	175	255	2340	38	15	27	5.6
4	2.3	17	1610	100	76	147	531	1440	32	14	23	5.6
5	3.0	36	832	99	69	150	495	733	28	13	21	4.9
6	3.1	25	585	96	63	187	326	376	24	11	17	4.5
7	3.0	20	494	87	54	166	231	308	22	12	16	4.1
8	2.6	16	289	76	52	138	181	1250	20	11	14	3.7
9	2.7	14	196	70	56	116	166	1030	19	12	13	3.5
10	2.7	13	148	97	68	100	172	473	17	11	12	3.7
11	3.0	13	170	184	92	90	147	279	16	9.4	11	3.7
12	3.2	14	323	145	86	81	126	196	15	9.6	10	3.5
13	5.4	15	287	128	162	82	108	150	14	21	9.4	3.1
14	5.0	14	277	117	363	95	95	118	13	25	8.7	2.8
15	5.4	17	294	112	257	80	84	95	13	16	8.7	2.6
16	5.5	40	217	109	185	107	78	77	12	68	7.9	2.6
17	5.2	30	170	103	146	121	89	65	11	80	7.4	2.8
18	5.1	21	143	242	120	132	83	55	11	76	7.5	2.8
19	4.9	17	125	287	105	140	74	49	10	82	7.1	2.5
20	4.7	68	106	187	98	217	78	43	9.8	43	6.9	2.6
21	4.5	160	93	139	85	360	81	39	10	29	6.7	2.6
22	4.4	82	357	111	76	294	582	36	9.6	22	6.9	2.4
23	4.6	80	409	104	71	219	779	44	9.4	17	7.4	2.6
24	4.9	380	254	404	68	174	331	66	11	15	7.4	2.8
25	5.0	228	157	534	67	166	210	45	14	13	7.3	3.0
26	5.1	116	121	352	60	152	157	74	11	12	7.1	2.5
27	5.4	182	105	248	304	131	133	235	9.8	12	6.6	2.2
28	5.4	2390	716	188	488	745	297	111	9.2	11	6.2	1.7
29	5.3	1050	842	152	334	1390	488	142	8.7	13	6.0	1.6
30	5.0	370	369	125	---	823	353	100	8.9	12	6.8	2.4
31	4.9	---	220	104	---	387	---	74	---	45	6.4	---
TOTAL	127.9	5442.7	10957	5110	3852	7606	7179	11228	529.4	750.6	397.4	99.4
MEAN	4.13	181	353	165	133	245	239	362	17.6	24.2	12.8	3.31
MAX	5.5	2390	1610	534	488	1390	779	2340	57	82	60	5.6
MIN	2.1	4.6	93	70	52	80	74	36	8.7	8.6	6.0	1.6
CFSM	.06	2.76	5.38	2.52	2.03	3.73	3.64	5.52	.27	.37	.20	.05
IN.	.07	3.09	6.21	2.90	2.18	4.31	4.07	6.37	.30	.43	.23	.06

CAL YR 1983	TOTAL	57925.7	MEAN	159	MAX	3140	MIN	2.1	CFSM	2.42	IN.	32.85
WTR YR 1984	TOTAL	53279.4	MEAN	146	MAX	2390	MIN	1.6	CFSM	2.23	IN.	30.21

03584500 ELK RIVER NEAR PROSPECT, TN

LOCATION.--Lat 35°01'39", long 86°56'52", Giles County, Hydrologic Unit 06030004, on right bank 50 ft upstream from county road bridge, 1.1 mi downstream from Richland Creek, 3.2 mi east of Prospect, 5.4 mi upstream from Ford Creek, 7.9 mi upstream from Tennessee - Alabama State line, and at mile 41.5.

DRAINAGE AREA.--1,784 mi².

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.

REVISED RECORDS.--WSP 523: 1904-8, 1919-20. WSP 823: Drainage area. WSP 1436: 1920-22, 1923(M), 1924, 1927, 1929, 1931-32(M).

GAGE.--Water-stage recorder. Datum of gage is 563.29 ft National Geodetic Vertical Datum of 1929. July 1, 1904, to Feb. 2, 1908, and Jan. 20, 1919, to Mar. 31, 1934, nonrecording gage 11.9 mi downstream at datum 13.52 ft lower.

REMARKS.--Records good. Flow regulated by Woods Reservoir (station 03579000) since May 1952, and Tims Ford Lake (station 03580740) since December 1970.

AVERAGE DISCHARGE.--68 years (water years 1905-7, 1920-84), 3,079 ft³/s, 23.44 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 117,000 ft³/s Mar. 17, 1973, gage height, 40.12 ft, from rating curve extended above 63,000 ft³/s on basis of slope-area measurement at gage height 38.17 ft and contracted-opening measurement at gage height 38.96 ft; minimum, 78 ft³/s Sept. 29, 1961 (caused by highway construction upstream).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1902 reached a stage of 40.9 ft, discharge, 130,000 ft³/s, and may have been equaled by a flood in March 1897, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,800 ft³/s at 2300 hours May 4, gage height, 28.61 ft; minimum, 188 ft³/s Oct. 2,19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	472	6100	6070	2950	3770	5750	2650	1320	677	2050	1230
2	196	487	5690	5240	2280	3720	4110	7440	1660	548	1820	1130
3	258	494	14200	4070	2250	3410	4450	24300	1420	450	2430	370
4	297	800	23800	4360	2110	3260	9520	30600	720	567	1600	308
5	376	2020	24500	4060	2020	3610	8660	29300	711	608	1180	354
6	465	1110	14200	4100	1580	3730	6430	14400	1500	623	585	469
7	701	819	9920	3790	1460	3250	5870	8630	1390	707	500	502
8	929	831	7970	3050	2100	2830	4560	18700	1360	684	1620	482
9	474	810	6800	2420	1620	2400	3580	23500	1120	456	1170	478
10	446	780	6140	2530	1780	2050	3860	21700	1090	375	805	299
11	443	889	12000	3880	2530	1810	3700	10900	594	502	928	246
12	457	2140	19700	4000	2500	1630	3430	8600	532	570	782	526
13	844	1720	13400	3310	3200	2240	2870	7420	691	574	472	627
14	2080	751	9040	3510	5020	2860	2110	6580	731	625	401	490
15	873	1150	7850	2690	4780	2520	1580	6160	750	655	623	440
16	657	2240	6810	2080	4350	2550	1300	5800	798	441	661	443
17	367	2180	6210	2500	4400	3780	1400	4360	760	516	614	309
18	235	2320	5420	3310	3740	3640	1480	4160	531	686	593	232
19	355	1740	4280	3570	3140	3410	1410	4000	452	849	643	354
20	510	2240	4690	3960	2090	5360	1420	2980	590	691	410	454
21	509	3260	4950	3880	2060	9550	1460	2210	780	625	341	481
22	504	2420	6060	3730	2370	6190	3880	2080	1200	594	295	455
23	527	3520	6680	3380	2560	4180	7240	2240	837	391	746	465
24	543	8640	5790	4990	2520	3260	3580	2030	1100	309	1640	289
25	552	5710	5190	5260	2510	3020	3000	1690	730	536	1520	229
26	527	5030	4970	4180	1840	2750	2660	1530	537	1070	613	320
27	512	5470	5030	4320	1670	2290	2100	1510	633	626	341	446
28	498	15500	12000	3600	3690	7910	3040	1040	664	625	270	747
29	493	14900	13600	3130	3920	14000	4350	1080	694	590	601	1140
30	493	6700	6380	2600	---	10300	3320	1060	1060	406	1200	528
31	485	---	6670	2340	---	7820	---	1300	---	431	1260	---
TOTAL	16907	97143	286040	113910	79040	133100	112120	259950	26955	18007	28714	14843
MEAN	545	3238	9227	3675	2726	4294	3737	8385	899	581	926	495
MAX	2080	15500	24500	6070	5020	14000	9520	30600	1660	1070	2430	1230
MIN	196	472	4280	2080	1460	1630	1300	1040	452	309	270	229

CAL YR 1983 TOTAL 1567992 MEAN 4296 MAX 47300 MIN 196 MEAN† 4226 CFSM† 2.39 IN.† 32.46
WTR YR 1984 TOTAL 1186729 MEAN 3242 MAX 30600 MIN 196 MEAN† 3242 CFSM† 1.82 IN.† 24.74

† Adjusted for change in contents in Woods Reservoir and Tims Ford Lake.

03588000 SHOAL CREEK AT LAWRENCEBURG, TN

LOCATION.--Lat 35°14'40", long 87°21'02", Lawrence County, Hydrologic Unit 06030005, on left bank at Lawrenceburg municipal water-supply intake, 500 ft downstream from Little Shoal Creek, 0.5 mi upstream from Crowson Creek, 0.9 mi west of courthouse in Lawrenceburg, and at mile 55.9.

DRAINAGE AREA.--55.4 mi².

PERIOD OF RECORD.--June 1932 to March 1934, March 1967 to current year.

REVISED RECORDS.--WSP 1306: Drainage area. WSP 2110: 1933.

GAGE.--Water-stage recorder. Datum of gage is 784.41 ft National Geodetic Vertical Datum of 1929. June 7, 1932, to Mar. 31, 1934, nonrecording gage at site 500 ft downstream at datum 4.01 ft lower. Mar. 22, 1967, to Sept. 30, 1970, at site 1,300 ft downstream at datum 7.71 ft lower.

REMARKS.--Records good. About 6 ft³/s were diverted by Lawrenceburg water plant, some of which was returned to the stream through sewage treatment plant 0.6 mi downstream.

AVERAGE DISCHARGE.--18 years (water years 1933, 1968-84), 108 ft³/s, 26.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft³/s Mar. 15, 1973, gage height, 18.71 ft, from rating curve extended above 6,700 ft³/s on basis of computation of peak flow over dam; minimum 15 ft³/s Nov. 11, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1846, 20.0 ft present site and datum, Mar. 28, 1902, discharge, 23,000 ft³/s; flood of Mar. 21, 1955, reached a stage of 17.2 ft, present site and datum, discharge 18,000 ft³/s, from report of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	unknown	3760	a7.28	May 3	0515	*4280	7.83
Apr. 22	0545	2710	6.22	May 3	2215	3710	7.23
May 2	1115	2310	5.79	May 8	0215	4020	7.56

a From high water mark.

Minimum discharge, 18 ft³/s Nov. 2, 8, 16, Sept. 14, 15, 19, 25, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	21	52	65	59	71	91	85	58	43	37	26
2	25	21	200	63	57	70	86	892	58	40	45	25
3	25	21	930	63	73	68	119	2160	57	38	37	28
4	25	31	550	63	68	68	113	716	53	40	41	23
5	26	22	350	60	62	97	89	215	51	77	37	23
6	23	22	184	57	59	89	81	172	50	49	40	23
7	23	21	103	79	55	69	75	735	49	43	43	24
8	23	21	82	77	54	63	72	1530	49	40	35	24
9	24	21	71	68	53	60	77	270	49	38	53	24
10	23	23	66	69	85	63	93	178	49	38	40	24
11	23	22	508	72	114	62	74	149	46	36	38	24
12	49	23	161	70	144	62	70	123	45	43	37	23
13	71	23	105	66	135	183	66	115	45	37	36	23
14	58	32	193	64	80	123	63	105	43	37	37	23
15	25	39	111	63	66	106	62	95	44	41	38	23
16	25	22	80	63	62	138	62	90	44	242	36	23
17	23	21	71	61	59	118	59	84	43	49	36	23
18	27	21	66	60	57	136	56	81	41	44	38	23
19	25	23	63	60	56	109	57	79	40	42	66	23
20	25	81	58	58	51	245	62	75	41	41	26	22
21	24	26	58	56	50	134	126	74	47	40	27	22
22	29	24	78	55	56	100	976	71	51	38	28	23
23	32	57	63	66	62	84	125	83	104	38	26	22
24	26	50	47	132	60	84	95	71	53	38	27	22
25	23	43	461	90	59	100	82	71	42	38	27	22
26	22	35	285	79	58	81	77	84	42	37	26	22
27	22	166	100	76	128	79	71	69	40	54	25	22
28	22	100	79	75	85	395	454	66	40	39	55	22
29	23	72	72	71	75	167	121	58	39	39	30	22
30	23	60	70	65	---	115	117	60	45	40	26	23
31	20	---	67	61	---	100	---	58	---	43	26	---
TOTAL	859	1164	5384	2127	2082	3439	3771	8714	1458	1502	1119	696
MEAN	27.7	38.8	174	68.6	71.8	111	126	281	48.6	48.5	36.1	23.2
MAX	71	166	930	132	144	395	976	2160	104	242	66	28
MIN	20	21	47	55	50	60	56	58	39	36	25	22
CFSM	.50	.70	3.14	1.24	1.30	2.00	2.27	5.07	.88	.88	.65	.42
IN.	.58	.78	3.62	1.43	1.40	2.31	2.53	5.85	.98	1.01	.75	.47

CAL YR 1983	TOTAL	47646	MEAN	131	MAX	2990	MIN	20	CFSM	2.36	IN.	31.99
WTR YR 1984	TOTAL	32315	MEAN	88.3	MAX	2160	MIN	20	CFSM	1.59	IN.	21.70

03588400 CHISHOLM CREEK AT WESTPOINT, TN

LOCATION.--Lat 35°08'04", long 87°31'45", Lawrence County, Hydrologic Unit 06030005, on left bank at downstream side of pier of county road bridge, 0.3 mi northeast of Westpoint, and at mile 1.2.

DRAINAGE AREA.--43.0 mi².

PERIOD OF RECORD.--July 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for period of no gage-height record, Oct. 1 to Nov. 21, which are poor.

AVERAGE DISCHARGE.--22 years, 87.8 ft³/s, 27.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft³/s Mar. 15, 1973, gage height, 14.74 ft, from rating curve extended above 4,100 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 8.4 ft³/s July 28, 29, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	1900	1740	7.63	May 3	0500	2330	8.36
Dec. 3	2245	*4400	10.00	May 8	0515	4090	9.80
Apr. 22	0845	3880	9.66				

Minimum discharge, 14 ft³/s Sept. 23, 24, 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	54	75	50	78	102	95	41	29	30	22
2	19	21	52	69	49	73	89	448	40	30	31	20
3	18	22	1500	63	57	68	95	1430	39	28	30	22
4	18	120	1230	59	54	63	131	872	39	27	29	24
5	19	55	264	57	52	94	113	252	38	48	28	20
6	22	40	200	56	50	97	98	173	37	54	27	20
7	20	30	155	53	49	94	86	383	37	35	27	18
8	19	25	131	51	48	88	78	1830	36	36	26	18
9	18	22	116	49	48	79	74	384	36	30	25	17
10	18	22	106	58	57	72	67	209	35	28	25	18
11	19	23	231	58	56	66	60	157	35	27	25	18
12	20	22	256	56	57	62	57	130	35	29	23	17
13	45	21	169	56	81	94	55	112	33	35	23	17
14	37	27	211	56	78	88	52	99	33	28	22	17
15	30	120	167	56	75	86	50	87	32	27	23	16
16	25	75	135	56	72	115	49	79	32	129	23	16
17	24	55	115	55	66	137	49	71	32	56	21	16
18	28	44	102	56	60	182	47	65	31	68	21	16
19	32	100	91	52	57	154	47	60	30	40	22	16
20	30	200	83	49	55	155	48	57	34	34	23	16
21	28	120	79	48	52	136	61	56	32	32	20	16
22	26	58	84	49	50	116	1630	54	35	29	20	15
23	33	612	75	50	51	100	304	67	40	28	20	15
24	30	306	67	71	49	92	173	54	36	27	19	14
25	26	114	60	62	47	96	130	49	32	26	18	15
26	25	74	60	60	46	81	110	48	32	26	18	15
27	24	111	61	60	90	77	99	47	31	31	18	16
28	23	146	149	58	88	399	124	48	30	31	87	16
29	22	97	109	56	83	248	112	44	32	27	66	16
30	22	72	91	55	---	157	107	43	31	27	29	16
31	22	---	81	52	---	121	---	42	---	36	25	---
TOTAL	761	2776	6284	1761	1727	3568	4297	7545	1036	1138	844	518
MEAN	24.5	92.5	203	56.8	59.6	115	143	243	34.5	36.7	27.2	17.3
MAX	45	612	1500	75	90	399	1630	1830	41	129	87	24
MIN	18	21	52	48	46	62	47	42	30	26	18	14
CFSM	.57	2.15	4.72	1.32	1.39	2.67	3.33	5.65	.80	.85	.63	.40
IN.	.66	2.40	5.44	1.52	1.49	3.09	3.72	6.53	.90	.98	.73	.45

CAL YR 1983	TOTAL	44963	MEAN	123	MAX	2910	MIN	18	CFSM	2.86	IN.	38.90
WTR YR 1984	TOTAL	32255	MEAN	88.1	MAX	1830	MIN	14	CFSM	2.05	IN.	27.90

NOTE.--No gage-height record Oct. 1 to Nov. 21.

03588500 SHOAL CREEK AT IRON CITY, TN

LOCATION.--Lat 35°01'27", long 87°34'44", Lawrence County, Hydrologic Unit 06030005, near center of span on down stream side of bridge on county road, 400 ft downstream from Holly Creek, 1,350 ft upstream from Louisville and Nashville Railroad bridge, 1,350 ft northeast of Iron City Post Office, and at mile 22.3.

DRAINAGE AREA.--348 mi².

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

REVISED RECORDS.--WSP 823: Drainage area. WSP 1113: 1927(M). WSP 1436: 1926(M), 1927-29, 1930(M), 1932, 1933(M).

GAGE.--Water-stage recorder. Datum of gage is 534.22 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 25, 1931, nonrecording gage at railroad bridge, 1,350 ft downstream at datum 0.85 ft lower. Feb. 25, 1931, to Sept. 30, 1933, nonrecording gage at site 825 ft downstream and Oct. 1, 1933, to Sept. 30, 1957, water-stage recorder at site 750 ft downstream at datum 0.69 ft higher.

REMARKS.--Records good. Prior to January 1951, diurnal fluctuation at low flow caused by powerplant near Lawrenceburg.

AVERAGE DISCHARGE.--59 years, 651 ft³/s, 25.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 132,000 ft³/s Mar. 21, 1955, gage height, 27.25 ft, site and datum then in use, present site and datum, 28.4 ft from high water profile, rating curve extended above 50,000 ft³/s on basis of slope-area measurement made 1,500 ft downstream; minimum, 38 ft³/s Aug. 31, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1902 reached a stage about 3 ft higher than that of Mar. 21, 1955, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0500	*18000	16.88	May 4	1000	9240	13.07
Apr. 22	1500	10300	13.83	May 8	1230	14400	15.59
May 3	1530	11700	14.48				

Minimum discharge, 124 ft³/s Sept. 23, 24, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	156	606	660	405	630	853	868	358	235	245	193
2	141	153	551	580	387	591	757	2620	348	233	274	174
3	138	153	5230	530	444	549	809	9430	337	213	274	171
4	138	465	11300	491	450	513	921	6730	328	205	256	216
5	144	360	2460	465	421	698	841	2450	318	204	245	183
6	162	245	1700	443	400	816	746	1600	310	427	228	166
7	146	208	1280	416	365	797	670	1820	304	277	223	158
8	139	191	1000	389	353	733	621	10100	302	302	224	151
9	136	178	838	370	349	646	590	3800	292	239	215	145
10	134	174	748	439	468	582	577	1910	285	216	246	147
11	140	177	1690	523	558	540	534	1370	280	205	215	154
12	151	171	2350	475	594	506	497	1100	277	207	199	150
13	361	163	1420	474	765	720	475	905	270	312	187	146
14	305	162	1560	469	743	834	449	793	267	241	179	142
15	205	359	1400	461	674	765	430	698	261	213	197	140
16	178	343	1080	462	635	869	426	636	254	805	212	135
17	169	243	876	452	577	1000	423	581	244	617	185	134
18	174	209	755	462	524	1460	398	544	238	521	180	133
19	261	200	665	431	498	1360	384	518	230	344	218	133
20	199	822	593	413	457	1340	387	497	240	266	281	133
21	175	663	550	413	423	1330	404	491	356	236	220	133
22	178	417	628	410	403	1070	5980	484	321	219	187	130
23	264	1850	597	401	417	889	2340	532	472	207	181	126
24	232	3190	559	623	396	778	1280	511	436	200	167	125
25	201	1060	555	653	374	806	942	446	287	199	158	126
26	180	723	555	603	354	720	777	428	239	203	153	126
27	170	800	552	571	656	668	700	439	228	240	151	134
28	165	1500	1650	540	780	1700	1160	435	218	283	152	137
29	160	1020	1320	510	693	1780	1260	403	227	222	825	140
30	158	752	1050	472	---	1260	1000	382	220	206	315	139
31	156	---	840	427	---	1010	---	369	---	266	231	---
TOTAL	5603	17107	46958	15028	14563	27960	27631	53890	8747	8763	7223	4420
MEAN	181	570	1515	485	502	902	921	1738	292	283	233	147
MAX	361	3190	11300	660	780	1780	5980	10100	472	805	825	216
MIN	134	153	550	370	349	506	384	369	218	199	151	125
CFSM	.52	1.64	4.35	1.39	1.44	2.59	2.65	4.99	.84	.81	.67	.42
IN.	.60	1.83	5.02	1.61	1.56	2.99	2.95	5.76	.94	.94	.77	.47

CAL YR 1983	TOTAL	320525	MEAN	878	MAX	12000	MIN	134	CFSM	2.52	IN.	34.26
WTR YR 1984	TOTAL	237893	MEAN	650	MAX	11300	MIN	125	CFSM	1.87	IN.	25.43

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LL), TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°03'54", long 88°15'08", Hardin County, Hydrologic Unit 06040001, at downstream end of lockwall in lower pool at Pickwick Landing Dam, 16.8 mi upstream from Savannah, Tennessee, and at mile 206.7.

DRAINAGE AREA.--32,820 mi², approximately.

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1981.
WATER TEMPERATURE: April 1976 to September 1981.

REMARKS.--Flow regulated by Pickwick Landing Dam and many other reservoirs above the station. Continuous discharge records are published under station 03593500 Tennessee River at Savannah, Tn.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 326 micromhos Sept. 18, 19, 1978; minimum, 116 micromhos Apr. 27, 1979.
WATER TEMPERATURE: Maximum, 31.5°C July 7, 1978; minimum, 2.0°C Feb. 8, 9, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT												
04...	0945	15500	180	7.1	24.0	755	2.5	7.5	90	--	--	68
FEB												
08...	1500	43400	140	6.3	5.0	760	9.8	12.8	100	K12	K1	64
MAY												
18...	1000	127000	125	5.7	19.0	760	18	8.5	92	K36	K3	52
JUL												
19...	1000	56000	160	7.8	28.0	768	3.5	5.8	74	K2	46	62

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT												
04...	7	19	4.9	7.6	19	.4	1.5	61	9.4	14	8.3	.10
FEB												
08...	12	20	3.4	5.7	16	.3	1.4	52	50	14	7.6	<.10
MAY												
18...	10	16	2.9	3.3	12	.2	1.3	42	162	11	3.7	<.10
JUL												
19...	6	18	4.2	5.6	16	.3	1.5	56	1.7	12	6.7	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT												
04...	4.7	95	97	.13	3980	.220	.060	.08	.20	.040	.070	.030
FEB												
08...	4.3	103	88	.14	12100	.590	.010	.01	.90	.050	.030	.020
MAY												
18...	5.7	96	70	.13	32900	.570	.560	.72	.80	.060	.030	.030
JUL												
19...	3.3	103	85	.14	15600	.160	.080	.10	.50	.050	.040	.020

K--Results based on non-ideal colony count.

TENNESSEE RIVER BASIN

03593005 TENNESSEE RIVER AT PICWICK LANDING DAM (LL), TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
OCT												
04...	.09	<10	2	29	<.5	<1	<1	<3	7	13	1	<4
FEB												
08...	.06	<10	1	46	<.5	2	<1	<3	3	26	43	<4
MAY												
18...	.09	60	1	70	<1	<1	<1	<3	2	300	1	<4
JUL												
19...	.06	<10	1	47	<.5	<1	<1	<3	7	12	4	9

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
04...	5	.3	10	<1	<1	<1	66	<6	4	--	--	--
FEB												
08...	17	<.1	<10	2	<1	<1	62	<6	18	19	2230	87
MAY												
18...	6	--	<10	4	--	<1	46	<6	26	25	8570	91
JUL												
19...	7	.1	<10	1	--	<1	59	<6	27	9	1360	90

03593500 TENNESSEE RIVER AT SAVANNAH, TN

LOCATION.--Lat 35°13'29", long 88°15'26", Hardin County, Hydrologic Unit 06040001, on right bank at upstream side of bridge on U.S. Highway 64, at Savannah, 16.8 mi downstream from Pickwick Landing Dam and at mile 189.9.

DRAINAGE AREA.--33,140 mi² 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.

REVISED RECORDS.--WSP 853: Drainage area. WSP 1306: 1936 (monthly runoff). WSP 2110: 1966. WRD Tenn. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft National Geodetic Vertical Datum of 1929. Prior to Apr. 7, 1945, at datum 41.61 ft higher. Oct. 1, 1948, to Apr. 13, 1978, auxiliary water-stage recorder on downstream end of lockwall in lower pool at Pickwick Landing Dam. Since Apr. 13, 1978, auxiliary water-stage recorder over the tailwater elevation well adjacent to the powerhouse which is an integral part of Pickwick Landing Dam, 16.8 mi upstream from base gage at same datum. Apr. 5, 1937, to Jan. 31, 1939, auxiliary nonrecording gage 4.0 mi downstream and Feb. 1, 1939, to Sept. 30, 1948, water-stage recorder 4.3 mi downstream from base gage at same datum.

REMARKS.--Records good. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other reservoirs have been built above station (see p. 177 and Water Resources Data for adjoining states).

AVERAGE DISCHARGE.--54 years, 55,036 ft³/s unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 585,000 ft³/s Mar. 17, 1973, from Pickwick Landing Dam releases furnished by Tennessee Valley Authority; maximum gage height, 96.11 ft Mar. 20, 1973; minimum discharge 60 ft³/s Apr. 23, 1966; minimum gage height, 41.20 ft present datum, Oct. 20, 1931; minimum gage height since Kentucky Lake reached minimum pool elevation on Apr. 7, 1945, 53.40 ft Jan. 12, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1867, 101.2 ft Mar. 21, 1897, present datum, from floodmarks, discharge, 450,000 ft³/s from rating curve extended above 320,000 ft³/s. Flood of Jan. 2, 1927, reached a stage of 92.7 ft present datum, discharge, 349,000 ft³/s. Minimum stage since 1905, 38.8 ft present datum, Sept. 8, 1925.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 273,000 ft³/s May 10; maximum gage height, 87.25 ft May 11; minimum daily discharge, 13,000 ft³/s Oct. 4; minimum gage height, 53.89 ft Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14000	23100	101000	117000	72300	86800	82900	74400	52300	37600	59000	40000
2	13600	22100	99300	116000	61400	86700	82900	75400	49900	36900	63300	35900
3	19100	21000	122000	109000	56500	80100	82300	154000	41600	36700	69600	35300
4	13000	21200	214000	92900	47300	82300	82800	233000	45100	29600	70400	57300
5	14500	20900	216000	81900	37200	85800	83000	237000	55600	33500	67000	50700
6	16300	19600	193000	81000	42100	80000	83200	217000	50000	33500	45800	51900
7	16000	28100	157000	73500	46000	75100	76000	198000	44800	44200	44000	52500
8	15600	30300	136000	47600	44500	65800	82800	219000	42200	60700	50800	26100
9	15700	35400	119000	52400	39700	65000	63000	257000	39500	47300	52100	21800
10	24000	28000	108000	69900	36200	63600	50200	269000	37300	47200	55100	44600
11	24200	28000	107000	57000	30100	53700	39200	261000	26800	42100	64200	44200
12	21400	22200	107000	46600	44000	55100	42800	258000	28700	48400	49100	46600
13	25400	17200	106000	53900	52400	59600	46500	255000	29700	40900	46500	46500
14	31900	30100	106000	61500	46200	45900	29400	233000	30500	45400	46000	45300
15	31500	32200	101000	57400	72800	45500	22000	193000	29300	43200	45100	25300
16	24000	35500	88800	55700	76300	45500	32000	160000	38100	47000	46000	22900
17	26700	40000	80700	65700	78500	48000	27100	126000	36300	41000	45200	44200
18	24100	34800	64500	58200	78800	64500	24300	110000	32800	46600	46900	46500
19	25500	28200	76200	70200	77400	68200	24300	93800	31000	56100	34300	48900
20	26000	27000	66100	72100	62800	43700	34000	76200	34200	57400	44600	48700
21	25500	47100	64500	69200	49900	52100	41800	70200	31400	58300	51700	45700
22	15700	48600	56200	65400	60900	76700	48600	66700	27800	56000	39800	25900
23	17100	45100	79100	52300	66900	77900	61100	60800	36100	44200	35000	20300
24	18400	70100	81700	62500	58600	78800	68500	54800	45600	45600	32800	39900
25	19500	63400	81300	73400	45600	73700	68500	59100	38500	43600	42200	39700
26	17200	55600	80700	70900	49100	60500	55200	49600	37700	42800	37800	38800
27	22800	60300	80600	67300	73200	45600	53200	52000	38300	46500	41800	41600
28	27000	71900	92300	63700	78500	75500	56400	61300	38200	56200	38700	29500
29	18100	95200	110000	61000	86500	85400	75300	59300	41800	53800	38000	21800
30	16100	101000	118000	64800	---	84600	85700	59100	38500	46100	36300	20600
31	22200	---	118000	71900	---	83100	---	59700	---	45900	39000	---
TOTAL	642100	1203200	3331000	2161900	1671700	2094800	1705000	4352400	1149600	1414300	1478100	1159000
MEAN	20710	40110	107500	69740	57640	67570	56830	140400	38320	45620	47680	38630
MAX	31900	101000	216000	117000	86500	86800	85700	269000	55600	60700	70400	57300
MIN	13000	17200	56200	46600	30100	43700	22000	49600	26800	29600	32800	20300

CAL YR 1983 TOTAL 22384200 MEAN 61330 MAX 257000 MIN 13000
WTR YR 1984 TOTAL 22363100 MEAN 61100 MAX 269000 MIN 13000

03596000 DUCK RIVER BELOW MANCHESTER, TN

LOCATION.--Lat 35°28'15", long 86°07'18", Coffee County, Hydrologic Unit 06040002, on right bank 50 ft downstream from Powers Bridge, 2.0 mi southwest of Manchester, 3.2 mi downstream from Little Duck River, 7.0 mi upstream from Crumpton Creek, and at mile 265.4.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--April 1934 to current year.

REVISED RECORDS.--WSP 1436: 1946-47.

GAGE.--Water-stage recorder. Datum of gage is 878.23 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional regulation for short periods during low flow by small reservoirs above station.

AVERAGE DISCHARGE.--50 years, 186 ft³/s, 23.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft³/s May 27, 1973, gage height, 20.95 ft, from rating curve extended above 12,000 ft³/s, based on contracted-opening measurement at gage height 15.04 ft, and slope-area measurements at gage heights 18.93 ft and 20.95 ft; minimum, 8.0 ft³/s Aug. 12, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of 23.2 ft from floodmarks by Tennessee Valley Authority, discharge, about 50,000 ft³/s. Flood in March 1902 reached approximately same stage.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	0930	3910	8.91	May 3	1600	4340	9.44
Dec. 4	0245	3080	7.77	May 8	0600	*4950	10.14

Minimum discharge, 19 ft³/s Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	26	188	137	117	270	230	226	60	46	146	30
2	20	27	167	125	108	246	190	908	56	72	81	28
3	20	68	1710	119	109	191	288	3300	53	90	64	28
4	21	119	2220	114	117	158	727	1470	51	44	56	29
5	24	71	620	116	107	214	436	553	49	67	50	62
6	23	46	691	117	98	315	290	608	47	82	45	35
7	21	38	432	110	86	242	213	1680	47	126	43	26
8	20	35	279	99	82	182	173	3820	46	100	73	24
9	20	33	216	95	90	152	161	975	43	54	53	24
10	20	35	182	165	136	126	161	441	43	45	45	24
11	20	34	385	272	250	115	141	305	44	42	43	25
12	25	32	782	191	225	106	128	223	47	208	42	25
13	40	31	406	169	678	140	117	195	49	99	38	24
14	35	31	340	181	850	177	106	166	46	59	36	24
15	31	106	297	184	381	139	97	140	43	48	35	24
16	29	88	213	170	273	197	96	122	41	370	35	23
17	27	54	172	162	221	207	103	109	39	146	34	23
18	26	45	149	278	183	361	99	99	39	444	35	24
19	25	40	133	276	162	274	91	92	42	143	34	24
20	25	102	121	163	148	486	102	86	40	85	33	24
21	25	122	115	123	130	641	134	82	42	66	32	24
22	26	74	334	104	125	388	876	76	42	63	43	23
23	30	230	307	107	119	257	454	108	44	78	65	22
24	28	636	188	460	112	203	242	128	40	53	36	23
25	29	203	124	399	136	233	174	85	38	48	32	23
26	28	127	122	274	108	217	143	75	36	47	30	23
27	28	397	98	225	287	180	130	69	35	47	30	24
28	27	2720	1200	188	465	1320	395	75	35	45	30	24
29	27	492	589	162	323	1330	408	87	36	42	31	24
30	26	261	254	140	---	497	402	75	37	43	36	24
31	26	---	167	132	---	305	---	65	---	138	34	---
TOTAL	793	6323	13201	5557	6226	9869	7307	16443	1310	3040	1420	784
MEAN	25.6	211	426	179	215	318	244	530	43.7	98.1	45.8	26.1
MAX	40	2720	2220	460	850	1330	876	3820	60	444	146	62
MIN	20	26	98	95	82	106	91	65	35	42	30	22
CFSM	.24	1.97	3.98	1.67	2.01	2.97	2.28	4.95	.41	.92	.43	.24
IN.	.28	2.20	4.59	1.93	2.16	3.43	2.54	5.72	.46	1.06	.49	.27

CAL YR 1983	TOTAL	84827	MEAN	232	MAX	4490	MIN	20	CFSM	2.17	IN.	29.49
WTR YR 1984	TOTAL	72273	MEAN	197	MAX	3820	MIN	20	CFSM	1.84	IN.	25.13

03598000 DUCK RIVER NEAR SHELBYVILLE, TN

LOCATION.--Lat 35°28'49", long 86°29'57", Bedford County, Hydrologic Unit 06040002, on right bank 150 ft downstream from Sims Bridge, 2.1 mi upstream from Sugar Creek, 2.2 mi west of Shelbyville, 2.9 mi downstream from Flat Creek, and at mile 216.2.

DRAINAGE AREA.--481 mi².

PERIOD OF RECORD.--October 1933 to current year. Prior to April 1934 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 783: 1934. WSP 853: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 683.51 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 2, 1966, at datum 2.0 ft higher.

REMARKS.--Records good. Prior to 1948 diurnal fluctuation caused by powerplant upstream. Flow regulated by Normandy Reservoir (station 03596460) since January 1976.

AVERAGE DISCHARGE.--51 years, 822 ft³/s, 23.21 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,900 ft³/s Feb. 13, 1948, gage height, 38.40 ft, present datum, from floodmarks, from rating curve extended above 35,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 5.0 ft³/s Aug. 23, 1936; minimum daily, 20 ft³/s Sept. 2, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of 39.6 ft present datum, discharge, about 70,000 ft³/s, from high water profile by Tennessee Valley Authority. Flood in March 1902 reached a stage about 2.0 ft higher than that in March 1929, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,500 ft³/s at 1630 hours May 8, gage height, 20.95 ft; minimum, 144 ft³/s Aug. 22; minimum daily, 148 ft³/s Aug. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	181	2010	1130	435	810	1720	1440	205	215	1130	190
2	175	181	1800	1070	392	744	1540	2820	211	220	635	185
3	174	195	5810	999	386	675	1480	9180	214	182	568	181
4	173	557	7700	618	388	611	1470	7850	206	181	429	180
5	187	557	3810	561	372	632	1470	4110	199	184	344	177
6	183	330	3560	377	356	1090	1160	3650	194	247	294	176
7	184	255	2910	338	319	1030	1050	5290	193	221	364	173
8	179	228	2490	311	303	893	940	10300	184	228	669	171
9	177	216	2250	295	263	765	868	8530	181	204	356	171
10	175	213	2270	381	346	505	500	4920	177	190	319	170
11	175	213	4640	699	626	448	416	4030	174	192	431	174
12	186	209	5280	586	652	402	370	1420	191	241	315	174
13	671	202	3480	545	1480	510	333	1040	201	240	260	169
14	430	201	2910	542	2850	593	306	924	185	203	236	167
15	253	1240	2460	538	1920	497	287	806	203	192	224	165
16	216	671	1260	533	1490	574	273	549	210	1780	215	165
17	201	361	1070	672	1300	627	263	505	200	479	210	162
18	194	735	978	859	995	952	250	496	195	1810	207	168
19	191	795	869	996	919	832	244	457	200	528	223	171
20	188	1530	514	852	853	2490	247	441	194	284	215	171
21	186	1450	471	772	783	2900	253	427	277	270	177	171
22	191	1050	662	744	524	2250	767	283	274	251	148	170
23	201	1700	896	692	491	1930	810	308	242	234	425	170
24	205	2780	740	1450	470	1140	534	399	218	220	251	169
25	199	1140	618	1160	454	1100	419	253	208	214	212	168
26	192	1590	595	1060	429	989	346	231	195	218	198	167
27	188	2270	552	927	783	638	308	261	191	211	193	168
28	185	8560	3130	955	1090	3280	588	245	188	208	191	168
29	184	4130	1800	886	919	3570	753	316	187	204	196	168
30	183	3250	1480	805	---	2630	1220	244	183	207	200	168
31	181	---	1250	625	---	2020	---	217	---	1720	194	---
TOTAL	6582	36990	70265	22978	22588	38127	21185	71942	6080	11978	10029	5147
MEAN	212	1233	2267	741	779	1230	706	2321	203	386	324	172
MAX	671	8560	7700	1450	2850	3570	1720	10300	277	1810	1130	190
MIN	173	181	471	295	263	402	244	217	174	181	148	162
(†)	-2200	-6500	-8700	+1500	+3700	+9100	+7000	-300	-1000	+1600	-1800	-3200
MEAN†	141	1016	1986	790	906	1523	940	2311	169	438	265	64.9
CFSM†	.29	2.11	4.13	1.64	1.88	3.17	1.95	4.80	.35	.91	.55	.13
IN.†	.34	2.36	4.76	1.89	2.03	3.65	2.18	5.54	.39	1.05	.64	.15

CAL YR 1983 TOTAL 390597 MEAN 1070 MAX 15900 MIN 80 MEAN† 1062 CFSM† 2.21 IN.† 29.97
WTR YR 1984 TOTAL 323891 MEAN 885 MAX 10300 MIN 148 MEAN† 883 CFSM† 1.84 IN.† 24.98

† Change in contents, in cfs-days, in Normandy Lake.
† Adjusted for change in contents.

TENNESSEE RIVER BASIN

03600500 BIG BIGBY CREEK AT SANDY HOOK, TN

LOCATION.--Lat 35°29'19", long 87°13'59", Maury County, Hydrologic Unit 06040003, on right bank 45 ft west of Louisville and Nashville Railroad track, 0.2 mi downstream from bridge on U. S. Highway 43, 0.4 mi northeast of Sandy Hook, 0.5 mi upstream from Dry Creek, 3.5 mi southwest of Mount Pleasant, and at mile 17.9.

DRAINAGE AREA.--17.5 mi².

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

REVISED RECORDS.--WRD TN 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).

GAGE.--Water-stage recorder. Datum of gage is 670.44 ft National Geodetic Vertical Datum of 1929.

REMARKS: Records good, except those below 10 ft³/s which are fair.

AVERAGE DISCHARGE.--31 years, 28.6 ft³/s, 22.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,700 ft³/s Mar. 15, 1973, gage height, 11.55 ft, from rating curve extended above 1,400 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 1.0 ft³/s Sept. 10, 1958, and July 9, 1959, caused by removal of gravel 0.2 mi upstream; minimum natural discharge, 1.5 ft³/s Sept. 4-7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	1330	1140	6.10	Apr. 22	0430	*1980	7.49
Dec. 3	1915	1120	6.07	May 3	0245	679	5.05
Apr. 21	2300	1750	7.18	May 8	0045	1410	6.62

Minimum daily discharge, 4.0 ft³/s Sept. 22-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	5.6	17	20	15	27	39	63	20	8.7	7.7	6.6
2	4.4	5.6	24	18	14	25	34	174	19	8.3	18	6.1
3	4.4	9.1	493	16	20	22	56	353	18	7.9	11	6.4
4	4.4	97	222	15	19	21	200	163	17	15	9.6	6.6
5	7.3	22	71	15	18	41	87	89	17	22	8.5	5.8
6	5.6	13	49	14	15	47	57	65	16	14	8.5	5.4
7	4.9	10	33	13	14	39	41	342	16	11	7.8	5.1
8	4.8	8.4	26	12	14	33	35	552	16	9.5	7.2	4.9
9	4.7	7.5	22	12	14	28	32	141	15	8.5	6.9	4.8
10	4.7	7.9	19	19	55	24	29	78	14	8.1	6.7	5.0
11	4.8	7.1	105	19	43	21	26	56	14	7.9	6.6	5.1
12	15	6.5	98	18	38	21	24	44	14	10	6.3	4.7
13	32	6.1	53	18	50	56	23	36	14	11	5.9	4.7
14	10	6.4	67	20	39	43	21	31	14	7.9	5.9	4.6
15	7.7	15	45	20	33	36	20	27	11	16	6.6	4.5
16	6.8	9.7	32	20	30	105	20	25	12	88	6.3	4.5
17	6.2	8.1	26	18	26	82	19	24	12	48	5.8	4.3
18	7.1	7.6	22	19	22	66	17	23	12	43	5.7	4.3
19	6.8	7.3	19	16	21	51	17	22	11	18	5.9	4.2
20	6.4	77	17	14	18	85	17	21	11	13	5.6	4.1
21	6.6	28	16	14	17	73	181	21	12	10	5.3	4.1
22	9.5	17	20	14	16	51	683	20	15	9.0	5.3	4.0
23	12	310	18	14	16	38	117	30	19	8.5	5.0	4.0
24	8.5	86	14	34	15	34	66	23	14	7.9	5.0	4.0
25	7.6	31	13	31	14	36	47	21	11	7.8	5.0	4.0
26	6.8	20	13	27	13	31	38	23	9.3	7.5	4.8	4.0
27	6.5	55	14	25	51	30	32	34	9.7	11	4.9	4.0
28	6.3	69	94	22	36	231	150	39	8.8	8.5	37	4.0
29	5.9	32	41	20	30	131	99	26	9.0	8.2	16	4.2
30	5.8	22	28	18	---	76	88	23	8.9	8.6	9.4	4.3
31	5.6	---	22	16	---	52	---	21	---	9.1	7.9	---
TOTAL	233.5	1006.9	1753	571	726	1656	2315	2610	409.7	471.9	258.1	142.3
MEAN	7.53	33.6	56.5	18.4	25.0	53.4	77.2	84.2	13.7	15.2	8.33	4.74
MAX	32	310	493	34	55	231	683	552	20	88	37	6.6
MIN	4.4	5.6	13	12	13	21	17	20	8.8	7.5	4.8	4.0
CFSM	.43	1.92	3.23	1.05	1.43	3.05	4.41	4.81	.78	.87	.48	.27
IN.	.50	2.14	3.73	1.21	1.54	3.52	4.92	5.55	.87	1.00	.55	.30

CAL YR 1983	TOTAL	14920.1	MEAN	40.9	MAX	792	MIN	3.1	CFSM	2.34	IN.	31.72
WTR YR 1984	TOTAL	12153.4	MEAN	33.2	MAX	683	MIN	4.0	CFSM	1.90	IN.	25.83

NOTE.--No gage-height record Sept. 20-30.

03602500 PINEY RIVER AT VERNON, TN

LOCATION.--Lat 35°52'16", long 87°30'05", Hickman County, Hydrologic Unit 06040003, on right bank at county highway bridge, 40 ft upstream from Pretty Creek, 0.2 mi northwest of Vernon, 2.3 mi downstream from Mill Creek, 6.5 mi north of Centerville, and at mile 8.3.

DRAINAGE AREA.--193 mi².

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

REVISED RECORDS.--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).

GAGE.--Water-stage recorder. Datum of gage is 461.72 ft National Geodetic Vertical Datum of 1929. Prior to May 11, 1934, nonrecording gage; July 3, 1925, to Feb. 8, 1931, at site 350 ft upstream at datum 3.17 ft higher; Feb. 9, 1931, to May 10, 1934, at site 0.4 mi downstream at datum 0.40 ft higher. May 11, 1934, to Sept. 30, 1970, water-stage recorder at site 350 ft upstream; prior to June 29, 1965, at datum 3.17 ft higher, and 2.17 ft higher thereafter.

REMARKS.--Records good.

AVERAGE DISCHARGE.--59 years, 318 ft³/s, 22.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft³/s Dec. 21, 1926, gage height, 16.5 ft, site and datum then in use; minimum, 35 ft³/s Sept. 19, 20, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1897 reached a stage of 17.5 ft, original site and datum, discharge, 37,000 ft³/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0015	7220	12.39	May 7	1315	18200	16.92
May 6	2115	*21700	17.92				

Minimum discharge, 66 ft³/s Sept. 22, 23, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	84	200	250	219	235	547	1140	211	170	144	96
2	76	85	549	239	212	239	466	1300	203	165	145	93
3	77	93	2320	229	223	238	448	2310	196	160	139	120
4	77	157	3080	220	219	240	414	1850	192	155	136	139
5	85	125	1000	215	214	593	379	1210	189	220	139	103
6	84	103	683	208	206	662	349	7710	184	270	139	95
7	80	98	502	199	193	531	325	12900	179	240	135	94
8	79	94	414	191	188	451	307	8470	174	190	123	91
9	79	90	366	185	187	392	329	2940	167	160	117	89
10	78	91	337	210	207	359	320	1760	162	140	112	92
11	78	88	388	214	232	334	307	1250	156	120	109	97
12	94	87	562	206	243	316	297	964	152	120	106	93
13	155	86	486	206	271	313	291	785	148	115	101	90
14	109	86	493	203	279	290	279	683	145	107	96	89
15	93	113	459	196	276	276	270	586	143	153	97	85
16	88	102	398	197	270	325	262	516	143	641	101	81
17	88	93	353	195	261	340	256	459	137	333	98	81
18	91	91	324	194	248	347	242	422	136	354	98	82
19	90	94	297	182	243	346	233	390	139	266	100	80
20	89	244	277	173	230	358	227	368	135	232	99	82
21	87	179	268	166	219	365	317	348	130	213	96	80
22	99	140	314	163	214	352	2390	329	200	196	96	74
23	109	566	313	175	210	330	1170	362	350	186	98	72
24	98	571	290	280	202	321	791	322	370	175	93	77
25	92	315	268	290	195	356	606	300	300	166	93	76
26	88	241	253	281	187	346	503	288	250	159	94	71
27	87	239	250	275	222	343	461	286	220	190	94	73
28	87	340	383	267	242	2010	883	287	200	171	96	73
29	86	282	337	259	241	1400	1290	250	190	154	105	74
30	86	232	288	245	---	882	1760	235	180	146	104	73
31	84	---	264	229	---	669	---	223	---	146	106	---
TOTAL	2771	5209	16716	6742	6553	14559	16719	51243	5681	6213	3409	2615
MEAN	89.4	174	539	217	226	470	557	1653	189	200	110	87.2
MAX	155	571	3080	290	279	2010	2390	12900	370	641	145	139
MIN	76	84	200	163	187	235	227	223	130	107	93	71
CFSM	.46	.90	2.79	1.12	1.17	2.44	2.89	8.56	.98	1.04	.57	.45
IN.	.53	1.00	3.22	1.30	1.26	2.81	3.22	9.88	1.09	1.20	.66	.50

CAL YR 1983	TOTAL	160781	MEAN	440	MAX	12000	MIN	76	CFSM	2.28	IN.	30.99
WTR YR 1984	TOTAL	138430	MEAN	378	MAX	12900	MIN	71	CFSM	1.96	IN.	26.68

TENNESSEE RIVER BASIN

03603000 DUCK RIVER ABOVE HURRICANE MILLS, TN

LOCATION.--Lat 35°55'48", long 87°44'35", Humphreys County, Hydrologic Unit 06040003, on left bank 0.4 mi downstream from Tumbling Creek, 1.3 mi upstream from bridge on State Highway 13, 3.6 mi Southeast of Hurricane Mills, and at mile 26.0.

DRAINAGE AREA.--2,557 mi².

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1951, published as "near Hurricane Mills."

REVISED RECORDS.--WSP 803: 1935. WSP 823: 1927(M). WSP 853: Drainage area. WSP 1436: 1926-28, 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 370.53 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 21, 1934, nonrecording gage and Feb. 21, 1934, to Sept. 30, 1951, water-stage recorder at bridge 5.6 mi downstream at datum 8.80 ft lower.

REMARKS.--Records good. Flow regulated since January 1976 by Normandy Lake (station 03596460). Prior to 1953 occasional regulation at low flow from small dams upstream. Minor diversions for irrigation.

AVERAGE DISCHARGE.--59 years, 4,137 ft³/s, 21.97 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 122,000 ft³/s Feb. 14, 1948, gage height, 30.70 ft, from floodmark in gage house, present site and datum; minimum, 185 ft³/s Sept. 11, 12, 1925.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52,000 ft³/s at 1900 hours May 7, gage height, 23.46 ft; minimum, 611 ft³/s Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	834	15000	5820	3300	4370	12300	11100	2440	1150	1170	926
2	655	815	8930	4790	3010	4170	9040	9520	2240	1130	1890	855
3	660	816	12300	4140	2810	3790	7400	16700	2050	1280	4630	901
4	665	1050	28800	3700	2680	3520	6720	25800	1910	1150	3830	981
5	686	1940	36900	3420	2660	3810	8850	30300	1810	1130	2930	928
6	681	2130	35700	3170	2630	4700	8860	35500	1710	1250	2440	860
7	722	2140	27400	2800	2510	5550	7340	47500	1630	1270	2400	800
8	741	2090	13100	2610	2360	6210	6020	51000	1550	1260	2290	760
9	721	1730	9920	2410	2260	5730	5270	47100	1490	1320	2060	743
10	722	1470	7910	2340	2230	4930	4750	42200	1420	1320	2020	740
11	716	1280	6920	2420	2370	4290	4410	36900	1370	1240	2310	778
12	716	1170	11100	2630	2780	3800	3960	25800	1320	1130	1870	761
13	908	1100	19500	3370	3770	3420	3440	12700	1280	1060	1640	732
14	1130	1070	23200	3470	4570	3750	3110	8870	1250	1020	1760	714
15	1140	1220	17200	3250	6090	4050	2870	6480	1310	1020	1550	684
16	1030	2860	11100	3230	7540	4580	2710	5380	1330	2330	1410	660
17	1470	3330	8840	3210	6460	5240	2580	4600	1410	9120	1280	661
18	1280	3370	6880	3090	5260	5650	2450	3950	1340	6180	1150	656
19	1090	2640	5460	2980	4530	5610	2330	3390	1240	8180	1230	643
20	1050	2420	4720	2960	3970	5690	2230	3050	1240	6210	1190	633
21	977	3500	4200	3140	3490	6550	2200	2850	1210	4420	1060	631
22	935	6020	3890	2960	3180	11000	13300	2660	1330	2830	980	631
23	948	6490	3710	2760	2950	11500	33000	2670	1300	2230	935	616
24	1020	13400	4000	2910	2790	8310	30000	2870	2040	1890	964	632
25	1030	15300	4140	4040	2510	7030	11200	2680	2240	1670	904	639
26	998	11900	3640	5740	2330	6110	7230	2390	1800	1500	825	630
27	986	7390	3240	5810	2370	5430	5730	2350	1520	1470	853	622
28	936	6590	3450	4890	2810	8660	5220	2910	1350	1460	943	635
29	892	12400	7650	4360	3490	19400	7620	3660	1260	1370	952	640
30	856	18000	10600	3950	---	23000	10600	2720	1200	1290	1200	650
31	843	---	8620	3630	---	19400	---	2540	---	1210	1030	---
TOTAL	27854	136465	368020	110000	99710	219250	232740	458140	46590	71090	51696	21742
MEAN	899	4549	11870	3548	3438	7073	7758	14780	1553	2293	1668	725
MAX	1470	18000	36900	5820	7540	23000	33000	51000	2440	9120	4630	981
MIN	650	815	3240	2340	2230	3420	2200	2350	1200	1020	825	616

CAL YR 1983 TOTAL 2222398 MEAN 6089 MAX 47000 MIN 646 MEAN† 6081 CFSM† 2.38 IN† 32.28
WTR YR 1984 TOTAL 1843297 MEAN 5036 MAX 51000 MIN 616 MEAN† 5034 CFSM† 1.97 IN† 26.80

† Adjusted for change in contents in Normandy Lake.

TENNESSEE RIVER BASIN

03604000 BUFFALO RIVER NEAR FLAT WOODS, TN
(Hydrologic bench-mark station)

LOCATION.--Lat 35°29'45", long 87°49'58", Perry County, Hydrologic Unit 06040004, on right bank 0.4 mi downstream from Little Opossum Creek, 0.5 mi downstream from bridge on State Highway 13, 1.3 mi north of Flat Woods, 3.9 mi upstream from Sinking Creek, and at mile 58.7.

DRAINAGE AREA.--447 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1920 to current year.

REVISED RECORDS.--WSP 758: 1933. WSP 803: 1935. WSP 823: Drainage area. WSP 1436: 1921(M), 1922-24, 1925(M), 1927(M), 1934(M), WRD TN 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 513.58 ft National Geodetic Vertical Datum of 1929. Prior to May 27, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--64 years, 759 ft³/s, 23.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,000 ft³/s Feb. 13, 1948, gage height, 32.0 ft, from high-water mark in gage house, from rating curve extended above 50,000 ft³/s on basis of slope-area and contracted-opening measurements of peak flow and rainfall-runoff study; minimum, 65 ft³/s Sept. 9, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Feb. 13, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 24	0600	5580	11.17	Apr. 22	2130	*22200	22.33
Dec. 4	1030	17600	20.43	May 4	0800	7150	12.88
Mar. 28	2100	7250	12.99	May 8	2000	14100	18.76

Minimum discharge, 166 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	279	798	792	533	727	1370	1910	567	314	354	266
2	250	269	736	719	513	689	1150	2260	530	304	341	242
3	249	270	3070	676	541	645	1060	5780	506	308	344	233
4	246	308	14500	628	581	601	1060	6340	486	307	359	252
5	274	396	5260	587	551	697	1340	3740	467	323	326	256
6	367	364	2230	565	529	912	1040	2160	449	376	332	240
7	343	328	1670	542	505	929	867	2570	429	358	430	226
8	293	305	1280	517	487	864	790	10500	419	341	373	220
9	255	285	1060	499	476	793	798	8660	406	327	320	210
10	242	286	951	535	523	724	803	3010	394	306	299	211
11	239	290	949	631	666	673	786	2010	384	294	291	220
12	256	286	1580	600	705	636	716	1520	382	288	289	219
13	465	280	1450	578	854	721	691	1220	396	316	282	211
14	491	279	1360	572	945	904	656	1030	423	324	273	206
15	366	322	1600	572	867	873	615	897	398	298	278	200
16	301	371	1310	570	827	1230	586	796	385	468	292	186
17	280	349	1100	558	773	1810	575	714	363	647	281	182
18	280	310	969	559	733	1980	563	644	347	866	269	182
19	348	299	867	546	700	1740	539	590	337	708	269	182
20	338	675	784	504	625	1460	529	566	336	454	309	180
21	311	812	727	471	610	1410	893	547	393	373	305	180
22	312	563	766	481	555	1210	13700	520	410	340	274	180
23	353	1470	760	484	545	1040	11900	528	424	320	259	175
24	351	4860	678	637	516	906	2730	577	426	306	248	169
25	310	2030	590	755	479	900	1810	498	402	298	235	168
26	287	1160	601	710	454	848	1380	465	361	296	230	168
27	275	918	569	671	590	786	1180	678	345	317	227	169
28	284	1290	959	646	828	4650	1510	1990	336	362	227	177
29	288	1270	1570	624	793	4590	2750	1040	343	344	234	181
30	297	958	1110	594	---	2440	2380	730	339	317	344	185
31	293	---	888	562	---	1740	---	624	---	321	296	---
TOTAL	9496	21882	52742	18385	18304	40128	56767	65114	12183	11521	9190	6076
MEAN	306	729	1701	593	631	1294	1892	2100	406	372	296	203
MAX	491	4860	14500	792	945	4650	13700	10500	567	866	430	266
MIN	239	269	569	471	454	601	529	465	336	288	227	168
CFSM	.68	1.63	3.81	1.33	1.41	2.89	4.23	4.70	.91	.83	.66	.45
IN.	.79	1.82	4.39	1.53	1.52	3.34	4.72	5.42	1.01	.96	.76	.51

CAL YR 1983	TOTAL	422619	MEAN	1158	MAX	17200	MIN	239	CFSM	2.59	IN.	35.17
WTR YR 1984	TOTAL	321788	MEAN	879	MAX	14500	MIN	168	CFSM	1.97	IN.	26.78

03604000 BUFFALO RIVER NEAR FLAT WOODS, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1964 to January 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 31.0°C July 13-15, 1966; minimum, 0.0°C many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV												
21...	1100	820	65	7.3	11.5	753	8.2	8.4	78	K1100	K1900	40
JAN												
12...	1100	601	85	7.8	3.0	760	2.6	12.7	95	K6	140	37
APR												
25...	1100	1810	80	8.4	15.0	--	20	9.1	--	350	310	31
JUL												
30...	1000	321	94	7.1	22.5	756	1.0	7.4	86	96	360	42

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV												
21...	4	13	1.8	1.6	8	.1	1.0	36	3.5	6.4	2.3	.10
JAN												
12...	3	12	1.7	1.5	8	.1	.70	34	1.0	5.1	2.4	<.10
APR												
25...	6	10	1.5	3.0	16	.2	1.9	25	.2	5.4	2.0	<.10
JUL												
30...	2	14	1.8	1.2	6	.0	.70	40	6.2	4.3	2.1	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV												
21...	5.8	57	54	.08	126	.100	.030	.04	2.2	.110	.030	.020
JAN												
12...	4.9	50	49	.07	81	.250	<.010	--	.40	.030	.020	<.010
APR												
25...	6.5	49	46	.07	239	.550	.060	.08	.30	.040	.010	.010
JUL												
30...	5.9	66	54	.09	57	.110	<.010	--	.30	.020	.030	.020

K--Results based on non-ideal colony count.

03604000 BUFFALO RIVER NEAR FLAT WOODS, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
NOV 21...	.06	10	<1	35	<.5	<1	<1	<3	1	66	2	<4
JAN 12...	--	--	--	--	--	--	--	--	--	--	--	--
APR 25...	.03	<10	<1	26	<1	2	<1	<3	4	92	1	<4
JUL 30...	.06	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 21...	7	.1	<10	<1	<1	<1	47	<6	7	5	11	62
JAN 12...	--	--	--	--	--	--	--	--	--	60	97	34
APR 25...	16	.1	<10	<1	<1	<1	36	<6	42	34	166	86
JUL 30...	--	--	--	--	--	--	--	--	--	17	15	81

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
APR 25...	<1.0	1.1	.7	1.4	.7	1.2	.6	.05	.25

03604500 BUFFALO RIVER NEAR LOBELVILLE, TN

LOCATION.--Lat 35°48'46", long 87°47'51", Perry County, Hydrologic Unit 06040004, on right bank 30 ft upstream from Standing Rock Bridge, 1.4 mi downstream from bridge on State Highway 13, 3 mi north of Lobelville, 13 mi downstream from Cane Creek, and at mile 17.7.

DRAINAGE AREA.--707 mi².

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1306.

REVISED RECORDS.--WSP 803: 1935. WSP 823: Drainage area. WSP 853: 1928-37. WSP 1436: 1932(M).

GAGE.--Water-stage recorder. Datum of gage 403.02 ft National Geodetic Vertical Datum of 1929. Nov. 1, 1927, to May 31, 1934, nonrecording gage 40 ft downstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--57 years, 1,199 ft³/s, 23.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft³/s Feb. 14, 1948, gage height, 23.76 ft from high-water mark in gage house, from rating curve extended above 40,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 135 ft³/s Aug. 18, 1953, caused by regulations upstream at unknown location; minimum discharge unaffected by regulation, 142 ft³/s Oct. 1-8, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Feb. 14, 1948. Flood of March 1902 reached a stage of about 21.8 ft, discharge not determined, from flood profile by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 25	0800	5270	9.77	Apr. 23	2200	*20000	15.90
Dec. 5	1400	16400	15.07	May 4	1730	9150	12.33
Mar. 29	2200	8050	11.72	May 9	1930	15800	14.92

Minimum discharge, 305 ft³/s Sept. 25, 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	474	1380	1290	918	1190	2480	3670	1030	536	496	445
2	405	469	1340	1180	874	1130	2040	3430	919	518	508	415
3	401	466	3110	1110	884	1090	1780	6140	854	500	512	422
4	399	557	9520	1060	917	1050	1630	8930	807	498	508	414
5	414	578	14700	1000	929	1180	1610	8320	768	498	532	401
6	418	561	7840	948	892	1410	1680	4660	731	508	520	404
7	469	553	3040	908	849	1590	1460	5380	721	524	545	390
8	500	513	2310	867	817	1540	1300	11900	696	537	583	373
9	472	485	1860	830	793	1430	1250	14800	673	512	570	361
10	441	472	1600	841	812	1310	1240	10900	651	501	516	357
11	414	457	1490	906	889	1220	1220	4150	633	483	484	363
12	406	453	1690	952	993	1150	1180	2890	617	479	464	374
13	472	452	2150	935	1110	1140	1140	2320	604	465	452	368
14	579	454	2060	915	1250	1200	1100	1940	602	462	448	358
15	653	618	2050	906	1320	1310	1060	1670	626	479	437	346
16	593	658	2090	906	1270	1440	1010	1480	611	568	444	335
17	521	605	1810	900	1230	1920	977	1340	594	653	448	327
18	492	582	1580	889	1160	2460	946	1240	577	878	442	322
19	481	544	1420	873	1120	2590	917	1150	590	925	431	321
20	490	784	1290	841	1070	2410	887	1100	587	936	427	322
21	517	1060	1200	795	994	2200	891	1050	564	751	435	320
22	507	1130	1200	753	959	2060	8670	1010	746	634	455	318
23	511	1630	1190	743	903	1800	16300	1060	749	570	432	315
24	522	3640	1150	911	873	1610	13300	1040	699	528	413	312
25	537	4770	1070	1090	832	1510	3720	1010	667	502	398	308
26	508	2450	961	1180	783	1440	2520	943	635	485	385	305
27	479	1750	911	1140	863	1360	2040	895	596	508	375	309
28	461	1680	1140	1100	1040	2830	2070	1570	567	516	371	314
29	457	1790	1540	1060	1200	6680	2890	2240	557	520	373	324
30	461	1650	1800	1020	---	5820	3950	1540	547	516	372	332
31	470	---	1490	966	---	3290	---	1150	---	500	431	---
TOTAL	14860	32285	77982	29815	28544	60360	83258	110918	20218	17490	14207	10575
MEAN	479	1076	2516	962	984	1947	2775	3578	674	564	458	353
MAX	653	4770	14700	1290	1320	6680	16300	14800	1030	936	583	445
MIN	399	452	911	743	783	1050	887	895	547	462	371	305
CFSM	.68	1.52	3.56	1.36	1.39	2.75	3.93	5.06	.95	.80	.65	.50
IN.	.78	1.70	4.10	1.57	1.50	3.18	4.38	5.84	1.06	.92	.75	.56

CAL YR 1983	TOTAL	622262	MEAN	1705	MAX	16100	MIN	397	CFSM	2.41	IN.	32.74
WTR YR 1984	TOTAL	500512	MEAN	1368	MAX	16300	MIN	305	CFSM	1.93	IN.	26.34

03605555 TRACE CREEK ABOVE DENVER, TN

LOCATION.--Lat 36°03'08", long 87°54'27", Humphreys County, Hydrologic Unit 06040005, on left bank at bridge on U.S. Highway 70, 1.0 mi east of Denver, 3.9 mi northeast of New Johnsonville, and at mile 4.2.

DRAINAGE AREA.--31.9 mi².

PERIOD OF RECORD.--October 1963 to current year. Published as "near Denver" prior to October 1972.

REVISED RECORDS.--WDR TN-76-1: 1973-75(P).

GAGE.--Water-stage recorder. Datum of gage is 377.05 ft National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1973, at site 1.1 mi upstream. Oct. 22 to Nov. 6, 1963, at different datum and Nov. 7, 1963, to Dec. 31, 1972, at datum 12.47 ft higher.

REMARKS.--Records good, except those for period of no gage-height record, Aug. 28 to Sept. 30, which are poor. Natural flow of stream effected by periodic transbasin diversion of water from the Duck River basin into the Trace Creek basin to supplement the Waverly municipal water supply.

AVERAGE DISCHARGE.--21 years, 53.1 ft³/s, 22.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s, May 6, 1984, gage height, 13.61 ft; maximum discharge at prior site and datum, 3,640 ft³/s, May 13, 1967, gage height, 9.08 ft; minimum discharge, 3.0 ft³/s Aug. 9, 13, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1886, 14 ft January 1937, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,850 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 2	1730	2100	7.39	May 6	2115	*11700	13.61
Dec. 3	1900	3820	9.10	May 7	2000	2390	7.74
Apr. 22	0030	1860	7.07				

Minimum discharge, 5.6 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	8.2	20	36	34	45	67	104	19	16	9.9	9.2
2	5.8	8.3	488	35	34	44	58	163	18	15	9.8	9.1
3	5.9	9.1	1340	34	35	42	67	691	17	14	9.8	13
4	6.0	15	522	33	36	104	62	270	17	13	10	12
5	6.5	10	170	33	34	678	56	128	16	15	11	10
6	6.4	9.1	144	32	33	185	52	2360	15	13	12	9.5
7	6.3	9.0	92	31	32	122	47	1420	15	13	11	9.0
8	6.3	8.7	67	31	32	97	44	798	14	12	10	9.0
9	6.5	8.6	56	30	31	81	50	236	14	11	9.9	9.5
10	6.5	9.3	56	31	33	71	48	122	13	11	10	10
11	6.6	9.3	70	31	46	65	44	76	13	11	11	12
12	7.1	9.0	72	30	46	61	41	54	14	12	10	11
13	8.8	8.9	60	29	52	59	40	41	15	11	9.9	10
14	7.7	9.1	66	29	48	55	38	34	14	10	9.7	9.5
15	7.3	11	64	29	44	54	35	28	15	11	9.7	9.0
16	7.1	10	55	29	42	85	34	24	21	47	9.8	8.8
17	7.4	9.7	49	28	42	78	33	21	15	34	9.8	8.6
18	7.8	9.4	46	28	39	74	32	20	15	29	9.9	8.6
19	7.8	9.6	43	27	41	71	31	18	15	21	10	8.7
20	7.8	29	41	27	40	109	30	17	19	17	10	8.8
21	7.8	16	44	26	38	96	84	17	22	16	9.5	8.5
22	9.5	13	118	26	37	83	665	17	17	14	9.1	8.4
23	9.8	54	74	28	36	73	128	57	18	13	9.2	8.3
24	8.6	45	59	54	36	69	77	32	20	12	9.0	8.4
25	8.3	23	50	53	34	94	57	24	15	11	8.9	8.5
26	8.3	19	45	46	33	80	47	22	14	10	8.8	8.4
27	8.0	46	43	43	45	75	43	22	13	13	8.7	8.4
28	8.0	78	54	41	51	549	106	22	39	11	9.0	8.5
29	8.0	32	49	39	46	250	214	20	37	10	10	8.8
30	8.0	24	41	38	---	117	224	20	20	10	9.5	8.8
31	8.1	---	37	36	---	82	---	20	---	10	9.2	---
TOTAL	229.7	560.3	4135	1043	1130	3748	2554	6898	529	466	304.1	280.3
MEAN	7.41	18.7	133	33.6	39.0	121	85.1	223	17.6	15.0	9.81	9.34
MAX	9.8	78	1340	54	52	678	665	2360	39	47	12	13
MIN	5.7	8.2	20	26	31	42	30	17	13	10	8.7	8.3
CFSM	.23	.59	4.17	1.05	1.22	3.79	2.67	6.99	.55	.47	.31	.29
IN.	.27	.65	4.82	1.22	1.32	4.37	2.98	8.04	.62	.54	.35	.33

CAL YR 1983	TOTAL	22204.3	MEAN	60.8	MAX	1560	MIN	5.7	CFSM	1.91	IN.	25.89
WTR YR 1984	TOTAL	21877.4	MEAN	59.8	MAX	2360	MIN	5.7	CFSM	1.87	IN.	25.51

NOTE.--No gage-height record Aug. 28 to Sept. 30.

03606500 BIG SANDY RIVER AT BRUCETON, TN

LOCATION.--Lat 36°02'19", long 88°13'42", Carroll County, Hydrologic Unit 06040005, on right bank on downstream end of abutment of county bridge, 700 ft downstream from bridge on U.S. Highway 70, 0.6 mi upstream from Cherry Creek, 0.9 mi east of Bruceton, and at mile 31.6.

DRAINAGE AREA.--205 mi².

PERIOD OF RECORD.--July 1929 to current year.

REVISED RECORDS.--WSP 853: Drainage area. WSP 923: 1929-35.

GAGE.--Water-stage recorder. Datum of gage is 380.58 ft National Geodetic Vertical Datum of 1929. Prior to Mar. 1, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--55 years, 295 ft³/s, 19.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s Jan. 21, 1935, gage height, 16.16 ft from graph based on gage readings, from rating curve extended above 9,200 ft³/s; minimum, 28 ft³/s Aug. 17-19, 22, Sept. 1, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1897 reached a stage of 18 ft, discharge, 25,000 ft³/s, and flood in March 1919 reached a stage of 17 ft, discharge, 21,000 ft³/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 5	0615	2770	12.78	May 8	1600	*5030	13.97
Mar. 5	1200	2250	12.35	July 18	0415	2240	12.34
Apr. 23	0930	4840	13.88				

Minimum discharge, 53 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	76	181	420	151	190	286	645	123	99	105	78
2	57	79	877	224	148	170	231	903	113	85	102	77
3	55	85	2220	199	190	155	490	1690	107	75	100	190
4	54	165	2650	183	193	377	396	2060	103	99	221	194
5	59	136	2710	189	167	2110	296	2430	97	161	244	117
6	65	98	2350	192	152	1740	235	2170	98	241	219	93
7	59	91	985	185	139	1250	199	2680	93	160	159	84
8	58	91	334	172	137	483	192	4730	89	102	121	79
9	58	91	240	171	142	248	257	3790	85	82	110	81
10	58	106	225	227	153	204	238	2350	83	75	103	104
11	59	111	328	244	169	189	203	1130	78	71	123	110
12	68	96	362	184	168	198	185	384	76	94	110	118
13	150	91	257	174	271	242	180	269	77	84	97	93
14	107	93	574	168	215	194	170	227	76	71	89	85
15	79	166	475	157	174	180	159	191	74	69	89	80
16	72	139	332	154	161	848	176	174	78	441	107	76
17	95	111	217	151	154	701	172	162	73	915	99	75
18	107	100	189	150	146	609	158	155	70	1600	86	74
19	99	97	174	152	232	562	148	148	66	414	86	75
20	83	573	163	152	203	1010	144	143	76	165	84	77
21	78	398	387	152	167	838	379	142	122	124	78	76
22	127	309	1070	152	153	660	2220	136	104	108	76	73
23	214	1410	675	160	148	295	4290	488	162	99	79	73
24	122	1090	664	531	141	363	2640	593	146	91	75	74
25	99	848	664	486	132	826	1070	650	101	87	74	77
26	88	438	664	357	128	686	326	227	82	88	70	74
27	83	474	664	237	382	448	280	195	79	1020	70	75
28	80	639	656	196	371	1060	997	446	130	371	82	77
29	78	439	652	184	245	1060	807	208	228	171	104	77
30	77	256	652	172	---	1100	979	156	122	124	87	78
31	76	---	650	155	---	634	---	134	---	110	84	---
TOTAL	2620	8896	23241	6630	5332	19630	18503	29806	3011	7496	3333	2714
MEAN	84.5	297	750	214	184	633	617	961	100	242	108	90.5
MAX	214	1410	2710	531	382	2110	4290	4730	228	1600	244	194
MIN	54	76	163	150	128	155	144	134	66	69	70	73
CFSM	.41	1.45	3.66	1.04	.90	3.09	3.01	4.69	.49	1.18	.53	.44
IN.	.48	1.61	4.22	1.20	.97	3.56	3.36	5.41	.55	1.36	.60	.49

CAL YR 1983	TOTAL	132765	MEAN	364	MAX	3980	MIN	54	CFSM	1.78	IN.	24.09
WTR YR 1984	TOTAL	131212	MEAN	359	MAX	4730	MIN	54	CFSM	1.75	IN.	23.81

03609500 TENNESSEE RIVER NEAR PADUCAH, KY

LOCATION.--Lat 37°01'11", long 88°16'50", Marshall County, Hydrologic Unit 06040006, on left bank at Gilbertsville, 4,000 ft downstream from Kentucky Dam, 2.3 mi upstream from Shadie Creek, 16 mi east of Paducah, and at mile 21.6.

DRAINAGE AREA.--40,200 mi², 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."

REVISED RECORDS.--WSP 1306: 1936 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 286.35 ft National Geodetic Vertical Datum of 1929. Prior to October 1939, various types of gages between 75 and 80 mi upstream at datums from 33.16 to 34.67 ft higher. October 1939 to September 1942, water-stage recorder 16.4 mi downstream at present datum. Auxiliary water-stage recorder 16.3 mi 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).

REMARKS.--Records good. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other lakes have been built above station (see basic data releases for adjoining states). Flow completely regulated. Barkley-Kentucky Canal (station 03438190) diverts water from or to Lake Barkley in Cumberland River basin.

AVERAGE DISCHARGE.--76 years (1889-1965, prior to opening of Barkley-Kentucky Canal), 64,060 ft³/s, unadjusted; 19 years (1965-84, since opening of Barkley-Kentucky Canal), 65,630 ft³/s, 22.17 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 500,000 ft³/s Feb. 17, 1948; maximum gage height, 62.43 ft Feb. 2, 1937, at Gilbertsville, present datum; minimum daily discharge, 60 ft³/s May 16, 1961.
Maximum discharge since closure of Kentucky Dam on Aug. 30, 1944, 500,000 ft³/s Feb. 17, 1948.
Maximum discharge since opening of Barkley-Kentucky Canal in June 1966, 420,000 ft³/s Mar. 17, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 350,000 ft³/s May 10; maximum gage height, 51.54 ft May 11; minimum daily discharge, 18,900 ft³/s Oct.30; minimum gage height, 12.74 ft Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20900	24300	129000	138000	54000	54600	79300	31200	50800	31400	51800	32200
2	21300	24600	124000	135000	54400	72400	76500	52300	44200	38300	52200	32800
3	21500	21400	162000	123000	55700	72200	84500	98500	37000	37600	52600	33300
4	20900	20600	232000	100000	39200	71400	101000	164000	38500	28300	52100	41100
5	23600	21900	266000	69700	38500	90400	109000	209000	40000	34800	52700	40700
6	22200	21000	269000	54400	36900	99400	106000	230000	40700	44500	44400	40300
7	23100	29500	239000	54500	36400	100000	88600	263000	44700	45800	46100	40600
8	21800	34200	205000	53400	38700	102000	79300	309000	46400	46500	53400	28400
9	21100	34500	192000	46000	39500	99100	84500	344000	44800	47100	51700	31500
10	20700	32000	185000	53800	39500	97800	88700	341000	37400	42900	53200	37100
11	19900	31400	177000	54400	29800	94700	86200	323000	40100	42100	52900	39100
12	22100	25900	148000	54700	42900	91600	82000	295000	33000	39100	50600	37600
13	22600	25100	139000	55800	49300	75100	79300	295000	40700	38600	52000	36700
14	22300	32500	148000	47700	58500	52600	67800	278000	40700	37400	52800	37400
15	25200	34700	140000	44800	88500	46400	58800	262000	37700	37400	53800	26000
16	24300	32600	121000	50300	104000	51700	62900	258000	37500	37000	41400	25500
17	25100	31500	111000	55500	98200	52100	42200	259000	37300	40400	41200	36400
18	26600	31500	108000	55600	81000	54900	45500	273000	38000	46500	41200	36800
19	25200	30300	89000	55500	70000	75100	35800	284000	38100	51800	35700	37800
20	25600	32200	60900	55300	44900	64800	42200	281000	32000	51500	32400	37000
21	24400	38000	54000	52300	42500	79700	38400	263000	35700	50200	37500	36600
22	24000	39000	62100	50200	43600	97300	44100	237000	35900	51300	35200	36900
23	26200	45400	70800	54800	39900	105000	69600	199000	36600	39800	34700	33100
24	24700	53900	79000	55700	46700	70600	104000	156000	38400	38500	35000	32200
25	27300	53000	78700	55900	52900	47600	109000	115000	36500	39700	40500	33600
26	26000	53300	77700	52500	58100	63500	95100	71200	37300	38300	35700	33600
27	30400	53000	77300	52300	56400	78600	61400	41000	36300	40600	34100	33100
28	30600	80100	88600	52300	58200	84800	41000	43700	36300	41600	39300	29600
29	23100	121000	118000	52200	54500	88500	29900	54600	36600	42700	38900	26100
30	18900	139000	139000	54600	---	94000	34600	66300	37100	44200	39700	25100
31	21100	---	141000	53100	---	87100	---	62500	---	40400	33100	---
TOTAL	732700	1247400	4231100	1943300	1552700	2415000	2127200	6159300	1166300	1286300	1367900	1028200
MEAN	23640	41580	136500	62690	53540	77900	70910	198700	38880	41490	44130	34270
MAX	30600	139000	269000	138000	104000	105000	109000	344000	50800	51800	53800	41100
MIN	18900	20600	54000	44800	29800	46400	29900	31200	32000	28300	32400	25100

CAL YR	1983	TOTAL	27037100	MEAN	74070	MAX	275000	MIN	18900	
WTR YR	1984	TOTAL	25257400	MEAN	69010	MAX	344000	MIN	18900	

RESERVOIRS IN TENNESSEE RIVER BASIN, TN

03468500 DOUGLAS LAKE.--Lat 35°57'40", long 83°32'20", Sevier County, Hydrologic Unit 06010107, at Douglas Dam on French Broad River, 6.5 mi north of Sevierville, and at mile 32.3. DRAINAGE AREA, 4,541 mi². PERIOD OF RECORD, February 1943 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir formed by concrete main dam and 10 saddle dams. Spillway equipped with 11 radial gages, 32 ft high by 40 ft wide and 8 sluice gates 10 ft high by 5.67 ft wide. Closure of dam was made Feb. 19, 1943; water in reservoir first reached minimum pool elevation Feb. 25, 1943. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,002.00 ft, top of gates, is 743,600 cfs-days, of which 631,200 cfs-days is controlled storage above elevation 940.00 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 760,000 cfs-days July 25, 1949, elevation, 1,001.79 ft; minimum after first filling, 1,000 cfs-days Jan. 16, 1956, elevation, 883.7 ft estimated.

EXTREMES FOR CURRENT YEAR: Maximum contents, 751,300 cfs-days May 9, elevation, 1002.45 ft; minimum, 126,600 cfs-days Jan. 21, elevation, 942.67 ft.

03476000 SOUTH HOLSTON LAKE.--Lat 36°31'15", long 82°05'11", Sullivan County, Hydrologic Unit 06010102, 470 ft upstream from South Holston Dam on South Fork Holston River, 7.0 mi southeast of Bristol, Virginia-Tennessee, and at mile 49.8. DRAINAGE AREA, 703 mi². PERIOD OF RECORD, November 1950 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 11, 1951, non-recording gage at same site and datum.

Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers 3 ft wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft in diameter. Closure of dam was made Nov. 20, 1950; water in reservoir first reached minimum pool elevation Jan. 25, 1951. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,742.00 ft, spillway crest, is 385,200 cfs-days, of which 220,800 cfs-days is controlled storage above elevation 1,675.00 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 363,800 cfs-days May 10, 1984, elevation, 1,736.86 ft; minimum after first filling, 57,700 cfs-days Jan. 13, 1956, elevation, 1,614.15 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 363,800 cfs-days May 10, elevation, 1,736.86 ft; minimum, 234,300 cfs-days Sept. 30, elevation, 1,700.51 ft.

03483500 WATAUGA LAKE.--Lat 36°19'20", long 82°07'16", Carter County, Hydrologic Unit 06010103, at Watauga Dam on Watauga River, 5 mi east of Elizabethton, and at mile 36.7. DRAINAGE AREA, 468 mi². PERIOD OF RECORD, December 1948 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers 3 ft wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft in diameter. Closure of dam was made Dec. 1, 1948; water in reservoir first reached minimum pool elevation Dec. 31, 1948. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,975.00 ft, spillway crest, is 341,300 cfs-days, of which 178,500 cfs-days is controlled storage above elevation 1,915.00 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 293,300 cfs-days Apr. 6, 1974, elevation, 1,961.07 ft; minimum after first filling, 25,100 cfs-days Jan. 13, 1956, elevation, 1,813.47 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 241,300 cfs-days July 30, elevation, 1,944.32 ft; minimum, 31,300 cfs-days Dec. 6, elevation, 1,823.07 ft.

03486800 BOONE LAKE.--Lat 36°26'26", long 82°26'16", Sullivan County, Hydrologic Unit 06010102, at Boone Dam on South Fork Holston River, 0.7 mi northeast of Spurgeon, 1.3 mi downstream from Watauga River, and at mile 18.6. DRAINAGE AREA, 1,840 mi². PERIOD OF RECORD, December 1952 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by gravity nonover-flow type concrete dam. Spillway is equipped with five radial gates. 35 ft high by 35 ft wide. Storage began Dec. 16, 1952; water in reservoir first reached minimum pool elevation Jan. 5, 1953. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,385.0 ft, top of gates, is 97,500 cfs-days, of which 74,800 cfs-days is controlled storage above elevation 1,330 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 99,100 cfs-days May 19, 1964, elevation 1,384.99 ft; minimum after first filling, 21,300 cfs-days Jan. 23, 1956, elevation, 1,327.06 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 96,300 cfs-days May 7, elevation, 1,384.45 ft; minimum, 38,400 cfs-days Dec. 13, elevation, 1,347.29 ft.

03487000 FORT PATRICK HENRY LAKE.--Lat 36°29'53", long 82°30'32", Sullivan County, Hydrologic Unit 06010102, at Fort Patrick Henry Dam on South Fork Holston River, 0.2 mi upstream from bridge on U. S. Highway 23, 4.5 mi southeast of Kingsport, and at mile 8.2. DRAINAGE AREA, 1,903 mi². PERIOD OF RECORD, October 1953 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by gravity nonover-flow type concrete dam. Spillway is equipped with five radial gates, 35 ft high by 35 ft wide. Storage began Oct. 27, 1953; water in reservoir first reached minimum pool elevation Dec. 8, 1953. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,263 ft, top of gates, is 13,600 cfs-days, of which 2,200 cfs-days is controlled storage above elevation 1,258 ft, normal minimum pool. Reservoir is used for navigation, flood control and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 14,000 cfs-days Feb. 11, 1954, elevation, 1,263.80 ft, minimum after first filling, 9,300 cfs-days Mar. 16, 1954, elevation, 1,252.32 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 13,600 cfs-days May 7, elevation, 1,263.20 ft; minimum, 11,500 cfs-days Aug. 10, elevation, 1,258.02 ft.

RESERVOIRS IN TENNESSEE RIVER BASIN, TN--Continued

03493500 CHEROKEE LAKE.--Lat 36°10'00", long 83°29'55", Jefferson County, Hydrologic Unit 06010104, at Cherokee Dam on Holston River, 0.3 mi upstream from bridge on State Highway 92, 2.7 mi upstream from Mill Spring Creek, 2.8 mi north of Jefferson City, and at mile 52.3. DRAINAGE AREA, 3,429 mi². PERIOD OF RECORD, December 1941 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with nine radial gates 32 ft high by 40 ft wide. Storage began Dec. 5, 1941; water in reservoir first reached minimum pool elevation Jan. 6, 1942. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,075.0 ft, top of gates, is 778,400 cfs-days, of which 580,300 cfs-days is controlled storage above elevation 1,020.0 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 779,400 cfs-days May 11, 1944, maximum elevation, 1,074.47 ft May 30, 1973; minimum after first filling, 48,400 cfs-days Jan. 7, 1954, elevation, 980.77 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 766,300 cfs-days May 13, elevation, 1,074.19 ft; minimum, 255,600 cfs-days Feb. 7, elevation, 1,028.46 ft.

03499500 FORT LOUDOUN LAKE.--Lat 35°47'30", long 84°14'35", Loudon County, Hydrologic Unit 06010201, at Fort Loudoun Dam on Tennessee River, 1 mi northeast of Lenoir City, and at mile 602.3. DRAINAGE AREA, 9,550 mi². PERIOD OF RECORD, July 1943 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir formed by concrete dam with earth embankment. Spillway equipped with 14 radial gates 32 ft high by 40 ft wide. Closure of dam was made Aug. 2, 1943; water in reservoir first reached ordinary minimum pool elevation Sept. 4, 1943. Revised capacity table put into use Jan. 19, 1980. Total level pool capacity at elevation 815.00 ft, top of gates, is 424,000 cfs-days, of which 120,000 cfs-days is controlled flood storage above elevation 807.00 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

Tellico-Fort Loudoun canal was opened Jan. 19, 1980. Canal is 1,000 ft long, and interconnects Tellico and Fort Loudoun Lakes at the dam. Spillway gates of Tellico Dam were closed Feb. 7, 1980, diverting all flow from Little Tennessee River.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation, 815.14 ft May 8, 1984; minimum after first filling, 805.54 ft Jan 18, 1954.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents, 191,000 cfs-days May 11; maximum elevation, 815.14 ft May 8; minimum elevation, 807.00 ft Feb. 27. Contents based on backwater profile.

03518200 CHILHOWEE LAKE.--Lat 35°32'43", long 84°03'02", Monroe County, Hydrologic Unit 06010204, at Chilhowee Dam on Little Tennessee River, 2.4 mi southwest of Chilhowee, 2.6 mi upstream from Citico Creek, 10.1 mi downstream from Calderwood Dam, and at mile 33.6. DRAINAGE AREA, 1,977 mi². PERIOD OF RECORD, August 1957 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with rockfill end abutments. Spillway controlled by six radial gates 38 ft high by 35 ft wide. Closure of dam was made June 9, 1957; storage began Aug. 1, 1957; water in reservoir first reached minimum pool elevation Aug. 9, 1957. Total capacity at elevation 874.0 ft, top of gates, is 24,800 cfs-days, of which 3,400 cfs-days is controlled storage above elevation 870.0 ft, normal 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.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 25,400 cfs-days May 28, 1973, elevation, 874.60 ft; minimum after first filling, 18,100 cfs-days May 18, 1963, elevation, 865.94 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 25,000 cfs-days May 8, elevation, 874.16 ft; minimum, 21,800 cfs-days Dec. 24, elevation, 870.47 ft.

03519800 TELLICO LAKE.--Lat 35°46'53", long 84°15'10", Loudon County, Hydrologic Unit 06010201, at Tellico Dam on Little Tennessee River, 1.1 mi south of Lenoir City, and at mile 0.4. DRAINAGE AREA, 2,627 mi². PERIOD OF RECORD, December 1979 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Resevoir formed by concrete dam with earth embankment. Spillway equipped with 3 radial gates 42 ft high by 40 ft wide. Closure of dam was made Nov. 29, 1979; water in reservoir first reached ordinary minimum pool elevation Dec. 24, 1979. Total capacity at elevation 815.00 ft, top of gates, is 225,500 cfs-days, of which 63,800 cfs-days is controlled storage above elevation 807.00 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and indirectly, power. Records furnished by Tennessee Valley Authority.

Tellico-Fort Loudoun canal was opened Jan. 19, 1980. Canal is 1,000 ft long, and interconnects Tellico and Fort Loudoun Lakes at the dam. Spillway gates of Tellico Dam were closed Feb. 7, 1980, diverting all flow from Little Tennessee River.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 228,700 cfs-days May 8, 1984, elevation, 815.37 ft; minimum after first filling, 161,400 cfs-days Jan. 14, 1980, elevation, 806.96 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 228,700 cfs-days May 8, elevation, 815.37 ft; minimum, 162,900 cfs-days Feb. 27, elevation, 807.16 ft.

03532500 NORRIS LAKE.--Lat 36°13'29", long 84°05'29", Anderson County, Hydrologic Unit 06010205, at Norris Dam on Clinch River, 2.5 mi northwest of Norris, and at mile 79.8. DRAINAGE AREA, 2,912 mi². PERIOD OF RECORD, June 1935 to current year. GAGE, water-stage recorder. Datum of gage is 0.11 ft National Geodetic Vertical Datum of 1929. Gage readings have been reduced to National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete gravity dam with three drum gates 100 ft wide by 14 ft high. Some storage began in June 1935; dam was completely closed and placed in operation Mar. 4, 1936; water in reservoir first reached minimum pool elevation Mar. 24, 1936. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,034.11 ft, top of gates, is 1,286,600 cfs-days, of which 969,000 cfs-days is controlled storage above elevation 960.11 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,236,700 cfs-days Feb. 11, 1937, elevation, 1,031.21 ft; minimum after first filling, 75,500 cfs-days Jan. 24, 1956, elevation, 909.46 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,212,800 cfs-days May 10, elevation, 1,030.31 ft; minimum, 498,800 cfs-days Nov. 15, elevation, 978.11 ft.

RESERVOIRS IN TENNESSEE RIVER BASIN, TN--Continued

03535900 MELTON HILL LAKE.--Lat 35°53'04", 84°18'01", Loudon-Roane County line, Hydrologic Unit 06010207, 9 mi southwest of Oak Ridge, 19 mi west of Knoxville, 57 mi downstream from Norris Dam on Clinch River, and at mile 23.1. DRAINAGE AREA, 3,343 mi². PERIOD OF RECORD, August 1962 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete gravity dam. Spillway is equipped with three radial gates, each 42 ft high by 40 ft wide. Dam completed and storage began May 1, 1963; water in reservoir first reached minimum pool elevation May 23, 1963. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 796 ft, top of gates, is 63,500 cfs-days, of which 16,100 cfs-days is controlled storage above elevation 790.0 ft, normal minimum pool. Reservoir is used for navigation, power, and recreation. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 64,900 cfs-days Mar. 16, 1973, elevation, 796.45 ft; minimum after first filling, 35,100 cfs-days Feb. 9, 1966, elevation, 784.10 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 62,200 cfs-days May 7, elevation, 795.55 ft; minimum, 47,200 cfs-days Dec. 25, elevation, 789.92 ft.

03543000 WATTS BAR LAKE.--Lat 35°37'13", long 84°47'00", Rhea County, Hydrologic Unit 06010201, at Watts Bar Dam on Tennessee River, 6.5 mi southeast of Spring City, 72.4 mi downstream from Fort Loudoun Dam, and at mile 529.9. DRAINAGE AREA, 17,310 mi², approximately. PERIOD OF RECORD, October 1941 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with 20 radial gates 32 ft high by 40 ft wide, also one 2-section leaf trashway gate 16.3 ft high by 24 ft wide. Storage began with partial closure Dec. 12, 1941, and final closure Jan. 1, 1942; water in reservoir first reached minimum navigation pool elevation Feb. 17, 1942. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 745.0 ft, top of gates, is 592,400 cfs-days, of which 191,000 cfs-days is controlled flood storage above elevation 735.0 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation, 745.40 ft Mar. 17, 1973; minimum after first filling, 733.44 ft Mar. 20, 1945.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents, 641,000 cfs-days May 8; maximum elevation, 746.48 ft May 10; minimum elevation, 735.00 ft Mar. 14. Contents based on backwater profile.

03564000 LAKE OCOEE.--Lat 35°05'40", long 84°38'53", Polk County, Hydrologic Unit 06020003, at Lake Ocoee Dam on Ocoee River at Parksville, 13.8 mi east of Cleveland, and at mile 11.9. DRAINAGE AREA, 595 mi². 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." GAGE, nonrecording gage. Datum of gage is 6.89 ft National Geodetic Vertical Datum of 1929. Gage readings have been reduced to National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with 347 ft of spillway. Spillway is equipped with four floodgates 6 ft high by 20 ft wide and 265 ft of flashboards about 5.7 ft high. Crest of spillway under gates is at elevation 830.82 ft; remainder of spillway is 1.0 ft higher. Dam completed and storage began in 1911. Capacity of reservoir has been considerably reduced by silting. Revised capacity table put into use Jan. 1, 1979. Total capacity at elevation 837.55 ft, about top of flashboards, is 42,300 cfs-days, of which 15,600 cfs-days is controlled storage above elevation 817.9 ft, normal minimum pool. Reservoir is used for power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum midnight contents observed, 53,300 cfs-days July 9, 1916; maximum midnight elevation observed, 840.2 ft Feb. 10, 1946; minimum contents observed, 27,300 cfs-days Jan. 27, 1956, elevation, 817.7 ft; minimum midnight elevation observed, 814.8 ft Dec. 14, 1934.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 42,900 cfs-days May 3, elevation, 838.1 ft; minimum contents observed, 32,900 cfs-days Feb. 4, elevation, 826.9 ft.

03566500 CHICKAMAUGA LAKE.--Lat 35°06'07", long 85°13'42", Hamilton County, Hydrologic Unit 06020001, at Chickamauga Dam on Tennessee River, 5.8 mi northeast of Chattanooga, 58.9 mi downstream from Watts Bar Dam, and at mile 471.0. DRAINAGE AREA, 20,790 mi², approximately. PERIOD OF RECORD, October 1939 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with eighteen 2-section lift gates 40.44 ft high by 40 ft wide. Storage began Feb. 6, 1940; water in reservoir first reached minimum navigation pool elevation Mar. 10, 1940. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 685.44 ft, top of gates, is 372,600 cfs-days, of which 175,000 cfs-days is controlled flood storage above elevation 675.0 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation, 686.10 ft Mar. 18, 1973; minimum after first filling, 673.27 ft Jan. 21, 1942.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents, 445,000 cfs-days May 9; maximum elevation, 686.99 ft May 9; minimum elevation, 674.90 ft Jan. 10. Contents based on backwater profile.

03570520 NICKAJACK LAKE.--Lat 35°00'07", long 85°37'14", Marion County, Hydrologic Unit 06020001, at Nickajack Dam on Tennessee River, 2 mi upstream from Sequatchie River, 5 mi south of Jasper, 46.3 mi downstream from Chickamauga Dam, and at mile 424.7. DRAINAGE AREA, 21,870 mi², approximately. PERIOD OF RECORD, December 1967 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with earth embankments on each side. The spillway, with crest at elevation 595.0 ft, is equipped with 10 radial gates, each 40 ft high by 40 ft wide. A trash gate, 5.5 ft high by 15 ft wide, is located between the spillway and powerhouse. Dam was completed and storage began on Dec. 14, 1967. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 635.0 ft, top of gates, is 127,200 cfs-days, of which 16,200 cfs-days is controlled storage above elevation 632.0 ft, ordinary minimum. Reservoir is used for navigation and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation, 634.99 ft Apr. 19, 1969; minimum after first filling, 630.82 ft Feb. 20, 1968.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents, 180,000 cfs-days May 8, 9; maximum elevation, 634.20 ft Dec. 23; minimum elevation, 631.90 ft May 7. Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03579000 WOODS RESERVOIR.--Lat 35°17'54", long 86°05'48", Franklin County, Hydrologic Unit 06030003, at Elk River Dam on Elk River, 1.2 mi upstream from Spring Creek, 2.5 mi northeast of Estill Springs, 6.8 mi upstream from bridge on U. S. Highway 41-A, and at mile 170.0. DRAINAGE AREA, 263 mi². PERIOD OF RECORD, May 1952 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete gravity and earthfill-type dam with riprapped embankments. Spillway equipped with three radial gates, 25 ft high by 50 ft wide and two sluice gates 6 ft high by 4 ft wide. Closure of dam was made May 1, 1952; water in reservoir first reached minimum pool elevation Feb. 6, 1953. Total capacity at elevation 962.0 ft, surcharge pool, is 44,400 cfs-days, of which 9,900 cfs-days is controlled storage above elevation 957.0 ft, normal minimum pool. Reservoir is used for cooling water, flood control, and recreational purposes. Twice-daily gage readings (0600 and 2400 hours) furnished by U. S. Air Force.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 42,300 cfs-days April 21 and 22, 1956, elevation, 960.98 ft; minimum after first filling, 26,300 cfs-days Nov. 8-11, 1953, elevation, 951.93 ft.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents, 39,500 cfs-days Aug. 7, elevation, 959.64 ft; minimum elevation, 957.74 ft.

03580740 TIMS FORD LAKE.--Lat 35°11'51", long 86°16'41", Franklin County, Hydrologic Unit 06030003, in intake tower near left bank at Tims Ford Dam on Elk River, 0.4 mi upstream from bridge on State Highway 50, 9.5 mi west of Winchester, and at mile 133.4. DRAINAGE AREA, 529 mi². PERIOD OF RECORD, December 1970 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with compacted rockfill impervious earth core embankments. Spillway equipped with three radial gates 42 ft high by 40 ft wide. Storage began Dec. 1, 1970; water in reservoir first reached minimum pool elevation Feb. 23, 1971, and first filling was completed June 3, 1971. Total capacity at elevation 895 ft, top of gates, is 306,500 cfs-days, of which 142,400 cfs-days is controlled storage above elevation 865 ft, normal minimum pool. Reservoir is used for flood control, power, and recreation. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 296,300 cfs-days Mar. 17, 1973, elevation, 893.24 ft; minimum after first filling 154,000 cfs-days Oct. 15, 1972, elevation, 862.24 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 288,700 cfs-days May 9, elevation, 891.91 ft; minimum, 194,700 cfs-days Jan. 22, elevation, 872.72 ft.

03593000 PICKWICK LAKE.--Lat 35°04'16", long 88°15'04", Hardin County, Hydrologic Unit 06040001, at Pickwick Landing Dam on Tennessee River, 1.5 mi north of town of Pickwick Dam, 6.1 mi upstream from Lick Creek, 52.7 mi downstream from Wilson Dam, and at mile 206.7. DRAINAGE AREA, 38,820 mi², approximately. PERIOD OF RECORD, October 1937 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with twenty-two 2-section lift gates 40 ft high by 40 ft wide, one of which is used as a trash gate. Dam completed and storage began Feb. 8, 1938; water in reservoir first reached minimum pool elevation Feb. 18, 1938. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 418.0 ft, top of gates, is 557,100 cfs-days, of which 210,200 cfs-days is controlled flood storage above elevation 408.0 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation, 419.49 ft Mar. 30, 1944; minimum after first filling, 407.12 ft Dec. 18, 1944.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents, 693,000 cfs-days May 12; maximum elevation, 418.02 ft May 9; minimum elevation, 407.85 ft Feb. 28. Contents based on backwater profile.

03596460 NORMANDY LAKE.--Lat 35°27'55", long 86°14'48", Coffee County, Hydrologic Unit 06040002, at Normandy Dam on Duck River, 1.5 mi northeast of Normandy, 2.6 mi downstream from Riley Creek, 8 mi north of Tullahoma, and at mile 248.6. DRAINAGE AREA, 195 mi². PERIOD OF RECORD, January 1976 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete gravity dam with riprapped and rolled earthfill embankment on left side. Spillway is equipped with two radial gates, 40 ft high by 36 ft wide. Storage began Jan. 5, 1976; water in reservoir first reached minimum pool elevation Mar. 22, 1976. Revised capacity table put into use Jan. 1, 1977. Total capacity at elevation 880 ft, top of gates, is 64,000 cfs-days, of which 30,400 cfs-days is controlled storage above elevation 859 ft, normal minimum pool. Reservoir is used for flood control, water supply, water quality control, recreation, and shoreline development. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 63,500 cfs-days May 19, 1983, elevation, 879.70 ft; minimum after first filling, 26,800 cfs-days Nov. 27, 1981, elevation, 853.12 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 63,500 cfs-days May 19, elevation, 879.25 ft; minimum, 34,600 cfs-days Jan. 13, elevation, 859.91 ft.

RESERVOIRS IN TENNESSEE RIVER BASIN, TN--Continued

03609000 KENTUCKY LAKE.--Lat. 37°00'49", long 88°16'06", Marshall County, KY, Hydrologic Unit 06040006, at Kentucky Dam on Tennessee River at Gilbertsville, and at mile 22.4. DRAINAGE AREA, 40,200 mi², approximately. PERIOD OF RECORD, July 1944 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with 24 lift gates 50 ft high by 40 ft wide. Storage began Aug. 16, 1944, and final closure was Aug. 30, 1944. Water in reservoir reached minimum pool elevation Apr. 7, 1945. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 375.0 ft, top of gates, is 3,090,000 cfs-days, of which 2,020,700 cfs-days is controlled storage above 354.0 ft, ordinary minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

Barkley-Kentucky Canal opened July 13, 1966, for navigation and power use. Canal is 1.75 miles long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 mi upstream from Barkley Dam. For daily discharges through the canal, see Kentucky reports.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation, 369.87 ft May 24, 1983; minimum after first filling, 348.02 ft Mar. 11, 1961.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents, 2,978,000 cfs-days May 12; maximum elevation, 369.99 ft May 11; minimum elevation, 353.67 ft Feb. 27. Contents based on backwater profile.

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, TN, with a total capacity of 1,300 cfs-days, none of which is controlled storage.

03517900 CALDERWOOD LAKE on Little Tennessee River at Calderwood, TN, with a total capacity of 20,800 cfs-days of which 840 cfs-days is controlled storage.

03562500 OCOEE NO. 3 LAKE on Ocoee River at Ocoee No. 3 Dam, 5.0 miles west of Ducktown, TN, with a total capacity of 1,660 cfs-days, of which 1,550 cfs-days is controlled storage. Records of contents previous to 1971 water year published (as Ocoee No. 3 Lake near Ducktown, TN).

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03468500 DOUGLAS LAKE			03476000 SOUTH HOLSTON LAKE			03483500 WATAUGA LAKE		
Sept. 30.....	957.64	243500	-	1706.74	253700	-	1894.09	118500	-
Oct. 31.....	957.86	228800	-14700	1706.96	254400	+700	1867.41	73400	-45100
Nov. 30.....	956.32	216600	-12200	1707.20	255200	+800	1824.44	32200	-41200
Dec. 31.....	948.04	158600	-58000	1708.00	257800	+2600	1849.56	51500	+19300
CAL YR 1983	-	-	-34400	-	-	+16300	-	-	-16900
Jan. 31.....	945.71	144200	-14400	1707.36	255700	-2100	1863.39	67900	+16400
Feb. 29.....	954.93	206000	+ 61800	1719.44	296500	+40800	1888.35	107900	+40000
Mar. 31.....	970.45	341700	+135700	1722.43	307000	+10500	1905.38	141600	+33700
Apr. 30.....	985.29	508200	+166500	1727.72	326500	+19500	1918.53	171600	+30000
May 31.....	998.24	681900	+173700	1729.07	331800	+5300	1937.80	222700	+51100
June 30.....	994.89	633100	-48800	1724.47	314300	-17500	1941.45	233000	+10300
July 31.....	996.77	659800	+26700	1720.46	300100	-14200	1944.16	240800	+7800
Aug. 31.....	982.29	471400	-188400	1712.90	274000	-26100	1936.89	220100	-20700
Sept. 30.....	963.19	274000	-197400	1700.55	234500	-39500	1929.99	201100	-19000
WTR YR 1984	-	-	+30500	-	-	-19200	-	-	+82600
	03486800 BOONE LAKE			03487000 FORT PATRICK HENRY LAKE			03493500 CHEROKEE LAKE		
Sept. 30.....	1378.24	83400	-	1261.25	12800	-	1306.04	316200	-
Oct. 31.....	1372.83	73500	-9900	1261.30	12800	0	1037.55	329200	+13000
Nov. 30.....	1356.46	49400	-24100	1261.36	12800	0	1040.52	355600	+26400
Dec. 31.....	1352.82	44800	-4600	1260.50	12500	-300	1033.92	298400	-57200
CAL YR 1983	-	-	-5300	-	-	-100	-	-	-13600
Jan. 31.....	1356.22	49100	+4300	1261.24	12800	+300	1031.31	277400	-21000
Feb. 29.....	1349.21	40400	-8700	1261.24	12800	0	1045.00	397700	+120300
Mar. 31.....	1372.67	73300	+32900	1260.87	12600	-200	1050.33	453400	+55700
Apr. 30.....	1380.47	87800	+14500	1259.87	12200	-400	1060.12	570200	+116800
May 31.....	1382.22	91500	+3700	1260.48	12500	+300	1072.32	738700	+168500
June 30.....	1382.33	91700	+200	1260.73	12600	+100	1067.13	664400	-74300
July 31.....	1382.05	91100	-600	1260.70	12600	0	1065.17	637300	-27100
Aug. 31.....	1381.92	90900	-200	1260.90	12600	0	1057.79	540800	-96500
Sept. 30.....	1378.25	83400	-7500	1260.57	12500	-100	1041.96	368700	-172100
WTR YR 1984	-	-	0	-	-	+300	-	-	+52500
	03499500 FORT LOUDOUN LAKE †			03518200 CHILHOWEE LAKE			03519800 TELLICO LAKE		
Sept. 30.....	812.46	179000	-	873.63	24500	-	812.49	204800	-
Oct. 31.....	812.60	180000	+1000	872.90	23900	-600	812.66	206200	+1400
Nov. 30.....	808.56	152000	-28000	872.88	23800	-100	808.62	173600	-32600
Dec. 31.....	809.67	160000	+8000	873.33	24200	+400	809.74	182300	+8700
CAL YR 1983	-	-	+13000	-	-	+1000	-	-	+16000
Jan. 31.....	808.01	149000	-11000	873.43	24300	+100	808.06	169500	-12800
Feb. 29.....	809.50	159000	+10000	873.20	24100	-200	809.56	180900	+11400
Mar. 31.....	809.07	156000	-3000	873.22	24200	+100	809.08	177200	-3700
Apr. 30.....	812.89	183000	+27000	873.22	24200	0	812.92	208400	+31200
May 31.....	812.87	182000	-1000	872.00	23100	-1100	812.93	208400	0
June 30.....	812.45	179000	-3000	873.10	24000	+900	812.47	204600	-3800
July 31.....	812.30	178000	-1000	872.96	23900	-100	812.37	203800	-800
Aug. 31.....	812.71	182000	+4000	871.83	22900	-1000	812.76	207100	+3300
Sept. 30.....	812.73	181000	-1000	873.47	24400	+1500	812.76	207000	-100
WTR YR 1984	-	-	+2000	-	-	-100	-	-	+2200

† Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03532500 NORRIS LAKE			03535900 MELTON HILL LAKE			03543000 WATTS BAR LAKE†		
Sept. 30.....	982.25	514700	-	792.83	54500	-	740.71	504000	-
Oct. 31.....	979.50	486500	-28200	793.39	56000	+1500	738.38	460000	-44000
Nov. 30.....	978.75	479000	-7500	793.77	57000	+1000	736.82	434000	-26000
Dec. 31.....	981.45	506400	+27400	794.92	60300	+3300	736.85	438000	+4000
CAL YR 1983	-	-	-78900	-	-	+1000	-	-	+16000
Jan. 31.....	985.98	552900	+46500	793.78	57000	-3300	735.35	409000	-29000
Feb. 28.....	998.70	708300	+155400	794.00	57600	+600	735.92	422000	+13000
Mar. 31.....	1007.70	833300	+125000	793.94	57400	-200	737.40	442000	+20000
Apr. 30.....	1015.20	949000	+115700	794.20	58200	+800	741.11	512000	+70000
May 31.....	1020.26	1032400	+83400	793.29	55700	-2500	740.75	506000	-6000
June 30.....	1014.62	939700	-92700	793.75	56900	+1200	741.09	512000	+6000
July 31.....	1011.29	887400	-52300	793.12	55200	-1700	740.74	507000	-5000
Aug. 31.....	1001.70	748400	139000	792.95	54800	-400	741.14	514000	+7000
Sept. 30.....	988.27	580600	-167800	794.06	57800	+3000	740.47	499000	-15000
WTR YR 1984	-	-	+65900	-	-	+3300	-	-	-5000
	03564000 LAKE OCOEE			03566500 CHICKAMAUGA LAKE†			03570520 NICKAJACK LAKE†		
Sept. 30.....	828.7	40500	-	680.17	274000	-	633.03	118000	-
Oct. 31.....	828.4	40200	-300	678.41	245000	-29000	633.55	121000	+3000
Nov. 30.....	824.4	36600	-3600	676.02	216000	-29000	633.48	123000	+2000
Dec. 31.....	826.7	38700	+2100	677.13	235000	+19000	632.45	122000	-1000
CAL YR 1983	-	-	+5000	-	-	+5000	-	-	+1000
Jan. 31.....	820.6	33200	-5500	675.86	211000	-24000	632.97	120000	-2000
Feb. 29.....	823.6	35900	+2700	676.93	231000	+20000	632.32	121000	+1000
Mar. 31.....	828.0	39900	+4000	677.40	232000	+1000	633.83	125000	+4000
Apr. 30.....	829.2	41000	+1100	682.81	323000	+91000	663.48	122000	-3000
May 31.....	828.6	40400	-600	682.10	311000	-12000	633.70	124000	+2000
June 30.....	828.9	40700	+300	682.16	311000	0	634.00	123000	-1000
July 31.....	829.1	40900	+200	681.07	294000	-17000	633.82	125000	+2000
Aug. 31.....	829.3	41100	+200	680.27	279000	-15000	633.83	124000	-1000
Sept. 30.....	828.5	40300	-800	680.67	282000	+3000	633.31	120000	-4000
WTR YR 1984	-	-	-200	-	-	+8000	-	-	+2000
	03579000 WOODS RESERVOIR			03580740 TIMS FORD LAKE			03593000 PICKWICK LAKE†		
Sept. 30.....	959.35	39000	-	882.67	239800	-	410.67	399000	-
Oct. 31.....	959.12	38500	-500	881.70	235000	-4800	410.02	465000	+66000
Nov. 30.....	957.86	36100	-2400	881.17	232500	-2500	409.07	460000	-5000
Dec. 31.....	957.90	36200	+100	875.85	208000	-24500	411.45	514000	+54000
CAL YR 1983			-400	-	-	-10400	-	-	+111000
Jan. 31.....	957.90	36200	0	874.24	201100	-6900	409.44	458000	-56000
Feb. 28.....	958.00	36400	+200	875.30	205600	+4500	409.12	459000	+1000
Mar. 31.....	958.06	36500	+100	881.45	233800	+28200	411.81	519000	+60000
Apr. 30.....	958.00	36400	-100	885.58	254500	+20700	415.29	598000	+79000
May 31.....	959.13	38500	+2100	887.50	264600	+10100	413.92	562000	-36000
June 30.....	959.47	39200	+700	886.50	259300	-5300	413.48	550000	-12000
July 31.....	959.53	39300	+100	886.34	258500	-800	412.62	528000	-22000
Aug. 31.....	959.33	38900	-400	884.42	248600	-9900	412.28	430000	-98000
Sept. 30.....	958.80	37900	-1000	882.93	241100	-7500	410.96	403000	-27000
WTR YR 1984			-1100	-	-	+1300	-	-	+4000

† Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03596460 NORMANDY LAKE			03609000 KENTUCKY LAKE†		
Sept. 30.....	872.98	52800	-	355.31	1144000	-
Oct. 31.....	870.60	50600	-2200	354.82	1108000	-36000
Nov. 30.....	867.21	44100	-6500	355.08	1220000	+112000
Dec. 31.....	860.46	35400	-8700	354.96	1240000	+20000
CAL YR 1983	-	-	-3000	-	-	-269000
Jan. 31.....	861.74	36900	+1500	354.61	1135000	-105000
Feb. 29.....	864.65	40600	+3700	354.50	1143000	+8000
Mar. 31.....	870.99	49700	+9100	358.72	1446000	+303000
Apr. 30.....	875.44	56700	+7000	362.33	1722000	+276000
May 31.....	875.31	56400	-300	359.26	1458000	-264000
June 30.....	874.67	55400	-1000	359.07	1437000	-21000
July 31.....	875.64	57000	+1600	357.82	1339000	-98000
Aug. 31.....	874.50	55200	-1800	356.80	1264000	-75000
Sept. 30.....	872.46	52000	-3200	355.15	1135000	-129000
WTR YR 1984	-	-	-800	-	-	-9000

† Contents based on backwater profile.

OBION RIVER BASIN

07024300 BEAVER CREEK AT HUNTINGDON, TN

LOCATION.--Lat 35°59'56", long 88°26'01", Carroll County, Hydrologic Unit 08010203, on left bank on downstream end of pier of bridge on U.S. Highway 70, 0.3 mi southwest of Huntingdon, 0.6 mi downstream from Brier Creek, and at mile 5.6.

DRAINAGE AREA.--55.5 mi².

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.

REVISED RECORDS.--WSP 1920: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 364.20 ft National Geodetic Vertical Datum of 1929 (Tennessee State Highway Department bench mark). Dec. 21, 1945, to Oct. 3, 1962, nonrecording gage at site 30 ft downstream at same datum; Jan. 6, 1954, to Oct. 3, 1962, crest-stage gage at same site at datum 1.17 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--22 years, 117 ft³/s, 28.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,350 ft³/s Sept. 9, 1970 from rating curve extended above 3,600 ft³/s on basis of contracted opening measurement of peak flow; maximum gage height, 15.20 ft Sept. 13, 1982; minimum discharge, 19 ft³/s May 17, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	1945	2200	11.76	May 8	0445	*3310	12.75
Mar. 5	1300	2560	12.11				

Minimum discharge, 20 ft³/s Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	27	36	67	58	71	88	80	43	31	41	29
2	27	30	396	66	58	67	82	281	37	27	35	28
3	28	39	1950	66	85	56	286	949	36	26	34	58
4	28	72	1720	66	74	227	202	836	35	67	75	40
5	38	41	579	72	65	2140	122	230	38	68	41	30
6	29	33	356	78	55	1060	93	354	35	66	37	28
7	27	32	204	71	51	251	80	1560	34	34	34	27
8	26	31	91	66	53	115	81	2760	34	30	33	27
9	25	32	74	68	56	91	140	889	34	28	32	31
10	25	41	68	100	67	79	97	174	33	27	32	34
11	25	39	154	75	71	73	83	64	33	27	36	60
12	37	35	134	61	78	90	75	47	39	40	33	35
13	50	36	87	63	126	99	72	38	36	28	31	30
14	24	41	270	62	77	78	66	33	34	27	30	28
15	21	70	169	57	63	87	63	30	34	33	31	26
16	21	42	83	56	61	497	74	29	34	243	32	25
17	69	35	66	54	57	488	69	27	33	218	29	26
18	49	35	62	55	54	348	62	24	33	426	28	26
19	29	46	56	50	109	215	59	24	33	180	29	27
20	22	247	54	50	77	735	60	21	57	71	28	26
21	22	77	209	50	63	434	111	20	142	57	28	26
22	61	93	928	50	57	141	875	28	35	46	31	25
23	46	640	718	74	54	94	590	325	135	42	29	25
24	28	653	300	256	52	131	124	166	56	40	27	27
25	25	109	110	168	49	291	68	58	30	38	26	29
26	25	41	70	106	48	149	49	47	26	52	26	27
27	25	403	90	83	231	122	50	78	25	601	26	28
28	25	735	120	75	140	600	247	189	100	547	30	29
29	25	184	78	73	84	608	246	63	156	107	32	30
30	26	49	70	67	---	196	187	49	42	57	36	30
31	25	---	68	59	---	104	---	45	---	44	33	---
TOTAL	961	3988	9370	2364	2173	9737	4501	9518	1472	3328	1025	917
MEAN	31.0	133	302	76.3	74.9	314	150	307	49.1	107	33.1	30.6
MAX	69	735	1950	256	231	2140	875	2760	156	601	75	60
MIN	21	27	36	50	48	56	49	20	25	26	26	25
CFSM	.56	2.40	5.44	1.37	1.35	5.66	2.70	5.53	.88	1.93	.60	.55
IN.	.64	2.67	6.28	1.58	1.46	6.53	3.02	6.38	.99	2.23	.69	.61

CAL YR 1983	TOTAL	51842	MEAN	142	MAX	2570	MIN	21	CFSM	2.56	IN.	34.75
WTR YR 1984	TOTAL	49354	MEAN	135	MAX	2760	MIN	20	CFSM	2.43	IN.	33.08

07024500 SOUTH FORK OBION RIVER NEAR GREENFIELD, TN

LOCATION.--Lat 36°07'05", long 88°48'39", Weakley County, Hydrologic Unit 08010203, on left bank 75 ft downstream from bridge on U.S. Highway 45E, 1.1 mi downstream from Mosley Branch, 2.5 mi south of Greenfield, and 9.7 mi upstream from confluence with Middle Fork.

DRAINAGE AREA.--383 mi².

PERIOD OF RECORD.--July 1929 to current year.

REVISED RECORDS.--WSP 1311: 1936(M). WSP 1920: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 300.36 ft National Geodetic Vertical Datum of 1929. Prior to June 22, 1939, recording gage at site 75 ft upstream at same datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--55 years, 594 ft³/s, 21.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s Jan. 22, 1937, gage height, 17.82 ft from floodmarks, from rating curve extended above 14,000 ft³/s; minimum, 61 ft³/s Aug. 21, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	Unknown	4090	14.23	Dec. 22	Unknown	3140	12.55
Dec. 3	Unknown	3820	14.07	May 3	0400	3060	12.38
Dec. 6	Unknown	5350	14.70	May 9	0300	*16000	16.54

Minimum discharge, 107 ft³/s Oct. 2, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	139	1090	465	337	1000	780	1380	310	245	541	153
2	112	136	1960	460	322	980	540	1560	253	209	303	152
3	112	169	3200	465	328	450	1500	2460	223	180	231	152
4	112	215	3460	416	344	325	1300	2370	212	194	236	159
5	113	204	3540	438	317	450	1080	2420	198	221	209	169
6	113	210	5350	471	305	7000	882	3520	179	272	199	176
7	113	209	4330	447	288	9000	648	8050	172	272	194	173
8	112	197	2910	416	278	6000	530	13800	167	242	189	164
9	111	210	1630	395	269	3000	587	14600	162	205	181	172
10	110	179	932	454	266	1700	532	10500	157	177	174	163
11	112	173	1010	407	308	900	494	6500	153	196	170	159
12	113	170	975	376	578	520	436	3740	150	227	169	161
13	131	166	820	366	730	560	379	1620	148	174	168	162
14	142	165	1460	341	573	630	334	782	148	173	165	165
15	145	175	1210	314	537	620	303	521	148	204	264	175
16	142	183	1050	294	360	1900	297	385	159	477	287	151
17	150	199	849	283	320	2300	299	301	153	528	201	146
18	157	189	635	240	290	2200	294	264	153	627	173	143
19	180	245	615	240	480	1600	269	244	152	617	163	141
20	171	998	384	240	490	3400	256	231	150	618	158	139
21	160	452	1280	260	370	3500	374	231	152	500	155	137
22	222	628	2390	300	325	2200	1220	239	165	314	153	136
23	198	2950	1800	370	285	860	1120	853	421	228	151	135
24	198	2140	1400	885	255	1000	1250	892	255	191	148	133
25	191	1550	700	891	240	1300	1180	766	232	171	146	132
26	180	1250	490	871	237	900	742	574	200	163	145	131
27	170	1430	640	745	600	780	497	739	175	330	145	130
28	158	1530	780	605	1050	2000	994	500	216	656	148	130
29	150	1590	540	515	1030	2800	903	470	392	994	147	129
30	142	1380	490	428	---	2500	1600	530	271	1210	153	129
31	139	---	470	368	---	1500	---	421	---	973	151	---
TOTAL	4472	19431	48390	13766	12112	63875	21620	81463	6026	11788	6017	4497
MEAN	144	648	1561	444	418	2060	721	2628	201	380	194	150
MAX	222	2950	5350	891	1050	9000	1600	14600	421	1210	541	176
MIN	110	136	384	240	237	325	256	231	148	163	145	129
CFSM	.38	1.69	4.08	1.16	1.09	5.38	1.88	6.86	.52	.99	.51	.39
IN.	.43	1.89	4.70	1.34	1.18	6.20	2.10	7.91	.59	1.14	.58	.44

CAL YR 1983	TOTAL	278588	MEAN	763	MAX	9060	MIN	107	CFSM	1.99	IN.	27.06
WTR YR 1984	TOTAL	293457	MEAN	802	MAX	14600	MIN	110	CFSM	2.09	IN.	28.50

07026000 OBION RIVER AT OBION, TN
(National stream-quality accounting network station)

LOCATION.--Lat 36°15'04", long 89°11'33", Obion County, Hydrologic Unit 08010202, near left bank on downstream end of pier of bridge on old U.S. Highway 51, 0.5 mi upstream from Richland Creek, 0.6 mi south of Obion, 14.5 mi downstream from North Fork, and at mile 62.4. Water quality sampling site at same location.

DRAINAGE AREA.--1,852 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1929 to September 1958, October 1966 to current year. Gage height and discharge records at this site from 1964 to 1975 are in reports of Corps of Engineers.

REVISED RECORD.--WSP 1211: 1930, 1943. WSP 2120: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.48 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1932, nonrecording gage at present site at datum 5.00 ft higher; Oct. 1, 1932, to Aug. 2, 1939, nonrecording gage, and Aug. 3, 1939, to Sept. 1958, water-stage recorder at present site at datum 15.00 ft higher.

REMARKS.--Records good.

COOPERATION.--Thirty nine discharge measurements furnished by the Corps of Engineers.

AVERAGE DISCHARGE.--47 years, (water years 1930-58, 1967-84), 2723 ft³/s, 19.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 99,500 ft³/s Jan. 24, 1937, gage height 40.4 ft present datum; minimum, under conditions of no backwater, 230 ft³/s Oct. 7-9, 1943; minimum daily discharge, 15 ft³/s, backwater from Mississippi River, Feb. 4, 1937; reverse flow of 57 ft³/s measured by current meter on that date

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 44,300 ft³/s May 11, gage height, 35.14 ft; minimum, 514 ft³/s July 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	581	710	3200	1570	1500	2100	3480	8050	1390	816	1470	687
2	571	755	7570	1710	1510	1760	2640	6010	1140	661	1050	650
3	571	1680	15000	2190	2240	1510	9630	10700	985	574	848	634
4	632	2270	18500	2090	2210	3850	10500	12500	908	769	972	649
5	786	1570	19000	2260	1860	15300	6600	11500	861	2930	875	670
6	780	1070	15000	2350	1710	17000	4000	12700	787	2190	856	671
7	740	872	10000	2250	1590	17700	2600	20000	785	1330	810	670
8	642	797	6000	1910	1490	15500	2200	28200	722	878	728	651
9	608	762	3700	1790	1510	12000	2600	35700	673	718	721	765
10	604	760	3150	2550	1540	7200	2500	41300	645	625	661	836
11	581	774	3250	2430	4370	4000	2200	43800	617	604	674	716
12	599	764	6000	1780	4570	2700	2000	35000	615	2790	1010	707
13	632	727	4300	1540	6790	2300	1850	24000	617	1480	712	646
14	655	712	4600	1490	4450	2000	1750	12000	640	743	662	615
15	632	759	6500	1380	2590	1850	1660	8000	655	626	622	874
16	613	844	4020	1280	2090	6450	1640	5000	1030	1800	913	735
17	617	724	2730	1230	1770	8310	1640	3500	1110	1410	769	662
18	822	606	2130	1190	1540	8690	1550	2500	683	4480	714	652
19	816	690	1780	1130	2610	7140	1430	1500	647	2600	706	646
20	778	8010	1540	1030	2350	12500	1330	1250	714	1340	688	640
21	746	5550	3830	996	1650	13100	1610	1150	1600	1180	672	636
22	1010	2600	13900	996	1400	10000	7420	1400	894	988	669	631
23	1520	12700	15000	1920	1270	6000	7090	3570	1990	793	669	636
24	1050	17700	15500	10600	1220	4300	4350	4690	1930	681	652	672
25	886	18300	12000	8790	1140	5400	2930	3020	905	610	634	642
26	811	16700	5500	5600	1030	5100	2270	1820	711	570	617	640
27	758	12000	3000	3670	2260	4100	1810	5930	608	7800	611	618
28	750	14800	4000	2600	4050	7480	3490	9930	551	6980	614	609
29	755	9600	4300	2200	2640	9240	5600	5820	1200	4460	653	604
30	735	4500	3000	2070	---	6620	9850	3020	1080	2790	689	610
31	716	---	2000	1730	---	4660	---	1830	---	2020	741	---
TOTAL	22997	140306	220000	76322	66950	225860	110220	365390	27693	58236	23682	20074
MEAN	742	4677	7097	2462	2309	7286	3674	11790	923	1879	764	669
MAX	1520	18300	19000	10600	6790	17700	10500	43800	1990	7800	1470	874
MIN	571	606	1540	996	1030	1510	1330	1150	551	570	611	604
CFSM	.40	2.53	3.83	1.33	1.25	3.93	1.98	6.37	.50	1.01	.41	.36
IN.	.46	2.82	4.42	1.53	1.34	4.54	2.21	7.34	.56	1.17	.48	.40

CAL YR 1983 TOTAL 1422156 MEAN 3896 MAX 42200 MIN 571 CFSM 2.10 IN. 28.57
WTR YR 1984 TOTAL 1357730 MEAN 3710 MAX 43800 MIN 551 CFSM 2.00 IN. 27.27

07026000 OBION RIVER AT OBION, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to September 1981.
WATER TEMPERATURE: June 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 488 micromhos Dec. 14, 1976; minimum, 35 micromhos July 21, 22, 1975.
WATER TEMPERATURES: Maximum, 33.5°C June 18, 1978; minimum, -0.5°C several days in Jan. and Feb. 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT												
05...	1030	783	80	6.3	20.0	757	30	7.6	84	--	--	21
JAN												
10...	1030	2950	90	6.0	4.5	762	140	11.4	88	840	K19000	30
MAY												
16...	1130	12400	75	5.5	20.5	760	75	6.3	70	K120	50000	--
JUL												
17...	1000	1210	60	6.7	24.5	766	250	5.5	66	--	4700	16

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT												
05...	0	5.2	1.9	6.7	40	.7	1.1	26	25	4.2	5.1	<.10
JAN												
10...	1	7.5	2.8	4.7	23	.4	2.5	29	56	9.6	5.0	<.10
MAY												
16...	--	--	--	--	--	--	2.4	19	116	6.8	3.5	.10
JUL												
17...	4	4.2	1.3	3.1	26	.4	2.7	12	4.6	9.9	3.3	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT												
05...	12	49	52	.07	104	.490	.070	.09	.20	.110	.030	.050
JAN												
10...	9.1	67	60	.09	534	.650	.310	.40	1.4	.180	.080	.060
MAY												
16...	--	--	--	.09	2240	--	--	--	--	--	--	--
JUL												
17...	7.5	57	41	.08	186	1.10	.260	.33	1.8	.060	.270	.160

K--Results based on non-ideal colony count.

07026000 OBION RIVER AT OBION, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
OCT 05...	.15	20	2	25	<.5	<1	8	<3	4	55	1	<4
JAN 10...	.18	40	1	79	<.5	<1	<1	<3	3	120	1	<4
MAY 16...	--	230	1	--	--	--	<1	--	5	--	2	--
JUL 17...	.49	40	1	120	<.5	<1	<1	<3	4	410	5	7

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 05...	70	.3	<10	1	<1	<1	32	<6	<3	79	167	92
JAN 10...	160	.2	<10	2	<1	<1	78	<6	14	--	--	--
MAY 16...	--	--	--	4	--	<1	--	--	--	62	2080	99
JUL 17...	23	2.3	<10	<1	--	<1	31	<6	25	1520	4970	99

07026370 NORTH REELFOOT CREEK AT STATE HIGHWAY 22, NEAR CLAYTON, TN

LOCATION.--Lat 36°27'50", long 89°15'13", Obion County, Hydrologic Unit 08010202, on left bank on upstream side of bridge on State Highway 22, 0.9 mi northwest of Clayton, 9.9 mi west of intersection of State Highways 22 and 5, and 11.8 mi northeast of the spillway at Reelfoot Lake.

DRAINAGE AREA.--56.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1980 to October 1983, April 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 290 ft, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s Dec. 3, 1982, gage height, 19.30 ft; no flow many days each year.

EXTREMES FOR CURRENT PERIOD.--October, April to September: Peak discharges above base of 520 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 9	1030	714	15.80	May 8	0030	*2130	19.26
Apr. 29	0830	1040	17.75				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00						---	161	11	.66	.85	.00
2	.00						---	90	8.7	.35	.24	.00
3	.00						---	213	7.2	.21	.11	.00
4	.00						---	142	5.1	.15	.05	.00
5	.00						105	82	3.6	37	.01	.00
6	.00						73	818	2.6	8.2	.00	.00
7	.00						48	1640	2.7	5.6	.00	.00
8	.00						39	1360	2.1	3.8	.00	.00
9	.00						315	537	1.3	2.5	.00	.74
10	.00						142	402	.86	1.6	.00	.17
11	.00						87	353	.78	1.0	.00	1.9
12	.00						75	299	.53	.76	.00	.27
13	.00						70	256	.40	.46	.00	.00
14	.00						45	164	.29	.29	.00	.00
15	.00						40	79	.19	.29	.00	.00
16	.00						41	41	75	38	.00	.00
17	.00						30	26	44	13	.00	.00
18	.06						26	19	18	9.2	.00	.00
19	.00						22	15	9.2	5.5	.00	.00
20	.00						19	12	5.4	3.5	.00	.00
21	.00						26	11	100	2.2	.00	.00
22	.04						41	20	17	1.3	.00	.00
23	.00						25	16	33	.73	.00	.00
24	.00						21	11	25	.38	.00	.00
25	.00						18	8.8	13	.25	.00	.00
26	.00						15	7.3	7.4	.18	.00	.00
27	.00						14	129	4.4	11	.00	.00
28	.00						13	59	3.0	14	.00	.00
29	.00						434	33	1.9	7.5	.01	.00
30	.00						319	21	1.1	4.3	.00	.00
31	.00						---	14	---	2.5	.00	---
TOTAL	.10						---	7039.1	404.75	176.41	1.27	3.08
MEAN	.00						---	227	13.5	5.69	.04	.10
MAX	.06						---	1640	100	38	.85	1.9
MIN	.00						---	7.3	.19	.15	.00	.00
CFSM	.00						---	4.03	.24	.10	.00	.00
IN.	.00						---	4.65	.27	.12	.00	.00

07026370 NORTH REELFOOT CREEK AT STATE HIGHWAY 22, NEAR CLAYTON, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to October 1983, April 1984 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT DISCHARGE: October 1982 to October 1983, April 1984 to current year.

INSTRUMENTATION.-- Sediment pumping sampler October 1982 to October 1983, April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,580 mg/L June 21, 1984; minimum daily mean 0 mg/L many days each year.
SEDIMENT LOADS: Maximum daily, 7,900 tons May 6, 1984; minimum daily, 0.00 ton many days each year.

EXTREMES FOR CURRENT PERIOD.--October, April to September:
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,580 mg/L June 21; minimum daily mean, 0 mg/L many days.
SEDIMENT LOADS: Maximum daily, 7,900 tons May 6; minimum daily, 0.00 ton many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
APR					JUN				
12...	1000	61	325	14.0	29...	1245	1.75	180	25.0
MAY					JUL				
08...	1800	1040	110	18.0	05...	1210	33.4	70	22.0
09...	1655	453	110	17.0	05...	1510	17	80	23.0
24...	1950	11	240	23.5	06...	1020	8.5	150	24.5
30...	1630	21	225	19.0	12...	1145	.76	225	21.5
JUN					27...	1225	4.18	200	24.5
06...	1145	2.68	280	24.0	31...	1125	2.6	180	22.0
14...	1245	.42	300	27.0	SEP				
21...	1500	10.7	120	26.0	11...	1530	6.5	160	24.0
22...	0915	11.3	150	26.0	12...	1000	1.57	160	24.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY										
30...	1630	21	225	19.0	<.1	<1.0	<.1	.4	<.1	<.1

DATE	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY										
30...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<1	<1.0

07026370 NORTH REELFOOT CREEK AT HIGHWAY 22, NEAR CLAYTON, TN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.00	0	.00						
2	.00	0	.00						
3	.00	0	.00						
4	.00	0	.00						
5	.00	0	.00						
6	.00	0	.00						
7	.00	0	.00						
8	.00	0	.00						
9	.00	0	.00						
10	.00	0	.00						
11	.00	0	.00						
12	.00	0	.00						
13	.00	0	.00						
14	.00	0	.00						
15	.00	0	.00						
16	.00	0	.00						
17	.00	0	.00						
18	.06	100	.02						
19	.00	0	.00						
20	.00	0	.00						
21	.00	0	.00						
22	.04	100	.01						
23	.00	0	.00						
24	.00	0	.00						
25	.00	0	.00						
26	.00	0	.00						
27	.00	0	.00						
28	.00	0	.00						
29	.00	0	.00						
30	.00	0	.00						
31	.00	0	.00						
TOTAL	0.10	---	0.03						
		APRIL			MAY			JUNE	
1	---	---	---	161	630	274	11	103	3.1
2	---	---	---	90	490	119	8.7	92	2.2
3	---	---	---	213	1520	824	7.2	91	1.8
4	---	---	---	142	610	234	5.1	87	1.2
5	105	262	74	82	400	89	3.7	83	.83
6	73	217	43	818	3090	7900	2.7	78	.57
7	48	156	20	1640	1490	7110	2.7	72	.52
8	39	125	13	1360	690	2530	2.1	67	.38
9	315	3200	3700	537	695	1030	1.3	60	.21
10	142	1000	383	402	592	643	.86	55	.13
11	87	288	68	353	520	496	.78	49	.10
12	75	210	45	299	460	371	.53	46	.07
13	70	180	34	256	420	284	.40	43	.05
14	45	140	17	164	360	159	.29	40	.03
15	40	125	14	79	250	53	.19	37	.02
16	41	130	14	41	200	22	75	1040	201
17	30	106	8.6	26	150	11	44	510	61
18	26	95	6.7	19	115	5.9	18	310	15
19	22	87	5.2	15	105	3.1	9.2	160	4.0
20	19	80	4.1	12	95	3.1	5.4	110	1.6
21	26	158	14	11	96	2.9	100	3580	1880
22	41	200	22	20	200	11	17	600	28
23	25	118	8.0	16	172	7.4	33	1800	225
24	21	112	6.4	11	151	4.5	25	500	34
25	18	104	5.1	8.8	125	3.0	13	250	8.8
26	15	98	4.0	7.3	105	2.1	7.4	140	2.8
27	14	93	3.5	129	956	554	4.4	121	1.4
28	13	89	3.1	59	510	81	3.0	104	.84
29	434	4340	6400	33	285	25	1.9	92	.47
30	319	2480	2300	21	215	12	1.1	84	.25
31	---	---	---	14	121	4.6	---	---	---
TOTAL	2103	---	13215.7	7039.1	---	22868.6	404.95	---	2475.37

OBION RIVER BASIN

07026370 NORTH REELFOOT CREEK AT HIGHWAY 22, NEAR CLAYTON, TN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.66	76	.14	.85	106	.24	.00	0	.00
2	.35	68	.06	.24	95	.06	.00	0	.00
3	.21	61	.03	.11	75	.02	.00	0	.00
4	.15	53	.02	.05	49	.00	.00	0	.00
5	37	2320	447	.01	10	.00	.00	0	.00
6	8.2	175	3.9	.00	0	.00	.00	0	.00
7	5.6	140	2.1	.00	0	.00	.00	0	.00
8	3.8	122	1.3	.00	0	.00	.00	0	.00
9	2.5	105	.71	.00	0	.00	.74	71	.31
10	1.6	93	.40	.00	0	.00	.17	10	.00
11	1.1	82	.24	.00	0	.00	1.9	57	.80
12	.76	72	.15	.00	0	.00	.27	20	.01
13	.46	67	.08	.00	0	.00	.00	0	.00
14	.29	65	.05	.00	0	.00	.00	0	.00
15	.29	64	.05	.00	0	.00	.00	0	.00
16	39	1500	277	.00	0	.00	.00	0	.00
17	13	210	7.4	.00	0	.00	.00	0	.00
18	9.2	118	2.9	.00	0	.00	.00	0	.00
19	5.5	108	1.6	.00	0	.00	.00	0	.00
20	3.5	97	.92	.00	0	.00	.00	0	.00
21	2.2	87	.52	.00	0	.00	.00	0	.00
22	1.3	76	.27	.00	0	.00	.00	0	.00
23	.73	65	.13	.00	0	.00	.00	0	.00
24	.38	59	.06	.00	0	.00	.00	0	.00
25	.25	56	.04	.00	0	.00	.00	0	.00
26	.18	53	.03	.00	0	.00	.00	0	.00
27	11	339	9.5	.00	0	.00	.00	0	.00
28	14	176	6.7	.00	0	.00	.00	0	.00
29	7.5	148	3.0	.01	45	.00	.00	0	.00
30	4.3	135	1.6	.00	0	.00	.00	0	.00
31	2.5	155	1.0	.00	0	.00	---	---	---
TOTAL	177.51	---	768.90	1.27	---	0.32	3.08	---	1.12

07026400 SOUTH REELFOOT CREEK NEAR CLAYTON, TN

LOCATION.--Lat 36°26'20", long 89°15'37", Obion County, Hydrologic Unit 08010202, at county road bridge, 1.7 mi above confluence with North Reelfoot Creek, and 2 mi southwest of Clayton.

DRAINAGE AREA.--38.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1955, 1956, 1964, 1983. May 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 317 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,560 ft³/s May 27, 1984, gage height, 20.31 ft; no flow several days.

EXTREMES FOR CURRENT PERIOD.--May to September 1984: Peak discharges above base of 360 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	0515	748	14.44	May 7	0415	3580	19.41
May 6	0915	484	13.30	May 27	1530	*4520	20.28
May 6	1645	2860	18.60				

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								43	21	.34	1.1	.09
2								34	15	.26	.72	.15
3								218	13	.64	.45	.10
4								94	11	.80	.29	.05
5								45	9.9	3.5	.19	.02
6								703	9.7	2.3	.13	.01
7								1050	17	1.4	.06	.00
8								150	11	1.1	.04	.00
9								106	8.3	.91	.03	8.2
10								84	5.6	1.1	.02	7.5
11								60	3.9	.80	.01	7.1
12								47	3.4	7.9	.01	5.1
13								39	2.2	1.6	.03	2.7
14								32	2.0	1.3	.02	1.7
15								24	2.2	1.5	.02	1.0
16								21	2.3	1.9	.03	.60
17								18	1.9	.81	.04	.35
18								16	1.1	.52	.03	.27
19								17	.58	1.2	.02	.13
20								20	.47	.59	.01	.08
21								23	.71	.37	.00	.05
22								33	.57	.26	.00	.03
23								14	1.8	.19	.05	.17
24								6.3	1.9	.14	.02	.04
25								8.5	.87	.11	.02	.01
26								21	.26	.59	.03	.04
27								1400	.44	8.6	.02	.01
28								88	.81	1.6	.01	.00
29								37	.84	1.2	.13	.00
30								33	.61	.90	.07	.00
31								29	---	1.8	.05	---
TOTAL								4513.8	150.36	46.23	3.65	35.50
MEAN								146	5.01	1.49	.12	1.18
MAX								1400	21	8.6	1.1	8.2
MIN								6.3	.26	.11	.00	.00
CFSM								3.78	.13	.04	.00	.03
IN.								4.35	.14	.04	.00	.03

OBION RIVER BASIN

07026400 SOUTH REELFOOT CREEK NEAR CLAYTON, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1983 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT DISCHARGE: May 1984 to current year.

INSTRUMENTATION.--Sediment pumping sampler since May 1984.

EXTREMES FOR CURRENT PERIOD.--May to September:
SEDIMENT CONCENTRATIONS: Maximum daily mean, 7,460 mg/L May 27; minimum daily mean, 0 mg/L several days.
SEDIMENT LOADS: Maximum daily, 35,700 tons May 27; minimum 0.00 ton several days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAY				
03...	0815	357	200	12.0
03...	1200	138	200	12.0
09...	1550	112	240	12.0
31...	1310	27	280	16.5
JUN				
06...	1100	14	320	25.0
14...	1050	2.1	360	27.0
29...	1345	.87	380	27.0
JUL				
05...	1105	4.2	400	25.0
06...	0945	3.4	360	26.0
12...	1410	4.4	330	27.5
13...	1230	1.5	260	27.0
27...	1045	7	180	23.5
31...	1335	1.9	240	22.0
SEP				
11...	1725	9.9	120	24.0
12...	1010	5.9	120	24.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY										
31...	1310	27	280	16.5	<.1	<1.0	<.1	<.1	<.1	<.1

DATE	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY										
31...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<1	<1.0

07026400 SOUTH REELFOOT CREEK NEAR CLAYTON, TN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1				43	---	---	21	125	7.1
2				34	---	---	15	125	5.1
3				218	---	---	13	90	3.2
4				94	---	---	11	88	2.6
5				45	---	---	9.9	93	2.5
6				703	---	---	9.7	97	2.5
7				1050	---	---	17	105	4.8
8				150	---	---	11	93	2.8
9				106	---	---	8.3	87	1.9
10				84	---	---	5.6	81	1.2
11				60	---	---	3.9	76	.80
12				47	---	---	3.4	71	.65
13				39	---	---	2.2	64	.38
14				32	---	---	2.0	45	.24
15				24	---	---	2.2	48	.29
16				21	---	---	2.3	50	.31
17				18	---	---	1.9	47	.24
18				16	---	---	1.1	38	.11
19				17	---	---	.58	35	.05
20				20	---	---	.47	35	.04
21				23	---	---	.71	35	.07
22				33	---	---	.57	30	.05
23				14	---	---	1.8	57	.28
24				6.3	---	---	1.9	59	.30
25				8.5	150	3.4	.87	50	.12
26				23	1270	97	.26	40	.03
27				1400	7460	35700	.44	49	.06
28				88	850	202	.81	47	.10
29				37	375	38	.84	32	.07
30				33	310	28	.61	28	.05
31				29	230	18	---	---	---
TOTAL				4513.8	---	---	150.36	---	37.94
		JULY			AUGUST			SEPTEMBER	
1	.34	26	.02	1.1	92	.27	.09	30	.00
2	.26	23	.02	.72	80	.16	.15	50	.02
3	.64	50	.09	.45	65	.08	.10	30	.00
4	.80	53	.11	.29	62	.05	.05	30	.00
5	3.5	57	.54	.19	61	.03	.02	30	.00
6	2.3	80	.50	.13	59	.02	.01	30	.00
7	1.4	74	.28	.06	58	.00	.00	0	.00
8	1.1	67	.20	.04	51	.00	.00	0	.00
9	.91	59	.14	.03	49	.00	8.2	645	22
10	1.1	63	.19	.02	46	.00	7.5	300	6.1
11	.80	56	.12	.01	46	.00	7.1	300	5.8
12	7.9	206	5.4	.01	50	.00	5.1	150	2.1
13	1.6	130	.56	.03	50	.00	2.7	80	.58
14	1.3	120	.42	.02	40	.00	1.7	75	.34
15	1.5	115	.47	.02	40	.00	1.0	50	.14
16	1.9	141	.72	.03	30	.00	.60	50	.08
17	.81	116	.25	.04	30	.00	.35	50	.05
18	.52	100	.14	.03	20	.00	.27	50	.04
19	1.2	108	.35	.02	20	.00	.13	50	.02
20	.59	95	.15	.01	10	.00	.08	50	.01
21	.37	87	.09	.00	0	.00	.05	50	.00
22	.26	80	.06	.00	0	.00	.03	50	.00
23	.19	79	.04	.05	30	.00	.17	100	.05
24	.14	75	.03	.02	30	.00	.04	100	.01
25	.11	74	.02	.02	30	.00	.01	0	.00
26	.59	105	.17	.03	30	.00	.04	50	.00
27	8.6	1080	40	.02	30	.00	.01	50	.00
28	1.6	290	1.3	.01	30	.00	.00	0	.00
29	1.2	175	.57	.13	40	.01	.00	0	.00
30	.90	140	.34	.07	30	.00	.00	0	.00
31	1.8	105	.51	.05	30	.00	---	---	---
TOTAL	46.23	---	53.80	3.65	---	0.62	35.50	---	37.34

OBION RIVER BASIN

07026640 RUNNING SLOUGH NEAR LEDFORD, KY

LOCATION.--Lat 36°32'28", long 89°18'59", Fulton County, Hydrologic Unit 08010202, on county road on the right bank, 1.1 mi northwest of Ledford.

DRAINAGE AREA.--10.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1982 to October 1983, April 1984 to current year.

GAGE.--Water stage recorder. Altitude of gage is 290 ft, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 278 ft³/s May 7, 1984, gage height, 8.86 ft; maximum gage height, 8.98 ft May 19, 1983; no flow many days each year.

EXTREMES FOR CURRENT PERIOD.--October, April to September: Maximum discharge, 278 ft³/s May 7, gage height, 8.86 ft; minimum, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00						---	60	25	.00	.00	.00
2	.00						---	52	19	.00	.00	.00
3	.00						---	64	13	.00	.00	.00
4	.00						78	77	5.1	.00	.00	.00
5	.00						72	63	2.5	.00	.00	.00
6	.00						61	113	1.7	.00	.00	.00
7	.00						54	222	1.3	.18	.00	.00
8	.00						52	259	1.1	.32	.00	.00
9	.00						72	210	.50	.34	.00	.00
10	.00						82	168	.07	.34	.00	.00
11	.00						71	126	.00	.35	.00	.00
12	.00						65	99	.00	.23	.00	.00
13	.00						68	87	.03	.03	.00	.00
14	.00						61	83	.01	.00	.00	.00
15	.00						55	78	.00	.00	.00	.00
16	.00						54	73	.00	.73	.00	.00
17	.00						51	69	.00	7.2	.00	.00
18	.00						49	66	.00	5.1	.00	.00
19	.00						46	64	.00	2.3	.00	.00
20	.00						41	62	.00	.94	.00	.00
21	.00						40	60	.01	.42	.00	.00
22	.00						52	60	9.6	.17	.00	.00
23	.00						43	61	9.1	.00	.00	.00
24	.00						33	57	5.3	.00	.00	.00
25	.00						27	52	4.5	.00	.00	.00
26	.00						22	46	.54	.00	.00	.00
27	.00						21	48	.00	.00	.00	.00
28	.00						23	57	.00	.00	.00	.00
29	.00						36	48	.00	.00	.00	.00
30	.00						66	38	.00	.00	.00	.00
31	.00						---	32	---	.00	.00	---
TOTAL	.00						---	2654	98.36	18.65	.00	.00
MEAN	.00						---	85.6	3.28	.60	.00	.00
MAX	.00						---	259	25	7.2	.00	.00
MIN	.00						---	32	.00	.00	.00	.00
CFSM	.00						---	7.93	.30	.06	.00	.00
IN.	.00						---	9.14	.34	.06	.00	.00

WATER QUALITY RECORDS

PERIOD OF RECORD.--July 1982 to October 1983, April 1984 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT DISCHARGE: JULY 1982 to October 1983, April 1984 to current year.

INSTRUMENTATION.--Sediment pumping sampler July 1982 to October 1983, April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 662 mg/L Dec. 4, 1982; minimum daily mean 0 mg/L many days each year.
SEDIMENT LOADS: Maximum daily, 346 tons Dec. 4, 1982; minimum daily, 0.00 ton, many days each year.

EXTREMES FOR CURRENT PERIOD.--October, April to September:
SEDIMENT CONCENTRATIONS: Maximum daily mean, 406 mg/L May 6; minimum daily mean 0 mg/L, many days.
SEDIMENT LOADS: Maximum daily, 232 tons May 7; minimum daily, 0.00 ton many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
APR					MAY				
18...	1715	49.2	--	15.0	24...	1800	57	500	22.5
20...	1145	39.4	--	14.0	30...	1445	38	380	--
MAY					JUN				
08...	1425	250	125	16.0	06...	1230	1.99	560	23.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY										
30...	1445	38	380	--	<.1	<1.0	<.1	12	<.1	<.1

DATE	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY										
30...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<1	<1.0

OBION RIVER BASIN

07026640 RUNNING SLOUGH NEAR LEDFORD, KY--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.00	0	.00						
2	.00	0	.00						
3	.00	0	.00						
4	.00	0	.00						
5	.00	0	.00						
6	.00	0	.00						
7	.00	0	.00						
8	.00	0	.00						
9	.00	0	.00						
10	.00	0	.00						
11	.00	0	.00						
12	.00	0	.00						
13	.00	0	.00						
14	.00	0	.00						
15	.00	0	.00						
16	.00	0	.00						
17	.00	0	.00						
18	.00	0	.00						
19	.00	0	.00						
20	.00	0	.00						
21	.00	0	.00						
22	.00	0	.00						
23	.00	0	.00						
24	.00	0	.00						
25	.00	0	.00						
26	.00	0	.00						
27	.00	0	.00						
28	.00	0	.00						
29	.00	0	.00						
30	.00	0	.00						
31	.00	0	.00						
TOTAL	0.00	---	0.00						
		APRIL			MAY			JUNE	
1	---	---	---	60	132	21	25	71	4.8
2	---	---	---	52	82	12	19	73	3.7
3	---	---	---	64	180	31	13	75	2.6
4	---	---	---	77	212	44	5.1	75	1.0
5	72	92	18	63	96	16	2.5	75	.51
6	61	91	15	113	406	138	1.7	75	.34
7	54	91	13	222	402	232	1.3	75	.26
8	52	91	13	259	308	217	1.1	75	.22
9	72	218	46	210	190	108	.50	65	.09
10	82	185	41	168	171	78	.07	60	.01
11	71	76	15	126	140	48	.00	0	.00
12	65	69	12	99	110	29	.00	0	.00
13	68	82	15	87	85	20	.03	50	.00
14	61	82	14	83	79	18	.01	50	.00
15	55	80	12	78	74	16	.00	0	.00
16	54	80	12	73	69	14	.00	0	.00
17	51	79	11	69	66	12	.00	0	.00
18	49	78	10	66	66	12	.00	0	.00
19	46	80	9.9	64	66	11	.00	0	.00
20	41	83	9.2	62	65	11	.00	0	.00
21	40	98	11	60	65	11	.01	50	.00
22	52	190	27	60	63	10	9.6	81	2.6
23	43	145	17	61	62	10	9.1	105	2.6
24	33	110	9.8	57	62	9.5	5.3	60	.86
25	27	100	7.3	52	60	8.4	4.5	52	.63
26	22	95	5.6	46	55	6.8	.54	50	.07
27	21	82	4.6	48	78	10	.00	0	.00
28	23	90	5.6	57	162	25	.00	0	.00
29	36	177	18	48	82	11	.00	0	.00
30	66	229	41	38	68	7.0	.00	0	.00
31	---	---	---	32	70	6.0	---	---	---
TOTAL	---	---	---	2654	---	1202.7	98.36	---	20.29

07026640 RUNNING SLOUGH NEAR LEDFORD, KY--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00	0	.00	.00	0	.00	.00	0	.00
2	.00	0	.00	.00	0	.00	.00	0	.00
3	.00	0	.00	.00	0	.00	.00	0	.00
4	.00	0	.00	.00	0	.00	.00	0	.00
5	.00	0	.00	.00	0	.00	.00	0	.00
6	.00	0	.00	.00	0	.00	.00	0	.00
7	.18	50	.02	.00	0	.00	.00	0	.00
8	.32	50	.04	.00	0	.00	.00	0	.00
9	.34	50	.05	.00	0	.00	.00	0	.00
10	.34	50	.05	.00	0	.00	.00	0	.00
11	.35	50	.05	.00	0	.00	.00	0	.00
12	.23	50	.03	.00	0	.00	.00	0	.00
13	.03	50	.00	.00	0	.00	.00	0	.00
14	.00	0	.00	.00	0	.00	.00	0	.00
15	.00	0	.00	.00	0	.00	.00	0	.00
16	.73	60	.12	.00	0	.00	.00	0	.00
17	7.2	100	1.9	.00	0	.00	.00	0	.00
18	5.1	100	1.4	.00	0	.00	.00	0	.00
19	2.3	75	.47	.00	0	.00	.00	0	.00
20	.94	50	.13	.00	0	.00	.00	0	.00
21	.42	50	.06	.00	0	.00	.00	0	.00
22	.17	50	.02	.00	0	.00	.00	0	.00
23	.00	0	.00	.00	0	.00	.00	0	.00
24	.00	0	.00	.00	0	.00	.00	0	.00
25	.00	0	.00	.00	0	.00	.00	0	.00
26	.00	0	.00	.00	0	.00	.00	0	.00
27	.00	0	.00	.00	0	.00	.00	0	.00
28	.00	0	.00	.00	0	.00	.00	0	.00
29	.00	0	.00	.00	0	.00	.00	0	.00
30	.00	0	.00	.00	0	.00	.00	0	.00
31	.00	0	.00	.00	0	.00	---	---	---
TOTAL	18.65	---	4.34	0.00	---	0.00	0.00	---	0.00

07026690 REELFOOT LAKE NEAR PHILLIPY, TN

LOCATION.--Lat 36°27'59", long 89°20'56", Lake County, Hydrologic Unit 08010202, 1.85 mi southeast of Phillipy and 3.0 mi northeast of New Markham.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.22 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Lake level below gage-height of intake Aug. 14 to Sept. 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 13.85 ft, May 8, 1984; minimum recorded 10.50 ft Aug. 13, 1984, but was less during period of no gage-height record Aug. 14 to Sept. 30 1984.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.85 ft, May 8; minimum recorded 10.50 ft Aug 13, but was less during period of no gage-height record Aug. 14 to Sept. 30.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	12.49	12.15	11.56	10.79	
2							---	12.47	12.11	11.54	10.77	
3							---	12.51	12.05	11.55	10.70	
4							---	12.52	12.02	11.57	10.66	
5							---	12.49	11.99	11.55	10.58	
6							---	12.85	11.97	11.53	10.55	
7							---	13.55	11.94	11.48	10.54	
8							---	13.85	11.92	11.49	10.53	
9							---	13.79	11.89	11.48	10.51	
10							---	13.68	11.86	11.48	10.51	
11							---	13.58	11.83	11.43	10.51	
12							---	13.46	11.81	11.40	10.51	
13							---	13.35	11.79	11.38	10.50	
14							---	13.22	11.79	11.37	---	
15							---	13.11	11.77	11.38	---	
16							---	12.98	11.77	11.33	---	
17							---	12.85	11.77	11.26	---	
18							---	12.74	11.74	11.16	---	
19							---	12.63	11.69	11.07	---	
20							12.06	12.51	11.70	11.02	---	
21							12.09	12.44	11.68	10.99	---	
22							12.13	12.36	11.70	10.98	---	
23							12.12	12.26	11.73	10.97	---	
24							12.09	12.20	11.66	10.94	---	
25							12.08	12.15	11.66	10.94	---	
26							12.06	12.10	11.65	10.93	---	
27							12.07	12.29	11.64	10.84	---	
28							12.05	12.37	11.61	10.84	---	
29							12.36	12.32	11.61	10.79	---	
30							12.49	12.25	11.56	10.79	---	
31							---	12.20	---	10.79	---	
MEAN							---	12.36	11.41	10.87	---	
MAX							---	13.85	12.15	11.57	---	
MIN							---	12.10	11.56	10.79	---	

Note.--No gage-height record Aug. 14 to Sept. 30.

07026795 INDIAN CREEK NEAR SAMBURG, TN

LOCATION.--Lat 36°22'59", long 89°20'32", Obion County, Hydrologic Unit 08010202, on left bank upstream from a bridge on county road, 0.6 mi northeast of the four-way stop on State Highway 22 in Samburg.

DRAINAGE AREA.--8.01 mi².

PERIOD OF RECORD.--August 1982 to October 1983, September 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 315 ft, from topographic map.

REMARKS.--Records good. Data for May 3, 1983 to October 31, 1983 previously published in WRD TN-83-1 have been recomputed. The criteria for publishing revisions were not met. Therefore, the data presented in October in this report are the same as in WRD TN-83-1.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,090 ft³/s May 12, 1983, gage height, 9.87 ft; no flow several days each year.

EXTREMES FOR CURRENT PERIOD.--October,September: maximum discharge, 22 ft³/s Sept. 9, gage height, 1.62 ft; no flow September 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04											.02
2	.04											.10
3	.03											.03
4	.08											.01
5	4.4											.01
6	.23											.09
7	.07											.07
8	.03											.02
9	.04											9.1
10	.07											.96
11	.31											2.3
12	4.5											.30
13	1.1											.10
14	.45											.06
15	.40											.03
16	.50											.01
17	3.3											.01
18	2.7											.13
19	.19											.18
20	.11											.18
21	.14											.17
22	2.1											.18
23	.28											5.1
24	.15											.37
25	.16											.04
26	.36											1.3
27	.53											.03
28	.84											.01
29	1.7											.00
30	3.6											.00
31	4.4											---
TOTAL	32.85											20.91
MEAN	1.06											.70
MAX	4.5											9.1
MIN	.03											.00
CFSM	.13											.09
IN.	.15											.10

07027000 REELFOOT LAKE NEAR TIPTONVILLE, TN

LOCATION.--Lat 36°21'09", long 89°25'07", Lake County, Hydrologic Unit 08010202, at Middle Landing in Reelfoot Lake State Park, 0.4 mi east of Blue Bank, 0.8 mi west of the spillway and 3.3 mi southeast of Tiptonville.

DRAINAGE AREA.--240 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 270.22 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.65 ft, from recorded range in stage, about Apr. 26, 1973; minimum, 10.16 ft Sept. 9, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of about 17.0 ft, at spillway, present datum, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.52 ft May 9; minimum 10.16 ft, Sept. 9.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.56	10.51	11.67	12.39	12.30	12.08	12.12	12.36	12.23	11.76	10.96	10.36
2	10.51	10.67	11.85	12.40	12.22	12.13	12.19	12.38	12.20	11.73	10.89	10.34
3	10.47	10.76	11.96	12.41	12.20	12.13	12.16	12.48	12.21	11.68	10.80	10.37
4	10.54	10.83	12.06	12.39	12.17	12.30	12.22	12.45	12.14	11.70	10.70	10.34
5	10.56	10.80	12.22	12.39	12.11	12.40	12.26	12.47	12.08	11.71	10.64	10.32
6	10.56	10.79	12.24	12.29	12.11	12.43	12.26	12.61	12.04	11.70	10.65	10.29
7	10.54	10.79	12.21	12.29	12.11	12.39	12.24	13.09	12.03	11.71	10.64	10.24
8	10.54	10.77	12.26	12.29	12.11	12.33	12.23	13.43	12.00	11.68	10.62	10.20
9	10.54	10.76	12.31	12.33	12.07	12.30	12.30	13.51	11.99	11.64	10.61	10.36
10	10.50	10.78	12.28	12.35	12.17	12.23	12.34	13.48	11.98	11.60	10.60	10.36
11	10.50	10.77	12.25	12.35	12.18	12.23	12.34	13.40	11.98	11.59	10.61	10.42
12	10.54	10.76	12.26	12.35	12.32	12.19	12.33	13.40	11.97	11.60	10.61	10.42
13	10.49	10.75	12.25	12.35	12.34	12.17	12.30	13.34	11.96	11.58	10.60	10.42
14	10.49	10.77	12.21	12.35	12.34	12.12	12.25	13.28	11.95	11.54	10.58	10.46
15	10.49	10.75	12.22	12.35	12.33	12.09	12.26	13.16	11.94	11.52	10.59	10.41
16	10.49	10.74	12.24	12.35	12.26	12.18	12.22	13.04	11.90	11.45	10.58	10.39
17	10.60	10.69	12.28	12.35	12.26	12.23	12.16	12.92	11.87	11.33	10.56	10.36
18	10.61	10.69	12.35	12.35	12.19	12.32	12.11	12.79	11.86	11.23	10.54	10.35
19	10.60	10.84	12.31	12.35	12.21	12.28	12.14	12.66	11.86	11.18	10.54	10.33
20	10.57	10.83	12.31	12.35	12.17	12.32	12.13	12.51	11.86	11.18	10.52	10.32
21	10.58	10.84	12.39	12.35	12.17	12.31	12.14	12.42	11.86	11.18	10.49	10.30
22	10.59	10.91	12.39	12.35	12.17	12.33	12.12	12.29	11.84	11.18	10.53	10.27
23	10.61	11.17	12.39	12.35	12.13	12.32	12.12	12.22	11.86	11.12	10.51	10.32
24	10.62	11.26	12.39	12.35	12.17	12.30	12.13	12.20	11.87	11.11	10.51	10.32
25	10.60	11.34	12.39	12.39	12.17	12.29	12.11	12.16	11.85	11.10	10.47	10.43
26	10.58	11.41	12.39	12.40	12.29	12.23	12.14	12.24	11.81	11.06	10.45	10.36
27	10.56	11.46	12.39	12.41	12.25	12.22	12.13	12.42	11.79	11.04	10.41	10.35
28	10.53	11.49	12.39	12.41	12.15	12.27	12.20	12.48	11.79	11.03	10.38	10.34
29	10.55	11.61	12.39	12.37	12.13	12.20	12.25	12.40	11.80	11.02	10.36	10.33
30	10.55	11.65	12.39	12.36	---	12.20	12.33	12.36	11.79	10.98	10.36	10.30
31	10.53	---	12.39	12.36	---	12.15	---	12.32	---	10.96	10.37	---
MEAN	10.55	10.94	12.26	12.36	12.20	12.25	12.21	12.72	11.94	11.38	10.57	10.35
MAX	10.62	11.65	12.39	12.41	12.34	12.43	12.34	13.51	12.23	11.76	10.96	10.46
MIN	10.47	10.51	11.67	12.29	12.07	12.08	12.11	12.16	11.79	10.96	10.36	10.20

07027010 RUNNING REELFOOT BAYOU NEAR OWL CITY, TN

LOCATION.--Lat 36°19'53", long 89°24'02", Obion County, Hydrologic Unit 08010202, at bridge on county road 1.5 mi downstream of the spillway at Reelfoot Lake and 1.6 mi east of Owl City.

DRAINAGE AREA.--247 mi².

PERIOD OF RECORD.--July 1982 to October 1983, April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 264.96 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow is regulated by a spillway located 1.5 mi upstream of the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft³/s May 18, 1983, gage height 17.97 ft; no flow part of each day September 15-16, 1984, due to construction work in channel.

EXTREMES FOR CURRENT PERIOD.--October, April to September: Maximum discharge, 1910 ft³/s May 7, gage height 17.78 ft; no flow part of each day September 15-16, due to construction work in channel.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4						---	675	487	9.2	4.1	3.0
2	3.2						---	681	315	8.7	261	3.4
3	2.9						---	747	308	8.3	549	3.4
4	2.6						690	762	296	8.0	541	3.5
5	2.6						700	738	272	8.8	379	3.5
6	2.3						712	843	250	8.5	6.5	3.7
7	2.2						702	1550	166	7.6	2.1	3.6
8	1.9						684	1690	22	7.1	2.4	3.5
9	1.5						806	1660	20	7.4	2.5	6.4
10	1.5						768	1670	18	7.5	2.3	3.0
11	2.2						765	1670	18	7.5	2.3	4.0
12	2.5						738	1670	21	7.7	2.5	3.6
13	2.0						732	1640	18	6.6	2.9	2.9
14	2.0						710	1620	17	6.5	3.4	1.3
15	2.4						705	1580	16	7.3	3.6	.14
16	3.1						698	1540	15	326	3.2	.17
17	4.7						668	1490	15	673	3.3	.65
18	1.3						626	1430	16	652	3.2	1.4
19	.50						391	1350	15	378	2.9	1.4
20	.50						177	1270	11	8.1	2.8	.99
21	.94						165	1220	11	5.6	2.9	.98
22	1.7						158	1170	12	5.2	3.2	1.2
23	1.8						157	1120	12	4.6	3.1	2.4
24	2.0						155	700	11	3.0	3.0	2.7
25	2.3						151	273	11	2.6	3.2	1.9
26	1.8						112	50	11	2.5	3.3	1.8
27	1.8						15	925	11	3.1	3.4	1.7
28	1.4						17	922	11	2.9	3.4	1.6
29	1.5						17	722	10	3.3	3.2	1.5
30	1.8						347	665	9.8	3.5	2.9	1.5
31	1.8						---	617	---	3.8	1.5	---
TOTAL	64.14						---	34660	2425.8	2193.9	1813.1	70.83
MEAN	2.07						---	1118	80.9	70.8	58.5	2.36
MAX	4.7						---	1690	487	673	549	6.4
MIN	.50						---	50	9.8	2.5	1.5	.14
CFSM	.01						---	4.53	.33	.29	.24	.01
IN.	.01						---	5.22	.37	.33	.27	.01

07029500 HATCHIE RIVER AT BOLIVAR, TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°16'31", long 88°58'36", Hardeman County, Hydrologic Unit 08010208, on left bank 25 ft upstream of bridge on State Highway 18, 250 ft upstream from Illinois Central Gulf Railroad bridge, 0.6 mi downstream from Spring Creek, and 1.5 mi northeast of Bolivar and at mile 135.1.

DRAINAGE AREA.--1,480 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 323.49 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--55 years, 2,436 ft³/s, 22.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft³/s Mar. 18, 1973, gage height, 21.66 ft from rating curve extended above 34,000 ft³/s; minimum, 78 ft³/s Sept. 2, 1943.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 7	1500	21200	17.97	May 4	1600	*25600	18.58
Apr. 28	1200	9430	15.64	May 9	1600	18800	17.59

Minimum discharge, 263 ft³/s Oct. 11,12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	404	6230	2870	2190	2380	5650	8660	1140	1250	574	593
2	293	403	5990	3270	1900	2420	7560	12800	997	973	549	467
3	287	398	7690	3470	1730	2430	8250	22200	911	763	546	452
4	286	441	11000	3600	1700	2340	7430	24900	845	640	558	537
5	279	491	12500	3500	1710	3040	6530	24800	792	567	571	495
6	275	572	17400	3150	1680	3710	5650	22400	747	545	559	440
7	273	592	20900	2660	1560	3850	4950	18600	697	549	536	397
8	269	543	19300	2300	1420	3860	4510	18400	679	551	509	364
9	265	497	15700	2040	1310	3640	4450	18500	673	587	482	338
10	265	473	12600	1930	1300	3580	4190	17800	666	825	479	430
11	264	465	10400	2060	1460	3590	3860	15100	631	826	545	521
12	287	463	8740	2280	1690	3500	3440	12400	601	705	598	634
13	352	453	7560	2360	1980	3510	3060	10100	578	615	572	667
14	466	450	7090	2390	2290	3230	2620	8330	555	575	515	588
15	617	488	6570	2420	2450	2850	2240	6930	537	524	475	486
16	596	535	6290	2440	2460	2570	1930	5840	558	505	463	413
17	491	649	5860	2370	2400	2690	1710	5060	590	503	453	365
18	457	704	5390	2210	2290	4110	1550	4330	599	653	453	344
19	456	649	5220	1970	2140	4740	1460	3460	532	980	464	326
20	456	988	4830	1770	2040	5470	1390	2430	477	1140	455	313
21	440	1460	4140	1570	2000	6390	1510	2070	450	1020	418	317
22	462	1850	4100	1390	1870	7070	3140	2090	454	813	391	313
23	533	2270	3860	1330	1690	6760	4220	2410	548	658	388	308
24	715	2960	3670	1890	1540	5890	4660	2490	677	565	380	304
25	774	3800	3230	2430	1420	5210	4760	2380	822	513	364	301
26	678	4330	2700	2770	1340	4440	6330	1930	911	480	344	297
27	551	4520	2470	2800	1500	3960	7590	1540	785	512	329	307
28	471	5100	2320	2770	1970	4780	8700	1430	619	574	323	324
29	432	5630	2440	2740	2300	4810	8390	1470	878	754	331	318
30	417	6210	2600	2640	---	4870	8810	1400	1260	843	365	306
31	412	---	2710	2450	---	4760	---	1290	---	694	607	---
TOTAL	13123	48788	231500	75840	53330	126450	140540	283540	21209	21702	14596	12265
MEAN	423	1626	7468	2446	1839	4079	4685	9146	707	700	471	409
MAX	774	6210	20900	3600	2460	7070	8810	24900	1260	1250	607	667
MIN	264	398	2320	1330	1300	2340	1390	1290	450	480	323	297
CFSM	.29	1.10	5.05	1.65	1.24	2.76	3.17	6.18	.48	.47	.32	.28
IN.	.33	1.23	5.82	1.91	1.34	3.18	3.53	7.13	.53	.55	.37	.31

CAL YR 1983 TOTAL 1383072 MEAN 3789 MAX 34800 MIN 263 CFSM 2.56 IN. 34.76
WTR YR 1984 TOTAL 1042883 MEAN 2849 MAX 24900 MIN 264 CFSM 1.92 IN. 26.21

07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1968, 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1980 to September 1982, October 1983 to current year.
WATER TEMPERATURE: June 1980 to current year.

INSTRUMENTATION.--Water-quality monitor since June 1980.

REMARKS.--Unpublished records of miscellaneous specific conductance and temperature are available in files of Sub-district office. The water-quality monitor does not register below 0.0°C, monitor readings of 0.0°C may indicate lower temperatures.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 252 micromhos Sept. 21, 1984; minimum, 28 micromhos Apr. 18, 1982.
WATER TEMPERATURE: Maximum, 31.5°C July 15, 16, 1980; minimum recorded 0.0°C Dec. 23, 1983 to Jan.3, 1984, minimum observed -.5°C on Jan. 3, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 252 micromohs Sept. 21,1984, minimum 44 micromohs July 20.
WATER TEMPERATURE: Maximum, 28.5°C June 16, 21-22. Minimum recorded 0.0°C Dec. 23 to Jan. 3; minimum observed -.5°C on Jan. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT												
03...	1000	284	60	6.0	18.5	756	17	7.7	83	--	--	15
JAN												
11...	0945	2060	--	6.3	2.5	762	33	11.6	85	240	4700	19
MAY												
17...	1000	5100	63	5.3	17.5	760	26	6.4	67	250	40000	25
JUL												
18...	1000	605	110	7.2	25.0	768	45	6.0	72	--	5600	19

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT												
03...	0	4.0	1.2	4.2	36	.5	1.3	17	33	5.8	4.7	<.10
JAN												
11...	7	5.5	1.3	3.2	25	.3	1.6	12	12	9.6	4.5	<.10
MAY												
17...	7	7.1	1.7	2.7	18	.2	1.4	18	175	6.5	3.0	<.10
JUL												
18...	4	5.1	1.4	6.8	42	.7	1.5	15	1.8	10	8.4	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT												
03...	11	36	43	.05	28	.280	.050	.06	.40	.060	.030	.050
JAN												
11...	8.6	55	42	.07	306	.180	.100	.13	.50	.080	.030	<.010
MAY												
17...	8.3	--	44	.07	716	.420	.750	.97	1.1	.060	.030	.020
JUL												
18...	9.2	65	53	.09	106	.340	.610	.79	.60	.060	.030	<.010

07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
OCT												
03...	.15	20	2	21	<.5	3	<1	4	12	260	1	<4
JAN												
11...	--	<10	1	76	<.5	<1	<1	<3	9	100	1	<4
MAY												
17...	.06	110	1	84	<1	1	<1	<3	4	870	1	<4
JUL												
18...	--	60	1	71	<.5	<1	--	<3	2	310	2	5

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
03...	78	.3	<10	1	<1	<1	39	<6	5	37	28	82
JAN												
11...	140	.4	<10	3	<1	<1	49	<6	12	--	--	--
MAY												
17...	90	.4	<10	5	<1	--	58	<6	13	23	317	94
JUL												
18...	150	--	<10	<1	--	1	51	<6	22	53	87	93

07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	73	68	71	73	70	71						
2	70	57	60	74	71	73						
3	64	58	61	75	72	74						
4	70	63	66	75	72	74						
5	74	70	72	73	67	70						
6	76	72	74	68	65	66						
7	79	75	77	68	65	66						
8	79	77	78	66	63	65						
9	79	76	78	67	64	65						
10	80	76	78	68	63	65						
11	80	77	79	63	61	62						
12	80	79	79	62	60	61						
13	79	77	78	62	59	61						
14	78	73	75	61	59	60						
15	74	72	73	61	59	60						
16	73	69	71	71	59	61						
17	72	69	71	---	---	---						
18	73	71	72	---	---	---						
19	74	71	73	---	---	---						
20	75	72	74	---	---	---						
21	76	74	75	---	---	---						
22	77	75	76	---	---	---						
23	76	75	75	---	---	---						
24	77	75	76	---	---	---						
25	78	76	77	---	---	---						
26	76	74	75	---	---	---						
27	76	73	75	---	---	---						
28	75	73	74	---	---	---						
29	76	72	74	---	---	---						
30	77	74	75	---	---	---						
31	75	72	74	---	---	---						
MONTH	80	57	74	---	---	---						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				---	---	---				---	---	---
2				98	76	87				---	---	---
3				88	54	65				---	---	---
4				76	51	54				---	---	---
5				68	49	55				---	---	---
6				55	46	51				---	---	---
7				75	55	70				---	---	---
8				74	58	61				---	---	---
9				60	55	58				---	---	---
10				59	54	57				---	---	---
11				59	58	59				---	---	---
12				59	58	58				---	---	---
13				58	57	57				---	---	---
14				58	56	57				---	---	---
15				78	57	65				---	---	---
16				84	77	81				---	---	---
17				87	84	86				---	---	---
18				87	81	85				---	---	---
19				80	67	71				---	---	---
20				70	65	67				---	---	---
21				72	69	71				---	---	---
22				76	72	74				---	---	---
23				86	75	80				81	64	68
24				87	67	85				66	64	65
25				69	66	67				67	66	66
26				67	64	65				68	67	67
27				69	66	68				69	63	66
28				75	68	72				67	65	66
29				78	74	76				67	64	66
30				84	69	77				67	65	66
31				96	84	90				71	67	68
MONTH				98	46	69				---	---	---

07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	69	68	69	---	---	---	66	56	59	124	72	91
2	70	68	69	---	---	---	78	57	64	76	52	62
3	69	66	67	---	---	---	79	65	71	71	57	61
4	78	67	69	---	---	---	76	66	71	64	53	60
5	80	70	74	---	---	---	69	56	63	86	60	69
6	83	72	75	---	---	---	63	50	60	105	70	80
7	88	74	78	---	---	---	83	58	64	145	83	97
8	112	77	92	---	---	---	98	67	75	137	101	110
9	110	106	108	---	---	---	115	76	84	126	118	121
10	107	82	94	---	---	---	109	89	94	244	124	192
11	88	73	82	---	---	---	96	69	82	210	162	190
12	102	81	85	---	---	---	73	58	65	161	93	121
13	106	84	88	---	---	---	66	59	62	105	103	104
14	110	89	93	---	---	---	92	63	70	163	131	144
15	114	92	97	---	---	---	97	73	80	180	138	148
16	119	97	101	---	---	---	124	79	92	202	149	163
17	115	100	104	---	---	---	132	94	105	234	120	190
18	112	103	105	---	---	---	111	80	97	185	87	111
19	---	---	---	---	---	---	80	61	68	245	195	230
20	---	---	---	48	44	46	78	58	65	250	244	247
21	---	---	---	49	45	47	108	68	77	252	212	243
22	---	---	---	50	47	48	96	87	91	209	84	118
23	---	---	---	81	48	57	164	96	113	87	68	75
24	---	---	---	99	59	70	203	138	185	91	69	76
25	---	---	---	85	76	81	165	77	102	136	81	94
26	---	---	---	124	80	94	76	59	66	141	110	123
27	---	---	---	111	100	106	60	57	58	151	129	138
28	---	---	---	108	72	91	205	58	143	240	144	211
29	---	---	---	77	54	64	220	173	200	198	103	143
30	---	---	---	58	52	57	174	160	170	132	99	120
31	---	---	---	62	56	57	160	126	144	---	---	---
MONTH	---	---	---	---	---	---	220	50	92	252	52	131

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	17.5	18.5	15.5	13.5	14.5	8.0	7.5	7.5	.0	.0	.0
2	19.5	17.5	18.5	16.0	14.5	15.0	8.0	7.5	8.0	.0	.0	.0
3	20.0	18.0	19.5	16.5	15.0	16.0	10.0	8.5	9.0	.0	.0	.0
4	20.5	19.0	19.5	16.0	15.0	16.0	10.0	10.0	10.0	.0	.0	.0
5	20.5	19.5	20.0	15.0	13.5	14.0	10.5	9.5	10.0	.0	.0	.0
6	20.0	18.5	19.0	13.0	12.0	12.5	11.0	9.0	10.0	.5	.0	.0
7	20.0	18.5	19.0	13.5	12.5	13.0	8.5	7.0	7.5	1.5	.5	.5
8	19.5	18.0	19.0	13.0	12.0	12.5	7.5	7.0	7.5	2.5	1.5	2.0
9	19.5	18.0	18.5	13.0	12.0	12.5	7.5	7.0	7.5	3.5	2.5	3.0
10	19.5	18.0	18.5	13.0	11.0	12.0	9.0	7.5	8.0	4.0	3.5	4.0
11	19.0	18.5	19.0	11.0	10.0	10.5	10.5	9.0	10.0	3.5	2.0	2.5
12	19.0	17.5	18.5	9.5	8.5	9.0	10.5	9.0	10.0	2.0	1.5	1.5
13	17.0	16.0	16.5	10.0	9.0	9.5	9.0	8.0	8.5	2.5	2.0	2.0
14	16.5	14.5	15.5	9.5	8.5	9.0	8.0	7.5	8.0	2.0	2.0	2.0
15	16.0	15.0	15.5	10.0	9.5	9.5	7.5	6.0	6.5	2.0	1.5	1.5
16	16.0	14.5	15.5	10.0	9.0	10.0	6.0	4.5	5.0	2.0	1.5	2.0
17	16.5	15.5	16.0	9.5	8.5	9.0	4.0	3.0	3.5	2.5	1.5	2.0
18	17.0	16.5	16.5	10.0	8.5	9.5	4.0	3.0	3.5	2.5	2.0	2.0
19	18.0	17.0	17.0	12.0	10.0	11.0	3.0	1.0	2.0	---	---	---
20	18.5	17.5	18.0	13.0	12.0	12.5	1.0	.5	.5	---	---	---
21	19.0	18.0	18.5	12.0	11.5	12.0	2.0	1.0	1.5	---	---	---
22	19.0	18.0	18.5	13.0	12.0	12.5	2.0	1.0	2.0	---	---	---
23	18.0	17.5	17.5	14.5	13.0	14.0	1.0	.0	.5	---	---	---
24	17.5	17.0	17.0	14.5	12.0	13.0	.0	.0	.0	---	---	---
25	17.0	16.0	16.5	11.5	10.0	10.5	.0	.0	.0	---	---	---
26	16.0	15.0	15.5	11.0	9.5	10.5	.0	.0	.0	1.5	.0	1.0
27	15.0	14.0	14.5	12.0	11.0	11.5	.0	.0	.0	1.5	1.0	1.0
28	14.5	13.5	14.0	11.5	9.5	10.5	.0	.0	.0	2.5	1.0	1.5
29	15.0	13.0	14.0	9.5	8.0	8.5	.0	.0	.0	3.5	2.0	2.5
30	15.0	13.5	14.0	8.0	7.0	7.5	.0	.0	.0	3.5	3.0	3.5
31	15.0	13.5	14.5	---	---	---	.0	.0	.0	3.5	2.0	3.0
MONTH	20.5	13.0	17.0	16.5	7.0	11.5	11.0	.0	4.5	---	---	---

07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.0	2.5	3.5	5.0	4.0	4.5	12.0	10.0	11.0	18.5	17.5	18.0
2	5.0	3.5	4.0	6.5	5.0	5.5	12.5	11.5	12.0	18.0	17.0	17.5
3	6.0	4.5	5.5	7.5	5.0	6.5	14.0	12.5	13.0	17.5	16.5	17.0
4	6.0	5.0	5.5	8.5	7.0	7.5	14.5	13.5	14.0	17.5	16.5	17.0
5	5.5	4.5	5.5	9.0	8.0	9.0	13.5	12.5	12.5	17.5	16.5	17.0
6	4.5	3.5	4.0	8.0	7.5	8.0	13.5	12.0	12.5	18.0	17.0	17.0
7	4.0	3.5	3.5	8.0	6.5	7.0	13.0	12.5	13.0	19.0	18.0	18.5
8	3.5	2.5	3.0	8.5	7.5	8.0	13.0	12.5	12.5	18.5	17.5	18.0
9	3.0	2.5	3.0	8.0	6.5	7.0	13.5	12.5	13.0	17.5	16.5	17.0
10	5.0	3.0	4.0	7.0	6.5	6.5	14.0	13.5	13.5	17.5	16.0	16.5
11	7.5	5.0	6.5	8.0	6.5	7.0	15.0	13.5	14.0	19.0	17.0	17.5
12	9.0	7.5	8.0	8.0	7.0	7.5	15.0	14.5	15.0	19.5	18.5	19.0
13	10.5	9.0	9.5	9.5	8.0	8.5	16.0	14.5	15.5	20.5	19.5	20.0
14	11.0	9.5	10.0	11.0	8.5	9.5	16.0	15.5	16.0	21.0	20.5	20.5
15	11.0	9.5	10.0	12.0	10.5	11.0	16.0	15.0	15.5	21.0	19.5	20.0
16	11.5	10.0	10.5	12.5	12.0	12.5	15.5	15.0	15.0	19.5	18.5	19.0
17	11.5	10.0	10.5	12.5	12.0	12.5	15.0	14.5	15.0	19.5	18.0	19.0
18	11.5	10.0	10.5	12.5	12.0	12.5	14.5	14.0	14.5	19.0	18.5	18.5
19	12.0	11.0	11.5	13.5	12.5	13.0	15.0	14.0	14.5	---	---	---
20	11.0	10.0	10.5	13.5	11.0	12.5	14.5	14.5	14.5	---	---	---
21	10.5	9.5	10.0	11.0	10.0	10.5	15.0	14.0	14.5	20.5	20.0	20.5
22	10.0	9.0	9.5	11.0	9.5	10.0	16.5	15.0	16.0	22.0	20.0	21.0
23	10.0	8.5	9.0	12.5	11.0	11.5	16.5	14.5	15.5	22.5	21.0	21.5
24	9.0	8.5	9.0	13.0	12.0	12.5	15.5	13.5	14.5	22.0	20.5	21.0
25	9.0	7.5	8.0	12.5	12.0	12.0	17.5	15.5	16.0	22.5	20.5	21.5
26	9.0	8.0	8.5	13.0	11.5	12.0	17.5	17.0	17.0	23.0	22.0	22.5
27	8.5	7.5	8.0	13.5	12.5	13.0	18.0	17.0	17.5	23.0	22.0	22.5
28	7.0	5.5	6.5	13.5	13.0	13.5	19.0	18.0	18.5	23.0	22.5	23.0
29	5.5	5.0	5.0	13.0	11.5	12.0	19.0	19.0	19.0	22.5	21.0	21.5
30	---	---	---	12.5	11.5	12.0	19.0	18.5	18.5	21.0	20.0	20.5
31	---	---	---	12.5	11.0	11.5	---	---	---	20.5	19.0	20.0
MONTH	12.0	2.5	7.5	13.5	4.0	10.0	19.0	10.0	15.0	23.0	16.0	19.5
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	19.0	20.0	---	---	---	25.0	23.5	24.0	26.5	24.5	25.5
2	21.0	19.0	20.0	---	---	---	25.0	23.5	24.0	26.5	24.5	25.5
3	22.0	19.5	20.5	---	---	---	24.5	24.0	24.0	25.0	23.0	24.0
4	22.5	20.0	21.5	---	---	---	24.5	23.5	24.0	23.5	22.0	22.5
5	23.5	21.5	22.5	---	---	---	24.5	23.5	24.0	23.5	21.0	22.5
6	24.0	22.5	23.0	---	---	---	25.0	23.5	24.0	23.5	21.5	22.5
7	24.0	23.0	23.5	---	---	---	26.5	24.0	25.0	23.5	21.0	22.0
8	25.5	23.0	24.0	---	---	---	26.0	24.5	25.5	23.5	21.5	22.5
9	26.0	23.5	24.5	---	---	---	27.0	25.0	25.5	22.5	22.0	22.5
10	26.5	24.0	25.0	---	---	---	26.0	25.0	25.5	23.0	21.5	22.5
11	27.0	24.5	26.0	---	---	---	26.0	24.5	25.5	23.0	22.0	22.5
12	27.0	25.0	26.0	---	---	---	26.5	24.5	25.5	24.0	22.0	23.0
13	27.5	25.5	26.5	---	---	---	26.5	25.0	26.0	24.5	23.0	23.5
14	28.0	26.0	27.0	---	---	---	26.5	25.0	26.0	25.0	23.5	24.0
15	28.0	26.0	27.0	---	---	---	26.0	25.0	25.5	24.5	22.5	23.5
16	28.5	26.5	27.5	---	---	---	27.0	25.0	25.5	22.5	21.0	22.0
17	28.0	26.5	27.0	---	---	---	27.0	25.0	26.0	21.5	20.0	21.0
18	28.0	26.5	27.0	---	---	---	27.0	25.0	26.0	21.0	20.0	20.5
19	28.5	26.5	27.5	---	---	---	27.0	25.5	26.0	21.5	19.5	20.5
20	28.5	26.5	27.5	25.5	25.0	25.5	27.0	25.5	26.0	21.5	19.5	20.5
21	28.5	27.0	27.5	26.0	24.0	25.0	26.5	25.0	26.0	21.5	19.5	20.5
22	28.5	26.5	27.5	26.0	24.5	25.5	26.0	25.5	25.5	21.5	20.0	20.5
23	---	---	---	26.5	24.5	25.5	27.0	24.5	25.5	22.0	21.0	21.5
24	---	---	---	26.5	25.0	25.5	26.0	24.0	25.0	22.0	21.5	22.0
25	---	---	---	27.0	25.0	26.0	26.0	23.5	24.5	23.0	21.0	22.0
26	---	---	---	27.5	25.5	26.5	25.5	23.5	24.5	22.0	19.5	20.5
27	---	---	---	26.5	25.0	25.5	26.0	23.5	24.5	19.5	18.5	19.0
28	---	---	---	26.0	24.5	25.0	25.0	24.0	24.5	18.5	17.5	18.0
29	---	---	---	25.5	24.0	25.0	26.5	24.0	25.0	17.5	16.5	17.0
30	---	---	---	25.5	24.0	24.5	26.0	25.0	25.5	17.0	16.0	16.5
31	---	---	---	25.0	23.5	24.0	26.0	24.5	25.5	---	---	---
MONTH	---	---	---	---	---	---	27.0	23.5	25.0	26.5	16.0	21.5

07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON, TN

LOCATION.--Lat 35°18'37", long 89°38'23", Shelby County, Hydrologic Unit 08010209, on left bank 20 ft downstream from bridge on U.S. Highways 70 and 79, 1.5 mi upstream from Beaver Creek, 1.5 mi northeast of Arlington, and at mile 30.4.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--15 years, 368 ft³/s, 19.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,700 ft³/s Mar. 13, 1975, gage height, 24.96 ft; minimum, 66 ft³/s Apr. 6, 7, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft³/s and maximim (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0630	7150	20.82	Mar. 5	2130	7200	20.85
Dec. 22	0145	5640	19.07	May 4	0330	*7830	21.17

Minimum discharge, 73 ft³/s Sept. 29,30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	87	131	163	148	185	198	371	112	90	90	109
2	95	87	1850	283	140	166	298	3360	104	88	88	102
3	95	87	5730	290	357	152	2920	6020	100	88	87	550
4	95	117	6220	274	276	1010	765	5800	100	88	94	349
5	95	102	1640	261	188	6130	316	977	99	88	103	109
6	95	91	411	243	145	3920	218	405	98	89	100	96
7	95	90	246	202	130	700	177	1670	98	89	92	91
8	95	88	205	173	120	340	205	4860	97	89	89	88
9	95	87	186	161	119	236	718	1490	95	90	88	88
10	95	88	178	430	117	202	259	305	95	90	87	97
11	95	88	997	304	116	189	185	185	95	90	88	137
12	98	87	463	184	912	336	153	167	95	97	91	111
13	101	86	238	163	1030	461	133	136	96	91	88	87
14	98	87	767	148	373	276	120	124	114	89	88	84
15	97	105	370	140	233	202	119	115	224	89	87	82
16	97	94	199	130	250	178	116	110	97	103	91	80
17	103	89	158	125	214	2430	113	106	90	93	88	78
18	132	89	144	120	256	1230	110	102	88	100	87	79
19	105	230	130	120	760	477	110	100	87	91	92	77
20	102	1690	125	117	297	520	110	100	86	90	106	77
21	102	214	1960	117	203	288	520	672	86	91	89	77
22	195	149	4560	116	170	205	4500	210	86	90	87	77
23	167	4100	1260	539	153	168	1270	1060	87	90	92	77
24	94	2310	306	2330	142	162	327	325	87	90	87	78
25	89	331	190	795	134	185	207	160	85	91	86	76
26	87	170	163	407	126	149	160	130	87	91	86	74
27	88	1100	158	285	835	320	143	490	88	110	86	74
28	87	927	772	223	510	3940	3100	906	91	101	452	76
29	87	214	498	199	243	1190	1300	210	131	92	1070	74
30	87	151	221	179	---	393	1510	160	93	91	157	74
31	87	---	158	156	---	245	---	125	---	92	119	---
TOTAL	3148	13235	30634	9377	8697	26585	20380	30951	2991	2851	4235	3328
MEAN	102	441	988	302	300	858	679	998	99.7	92.0	137	111
MAX	195	4100	6220	2330	1030	6130	4500	6020	224	110	1070	550
MIN	87	86	125	116	116	149	110	100	85	88	86	74
CFSM	.39	1.68	3.77	1.15	1.15	3.27	2.59	3.81	.38	.35	.52	.42
IN.	.45	1.88	4.35	1.33	1.23	3.77	2.89	4.39	.42	.40	.60	.47

CAL YR 1983	TOTAL	183863	MEAN	504	MAX	7430	MIN	86	CFSM	1.92	IN.	26.11
WTR YR 1984	TOTAL	156412	MEAN	427	MAX	6220	MIN	74	CFSM	1.63	IN.	22.21

Note.--Many periods of no gage-height record from Dec. to June.

07031650 WOLF RIVER AT GERMANTOWN, TN

LOCATION.--Lat 35°06'59", long 89°48'05", Shelby County, Hydrologic Unit 08010210, on left bank at bridge on Germantown Road at Germantown, 3.6 mi downstream from Grays Creek, 6.4 mi upstream from Fletcher Creek, and at mile 18.9.

DRAINAGE AREA.--699 mi².

PERIOD OF RECORD.--October 1969 to current year. Published as "near Germantown" prior to 1978.

GAGE.--Water-stage recorder. Datum of gage is 235.76 ft National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--15 years, 1,048 ft³/s, 20.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,400 ft³/s Mar. 14, 1975, gage height, 27.98 ft minimum, 190 ft³/s Sept. 15, 16, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 24	Unknown	Unknown	Unknown	May 2	1200	7160	14.01
Dec. 4	Unknown	Unknown	Unknown	May 4	0645	*17500	21.41
Mar. 5	0345	7320	14.15	May 8	0015	10200	16.57

Minimum daily discharge, 268 ft³/s Oct. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	295	1450	1070	611	779	1400	3280	516	325	288	614
2	270	295	2000	921	571	736	1310	5570	472	315	282	458
3	270	295	7000	881	894	699	2700	15000	429	313	281	700
4	270	299	15000	836	784	1240	1770	16000	416	309	307	650
5	270	295	6470	807	701	4660	1360	10100	406	300	318	497
6	270	290	7000	801	597	3480	989	6920	421	300	468	448
7	269	290	5900	776	543	2750	796	6060	434	298	361	386
8	269	285	4040	730	522	2250	788	6330	372	290	324	360
9	269	285	2960	700	505	1800	963	4960	361	290	305	370
10	269	310	2260	857	511	1190	852	4520	352	292	566	346
11	268	290	1970	855	546	898	861	4140	345	287	431	360
12	268	280	1500	805	1570	844	793	3640	339	459	431	415
13	300	275	1250	750	1450	939	753	2830	336	300	389	409
14	290	280	1220	724	1120	898	720	2080	341	296	374	390
15	280	430	1270	702	928	797	642	1330	336	290	377	369
16	270	330	1240	659	923	698	586	940	333	325	363	360
17	350	327	1140	615	908	2240	552	784	337	325	376	347
18	400	320	1000	585	996	2010	519	695	331	315	355	337
19	350	1000	923	553	1190	2370	495	632	321	296	418	326
20	330	1200	815	512	777	2270	481	606	311	288	378	320
21	327	600	2550	480	672	2180	614	802	306	287	369	318
22	450	580	2780	454	620	1830	2430	1280	302	282	554	312
23	400	3380	2020	873	601	1480	5340	1490	721	278	412	308
24	350	7000	1790	1900	590	1130	3900	1230	648	283	361	310
25	334	2500	1380	1800	559	960	2940	1180	408	274	347	309
26	330	1000	1140	1680	555	788	2140	1220	349	274	336	310
27	329	2000	1080	1430	1160	824	1500	1160	330	461	330	306
28	310	1500	1140	1130	1160	1960	2160	1090	325	343	326	302
29	300	1600	1410	945	943	1550	2470	903	316	314	523	301
30	300	1500	1210	800	---	1460	4050	665	312	306	996	303
31	297	---	1090	683	---	1470	---	563	---	295	1060	---
TOTAL	9529	29331	83998	27314	23507	49180	46874	108000	11526	9610	13006	11541
MEAN	307	978	2710	881	811	1586	1562	3484	384	310	420	385
MAX	450	7000	15000	1900	1570	4660	5340	16000	721	461	1060	700
MIN	268	275	815	454	505	698	481	563	302	274	281	301
CFSM	.44	1.40	3.88	1.26	1.16	2.27	2.23	4.98	.55	.44	.60	.55
IN.	.51	1.56	4.47	1.45	1.25	2.62	2.49	5.75	.61	.51	.69	.61

CAL YR 1983	TOTAL	456278	MEAN	1250	MAX	15000	MIN	245	CFSM	1.79	IN.	24.28
WTR YR 1984	TOTAL	423416	MEAN	1157	MAX	16000	MIN	268	CFSM	1.66	IN.	22.53

Note.--No gage-height record Oct. 1 to Dec. 5.

07032000 MISSISSIPPI RIVER AT MEMPHIS, TN
(National stream-quality accounting and pesticide station)

LOCATION.--Lat 35°07'37", long 90°04'25", Shelby County, Hydrologic Unit 08010100, on left bank 50 ft downstream from Harahan Bridge at Memphis, 1.3 mi downstream from Beale Street gage, 3.5 mi downstream from Wolf River, 62.4 mi upstream from St. Francis River, and at mile 734.8.

DRAINAGE AREA.--932,800 mi² , approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: January 1933 to September 1981. Monthly discharge only for some periods, published in WSP 1311.
Gage heights: October 1934 to September 1951 and October 1952 to September 1980 in reports of Geological Survey. Since November 1871, at Beale Street gage, in reports of Mississippi River Commision, December 1890 to August 1932 at Beale Street gage, September 1932 to December 1934 at nonrecording gage 1,000 ft downstream, and since December 1934 at water-stage recorder at present site, in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 183.91 ft National Geodetic Vertical Datum of 1929. Prior to Apr. 16, 1934, Beale Street nonrecording gage 1.3 mi upstream at present datum. Apr. 16 to Dec. 21, 1934, nonrecording gage 1,000 ft downstream at present datum.

REMARKS.--Flow regulated by many locks, dams, and reservoirs.

COOPERATION.--Records furnished by Corps of Engineers.

AVERAGE DISCHARGE.--48 years, 474,200 ft³/s, 343,600,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980,000 ft³/s Feb. 8, 1937; maximum gage height, 48.69 ft Feb. 10, 1937; minimum discharge, 79,200 ft³/s Aug. 26, 1936; minimum gage height, -5.70 ft Sept. 21, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage prior to 1937, 46.55 ft Apr. 9, 1913, at Beale Street gage or about 45.2 ft at present site.

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 953,000 ft³/s May 26, gage height, 24.90 ft; minimum daily discharge, 139,000 ft³/s Jan. 13.

NOTE.--Records for 1982, 1983, and 1984 water years were not available in time for inclusion in this report. These records will be published in a subsequent report.

07032000 MISSISSIPPI RIVER AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

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

PERIOD DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1973 to September 1981.
WATER TEMPERATURES: February 1973 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 571 micromhos July 30, 1977; minimum daily, 174 micromhos Feb. 7, 1979.
WATER TEMPERATURES: Maximum daily, 32.0°C July 22, 24, 1981; minimum daily, 0.0°C Jan. 12, 13, 14, 17, 18, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 24...	1230	232000	477	8.0	16.5	758	29	7.3	75	K670	170	170
JAN 30...	1330	385000	419	7.7	3.0	765	28	8.6	64	220	800	160
APR 04...	1000	1270000	360	7.8	8.0	759	80	7.8	66	260	570	140
JUL 10...	1400	703000	406	8.0	--	--	80	8.4	--	1700	260	160

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 24...	46	43	16	29	26	1	3.3	128	2.5	82	22	.40
JAN 30...	41	42	13	17	19	.6	2.6	118	4.5	55	20	.20
APR 04...	48	38	11	14	18	.5	1.9	93	2.8	49	15	.20
JUL 10...	39	43	13	11	13	.4	3.5	122	2.4	52	14	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 24...	5.4	288	280	.39	180000	1.00	.240	.31	.20	.150	.100	.080
JAN 30...	7.5	255	230	.35	265000	1.70	.260	.33	.80	.130	.070	.040
APR 04...	6.9	215	190	.29	737000	2.50	.050	.06	1.4	.100	.110	.040
JUL 10...	7.2	254	220	.35	482000	2.60	.070	.09	1.9	.310	.210	.190

K--Results based on non-ideal colony count.

07032000 MISSISSIPPI RIVER AT MEMPHIS, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
OCT												
24...	.25	10	1	83	<.5	<1	30	<3	8	18	2	12
JAN												
30...	.12	50	1	67	<.5	<1	1	<3	21	61	3	<4
APR												
04...	.12	20	2	400	<.5	1	7	<3	10	53	2	5
JUL												
10...	.58	<10	2	87	<.5	<1	<1	<3	11	12	1	10

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
24...	2	.2	<10	3	2	<1	230	<6	15	88	55100	90
JAN												
30...	16	<.1	<10	6	<1	<1	170	<6	18	61	63400	80
APR												
04...	5	.1	<10	2	<1	<1	160	<6	150	209	717000	93
JUL												
10...	2	.2	<10	3	<1	<1	180	<6	12	290	550000	82

07032200 NONCONNAH CREEK NEAR GERMANTOWN, TN

LOCATION.--Lat 35°02'59", long 89°49'08", Shelby County, Hydrologic Unit 08010211, on left bank at downstream side of bridge on Winchester Road, 2.6 mi south of Germantown, and at mile 17.3.

DRAINAGE AREA.--68.2 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-1964, 1969; October 1969 to current year.

REVISED RECORDS.--WRD TN 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 262.92 ft National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--15 years, 107 ft³/s, 21.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,680 ft³/s Mar. 12, 1975, gage height, 27.11 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	1315	4630	17.95	May 2	0930	4920	18.60
Mar. 5	0045	4020	16.42	May 3	0100	*8180	24.34
Apr. 22	0145	4770	18.26	May 7	2315	4570	17.81

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.13	1.2	10	1.3	7.2	4.6	66	1.7	.32	7.6	.05
2	.01	.30	448	22	1.7	4.2	160	2570	1.5	.27	.50	.05
3	.00	.24	3200	28	203	2.6	1030	4020	1.3	.21	.20	.15
4	.00	25	759	27	47	502	117	745	1.2	.22	2.0	.07
5	.00	.90	87	28	13	2130	32	167	1.1	.58	.35	.06
6	.00	.25	30	26	3.5	402	14	109	65	.26	.20	.05
7	.00	.32	15	23	1.5	80	7.6	1040	113	.18	.15	.05
8	.00	.15	11	14	.99	30	92	1580	2.7	.39	.12	.04
9	.00	.20	8.8	12	.82	14	117	160	1.2	.31	.10	.30
10	.00	.99	14	93	1.9	10	21	35	.69	.21	80	.14
11	.00	1.6	416	44	2.7	8.2	11	17	.92	.15	10	.15
12	.73	1.1	72	19	1030	89	6.3	11	.78	60	1.0	.10
13	.38	.98	25	12	339	165	3.8	8.3	211	.63	.40	.07
14	.24	1.5	116	8.5	69	54	2.2	41	68	.21	.20	.05
15	.14	1.4	41	5.9	19	22	3.7	14	2.0	.16	.15	.04
16	.11	.24	16	4.5	38	202	4.1	5.7	.86	2.8	.10	.04
17	75	.33	10	3.7	15	752	2.0	4.8	.59	29	.09	.03
18	31	.33	7.2	4.4	40	229	1.2	4.6	.54	2.9	.08	.03
19	.51	373	5.6	3.0	66	102	2.0	4.4	.50	.26	1.5	.03
20	.16	378	4.6	1.9	13	108	5.1	6.7	.51	.15	.20	.03
21	.13	5.6	1050	1.6	6.2	35	458	38	.53	.14	.10	.03
22	39	36	727	1.2	3.9	14	2360	23	.54	.14	90	.20
23	1.1	1650	94	490	2.8	6.5	202	407	33	.11	20	.25
24	.19	114	33	590	2.1	22	29	35	9.9	.08	1.0	.07
25	.12	9.3	12	139	1.5	18	15	8.4	2.2	.07	.20	.05
26	.11	3.0	4.2	47	19	7.3	11	4.5	.62	.17	.12	.22
27	.10	460	4.4	20	399	79	8.3	38	.44	31	.09	.10
28	.09	119	316	10	86	537	1110	10	.34	.67	.07	.07
29	.08	9.5	138	6.1	19	99	325	3.4	.35	.18	.06	.05
30	.07	2.4	56	3.9	---	24	760	3.2	.36	.11	.06	.04
31	.08	---	18	1.8	---	8.4	---	1.8	---	.17	.05	---
TOTAL	149.37	3195.76	7740.0	1700.5	2445.91	5763.4	6914.9	11181.8	523.37	132.05	216.69	2.61
MEAN	4.82	107	250	54.9	84.3	186	230	361	17.4	4.26	6.99	.09
MAX	75	1650	3200	590	1030	2130	2360	4020	211	60	90	.30
MIN	.00	.13	1.2	1.2	.82	2.6	1.2	1.8	.34	.07	.05	.03
CFSM	.07	1.57	3.67	.80	1.24	2.73	3.37	5.29	.26	.06	.10	.00
IN.	.08	1.74	4.22	.93	1.33	3.14	3.77	6.10	.29	.07	.12	.00

CAL YR 1983 TOTAL 44405.60 MEAN 122 MAX 3200 MIN .00 CFSM 1.79 IN. 24.22
WTR YR 1984 TOTAL 39966.36 MEAN 109 MAX 4020 MIN .00 CFSM 1.60 IN. 21.80

Note.--No gage-height record Aug. 1 to sept. 30.

07032222 JOHNS CREEK TRIBUTARY AT HOLMES ROAD NEAR MEMPHIS, TN

LOCATION.--Lat 35°00'20", long 89°52'16", Shelby County, Hydrologic Unit 08010211, on left bank at upstream side of bridge at Holmes Road, 1,200 ft east of St. Louis-San Francisco Railroad, 2.0 mi east of U.S. Highway 78, and 2.2 mi southeast of Memphis city limits.

DRAINAGE AREA.--5.83 mi².

PERIOD OF RECORD.--March 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 304 ft from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--9 years, 9.46 ft³/s, 22.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft³/s May 2, 1984; maximum gage height, 12.99 ft May 22, 1979; no flow several days, 1982-1984 water years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 23	0300	970	5.07	May 7	1830	1190	5.84
Dec. 3	1130	951	5.01	July 12	0140	887	4.81
Mar. 4	2130	1100	5.53	Aug. 10	1125	1040	5.32
Apr. 21	2045	1140	5.66	Aug. 11	1450	1110	5.56
May 2	2400	*2090	8.87				

No flow July 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.06	.10	.29	.22	.95	4.2	3.2	.14	.06	.09	.10
2	.02	.09	142	.51	.24	.85	20	350	.12	.06	.05	.10
3	.03	.10	463	.38	36	.56	150	416	.14	.06	.03	.60
4	.03	.19	13	.44	1.5	157	16	17	.12	.05	2.8	.16
5	.03	.04	1.2	.44	.63	239	9.4	3.8	.12	.08	.07	.10
6	.03	.03	1.2	.50	.22	46	6.4	1.7	25	.07	.05	.10
7	.03	.04	.40	.44	.19	20	4.6	230	18	.06	.05	.11
8	.04	.05	.28	.35	.19	13	25	92	.14	.07	.05	.13
9	.02	.05	.25	.35	.19	8.7	19	2.6	.08	.07	.05	.93
10	.02	.06	.24	4.9	.25	8.2	7.6	.77	.07	.06	134	.24
11	.03	.06	83	.70	.28	7.0	6.4	.39	.07	.09	150	.25
12	.06	.06	1.5	.39	227	35	5.0	.25	.07	99	1.0	.22
13	.06	.06	.69	.35	16	33	4.6	.19	45	.03	.11	.16
14	.05	.06	5.4	.28	3.5	14	4.6	.39	10	.01	.06	.16
15	.04	.12	.75	.22	1.3	11	5.4	.16	.40	.02	.06	.17
16	.04	.06	.35	.22	3.2	98	7.0	.12	.20	.02	.06	.19
17	14	.05	.25	.22	1.2	104	4.6	.12	.10	.09	.06	.21
18	.28	.05	.23	.22	19	23	3.5	.12	.07	.02	.05	.22
19	.05	96	.19	.16	8.7	27	4.2	.14	.05	.01	45	.24
20	.04	10	.14	.10	1.9	15	5.4	.19	.04	.01	.20	.24
21	.04	.05	258	.09	1.2	11	185	.31	.04	.03	.07	.20
22	1.7	.61	42	.08	.77	7.1	79	1.1	.04	.02	74	.80
23	.10	302	1.5	120	.70	5.5	16	96	.04	.03	.61	1.0
24	.06	.45	.38	24	.63	12	11	.56	.04	.00	.11	.30
25	.06	.11	.14	3.2	.44	8.8	6.4	.19	.04	.00	.07	.20
26	.04	.10	.09	.95	11	6.4	6.4	.16	.05	.00	.08	.90
27	.03	91	.09	.70	64	65	5.9	3.4	.05	.07	.07	.40
28	.03	1.4	15	.50	3.5	129	62	.85	.05	.02	.08	.30
29	.03	.24	.77	.39	1.5	19	48	.22	.06	.01	.08	.20
30	.04	.14	.24	.31	---	8.2	16	.16	.06	.02	.08	.15
31	.05	---	.21	.22	---	5.4	---	.14	---	.06	.09	---
TOTAL	17.10	503.33	1032.59	161.90	405.45	1138.66	748.6	1222.23	100.40	100.20	409.18	9.08
MEAN	.55	16.8	33.3	5.22	14.0	36.7	25.0	39.4	3.35	3.23	13.2	.30
MAX	14	302	463	120	227	239	185	416	45	99	150	1.0
MIN	.02	.03	.09	.08	.19	.56	3.5	.12	.04	.00	.03	.10
CFSM	.09	2.88	5.71	.90	2.40	6.30	4.29	6.76	.57	.55	2.26	.05
IN.	.11	3.21	6.59	1.03	2.59	7.27	4.78	7.80	.64	.64	2.61	.06

CAL YR 1983	TOTAL	4319.26	MEAN	11.8	MAX	463	MIN	.00	CFSM	2.02	IN.	27.56
WTR YR 1984	TOTAL	5848.72	MEAN	16.0	MAX	463	MIN	.00	CFSM	2.74	IN.	37.32

07032248 CANE CREEK AT EAST PERSON AVENUE AT MEMPHIS, TN

LOCATION.--Lat 35°06'02", long 90°00'43", Shelby County, Hydrologic Unit 08010211, on left bank 40 ft upstream from bridge on East Person Avenue, 0.4 mi east of Elvis Presley Boulevard, 0.6 mi south of South Parkway East in Memphis, and at mile 2.8.

DRAINAGE AREA.--4.98 mi².

PERIOD OF RECORD.--December 1974 to current year.

REVISED RECORDS.--WRD TN-83-1 (M).

GAGE.--Water-stage recorder. Altitude of gage is 243 ft from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--9 years (water years 1976-84), 10.9 ft³/s, 29.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,830 ft³/s Apr. 17, 1982, gage height, 14.39 ft; minimum, 0.09 ft³/s Dec. 30, 1983, result of cold weather regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above a base of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	1735	*2510	12.01	May 2	2305	1490	9.72
Nov. 23	Unknown	Unknown	Unknown	May 7	1635	2200	11.36
Dec. 3	Unknown	Unknown	Unknown	June 13	1655	1630	10.08
Mar. 4	1920	1640	10.10	July 11	2400	1800	10.48
Apr. 21	1830	1550	9.89	July 27	0305	1720	10.28
Apr. 29	2150	1650	10.12				

Minimum discharge, 0.09 ft³/s Dec. 30, result of cold weather regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.8	4.0	3.3	2.4	3.4	2.1	4.0	3.5	3.0	3.7	3.5
2	1.9	4.4	100	3.3	13	3.3	38	180	3.1	3.0	3.5	3.0
3	2.0	4.8	200	2.7	8.3	3.0	29	48	3.1	3.1	3.9	6.5
4	2.4	37	20	2.4	2.8	159	3.4	4.6	3.0	3.0	3.2	4.0
5	1.9	2.9	9.0	2.5	2.8	26	3.2	6.1	2.8	3.0	3.8	3.8
6	1.7	3.5	6.0	2.5	2.1	5.9	2.3	4.0	14	3.0	49	3.8
7	1.7	5.5	5.0	2.5	2.1	4.5	2.4	218	3.6	2.2	3.4	3.9
8	2.1	4.0	4.5	2.1	2.1	4.0	16	6.1	3.1	2.6	3.5	3.4
9	2.7	4.1	4.6	2.1	3.2	4.1	3.3	3.7	2.6	3.1	3.7	15
10	3.0	3.7	5.0	11	6.6	3.9	3.2	3.9	2.8	3.5	73	3.7
11	4.4	3.7	60	2.1	2.8	3.9	3.2	3.6	3.3	33	2.6	4.9
12	4.4	3.7	10	2.1	94	20	3.7	3.0	3.7	61	2.7	3.7
13	1.2	4.1	6.0	2.1	4.4	5.1	3.2	3.1	50	3.6	3.4	3.8
14	1.6	24	15	2.1	3.6	5.0	2.5	3.4	3.9	3.1	3.4	3.8
15	1.6	4.1	6.0	2.0	4.3	5.0	4.6	3.4	3.4	3.1	5.1	3.3
16	4.4	2.9	4.0	2.1	10	5.3	4.5	3.8	2.9	4.1	3.6	3.6
17	96	2.9	3.5	2.1	4.3	42	3.5	4.0	3.3	15	3.7	3.9
18	5.9	2.9	3.3	2.6	4.3	3.9	3.3	3.7	3.6	3.5	2.8	4.1
19	2.6	106	3.3	3.0	4.5	8.3	3.7	3.3	3.9	3.3	36	4.3
20	3.0	14	3.2	1.8	3.6	4.0	4.2	43	3.9	3.6	3.5	4.1
21	5.8	4.0	140	1.5	3.9	3.3	48	4.3	3.8	3.2	3.9	3.9
22	14	35	15	2.1	4.0	3.3	3.8	5.6	10	3.8	20	3.5
23	2.5	250	6.0	50	4.1	3.4	3.0	32	3.0	3.9	6.0	4.7
24	2.5	30	4.0	5.5	4.0	15	3.0	3.4	2.9	6.3	4.0	6.1
25	2.5	6.0	3.3	3.6	3.5	3.9	3.4	3.2	2.6	3.1	3.5	3.6
26	2.5	4.0	3.0	3.4	23	3.8	3.7	3.1	2.7	3.4	3.4	5.7
27	2.4	50	3.0	2.8	14	59	3.8	21	2.9	78	3.0	3.8
28	3.2	10	6.0	2.7	3.8	11	44	3.3	3.0	3.4	3.1	3.6
29	2.8	5.0	3.0	2.5	3.6	4.0	69	3.5	2.8	3.5	10	3.2
30	3.3	4.3	1.5	2.5	---	2.8	8.4	3.6	2.6	3.6	30	3.4
31	3.6	---	2.5	2.5	---	2.0	---	3.6	---	3.8	10	---
TOTAL	191.3	640.3	659.7	135.5	245.1	431.1	329.4	639.3	159.8	278.8	314.4	131.6
MEAN	6.17	21.3	21.3	4.37	8.45	13.9	11.0	20.6	5.33	8.99	10.1	4.39
MAX	96	250	200	50	94	159	69	218	50	78	73	15
MIN	1.2	2.9	1.5	1.5	2.1	2.0	2.1	3.0	2.6	2.2	2.6	3.0
CFSM	1.24	4.28	4.28	.88	1.70	2.79	2.21	4.14	1.07	1.81	2.03	.88
IN.	1.43	4.78	4.93	1.01	1.83	3.22	2.46	4.78	1.19	2.08	2.35	.98

CAL YR 1983	TOTAL	4048.97	MEAN	11.1	MAX	250	MIN	.97	CFSM	2.23	IN.	30.25
WTR YR 1984	TOTAL	4156.3	MEAN	11.4	MAX	250	MIN	1.2	CFSM	2.29	IN.	31.05

Note.--No gage-height record Nov. 19 to Dec. 28.

07032260 CYPRESS CREEK AT NEELY ROAD AT MEMPHIS, TN

LOCATION.--Lat 35°01'36", long 90°03'23", Shelby County, Hydrologic Unit 08010211, on right bank at downstream end of bridge on Neely Road, 1.8 mi west of U.S. Highway 51 and 1.1 mi southeast of U.S. Highway 61 in Memphis.

DRAINAGE AREA.--3.18 mi².

PERIOD OF RECORD.--February 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 244 ft from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--9 years, 4.46 ft³/s, 19.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,830 ft³/s Apr. 11, 1979, gage height, 12.72 ft; no flow several days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s, revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 19	1915	684	7.39	May 7	1705	748	7.79
Nov. 23	0150	*1440	11.55	Jul. 11	2355	882	8.60
Feb. 12	0910	604	6.86	Aug. 6	0155	611	6.88
Mar. 4	1945	678	7.35	Aug. 10	1330	664	7.23
May 2	2300	683	7.38				

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.14	.90	.27	.48	.38	.48	.18	.13	.10	.15
2	.00	.01	77	.62	2.4	.43	38	106	.08	.16	.17	.09
3	.00	.01	169	.21	10	.38	21	71	.13	.09	.46	.20
4	.00	4.6	1.4	.21	.15	81	.84	2.5	.16	.47	5.3	.09
5	.00	.03	.75	.19	.15	46	.56	2.9	.11	1.7	.34	.04
6	.00	.02	.59	.18	.18	1.6	.47	1.2	4.9	.28	43	.03
7	.00	.39	.45	.15	.18	.68	.42	112	.89	.60	.22	.03
8	.00	.04	.32	.16	.17	.51	6.2	7.1	.10	.19	.12	.02
9	.00	.27	.30	.18	.52	.42	.78	.99	.11	.14	.12	8.3
10	.00	.23	.30	4.9	14	.49	1.4	.57	.12	.18	98	.07
11	.89	.06	25	.13	1.5	.36	.43	.46	.09	24	.67	.13
12	3.4	.03	3.5	.11	94	12	.38	.30	.08	43	.18	.06
13	.12	.12	.95	.13	2.7	.63	.37	.24	8.9	.21	.56	.05
14	.06	6.1	4.0	.11	.78	.45	.31	.22	.18	.09	.30	.09
15	.03	.58	.80	.13	1.1	.42	.45	.14	.14	.07	.36	.02
16	5.9	.09	.50	.18	4.7	1.2	.52	.13	.08	1.1	.20	.01
17	33	.04	.35	.17	.61	19	.32	.11	.10	15	.29	.01
18	1.4	.03	.27	.70	1.6	.79	.56	.12	.11	.24	.14	.01
19	.06	67	.22	.15	.91	2.2	1.3	.32	.11	.09	9.9	.01
20	.02	1.8	.18	.06	.40	.59	.91	29	.10	.06	.28	.01
21	.45	.12	110	.04	.39	.41	1.7	.38	.62	.05	.15	.01
22	6.1	21	40	.06	.40	.40	.76	5.0	.22	.04	1.8	.02
23	.05	194	2.0	47	.42	.31	.48	47	.12	.09	.24	.40
24	.05	.39	.45	1.8	.38	7.3	.38	.40	.15	.05	.13	.67
25	.02	.16	.21	.31	.36	.41	.33	.22	.23	.05	.09	.07
26	.01	.13	.14	.22	11	.34	.29	.21	.09	.06	.09	.65
27	.01	11	.14	.18	13	33	.45	13	.12	15	.08	.15
28	.01	.34	5.0	.15	.66	9.6	34	.45	5.9	.13	.09	.11
29	.01	.16	.68	.13	.54	.84	24	.20	.36	.05	.38	.10
30	.01	.14	.41	.16	---	.46	5.0	.15	.10	.10	2.3	.09
31	.01	---	.72	.18	---	.36	---	.12	---	.11	.80	---
TOTAL	51.61	308.90	445.77	59.80	163.47	223.06	142.99	402.91	24.58	103.53	166.86	11.69
MEAN	1.66	10.3	14.4	1.93	5.64	7.20	4.77	13.0	.82	3.34	5.38	.39
MAX	33	194	169	47	94	81	38	112	8.9	43	98	8.3
MIN	.00	.01	.14	.04	.15	.31	.29	.11	.08	.04	.08	.01
CFSM	.52	3.24	4.53	.61	1.77	2.26	1.50	4.09	.26	1.05	1.69	.12
IN.	.60	3.61	5.21	.70	1.91	2.61	1.67	4.71	.29	1.21	1.95	.14

CAL YR 1983	TOTAL	1804.82	MEAN	4.94	MAX	194	MIN	.00	CFSM	1.55	IN.	21.11
WTR YR 1984	TOTAL	2105.17	MEAN	5.75	MAX	194	MIN	.00	CFSM	1.81	IN.	24.63

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

The data given in the following tables include a description of the station and a table showing time, gage height, discharge, and rainfall for the two highest peaks that occured during the year. The time given corresponds with the first column of data or the first blank (*). Information is available on some lower peaks, but is not published herein.

07030300 LOOSAHATCHIE RIVER TRIBUTARY AT ST. ELMO ROAD AT MEMPHIS, TN

LOCATION.--Lat 35°13'56", long 89°58'51", Shelby County, Hydrologic Unit 08010209, 150 ft downstream from culvert under St. Elmo Road, and 200 ft north from intersection of st. Elmo Road and Brookmeade Street.

DRAINAGE AREA.--0.82 mi².

PERIOD OF RECORD.--November 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is about 240 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 840 ft³/s May 3, 1979, gage height, 11.10 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 431 ft³/s May 2, gage height, 7.99 ft.

4/21/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1705>	---*	---	136	183	202	371	337	268	192	104	79	65
<1805>	59	54	44	33	27	24	---	---	---	---	---	---

4/21/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1605>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1705>	0.02	0.05	0.03	0.21	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5/ 2/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<0005>	---	---	---	---	28	64	103	162	189	202	351	369
<0105>	354	311	256	221	144	137	108	97	92	93	86	84
<0205>	81	78	80	76	72	69	69	66	64	64	64	66
<0305>	68	73	76	77	74	72	71	67	67	67	67	67
<0405>	65	64	60	54	47	44	42	33	30	26	25	25
<0505>	25	24	24	23	23	21	---	---	---	---	---	---
<1505>	---	---	---	---	---	---	---	---	---	---	---	---
<1605>	---	---	---	---	---	---	---	---	---	---	---	---
<1705>	---	---	22	25	---	---	---	---	---	---	---	---
<1805>	---	---	---	---	---	---	---	---	---	---	---	---
<1905>	---	---	---	---	---	---	---	---	---	---	---	---
<2005>	---	---	---	---	---	---	---	41	112	132	123	155
<2105>	355	418	431	413	378	320	265	213	156	113	104	101
<2205>	100	108	111	108	105	103	100	97	98	95	84	78
<2305>	72	72	69	64	64	61	60	60	56	50	44	44

5/ 3/84

<0005>	43	29	25	23	22	---	---	---	---	---	---	---

5/ 2/84 UNIT RAINFALL, INCREMENTAL (INCH)

<TIME>												
<0005>	0.00	0.01	0.01	0.02	0.03	0.09	0.04	0.06	0.04	0.01	0.02	0.02
<0105>	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
<0205>	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01
<0305>	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00
<0405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0505>	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0605>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0705>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0805>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0905>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
<1205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1505>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1605>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
<1705>	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1805>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1905>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2005>	0.00	0.02	0.02	0.00	0.01	0.01	0.03	0.04	0.01	0.02	0.06	0.08
<2105>	0.02	0.04	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.01
<2205>	0.02	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.00	0.01	0.00	0.00
<2305>	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07030358 TODD CREEK AT STEELE AVENUE AT MEMPHIS, TN

LOCATION.--Lat 35°13'13", long 90°00'53", Shelby County, Hydrologic Unit 08010209, at downstream side of bridge on Steele Avenue, 0.5 mi north of Frayser Boulevard, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--2.47 mi².

PERIOD OF RECORD.--September 1983 to current year.

GAGE.--Water-stage recorder. Altitude of gage is about 240 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 2,020 ft³/s Aug. 3, 1984, gage height 9.14 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 2,020 ft³/s Aug. 3, gage height 9.14 ft.

5/ 2/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<0105>	---*	---	---	---	68	137	316	537	985	1380	1630	1800
<0205>	1760	1610	1350	1130	912	741	614	540	463	427	375	333
<0305>	319	297	288	275	271	260	244	233	222	226	233	237
<0405>	266	282	295	312	304	297	282	273	262	253	240	233
<0505>	222	210	195	177	166	144	137	129	122	111	109	104
<0605>	104	103	103	103	99	94	96	89	81	81	74	70
<0705>	67	64	61	59	57	56	56	56	---	---	---	---

5/ 2/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<0005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08
<0105>	0.07	0.05	0.10	0.17	0.17	0.14	0.14	0.11	0.06	0.00	0.10	0.00
<0205>	0.04	0.01	0.03	0.02	0.04	0.01	0.03	0.02	0.01	0.05	0.02	0.03
<0305>	0.01	0.02	0.03	0.01	0.02	0.01	0.02	0.02	0.04	0.03	0.03	0.04
<0405>	0.01	0.05	0.01	0.02	0.02	0.00	0.07	0.00	0.01	0.02	0.01	0.01
<0505>	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
<0605>	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

8/ 3/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1505>	---	---	---	---	---	---	---	---	64	297	609	1070
<1605>	1500	1790	1940	2020	1950	1690	1380	1050	798	554	402	280
<1705>	205	146	120	100	89	80	75	66	63	62	62	62

8/ 3/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1305>	0.00	0.00	0.00	0.00	0.03	0.26	0.17	0.22	0.22	0.09	0.00	0.00
<1405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1505>	0.00	0.00	0.01	0.01	0.00	0.05	0.20	0.19	0.24	0.30	0.20	0.29
<1605>	0.17	0.10	0.10	0.01	0.00	0.02	0.14	0.04	0.01	0.00	0.00	0.00
<1705>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07031665 WHITE STATION CREEK AT RICH ROAD AT MEMPHIS, TN

LOCATION.--Lat 35°08'09", long 89°53'37", Shelby County, Hydrologic Unit 08010210, at downstream side of bridge on Rich Road, 2,000 ft west of White Station Road, 2,000 ft north of Walnut Grove Road, and 1.8 mi upstream from mouth.

DRAINAGE AREA.--2.45 mi².

PERIOD OF RECORD.--June 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 252 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s May 3, 1979, gage height, 12.18 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 1,100 ft³/s May 7, gage height, 5.71 ft.

5/ 7/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1405>	---*	---	---	191	301	331	344	314	301	271	241	218
<1505>	***	***	***	***	***	191	503	592	573	604	616	543
<1605>	528	446	368	510	415	950	1100	1020	923	705	491	439
<1705>	436	432	425	443	394	368	344	305	251	223	215	201

5/ 7/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.01	0.00	0.01
<1305>	0.02	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02
<1405>	0.12	0.17	0.05	0.04	0.03	0.04	0.05	0.01	0.00	0.00	0.00	0.00
<1505>	0.00	0.00	0.00	0.00	0.13	0.30	0.10	0.03	0.00	0.08	0.17	0.04
<1605>	0.08	0.06	0.03	0.21	0.16	0.14	0.05	0.01	0.01	0.01	0.01	0.04
<1705>	0.07	0.02	0.02	0.04	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00

7/11/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<2305>	---	---	---	263	268	584	649	709	746	828	1010	797
7/12/84												
<0005>	892	955	964	955	806	832	789	692	535	450	362	331
<0105>	274	226	191	191	191	191	191	191	191	191	191	191

7/11/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<2305>	0.00	0.25	0.24	0.22	0.15	0.13	0.12	0.11	0.07	0.07	0.24	0.20
7/12/84												
<0005>	0.00	0.17	0.16	0.15	0.12	0.04	0.06	0.01	0.01	0.00	0.00	0.00

*** Recorder does not measure flows below 183 ft³/s.

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07031695 HARRINGTON CREEK TRIBUTARY AT HAWTHORNE ROAD AT BARTLETT, TN

LOCATION.--Lat 35°11'43", long 89°51'29", Shelby County, Hydrologic Unit 08010210, 25 ft downstream from culvert under Hawthorne Road, 30 ft west of Elmore Park Road, and 1 mi southeast of Bartlett.

DRAINAGE AREA.--0.21 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 280 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 392 ft³/s July 22, 1980, gage height 12.64 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 188 ft³/s July 12, gage height 10.73 ft.

7/11/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<2205>	0.00*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	2.0	13
<2305>	12	20	14	18	21	25	37	33	24	21	25	57

7/12/84

<0005>	77	101	126	188	158	96	70	73	66	55	55	41
<0105>	29	23	20	17	8.7	7.2	4.9	4.4	3.1	3.5	4.9	3.5
<0205>	3.5	2.5	2.5	2.0	2.2	1.5	1.5	1.5	1.2	1.00	1.00	0.86
<0305>	0.86	0.86	0.86	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
<0405>	0.71	0.71	0.71	0.71	0.57	0.57	0.57	0.00	0.00	0.00	0.00	0.00

7/11/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<2105>	0.00	0.00	0.00	0.01	0.09	0.02	0.01	0.00	0.00	0.00	0.00	0.00
<2205>	0.00	0.01	0.01	0.05	0.01	0.00	0.01	0.00	0.00	0.00	0.02	0.08
<2305>	0.09	0.05	0.15	0.11	0.07	0.15	0.28	0.18	0.15	0.02	0.00	0.00

7/12/84

<0005>	0.00	0.20	0.16	0.28	0.24	0.19	0.15	0.12	0.03	0.04	0.01	0.00
<0105>	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

8/22/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	9.8	14	57	60
<1205>	56	50	46	28	23	21	20	12	6.8	7.7	5.4	4.9
<1305>	3.5	3.5	2.8	2.8	2.8	2.2	2.0	1.7	1.5	1.2	1.3	1.3
<1405>	1.2	0.86	0.86	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.57	0.57
<1505>	0.57	0.57	0.43	0.29	0.29	0.14	0.14	0.00	0.00	0.00	0.00	0.00

8/22/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1105>	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.28	0.14	0.18	0.34	0.38
<1205>	0.29	0.08	0.01	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00
<1305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07031697 HARRINGTON CREEK TRIBUTARY AT STAGE ROAD AT BARTLETT, TN

LOCATION.--Lat 35°12'20", long 89°53'05", Shelby County, Hydrologic Unit 08010210, 30 ft upstream from culvert under Stage Lane, 300 ft west of Chaucer Lane, and 1 mi west of Bartlett.

DRAINAGE AREA.--0.91 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 255 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 960 ft³/s Aug. 22, 1979, gage height 11.79 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 621 ft³/s July 12, gage height 11.01 ft.

4/21/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1705>	---*	---	---	---	33	317	536	610	594	451	310	207
<1805>	140	99	78	65	57	50	44	40	37	35	34	32
<1905>	31	30	30	29	28	28	27	26	26	26	26	26
<2005>	26	26	26	25	24	24	24	---	---	---	---	---

4/21/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1705>	0.00	0.00	0.03	0.32	0.62	0.34	0.32	0.04	0.04	0.01	0.03	0.00
<1805>	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02
<1905>	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.01
<2005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

7/11/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<2105>	---	---	---	---	---	---	---	---	25	29	29	27
<2205>	25	23	23	23	---	---	---	---	---	---	23	23
<2305>	24	33	62	122	145	129	154	207	258	279	229	155
7/12/84												
<0005>	104	80	78	97	176	357	513	596	621	618	513	354
<0105>	223	136	93	70	55	47	41	37	34	32	30	28
<0205>	27	27	26	25	24	24	24	23	23	---	---	---
<0305>	---	---	---	---	---	---	---	---	---	---	---	---
<0405>	---	---	---	---	---	---	---	---	---	---	---	---
<0505>	---	---	---	---	---	---	---	---	---	---	---	---
<0605>	---	---	---	---	---	---	---	52	59	52	42	36
<0705>	32	30	28	27	25	24	24	23	23	23	23	23
<0805>	23	23	23	23	23	23	23	23	23	23	23	23
<0905>	23	23	23	23	23	---	---	---	---	---	---	---

7/11/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<2105>	0.00	0.00	0.00	0.01	0.09	0.02	0.01	0.00	0.00	0.00	0.00	0.00
<2205>	0.00	0.01	0.01	0.05	0.01	0.00	0.01	0.00	0.00	0.00	0.02	0.08
<2305>	0.09	0.05	0.15	0.11	0.07	0.15	0.28	0.18	0.15	0.02	0.00	0.00
7/12/84												
<0005>	0.00	0.20	0.16	0.28	0.24	0.19	0.15	0.12	0.03	0.04	0.01	0.00
<0105>	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0305>	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
<0405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0505>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0605>	0.00	0.00	0.00	0.00	0.05	0.07	0.00	0.00	0.00	0.00	0.00	0.00
<0705>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0805>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
<0905>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07031699 COLUMN BRANCH AT RALEIGH-LAGRANGE ROAD AT MEMPHIS, TN

LOCATION.--Lat 35°11'58", long 89°54'37", Shelby County, Hydrologic Unit 08010210, on downstream wingwall of culvert under Raleigh-LaGrange Road, 0.7 mi east of Jackson Avenue, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--1.87 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 240 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 6,850 ft³/s Aug. 22, 1984, gage height 12.89 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 6,850 ft³/s Aug. 22, gage height 12.89 ft.

11/23/83 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<0005>	6.8*	9.4	16	28	41	63	121	225	481	1130	1980	2440
<0105>	2760	3340	3960	4630	5370	6470	6820	6400	5810	4870	3950	3200
<0205>	2930	3140	3330	3270	3070	2610	2060	1610	1220	934	761	608
<0305>	481	370	329	290	223	189	146	115	94	79	72	62
<0405>	57	50	47	42	39	37	35	33	29	28	27	26
<0505>	25	24	23	22	20	20	19	19	19	19	19	18
<0605>	18	18	18	---	---	---	---	---	---	---	---	---

11/22/83 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<2305>	---	---	---	---	---	0.01	0.00	0.01	0.01	0.01	0.01	0.02

11/23/83

<0005>	0.00	0.02	0.02	0.02	0.03	0.08	0.17	0.29	0.19	0.13	0.10	0.22
<0105>	0.10	0.18	0.08	0.10	0.17	0.03	0.12	0.09	0.06	0.03	0.08	0.13
<0205>	0.13	0.10	0.05	0.03	0.07	0.03	0.01	0.03	0.02	0.01	0.01	0.03
<0305>	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
<0405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0505>	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
<0605>	0.00	0.00	---	---	---	---	---	---	---	---	---	---

8/22/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1105>	---	---	---	---	---	15	99	427	2760	5950	6850	6600
<1205>	5770	4120	2370	1300	705	315	196	124	83	61	49	39
<1305>	35	28	26	23	20	18	17	15	14	12	11	11
<1405>	10	9.7	9.4	9.2	9.2	---	---	---	---	---	---	---

8/22/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1105>	---	---	---	---	---	0.00	0.09	0.28	0.14	0.18	0.34	0.38
<1205>	0.29	0.08	0.01	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00
<1305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1405>	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---	---	---

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07031773 LICK CREEK AT JEFFERSON AVENUE AT MEMPHIS, TN

LOCATION.--Lat 35°08'20", long 89°59'30", Shelby County, Hydrologic Unit 08010210, 20 ft upstream from culvert under Jefferson Avenue, 600 ft west of Cooper Street, 1,000 ft south of Poplar Avenue, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--1.00 mi².

PERIOD OF RECORD.--February 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 258 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s Aug. 10, 1978, gage height 11.60 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 670 ft ³/s Apr. 21, gage height 7.70 ft.

4/21/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1705>	---*	---	---	---	---	---	---	---	---	---	---	0.63
<1805>	130	528	652	670	625	564	499	431	332	241	119	65
<1905>	44	34	28	25	22	20	18	17	16	12	14	13
<2005>	12	10	9.4	6.4	8.0	8.2	8.8	9.4	9.4	9.4	8.8	8.0
<2105>	7.1	6.4	5.7	5.3	4.7	4.1	3.4	2.6	2.3	2.1	2.0	1.8
<2205>	1.6	1.5	0.80	1.3	1.2	1.2	1.1	1.1	1.1	0.99	0.99	0.93
<2305>	0.93	0.86	0.86	0.80	0.80	0.74	0.74	0.74	0.74	0.74	0.74	0.74

4/21/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1705>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.29
<1805>	0.34	0.36	0.19	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
<1905>	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
<2005>	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5/ 7/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1205>	---	---	---	---	---	---	---	---	---	3.0	6.2	6.4
<1305>	12	17	20	20	19	17	14	11	9.1	7.7	13	72
<1405>	239	233	171	119	86	69	51	45	42	37	31	24
<1505>	17	13	15	81	275	279	208	168	132	131	150	182
<1605>	176	246	446	575	609	577	522	467	406	316	228	175
<1705>	163	149	121	105	92	78	65	48	39	31	26	22
<1805>	19	16	15	14	12	11	9.7	9.1	8.2	7.7	7.1	6.6
<1905>	4.3	5.7	5.7	6.4	8.8	12	14	13	11	9.4	8.2	7.1

5/ 7/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1205>	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.01	0.00	0.01	0.03	0.01
<1305>	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.11	0.12	0.14
<1405>	0.02	0.01	0.00	0.01	0.00	0.02	0.01	0.00	0.00	0.01	0.00	0.00
<1505>	0.00	0.00	0.24	0.06	0.01	0.02	0.01	0.02	0.06	0.07	0.07	0.02
<1605>	0.17	0.24	0.14	0.04	0.01	0.01	0.00	0.01	0.00	0.05	0.03	0.03
<1705>	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1805>	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
<1905>	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07031795 WOLF RIVER TRIBUTARY AT WHITNEY AVENUE AT MEMPHIS, TN

LOCATION.--Lat 35°12'31", long 90°01'05", Shelby County, Hydrologic Unit 08010210, 17 ft upstream from culvert under Whitney Avenue, 0.8 mi west of Watkins Street, 0.8 mi east of Thomas Street, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--0.35 mi².

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 249 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 334 ft³/s June 24, 1980, gage height 11.48 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 282 ft³/s Aug. 3, gage height 10.67 ft.

5/ 1/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<2105>	0.00*	0.00	0.10	0.65	0.68	0.68	0.68	0.68	0.70	0.99	1.00	1.00
<2205>	1.2	2.6	5.3	9.8	11	11	9.8	7.5	5.8	4.4	3.3	2.5
<2305>	2.2	1.9	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5

5/ 2/84

<0005>	1.3	1.2	1.00	0.99	0.94	0.94	2.0	5.5	15	31	54	84
<0105>	107	126	145	161	171	175	172	160	146	130	116	99
<0205>	84	72	65	61	58	55	54	52	50	49	47	45
<0305>	43	41	41	41	42	44	46	49	50	50	50	49
<0405>	48	45	44	43	42	41	39	36	34	31	28	25
<0505>	23	20	18	17	16	15	15	14	14	14	13	12
<0605>	11	11	10.0	8.9	8.1	7.5	7.0	6.1	5.8	5.3	4.8	4.5
<0705>	4.1	3.8	3.4	3.2	3.1	2.7	2.5	2.5	2.3	2.1	2.0	1.8
<0805>	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.00	0.99
<0905>	0.99	0.88	0.88	0.83	0.79	0.79	0.74	0.70	0.70	0.70	0.65	0.63
<1005>	0.63	0.63	0.63	0.60	0.60	0.58	0.58	0.55	0.55	0.55	0.55	0.55
<1105>	0.55	0.53	0.50	0.48	0.48	0.48	0.45	0.45	0.45	0.45	0.45	0.45
<1205>	0.43	0.43	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.38	0.38	0.38
<1305>	0.38	0.35	0.35	0.35	0.35	0.35	0.33	0.33	0.33	0.33	0.33	0.30
<1405>	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.28	0.28	0.28	0.28	0.28
<1505>	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
<1605>	0.28	0.28	0.28	0.28	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
<1705>	0.25	0.25	0.25	0.25	0.25	0.25	2.0	2.4	2.6	3.7	3.7	3.1
<1805>	2.5	1.9	1.6	1.3	1.2	0.94	0.83	0.79	0.74	0.70	0.68	0.65
<1905>	0.65	0.65	0.63	0.63	0.60	0.60	0.58	0.55	0.53	0.50	0.48	0.48
<2005>	0.48	0.48	0.45	0.45	0.45	0.45	0.45	0.63	3.0	5.8	10	13
<2105>	31	60	81	98	111	123	137	142	143	140	135	129
<2205>	120	112	100	89	82	81	81	81	82	82	82	82
<2305>	80	75	71	64	58	53	49	44	41	39	36	35

5/ 3/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<0005>	34	32	31	27	25	22	20	18	16	14	13	12
<0105>	11	10	9.1	8.3	7.5	7.0	6.4	5.9	5.8	5.2	4.9	4.5
<0205>	4.4	4.0	3.7	3.4	3.2	3.1	2.9	2.6	2.5	2.3	2.2	2.1
<0305>	1.9	1.9	1.7	1.7	1.7	1.7	1.7	2.0	2.5	2.9	3.0	3.2
<0405>	3.2	3.2	3.2	3.2	3.1	2.7	2.5	2.5	2.5	2.5	2.3	2.1
<0505>	2.1	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.2
<0605>	1.1	1.00	1.00	---	---	---	---	---	---	---	---	---

5/ 1/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<2105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.01
<2205>	0.00	0.00	0.00	0.00	0.00	0.06	0.04	0.06	0.05	0.04	0.00	0.00
<2305>	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07031795 WOLF RIVER TRIBUTARY AT WHITNEY AVENUE AT MEMPHIS, TN--Continued

<TIME> UNIT RAINFALL, INCREMENTAL (INCHES)

5/2 /84

<0005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08
<0105>	0.07	0.05	0.10	0.17	0.17	0.14	0.14	0.11	0.06	0.00	0.10	0.00
<0205>	0.04	0.01	0.03	0.02	0.04	0.01	0.03	0.02	0.01	0.05	0.02	0.03
<0305>	0.01	0.02	0.03	0.01	0.02	0.01	0.02	0.02	0.04	0.03	0.03	0.04
<0405>	0.01	0.05	0.01	0.02	0.02	0.00	0.07	0.00	0.01	0.02	0.01	0.01
<0505>	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
<0605>	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0705>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0805>	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
<0905>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1005>	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
<1405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1505>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1605>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1705>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02
<1805>	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1905>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
<2105>	0.05	0.04	0.01	0.01	0.04	0.16	0.11	0.13	0.12	0.06	0.08	0.13
<2205>	0.05	0.03	0.04	0.03	0.02	0.04	0.01	0.05	0.00	0.06	0.06	0.04
<2305>	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.01	0.00	0.01	0.02

5/ 3/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>

<0005>	0.00	0.00	0.03	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00
<0105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02
<0405>	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00
<0505>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0605>	0.00	0.00	0.00	---	---	---	---	---	---	---	---	---

8/ 3/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>

<1305>	---	---	---	---	---	---	15	32	54	67	59	45
<1405>	34	26	23	20	18	17	15	14	12	11	9.6	8.1
<1505>	7.1	6.4	5.8	5.3	4.9	4.7	4.7	26	73	123	161	197
<1605>	236	261	274	282	281	276	268	261	246	219	186	155
<1705>	118	81	56	44	37	33	30	27	25	24	24	23
<1805>	23	22	22	21	20	20	19	18	18	17	16	16
<1905>	16	15	15	15	14	14	14	14	14	14	14	15
<2005>	15	15	15	15	15	15	15	15	15	14	14	13
<2105>	13	12	12	11	11	10	10.0	9.8	9.6	8.9	8.5	8.1
<2205>	7.9	7.5	7.3	7.1	6.8	6.6	6.4	6.1	5.9	5.8	5.6	5.6
<2305>	5.3	5.3	5.2	5.1	4.9	4.9	4.8	4.7	4.5	4.4	4.4	4.4

8/ 4/84

<0005>	4.1	4.1	4.0	3.8	3.7	3.6	3.4	3.3	1.3	3.2	3.2	3.1
<0105>	3.0	2.9	2.7	2.6	2.5	2.5	2.4	2.4	2.3	2.2	2.1	2.0
<0205>	1.9	1.8	1.6	1.5	1.5	1.5	1.4	1.3	1.3	1.2	1.2	1.2
<0305>	1.2	1.1	1.1	1.1	1.00	---	---	---	---	---	---	---

8/ 3/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>

<1305>	---	---	---	---	0.03	0.26	0.17	0.22	0.22	0.09	0.00	0.00
<1405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<1505>	0.00	0.00	0.01	0.01	0.00	0.05	0.20	0.19	0.24	0.30	0.20	0.29
<1605>	0.17	0.10	0.10	0.01	0.00	0.02	0.14	0.04	0.01	0.00	0.00	0.00
<1705>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01
<1805>	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
<1905>	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.01
<2005>	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
<2105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2205>	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

8/ 4/84

<0005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0305>	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---	---	---

NONCONNAH CREEK BASIN

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION

07032241 BLACK BAYOU AT SOUTHERN AVENUE AT MEMPHIS, TN

LOCATION.--Lat 35°06'55", long 89°56'00", Shelby County, Hydrologic Unit 08010211, on right bank 130 ft downstream from Southern Avenue, and 150 ft east of Normal Street, at southeast corner of Memphis State University parking lot.

DRAINAGE AREA.--0.59 mi².

PERIOD OF RECORD.--December 1974 to current year.

REVISED RECORDS.--WRD TN-80-1: 1979, WRD TN-82-1: 1975-81 (p).

GAGE.--Water-stage recorder. Altitude of gage is 270 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 714 ft³/s Sept. 29, 1977, gage height, 9.05 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 526 ft³/s Oct. 17, gage height, 8.21 ft.

10/17/83 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1705>	---*	---	---	---	---	---	---	---	---	---	---	29
<1805>	194	421	502	526	508	398	275	184	131	92	74	62
<1905>	62	58	55	54	50	50	46	41	36	30	25	25
<2005>	25	19	19	15	10	10	8.3	8.3	6.7	6.7	6.7	4.7
<2105>	4.7	4.7	4.7	4.7	4.7	3.9	3.9	3.9	2.8	2.8	2.8	2.8
<2205>	2.8	2.8	2.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
<2305>	1.8	1.8	1.8	1.8	1.8	1.8	0.95	0.95	0.95	0.95	0.95	0.95

10/17/83 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1705>	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.05	0.13	0.23	0.34	0.32
<1805>	0.21	0.12	0.03	0.03	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03
<1905>	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
<2005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

7/11/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<2105>	---	---	---	---	---	---	---	---	---	---	1.3	5.0
<2205>	6.4	6.4	5.7	4.4	3.7	3.2	2.6	2.4	1.6	1.6	1.3	1.2
<2305>	1.2	0.95	0.95	0.95	0.95	30	165	288	349	374	338	326

7/12/84

<0005>	365	358	321	365	407	452	452	372	282	189	131	99
<0105>	69	55	43	33	27	22	17	14	12	9.1	8.3	7.1
<0205>	6.4	5.4	4.4	3.9	3.9	3.4	3.4	2.8	2.8	2.4	2.4	2.0
<0305>	2.0	2.0	1.6	1.6	1.6	1.6	1.6	1.8	3.0	3.7	3.9	4.2
<0405>	4.2	4.2	4.2	4.2	3.9	3.4	3.2	3.0	2.8	2.6	2.2	2.0
<0505>	2.0	1.8	1.6	1.6	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1
<0605>	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
<0705>	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	---	---	---	---

7/11/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<2105>	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.03	0.02	0.00	0.01	0.00
<2205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2305>	0.00	0.00	0.04	0.27	0.29	0.12	0.25	0.12	0.11	0.20	0.13	0.03

7/12/84

<0005>	0.00	0.24	0.16	0.21	0.08	0.01	0.01	0.00	0.00	0.00	0.00	0.00
<0105>	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0305>	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00
<0405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
<0505>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00

NONCONNAH CREEK BASIN

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION STATION

07032246 DAYS CREEK AT SHELBY DRIVE AT MEMPHIS, TN

LOCATION.--Lat 35°01'14", long 90°00'37", Shelby County, Hydrologic Unit 08010211, 75 ft upstream from culvert under Shelby Drive, 0.5 mi west of I-55, 0.9 mi east of U.S. 51 (Elvis Presley Boulevard), and 3.4 mi upstream from mouth.

DRAINAGE AREA.--2.63 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 259 ft from topographic map.

MAXIMUM FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s Apr. 16, 1982, gage height 10.05 ft.

MAXIMUM FOR CURRENT YEAR.--Maximum discharge, 1,100 ft³/s Nov. 23, gage height 8.35 ft.

11/22/83 — UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1705>	---*	---	---	---	1.7	6.4	16	48	96	134	149	160
<1805>	181	202	216	218	210	200	188	176	163	151	139	127
<1905>	116	106	95	85	77	70	65	60	56	51	46	42
<2005>	39	36	33	30	28	26	25	23	22	20	19	18
<2105>	17	16	15	15	14	14	13	13	12	12	12	11
<2205>	11	11	11	11	11	11	10	10	10	9.6	9.2	8.7
<2305>	8.7	8.3	8.3	7.9	7.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5
11/23/83												
<0005>	7.9	9.6	12	16	28	56	82	132	187	273	402	495
<0105>	571	668	784	820	861	927	949	1000	1020	1050	1050	1060
<0205>	1090	1100	1080	1070	1060	1060	1010	981	915	844	784	703
<0305>	622	562	500	446	399	356	317	283	259	228	200	178
<0405>	160	147	133	122	112	103	95	88	82	77	73	69
<0505>	66	62	61	58	55	52	50	47	43	40	38	35
<0605>	33	30	29	27	26	25	25	25	25	25	25	42
<0705>	65	67	65	69	82	98	109	117	124	129	133	136
<0805>	138	139	141	144	145	148	150	150	150	150	150	150
<0905>	147	144	140	135	131	125	119	114	108	101	95	89
<1005>	83	79	74	70	66	62	60	56	53	51	48	46
<1105>	43	41	38	37	35	33	31	30	28	27	26	25
<1205>	23	22	21	20	19	18	17	16	16	15	15	14
<1305>	14	13	13	12	12	11	11	11	11	10	9.6	9.2
<1405>	9.2	8.7	8.3	8.3	7.9	7.5	7.5	7.1	7.1	6.8	6.8	6.4

11/22/83 — UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1705>	0.01	0.02	0.10	0.06	0.09	0.11	0.16	0.17	0.08	0.00	0.00	0.00
<1805>	0.01	0.02	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
<1905>	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2005>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01
<2105>	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
<2205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2305>	0.00	0.00	0.03	0.00	0.00	0.01	0.02	0.01	0.02	0.02	0.02	0.01
11/23/83												
<0005>	0.00	0.01	0.05	0.13	0.08	0.07	0.08	0.09	0.15	0.19	0.05	0.09
<0105>	0.12	0.16	0.08	0.04	0.10	0.10	0.17	0.10	0.14	0.27	0.49	0.15
<0205>	0.05	0.04	0.07	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.01	0.00
<0305>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0405>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0505>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
<0605>	0.01	0.00	0.02	0.00	0.01	0.02	0.00	0.01	0.01	0.03	0.12	0.02
<0705>	0.12	0.02	0.02	0.00	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.03
<0805>	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00	0.00

NONCONNAH CREEK BASIN

FLOOD-HYDROGRAPH RAINFALL-RUNOFF STATION STATION

07032246 DAYS CREEK AT SHELBY DRIVE AT MEMPHIS, TN--Continued

7/11/84 UNIT DISCHARGE (CUBIC FEET/SECOND)

<TIME>												
<1905>	---	---	---	---	---	2.0	4.7	7.5	9.6	10	10	10
<2005>	11	12	15	18	21	22	22	22	22	22	22	21
<2105>	19	18	17	16	15	15	14	14	13	15	19	21
<2205>	21	21	21	24	28	31	33	34	34	34	33	30
<2305>	29	27	25	24	22	21	20	20	21	68	137	220
7/12/84												
<0005>	307	441	560	636	613	756	771	763	734	678	629	576
<0105>	518	465	415	369	323	283	247	209	178	153	130	114
<0205>	100	89	81	73	67	62	58	54	51	48	44	42
<0305>	41	39	39	39	39	40	40	40	40	39	38	38
<0405>	38	38	37	36	36	34	33	31	30	29	28	26
<0505>	25	24	22	21	20	19	18	17	16	16	15	15
<0605>	14	13	13	12	12	11	11	11	9.6	9.6	9.2	8.7
<0705>	8.3	8.3	7.9	7.5	7.5	7.1	6.8	6.8	6.8	6.4	6.4	6.1

7/11/84 UNIT RAINFALL, INCREMENTAL (INCHES)

<TIME>												
<1905>	0.00	0.00	0.00	0.00	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00
<2005>	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.09	0.02	0.01
<2205>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<2305>	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.04	0.06	0.29	0.24	0.18
7/12/84												
<0005>	0.00	0.27	0.21	0.09	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00
<0105>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<0205>	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.03	0.02
<0305>	0.00	0.01	0.00	0.00	0.01	0.01	0.02	0.01	0.01	0.00	0.01	0.00
<0405>	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first 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 continous 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 1984

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Mobile River basin				
*02384900	Coahulla Creek near Cleveland, TN	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	1975-81, 1983-84	6-13-84 9-11-84	1.3 .51
		Green River basin				
03312287	Long Fork Creek near Galen, TN	Lat 36°34'37", long 85°56'23", Macon County, at secondary road, 1.4 miles east of Galen.	22.0	1980-81, 1983-84	6-14-84 9-11-84	12 2.0
033122955	White Oak Creek at White Oak, TN	Lat 36°35'35", long 85°58'40", Macon County, at secondary road, 0.8 mile east of White Oak.	20.6	1980-81, 1983-84	6-14-84 9-11-84	25 8.7
03312413	Puncheon Creek near Green Valley, TN	Lat 36°35'42", long 86°01'15", Macon County, at ford below Spring Creek and Lick Branch, 1.1 miles northeast of Spring Creek Church.	9.3	1980-81, 1983-84	6-14-84 9-11-84	6.8 2.5
03312457	Long Creek at Long Creek, TN	Lat 36°33'48", long 86°05'30", Macon County, at secondary road just below Johns Creek, 0.5 mile north of Long Creek.	15.5	1980-81, 1983-84	6-14-84 9-11-84	6.1 4.6
03313640	West Fork Drakes Creek below Portland, TN	Lat 36°36'31", long 86°28'31", Sumner County, at county road bridge, 0.7 mile northeast of Portland water treatment plant, 2.6 miles northeast of Portland.	57.5	1983-84	6-14-84 9-14-84	9.6 3.7
		Cumberland River Basin				
03415960	Wolf River at Wolf River, TN	Lat 36°32'14", long 84°57'09", Fentress County, at county road bridge, 200 ft east of junction with State Highway 28 - U.S. Highway 127, 0.4 mile south of Pall Mall Post Office.	41.0	1979-81, 1983-84	10- 4-83 11- 8-83 6-13-84 7-25-84	3.4 5.8 12 6.0
03415975	Rotten Fork Wolf River near Pall Mall, TN	Lat 36°32'20", long 84°56'56", Fentress County, 0.25 mile above Wolf River, at John W. Painter Memorial Bridge, 1.3 miles southeast of Pall Mall.	21.6	1979-81, 1983-84	10- 4-83 11- 8-83 6-13-84 7-25-84	1.1 1.9 6.0 2.1

* Also crest-stage partial-record station.

Discharge measurements made at low-flow partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Cumberland River basin--Continued				
03418180	Blackburn Fork near Dodson Branch, TN	Lat 36°20'53", long 85°34'00", Jackson County, at bridge on State Highway 135, 3.1 miles northwest of Dodson Branch, and at mile 0.24.	61.0	1974-76, 1978-81, 1983-84	10- 3-83 11- 7-83 6-12-84 7-26-84	11 25 36 18
03418935	Beaverdam Creek at Latana Road near Bellview, TN	Lat 35°44'07", long 85°11'43", Bledsoe County, Hydrologic Unit 05130108, 1.2 miles southwest of Bellview, 2.8 miles southwest of Winesap, 3.1 miles southeast of Herbert Domain.	17.0	1979-81, 1983-84	11- 1-83 6-12-84 7-24-84 9-13-84	.23 .46 1.7 .12
03418995	Glade Creek near Lonewood, TN	Lat 35°45'35", long 85°15'57", Bledsoe County line, Hydrologic Unit 05130108, 1.2 miles above confluence of Bee Creek, 1.7 miles west of Herbert Domain, and 2.3 miles east of Lonewood.	39.1	1979-81, 1983-84	11- 1-83 6-12-84 7-24-84 9-13-84	.33 2.4 4.0 1.2
03419270	Calfkiller River near Taylors, TN	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	1975-76, 1978-81, 1983-84	10- 4-83 11- 8-83 6-12-84 9-13-84	5.2 12 18 8.1
03420116	Rocky River at Rocky River Road at Riverview, TN	Lat 35°42'04", long 85°34'40", Van Buren County, on Rocky River Road 3.0 miles south of Rocky River Road-State Highway 30 intersection.	72.0	1979-81, 1983-84	11- 1-83 6-11-84 9-13-84	2.0 14 3.8
03420156	Collins River at Barkertown, TN	Lat 35°23'35", long 85°34'00", Grundy County, Hydrologic Unit 05130107, 100 ft below Jonathan Creek at county road bridge.	22.9	1979-81, 1983-84	6-12-84 7-25-84	2.0 a6.2
03420230	Scott Creek at Irving College, TN	Lat 35°34'17", long 85°42'42", Warren County, Hydrologic Unit 05130107, at State Highway 56 bridge, 1.0 mile south of Irving College, and 0.6 mile above mouth.	34.1	1979-81, 1983-84	11- 1-83 6-12-84 9-12-84	2.4 11 4.4
03420440	South Prong Barren Fork Near Trousdale, TN	Lat 35°40'41", long 85°57'06", Warren County, at county road bridge, 3.8 miles southwest of Centertown, 0.9 mile northwest of Trousdale.	65.3	1983-84	11- 1-83 6-11-84 9-12-84	12 20 12
03420470	North Prong Barren Fork at Oak Grove, TN	Lat 35°42'40", long 85°57'25", Warren County, at county road bridge, 2.3 miles southwest of Centertown, 0.9 mile northeast of Oak Grove and at mile 2.9	29.8	1983-84	11- 1-83 6-11-84 9-12-84	12 23 14
03420720	Hickory Creek near Viola, TN	Lat 35°34'32", long 85°51'02", Warren County, at State Highway 108 bridge, 2.9 miles north of Viola.	58.2	1954, 1979-81, 1983-84	11- 1-83 6-11-84 9-12-84	4.0 18 5.1
03421150	Charles Creek at Daylight, TN	Lat 35°44'32", long 85°51'12", Warren County, at county road bridge, 2.5 miles north of Bethany, 0.3 mile southeast of Daylight.	13.8	1983-84	11- 1-83 6-11-84 9-12-84	4.5 11 5.6
03421390	Mountain Creek at Dibrell, TN	Lat 35°47'53", long 85°45'58", Warren County, 75 ft below county bridge, 1.8 miles east-southeast of Dibrell.	42.7	1962-63 1966,1968, 1972, 1983-84	11- 1-83 6-11-84 9-12-84	11 34 14
03424825	Brush Creek at Brush Creek, TN	Lat 36°07'03", long 86°01'20", Smith County, at State Highway 53 bridge, 0.3 mile east of Brush Creek.		1983-84	10- 3-83 11- 7-83 6-13-84 7-26-84 9-18-84	<.01 .18 .11 .05 .02
03425275	Goose Creek at Hillsdale, TN	Lat 36°26'46", long 86°03'50", Macon County, at secondary road in Hillsdale.	27.4	1980-81, 1983-84	6-14-84 9-11-84	15 2.3

Discharge measurements made at low-flow partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Cumberland River basin--Continued				
03431570	Whites Creek near Jordonia, TN	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	1974-76, 1978-81, 1983-84	9-13-84	4.6
*03432925	Little Harpeth River at Granny White Pike at Brentwood, TN	Lat 36°01'30", long 86°49'09" Williamson County, at bridge on Granny White Pike, 2.0 miles southwest of Brentwood, and at mile 1.1.	22.0	1978-84	10-12-83 6-15-84 7-11-84 9-12-84	.05 2.3 .90 2.3
03433660	South Harpeth River at Fernvale, TN	Lat 35°57'15", long 87°04'43", Williamson County, at new county road bridge, at Fernvale, 3.1 miles southeast of Fairview, and at mile 14.0.	27.6	1974-75, 1978-84	10-12-83 6-13-84 7-11-84 9-12-84	13 20 15 13
03433902	Big Turnbull Creek near Liberty Hill, TN	Lat 35°57'59", long 87°11'56", Williamson County, at county road bridge, 1.5 miles southeast of Liberty Hill.	11.3	1981, 1983-84	10-12-83 6-12-84 7-11-84 9-12-84	4.1 7.7 6.2 4.0
03434560	Trace Creek near White Bluff, TN	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, 1978-84	10- 3-83 6-12-84 9-11-84	1.4 2.2 1.6
03434620	Town Branch near Charlotte, TN	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	1974-76, 1978-84	6-12-84 9-11-84	1.7 .38
034350028	Bartons Creek above Louise Creek near Southside,TN	Lat36°21'17", long 87°16'48", Montgomery County, just above Louise Creek, 20 ft above County road bridge, 1.7 miles southeast of Southside.	96.4	1962-64, 1983-84	6-12-84 9-11-84	30 11
03435320	Red River at Adams, TN	Lat 36°35'37", long 87°03'33", Robertson County, at bridge on Keysburg road, 0.9 mile north of Adams.	594	1937, 1983-84	10- 7-83 11-14-83 6-14-84 9-12-84	60 70 320 154
03436460	Little West Fork Red River near New Providence, TN	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, 1978-84	10-12-83 6-14-84 9-12-84	19 99 29
		Tennessee River basin				
03454850	Long Creek near Del Rio, TN	Lat 35°56'53", long 83°03'12", 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	1953-54, 1975-81, 1983-84	10-18-83 6-19-84 9-12-84	1.7 3.8 2.7
034611996	Crying Creek above Cosby, TN	Lat 35°46'54", long 83°13'01", Cocke County, at culvert on road to Cosby Creek Campground in Great Smoky Mountain National Park, 2.4 miles Southeast of Cosby and 150 ft above mouth.	2.94	1983-84	10-18-83 6-19-84 6-12-84	.74 2.1 1.0
03461266	Greenbrier Creek at Cosby, TN	Lat 35°48'12", long 83°14'52", Cocke County, near mouth at bridge on State Highway 32, 0.9 mile northwest of intersection of State Highway 73 and 32, 0.9 mile south of Cosby.	4.96	1978-81, 1983-84	10-20-83 6-19-84 9-12-84	2.1 4.1 2.9
03461450	English Creek near Newport, TN	Lat 35°54'47", long 83°12'42", Cocke County, at bridge on State Highway 32, 0.9 mile downstream from Laurel Branch, 3.7 miles southwest of Newport and at mile 3.5	9.74	1983-84	10-20-83 6-19-84 9-12-84	2.1 4.5 3.8

* Also crest-stage partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Tennessee River basin--Continued				
03464815	South Indian Creek near Erwin, TN	Lat 36°07'38", long 82°26'45", Unicoi County, 0.1 mile above mouth, near Erwin.	81.0	1972, 1974, 1978-81, 1983-84	10-19-83 6-20-84 9-13-84	14 37 21
*03465780	Clear Fork near Fairview, TN	Lat 36°19'33", long 82°33'47", Washington County, at culvert on State Highway 81, 2.0 miles southwest of Sulpher Springs at mile 3.8.	10.5	1983-84	10-19-83 6-22-84 9-13-84	2.7 6.9 3.1
03466099	Jockey Creek at Limestone, TN	Lat 36°13'31", long 82°38'06", Washington County, 0.25 mile west of Limestone, at county road bridge 400 ft above mouth.	19.0	1954, 1972-73, 1976-77, 1979-81, 1983-84	10-19-83 6-22-84 9-13-84	4.7 16 10
*03466295	Camp Creek at Camp Creek, TN	Lat 36°05'39", long 82°45'37", Greene County, at bridge on county road at Camp Creek, 2.0 miles southeast of Jones Bridge, 6.2 miles northeast of Nolichucky Dam, TN.	9.99	1961, 1983-84	10-18-83 6-22-84 9-13-84	7.4 15 13
03466870	Roaring Fork near Greeneville, TN	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	1975-81, 1983-84	10-18-83 6-19-84 9-13-84	3.0 7.8 6.6
03466880	Roaring Fork near Mosheim, TN	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	1975-81, 1983-84	10-18-83 6-22-84 9-13-84	4.9 20 13
03467490	Bent Creek near Springvale, TN	Lat 30°43'47", long 83°37'43", Hamblen County, at bridge 0.6 mile above mouth, 2.4 miles southeast of Springvale.	41.2	1954, 1959, 1975-81, 1983-84	10-18-83 6-19-84 9-13-84	3.7 13 7.2
03469185	Middle Creek near Pigeon Forge, TN	Lat 35°48'15", long 83°32'20", Sevier County, at bridge on county road (Middle Creek Road) 4.5 miles southeast of Sevierville and at mile 6.6.	5.37	1983-84	10-18-83 6-19-84 9-11-84	.80 1.1 .43
03469610	Cove Creek at Hatchertown, TN	Lat 35°43'47", long 83°37'43", Sevier County, at culvert on county road, 7.8 miles southwest of Pigeon Forge, and at mile 6.3.	2.64	1983-84	10-18-83 6-19-84 9-11-84	2.7 5.6 4.2
03470120	Boyds Creek near Providence, TN	Lat 35°51'45", long 83°46'12", Sevier County, at bridge on U.S. Highway 411, 1.4 miles northeast of Providence and at mile 14.3.	0.60	1983-84	10-20-83 6-19-84 9-11-84	.10 .39 .22
03476515	Beidleman Creek near Caywood Ford, TN	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	1975-81, 1983-84	10-19-83 6-20-84 9-14-84	7.7 19 7.3
*03476960	Indian Creek at Childress, TN	Lat 36°25'38", long 82°15'54", Sullivan County, at bridge on U.S. Highway 19, 3.3 miles south of Bluff City and at mile 4.6	6.79	1983-84	10-19-83 6-20-84 9-11-84	.51 .99 .19
*03478615	Evans Creek near Blountville, TN	Lat35°31'19", long 82°18'12", Sullivan County, at State Highway 37 bridge, 1.5 miles southeast of Blountville.	2.50	1932, 1983-84	10-18-83 6-20-84 9-11-84	1.0 1.7 .88
03491493	Dodson Creek near Rogersville, TN	Lat 36°20'49", long 82°57'07", Hawkins County, at State Highway 70 bridge,6.8 miles southeast of Rogersville.	7.46	1961, 1983-84	10-18-83 6-22-84 9-13-84	.54 3.3 .91

* Also crest-stage partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Tennessee River basin--Continued				
03518630	Morgan Branch at Tellico Plains, TN	Lat35°22'27", long 84°18'08", Monroe County, at bridge on State Highway 68, 3.8 miles northeast of Jalapa and at mile 1.5.	2.11	1983-84	10-19-83 6-19-84 9-12-84	.68 3.8 1.2
03520170	Pond Creek near Adolphus, TN	Lat 35°42'20", long 84°27'35", Loudon County, 150 ft below county road bridge, 2.5 miles southwest of Prospect, 3.1 miles southwest of Adolphus, and 3.6 miles northwest of Philadelphia.	30.8	1953, 1975-77, 1979-81, 1983-84	10-19-83 6-19-84 9-14-84	8.6 22 12
03555882	Barney Creek near Coker Creek, TN	Lat 35°14'29", long 84°19'04", Monroe County, at bridge on State Highway 68, 1.6 miles northeast of Ironsburg and 75 ft above mouth.	4.29	1983-84	10-19-83 6-19-84 9-12-84	.85 2.2 .72
03566253	Greasy Creek near Hopewell,TN	Lat 35°12'17", long 84°53'11", Bradley County, at bridge on Eureka Road, 0.2 mile north of Hopewell, 3.9 miles north of Cleveland, and at mile 0.9.	3.12	1979-81, 1983-84	10-19-83 6-19-84 9-13-84	.11 .12 .36
*03566200	Brymer Creek near McDonald, TN	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	1983-84	6-13-84 9-11-84	3.0 2.4
03574702	Flint River at Lincoln, TN	Lat 35°00'42", long 86°30'06", Lincoln County, at county road bridge, 0.4 mile southeast of Lincoln.	52.2	1952, 1983-84	10- 3-83 11- 7-83 6-13-84 9-11-84	6.3 20 14 9.7
03582205	Norris Creek below Howell, TN	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, 1978-81, 1983-84	10- 3-83 11- 7-83 6-14-84 9-11-84	.16 2.4 1.2 .42
03593115	Lick Creek near Michie, TN	Lat 35°04'30", long 88°25'47", McNairy County, at county road bridge. 1.7 miles north of Michie and at mile 11.2.	9.93	1982-84	8-13-84	.17
03601100	Big Bigby Creek at Needmore, TN	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, Tn.	48.3	1934, 1969, 1972-73 1975, 1978-81, 1983-84	10- 6-83 11-10-83 6-14-84 9-12-84	12 22 25 11
03602192	West Piney River near Dickson, TN	Lat 36°01'40", long 87°27'00", Dickson County, at State Highway 48 bridge, 2.3 miles northeast of Oak Grove, and at mile 1.2.	21.2	1950-52, 1962-63, 1965, 1979-81 1983-84	10- 3-83 6-12-84 7-11-84 8-17-84 8-28-84	8.7 16 12 9.9 9.8
03602194	West Piney River below State Highway 48 near Dickson,TN	Lat 36°00'43", long 87°26'33", Dickson County, at mouth, 5.4 miles southwest of Dickson.		1981, 1984	5-16-84 6-12-84 7-11-84 8-17-84 8-28-84 9- 5-84	a53 19 12 11 10 a11
03602207	East Piney River below Dickson, TN	Lat 36°00'37", long 87°26'20", Dickson County, at county road bridge, 0.2 mile above West Piney River, 2.5 miles east of Oak Grove.	17.9	1979-81, 1983-84	10- 3-83 5-16-84 6-12-84 7-11-84 8-17-84 8-28-84 9- 5-84	3.8 a35 10 6.6 4.9 4.6 a6.2
03602220	Piney River near Dickson, TN	Lat 35°59'30", long 87°26'19", Dickson County, at county road crossing, 2.7 miles southeast of Oak Grove.	46.7	1980-81, 1983-84	10- 3-83 6-12-84 7-11-84 8-17-84 8-28-84	14 31 22 18 17

* Also crest-stage partial-record station.
a Not base flow.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Tennessee River basin--Continued				
03602230	Piney River above Pinewood, TN	Lat 35°57'11", long 87°27'53", Hickman County, at county road crossing, 0.7 miles below mouth of Plumders Creek, 2.8 miles north of Pinewood and at mile 17.2.		1984	6-12-84 7-11-84 8-17-84 8-28-84	51 38 31 25
03602265	Piney River at Pinewood, TN	Lat 35°54'37", long 87°28'04", Hickman County, at county road crossing, 200 ft below mouth of Little Spring Creek, at Pinewood and at mile 13.5.		1984	6-12-84 7-11-84 8-17-84 8-28-84	110 85 60 57
03604750	Birdsong Creek at Holladay, TN	Lat 35°52'53", long 88°08'39", Benton County, at bridge on State Highway 69, 0.7 mile north of Holladay.	15.7	1975-78, 1980-84	8-14-84	15
03605968	Whiteoak Creek near Concord, TN	Lat 36°14'22", long 87°47'06", Humphreys County, at Collins Ford bridge, 11.5 miles north of Waverly.	54.5	1953-54, 1956, 1983-84	10- 5-83 6-13-84 9-11-84	12 31 18
03606020	Hurricane Creek near Stewart,TN	Lat 36°20'46", long 87°51'03", Stewart County, at county road bridge, 1.9 miles north of Stewart and at mile 7.7.	13.4	1983-84	10- 6-83 6-13-84 9-12-84	3.0 5.5 3.7
03606125	Standing Rock Creek near Fort Henry, TN	Lat 36°26'13", long 87°59'57", Stewart County, at point of flow into Kentucky Lake, 4.9 miles south of Fort Henry.	22.6	1956-57, 1983-84	10- 6-83 6-13-84 9-12-84	4.3 7.9 6.1
03606350	Big Sandy River at Westport, TN	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	1975-78, 1980-84	8-14-84	50
		Obion River basin				
07024760	Spring Creek near Greenfield, TN	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, 1975-78, 1980-84	8-15-84	27
07025190	Mud Creek near Sharon, TN	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, 1975-78, 1980-84	8-15-84	.61
07025300	North Fork Obion River at Jones Mill, TN	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, 1975-78, 1980-84	8-15-84	62
07026100	Reeds Creek near Trimble, TN	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	1975-78, 1980-84	8-15-84	0
07027270	Tar Creek at Oak Grove, TN	Lat 35°24'02", long 88°34'54", Chester County, at bridge on Finger Road, 0.3 mile south of Oak Grove.	16.4	1982-84	8-13-84	5.6
07027280	Jacks Creek at Jacks Creek, TN	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	1975-78, 1980-84	8-13-84	4.9
07027750	Nixon Creek near Nut Bush, TN	Lat 35°41'59", long 89°16'36", Haywood County, 1.6 miles northeast of Christmasville, at county road bridge, 7.2 miles east of Nut Bush, and at mile 6.60.	42.5	1976-78, 1980-81, 1983-84	8-16-84	.54

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Hatchie River basin--Continued				
07029450	Cub Creek near Hebron, TN	Lat 35°10'28", long 88°54'50", Hardeman County, at county road bridge, 0.3 mile southeast of State Highway 125, 1.4 miles northwest of Hebron, and 7.8 miles northwest of Middleton.	15.0	1980-84	8-13-84	2.0
07030160	Indian Creek at Gilt Edge, TN	Lat 35°33'09", long 89°49'20", Tipton County, at bridge on State Highway 59, 0.02 mile east of Gilt Edge.	65.9	1976-78, 1980-81, 1983-84	8-17-84	1.5
		Wolf River Basin				
07030940	Grays Creek near Cordova, TN	Lat 35°09'47", long 89°44'25", Shelby County, at bridge on Macon Road, 2.2 miles northeast of Cordova.	31.2	1982-84	8-17-84	.08

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 current meter or indirect measurements of peak flow. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1984

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Mobile River basin					
*02384900	Coahulla Creek near Cleveland, TN	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 National Geodetic Vertical Datum of 1929.	4.35	1955-84	5- 7-84	6.12	367
		Green River basin					
03313600	West Fork Drakes Creek tributary near Fountain Head, TN	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	1967-84	5- 6-84	11.22	742
		Cumberland River basin					
03417700	Mathews Branch tributary near Livingston, TN	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.	0.49	1955-84	5- 3-83 5- 7-84	3.63 4.49	a136 193
03418201	Doe Creek at Gainesboro, TN	Lat 36°21'23", long 85°39'20", Jackson County, at bridge on Highway 56, at Gainesboro. Datum of gage is 519.37 ft National Geodetic Vertical Datum of 1929.	5.72	1978-84	5- 7-84	4.82	-
03420360	Mud Creek tributary No. 2 near Summitville, TN	Lat 35°36'10", long 86°01'33", Coffee County, at culvert under county road, 3.5 miles northwest of Summitville, and 0.7 mile upstream from mouth.	2.28	1967-84	12- 3-83	4.67	375
03420600	Owen Branch near Centertown, TN	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	1955-84	5- 6-84	2.70	54
03421200	Charles Creek near McMinnville, TN	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	1955-84	5- 6-84	10.28	4,160
03425500	Spring Creek near Lebanon, TN	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 National Geodetic Vertical Datum of 1929.	35.3	1955-61†, 1962-84	5- 7-84	10.14	8,040
03425644	Town Creek above Gallatin, TN	Lat 36°24'17", long 86°25'36", Sumner County, 200 ft above culvert on U.S. Highway 31E, 1.3 miles northeast of intersection of Highway 109 and 31E in Gallatin.	2.25	b1983-84	8-28-84	9.2	2,310

See footnotes at end of the table.

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Cumberland River basin--Continued					
03425700	Spencer Creek near Lebanon, TN	Lat 36°14'20", long 86°24'03", Wilson County, at bridge on county road, 100ft north of junction of county road and and U.S. Highway 70, 6.5 miles west of square in Lebanon.	3.32	1955-84	5- 7-84	6.91	1,060
03426000	Drake Creek above Hendersonville, TN	Lat 36°13'32", long 86°31'40", Sumner County, at bridge on Long Hollow Pike, 4.5 miles north of Hendersonville. Datum of gage is 503.06 ft National Geodetic Vertical Datum of 1929.	19.2	1965-61†, 1962-84	5- 7-84	5.51	1,520
03426874	Brawleys Fork below Bradyville, TN	Lat 35°44'44", long 86°10'14", Cannon County, at brige on Bradyville Pike, 0.5 mile northwest of Bradyville.	15.4	1983-84	5- 7-84	26.20	2,430
034269424	Reed Creek near Bradyville, TN	Lat 35°44'44", long 86°12'31", Rutherford County, at bridge on Bradyville Pike, 2.4 miles northwest of Bradyville.	3.52	1983-84	5- 7-84	3.88	-
03428043	Lytle Creek at Sanbyrne Drive at Murfreesboro, TN	Lat 35°49'38", long 86°23'28", Rutherford County, at bridge on Sanbyrne Drive, 1 mile south of intersection of Highways 41 and 231 in Murfreesboro. Datum of gage is 591.91 ft National Geodetic Vertical Datum of 1929.	17.6	1978-84	5- 7-84	1.87	-
03430118	McCrory Creek at Ironwood Drive at Donelson, TN	Lat 36°09'07", long 86°39'02", Davidson County, at bridge under Ironwood Drive, 1.3 miles southeast of intersection of U.S. Highway 70 (Lebanon Road) and Donelson Pike in Donelson.	7.31	b1977-84	5- 6-84	9.87	2,850
03430400	Mill Creek at Nolensville, TN	Lat 35°57'32", long 86°40'31", Williamson County, at bridge on Sunset Road, 0.6 mile northwest of Nolensville. Datum of gage is 586.18 ft National Geodetic Vertical Datum of 1929.	12.0	1965-84	5- 7-84	9.82	11,400
03431000	Mill Creek near Antioch, TN	Lat 36°04'54", long 86°40'50", Davidson County, at bridge on Franklin-Limestone Road, 1.6 miles north of Antioch. Datum of gage is 472.57 ft National Geodetic Vertical Datum of 1929.	64.0	1954-61†, 1962-63, 1964-75†, 1976-84	5- 7-84	16.92	10,700
03431040	Sevenmile Creek at Blackman Road, at Nashville, TN	Lat 36°04'21", long 86°44'00", Davidson County, at bridge on Blackman Road, 7.0 miles southeast of State capitol in Nashville.	12.2	1965-84	5- 6-84	11.86	-
03431060	Mill Creek at Thompson Lane, near Woodbine, TN	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 National Geodetic Vertical Datum of 1929.	93.4	1965-84	5- 7-84	15.70	13,400
03431062	Mill Creek tributary at Glenrose Avenue, at Woodbine, TN	Lat 36°07'02", long 86°43'37", Davidson County, at culvert under Glenrose Avenue, 1.1 miles northeast of intersection of Nolensville Road and Thompson Lane in Woodbine, and 750 ft upstream from mouth.	1.17	b1977-84	5- 6-84	9.12	833

See footnotes at end of the table.

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Cumberland River basin--Continued					
03431120	West Fork Browns Creek at General Bates Drive, at Nashville, TN	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 National Geodetic Vertical Datum of 1929.	3.30	1965-84	5- 6-84	6.37	1,630
03431240	East Fork Browns Creek at Baird-Ward Printing Company, at Nashville, TN	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 National Geodetic Vertical Datum of 1929.	1.58	1965-84	5- 6-84	4.23	396
03431340	Browns Creek at Factory Street, at Nashville, TN	Lat 36°08'26", long 46°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 National Geodetic Vertical Datum of 1929.	13.2	1965-84	5- 6-84	9.05	4,240
03431490	Pages Branch at Avondale, TN	Lat 36°12'22", long 86°46'24", Davidson County, at culvert under Trinity Lane, 900 ft east of intersection of Interstate 65 and Trinity Lane at Avondale, 0.9 mile upstream from mouth.	2.01	b1977-84	5- 6-84	5.45	1690
03431520	Claylick Creek at Lickton, TN	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	1965-84	5- 6-84	6.66	1,650
03431550	Earthman Fork at Whites Creek, TN	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	1965-84	5- 6-84	8.76	2,120
03431573	Ewing Creek at Richmond Hill Drive at Parkwood, TN	Lat 36°13'50", long 86°46'28", Davidson County, at bridge on Richmond Hill Drive, 1.0 mile southeast of parkwood.	2.17	1976-84	5- 6-84	496.24	-
03431575	Ewing Creek at Brick Church Pike at Parkwood,TN	Lat 36°13'58", long 86°46'54", Davidson County, at bridge Brick Church Pike, 0.4 mile upstream from North Fork, 0.8 mile South of Parkwood.	3.02	1976-84	5- 6-84	476.95	-
03431578	Ewing Creek at Gwynwood Drive near Jordania,TN	Lat 36°13'58", long 86°47'32" Davidson County, at bridge on county road, 0.3 mile downstream from North Fork, 3.4 miles northeast of Bordeaux, 4.5 miles northeast of Jordonia, and at mile 2.1.	9.98	1976-84	12- 3-83	462.59	-
03431581	Ewing Creek below Knight Road, near Bordeaux,TN	Lat 36°13'55", long 86°48'14", Davidson County, at downstream side of bridge on Knight Road, 3.0 miles northeast of Bordeaux. Datum of gage is 438.27 ft. National Geodetic Vertical Datum of 1929.	13.3	1976-84	12- 3-83	447.95	-
03431677	Sugartree Creek at YMCA Access Road, at Green Hills, TN	Lat 36°06'13", long 86°49'12", Davidson County, at bridge on YMCA Access Road, .5 mile southwest of Hillsboro High School, at Green Hills.	1.51	1976-84	5- 6-84	545.21	-

See footnotes at end of t table.

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Cumberland River basin--Continued					
03431679	Sugartree Creek at Abbott Martin Road, at Green Hill, TN	Lat 36°06'23", long 86°49'17", Davidson County, at bridge on Abbott Martin Road, at intersection of Bedford Avenue and Abbott Martin Road, at Green Hills.	2.19	1976-84	5- 6-84	531.19	-
*03432925	Little Harpeth River at Granny White Pike, at Brentwood, TN	Lat 36°01'30", long 86°49'09", Williamson County, at bridge on Granny White Pike, 2.0 miles southwest of Brentwood. Datum of gage is 618.29 ft National Geodetic Vertical Datum of 1929.	22.0	1978-84	2- 9-82 5-19-83 5- 7-84	9.38 12.43 13.11	a1,450 a3,220 3,760
03434590	Jones Creek near Burns, TN	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	1984	5- 6-84	9.87	3,750
03434616	Hall Branch near Charlotte,TN	Lat 36°11'48", long 87°20'30" Dickson County, at Culvert under State Highway 48, 1.4 miles north of Charlotte and at mile 2.6.	0.50	1984	5- 6-84	15.71	385
034350021	Bartons Creek near Cumberland Furnance, TN	Lat 36°15'02", long 87°20'00" Dickson County, at bridge on Slayton road, 1.9 miles southeast of Cumberland Furnace.	22.29	1984	5- 7-84	12.17	-
0343500213	Bartons Creek Triuatary near Stayton, TN	Lat 36°15'19", long 87°19'12" Dickson County, at Culvert under Jackson Lane road, 1.5 miles southeast of Stayton 2.5 miles southeast of Cumberland Furnance.	0.51	1984	5- 7-84	10.56	195
03435030	Red River near Portland, TN	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†, 1976-84	5- 6-84	11.42	3,970
03436505	Cummings Creek nr Dotsonville,TN	Lat 36°29'18", long 87°28'06" Montgomery County, at bridge on Dotsonville road, 1.1 miles northeast of Dotsonville.	2.65	1984	5- 7-84	8.32	-
03436700	Yellow Creek near Shiloh, TN	Lat 36°20'55", long 87°32'20", Montgomery County, at bridge on State Highway 13, 2.6 miles west of Shiloh, 3.0 miles downstream from Leatherwood Creek, 9.0 miles east of Erin. Datum of gage is 390.13 ft. National Geodetic Vertical Datum of 1929.	124	1957-80†, 1982-84	5- 6-84	17.75	16,200
		Tennessee River basin					
03461230	Caney Creek near Cosby, TN	Lat 35°47'03", long 83°12'11", Cocke County, at culvert under State Highway 32, 3.3 miles southeast of Cosby.	1.62	1967-84	5- 7-84	3.67	50
03465000	North Indian Creek near Unicoi, TN	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 National Geodetic Vertical Datum of 1929.	15.9	1945-57†, 1959-84	5- 7-84	5.30	977
03465607	Cherokee Creek near Embreeville, TN	Lat 36°12'24", long 82°29'23", Washington County, at culvert on county road, 0.5 mile southeast of Mayday, 1.4 miles northwest of Kansas City.	-	1984	5- 7-84	18.37	-

See footnotes at end of the table

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Tennessee River basin--Continued					
*03465780	Clear Fork near Fairview, TN	Lat 36°19'33", long 82°33'47", Washington County, at Culvert on State Highway 81, 2.0 miles southwest of Sulfur Springs, and at mile 3.8	10.5	1983-84	5- 7-84	7.26	-
*03466295	Camp Creek at Camp Creek, TN	Lat 36°05'39", long 82°45'37", Greene County, at bridge on County road at Camp Creek, 6.2 miles northeast of Nolichucky Dam.	9.99	1983-84	5- 7-84	7.91	-
03466865	Roaring Fork North of Greeneville, TN	Lat 36°12'45", long 82°50'15", Greene County, at bridge on county road, 2.3 miles northwest of Bradburn Hill and at mile 7.3.	16.1	1983-84	7-21-84	8.83	-
03469110	Ramsey Creek near Pittman Center, TN	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	1967-84	5- 7-84	4.87	102
*03476960	Indian Creek at Childress, TN	Lat 36°25'38", long 82°15'54", Sullivan County, at bridge on U.S. Highway 19, 3.3 miles South of Bluff City and at mile 4.6.	6.79	1983-84	5- 7-84	10.73	-
*03478615	Evans Creek near Blountville, TN	Lat 36°31'19", long 82°18'12", Sullivan County, at State Highway 37 bridge, 1.5 miles southeast of Blountville.	2.50	1983-84	7-21-84	12.38	-
03481600	Corn Creek at Mountain City, TN	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, 1963-84	5- 7-84	4.08	376
03482000	Roan Creek near Neva, TN	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 National Geodetic Vertical Datum of 1929.	102	1943-55†, 1959-84	5- 7-84	9.19	7,850
03486225	Powder Branch near Johnson City, TN	Lat 36°19'03", long 82°16'40", Carter County, at culvert under county road, 4.0 miles east of Johnson city, 4.3 miles southwest of Elizabethton, and at mile 0.2.	4.88	1973-84	5- 7-84	9.82	191
03487507	Horse Creek at Sullivan Gardens, TN	Lat 36°28'13", long 82°35'52", Sullivan County, at bridge on Country road, 2.5 miles southwest of Vernon Heights and at mile 7.3.	26.0	1983-84	5- 7-84	14.41	-
03491200	Big Creek tributary near Rogersville, TN	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	1955-84	5- 7-84	6.75	345
03491490	Dodson Creek Tributary near Rogersville,TN	Lat 36°21'19", long 82°57'03", Hawkins County, at bridge on County road, 1.4 miles northwest of Enterprise and at mile 0.5.	0.32	1983-84	5- 7-84	6.83	-
03498700	Nails Creek near Knoxville, TN	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.	0.36	1955-84	7-31-82 5- 7-84	6.45 3.23	a240 64

See footnotes at end of the table

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Tennessee River basin--Continued					
03519610	Baker Creek Tributary near Binfield, TN	Lat 35°41'56", long 84°02'46", Blount County, at culvert under county road, 1.5 miles east of Binfield.	2.10	1966-77, 1979-84	5- 7-84	5.75	364
03519640	Baker Creek near Greenback, TN	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. Datum of gage is 845.01 ft. National Geodetic Vertical Datum of 1929.	16.0	1965-75†, 1976-84	5- 7-84	8.00	1,150
03534000	Coal Creek at Lake City, TNc/	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 National Geodetic Vertical Datum of 1929.	24.5	1932-34†, 1955-84	5- 7-84	4.42	1,940
03535180	Willow Fork near Halls Crossroads, TN	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 National Geodetic Vertical Datum of 1929.	3.23	1967-84	5- 7-84	6.68	388
03538130	Caney Creek near Kingston, TN	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.	5.55	1962-84	5- 7-84	7.47	1,640
03538200	Poplar Creek near Oliver Springs,	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	1954-84	5- 7-84	15.20	3,910
03538600	Obed River at Crossville, TN	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	1955-84	5- 7-84	7.83	778
03538900	Self Creek near Big Lick, TN	Lat 35°47'54", long 85°02'33", Cumberland County, at culvert under county road, 1.3 miles southwest of Big Lick.	3.80	1968-84	5- 7-84	4.15	224
03541100	Bitter Creek near Camp Austin, TN	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	1967-84	5- 7-84	5.64	848
03555900	Coker Creek near Ironsburg, TN	Lat 35°13'05", long 84°20'28", Monroe County, at bridge on State Highway 68, 4.2 miles southwest of Coker Creek.	22.4	1983-84	5- 8-84	4.38	-
*03566200	Brymer Creek near McDonald, TN	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	1955-84	5- 7-84	5.63	769
03566599	North Chickamauga Creek at Greens Mill, near Hixson, TN	Lat 35°10'30", long 85°13'40", Hamilton County, at bridge on Boy Scout Road, 2.3 miles north of Hixson.	99.5	1925,1944, 1953-56, 1980-84	12- 3-83	32.00	-
03569168	Stringers Branch at Leawood Drive, at Red Bank TN	Lat 35°07'00", long 85°17'28", Hamilton County, at bridge on Leawood Drive at Red Bank.	1.54	1980-84	12- 3-83	22.5	-

See footnotes at end of the table

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Tennessee River basin--Continued					
03570800	Little Brush Creek near Dunlap, TN	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	1959-84	12- 3-83	6.16	1,460
03571500	Little Sequatchie River at Sequatchie, TN	Lat 35°07'47", long 85°35'10", Marion County, at Highway 27 bridge, 1.0 mile northeast of Sequatchie.	116	1925,1929, 1930, 1932-34†, 1944,1951-54, 1965,1979-84	12- 3-84	10.78	-
03571730	Standifer Branch at Jasper, TN	Lat 35°04'22", long 85°36'56", Marion County, at bridge on U.S. Highways 41, 64, and 72, 0.6 mile east of courthouse, 0.8 mile above Town Creek, at Jasper.	15.3	1982-84	12- 3-83	16.80	-
03571800	Battle Creek near Monteagle, TN	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 National Geodetic Vertical Datum of 1929.	50.4	1955-84	12-28-83	10.46	6,710
03581500	West Fork Mulberry Creek at Mulberry, TN	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 National Geodetic Vertical Datum of 1929.	41.2	1954-62†, 1963-66, 1967-68†, 1969-84	12- 3-83	12.24	5,740
03583200	Chicken Creek at McBurg, TN	Lat 35°11'03", long 86°48'47", Lincoln County, at bridge on county highway R7374 in McBurg.	7.66	1955-84	5- 8-84	7.09	4,360
03583300	Richland Creek near Cornersville, TN	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 National Geodetic Vertical Datum of 1929.	47.5	1962-68†, 1969-84	5- 8-84	13.36	6,320
035944242	Owl creek at Lexington, TN	Lat 35°38'26", long 88°22'13", Henderson County, on State Highway 20, 1.37 miles east of Lexington.	-	1984	5- 8-84	14.42	-
03597000	Garrison Fork at Fairfield, TN	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 National Geodetic Vertical Datum of 1929.	66.3	1954-58†, 1959-66, 1967-68†, 1970-84	5- 8-84	13.30	4,480
03597300	Wartrace Creek above Bell Buckle, TN	Lat 35°37'45", long 86°21'22", Bedford County, at culvert under county road, 2.7 miles north of Bell Buckle.	4.99	1966-84	5- 8-84	7.22	1,050
03599200	East Rock Creek at Farmington, TN	Lat 35°30'05", long 86°42'50", Marshall County, at culvert, on old State Highway 64, 0.2 mile west of Farmington.	43.1	1966-84	5- 8-84	12.21	6,180
03602170	West Piney River at Hwy 70 near Dickson, TN	Lat 36°05'21", long 87°28'12", Dickson County, at U.S.Highway 70 bridge, 4.0 miles west of Dickson.	2.16	1984	5- 6-84	28.17	1,230
03604070	Coon Creek tributary near Hohenwald, TN	Lat 35°34'07", long 87°40'02", Perry County, at culvert under State Highway 20, 7 miles northwest of Hohenwald.	0.51	1967-84	5- 8-84	6.58	301

See footnotes at end of the table

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Tennessee River basin--Continued					
03604080	Hugh Hollow Branch near Hohenwald, TN	Lat 35°34'59", long 87°40'36", Perry County, at culvert under State Highway 20, 8 miles northwest of Hohenwald.	1.52	1967-84	5- 8-84	5.55	d1,400
03604090	Coon Creek above Chop Hollow, near Hohenwald, TN	Lat 35°35'19", long 87°41'09", Perry County, at bridge on State Highway 20, 9 miles northwest of Hohenwald.	6.02	1967-84	5- 8-84	6.50	2,700
03604595	Little Blue Creek tributary near Gorman	Lat 36°19'44", long 87°42'13", Humpherys County, at Culvert under county road, 1.8 miles south of Gorman, 44 miles southwest of McEwen and at mile 0.3	0.62	1984	5- 6-84	21.89	-
03605880	Cane Creek at Stewart, TN	Lat 36°19'09", long 87°50'21", Houston County, at bridge on County road, 200ft north of inter-section of County road and state highway 147 at mile 7.0.	4.12	1984	5- 8-84	18.02	-
03604580	Blue Creek near New Hope, Tn	Lat 36°03'52", long 87°38'58", Humphreys County, at County road bridge, 1.8 miles north-west of New Hope, 3.1 miles southeast of McEwen and at mile 3.9.	13.2	1984	5- 7-84	16.62	-
07024225	Neil Ditch near Henry, TN	Lat 36°10'19", long 88°23'33", Henry County, located on county road 2.68 miles southeast of Henry and 1.58 miles north of Henry-Carroll county line.	-	1984	5- 8-84	11.03	-
07025220	Cane Creek near Martin, TN	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 National Geodetic Vertical Datum of 1929.	6.79	1955-84	12- 3-83	e10.92	911
07028500	North Fork Forked Deer River at Trenton, TN	Lat 35°58'49", long 88°55'35", Gibson County, at bridgeen State Highways 77 and 104, 0.8 mile east of Trenton, 1.0 mile downstream from Thompson Levee Creek and 1.6 miles upstream from Cain Creek.	73.5	1950-71, 1980-84	3- 5-84	f13.53	-
07028600	Cain Creek trib-utary near Trenton, TN	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.	0.95	1955-57, 1959-84	3- 5-84	6.09	434
07028700	Cain Creek near Trenton, TN	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	1954-84	3- 5-84	10.66	980
		Loosahatchie River basin					
07030270	Clear Creek near Arlington, TN	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 National Geodetic Vertical Datum of 1929.	60.5	1954-56, 1959-84	5- 8-84	g15.44	3,950

* Also a low-flow partial-record station.
† Operated as a continuous-record gaging station.
a Revised.
b Operated as a flood hydrograph statien.
c Published as at Coal Creek prior to 1935.
d Estimate.
e Maximum for period October 1,1983 to January 4,1984.
f Maximum for period October 1,1983 to April 5,1984.
g Maximum for period October 1,1983 to June 12,1984.

Miscellaneous Sites

Measurements of streamflow at points other than gaging stations are given in the following table. 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 1984

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Cumberland River basin				
03436644 Cedar Creek	Yellow Creek	Lat 36°12'35", long 87°28'31", Dickson County, 2.25 Southwest of Vanleer, 2.1 miles west of Taylor Crossroads near Vanleer, TN.	--		6-19-84	*1.2
		Tennessee River basin				
036021972 East Piney River	Piney River to Duck River	Lat 36°03'57", long 87°23'55", Dickson County, 50 ft'below Tice Spring 0.1 mile below State Highway 48, 0.9 mile southwest of Dickson.	--		5-16-84 9- 5-84	3.3 *.53
03602200 East Piney River	Piney River to Duck River	Lat 36°03'08", long 87°23'51", Dickson County,at County road brige, 1.8 miles south of Dickson.	6.21	1962-63, 1965,1969, 1979,	5-16-84 9- 5-84	11 *2.4
3601580872403 East Piney River	Piney River to Duck River	Lat 36°01'08", long 87°24'03", Dickson County, at County road brige, 2.3 miles south of Dickson	7.43	1979	5-16-84 9- 5-84	15 *3.7
03602209 Piney River	Duck River	Lat 36°00'36", 87°26' 38", Dickson County, 2.2 miles east of OakGrove	44.1	1979	5-16-84 8-22-84 8-28-84 9- 5-84 9-21-84	90 *16 *14 *16 *13
036022297 Piney River	Duck River	Lat 35°57'33", long 87°27'31", Hickman County,0.2 mile above Piunders Creek, 3.4 north of Pinewood.	--		8-23-84 8-28-84 9-21-84	*24 *21 *20

Springs

In 1931 a study of large springs in Tennessee was made and the results published in WSP 713. From 1950 to 1954 a more detailed study, including some of these springs, was made. Results of this study and all subsequent spring measurements were published annually in WSP's from 1950 to 1960. Since 1960 results of measurements have been published in annual State reports.

One measurement was made in the 1984 Water Year. The results of this measurement are given in the following table.

Discharge measurement of springs during water year 1984

Site number and name	Location	Tributary to	Date	Discharge (gpm)
	Dickson County			
03436645 Columbia Cavern Spring near Vanleer, TN	Lat 36°12'39", long 87°28'26" 2.25 miles southwest of Vanleer, 2.1 miles west of Taylors Crossroads.	Cedar Creek to yellow creek to Cumberland River	6-19	490

Piney River Seepage Investigation--Piney River from headwaters to mile 8.3, including sections of East Piney River and West Piney River

Discharge measurements were made on August 28, 1984, on Piney River Tributaries including sections of East Piney River and West Piney River to define the low-flow hydrology and quality of water at base flow conditions. The reach studied included the main-stem and tributaries from mile 8.3 on the Piney River to mile 0.20 on the East Piney River and to mile 1.2 on the West Piney River. The measurements were made during a period of constant base flow. Tributary flow was considered a contribution and not a gain. Temperature and specific conductance were collected at each of the sites.

West Piney River mile	Site number and stream	Location	Drainage Area (mi)	Meas. disch. (ft³/s)	West Piney River gain or loss	Water temp. (°C)	Specific conductance (umhos/cm)
1.2	03602192 West Piney River	Lat 36°01'40", long 87°27'00", Dickson County, at State Highway 48 bridge, 2.3 miles northeast of Oak Grove, and at mile 1.2.	21.2	9.80	-	19.0	242
1.2	0360219265 Dry Hollow Branch	Lat 36°01'38", long 87°26'57", Dickson County, 2.4 miles northeast of Oak Grove, 4.8 miles southwest of Dickson, and 150 feet above mouth.	1.65	.24	-	18.5	288
1.1	036021927 West Piney River Tributary	Lat 36°01'32", long 87°27'05", Dickson County, at State Highway 48 culvert, 2.2 miles northeast of Oak Grove.	.26	0.00	-	-	-
0.9	03602193 Bruce Hollow Branch	Lat 36°01'22", long 87°27'00", Dickson County, below county road bridge 2.1 miles northeast of Oak Grove and at mile 0.1.	1.95	0.00	-	-	-
0.0	03602194 West Piney River	Lat 36°00'43", long 87°26'33", Dickson County, at mouth, 5.4 miles southwest of Dickson.	25.7	10.4	+.36	18.5	248
East Piney River Mile					East Piney River gain or loss		
0.20	03602207 East Piney River	Lat 36°00'37", long 87°26'20", Dickson County, at county road bridge, 0.2 miles above West Piney River, 2.5 miles east of Oak Grove.	17.9	4.58	-	21.0	356
0.0	03602208 East Piney River	Lat 36°00'42", long 87°26'32", Dickson County, 20 feet above West Piney River, 5.4 miles southwest of Dickson.	18.0	4.16	-.42	21.5	316
23.6		Confluence of East and West Piney Rivers					
Piney River Mile					Piney River gain or loss		
23.6	036022087 Piney River Tributary	Lat 36°00'44", long 87°26'36", Dickson County, 2.2 miles east of Oak Grove, 5.4 miles southwest of Dickson, and 200 feet above mouth.	0.41	0.00	-	-	-
23.5	03602209 Piney River	Lat 36°00'36", long 87°26'38", Dickson County, 2.2 miles east of Oak Grove.	44.1	13.9	-.66	20.0	280
23.4	03602210 Gray Hollow Branch	Lat 36°00'31", long 87°26'30", Dickson County, at county road bridge at mouth, 5.6 miles southwest of Dickson.	0.73	0.00	-	-	-

Piney River seepage investigation--Piney River from headwaters to mile 8.3, including sections of East Piney River and West Piney River

Piney River mile	Site number and stream	Location	Drainage Area (mi)	Meas. disch. (ft³/s)	Piney River gain or loss	Water temp. (°C)	Specific conductance (umhos/cm)
23.1	03602214 Piney River Tributary at Opossum Hollow	Lat 36°00'15", long 87°26'43", Dickson County, at county road bridge, 2.1 miles east of Oak Grove at mile 0.2.	0.51	.02	-	23.0	380
22.9	03602217 Piney River	Lat 36°00'06", long 87°26'27", Dickson County, 2.4 miles east of Oak Grove and at mile 22.9.	45.7	17.0	+3.08	20.0	290
21.7	03602220 Piney River	Lat 35°59'30, long 87°26'19, Dickson County, 2.7 miles southeast of Oak Grove.	46.7	17.0	0	20.0	290
21.5	03602221 Piney River	Lat 35°59'24", long 87°26'06, Dickson County, 5.8 miles north of Pinewood, 2.9 miles southeast of Oak Grove, and at mile 21.5.	46.7	15.8	-1.20	20.0	290
21.5	03602222 Double Branch nr Oak Grove	Lat 35°59'24", long 87°26'24", Dickson County, 2.9 miles southeast of Oak Grove, and 50 feet above mouth.	1.30	.26	-	19.0	255
21.1	03602223 Wells Branch	Lat 35°59'20", long 87°26'19", Dickson County, at county road bridge, 2.8 miles southeast of Oak Grove, and at mile 0.1.	0.77	0.00	-	-	-
20.6	03602224 Piney River	Lat 35°58'56", long 87°26'37", Hickman County, 1.0 mile upstream of Bear Creek, 2.6 miles southeast of Oak Grove, and at mile 20.6		16.1	+.04	20.0	285
19.5	036022293 Bear Creek	Lat 35°58'30", long 87°26'48", Hickman County, 2.9 miles southeast of Oak Grove, 5.0 miles north of Pinewood, and 150 feet above mouth.	22.4	2.29	-	20.5	265
19.5	036022294 Piney River	Lat 35°58'25", long 87°26'45", Hickman County, 300 feet below Bear Creek, 3.0 miles southeast of Oak Grove, and at mile 19.5.	72.6	23.7	+5.31	21.0	280
19.1	036022295 Piney River Tributary	Lat 35°58'10", long 87°26'54", Hickman County, at county road bridge, 3.2 miles southeast of Oak Grove, and at mile 0.2.	0.27	0.00	-	-	-
18.7	036022296 Piney River	Lat 35°57'53", long 87°27'03", Hickman County, 3.5 miles southest of Oak Grove, 3.8 miles north of Pinewood, and at mile 18.7.	73.3	23.1	-.60	21.5	280
18.0	036022297 Piney River	Lat 35°57'33", long 87°27'31", Hickman County, 0.2 mile above Plunders Creek, 3.4 miles north of Pinewood, and at mile 18.0.	-	21.1	-2.00	21.0	310
17.8	036022299 Plunders Creek	Lat 35°57'39", long 87°27'43", Hickman County, 3.4 miles north of Pinewood, 3.4 miles south of Oak Grove, and 100 feet above mouth.	3.40	.71	-	19.0	280
17.2	03602230 Piney River	Lat 35°57'11", long 87°27'53", Hickman County, at county road crossing, 0.7 miles below mouth of Plumders Creek, 2.8 miles north of Pinewood and at mile 17.2.	77.5	25.2	+3.39	20.0	260

Piney River Seepage Investigation--Piney River from headwaters to mile 8.3, including sections of East Piney River and West Piney River

Piney River mile	Site number and stream	Location	Drainage Area (mi)	Meas. disch. (ft³/s)	Piney River gain or loss	Water temp. (°C)	Specific conductance (umhos/cm)
16.9	036022303 Piney River Tributary at Wrenn Hollow	Lat 35°57'03, long 87°27'55", Hickman County, at county road bridge, 2.7 miles north of Pinewood, and at mile 0.1.	0.63	0.00	-	-	-
16.1	03602231 Piney River	Lat 35°56'34", long 87°28'08", Hickman County, 200 feet above Garner Creek, 2.1 miles north of Pinewood, and at mile 16.1.	78.8	25.7	+.50	20.0	260
16.1	03602238 Garner Creek	Lat 35°56'32", long 87°28'08", Hickman County, 2.1 miles north of Pinewood, and 100 feet above mouth.	27.6	6.18	-	20.0	240
15.7	03602239 Piney River Tributary	Lat 35°56'23", long 87°27'56", Hickman County, at county road bridge, 2.0 miles north of Pinewood, and 350 feet above mouth.	0.13	0.00	-	-	-
15.2	03602240 Piney River	Lat 35°55'56", long 87°28'05", Hickman County, at county road bridge, 1.4 miles north of of Pinewood, and at mile 15.2.	107	36.2	+4.32	20.0	275
15.1	03602252 Big Spring Creek	Lat 35°55'53", long 87°28'04, Hickman County, 1.4 miles north of Pinewood, and 100 feet above mouth.	22.7	12.4	-	18.0	245
15.0	03602254 Piney River Tributary	Lat 35°55'48", long 87°28'11", Hickman County, at county road bridge, 1.3 miles north of Pinewood, and 200 feet above mouth.	0.25	0.00	-	-	-
14.6	03602258 Beaver Creek	Lat 35°55'26", long 87°28'23", Hickman County, 0.9 mile north of Pinewood, and 100 feet above mouth.	10.4	2.96	-	19.0	240
14.5	03602259 Piney River	Lat 35°55'21", long 87°28'24", Hickman County, 450 feet below Beaver Creek, 0.8 mile north of Pinewood, and at mile 14.5.	141	51.9	+.34	20.5	240
13.6	03602261 Little Spring Creek	Lat 35°54'39", long 87°28'00", Hickman County, 0.2 mile east of Pinewood, and 150 feet above mouth.	8.80	1.58	-	21.5	210
13.5	03602265 Piney River	Lat 35°54'37", long 87°28'04", Hickman County, at county road crossing, 200 feet below mouth of Little Spring Creek, at Pinewood, and at mile 13.5.	150	57.2	+3.72	21.0	240
13.4	03602269 Piney River Tributary	Lat 35°54'35", long 87°28'08", Hickman County, at county road bridge, 0.1 mile south of Pinewood, and 300 feet above mouth.	0.58	0.00	-	-	-
11.5	03602274 Keys Branch	Lat 35°53'26", long 87°28'09", Hickman County, 1.4 miles south of Pinewood, 2.9 miles north of Nunnelly, and 150 feet above mouth.	2.84	1.48	-	19.5	215
11.5	03602275 Piney River	Lat 35°53'25", long 87°28'12", Hickman County, at State Highway 48 Bridge, 1.5 miles south of Pinewood, and at mile 11.5.		64.3	+5.62	22.5	185

Piney River Seepage Investigation--Piney River from headwaters to mile 8.3, including sections of East Piney River and West Piney River

Piney River mile	Site number and stream	Location	Drainage Area (mi)	Meas. disch. (ft³/s)	Piney River gain or loss	Water temp. (°C)	Specific conductance (umhos/cm)
10.9	03602280 Piney River Tributary at Campground Hollow	Lat 35°53'50", long 87°28'50", Hickman County, at county road bridge, 1.1 miles south of Pinewood, and at mile .4.	1.23	.10	-	20.0	165
10.7	03602420 Mill Creek	Lat 35°53'25", long 87"28'50", Hickman County, 1.6 miles south of Pinewood, and 200 feet above mouth.	33.5	24.1	-	20.5	200
10.6	03602422 Piney River	Lat 35°53'23", long 87°28'55", Hickman County, at Matlock Ford, 1.6 miles south of Pinewood, and at mile 10.6.	191	94.3	+5.80	21.0	245
10.2	03602429 Piney River Tributary at Betty Hollow	Lat 35°53'26", long 87°29'22", Hickman County, 1.8 miles southwest of Pinewood, and at mouth.	0.64	0.00	-	-	-
10.1	03602430 Piney River	Lat 35°53'25", long 87°29'23", Hickman County, 0.4 mile west of Matlock Fork, 1.8 miles southwest of Pinewood, and at mile 10.1.	192	93.9	-.40	21.0	230
8.3	03602500 Piney River	Gaging Station at Vernon (03602500)	202	96.1	+2.20	20.5	235

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN

03534880 - UNION VALLEY QUARRY NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 12...	1030	318	7.1	22.0	13.0	150	25	43	11	3.3

DATE	SODIUM ADSORPTION RATIO	PERCENT SODIUM	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
APR 12...	.1	4	1.7	128	20	43	2.5	173	.24	.56

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)
APR 12...	<.010	<100	<10	<1	3	<1	2	200	1	10

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	URANIUM NATURAL DISSOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	<.1	3	260	<1	10	1.1	1.3	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535076 - SCARBORO CREEK AT OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 12...	0800	.05	85	6.0	20.0	10.0	9.2	33	2	8.6

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	2.7	2.5	.2	14	1.5	60	11	1.3	64	.09

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	<.10	<.010	<100	<10	<1	2	1	1	710	1

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<10	30	<.1	<1	20	1	20	.08	2.0	<.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 03...	1315	.01	105	17.0	15

TENNESSEE RIVER BASIN--Continued

03535080 - SCARBORO CREEK BELOW OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1530	.19	460	7.3	25.0	15.0	7.0	160	0	41	15

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	15	.5	16	9.6	198	19	8.9	24	270	.37

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	.19	<.010	200	<10	1	3	7	4	180	4

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	430	.1	<1	140	<1	10	.8	5.1	<.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
JUN 03...	1430	.07	660	16.0	10	<1

TENNESSEE RIVER BASIN--Continued

03535082 - UNNAMED SPRING TO SCARBORO CRK AT OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 12...	1230	.07	400	7.1	25.0	12.5	5.5	200	5	70	6.7	2.6

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)
APR 12...	.0	3	1.5	198	30	17	4.1	256	.35	.95	<.010	<100

DATE	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)
APR 12...	<10	<1	1	1	1	230	1	<10	30	<.1	<1	110

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<1	10	<5.0	.6	<3.1	.7	<2.7	.7	.9	.90	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535084 - SCARBORO CREEK TRIB TO OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1400	.25	380	7.5	25.0	14.0	10.4	190	0	56	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	4.6	.2	5	1.6	186	11	16	9.4	231	.31

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	.69	<.010	100	<10	<1	3	<1	2	190	3

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	20	<.1	<1	100	<1	10	1.0	1.4	<.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 03...	1400	.22	425	15.5	2.0

TENNESSEE RIVER BASIN--Continued

03535087 - UNNAMED SPRING NO. 2 TO SCARBORO CRK NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1700	.32	282	7.4	20.0	15.0	8.2	150	0	31	18

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
APR 12...	.90	.0	1	.60	156	12	4.0	2.0	7.6	184	160

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	.25	.32	<.010	<100	<10	<1	3	5	1	100	2

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	20	<.1	<1	30	1	10	.9	.60	<.01

TENNESSEE RIVER BASIN--Continued

03535090 - UNNAMED SPRING NO.1 TO SCARBORO CRK NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1800	.19	232	7.4	17.0	14.0	7.2	140	0	28	16

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	.70	.0	1	.70	140	11	2.2	1.6	159	.22

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	.17	<.010	<100	<10	<1	2	<1	1	170	1

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<10	<10	<.1	<1	10	<1	30	.7	.70	<.01

03535105 - UNNAMED SPR ABV KIRBY CEM NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 12...	0815	.16	183	7.0	21.5	13.0	7.7	93	0	19	11	.50

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)
APR 12...	.0	1	.90	18	2.7	1.4	127	.17	.46	.050	<100	<10

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)
APR 12...	<1	3	2	1	210	3	<10	20	<.1	<1	20

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<1	40	<2.3	.9	<1.4	.8	<1.2	.7	.7	.60	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535110 - SCARBORO CREEK TRIBUTARY NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 12...	1200	.88	262	8.0	20.0	14.0	8.2	130	0	30

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	13	.70	.0	1	1.0	2.6	4.5	1.8	166	.23

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	.51	<.010	<100	<10	<1	3	3	2	120	5

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	20	20	<.1	<1	40	<1	20	1.4	.80	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535120 - UNNAMED SPRING AT KIRBY CEMETARY NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 13...	0900	.13	245	7.4	14.0	8.0	120	19	39	5.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 13...	1.4	.0	2	.60	100	7.7	6.7	3.9	153	.21

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 13...	.29	<.010	<100	<10	<1	<1	1	1	190	2

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 13...	<10	10	.1	<1	50	<1	30	.70	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535590 - UNNAMED SPRING BELOW TAILINGS POND NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1500	.27	360	7.2	25.0	12.5	1.6	160	0	41	13

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	2.5	.0	3	4.5	560	68	34	2.7	231	.31

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	.10	.030	100	<10	<1	3	10	1	1600	5

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	90	1000	<.1	11	770	<1	20	1.0	.40	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535598 - MCCOY BRANCH NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 12...	1730	3.1	324	8.7	22.0	12.0	12.6	140	29	40	9.7	3.3

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)
APR 12...	.1	5	3.1	--	.4	48	3.8	204	.28	<.10	.080	100

DATE	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)
APR 12...	<10	<1	7	1	4	290	5	90	50	<.1	32	230

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	30	20	<4.6	2.4	<2.6	1.9	<2.2	1.7	2.5	.70	<.01

TENNESSEE RIVER BASIN--Continued

03535615 - MCCOY BRANCH TRIB NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
APR 13...	1015	<.01	200	8.0	16.5	9.0	97	2	26	7.9	1.6	.0

DATE	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)
APR 13...	3	.80	96	1.9	6.5	3.1	133	.18	.24	<.010	<100

DATE	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)
APR 13...	<10	<1	1	<1	2	250	1	10	10	.2	1

DATE	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 13...	30	<1	20	2.6	<.4	1.3	<.5	1.2	<.4	1.9	<.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 03...	1630	.01	225	20.0	4.4

TENNESSEE RIVER BASIN--Continued

03535636 - WALKER BR TRIB NR MT VERNON CEM NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1230	.14	115	7.3	15.0	8.9	53	0	11	6.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	.70	.0	3	.90	54	5.2	3.2	1.9	85	.12

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	<.10	.010	<100	<10	<1	2	<1	1	130	1

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<10	10	<.1	<1	10	<1	10	.08	.80	<.01

TENNESSEE RIVER BASIN--Continued

03535639 - UNNAMED SPR BELOW MT VERNON CEM NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	0915	.47	158	6.7	12.0	9.2	77	0	18	7.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	1.0	.0	3	.80	77	30	3.7	2.2	112	.15

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	<.10	<.010	<100	<10	3	4	6	3	300	4

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	10	<.1	<1	20	<1	30	.8	.60	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535641 - UNNAMED SPR NR MT VERNON CEM NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	0945	.02	240	6.7	12.0	7.9	110	2	27	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	1.4	.0	3	.60	111	43	6.0	4.5	151	.21

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	<.10	<.010	<100	<10	<1	4	5	1	180	2

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	10	.1	<1	30	<1	20	.9	.50	<.01

TENNESSEE RIVER BASIN--Continued

03535643 - UNNAMED SPR TO WALKER BR TRIB NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1425	.37	225	6.8	12.5	8.2	110	0	27	10

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	.60	.0	1	.50	111	34	5.9	1.8	141	.19

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	<.10	.080	<100	<10	<1	2	<1	2	90	3

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<10	<10	<.1	1	40	<1	60	.17	.60	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03535648 - WALKER BRANCH TRIB NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 12...	1530	.87	190	7.7	14.5	10.2	94	0	23	8.8	.90

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
APR 12...	.0	2	.60	94	3.6	4.4	2.1	121	.16	<.10

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)
APR 12...	<.010	<100	<10	<1	2	1	1	220	1	<10

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	<.1	<1	2	20	1	10	.8	.70	<.01

TENNESSEE RIVER BASIN--Continued

03538253 - BEAR CRK NR MT VERNON CEMTARY NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 13...	1045	.02	4000	6.6	24.0	11.0	1.6	1600	1300	530	75	180

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)
APR 13...	2	19	9.7	607	153	190	220	300	<.010	<1	1300	2.2

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 30...	1815	<.01	3900	15.0	3.2

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03538254 - UNNAMED TRIB TO BR CRK TRIB NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 13...	1045	.08	86	6.8	20.0	14.0	9.2	33	7	9.8

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
APR 13...	2.1	2.8	.2	15	1.2	8.0	11	3.5	3.9	<.010

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)
APR 13...	<100	<10	<1	4	3	2	740	6	<10

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 13...	80	<.1	<1	30	<1	20	.40	2.3	<.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 03...	1200	.01	145	21.0	5.0

TENNESSEE RIVER BASIN--Continued

03538255 - BEAR CRK TRIB NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 13...	0830	.11	2300	5.9	19.0	13.0	8.9	1000	890	350

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
APR 13...	39	23	.3	5	2.9	144	351	9.2	19	280

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)
APR 13...	<.010	2400	<10	58	1	20	2	240	2	<10

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 13...	5900	.1	<1	1100	<1	40	1.0	2.7	.06

TENNESSEE RIVER BASIN--Continued

03538256 - BEAR CREEK AT BR CRK RD NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 13...	1215	.29	1800	7.6	21.5	17.0	9.0	820	680	270	35	39

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)
APR 13...	.6	9	4.4	6.8	58	47	802	1.1	210	<.010	800

DATE	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)
APR 13...	<10	27	4	10	2	120	4	20	2900	.1	<1

DATE	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)
APR 13...	720	<1	30	160	10	320	49	280	44	190	.06

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
JUN 03...	1730	.07	2600	22.0	1.3	<1

TENNESSEE RIVER BASIN--Continued

03538257 - UNNAMED SPR TO BR CRK AT BR CRK RD NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 13...	0845	.14	240	7.5	17.0	14.0	9.0	130	0	27	16	.60

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)
APR 13...	.0	0	.40	522	32	1.1	1.6	156	.21	<.10	.020	100

DATE	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)
APR 13...	<10	<1	2	<1	1	100	2	<10	<10	<.1	<1	20

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 13...	<1	10	<3.5	1.2	<1.8	.9	<1.6	.8	.8	.50	<.01

TENNESSEE RIVER BASIN--Continued

03538259 - UNNAMED SPR TO BR CRK NR CO LINE NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1600	.21	530	7.2	26.0	13.0	4.3	280	0	81	20

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	9.1	.2	6	1.7	750	92	24	20	414	.56

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	20	<.010	100	<10	<1	2	4	2	150	1

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	20	40	.2	<1	120	<1	20	110	.90	<.01

WATER-QUALITY ANALYSES AT PARTIAL-RECORD AND MISCELLANEOUS SITES

TENNESSEE RIVER BASIN--Continued

03538260 - BEAR C AT COUNTY LINE NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 12...	1415	1.3	540	8.1	21.0	16.0	10.4	230	130	73	12	9.9

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)
APR 12...	.3	8	2.1	410	1.6	25	20	417	.57	30	<.010	200

DATE	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)
APR 12...	<10	1	1	<1	2	480	1	350	430	.2	1	210

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<1	10	94	3.7	61	37	53	34	180	2.0	.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 03...	1045	.13	780	16.0	3.4

TENNESSEE RIVER BASIN--Continued

03538261 - BEAR CREEK SPRING NO 1 NEAR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1200	.75	360	7.2	19.0	14.0	6.6	170	0	45	13

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
APR 12...	4.2	.1	5	1.1	472	58	12	9.9	232	.32	9.9	<.010

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)
APR 12...	<100	<10	<1	2	<1	1	100	2	20	10	.2	1

DATE	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	70	<1	50	20	1.2	19	11	16	9.9	61	.80	<.01

TENNESSEE RIVER BASIN--Continued

03538262 - BEAR CRK BELOW COUNTY LINE NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 12...	0900	1.9	480	7.7	14.0	11.0	10.2	210	0	62

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
APR 12...	13	7.1	.2	7	1.6	448	17	19	15	343

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
APR 12...	.47	22	<.010	200	<10	1	2	6	2	210

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	1	210	250	.2	<1	120	<1	30	140	<.01

TENNESSEE RIVER BASIN--Continued

035382655 - BEAR CRK TRIB AT CO RD NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	0820	.10	48	8.3	10.5	9.5	10.0	15	6	3.7	1.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	1.2	.1	13	2.3	32	.0	12	1.3	26	.04

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	<.10	<.010	<100	<10	<1	3	4	2	270	3

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	<10	10	<.1	<1	20	<1	20	.01	1.1	<.01

TENNESSEE RIVER BASIN--Continued

03538266 - BEAR CRK TRIB ABV BR CRK RD NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR												
12...	1210	.21	68	7.8	23.0	16.0	10.5	24	3	6.4	1.9	2.0

DATE	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)
APR												
12...	.2	14	1.8	.6	10	1.2	42	.06	<.10	.050	<100	<10

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)
APR											
12...	<1	1	<1	2	410	2	<10	10	<.1	1	20

DATE	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR											
12...	<1	20	<.9	<.4	2.2	<.4	1.9	<.4	.02	1.5	<.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
JUN						
03...	0900	.04	123	14.0	1.7	<1

TENNESSEE RIVER BASIN--Continued

03538267 - BEAR CRK TRIB NR BR CRK RD NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 12...	1030	.03	47	9.2	18.5	11.0	9.8	17	0	5.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
APR 12...	1.2	1.5	.2	15	1.0	68	.0	11	1.4	<.10

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)
APR 12...	<.010	<100	<10	<1	5	3	3	940	4	10

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	20	<.1	<1	20	<1	20	.05	1.4	<.01

TENNESSEE RIVER BASIN--Continued

03538268 - BEAR CRK ABV WHITE WING RD NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 12...	1345	4.3	320	8.5	22.0	15.0	10.0	140	41	41

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	9.7	4.5	.2	6	1.4	.6	13	10	210	.29

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	9.2	<.010	100	<10	<1	2	1	3	240	1

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	90	20	<.1	<1	60	<1	20	68	1.1	<.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN 03...	1000	1.2	420	14.5	2.5

TENNESSEE RIVER BASIN--Continued

03538269 - BEAR CREEK SPRING NO 2 NEAR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 12...	1530	.71	221	7.3	25.0	12.0	9.6	110	0	28

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	9.0	2.0	.0	4	.80	422	41	3.2	4.0	146	.20

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 12...	.15	<.010	<100	<10	<1	3	2	2	360	5

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	10	10	.1	<1	30	<1	20	.23	.80	<.01

TENNESSEE RIVER BASIN--Continued

03538271 - BEAR CRK TRIB NR ST HWY 95 NR OAK RIDGE, TN

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 12...	1645	.01	35	6.0	13.0	7.8	11	4	2.6	1.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR 12...	1.1	.2	17	.90	7	14	7.7	1.2	20	.03

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
APR 12...	<.10	<.010	1	<100	<10	<1	1	<1	2	570

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
APR 12...	2	<10	30	<.1	<1	1	20	<.01	1.3	<.01

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MOBILE RIVER BASIN									
02384900 - COAHULLA CREEK NR CLEVELAND, TN									
JUN					SEP				
13...	1110	1.3	350	23.0	11...	1210	.51	400	20.0
GREEN RIVER BASIN									
03312287 - LONG FORK NEAR GALEN, TN									
JUN					SEP				
14...	1220	12	170	24.5	11...	1015	2.0	215	21.0
03312295 - WHITE OAK CREEK AT WHITE OAK, TN									
14...	1135	25	180	22.0	11...	1215	8.7	185	22.0
03312413 - PUNCHEON CREEK NEAR GREEN VALLEY, TN									
14...	1145	6.8	178	19.5	11...	1110	2.5	205	19.5
03312457 - LONG CREEK AT LONG CREEK, TN									
14...	0950	6.1	190	21.5	11...	1310	4.6	200	22.0
03313640 - WEST FORK DRAKES CREEK BELOW PORTLAND, TN									
JUN					SEP				
14...	1515	9.6	240	23.5	14...	0920	3.7	280	21.0
CUMBERLAND RIVER BASIN									
03414500 - EAST FORK OBEY RIVER NEAR JAMESTOWN, TN									
OCT					MAR				
04...	1310	12	--	19.0	01...	1600	750	--	6.0
NOV					APR				
08...	1245	31	--	12.5	19...	1100	249	--	10.5
DEC					JUN				
13...	1425	856	--	10.0	28...	1040	28	--	20.0
JAN					AUG				
23...	1610	186	--	.5	15...	1545	18	--	30.0
03415960 - WOLF RIVER AT WOLF RIVER, TN									
OCT					JUN				
04...	1145	3.4	200	17.0	13...	0930	12	193	14.5
NOV					JUL				
08...	1110	5.8	185	11.0	25...	1445	6.0	185	23.0
03415975 - ROTTEN FORK WOLF RIVER NEAR PALL MALL, TN									
OCT					JUN				
04...	1105	1.1	280	20.5	13...	0900	6.0	230	18.5
NOV					JUL				
08...	1145	1.9	270	12.0	25...	1415	2.1	280	31.5
03416000 - WOLF RIVER NEAR BYRDSTOWN, TN									
OCT					MAY				
04...	1015	8.0	--	19.0	07...	1900	4900	--	16.0
NOV					24...	1030	66	--	18.5
08...	0915	12	--	10.0	JUN				
DEC					27...	1300	23	--	26.0
13...	1015	183	--	10.0	AUG				
JAN					15...	1245	14	--	31.0
24...	1030	819	--	2.0					
APR									
19...	0920	1.3	--	10.0					
03418070 - ROARING RIVER ABOVE GAINESBORO, TN									
DEC					MAY				
12...	1630	539	--	10.5	07...	1400	19300	--	16.0
JAN					JUN				
04...	1145	140	--	3.5	20...	1130	.00	--	26.0
23...	1150	83	--	.5	AUG				
FEB					01...	1500	2.8	--	22.0
27...	1250	324	--	9.0					
APR									
18...	1300	123	--	13.0					

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
				CUMBERLAND RIVER BASIN--Continued					
		03418180		- BLACKBURN FORK NEAR DODSON BRANCH, TN					
OCT					JUN				
03...	1530	11	220	20.0	12...	1615	36	200	25.0
NOV					JUL				
07...	1310	25	225	11.5	26...	0900	18	215	24.0
		03418935		- BEAVERDAM CR AT LANTANA RD NEAR BELLVIEW, TN					
NOV					JUL				
01...	1345	.23	89	12.0	24...	1500	1.7	55	21.0
JUN					SEP				
12...	1240	.46	56	19.5	13...	0948	.12	80	16.0
		03418995		- GLADE CREEK NEAR LONEWOOD, TN					
NOV					JUL				
01...	1439	.33	218	14.5	24...	1545	4.0	90	24.5
JUN					SEP				
12...	1150	2.4	88	24.0	13...	1030	1.2	115	19.0
		03419270		- CALFKILLER RIVER NEAR TAYLORS, TN					
OCT					JUN				
04...	1610	5.2	280	17.0	12...	1420	18	230	19.0
NOV					SEP				
08...	1505	12	300	11.0	13...	1220	8.1	285	19.0
		03420116		- ROCKY RIVER AT ROCKY R ROAD AT RIVERVIEW, TN					
NOV					SEP				
01...	1207	2.0	505	15.5	13...	0830	3.8	320	17.0
JUN									
11...	1435	14	245	18.0					
		03420156		- COLLINS RIVER AT BARKERTOWN, TN					
JUN					JUL				
12...	0850	2.0	50	--	25...	0845	6.2	85	19.0
JUN					JUL				
12...	0850	2.0	50	--	25...	0845	6.2	85	19.0
		03420230		- SCOTT CREEK AT IRVING COLLEGE, TN					
NOV					SEP				
01...	0954	2.4	400	12.5	12...	1450	4.4	340	22.5
JUN									
12...	1005	11	290	19.0					
		03420440		- SOUTH PRONG BARREN FORK NEAR TROUSDALE, TN					
NOV					SEP				
01...	1105	12	130	14.0	12...	1125	12	125	22.0
JUN									
11...	1115	20	120	21.0					
		03420470		- NORTH PRONG BARREN FORK AT OAK GROVE, TN					
NOV					SEP				
01...	0935	12	150	14.5	12...	1025	14	140	1025
JUN									
11...	1030	23	130	20.0					
		03420720		- HICKORY CREEK NEAR VIOLA, TN					
NOV					SEP				
01...	1427	4.0	520	15.0	12...	1605	5.1	460	22.0
JUN									
11...	1545	18	340	22.5					
		03421000		- COLLINS RIVER NEAR MCMINNVILLE, TN					
OCT					APR				
05...	1200	99	--	21.0	23...	1500	4610	--	8.0
NOV					MAY				
09...	0945	106	--	13.0	25...	1020	768	240	19.5
DEC					JUN				
14...	1300	2080	--	10.0	26...	1045	228	--	24.0
JAN									
24...	1600	3330	--	7.0					

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

CUMBERLAND RIVER BASIN--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
03421150 - CHARLES CREEK AT DAYLIGHT, TN				
NOV 01...	1220	4.5	220	15.5
JUN 11...	1210	11	200	17.0
03422500 - CANEY FORK NEAR ROCK ISLAND, TN				
OCT 05...	1000	58	--	19.5
03424825 - BRUSH CREEK AT BRUSH CREEK, TN				
OCT 03...	1155	.00	440	17.0
NOV 07...	1040	.18	430	11.0
JUN 13...	1230	.11	330	27.5
03425275 - GOOSE CREEK AT HILLSDALE, TN				
JUN 14...	0855	15	283	19.0
03425646 - TOWN CREEK AT MAPLE ST AT GALLATIN, TN				
OCT 18...	1415	.29	500	21.0
NOV 08...	1150	.43	500	16.0
DEC 13...	1145	30	440	12.0
JAN 26...	0945	9.0	--	7.0
03426800 - EAST FORK STONES RIVER AT WOODBURY, TN				
OCT 06...	0900	9.9	--	17.0
NOV 09...	1135	9.4	--	14.0
DEC 15...	1110	82	--	11.0
JAN 25...	0930	180	--	10.0
FEB 29...	1340	110	--	7.0
03427500 - EAST FORK STONES RIVER NEAR LASCASSAS, TN				
OCT 06...	1015	18	280	19.5
NOV 10...	0810	63	420	13.0
DEC 16...	0810	720	350	10.0
03428500 - WEST FORK STONES RIVER NEAR SMYRNA, TN				
OCT 06...	1230	29	495	21.0
NOV 09...	1310	95	440	14.0
DEC 15...	1250	1240	325	11.5
FEB 29...	0840	451	355	8.0
03431517 - CUMMINGS BRANCH AT LICKTON, TN				
NOV 08...	1340	.12	--	13.5
DEC 14...	1420	6.7	--	11.5
JAN 25...	1440	3.4	--	10.0
SEP 12...	1230	5.6	210	18.5
OCT 27...	1600	52	--	17.0
JUL 26...	1105	.05	320	27.0
SEP 18...	1356	.02	520	19.0
SEP 11...	0930	2.3	305	21.0
FEB 22...	1125	3.4	--	12.0
APR 16...	1420	3.2	--	12.0
24...	1025	19	--	15.0
AUG 06...	1200	4.6	--	24.0
APR 16...	1215	38	--	12.0
23...	1000	191	--	2.0
MAY 25...	1200	32	260	18.0
JUN 21...	0920	15	--	21.0
AUG 21...	1150	11	--	20.0
JAN 26...	0830	882	335	8.0
APR 17...	1023	162	--	12.5
AUG 20...	1430	49	--	28.0
APR 18...	1038	194	--	12.5
MAY 22...	1200	268	340	19.0
JUN 21...	1220	76	--	21.5
AUG 09...	1045	247	385	23.0
FEB 24...	1020	1.2	--	11.0
APR 16...	1035	2.3	--	11.0

CUMBERLAND RIVER BASIN--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
03431570 - WHITES CREEK NEAR JORDONIA, TN									
13...	1255	4.6	425	27.0					
03431700 - RICHLAND C AT CHARLOTTE AVE., AT NASHVILLE, TN									
OCT					APR				
05...	0955	3.5	--	20.0	16...	1445	22	--	14.0
DEC					MAY				
08...	1350	40	--	12.0	22...	1430	11	--	21.0
JAN					AUG				
25...	1230	43	--	6.0	03...	1100	56	--	20.0
FEB									
24...	1215	13	--	12.0					
03431800 - SYCAMORE CREEK NEAR ASHLAND CITY, TN									
OCT					MAR				
12...	1447	14	--	18.5	12...	1635	115	--	6.0
NOV					APR				
10...	1030	25	--	12.0	17...	1645	115	--	12.5
DEC					JUN				
15...	1345	241	--	10.0	06...	1250	37	--	23.0
JAN					JUL				
24...	1600	264	--	10.5	17...	1125	61	--	24.0
03432350 - HARPETH RIVER AT FRANKLIN, TN									
OCT					MAR				
11...	1050	2.4	--	17.5	30...	1115	1210	--	10.0
JAN					MAY				
24...	1145	912	--	2.0	22...	0950	153	--	19.0
FEB					AUG				
29...	1530	250	--	9.0	24...	1220	18	--	28.0
03432925 - L HARPETH R AT GRANNY WHITE PIKE AT BRENTWOOD, TN									
OCT					JUL				
12...	0730	.05	540	18.0	11...	1050	.90	400	25.0
JUN					SEP				
15...	0930	2.3	430	21.5	12...	0957	2.3	650	23.0
03433500 - HARPETH RIVER AT BELLEVUE, TN									
OCT					MAY				
12...	1058	8.4	--	19.0	22...	1155	364	--	19.0
NOV					JUN				
15...	1115	63	--	9.5	21...	1435	43	--	27.0
JAN					AUG				
23...	1100	310	--	1.0	14...	0830	154	--	25.0
FEB									
23...	1420	313	--	11.0					
03433660 - SOUTH HARPETH RIVER AT FERNVALE, TN									
OCT					JUL				
12...	1248	13	250	18.5	11...	1300	15	160	26.0
JUN					SEP				
13...	0945	20	230	22.5	12...	0929	13	340	22.5
03433902 - BIG TURNBULL CREEK NEAR LIBERTY HILL, TN									
OCT					JUL				
12...	1450	4.1	240	18.0	11...	1455	6.2	130	26.0
JUN					SEP				
12...	0930	7.7	195	20.5	12...	1156	4.0	320	23.0
03434500 - HARPETH RIVER NEAR KINGSTON SPRINGS, TN									
OCT					MAY				
13...	1255	312	--	15.0	24...	1210	751	--	18.0
NOV					JUN				
15...	1315	190	--	10.0	21...	0925	148	--	26.0
FEB					AUG				
02...	0900	591	--	4.0	06...	1200	578	--	24.0
23...	1045	554	--	10.0					
APR									
12...	1350	973	--	17.0					

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
				CUMBERLAND RIVER BASIN--Continued					
		03434560		- TRACE CREEK NEAR WHITE BLUFF, TN					
OCT					SEP				
03...	0830	1.4	300	13.0	11...	0920	1.6	308	18.0
JUN									
12...	1030	2.2	270	--					
		03434620		- TOWN BRANCH NEAR CHARLOTTE, TN					
JUN					SEP				
12...	1215	1.7	280	23.0	11...	1020	.38	375	20.0
		034350028		- BARTONS CRK ABV LOUISE CRK NR SOUTHSIDE, TN					
JUN					SEP				
12...	1315	30	--	22.0	11...	1150	11	305	22.0
		03435320		- Red River at Adams, TN					
OCT					JUN				
07...	1130	60	410	17.0	14...	1205	320	--	23.0
NOV					SEP				
14...	1045	70	400	10.0	12...	1410	154	--	24.0
		03435770		- SULPHUR FORK RED RIVER ABOVE SPRINGFIELD, TN					
NOV					APR				
10...	1240	7.9	--	12.0	17...	1315	71	--	11.0
DEC					MAY				
15...	1530	192	--	10.0	06...	1925	1840	--	15.5
JAN					29...	1315	37	300	16.0
24...	1340	204	--	15.0					
MAR									
13...	1030	104	--	6.0					
		03436000		- SULPHUR FORK RED RIVER NEAR ADAMS, TN					
NOV					APR				
14...	0900	22	--	7.0	18...	1005	187	--	12.0
JAN					MAY				
25...	1035	451	--	3.5	29...	1525	128	330	17.0
MAR					AUG				
13...	1330	273	--	9.0	16...	1250	77	--	25.0
		03436100		- RED RIVER AT PORT ROYAL, TN					
OCT					APR				
12...	1110	102	--	18.0	18...	1415	1220	--	13.0
21...	1100	110	--	17.5	AUG				
NOV					17...	1115	305	--	26.0
14...	1320	110	--	9.0					
JAN									
25...	1530	2500	--	7.0					
		03436460		- LITTLE WEST FORK RED RIVER NR NEW PROVIDENCE, TN					
OCT					SEP				
12...	1405	19	400	19.0	12...	1145	29	390	23.0
JUN									
14...	0935	99	320	20.0					
		03436690		- YELLOW CREEK AT ELLIS MILLS, TN					
NOV					MAY				
08...	1410	28	--	17.0	07...	1330	3280	121	14.5
DEC					JUN				
14...	1645	280	--	4.0	01...	1020	85	220	15.5
JAN					JUL				
31...	1200	99	--	6.0	18...	1545	138	--	26.0
APR					AUG				
18...	1730	131	--	13.5	16...	1145	43	--	25.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
TENNESSEE RIVER BASIN									
03454850 - LONG CREEK NEAR DEL RIO, TN									
OCT					SEP				
18...	1005	1.7	350	14.0	12...	1330	2.7	--	20.5
JUN									
19...	1330	3.8	340	23.0					
03455000 - FRENCH BROAD RIVER NEAR NEWPORT, TN									
OCT					APR				
05...	1510	846	--	19.0	20...	0900	3830	--	9.5
DEC					JUL				
14...	1200	8240	--	9.0	03...	0940	2560	--	22.0
FEB					AUG				
15...	1620	13400	--	8.0	08...	1310	2580	--	24.0
034611996 - CRYING CREEK ABOVE COSBY, TN									
OCT					SEP				
18...	1100	.74	21	12.0	12...	1005	1.0	--	16.0
JUN									
19...	1045	2.1	15	17.5					
03461200 - COSBY CREEK ABOVE COSBY, TN									
OCT					MAY				
06...	0920	4.2	--	14.0	15...	1410	33	--	11.5
18...	1050	4.3	--	14.0	JUN				
NOV					19...	1040	19	--	17.5
17...	1045	8.8	--	6.0	AUG				
DEC					08...	1540	24	--	17.5
15...	1445	34	--	7.0	SEP				
JAN					12...	0920	8.1	--	16.0
27...	0825	26	--	3.5					
MAR									
20...	1000	24	--	11.0					
03461266 - GREENBRIER CREEK AT HWY 32 AT COSBY, TN									
OCT					SEP				
20...	0955	2.1	46	14.0	12...	1040	2.9	--	17.5
JUN									
19...	1205	4.1	36	19.5					
03461450 - ENGLISH CREEK NEAR NEWPORT, TN									
OCT					SEP				
20...	0905	2.1	375	15.0	12...	1120	3.8	--	17.0
JUN									
19...	1250	4.5	390	18.5					
03464815 - SOUTH INDIAN CREEK NEAR ERWIN, TN									
OCT					SEP				
19...	1515	14	108	16.0	13...	1445	21	--	24.0
JUN									
20...	0950	37	90	22.0					
03465500 - NOLICHUCKY RIVER AT EMBREEVILLE, TN									
OCT					MAR				
03...	1310	314	--	16.5	28...	0945	1910	--	10.0
DEC					JUN				
22...	1630	1550	--	5.5	20...	0900	748	--	24.0
JAN					AUG				
19...	1340	1440	--	1.0	15...	1230	986	--	27.0
FEB					SEP				
21...	1535	1730	--	9.0	11...	1215	394	--	19.5
03465780 - CLEAR FORK NEAR FAIRVIEW, TN									
OCT					SEP				
19...	1455	2.7	470	17.0	13...	1320	3.1	--	20.5
JUN									
22...	0920	6.9	450	17.5					
03466099 - JOCKEY CREEK AT LIMESTONE, TN									
OCT					SEP				
19...	1530	4.7	415	18.0	13...	1215	10	--	20.0
JUN									
22...	0815	16	395	19.5					

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
				TENNESSEE RIVER BASIN--Continued					
		03466228		- SINKING CREEK AT AFTON, TN					
OCT					APR				
05...	0850	3.3	--	15.0	19...	1230	18	--	11.0
NOV					MAY				
15...	1130	2.9	--	9.0	18...	1150	23	--	15.5
DEC					JUN				
14...	0900	6.9	--	10.0	21...	1550	11	--	21.0
JAN					AUG				
19...	1040	16	--	5.0	07...	0940	17	--	19.0
MAR					SEP				
20...	1430	14	--	15.0	12...	1500	7.2	--	19.5
		03466295		- CAMP CREEK AT CAMP CREEK, TN					
OCT					SEP				
18...	1400	7.4	195	14.0	13...	1100	13	--	14.0
JUN									
22...	1020	15	182	14.5					
		03466870		- ROARING FORK NEAR GREENEVILLE, TN					
OCT					SEP				
18...	1200	3.0	420	14.0	13...	0930	6.6	--	18.0
JUN									
19...	1555	7.8	430	24.0					
		03466880		- ROARING FORK NEAR MOSHEIM, TN					
OCT					SEP				
18...	1310	4.9	480	16.0	13...	0850	13	--	20.0
JUN									
22...	1140	20	470	21.0					
		03467490		- BENT CREEK NEAR SPRINGVALE, TN					
OCT					SEP				
18...	1555	3.7	410	17.0	13...	1440	7.3	--	21.0
JUN									
19...	1500	13	420	23.0					
		03469185		- MIDDLE CREEK NEAR PIGEON FORGE, TN					
OCT					SEP				
18...	0745	.80	270	13.0	11...	0955	.43	--	19.0
JUN									
19...	0915	1.1	235	23.0					
		03469610		- COVE CREEK AT HATCHERTOWN, TN					
OCT					SEP				
18...	0840	2.7	250	12.5	11...	1055	4.2	--	18.0
JUN									
19...	0820	5.6	240	18.5					
		03470120		- BOYDS CREEK NEAR PROVIDENCE, TN					
OCT					SEP				
20...	1200	.10	335	16.0	11...	0905	.22	--	15.5
JUN									
19...	0715	.39	275	17.0					
		03476515		- BEIDLEMAN CREEK NEAR CAYWOOD FORD, TN					
OCT					SEP				
19...	1130	7.7	410	15.0	14...	0930	7.3	--	18.0
JUN									
20...	1200	19	400	21.0					
		03476960		- INDIAN CREEK AT CHILDRESS, TN					
OCT					SEP				
19...	1210	.51	340	17.0	11...	1440	.19	--	25.0
JUN									
20...	1120	.99	290	23.5					
		03478615		- EVANS CREEK NEAR BLOUNTVILLE, TN					
OCT					JUN				
18...	1010	1.0	550	15.0	20...	1350	1.7	475	23.5
FEB					SEP				
23...	1100	50	--	7.0	11...	1520	.88	--	23.0

TENNESSEE RIVER BASIN--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
03487550 - REEDY CREEK AT OREBANK, TN				
OCT 05...	1530	8.0	--	16.5
NOV 16...	1000	14	--	8.0
DEC 23...	1105	27	--	4.5
JAN 19...	1440	75	--	4.0
FEB 24...	1100	195	--	9.0
MAR 29...	0950	134	--	9.5
APR 26...	1330	37	--	15.0
JUN 06...	1410	28	--	19.0
JUL 18...	1505	113	--	20.0
26...	1140	24	--	18.0
AUG 07...	1445	20	--	22.0
16...	1500	16	--	21.5
28...	0925	7.8	--	21.0
SEP 12...	1320	9.7	--	20.0
03490500 - HOLSTON RIVER AT SURGOINSVILLE, TN				
NOV 16...	1245	1320	--	11.0
DEC 23...	1405	1650	--	9.0
JAN 18...	1430	1760	--	9.0
FEB 24...	1440	15300	--	9.5
MAR 28...	1300	3210	--	11.0
APR 26...	1000	2880	--	14.0
JUL 18...	1200	2650	--	23.5
AUG 17...	1030	2940	--	20.5
SEP 12...	1055	3150	--	19.5
03491000 - BIG CREEK NEAR ROGERSVILLE, TN				
NOV 08...	1350	4.2	--	12.5
JAN 17...	1545	19	--	2.5
MAR 27...	1750	71	--	13.0
28...	1555	512	--	13.5
APR 25...	1100	35	--	11.0
JUN 07...	1550	15	--	22.0
AUG 14...	1130	8.1	--	22.5
03491300 - BEECH CREEK AT KEPLER, TN				
OCT 07...	1145	3.1	--	14.0
18...	1435	4.0	--	17.0
NOV 08...	1220	3.9	--	9.0
JAN 17...	1245	17	--	1.5
MAR 27...	1540	50	--	12.0
APR 25...	1300	51	--	11.5
JUN 06...	0915	15	--	21.5
AUG 14...	1500	11	--	24.0
SEP 13...	1120	5.5	--	20.0
03491493 - DODSON CREEK NEAR ROGERSVILLE, TN				
OCT 18...	1345	.54	300	15.0
JUN 22...	1230	3.3	300	21.5
SEP 13...	1300	.91	--	21.0
03497300 - LITTLE RIVER ABOVE TOWNSEND, TN				
OCT 04...	1000	30	--	14.0
NOV 14...	1045	55	--	4.5
DEC 15...	1110	408	--	7.0
FEB 16...	1600	525	--	7.0
APR 18...	0830	258	--	8.5
JUL 02...	1215	96	--	19.5
AUG 09...	1220	179	--	20.0
SEP 11...	1240	67	--	17.5
03498500 - LITTLE RIVER NEAR MARYVILLE, TN				
OCT 03...	1445	53	--	18.0
NOV 11...	0920	101	--	10.0
DEC 16...	1100	471	--	6.0
FEB 17...	1300	676	--	8.5
APR 20...	1230	385	--	9.5
JUL 02...	1005	190	--	21.5
AUG 09...	0940	354	--	22.5
SEP 10...	1230	125	--	19.5
25...	0905	93	--	19.5

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
				TENNESSEE RIVER BASIN--Continued					
		03543500		- SEWEE CREEK NEAR DECATUR, TN					
OCT					APR				
06...	1100	24	--	18.0	19...	1500	135	--	11.0
NOV					MAY				
16...	1530	34	--	10.0	21...	1445	134	--	15.0
DEC					JUN				
21...	1430	117	--	8.0	29...	1330	57	--	21.0
JAN					AUG				
12...	1540	136	--	5.0	08...	1530	84	--	22.0
FEB					SEP				
16...	1430	287	--	10.0	17...	1345	32	--	17.0
MAR									
22...	1240	578	--	10.0					
		03555882		- BARNEY CREEK NEAR COKER CREEK, TN					
OCT					SEP				
19...	1105	.85	46	15.0	12...	1230	.72	44	15.0
JUN									
19...	1305	2.3	--	19.5					
		03563000		- OCOEE RIVER AT EMF, TN					
NOV					MAY				
15...	1515	1130	--	12.5	03...	1515	9000	--	13.0
JAN					JUN				
11...	1415	1240	--	6.0	27...	1545	1260	--	19.0
APR					SEP				
18...	1445	1170	--	9.0	12...	1605	1070	--	20.0
		03564500		- OCOEE RIVER AT PARKSVILLE, TN					
OCT					MAY				
05...	1530	2140	--	16.5	24...	1520	1230	--	15.0
DEC					AUG				
20...	1500	2180	--	6.0	23...	1515	1820	--	22.5
MAR									
21...	0940	2280	--	10.0					
		03565300		- SOUTH CHESTUEE CREEK NEAR BENTON, TN					
OCT					APR				
05...	1330	3.5	--	19.0	19...	1025	32	--	11.0
NOV					MAY				
16...	1040	15	--	9.5	03...	1745	1490	--	15.0
DEC					25...	0945	22	--	14.0
21...	0930	27	--	7.0	JUN				
JAN					28...	1000	7.0	--	20.0
12...	1030	71	--	4.0	AUG				
FEB					08...	1020	8.1	--	21.5
15...	1330	126	--	9.0	SEP				
MAR					13...	1100	4.4	--	21.0
21...	1245	129	--	10.0					
		03565500		- OOSTANAULA CREEK NEAR SANFORD, TN					
OCT					APR				
05...	1030	19	--	18.0	19...	1200	96	--	12.0
NOV					MAY				
16...	1340	36	--	9.5	25...	1200	111	--	15.0
DEC					JUN				
21...	1130	52	--	8.0	28...	1150	51	--	20.0
JAN					AUG				
12...	1245	79	--	6.0	07...	1630	56	--	21.0
FEB					SEP				
15...	1040	162	--	10.0	13...	1315	31	--	22.0
MAR									
21...	1445	144	--	13.0					
		03566200		- BRYMER CREEK NEAR MCDONALD, TN					
JUN					SEP				
13...	1250	3.0	430	20.0	11...	1300	2.4	250	18.5
		03566253		- GREASY CREEK AT HOPEWELL, TN					
OCT					SEP				
19...	1335	.11	310	17.0	13...	0830	.36	210	19.0
JUN									
19...	1035	.12	--	20.5					

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

TENNESSEE RIVER BASIN--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
03566420 - WOLFTEVER CREEK NEAR OOLTEWAH, TN				
OCT 03...	1610	1.6	--	18.0
NOV 17...	1635	5.4	--	9.5
DEC 16...	1200	30	--	7.5
JAN 24...	1130	257	--	4.0
MAR 06...	1315	42	--	9.0
APR 10...	1645	78	--	14.0
MAY 11...	1030	60	--	14.0
30...	1530	14	--	15.0
JUL 11...	0730	11	--	21.5
03567500 - SOUTH CHICKAMAUGA CREEK NEAR CHICKAMAUGA, TN				
NOV 18...	0930	173	--	8.0
MAR 07...	1030	917	--	9.5
APR 10...	1140	2360	--	12.5
MAY 30...	1200	431	--	17.0
JUL 12...	0730	235	--	23.0
AUG 16...	0905	297	--	24.0
03571000 - SEQUATCHIE RIVER NEAR WHITWELL, TN				
OCT 04...	1510	40	--	19.0
NOV 18...	1210	62	--	9.0
MAR 05...	1340	917	--	10.0
APR 11...	1215	1220	--	13.0
MAY 29...	1550	1350	--	16.0
AUG 21...	1310	257	--	21.5
03574702 - FLINT RIVER AT LINCOLN, TN				
OCT 03...	1923	6.3	80	18.0
NOV 07...	1530	20	80	12.0
JUN 13...	1630	14	80	24.0
SEP 11...	1405	9.7	150	22.5
03578000 - ELK RIVER NEAR PELHAM, TN				
OCT 05...	1045	2.9	--	18.5
NOV 15...	1040	15	--	10.0
DEC 20...	1350	100	--	7.0
MAR 09...	0915	117	--	6.0
APR 12...	1105	126	--	11.5
MAY 29...	1200	188	--	10.0
JUL 13...	0930	13	--	22.5
AUG 07...	1150	16	--	20.0
03582205 - NORRIS CREEK BELOW HOWELL, TN				
OCT 03...	1658	.16	390	21.0
NOV 07...	1317	2.4	450	13.0
JUN 14...	0830	1.2	295	21.0
SEP 11...	1105	.42	460	24.5
03584500 - ELK RIVER NEAR PROSPECT, TN				
OCT 04...	1120	312	--	19.5
NOV 08...	1450	734	--	13.0
DEC 15...	1235	8580	--	11.0
MAR 05...	1250	3640	--	10.0
APR 18...	0930	1340	--	17.0
MAY 23...	1245	1870	--	18.0
JUN 25...	1340	657	--	25.0
AUG 08...	0925	1360	--	22.0
03588000 - SHOAL CREEK AT LAWRENCEBURG, TN				
OCT 04...	1805	24	--	19.5
04...	1815	27	--	19.5
DEC 14...	1405	203	--	9.5
JAN 18...	1630	68	--	7.5
MAR 07...	1615	65	--	11.0
APR 18...	1530	60	--	16.0
MAY 24...	1115	75	--	16.0
JUN 27...	1000	43	--	19.0
AUG 08...	1225	36	--	20.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
				TENNESSEE RIVER BASIN--Continued					
		03588400		- CHISHOLM CREEK AT WESTPOINT, TN					
OCT					APR				
05...	1040	19	--	19.0	19...	0825	49	--	11.0
NOV					MAY				
09...	0700	22	--	12.0	24...	0800	53	--	16.0
DEC					JUN				
13...	1045	172	--	10.0	26...	1405	28	--	20.0
JAN					AUG				
18...	0925	53	--	5.0	09...	1200	24	--	27.0
MAR									
08...	0950	92	--	8.0					
		03588500		- SHOAL CREEK AT IRON CITY, TN					
OCT					MAY				
05...	1345	138	--	20.5	23...	1645	570	--	19.0
MAR					JUN				
08...	1535	745	--	9.0	26...	1000	239	--	23.0
APR					AUG				
19...	1050	363	--	13.0	09...	0920	209	--	23.0
		03596000		- DUCK RIVER BELOW MANCHESTER, TN					
OCT					APR				
05...	1325	26	--	19.0	12...	0745	126	--	14.0
NOV					MAY				
15...	1415	102	--	10.5	29...	1600	94	--	11.0
DEC					JUL				
21...	1135	110	--	5.5	13...	1305	88	--	24.0
JAN					AUG				
26...	1115	317	--	4.5	08...	1420	88	--	24.0
MAR									
08...	1130	182	--	8.5					
		03598000		- DUCK RIVER NEAR SHELBYVILLE, TN					
OCT					APR				
03...	1100	174	--	17.0	17...	1325	263	--	13.0
NOV					JUN				
07...	1050	263	--	12.0	25...	0945	202	--	21.0
MAR									
01...	1245	816	--	11.0					
		03600500		- BIG BIGBY CREEK AT SANDY HOOK, TN					
OCT					APR				
06...	0915	5.6	--	15.5	18...	1305	17	--	17.0
DEC					MAY				
14...	0945	79	--	10.5	23...	1610	28	--	22.0
JAN					JUN				
19...	1040	16	--	1.0	27...	1410	8.7	--	25.0
MAR					AUG				
07...	1125	39	--	9.0	10...	0920	7.7	--	26.0
		03601100		- BIG BIGBY CREEK AT NEEDMORE, TN					
OCT					SEP				
06...	1218	12	300	18.5	12...	1345	11	420	25.0
JUN									
14...	1055	25	254	22.5					
		03602192		- WEST PINEY RIVER NEAR DICKSON,TN					
OCT					AUG				
03...	1055	8.7	250	17.0	17...	1325	9.9	--	20.5
JUN					28...	1008	9.8	242	19.0
12...	1130	16	220	18.0					
JUL									
11...	1120	12	235	19.5					
		03602194		- WEST PINEY RIVER BELOW ST HWY 48, NR DICKSON, TN					
JUN					AUG				
12...	1030	19	220	18.0	28...	1132	10	248	18.5
JUL					SEP				
11...	1025	12	255	16.5	05...	1330	11	240	18.0
AUG									
17...	1430	11	--	21.0					

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
				TENNESSEE RIVER BASIN--Continued					
		03602207		- EAST PINEY RIVER BELOW DICKSON, TN					
OCT					AUG				
03...	1015	3.8	400	17.0	17...	1415	4.9	--	23.0
JUN					28...	1315	4.6	356	21.0
12...	0950	10	305	21.0	SEP				
JUL					05...	1225	6.2	325	17.0
11...	0940	6.6	330	20.0					
		03602220		- PINEY RIVER BELOW DICKSON, TN					
OCT					AUG				
03...	1150	14	270	21.0	17...	1230	18	--	21.0
JUN					28...	1225	17	290	20.0
12...	1245	31	255	20.0					
JUL									
11...	1215	22	270	22.0					
		03602230		- PINEY RIVER ABOVE PINEWOOD, TN					
JUN					AUG				
12...	1345	51	240	21.0	17...	1100	31	--	22.0
JUL					28...	1345	25	260	20.0
11...	1020	38	22	22.0					
		03602261		- LITTLE SPRING CREEK AT PINEWOOD, TN					
JUN					AUG				
12...	1515	--	175	25.0	28...	1310	1.6	210	21.5
JUL									
11...	1200	--	200	23.0					
		03602265		- PINEY RIVER AT PINEWOOD, TN					
JUN					AUG				
12...	1515	110	225	22.0	28...	1415	56	246	21.0
JUL									
11...	1155	85	230	22.5					
		03602500		- PINEY RIVER AT VERNON, TN					
NOV					MAY				
07...	1315	97	--	15.0	30...	1405	239	--	15.5
DEC					JUL				
13...	1310	482	--	11.0	11...	1345	120	190	20.0
JAN					AUG				
26...	1040	282	--	6.0	14...	1600	100	--	23.0
APR					17...	1030	102	--	21.0
20...	1205	227	--	14.0	28...	0945	96	235	20.5
		03603000		- DUCK RIVER ABOVE HURRICANE MILLS, TN					
NOV					APR				
08...	1400	1910	--	13.0	20...	1000	2260	--	14.5
JAN					JUL				
26...	1355	6150	--	9.0	18...	1515	5230	--	23.0
		03604500		- BUFFALO RIVER NEAR LOBELVILLE, TN					
JAN					AUG				
26...	1700	1250	--	7.5	15...	1525	489	--	26.0
MAR									
27...	1400	837	--	24.0					
		03605555		- TRACE CREEK ABOVE DENVER, TN					
NOV					APR				
09...	0845	8.5	--	14.0	19...	1715	30	--	16.0
DEC					MAY				
14...	1050	63	--	11.0	31...	1400	20	205	20.0
JAN					JUL				
27...	1500	42	--	5.0	17...	1645	28	--	24.0
MAR					AUG				
07...	1600	116	--	8.5	15...	1245	9.8	--	24.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
				TENNESSEE RIVER BASIN--Continued					
		03605968		- WHITEOAK CREEK NEAR CONCORD, TN					
OCT					SEP				
05...	1735	12	140	17.0	11...	1830	18	232	23.0
		03606020		- HURRICANE CREEK NEAR STEWART, TN					
OCT					SEP				
06...	0840	3.0	16	16.0	12...	0750	3.7	220	20.0
JUN									
13...	1340	5.5	195	24.0					
		03606125		- STANDING ROCK CREEK NEAR FORTHENRY, TN					
OCT					SEP				
06...	1010	4.3	175	16.0	12...	0915	6.1	166	21.0
JUN									
13...	1455	7.9	105	25.0					
		03606500		- BIG SANDY RIVER AT BRUCETON, TN					
NOV					MAY				
09...	1120	90	--	13.0	31...	1145	133	--	14.0
DEC					JUL				
14...	1400	710	--	11.0	18...	1150	1470	--	21.0
MAR					AUG				
07...	1315	1260	--	5.5	15...	0930	88	--	22.0

CARTER COUNTY

361738082132900. Local number, Ct:H-1.

LOCATION.--Lat 36°17'38", long 82°13'29", Hydrologic Unit 06010103, 3.5 mi south of Elizabethton, 0.8 mi north of Gap Creek.
Owner: Gap Creek Community.

AQUIFER: Honaker dolomite of middle Cambrian age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 24 in, depth 31 ft, casing information not available.

INSTRUMENTATION.--Water level recorder since April 1964.

DATUM.--Altitude of land-surface datum is 1,820 ft. Measuring point: Top of concrete tile, 2.50 ft above land-surface datum.

REMARKS.--Highest water level readings may be influenced for short periods by surface seepage. Missing record Jan. 14-16, July 20 to Aug. 14.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.61 ft below land-surface datum, May 7, 1984; lowest, 26.01 ft below land-surface datum Dec. 22, 23, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.39	14.83	11.26	11.71	9.84	5.83	7.59	11.04	5.98	6.43	---	12.13
2	14.43	14.84	11.80	11.67	9.91	6.15	7.96	11.08	6.15	7.33	---	12.13
3	14.48	14.84	10.46	11.54	9.97	6.43	8.22	10.49	6.32	8.77	---	12.12
4	14.54	14.84	8.81	11.37	10.00	6.53	8.27	9.49	6.52	9.51	---	12.05
5	14.56	14.84	6.97	11.24	9.98	6.52	8.13	9.98	6.75	9.86	---	12.19
6	14.46	14.85	6.59	11.10	10.11	6.52	8.15	10.23	6.98	10.02	---	12.40
7	14.57	14.86	7.06	11.07	10.27	6.42	8.72	6.09	7.22	10.21	---	12.56
8	14.62	14.87	7.59	11.02	10.42	6.33	9.21	2.89	7.52	10.30	---	12.63
9	14.67	14.88	8.57	10.29	10.55	6.54	9.43	3.42	7.72	10.35	---	12.65
10	14.71	14.88	9.72	9.55	10.64	6.73	9.44	3.73	8.02	10.50	---	12.72
11	14.71	14.88	10.33	9.95	10.64	7.04	9.20	3.84	8.30	10.58	---	12.82
12	14.71	14.88	9.73	10.31	10.62	7.33	8.89	4.00	8.55	10.62	---	12.99
13	14.50	14.88	9.05	10.42	9.55	7.32	8.71	4.16	8.67	10.62	---	13.29
14	14.22	14.88	9.16	---	4.82	6.85	8.68	4.41	8.73	9.96	---	13.39
15	14.27	14.88	9.85	---	5.46	7.13	8.67	4.66	8.87	10.25	10.26	13.39
16	14.36	14.88	10.73	---	5.68	7.57	8.76	4.88	9.01	10.44	10.27	13.17
17	14.47	14.84	11.36	10.54	5.74	7.84	8.94	5.08	9.18	10.51	10.35	13.14
18	14.59	14.81	11.75	10.83	6.06	8.16	8.88	5.19	9.38	10.43	10.45	13.03
19	14.66	14.81	12.03	10.86	6.46	8.45	8.82	5.31	9.52	5.95	10.62	13.00
20	14.71	14.80	12.42	9.43	6.72	8.79	9.22	5.43	9.39	---	10.86	12.99
21	14.72	14.81	12.65	7.83	6.96	8.85	9.57	5.52	9.54	---	11.14	13.13
22	14.73	14.81	12.66	8.32	7.18	8.42	9.81	5.61	9.18	---	11.24	13.15
23	14.72	14.77	12.69	8.95	7.19	8.55	9.80	5.61	7.51	---	11.27	13.13
24	14.73	14.74	12.90	9.06	4.87	8.99	10.03	5.73	8.05	---	11.47	13.18
25	14.75	11.65	13.46	8.97	5.09	9.31	10.22	5.81	8.97	---	11.64	13.17
26	14.75	8.81	13.44	8.79	5.19	9.48	10.36	5.93	9.63	---	11.84	13.08
27	14.76	9.14	11.95	8.97	5.21	9.63	10.54	5.97	9.92	---	11.95	13.04
28	14.77	9.11	10.90	9.33	5.36	9.63	10.57	5.22	10.07	---	11.96	13.14
29	14.79	9.06	11.11	9.66	5.40	8.85	10.83	5.10	10.10	---	12.00	13.30
30	14.81	10.11	11.49	9.74	---	6.94	10.90	5.43	7.99	---	12.04	13.30
31	14.82	---	11.65	9.77	---	6.95	---	5.78	---	---	12.09	---
LOWEST	14.82	14.88	13.46	11.71	10.64	9.63	10.90	11.08	10.10	---	---	13.39

WTR YEAR 1984 HIGHEST .61 MAY 7, 1984 LOWEST 14.88 NOV 9-16, 1983

DICKSON COUNTY

360429087233602. Local number, Di:F-19.

LOCATION.--Lat 36°04'29", long 87°23'36", Hydrologic Unit 06040003, on north side of State Highway 48, 0.4 mi northeast of State Highway 48 bridge over East Piney River at Dickson.

AQUIFER.--Fort Payne Formation of early Mississippian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 387 ft, cased to 22 ft, open end.

INSTRUMENTATION.--Water-level recorder since July 1960.

DATUM.--Altitude of land-surface datum is 755 ft. Measuring point: Top of instrument shelf, 1.26 ft above land-surface datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.52 ft below land-surface datum, Mar. 12, 13, 1975; lowest 34.12 ft below land-surface datum, Sept. 27, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.77	32.60	24.91	23.58	30.61	29.65	---	---	32.26	33.68	33.64	34.08
2	32.77	32.40	25.42	23.58	30.91	29.61	---	---	33.40	33.67	33.65	34.08
3	32.78	32.44	19.03	23.58	30.93	29.82	---	---	---	33.70	33.67	34.09
4	32.83	30.84	13.83	24.10	30.35	29.85	---	---	---	33.72	33.68	33.67
5	32.92	30.44	13.83	24.60	30.46	---	---	---	---	33.75	33.68	33.85
6	32.92	31.03	---	24.65	30.63	22.05	---	16.83	33.22	33.79	33.66	33.92
7	32.85	31.44	---	25.22	31.01	23.31	---	11.90	33.41	33.83	33.74	33.98
8	32.78	31.81	---	25.75	31.36	24.18	---	12.78	33.51	33.84	33.76	33.99
9	32.89	32.07	---	26.50	31.61	24.80	---	15.27	33.58	33.86	33.77	34.02
10	32.89	32.10	---	26.86	31.63	25.28	---	---	33.63	33.88	33.79	34.03
11	32.84	32.10	---	28.24	30.74	25.86	---	---	33.68	33.88	33.79	34.05
12	32.84	32.82	---	29.11	30.40	26.26	---	---	33.70	33.87	33.81	34.04
13	31.70	32.21	22.83	29.86	29.87	26.75	---	---	33.71	33.89	33.83	34.05
14	32.06	32.42	21.89	30.40	29.13	27.60	---	---	33.74	33.90	33.98	34.06
15	32.29	32.05	22.59	30.82	28.94	28.21	---	---	33.75	33.91	33.98	34.06
16	32.50	32.01	23.04	31.21	28.91	27.94	---	---	33.74	32.98	33.99	34.06
17	32.66	32.06	23.22	31.61	29.08	27.45	---	---	33.76	30.18	33.99	34.09
18	32.67	32.09	23.63	31.89	29.39	27.60	---	27.76	33.78	29.05	33.99	34.09
19	32.73	32.07	23.64	32.25	29.52	27.77	---	28.48	33.80	29.71	34.00	34.09
20	32.77	30.64	23.64	32.67	30.00	27.64	30.41	29.18	33.80	30.30	34.01	34.09
21	32.85	28.99	24.24	32.90	30.36	26.88	30.47	29.81	33.69	31.09	34.02	34.10
22	32.85	29.33	22.73	33.14	30.68	27.34	29.41	30.33	33.55	32.03	34.03	34.09
23	32.30	29.34	22.02	33.30	30.95	27.83	29.41	30.33	32.43	32.79	34.02	34.09
24	32.46	22.72	22.84	31.96	31.31	27.97	29.41	29.36	31.54	33.31	34.02	34.11
25	32.55	23.63	23.02	30.18	31.78	27.48	29.41	29.94	32.23	33.61	34.03	34.11
26	32.54	24.41	23.11	29.53	32.17	27.26	29.41	30.46	32.74	33.75	34.03	34.11
27	32.49	24.52	23.25	29.13	32.16	27.31	29.41	30.70	33.30	33.78	34.04	34.12
28	32.46	22.84	23.20	29.19	30.30	24.90	29.41	30.06	33.49	33.55	34.05	34.11
29	32.28	23.63	22.82	29.46	29.88	---	22.77	30.51	33.51	33.58	34.06	34.09
30	32.35	24.13	22.97	29.89	---	---	17.46	30.77	33.60	33.61	34.06	34.05
31	32.39	---	23.30	30.29	---	---	---	31.42	---	33.63	34.07	---
LOWEST	32.92	32.82	---	33.30	32.17	---	---	---	---	33.91	34.07	34.12

WTR YEAR 1984 HIGHEST 7.99 MAY 7, 1984 LOWEST 34.12 SEP 27, 1984

HAMILTON COUNTY

350234085181200. Local number, Hm:G-36.

LOCATION.--Lat 35°02'34", long 85°18'12", Hydrologic Unit 06020001, in Tennessee Valley Authority parking lot, Douglas Street in Chattanooga.
Owner: Tennessee Valley Authority.

AQUIFER.--Knox Dolomite of Cambrian and Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian test well, diameter 16 in to 120 ft, 6 in to 250 ft, cased to 27 ft, open end.

INSTRUMENTATION.--Water-level recorder since April 1981.

DATUM.--Altitude of land-surface datum 670.3 ft. Measuring point: Top of instrument shelf, 1.5 ft above land-surface datum.

REMARKS.--The well has been pumped at rates up to 1,200 gal/min over a 68 hour period indicating a specific capacity of 20.4 [(gal/min)/ft]. No record Jan. 24 to Mar. 6.

PERIOD OF RECORD.--April 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.35 ft below land-surface datum, Dec. 1, 1982; lowest, 14.13 ft below land-surface datum, Sept. 30, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.59	13.19	7.55	6.77		---	8.75	10.13	10.42	11.42	7.53	11.91
2	12.65	13.26	7.85	7.16		---	8.96	10.14	10.49	10.06	7.77	11.96
3	12.73	13.30	7.45	7.50		---	8.95	8.29	10.54	9.80	8.13	12.02
4	12.80	13.13	4.65	7.76		---	8.25	4.85	10.61	9.91	8.43	12.09
5	12.88	12.70	5.37	8.11		---	7.47	5.50	10.68	10.05	8.72	12.18
6	12.96	12.65	5.90	8.43		9.55	7.76	6.28	10.74	10.18	9.00	12.26
7	13.07	12.69	6.47	8.76		9.65	8.13	6.82	10.80	10.22	9.21	12.34
8	13.12	12.75	7.00	9.09		9.79	8.40	6.03	10.86	9.51	9.52	12.43
9	13.19	12.79	7.43	9.17		9.88	8.42	6.02	10.93	9.71	9.74	12.51
10	13.27	12.80	7.80	9.17		9.98	7.83	6.60	10.97	9.91	9.92	12.58
11	13.32	12.85	7.87	8.66		10.01	8.11	7.11	11.03	10.07	10.13	12.64
12	13.36	12.91	6.97	8.85		10.12	8.35	7.60	11.15	9.98	10.23	12.74
13	13.24	12.97	7.19	9.06		10.20	8.63	7.92	11.25	10.10	10.41	12.82
14	12.64	13.01	7.39	9.19		10.26	8.87	8.31	11.26	10.24	10.55	12.90
15	12.66	12.99	7.76	9.37		10.36	9.05	8.67	11.33	10.36	10.72	13.00
16	12.71	11.90	8.10	9.51		10.31	9.22	8.91	11.33	10.37	10.86	13.10
17	12.78	11.80	8.37	9.74		10.23	9.50	9.14	11.37	10.43	10.90	13.18
18	12.85	11.83	8.60	9.69		10.25	9.73	9.33	11.41	10.03	11.00	13.27
19	12.93	11.85	8.84	9.42		10.30	9.91	9.49	11.47	9.88	11.07	13.36
20	13.02	11.84	9.09	9.58		10.24	9.94	9.64	11.51	10.03	11.13	13.39
21	13.10	10.61	9.20	9.69		9.00	9.79	9.75	11.46	10.12	11.22	13.50
22	13.17	10.53	9.16	9.69		9.11	9.77	9.83	11.48	10.24	11.26	13.57
23	13.04	10.54	8.37	9.78		9.28	9.37	9.91	11.21	10.37	11.31	13.65
24	12.71	8.84	8.53	---		9.43	9.56	10.01	11.25	10.47	11.43	13.73
25	12.73	8.72	8.65	---		9.51	9.70	10.09	11.38	10.63	11.50	13.76
26	12.77	8.98	8.91	---		9.62	9.86	10.17	11.50	10.75	11.54	13.83
27	12.84	9.07	8.99	---		9.73	9.99	10.19	11.56	10.85	11.60	13.91
28	12.90	6.70	8.63	---		9.58	10.02	10.23	11.67	11.00	11.66	14.01
29	12.97	6.41	5.97	---		8.25	9.87	10.15	11.66	11.03	11.72	14.05
30	13.04	7.04	5.88	---		8.26	10.05	10.27	11.65	9.44	11.78	14.13
31	13.11	---	6.28	---		8.52	---	10.35	---	8.60	11.84	---
LOWEST	13.36	13.30	9.20	---		---	10.05	10.35	11.67	11.42	11.84	14.13

WTR YEAR 1984 HIGHEST 4.12 MAY 4, 1984 LOWEST 14.13 SEP 30, 1984

HAMILTON COUNTY--Continued

351428085003600. Local number, Hm:O-15.

LOCATION.--Lat 35°14'28", long 85°00'36", Hydrologic Unit 06020001, at Smith Road and State Highway 58, near Snow Hill.
Owner: Savannah Valley Utility District.

AQUIFER.--Knox Dolomite of the Cambrian and Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian test well, diameter 10 in, depth 262 ft, cased to 50 ft, open end.

INSTRUMENTATION.--Water-level recorder since May 1975.

DATUM.--Altitude of land-surface datum is 735 ft. Measuring point: Top of back shelter panel, 8.00 ft above land-surface datum.

REMARKS.--Well previously published as "at Savannah Valley". Water level affected intermittently by pumping from municipal supply well 300 ft south. Negative values indicate water levels above land-surface.

PERIOD OF RECORD.--May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.40 ft above land-surface datum, May 31, 1979; lowest, 7.73 ft below land-surface datum, Aug. 31, Sept. 1, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.09	7.16	2.85	.66	3.24	.84	.41	4.24	5.10	6.24	4.07	6.23
2	7.07	7.17	3.43	1.16	3.59	1.22	.66	4.15	5.27	6.24	1.70	6.24
3	6.98	7.14	3.43	1.71	3.86	1.61	.83	2.96	5.35	6.27	1.22	6.25
4	7.04	7.15	.41	2.21	4.11	2.05	.58	-1.61	5.46	6.28	1.44	6.19
5	7.08	7.14	.00	2.68	4.41	2.34	-0.74	-1.41	5.58	6.24	1.75	6.16
6	7.09	7.12	.00	3.19	4.70	2.73	-0.61	-1.11	5.65	6.20	2.24	6.17
7	7.13	7.14	.02	3.63	4.94	3.15	-0.23	-1.30	5.71	6.19	2.71	6.22
8	7.14	7.15	.83	4.02	5.15	3.45	.17	-2.58	5.76	4.23	3.17	6.22
9	7.17	7.16	1.61	4.33	5.31	3.74	.02	-2.08	5.82	4.50	3.55	6.22
10	7.10	7.15	2.27	4.47	5.37	3.98	-0.01	-1.72	5.87	4.75	3.88	6.27
11	7.09	7.23	2.31	3.87	5.44	4.20	.21	-1.35	5.91	4.98	4.19	6.19
12	7.08	7.24	1.47	3.62	5.45	4.39	.51	-0.94	5.95	5.25	4.46	6.26
13	6.95	7.22	1.11	3.72	5.22	4.57	.88	-0.57	6.00	5.47	4.71	6.30
14	7.03	7.21	1.42	3.87	4.57	4.78	1.31	-0.17	6.02	5.63	4.94	6.20
15	7.03	7.16	1.96	4.00	3.57	4.93	1.75	.28	6.04	5.74	5.19	6.28
16	7.10	6.95	2.50	4.14	3.31	5.04	2.16	.73	6.01	5.78	5.35	6.32
17	7.06	7.01	2.99	4.34	3.29	5.17	2.61	1.23	6.07	5.88	5.48	6.13
18	7.06	7.08	3.44	4.20	3.47	5.22	3.03	1.74	6.10	5.80	5.49	6.28
19	7.08	7.08	3.80	3.51	3.73	5.27	3.38	2.13	6.13	4.80	5.57	6.33
20	7.09	6.99	4.17	3.04	3.98	5.27	3.67	2.56	6.15	4.96	5.72	6.33
21	7.14	6.77	4.44	3.21	4.13	4.65	3.93	3.03	6.09	5.14	5.76	6.35
22	7.14	6.80	4.09	3.51	4.41	4.47	4.05	3.42	6.10	5.17	5.89	6.37
23	7.09	6.76	3.58	3.66	4.37	4.29	4.23	3.74	6.02	5.47	5.92	6.24
24	7.04	5.99	3.08	3.56	4.46	4.29	4.40	4.04	5.98	5.61	5.98	6.33
25	7.06	5.97	3.39	1.74	4.56	4.28	4.56	4.32	6.06	5.70	6.03	6.37
26	7.07	6.15	3.69	1.16	4.60	4.36	4.70	4.62	6.11	5.81	6.06	---
27	7.10	6.14	3.97	1.16	4.35	4.41	4.83	4.82	6.13	5.82	6.10	---
28	7.11	4.44	3.90	1.43	1.39	4.39	4.80	4.81	6.16	5.70	6.14	---
29	7.22	1.50	.09	1.82	.58	.86	4.74	4.67	6.18	5.58	6.17	---
30	7.23	2.07	.04	2.26	---	-0.21	4.49	4.69	6.20	5.47	6.19	---
31	7.15	---	.20	2.76	---	.00	---	4.94	---	5.17	6.21	---
LOWEST	7.23	7.24	4.44	4.47	5.45	5.27	4.83	4.94	6.20	6.28	6.21	---

WTR YEAR 1984 HIGHEST -3.76 MAY 8, 1984 LOWEST 7.24 NOV 12, 1983

HUMPHREYS COUNTY

360020087573300. Local number, Hs:H-1.

LOCATION.--Lat 36°00'20", long 87°57'33", Hydrologic Unit 06040005, 100 ft north of Woodland Drive at New Johnsonville.
Owner: A. M. Powers.

AQUIFER.--Camden Chert of early Devonian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in, depth 187 ft, cased to 72 ft, open end.

INSTRUMENTATION.--Water-level recorder since February 1962.

DATUM.--Altitude of land-surface datum is 470 ft. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--February 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.31 ft below land-surface datum, May 25, 1983; lowest, 90.20 ft below land-surface datum, Nov. 25, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87.66	87.71	87.34	86.90	86.80	86.76	86.24	85.97	86.11	86.70	86.89	87.20
2	87.67	87.69	87.28	86.88	86.80	86.73	86.19	85.89	86.14	86.74	86.90	87.21
3	87.66	87.65	87.05	86.87	86.74	86.74	86.10	85.57	86.15	86.78	86.92	87.21
4	87.65	87.59	86.83	86.81	86.74	86.70	86.04	85.49	86.19	86.79	86.94	87.21
5	87.74	87.59	86.82	86.79	86.84	86.49	86.09	85.45	86.26	86.78	86.93	87.23
6	87.77	87.58	86.93	86.84	86.88	86.41	86.14	85.30	86.31	86.80	86.90	87.24
7	87.77	87.57	86.93	86.85	86.92	86.43	86.17	84.94	86.33	86.85	86.89	87.26
8	87.78	87.58	86.93	86.87	86.92	86.50	86.14	84.59	86.37	86.90	86.91	87.26
9	87.79	87.58	86.94	86.86	86.85	86.53	86.11	84.47	86.41	86.93	86.96	87.22
10	87.77	87.54	86.94	86.88	86.80	86.50	86.13	84.44	86.44	86.93	86.99	87.20
11	87.74	87.64	86.87	86.90	86.81	86.52	86.14	84.43	86.47	86.93	86.96	87.24
12	87.69	87.65	86.86	86.89	86.79	86.50	86.15	84.46	86.49	86.89	86.98	87.27
13	87.68	87.60	86.84	86.96	86.78	86.55	86.17	84.47	86.51	86.93	86.99	87.29
14	87.73	87.59	86.77	86.99	86.81	86.58	86.20	84.54	86.54	86.96	87.01	87.30
15	87.73	87.62	86.88	86.95	86.81	86.54	86.20	84.59	86.56	86.93	87.02	87.38
16	87.73	87.65	86.96	86.89	86.79	86.53	86.20	84.64	86.58	86.84	86.98	87.40
17	87.72	87.65	86.97	86.92	86.79	86.48	86.25	84.72	86.58	86.79	86.97	87.41
18	87.67	87.62	86.95	86.94	86.79	86.41	86.31	84.80	86.62	86.71	86.98	87.40
19	87.66	87.61	86.93	86.97	86.78	86.34	86.33	84.88	86.66	86.73	86.99	87.39
20	87.65	87.50	86.91	87.01	86.79	86.25	86.36	85.04	86.63	86.74	87.05	87.38
21	87.66	87.53	86.87	87.01	86.75	86.26	86.32	85.26	86.61	86.77	87.09	87.40
22	87.63	87.53	86.81	86.97	86.73	86.36	86.10	85.45	86.68	86.79	87.11	87.45
23	87.58	87.45	86.80	86.91	86.72	86.39	86.02	85.59	86.72	86.84	87.11	87.47
24	87.64	87.38	86.86	86.78	86.78	86.33	86.05	85.63	86.68	86.87	87.18	87.45
25	87.66	87.37	86.87	86.77	86.80	86.30	86.09	85.72	86.71	86.89	87.23	87.47
26	87.66	87.40	86.87	86.75	86.79	86.30	86.11	85.84	86.70	86.89	87.25	87.50
27	87.67	87.34	86.84	86.74	86.67	86.23	86.13	85.87	86.69	86.86	87.23	87.48
28	87.69	87.23	86.86	86.72	86.74	86.11	86.13	85.95	86.71	86.89	87.20	87.46
29	87.70	87.28	86.99	86.71	86.77	86.23	86.04	86.02	86.67	86.90	87.14	87.47
30	87.71	87.32	87.00	86.85	---	86.25	85.99	86.05	86.66	86.89	87.16	87.46
31	87.71	---	86.95	86.84	---	86.25	---	86.08	---	86.87	87.19	---
LOWEST	87.79	87.71	87.34	87.01	86.92	86.76	86.36	86.08	86.72	86.96	87.25	87.50

WTR YR 1984 HIGHEST 84.38 MAY 11, 1984 LOWEST 87.79 OCT 9, 1984

LAUDERDALE COUNTY

353839089493500. Local number, Ld:F-4.

LOCATION.--Lat 35°38'39", long 89°49'35", Hydrologic Unit 08010208, 1.1 mi north of State Highway 87, at Fort Pillow State Park.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 to 6 to 3 in, depth 879 ft, cased to 869 ft, screened 869 to 879 ft.

INSTRUMENTATION.--Water-level recorder since April 1966.

DATUM.--Land-surface datum is 437.05 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 187.76 ft below land-surface datum, Apr. 7, 1975; lowest, 197.90 ft below land-surface datum, Oct. 16, 17, 18, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197.60	197.68	196.99	196.97	196.84	195.70	193.90	193.63	195.46	195.38	196.02	196.94
2	197.59	197.71	196.64	196.96	196.77	195.70	193.71	193.37	195.56	195.40	196.06	196.97
3	197.59	197.73	196.26	196.96	196.67	195.70	193.44	192.97	195.60	195.41	196.08	196.98
4	197.58	197.74	196.09	196.90	196.62	195.70	193.25	192.77	195.60	195.40	196.07	197.02
5	197.66	197.79	196.05	196.80	196.62	195.46	193.21	192.77	195.60	195.38	196.11	197.07
6	197.66	197.80	195.91	196.75	196.72	195.31	193.19	192.68	195.60	195.38	196.15	197.09
7	197.71	197.83	195.81	196.78	196.79	195.27	193.18	192.50	195.58	195.36	196.17	197.09
8	197.75	197.85	195.61	196.82	196.80	195.15	193.11	192.29	195.62	195.36	196.18	197.12
9	197.76	197.85	195.41	196.83	196.80	195.13	192.91	192.21	195.70	195.34	196.23	197.12
10	197.76	197.77	195.41	196.89	196.71	195.07	192.86	192.13	195.77	195.34	196.27	197.01
11	197.75	197.79	195.36	196.92	196.67	195.08	192.85	191.85	195.83	195.31	196.29	197.06
12	197.79	197.82	195.40	196.92	196.67	195.08	192.83	191.56	195.86	195.25	196.34	197.12
13	197.79	197.82	195.40	196.99	196.52	195.27	192.86	191.34	195.88	195.29	196.38	197.14
14	197.86	197.80	195.57	197.04	196.56	195.43	192.96	191.06	195.87	195.35	196.43	197.14
15	197.89	197.79	195.76	197.04	196.57	195.57	193.01	190.90	195.85	195.39	196.47	197.20
16	197.90	197.85	195.90	196.99	196.56	195.76	193.06	190.80	195.83	195.38	196.52	197.23
17	197.90	197.85	195.99	196.95	196.48	195.77	193.19	190.79	195.78	195.37	196.52	197.24
18	197.90	197.82	196.07	196.99	196.43	195.77	193.37	190.80	195.71	195.43	196.50	197.26
19	197.89	197.76	196.15	197.06	196.16	195.75	193.60	190.82	195.67	195.49	196.47	197.27
20	197.88	197.59	196.25	197.09	196.10	195.63	193.87	190.90	195.66	195.53	196.48	197.26
21	197.88	197.63	196.27	197.14	195.92	195.43	194.16	191.07	195.63	195.59	196.51	197.26
22	197.87	197.64	196.42	197.14	195.80	195.26	194.42	191.35	195.60	195.64	196.54	197.29
23	197.85	197.53	196.55	197.11	195.63	195.17	194.69	191.73	195.53	195.69	196.53	197.32
24	197.87	197.41	196.78	196.93	195.48	194.93	194.83	192.09	195.51	195.74	196.58	197.29
25	197.89	197.41	196.81	196.91	195.45	194.68	194.84	192.56	195.50	195.78	196.66	197.32
26	197.88	197.40	196.81	196.91	195.45	194.59	194.82	193.17	195.44	195.80	196.71	197.36
27	197.80	197.25	196.75	196.91	195.35	194.38	194.61	193.68	195.39	195.86	196.74	197.36
28	197.76	197.04	196.70	196.91	195.53	194.14	194.43	194.25	195.38	195.92	196.76	197.35
29	197.71	197.02	196.91	196.87	195.67	194.10	194.09	194.77	195.38	195.96	196.79	197.36
30	197.70	197.02	196.97	196.89	---	194.10	193.73	195.14	195.37	195.98	196.85	197.37
31	197.65	---	196.97	196.89	---	194.04	---	195.33	---	195.99	196.90	---
LOWEST	197.90	197.85	196.99	197.14	196.84	195.77	194.84	195.33	195.88	195.99	196.90	197.37

WTR YEAR 1984 HIGHEST 190.77 MAY 16, 17, 1984 LOWEST 197.90 OCT 16, 17, 18, 1983

LAUDERDALE COUNTY--Continued

354158089384300. Local number, Ld: G-12.

LOCATION.--Lat 35°41'58", long 89°38'43", Hydrologic Unit 08010208, 130 ft west of Glimp-Ripley Road, 0.1 mi northeast of State Highway 87 at Glimp.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 440 ft, cased to 420 ft, screened 420 to 440 ft.

INSTRUMENTATION.--Water level recorder since October 1980.

DATUM.--Altitude of land-surface datum is 360 ft. Measuring point: Inside top of shelter base plate, 2.70 ft above land-surface datum.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 101.02 ft below land-surface datum, May 29, 1983; lowest, 106.45 ft below land-surface datum, Oct. 29, 30, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106.15	106.44	105.98	104.90	105.01	104.81	103.99	103.39	102.76	104.25	104.79	105.55
2	106.16	106.41	105.91	104.90	105.01	104.75	103.90	103.26	102.85	104.29	104.83	105.58
3	106.16	106.39	105.68	104.90	104.93	104.77	103.68	102.96	102.92	104.31	104.86	105.58
4	106.13	106.31	105.57	104.85	104.92	104.71	103.61	102.96	103.00	104.29	104.87	105.63
5	106.20	106.31	105.55	104.81	105.02	104.56	103.60	102.91	103.10	104.30	104.91	105.67
6	106.24	106.30	105.53	104.85	105.06	104.56	103.58	102.75	103.17	104.29	104.94	105.69
7	106.25	106.27	105.53	104.87	105.09	104.55	103.57	102.65	103.20	104.35	104.93	105.70
8	106.28	106.29	105.39	104.90	105.10	104.55	103.49	102.65	103.27	104.40	104.94	105.72
9	106.31	106.27	105.31	104.89	105.04	104.56	103.32	102.60	103.34	104.43	104.97	105.68
10	106.31	106.22	105.27	104.96	104.95	104.52	103.31	102.55	103.42	104.46	105.00	105.56
11	106.25	106.31	105.07	104.96	104.94	104.48	103.28	102.48	103.49	104.46	105.00	105.61
12	106.23	106.33	104.99	104.95	104.92	104.44	103.22	102.49	103.55	104.44	105.04	105.64
13	106.30	106.27	104.92	105.05	104.89	104.43	103.20	102.45	103.59	104.49	105.08	105.65
14	106.36	106.24	104.74	105.09	104.92	104.44	103.18	102.44	103.63	104.54	105.13	105.65
15	106.38	106.27	104.87	105.07	104.92	104.39	103.17	102.43	103.68	104.52	105.17	105.73
16	106.40	106.31	104.97	104.99	104.90	104.40	103.13	102.41	103.73	104.47	105.26	105.75
17	106.41	106.30	104.98	105.02	104.92	104.34	103.14	102.38	103.76	104.43	105.20	105.76
18	106.34	106.27	104.97	105.08	104.90	104.28	103.18	102.33	103.80	104.47	105.19	105.76
19	106.34	106.23	104.97	105.12	104.92	104.19	103.19	102.25	103.86	104.50	105.22	105.75
20	106.33	106.15	104.93	105.17	104.93	104.12	103.19	102.18	103.91	104.50	105.27	105.71
21	106.32	106.18	104.87	105.18	104.89	104.13	103.16	102.14	103.94	104.52	105.33	105.70
22	106.29	106.20	104.82	105.13	104.84	104.22	103.13	102.19	103.95	104.55	105.37	105.75
23	106.30	106.06	104.84	105.06	104.83	104.25	103.17	102.24	103.97	104.58	105.32	105.79
24	106.37	106.08	104.92	104.93	104.84	104.17	103.22	102.25	104.06	104.63	105.36	105.75
25	106.41	106.07	104.91	104.97	104.86	104.15	103.27	102.20	104.10	104.65	105.41	105.78
26	106.41	106.04	104.82	104.96	104.82	104.15	103.29	102.30	104.10	104.64	105.43	105.80
27	106.42	105.94	104.70	104.96	104.69	104.04	103.37	102.32	104.09	104.67	105.42	105.78
28	106.43	105.88	104.74	104.95	104.80	103.90	103.41	102.47	104.14	104.71	105.41	105.79
29	106.45	105.92	104.90	104.92	104.83	104.02	103.38	102.57	104.15	104.74	105.42	105.82
30	106.45	105.96	104.95	105.06	---	104.03	103.42	102.64	104.19	104.74	105.47	105.81
31	106.44	---	104.93	105.06	---	104.02	---	102.70	---	104.74	105.52	---
LOWEST	106.45	106.44	105.98	105.18	105.10	104.81	103.99	103.39	104.19	104.74	105.52	105.82

WTR YEAR 1984 HIGHEST 102.11 MAY 21, 1984 LOWEST 106.45 OCT 29, 30, 1983

LAUDERDALE COUNTY--Continued

354357089271701. Local number, Ld:J-5.

LOCATION.--Lat 35°43'57", long 89°27'17", Hydrologic Unit 08010208, 50 ft southeast of Conner Church Road, 1.7 mi north of State Highway 19 and 2.5 mi northwest of Nutbush.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 277 ft, cased to 257 ft, screened 257 to 277 ft.

INSTRUMENTATION.--Water level recorder since March 1982.

DATUM.--Altitude of land-surface datum is 469 ft. Measuring point: Inside top of shelter base plate, 2.80 ft above land-surface datum.

PERIOD OF RECORD.--March 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 128.46 ft below land-surface datum, June 29, 30, 1983; lowest 130.89 ft below land-surface datum, Nov. 15 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129.17	129.42	129.51	129.69	129.80	129.74	129.51	129.19	128.86	128.80	128.81	128.99
2	129.17	129.42	129.50	129.69	129.81	129.73	129.49	129.16	128.86	128.81	128.82	129.00
3	129.17	129.42	129.39	129.70	129.77	129.74	129.41	129.04	128.85	128.82	128.83	129.00
4	129.17	129.39	129.38	129.68	129.76	129.73	129.40	129.07	128.85	128.81	128.79	128.98
5	129.18	129.38	129.39	129.67	129.81	129.64	129.41	129.07	128.85	128.80	128.80	129.01
6	129.20	129.39	129.44	129.69	129.83	129.66	129.42	129.03	128.85	128.77	128.80	129.03
7	129.21	129.40	129.46	129.70	129.85	129.67	129.43	129.00	128.83	128.79	128.79	129.07
8	129.23	129.41	129.48	129.72	129.86	129.70	129.42	129.03	128.83	128.80	128.80	129.07
9	129.25	129.42	129.50	129.72	129.84	129.71	129.36	129.03	128.83	128.81	128.82	129.04
10	129.25	129.40	129.50	129.74	129.82	129.70	129.36	129.02	128.84	128.81	128.83	128.95
11	129.24	129.45	129.47	129.75	129.79	129.69	129.36	129.01	128.85	128.81	128.83	128.96
12	129.24	129.46	129.47	129.75	129.79	129.68	129.34	129.03	128.85	128.75	128.85	128.97
13	129.27	129.46	129.47	129.79	129.75	129.66	129.34	129.03	128.85	128.77	128.86	128.98
14	129.30	129.46	129.44	129.82	129.77	129.66	129.34	129.07	128.84	128.79	128.88	128.99
15	129.31	129.46	129.51	129.81	129.78	129.65	129.34	129.05	128.84	128.79	128.90	129.04
16	129.32	129.48	129.57	129.78	129.77	129.64	129.32	129.07	128.84	128.73	128.91	129.06
17	129.33	129.49	129.59	129.80	129.78	129.63	129.32	129.05	128.84	128.71	128.90	129.07
18	129.27	129.49	129.61	129.81	129.77	129.59	129.33	129.04	128.83	128.66	128.90	129.09
19	129.26	129.49	129.61	129.83	129.76	129.56	129.32	129.03	128.84	128.67	128.91	129.09
20	129.27	129.42	129.60	129.85	129.77	129.53	129.32	128.99	128.84	128.69	128.93	129.09
21	129.28	129.45	129.60	129.86	129.76	129.54	129.29	128.94	128.84	128.70	128.95	129.19
22	129.27	129.47	129.56	129.85	129.75	129.58	129.21	128.93	128.83	128.71	128.97	129.13
23	129.23	129.40	129.59	129.83	129.73	129.59	129.22	128.95	128.77	128.73	128.91	129.17
24	129.27	129.39	129.65	129.73	129.75	129.56	129.22	128.94	128.78	128.75	128.93	129.17
25	129.30	129.41	129.66	129.76	129.76	129.53	129.23	128.92	128.79	128.76	128.96	129.15
26	129.30	129.43	129.64	129.76	129.75	129.53	129.22	128.92	128.78	128.76	128.97	129.15
27	129.33	129.42	129.61	129.76	129.69	129.49	129.22	128.86	128.77	128.77	128.97	129.13
28	129.34	129.40	129.60	129.76	129.72	129.41	129.22	128.87	128.79	128.79	128.97	129.14
29	129.37	129.45	129.67	129.76	129.74	129.48	129.20	128.89	128.79	128.80	128.93	129.15
30	129.39	129.49	129.70	129.81	---	129.50	129.19	128.89	128.79	128.80	128.96	129.16
31	129.40	---	129.70	129.81	---	129.51	---	128.87	---	128.80	128.97	---
LOWEST	129.40	129.49	129.70	129.86	129.86	129.74	129.51	129.19	128.86	128.82	128.97	129.19

WTR YEAR 1984 HIGHEST 128.61 JUL 17, 18, 1984 LOWEST 129.86 JAN 21, FEB 8, 1984

LAUDERDALE COUNTY--Continued

354552089455900. Local number, Ld:L-2.

LOCATION.--Lat 35°45'52", long 89°45'59", Hydrologic Unit 08010100, 70 ft south of State Highway 19, 1.2 mi east of Ashport.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 245 ft, cased to 225 ft, screened 225 to 245 ft.

INSTRUMENTATION.--Water-level recorder since October 1980.

DATUM.--Altitude of land-surface datum is 239 ft. Measuring point: Inside top of shelter base plate, 2.00 ft above land-surface datum.

REMARKS.--Missing record October 28 to December 15.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.02 ft below land-surface datum, May 12, 1983; lowest, 15.82 ft below land-surface datum, Jan. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.49		---	11.12	11.84	10.96	9.35	7.29	5.95	7.22	8.50	10.49
2	12.52		---	11.13	11.83	10.89	9.23	7.18	5.98	7.26	8.58	10.55
3	12.54		---	11.13	11.78	10.88	8.99	6.92	6.01	7.28	8.62	10.59
4	12.56		---	11.12	11.78	10.83	8.88	6.88	6.04	7.30	8.63	10.67
5	12.61		---	11.12	11.86	10.58	8.79	6.86	6.08	7.32	8.71	10.74
6	12.70		---	11.18	11.87	10.57	8.70	6.74	6.12	7.34	8.75	10.80
7	12.76		---	11.22	11.90	10.55	8.58	6.53	6.15	7.37	8.82	10.88
8	12.80		---	11.26	11.90	10.50	8.40	6.25	6.21	7.39	8.89	10.94
9	12.82		---	11.29	11.88	10.49	8.17	6.00	6.27	7.42	8.98	10.94
10	12.83		---	11.35	11.85	10.43	7.98	5.68	6.35	7.44	9.05	10.89
11	12.88		---	11.38	11.86	10.36	7.84	5.25	6.43	7.45	9.12	10.98
12	12.92		---	11.41	11.85	10.31	7.76	4.82	6.50	7.38	9.20	11.04
13	12.93		---	11.49	11.78	10.24	7.72	4.42	6.57	7.43	9.27	11.09
14	12.99		---	11.53	11.78	10.23	7.69	4.06	6.62	7.47	9.34	11.15
15	13.03		11.15	11.53	11.78	10.21	7.68	3.81	6.69	7.49	9.41	11.24
16	13.07		11.16	11.57	11.74	10.19	7.62	3.62	6.74	7.50	9.47	11.30
17	13.10		11.15	11.61	11.71	10.16	7.63	3.50	6.78	7.53	9.50	11.36
18	13.07		11.10	11.67	11.66	10.12	7.64	3.47	6.82	7.60	9.53	11.42
19	13.08		11.08	11.72	11.58	10.09	7.64	3.49	6.86	7.65	9.58	11.45
20	13.12		11.03	11.78	11.56	10.04	7.65	3.56	6.91	7.71	9.64	11.49
21	13.13		10.99	11.80	11.48	10.00	7.62	3.73	6.94	7.77	9.72	11.55
22	13.14		10.87	11.81	11.40	10.00	7.60	4.01	6.95	7.83	9.74	11.62
23	13.14		10.91	11.81	11.33	9.99	7.61	4.37	6.95	7.90	9.79	11.65
24	13.15		10.96	11.72	11.24	9.91	7.61	4.77	7.01	7.96	9.87	11.63
25	13.16		10.96	11.79	11.21	9.81	7.61	5.18	7.04	8.04	9.96	11.70
26	13.15		10.95	11.81	11.14	9.78	7.60	5.54	7.06	8.09	10.03	11.74
27	13.10		10.92	11.84	11.01	9.66	7.57	5.74	7.09	8.16	10.10	11.77
28	13.07		10.98	11.84	10.98	9.47	7.56	5.86	7.12	8.24	10.16	11.83
29	---		11.05	11.83	10.98	9.48	7.50	5.90	7.15	8.31	10.24	11.88
30	---		11.09	11.88	---	9.47	7.35	5.93	7.19	8.36	10.32	11.93
31	---		11.10	11.87	---	9.42	---	5.94	---	8.43	10.41	---
LOWEST	---		---	11.88	11.90	10.96	9.35	7.29	7.19	8.43	10.41	11.93

WTR YEAR 1984 HIGHEST 3.45 MAY 18, 19, 1984 LOWEST 13.16 OCT 25, 1983

LAUDERDALE COUNTY--Continued

355251089350500. Local number, Ld: S-2.

LOCATION.--Lat 35°52'51", long 89°35'05", Hydrologic Unit 08010100, about 0.7 mi east of Old Bed Forked Deer River, 3 mi west of Knob Creek.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Fluvial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 100 ft, cased to 80 ft, screened 80 to 100 ft.

INSTRUMENTATION.--Water level recorder since October 1980.

DATUM.--Altitude of land-surface datum is 254 ft. Measuring point: Inside top of shelter base plate, 3.20 ft above land-surface datum.

REMARKS.--Negative values indicate water levels above land-surface. Missing record April 5 to June 25.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft above land-surface datum, Dec. 11, 1982; lowest, 9.45 ft below land-surface datum, Oct. 16, 17, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.27	9.39	6.86	4.34	3.88	3.25	-1.48		---	5.07	6.07	7.71
2	9.30	9.37	6.71	4.43	3.96	3.35	-2.04		---	5.13	6.16	7.75
3	9.32	9.36	5.11	4.34	3.91	3.42	-2.52		---	5.16	6.16	7.76
4	9.33	9.31	4.12	4.13	3.80	3.32	-2.94		---	5.23	6.18	7.80
5	9.36	9.31	3.98	3.88	4.19	2.18	-2.97		---	5.29	6.24	7.83
6	9.37	9.28	3.83	3.51	4.27	1.87	---		---	5.34	6.27	7.87
7	9.39	9.26	3.72	3.47	4.41	1.97	---		---	5.38	6.29	7.94
8	9.41	9.27	3.10	3.45	4.44	2.12	---		---	5.37	6.40	7.98
9	9.41	9.25	2.05	3.42	4.38	2.14	---		---	5.38	6.49	7.97
10	9.41	9.20	1.59	3.44	4.40	1.90	---		---	5.38	6.52	7.63
11	9.41	9.19	.95	3.56	4.42	1.32	---		---	5.39	6.58	7.64
12	9.40	9.17	.73	3.74	4.37	1.01	---		---	5.37	6.65	7.49
13	9.42	9.14	.62	3.92	3.33	1.09	---		---	5.42	6.71	7.50
14	9.43	9.13	.91	4.01	3.34	1.22	---		---	5.47	6.79	7.57
15	9.44	9.09	1.23	4.02	3.54	1.54	---		---	5.55	6.85	7.65
16	9.45	9.09	1.38	4.20	3.63	1.82	---		---	5.54	6.90	7.69
17	9.45	9.07	1.48	4.33	3.74	1.85	---		---	5.53	6.93	7.72
18	9.39	9.04	1.65	4.47	3.71	2.00	---		---	3.50	6.99	7.75
19	9.38	9.04	1.88	4.58	3.77	2.15	---		---	3.80	7.07	7.77
20	9.37	8.65	2.09	4.70	3.76	2.20	---		---	4.15	7.16	7.81
21	9.37	8.57	2.13	4.74	3.61	2.40	---		---	4.45	7.23	7.90
22	9.34	8.57	1.77	4.76	3.54	2.56	---		---	4.68	7.23	7.97
23	9.34	8.36	2.28	4.70	3.48	2.59	---		---	4.94	7.25	7.99
24	9.37	7.58	2.70	3.47	3.56	2.44	---		---	5.13	7.31	7.75
25	9.38	7.60	2.91	2.75	3.57	2.30	---		4.75	5.26	7.37	7.79
26	9.36	7.59	3.12	2.80	3.46	2.12	---		4.75	5.40	7.40	7.82
27	9.36	7.49	3.22	3.04	3.27	1.60	---		4.86	5.53	7.44	7.79
28	9.37	6.94	3.76	3.16	3.26	.68	---		4.92	5.68	7.48	7.84
29	9.39	6.93	3.97	3.35	3.32	.32	---		4.95	5.78	7.54	7.85
30	9.38	6.89	4.09	3.74	---	-0.20	---		5.02	5.86	7.59	7.89
31	9.38	---	4.18	3.80	---	-0.85	---		---	5.95	7.64	---
LOWEST	9.45	9.39	6.86	4.76	4.44	3.42	---		---	5.95	7.64	7.99

WTR YEAR 1984 HIGHEST -2.98 APR 5, 1984 LOWEST 9.45 OCT 16, 17, 1983

PUTNAM COUNTY

360521085432600. Local number, Pm:C-1.

LOCATION.--Lat 36°05'21", long 85°43'26", Hydrologic Unit 05130108, at Interstate 40 and State Highway 56, Silver Point.
Owner: Tennessee Department of Highways.

AQUIFER.--Fort Payne Formation of early Mississippian age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in, depth 175 ft, cased to 60 ft, open end.

INSTRUMENTATION.--Water-level recorder since March 1968.

DATUM.--Altitude of land-surface datum is 1,030 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Record good.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.30 ft below land-surface datum, May 2, 1974; lowest, 53.56 ft below land-surface datum, Nov. 24, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.54	53.00	53.17	52.42	52.30	52.09	51.20	50.63	49.52	50.15	50.74	51.02
2	52.55	52.99	53.10	52.36	52.28	52.05	51.14	50.49	49.52	50.19	50.75	51.02
3	52.56	52.98	53.02	52.35	52.23	52.07	50.98	50.20	49.51	50.21	50.76	51.05
4	52.56	53.01	53.09	52.31	52.26	52.00	50.96	50.40	49.54	50.21	50.76	51.09
5	52.61	53.02	53.00	52.31	52.34	52.01	50.95	50.35	49.59	50.22	50.74	51.10
6	52.63	53.03	53.10	52.35	52.37	52.01	50.98	50.22	49.61	50.24	50.73	51.13
7	52.63	53.03	53.02	52.35	52.37	52.00	51.00	50.18	49.62	50.31	50.71	51.17
8	52.64	53.06	53.00	52.36	52.31	52.05	50.90	49.99	49.62	50.35	50.69	51.17
9	52.65	53.04	52.94	52.33	52.28	52.01	50.82	49.84	49.64	50.36	50.70	51.14
10	52.66	53.04	52.91	52.34	52.27	51.94	50.83	49.83	49.68	50.37	50.70	51.16
11	52.66	53.10	52.83	52.35	52.30	51.93	50.82	49.73	49.69	50.38	50.68	51.21
12	52.66	53.09	52.89	52.33	52.25	51.89	50.78	49.71	49.70	50.41	50.71	51.23
13	52.75	53.09	52.74	52.35	52.26	51.93	50.75	49.62	49.72	50.44	50.72	51.23
14	52.75	53.09	52.80	52.38	52.25	51.95	50.77	49.59	49.72	50.48	50.72	51.26
15	52.75	53.15	52.82	52.30	52.24	51.93	50.71	49.58	49.76	50.48	50.74	51.32
16	52.76	53.14	52.78	52.31	52.17	51.87	50.70	49.56	49.80	50.47	50.72	51.34
17	52.78	53.15	52.73	52.35	52.22	51.79	50.75	49.51	49.80	50.45	50.70	51.37
18	52.79	53.14	52.67	52.35	52.17	51.79	50.78	49.54	49.79	50.56	50.70	51.37
19	52.81	53.14	52.65	52.39	52.22	51.72	50.77	49.42	49.85	50.58	50.73	51.37
20	52.81	53.23	52.63	52.38	52.19	51.66	50.79	49.37	49.86	50.57	50.79	51.36
21	52.82	53.20	52.58	52.37	52.14	51.67	50.80	49.43	49.85	50.60	50.81	51.41
22	52.82	53.20	52.67	52.38	52.12	51.71	50.66	49.46	49.87	50.62	50.82	51.44
23	52.83	53.20	52.56	52.34	52.11	51.70	50.68	49.47	49.91	50.67	50.81	51.45
24	52.87	53.23	52.63	52.28	52.20	51.54	50.70	49.46	49.97	50.69	50.86	51.45
25	52.89	53.21	52.54	52.34	52.16	51.52	50.74	49.43	49.98	50.67	50.89	51.47
26	52.91	53.20	52.49	52.29	52.13	51.51	50.74	49.50	49.99	50.69	50.90	51.53
27	52.94	53.16	52.45	52.29	52.05	51.38	50.73	49.48	50.01	50.69	50.87	51.51
28	52.94	53.19	52.59	52.24	52.15	51.28	50.86	49.48	50.03	50.72	50.91	51.54
29	52.96	53.19	52.54	52.31	52.15	51.42	50.74	49.56	50.03	50.74	50.92	51.55
30	52.96	53.18	52.52	52.39	---	51.36	50.63	49.51	50.09	50.72	50.96	51.59
31	52.98	---	52.43	52.34	---	51.27	---	49.52	---	50.71	50.97	---
LOWEST	52.98	53.23	53.17	52.42	52.37	52.09	51.20	50.63	50.09	50.74	50.97	51.59

WTR YEAR 1984 HIGHEST 49.30 MAY 25, 1984 LOWEST 53.23 NOV 24, 1983

SEVIER COUNTY

353922083345600. Local number, Sv:E-2.

LOCATION.--Lat 35°39'22", long 83°34'56", Hydrologic Unit 06010201, 3.3 mi southwest of Great Smoky Mountains National Park Headquarters, near Gatlinburg.

AQUIFER.--Elkmont Sandstone.

WELL CHARACTERISTICS.--Drilled unused water-table well in phyllite, sandstone, diameter 6 in; depth 220 ft, cased to 27 ft.

INSTRUMENTATION.--Water level recorder since May 1979.

DATUM.--Altitude of land-surface datum is 2,150 ft. Measuring point: Floor of recorder shelter 1.50 ft above land surface datum.

REMARKS.--Missing record Oct. 6-24, Nov.1-6.

PERIOD OF RECORD.--May 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.59 ft below land surface datum, May 8, 1984; lowest, 9.68 ft below land surface datum, Aug. 10, Sept. 16, 17, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.58	---	8.91	8.86	9.12	8.58	8.72	9.03	9.17	9.10	8.51	9.30
2	9.59	---	8.99	8.93	9.14	8.70	8.80	9.04	9.21	9.17	8.70	9.31
3	9.59	---	8.96	8.99	9.14	8.77	8.81	8.61	9.24	9.19	8.79	9.32
4	9.60	---	8.26	9.04	9.16	8.82	8.82	8.28	9.27	9.23	8.86	9.26
5	9.54	---	8.43	9.05	9.19	8.82	8.16	8.48	9.29	9.23	8.91	9.29
6	---	---	8.47	9.08	9.20	8.55	8.37	8.58	9.31	9.17	8.94	9.32
7	---	9.35	8.64	9.12	9.21	8.65	8.56	7.11	9.32	9.16	8.98	9.34
8	---	9.37	8.77	9.14	9.21	8.74	8.69	6.43	9.31	9.13	9.04	9.35
9	---	9.37	8.87	9.17	9.21	8.80	8.71	7.65	9.32	9.18	9.08	9.37
10	---	9.28	8.94	9.18	9.21	8.86	8.75	8.18	9.34	9.23	9.10	9.38
11	---	9.34	8.97	8.97	9.09	8.91	8.80	8.46	9.35	9.25	8.62	9.40
12	---	9.36	8.35	9.03	9.08	8.94	8.84	8.66	9.35	9.20	8.76	9.40
13	---	9.38	8.46	9.08	9.04	8.94	8.89	8.74	9.32	9.13	8.83	9.41
14	---	9.38	8.61	9.11	7.95	8.97	8.89	8.83	9.29	8.73	8.90	9.41
15	---	9.35	8.74	9.14	8.33	8.99	8.93	8.90	9.31	8.83	8.94	9.42
16	---	9.11	8.84	9.16	8.58	8.99	8.95	8.95	9.28	8.86	9.00	9.42
17	---	9.16	8.92	9.19	8.70	8.84	8.95	9.00	9.21	8.83	9.04	9.42
18	---	9.21	8.97	9.19	8.80	8.84	8.95	9.04	9.26	8.81	9.07	9.43
19	---	9.22	9.03	9.02	8.83	8.79	8.97	9.08	9.30	8.32	9.10	9.44
20	---	9.22	9.07	9.07	8.87	8.80	9.00	9.12	9.33	8.61	9.13	9.46
21	---	8.94	9.11	9.10	8.92	7.77	8.97	9.14	9.34	8.74	9.15	9.47
22	---	9.04	9.11	9.11	8.97	8.23	8.93	9.15	9.31	8.83	9.19	9.49
23	---	9.09	9.01	9.10	8.97	8.49	8.93	9.17	9.14	8.76	9.19	9.49
24	---	9.08	9.09	9.10	8.49	8.66	8.97	9.18	9.15	8.88	9.14	9.49
25	9.37	8.75	9.13	8.79	8.49	8.74	9.02	9.21	8.97	8.93	9.19	9.50
26	9.40	8.88	9.12	8.84	8.62	8.80	9.04	9.22	9.08	8.94	9.21	9.50
27	9.41	8.93	9.02	8.89	8.67	8.85	9.05	9.19	9.15	8.95	9.23	9.50
28	9.41	8.67	9.01	8.93	8.05	8.85	9.01	8.90	9.21	8.68	9.23	9.50
29	9.26	8.59	8.31	9.01	8.26	8.40	9.04	8.90	9.23	8.72	9.24	9.50
30	9.28	8.79	8.60	9.04	---	8.42	9.04	9.03	9.21	8.15	9.26	9.49
31	9.35	---	8.75	9.08	---	8.60	---	9.11	---	8.37	9.27	---
LOWEST	---	---	9.13	9.19	9.21	8.99	9.05	9.22	9.35	9.25	9.27	9.50

WTR YEAR 1984 HIGHEST 5.59 MAY 8, 1984 LOWEST 9.60 OCT 4, 1983

SHELBY COUNTY

350514089553700. Local number, Sh:K-75.

LOCATION.--Lat 35°05'14", long 89°55'37", Hydrologic Unit 08010211, at Willowview Ave. and Getwell Road, Memphis. Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Fluvial sand and gravel of Pleistocene age and possibly sand of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 91 ft, cased to 81 ft, screened 81 to 91 ft.

INSTRUMENTATION.--Water-level recorder since August 1948.

DATUM.--Altitude of land-surface datum is 260 ft. Measuring point: Top of casing, 1.20 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--August 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.28 ft below land-surface datum, Apr. 2, 1950; lowest, 50.79 ft below land-surface datum, Jan. 12, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.76	49.64	49.94	49.87	49.97	49.83	49.87	49.72	49.29	49.39	49.29	49.21
2	49.75	49.63	49.68	49.91	50.01	49.87	49.67	49.43	49.40	49.28	49.20	49.16
3	49.70	49.65	49.70	49.88	49.95	49.95	49.67	49.51	49.41	49.31	49.17	49.21
4	49.70	49.73	49.87	49.80	49.95	49.78	49.92	49.81	49.35	49.24	49.25	49.31
5	49.86	49.72	49.83	49.86	50.25	49.93	49.89	49.77	49.41	49.35	49.20	49.23
6	49.85	49.72	50.15	49.98	50.24	49.87	49.92	49.61	49.47	49.31	49.17	49.24
7	49.77	49.66	49.99	49.98	50.18	49.89	49.99	49.70	49.40	49.34	49.15	49.27
8	49.80	49.68	49.89	50.00	50.10	49.98	49.83	49.87	49.42	49.39	49.21	49.28
9	49.83	49.61	49.83	49.92	49.99	50.02	49.85	49.67	49.31	49.41	49.29	49.15
10	49.76	49.84	49.79	50.03	49.98	49.89	49.91	49.57	49.41	49.34	49.31	49.25
11	49.77	49.79	49.90	50.01	50.06	49.96	49.85	49.58	49.34	49.31	49.11	49.39
12	49.82	49.75	50.00	49.91	50.03	49.76	49.81	49.64	49.33	49.33	49.15	49.33
13	49.85	49.80	49.82	50.08	50.12	49.96	49.85	49.51	49.42	49.35	49.11	49.33
14	49.95	49.63	50.00	50.10	50.20	49.98	49.84	49.54	49.35	49.36	49.14	49.30
15	49.82	49.82	49.92	49.94	50.19	49.74	49.85	49.61	49.33	49.29	49.17	49.42
16	49.81	49.84	49.95	49.96	50.00	50.04	49.80	49.60	49.41	49.28	49.18	49.40
17	49.71	49.75	49.99	50.10	50.06	49.82	49.88	49.50	49.42	49.26	49.14	49.44
18	49.70	49.69	49.90	50.10	49.89	49.90	49.94	49.45	49.42	49.37	49.27	49.38
19	49.64	49.83	49.82	50.08	50.01	49.92	49.88	49.38	49.33	49.30	49.19	49.33
20	49.62	49.85	49.84	50.16	49.99	49.80	49.86	49.31	49.32	49.27	49.20	49.31
21	49.60	49.87	49.71	50.03	49.86	49.85	49.79	49.43	49.32	49.23	49.18	49.33
22	49.62	49.83	50.01	50.00	49.97	49.97	49.84	49.52	49.26	49.26	49.15	49.35
23	49.63	49.91	49.96	49.87	49.88	49.90	49.84	49.63	49.27	49.29	49.10	49.44
24	49.69	49.91	50.13	49.98	49.92	49.75	49.82	49.51	49.33	49.28	49.19	49.30
25	49.69	49.78	49.95	50.05	49.93	49.97	49.78	49.45	49.29	49.25	49.17	49.47
26	49.62	49.62	49.75	50.07	49.98	49.85	49.72	49.58	49.21	49.17	49.18	49.52
27	49.68	49.75	49.70	50.09	49.92	49.73	49.77	49.46	49.21	49.24	49.16	49.40
28	49.65	49.89	50.17	49.97	50.06	50.00	49.81	49.51	49.29	49.22	49.17	49.39
29	49.69	49.88	50.21	50.02	50.06	50.18	49.76	49.52	49.23	49.28	49.20	49.48
30	49.59	49.88	50.10	50.15	---	50.15	49.88	49.41	49.24	49.21	49.36	49.43
31	49.58	---	49.90	50.15	---	50.10	---	49.28	---	49.17	49.23	---
LOWEST	49.95	49.91	50.21	50.16	50.25	50.18	49.99	49.87	49.47	49.41	49.36	49.52

WTR YEAR 1984 HIGHEST 48.96 SEP 10, 1984 LOWEST 50.25 FEB 5, 1984

SHELBY COUNTY--Continued

351435090005200. Local number, Sh:O-1.

LOCATION.--Lat 35°14'35", long 90°00'52", Hydrologic Unit 08010209, west side of O.K. Robertson Road 0.4 mi north of U.S. Highway 51, Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 434 ft, cased to 424 ft, screened 424 to 434 ft.

INSTRUMENTATION.--Water-level recorder since September 1940.

DATUM.--Land-surface datum is 228.70 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--September 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.65 ft below land-surface datum, Sept. 3, 1940; lowest, 61.37 ft below land-surface datum, Sept. 8, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.32	58.09	56.08	57.16	58.22	56.76	54.25	51.88	52.43	54.55	57.95	58.00
2	59.09	58.06	56.06	57.33	58.22	56.79	53.93	51.77	52.62	54.90	57.97	58.06
3	58.91	58.02	55.71	57.47	58.17	56.81	---	51.24	52.82	55.20	57.93	58.12
4	58.78	57.99	55.16	57.50	58.08	56.70	---	50.96	52.95	55.45	57.89	58.17
5	58.71	58.05	55.03	57.58	58.01	56.24	---	51.14	53.10	55.68	57.93	58.21
6	58.71	58.05	55.24	57.63	58.02	56.01	---	51.34	53.25	55.78	57.96	58.23
7	58.62	57.95	55.27	57.74	58.06	56.11	---	51.36	53.27	55.92	57.94	58.26
8	58.45	57.86	55.15	57.83	58.10	56.28	---	51.13	53.44	56.04	57.88	58.26
9	58.44	57.82	55.02	57.87	58.09	56.29	---	50.87	53.67	56.18	57.91	58.19
10	58.41	57.63	54.92	58.02	57.99	56.21	---	50.76	54.00	56.35	58.01	58.08
11	58.24	57.54	54.72	58.12	57.93	56.19	---	50.70	54.49	56.60	58.01	58.12
12	58.26	57.44	54.64	58.17	57.92	56.18	---	50.48	54.59	56.68	57.98	58.13
13	58.45	57.34	54.64	58.29	57.70	56.17	---	50.35	54.97	56.78	57.95	58.13
14	58.54	57.22	54.48	58.31	57.75	56.22	---	50.13	55.08	56.81	57.94	58.10
15	58.60	57.02	54.62	58.33	57.95	56.27	---	49.97	55.31	56.81	57.93	58.04
16	58.61	57.04	54.75	58.26	58.00	56.40	---	49.88	55.43	56.85	57.96	58.05
17	58.59	57.02	54.79	58.34	58.03	56.42	---	49.82	55.43	56.87	57.99	58.04
18	58.55	56.92	54.81	58.43	57.97	56.39	---	49.77	55.34	56.94	57.94	58.01
19	58.54	56.82	54.85	58.55	57.69	56.40	---	49.67	55.14	57.01	57.86	57.99
20	58.54	56.62	54.88	58.74	57.60	56.43	---	49.63	55.02	57.07	57.85	57.98
21	58.50	56.64	54.87	58.84	57.36	56.43	---	49.62	54.86	57.13	57.82	57.76
22	58.48	56.65	54.84	58.86	57.15	56.37	---	49.86	54.69	57.21	57.74	57.76
23	58.44	56.50	55.03	58.85	57.00	56.34	---	50.07	54.45	57.34	57.66	57.80
24	58.40	56.26	55.51	58.76	56.93	56.02	---	50.32	54.25	57.44	57.72	57.82
25	58.41	56.29	55.70	58.67	56.93	55.64	---	50.59	54.16	57.47	57.79	57.81
26	58.41	56.34	55.72	58.66	56.89	55.41	---	50.97	54.03	57.51	57.82	57.84
27	58.31	56.25	55.72	58.58	56.68	55.04	---	51.22	53.91	57.61	57.86	57.84
28	58.25	56.04	55.89	58.56	56.69	54.71	---	51.51	53.85	57.72	57.93	57.76
29	58.16	56.01	56.31	58.44	56.74	54.52	---	51.89	54.01	57.78	57.97	57.71
30	58.17	56.05	56.68	58.33	---	54.53	---	52.13	54.25	57.79	58.06	57.69
31	58.15	---	56.91	58.34	---	54.53	---	52.32	---	57.87	58.06	---
LOWEST	59.32	58.09	56.91	58.86	58.22	56.81	---	52.32	55.43	57.87	58.06	58.26

WTR YEAR 1984 HIGHEST 49.55 MAY 20, 21, 1984 LOWEST 59.32 OCT 1, 1983

SHELBY COUNTY--Continued

350923090023500. Local number, Sh:O-124.

LOCATION.--Lat 35°09'23", long 90°02'35", Hydrologic Unit 08010100, at Fifth Street and Sycamore Avenue, Memphis. Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Unused work shaft to tunnel connected to an unknown number of drilled artesian wells, diameter of shaft 30 in, depth 98 ft, cased to 80 ft.

INSTRUMENTATION.--Water-level recorder since September 1938.

DATUM.--Land-surface datum is 229.70 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--May 1927 to 1933, 1936 to March 1984 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.09 ft below land-surface datum, Apr. 1, 1933; lowest, 73.4 ft below land-surface datum, July 30 to Aug. 1, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	66.00	61.37	64.67	64.19	61.60						
2	---	65.86	61.09	64.98	64.12	61.65						
3	---	65.78	60.67	65.07	63.98	61.67						
4	---	65.66	60.33	65.19	63.84	61.55						
5	---	65.67	60.19	65.34	63.79	61.39						
6	---	65.61	59.91	65.51	63.79	61.32						
7	---	65.56	59.88	65.54	63.71	61.15						
8	---	65.49	59.66	65.50	63.84	60.92						
9	---	65.36	59.55	65.44	63.92	60.87						
10	---	65.17	59.51	65.39	63.95	60.62						
11	---	65.18	59.37	65.38	63.95	60.25						
12	---	65.17	59.35	65.29	63.87	59.84						
13	---	65.02	59.33	65.32	63.75	59.46						
14	---	64.95	59.49	65.32	63.72	59.51						
15	---	64.93	59.74	65.24	63.77	59.51						
16	---	64.92	59.89	65.04	63.72	59.74						
17	---	64.81	59.91	64.98	63.71	59.96						
18	---	64.59	59.88	65.03	63.59	60.03						
19	---	64.40	59.81	65.06	63.38	60.07						
20	---	64.05	59.70	65.10	63.20	60.07						
21	---	63.94	59.67	65.12	62.93	60.01						
22	---	63.75	59.88	65.10	62.66	59.99						
23	---	63.54	60.21	64.99	62.47	59.96						
24	---	63.27	60.56	64.90	62.21	59.76						
25	---	63.12	60.63	65.04	62.10	59.47						
26	---	62.80	60.58	65.04	61.83	59.18						
27	66.83	62.46	60.73	64.98	61.45	58.76						
28	66.78	62.05	61.61	64.88	61.48	58.32						
29	66.61	61.74	62.71	64.66	61.60	---						
30	66.42	61.53	63.65	64.47	---	---						
31	66.19	---	64.20	64.39	---	---						
LOWEST	---	66.00	64.20	65.54	64.19	---						

WTR YEAR 1984 HIGHEST 58.23 MAR 28, 1984 LOWEST 66.83 OCT 27, 1983

SHELBY COUNTY--Continued

351320089535800. Local number, Sh:P-1.

LOCATION.--Lat 35°13'20", long 89°53'58", Hydrologic Unit 08010210, at Scheibler Road, 0.2 mi east of Yale Road, Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 344 ft, cased to 334 ft, screened 334 to 344 ft.

INSTRUMENTATION.--Water-level recorder since July 1941.

DATUM.--Land-surface datum is 299.80 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--September 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 63.33 ft below land-surface datum, Sept. 27, 1940; lowest, 122.36 ft below land-surface datum, Sept. 4, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120.25	118.98	117.79	118.89	119.48	118.54	117.30	116.41	116.25	119.84	120.79	120.31
2	120.25	118.95	117.76	118.99	119.31	118.49	117.14	116.31	116.43	120.01	120.87	120.26
3	120.22	118.94	117.55	119.03	119.11	118.49	116.84	116.05	116.66	120.12	120.91	120.18
4	120.13	118.87	117.38	119.05	119.07	118.44	116.63	115.91	116.88	120.35	120.92	120.04
5	120.18	118.78	117.37	119.09	119.14	118.30	116.52	115.80	117.19	120.44	120.97	119.92
6	120.19	118.79	117.49	119.33	119.15	118.24	116.40	115.72	117.45	120.44	120.99	119.74
7	120.14	118.86	117.52	119.38	119.22	118.14	116.40	115.79	117.59	120.50	121.02	119.78
8	120.19	118.87	117.47	119.39	119.25	118.26	116.32	115.86	117.65	120.58	121.03	119.80
9	120.19	118.87	117.41	119.39	119.20	118.29	116.13	115.84	117.78	120.79	121.02	119.78
10	120.14	118.89	117.34	119.43	119.06	118.25	116.10	115.74	117.97	121.08	120.96	119.69
11	120.06	118.96	117.20	119.43	119.06	118.16	116.04	115.73	118.17	121.37	120.84	119.71
12	119.92	118.93	117.17	119.35	119.04	118.03	116.00	115.77	118.77	121.42	120.73	119.69
13	119.73	118.80	117.13	119.49	118.98	117.90	116.01	115.79	118.98	121.40	120.73	119.72
14	119.60	118.73	116.95	119.54	118.99	117.91	116.06	115.82	119.08	121.32	120.76	119.82
15	119.52	118.75	116.98	119.54	118.99	117.87	116.08	115.89	119.24	121.23	120.77	---
16	119.47	118.78	116.99	119.45	118.97	117.79	116.00	115.98	119.41	121.15	120.71	---
17	119.49	118.76	117.02	119.39	118.97	117.74	115.85	116.06	119.50	121.10	120.61	---
18	119.40	118.69	117.11	119.39	118.91	117.71	115.88	116.07	119.62	---	120.58	---
19	119.34	118.56	117.11	119.53	118.79	117.63	115.87	116.06	119.83	---	120.58	---
20	119.20	118.27	117.08	119.67	118.79	117.57	115.91	116.06	119.95	---	120.51	---
21	119.08	118.27	117.05	119.69	118.70	117.55	115.93	116.06	119.99	---	120.38	---
22	119.03	118.29	117.18	119.77	118.57	117.59	115.97	116.05	120.03	---	120.37	---
23	119.01	118.20	117.27	119.79	118.50	117.63	115.97	116.02	120.02	---	120.31	---
24	119.09	118.05	117.45	119.79	118.55	117.60	115.96	116.01	119.86	---	120.29	---
25	119.13	117.94	117.51	119.86	118.58	117.45	116.01	116.01	119.80	---	120.29	---
26	119.14	117.81	117.55	119.86	118.56	117.36	116.07	116.11	119.70	---	120.27	---
27	119.11	117.73	117.59	119.76	118.35	117.29	116.18	116.11	119.64	---	120.26	---
28	119.07	117.65	118.05	119.70	118.49	117.23	116.24	116.09	119.64	---	120.25	---
29	119.00	117.77	118.49	119.54	118.54	117.35	116.27	116.13	119.69	---	120.28	---
30	118.97	117.79	118.67	119.66	---	117.39	116.43	116.19	119.69	---	120.33	---
31	118.99	---	118.79	119.66	---	117.39	---	116.14	---	120.71	120.33	---
LOWEST	120.25	118.98	118.79	119.86	119.48	118.54	117.30	116.41	120.03	---	121.03	---

WTR YEAR 1984 HIGHEST 115.68 MAY 5, 6, 10, 11, 1984 LOWEST 121.42 JUL 12, 1984

SHELBY COUNTY--Continued

350735089593300. Local number, Sh:P-76.

LOCATION.--Lat 35°07'35", long 89°59'33", Hydrologic Unit 08010210, at Central Avenue and Tanglewood Street, Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation atresian well, diameter 12 in, depth 488 ft, cased to 428 ft, screened 428 to 488 ft.

INSTRUMENTATION.--Water-level recorder since October 1932.

DATUM.--Land-surface datum is 286.70 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.65 ft below land-surface datum, Apr. 3, 1933; lowest, 144.77 ft below land-surface datum, July 20-25, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	133.84	130.97	134.14	133.47	132.26	130.81	129.99	130.19	135.53	137.18	135.61
2	---	133.98	130.91	133.96	133.58	132.54	130.37	129.83	130.64	135.86	137.42	135.35
3	---	134.06	130.58	134.18	133.58	132.54	130.10	129.37	130.84	136.14	137.48	134.80
4	---	134.09	130.32	134.35	133.40	132.25	129.95	129.04	130.51	136.35	137.43	134.51
5	---	134.05	130.36	134.50	133.08	131.81	129.84	128.93	130.56	136.08	136.95	134.69
6	---	133.59	130.33	134.47	132.89	131.58	129.78	128.99	131.34	136.08	136.72	134.69
7	---	133.22	130.44	134.26	132.63	131.56	129.62	128.96	131.69	135.90	136.46	134.69
8	---	133.01	130.64	133.88	133.40	131.66	129.39	129.11	131.86	135.99	136.32	134.67
9	---	133.01	130.71	133.57	133.58	131.94	129.27	129.35	132.22	136.34	136.05	134.67
10	---	132.69	130.63	133.64	133.58	131.95	129.43	129.45	132.30	137.01	135.86	134.46
11	---	132.66	130.54	133.66	133.56	131.90	129.40	129.52	132.52	137.56	135.53	134.92
12	---	132.57	130.43	133.66	133.50	131.79	129.58	129.47	133.32	137.65	134.94	134.99
13	---	132.68	130.30	133.66	133.39	131.59	129.62	129.39	133.84	137.63	134.33	135.17
14	---	132.67	130.21	133.66	133.44	131.97	129.75	129.24	133.96	137.39	134.47	135.23
15	---	132.55	130.00	133.58	133.42	132.12	129.76	129.56	133.96	136.94	134.60	135.19
16	---	132.66	130.21	133.22	133.38	132.32	129.60	129.76	133.77	136.25	134.79	134.81
17	---	132.69	130.31	133.43	133.18	132.30	129.83	129.99	133.75	136.24	134.94	134.23
18	---	132.77	130.33	133.57	133.00	131.96	129.93	130.07	133.74	136.28	134.93	134.51
19	---	132.77	130.32	133.77	132.63	131.73	129.68	130.14	134.63	136.16	134.39	134.61
20	---	132.74	130.16	134.16	132.57	131.73	129.66	130.16	135.19	136.09	133.88	134.70
21	---	132.77	130.35	134.16	132.51	131.65	129.55	130.01	135.32	136.00	134.44	134.86
22	---	132.79	130.75	133.90	132.46	131.76	129.51	129.71	135.40	136.24	134.71	134.89
23	---	132.66	131.16	133.31	132.40	131.84	129.50	130.17	135.39	136.59	134.74	134.90
24	---	132.69	131.33	133.58	132.37	131.94	129.43	130.25	134.99	137.07	134.53	134.45
25	---	132.41	131.32	133.97	132.38	131.90	129.50	130.23	134.54	137.12	134.49	134.49
26	---	131.56	131.07	133.97	132.36	131.74	129.66	130.34	134.90	137.12	134.14	134.60
27	134.27	131.13	131.74	133.97	132.07	131.59	129.83	130.32	135.20	137.22	134.14	134.71
28	134.34	130.84	132.65	133.97	132.13	131.51	130.02	129.86	135.27	137.14	134.68	134.71
29	134.15	130.90	133.55	133.79	132.22	131.57	130.08	129.65	135.36	137.03	135.13	134.71
30	134.03	130.96	134.30	133.64	---	131.41	130.02	129.76	135.28	136.98	135.60	134.71
31	133.88	---	134.30	133.65	---	131.01	---	130.01	---	137.19	135.69	---
LOWEST	---	134.09	134.30	134.50	133.58	132.54	130.81	130.34	135.40	137.65	137.48	135.61

WTR YEAR 1984 HIGHEST 128.82 MAY 7, 1984 LOWEST 137.65 JUL 12, 1984

SHELBY COUNTY--Continued

350900089482300. Local number, Sh:Q-1.

LOCATION.--Lat 35°09'00", long 89°48'23", Hydrologic Unit 08010210, south of Macon Road, 0.6 mi west of Germantown Road, near Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 384 ft, cased to 375 ft, screened 375 to 384 ft.

INSTRUMENTATION.--Water-level recorder since October 1940.

DATUM.--Land-surface datum is 330.40 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--October 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 74.08 ft below land-surface datum, Dec. 27, 1940; lowest 104.43 ft below land-surface datum, Sept. 5, 26, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103.37	103.60	103.66	103.69	103.68	103.71	103.54	103.48	103.14	103.97	104.28	104.36
2	103.38	103.58	103.56	103.63	103.66	103.62	103.45	103.37	103.15	104.03	104.33	104.37
3	103.37	103.54	103.30	103.62	103.56	103.64	103.18	103.05	103.15	104.04	104.33	104.34
4	103.35	103.52	103.31	103.53	103.56	103.57	103.19	103.12	103.17	104.00	104.29	104.39
5	103.51	103.56	103.31	103.42	103.69	103.48	103.26	103.17	103.22	104.03	104.30	104.43
6	103.58	103.54	103.51	103.46	103.81	103.56	103.32	103.14	103.29	104.07	104.25	104.42
7	103.57	103.49	103.54	103.53	103.87	103.61	103.37	103.17	103.30	104.14	104.22	104.39
8	103.57	103.50	103.49	103.57	103.87	103.69	103.31	103.32	103.33	104.20	104.18	104.37
9	103.61	103.47	103.43	103.55	103.78	103.70	103.18	103.31	103.33	104.22	104.20	104.29
10	103.60	103.40	103.41	103.62	103.61	103.69	103.23	103.27	103.39	104.26	104.19	104.19
11	103.53	103.52	103.23	103.64	103.55	103.62	103.24	103.19	103.42	104.24	104.16	104.26
12	103.52	103.54	103.29	103.61	103.53	103.55	103.21	103.22	103.44	104.17	104.17	104.31
13	103.60	103.45	103.28	103.69	103.53	103.53	103.24	103.22	103.48	104.24	104.17	104.31
14	103.67	103.41	103.18	103.77	103.58	103.57	103.24	103.24	103.49	104.29	104.16	104.28
15	103.66	103.49	103.45	103.74	103.60	103.52	103.25	103.28	103.51	104.23	104.19	104.39
16	103.63	103.56	103.65	103.56	103.57	103.53	103.21	103.29	103.55	104.17	104.20	104.41
17	103.61	103.55	103.67	103.56	103.60	103.47	103.24	103.27	103.56	104.11	104.17	104.39
18	103.53	103.48	103.62	103.66	103.58	103.37	103.32	103.21	103.55	104.19	104.12	104.36
19	103.54	103.40	103.58	103.73	103.60	103.23	103.33	103.17	103.59	104.23	104.11	104.34
20	103.52	103.38	103.49	103.77	103.65	103.14	103.32	103.04	103.65	104.19	104.18	104.26
21	103.51	103.47	103.40	103.78	103.61	103.14	103.26	103.07	103.68	104.18	104.27	104.24
22	103.47	103.51	103.44	103.69	103.54	103.28	103.22	103.18	103.70	104.21	104.32	104.31
23	103.47	103.35	103.48	103.56	103.51	103.33	103.23	103.27	103.73	104.24	104.28	104.37
24	103.58	103.51	103.67	103.43	103.56	103.23	103.27	103.27	103.83	104.31	104.29	104.35
25	103.64	103.54	103.67	103.53	103.62	103.22	103.31	103.16	103.87	104.32	104.33	104.34
26	103.64	103.51	103.54	103.53	103.57	103.22	103.31	103.18	103.85	104.30	104.33	104.43
27	103.62	103.42	103.34	103.55	103.43	103.10	103.35	103.18	103.82	104.26	104.27	104.40
28	103.63	103.42	103.42	103.55	103.67	102.98	103.43	103.21	103.88	104.33	104.23	104.37
29	103.64	103.53	103.70	103.50	103.70	103.33	103.42	103.31	103.90	104.32	104.24	104.37
30	103.62	103.61	103.84	103.69	---	103.46	103.47	103.27	103.91	104.27	104.30	104.33
31	103.59	---	103.80	103.73	---	103.52	---	103.20	---	104.23	104.34	---
LOWEST	103.67	103.61	103.84	103.78	103.87	103.71	103.54	103.48	103.91	104.33	104.34	104.43

WTR YEAR 1984 HIGHEST 102.82 MAR 28, 1984 LOWEST 104.43 SEP 5, 26, 1984

WILLIAMSON COUNTY

355749086533300. Local number, Wm:M-8.

LOCATION.--Lat 35°57'49", long 86°53'33", Hydrologic Unit 05130204, 3.9 mi north of Franklin.
Owner: City of Franklin.

AQUIFER.--Carters Limestone of middle Ordovician age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 10 in to 54 ft, 9 in to 170 ft, 6 in to 192 ft below land surface, cased to 54 ft, open end.

INSTRUMENTATION.--Water-level recorder since August 1976.

DATUM.--Altitude of land-surface datum is 630 ft. Measuring point: Instrument shelf, 2.2 ft (corrected) above land-surface datum.

REMARKS.--Period of record low resulted from water levels being affected by 68 hour aquifer test run in well field. Three wells were pumped at a combined rate of 925 gal/min.

PERIOD OF RECORD.--August 1976 to February 1984 (discontinued).

REVISED RECORD.--Records published in WRD TN 1976-80 are in error. A correction of 2.2 ft should be subtracted from all published data to obtain the correct water level below land surface datum.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.46 ft below land-surface datum, Mar. 21, 1980; lowest measured, 68.29 ft below land-surface datum, Nov. 1, 1980; lowest recorded, 40.51 ft below land-surface datum, Dec. 10, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO FEBRUARY 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.40	32.44	29.98	30.23	30.99							
2	32.40	32.44	30.14	30.42	31.04							
3	32.41	32.43	25.38	30.54	31.05							
4	32.42	32.02	19.35	30.65	31.07							
5	32.41	32.07	22.32	30.73	31.12							
6	32.41	32.13	24.41	30.82	31.16							
7	32.42	32.19	25.96	30.88	31.19							
8	32.42	32.21	27.18	30.95	31.22							
9	32.42	32.23	28.08	31.01	31.24							
10	32.42	32.25	28.65	31.03	31.24							
11	32.42	32.27	28.73	31.00	31.11							
12	32.42	32.27	22.44	30.99	31.15							
13	32.38	32.29	24.40	31.02	31.12							
14	32.37	32.30	25.63	31.02	30.42							
15	32.38	32.24	26.81	31.03	30.63							
16	32.39	31.94	27.71	31.05	30.77							
17	32.40	32.12	28.29	31.07	30.89							
18	32.40	32.18	28.71	31.09	30.96							
19	32.40	32.22	29.07	31.13	31.02							
20	32.41	32.18	29.39	31.17	31.07							
21	32.42	31.34	29.60	31.19	31.10							
22	32.42	31.77	29.66	31.22	31.14							
23	32.39	31.78	29.75	31.24	31.17							
24	32.40	28.36	30.02	31.07	31.22							
25	32.40	29.97	30.22	30.43	31.26							
26	32.40	30.61	30.34	30.58	31.29							
27	32.41	30.73	30.44	30.65	31.28							
28	32.41	27.71	30.43	30.72	31.21							
29	32.42	28.59	28.68	30.79	31.20							
30	32.42	29.47	29.53	30.87	---							
31	32.43	---	29.94	30.93	---							
LOWEST	32.43	32.44	30.44	31.24	31.29							

WTR YEAR 1984 HIGHEST 17.81 DEC 4, 1983 LOWEST 32.44 NOV 1,2, 1983

CRITTENDEN COUNTY, AR

350958090173800. Local number, Ar:C-1.

LOCATION.--Lat 35°09'58", long 90°02'35", Hydrologic Unit 08020203, 450 ft west of Highway 147, 1.3 mi north of Lehi.
Owner: Memphis Light, Gas, and Water Division, City of Memphis, and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 622 ft, cased to 602 ft, screened 602 to 622 ft.

INSTRUMENTATION.--Water-level recorder since May 1983.

DATUM.--Altitude of land-surface datum is 209 ft. Measuring point: Inside top of shelter base plate, 3.30 ft above land-surface datum.

REMARKS.--Missing record April 1 to May 3, May 7 to May 31.

PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.29 ft below land-surface datum, June 11, 12, 13, 1983; lowest, 20.68 ft below land-surface datum, Oct. 29, 30, 31, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.52	20.66	20.41	19.49	19.48	19.31	18.59	---	16.11	16.97	18.50	19.56
2	20.52	20.63	20.29	19.46	19.47	19.25	---	---	16.08	17.05	18.54	19.59
3	20.51	20.60	20.08	19.44	19.40	19.25	---	17.06	16.04	17.08	18.58	19.61
4	20.47	20.55	20.09	19.36	19.41	19.17	---	17.15	16.01	17.10	18.61	19.66
5	20.56	20.55	20.08	19.32	19.54	19.08	---	17.14	16.01	17.16	18.67	19.72
6	20.60	20.53	20.17	19.34	19.56	19.09	---	17.07	16.03	17.24	18.68	19.74
7	20.60	20.50	20.17	19.35	19.59	19.10	---	17.09	15.98	17.32	18.70	19.76
8	20.61	20.49	20.13	19.37	19.60	19.15	---	---	16.01	17.40	18.73	19.79
9	20.63	20.47	20.07	19.34	19.53	19.17	---	---	16.03	17.44	18.79	19.75
10	20.63	20.46	20.07	19.42	19.44	19.13	---	---	16.06	17.51	18.78	19.71
11	20.58	20.52	19.89	19.42	19.44	19.08	---	---	16.10	17.52	18.80	19.79
12	20.55	20.53	19.93	19.39	19.39	19.00	---	---	16.12	17.56	18.81	19.82
13	20.60	20.48	19.86	19.49	19.39	18.98	---	---	16.15	17.64	18.86	19.84
14	20.66	20.43	19.75	19.52	19.42	18.98	---	---	16.15	17.72	18.91	19.87
15	20.66	20.49	19.87	19.49	19.42	18.91	---	---	16.18	17.73	18.96	19.96
16	20.67	20.52	19.94	19.42	19.42	18.94	---	---	16.21	17.75	19.00	19.98
17	20.61	20.50	19.93	19.44	19.43	18.85	---	---	16.22	17.74	19.00	20.00
18	20.51	20.45	19.89	19.51	19.40	18.79	---	---	16.27	17.86	19.01	20.01
19	20.51	20.41	19.86	19.54	19.42	18.69	---	---	16.33	17.91	19.04	20.01
20	20.50	20.37	19.80	19.59	19.44	18.64	---	---	16.38	17.95	19.08	19.97
21	20.49	20.40	19.72	19.60	19.39	18.63	---	---	16.41	18.00	19.16	19.96
22	20.48	20.41	19.62	19.53	19.35	18.69	---	---	16.46	18.06	19.21	19.99
23	20.49	20.32	19.71	19.45	19.31	18.71	---	---	16.50	18.12	19.24	20.01
24	20.56	20.35	19.71	19.34	19.35	18.63	---	---	16.61	18.18	19.29	20.00
25	20.61	20.36	19.61	19.40	19.37	18.61	---	---	16.68	18.22	19.35	20.04
26	20.61	20.35	19.42	19.39	19.31	18.59	---	---	16.71	18.27	19.38	20.08
27	20.63	20.25	19.46	19.42	19.22	18.47	---	---	16.73	18.28	19.38	20.06
28	20.65	20.27	19.57	19.39	19.32	18.43	---	---	16.81	18.35	19.38	20.08
29	20.68	20.33	19.60	19.38	19.35	18.55	---	---	16.83	18.38	19.41	20.09
30	20.68	20.39	19.57	19.52	---	18.60	---	---	16.89	18.41	19.49	20.09
31	20.68	---	19.55	19.52	---	18.61	---	16.12	---	18.45	19.52	---
LOWEST	20.68	20.66	20.41	19.60	19.60	19.31	---	---	16.89	18.45	19.52	20.09

WTR YEAR 1984 HIGHEST 15.92 JUN 7, 1984 LOWEST 20.68 OCT 29, 30, 31, 1983

CRITTENDEN COUNTY, AR--Continued

350344090130000. Local number, Ar:H-2.

LOCATION.--Lat 35°03'44", long 90°13'00", Hydrologic Unit 08020203, 0.7 mi east of Millers.
Owner: Memphis Light, Gas, and Water Division, City of Memphis, and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 502 ft, cased to 482 ft, screened 482 to 502 ft.

INSTRUMENTATION.--Water-level recorder since May 1983.

DATUM.--Altitude of land-surface datum is 211 ft. Measuring point: Inside top of shelter base plate, 3.30 ft above land-surface datum.

PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.28 ft below land-surface datum, May 30, 31, 1983; lowest, 26.26 ft below land-surface datum, Oct. 16, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.02	25.43	23.97	23.82	23.71	22.35	20.36	18.80	18.14	19.83	22.15	23.78
2	26.00	25.59	23.81	23.81	23.64	22.41	20.17	18.57	18.31	19.89	22.20	23.83
3	25.96	25.67	23.44	23.80	23.62	22.42	19.85	18.14	18.42	19.95	22.25	23.88
4	25.91	25.78	23.18	23.69	23.64	22.35	19.70	18.02	18.52	20.00	22.33	23.91
5	25.98	25.83	23.12	23.58	23.86	22.11	19.65	17.96	18.59	20.07	22.44	23.95
6	26.01	25.85	23.06	23.59	23.96	22.05	19.57	17.84	18.64	20.12	22.43	23.96
7	26.01	25.86	23.06	23.67	24.03	21.98	19.53	17.81	18.64	20.16	22.50	23.96
8	26.07	25.86	22.93	23.76	24.04	21.87	19.44	17.68	18.75	20.20	22.56	24.00
9	26.10	25.81	22.84	23.83	23.97	21.85	19.23	17.59	18.89	20.21	22.62	23.99
10	26.10	25.64	22.77	23.96	23.87	21.74	19.19	17.48	19.08	20.25	22.61	24.02
11	26.07	25.54	22.59	23.99	23.84	21.64	19.11	17.34	19.24	20.27	22.64	24.14
12	26.10	25.50	22.64	24.00	23.82	21.57	19.02	17.21	19.39	20.26	22.73	24.21
13	26.18	25.47	22.63	24.08	23.75	21.63	18.97	17.06	19.50	20.37	22.80	24.24
14	26.24	25.46	22.67	24.09	23.77	21.70	18.91	16.85	19.55	20.48	22.86	24.23
15	26.25	25.56	22.83	24.05	23.76	21.84	18.89	16.70	19.54	20.59	22.90	24.28
16	26.26	25.58	22.92	24.01	23.61	22.04	18.84	16.53	19.51	20.65	22.92	24.28
17	26.20	25.52	22.91	24.05	23.46	22.17	18.82	16.38	19.47	20.73	22.90	24.29
18	26.04	25.41	22.88	24.17	23.22	22.21	18.86	16.26	19.43	20.90	22.82	24.33
19	26.05	25.26	22.87	24.24	22.94	22.19	18.87	16.13	19.43	21.00	22.77	24.38
20	26.04	25.11	22.87	24.31	22.81	22.10	18.90	16.01	19.45	21.12	22.80	24.40
21	26.02	25.15	22.87	24.32	22.62	21.91	18.97	15.92	19.47	21.25	22.89	24.41
22	25.97	25.16	22.94	24.30	22.46	21.71	19.15	16.00	19.48	21.35	22.95	24.45
23	25.97	24.91	23.14	24.24	22.32	21.53	19.32	16.05	19.50	21.47	23.04	24.48
24	25.96	24.80	23.30	24.11	22.21	21.25	19.46	16.11	19.55	21.56	23.19	24.48
25	25.94	24.70	23.45	24.15	22.20	21.03	19.52	16.28	19.58	21.66	23.32	24.59
26	25.77	24.57	23.47	24.16	22.12	20.90	19.53	16.56	19.57	21.77	23.41	24.64
27	25.46	24.34	23.45	24.19	22.05	20.69	19.46	16.70	19.59	21.81	23.48	24.62
28	25.28	24.11	23.57	24.17	22.21	20.46	19.40	17.10	19.66	21.93	23.55	24.61
29	25.18	24.03	23.68	24.05	22.32	20.51	19.19	17.44	19.70	22.00	23.61	24.59
30	25.16	23.99	23.77	23.93	---	20.50	18.92	17.72	19.76	22.04	23.68	24.60
31	25.26	---	23.78	23.89	---	20.46	---	17.95	---	22.09	23.73	---
LOWEST	26.26	25.86	23.97	24.32	24.04	22.42	20.36	18.80	19.76	22.09	23.73	24.64

WTR YEAR 1984 HIGHEST 15.89 MAY 20, 21, 1984 LOWEST 26.26 OCT 16, 1983

CRITTENDEN COUNTY, AR--Continued

351349090062800. Local number, Ar:O-1.

LOCATION.--Lat 35°13'49", long 90°06'28", Hydrologic Unit 08020203, 0.3 mi east of blacktop road, 0.8 mi north of St. Claire.
Owner: Memphis Light, Gas, and Water Division, City of Memphis, and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 497 ft, cased to 477 ft, screened 477 to 497 ft.

INSTRUMENTATION.--Water-level recorder since May 1983.

DATUM.--Altitude of land-surface datum is 217 ft. Measuring point: Inside top of shelter base plate, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.42 ft, May 29, 30, 31, 1983; lowest, 35.93 ft below land-surface datum, Sept. 21, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.45	34.18	31.49	31.69	32.46	30.89	27.83	25.07	25.95	28.64	31.37	33.20
2	35.38	34.36	31.20	31.70	32.43	30.93	27.54	24.80	26.19	28.74	31.44	33.25
3	35.32	34.43	30.67	31.69	32.49	30.93	27.14	24.27	26.33	28.81	31.52	33.27
4	35.25	34.50	30.32	31.60	32.63	30.84	26.87	24.10	26.43	28.88	31.63	33.28
5	35.31	34.55	30.25	31.55	32.87	30.50	26.77	24.08	26.52	28.94	31.75	33.27
6	35.35	34.55	30.03	31.80	32.96	30.35	26.65	24.06	26.59	28.96	31.78	33.21
7	35.36	34.52	30.00	32.03	33.00	30.24	26.55	24.05	26.71	28.91	31.83	33.26
8	35.41	34.44	29.75	32.23	32.97	30.04	26.39	23.86	26.94	28.89	31.87	33.37
9	35.43	34.23	29.57	32.37	32.86	30.01	26.10	23.73	27.22	28.90	31.90	33.37
10	35.41	33.90	29.49	32.54	32.75	29.87	25.96	23.58	27.53	28.96	31.98	33.42
11	35.35	33.83	29.48	32.61	32.77	29.77	25.83	23.34	27.81	29.00	32.09	33.59
12	35.32	33.87	29.65	32.63	32.75	29.75	25.70	23.05	28.03	29.03	32.15	33.64
13	35.38	33.92	29.68	32.71	32.69	29.96	25.64	22.74	28.16	29.20	32.21	33.62
14	35.42	33.91	29.78	32.75	32.71	30.16	25.58	22.40	28.19	29.37	32.24	33.53
15	35.40	33.90	29.93	32.72	32.65	30.45	25.56	22.18	28.16	29.51	32.23	33.54
16	35.34	33.89	29.98	32.78	32.33	30.80	25.49	21.97	28.11	29.60	32.21	33.58
17	35.22	33.74	29.95	32.88	32.10	30.92	25.46	21.84	28.08	29.69	32.13	33.69
18	35.13	33.52	29.96	33.03	31.77	30.95	25.51	21.75	28.13	29.88	31.97	33.82
19	35.11	33.39	30.04	33.10	31.39	30.86	25.60	21.66	28.18	30.02	31.96	33.88
20	35.00	33.30	30.13	33.20	31.25	30.59	25.78	21.59	28.24	30.19	32.03	33.86
21	34.94	33.30	30.14	33.22	31.06	30.22	25.97	21.63	28.30	30.33	32.14	33.83
22	34.88	33.30	30.39	33.21	30.88	29.90	26.38	21.81	28.32	30.43	32.28	33.85
23	34.82	32.97	30.70	33.16	30.71	29.64	26.65	22.04	28.31	30.54	32.45	33.91
24	34.70	32.71	31.05	33.05	30.55	29.29	26.78	22.26	28.36	30.64	32.63	34.00
25	34.44	32.59	31.15	33.14	30.53	28.98	26.78	22.64	28.39	30.80	32.78	34.09
26	34.06	32.41	31.17	33.17	30.44	28.75	26.67	23.15	28.39	30.96	32.90	34.11
27	33.74	32.06	31.13	33.18	30.47	28.49	26.38	23.60	28.44	31.09	32.97	34.04
28	33.57	31.69	31.20	33.12	30.71	28.20	26.11	24.24	28.51	31.18	33.01	33.95
29	33.57	31.60	31.37	32.91	30.87	28.20	25.65	24.84	28.54	31.24	33.06	33.94
30	33.66	31.56	31.47	32.71	---	28.16	25.23	25.34	28.58	31.28	33.12	34.07
31	33.92	---	31.59	32.64	---	28.04	---	25.70	---	31.33	33.16	---
LOWEST	35.45	34.55	31.59	33.22	33.00	30.95	27.83	25.70	28.58	31.33	33.16	34.11

WTR YEAR 1984 HIGHEST 21.50 MAY 20, 1984 LOWEST 35.45 OCT 1, 1983

GROUND-WATER LEVELS

BRADLEY COUNTY

350503084505000. Local number, Br:E-1.

LOCATION.--Lat 35°05'03", long 84°50'50", Hydrologic Unit 03150101, on Trewhitt Road, 0.5 mi north of Goodwill Road, Cleveland.
Owner: F. G. Trewhitt.

AQUIFER.--Conasauga shale of middle and late Cambrian age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in, depth 25 ft, casing information not available.

DATUM.--Land-surface datum is 850 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete casing at land-surface datum.

PERIOD OF RECORD.--February 1950 to November 1955, April 1964 to current year. Analog record February 1950 to November 1955, April 1964 to February 1971, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.38 ft below land-surface datum, Dec. 19, 1967; lowest recorded, 24.97 ft below land-surface datum, Dec. 7, 8, 1954; highest water level measured, 8.22 ft below land-surface datum, Apr. 5, 1977; lowest measured, 23.20 ft below land-surface datum, Dec. 12, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 16	18.32	MAR 6	10.45	APR 9	8.81	AUG 15	18.64

CANNON COUNTY

354823086104400. Local number, Cn:D-1.

LOCATION.--Lat 35°48'23", long 86°10'44", Hydrologic Unit 05130203, on county road on Cannon County and Rutherford County lines, 1.5 mi south of Readyville.
Owner: Ray Barker.

AQUIFER.--Lebanon Limestone of middle Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter, 6 in, depth 30 ft, cased with steel to unknown depth, open end.

DATUM.--Land-surface datum is 715 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1967 to current year. Analong record April 1967 to February 1971, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.91 below land-surface datum, Mar. 11, 1968; lowest recorded, 19.38 ft below land-surface datum, Dec. 9, 10, 1968; highest water level measured, 12.14 ft below land-surface datum, Jan. 8, 1974; lowest measured, 18.07 ft below land-surface datum, June 27, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 6	16.60	JAN 5	13.99	APR 16	14.19	AUG 21	14.78

GROUND-WATER LEVELS

DYER COUNTY

360200089280100. Local number, Dy:H-1.

LOCATION.--Lat 36°02'00", long 89°28'01", Hydrologic Unit 08010206, 4.0 mi west of Dyersburg on State Highway 20 at Finley.
Owner: U.S. Geological Survey.

AQUIFER.--Fluvial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 70 ft, cased to 60 ft, screened 60 to 70 ft.

DATUM.--Altitude of land-surface datum is 278 ft. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1955 to current year. Analog record April 1955 to February 1971, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.69 ft below land-surface datum, Feb. 28, 1962; lowest recorded, 18.93 ft below land-surface datum, Jan. 18-21, 1957; highest water level measured, 4.18 ft below land-surface datum, Apr. 13, 1979; lowest measured, 17.24 ft below land-surface datum, Jan. 27, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	16.52	JAN 3	13.69	APR 6	7.08	JUL 30	13.62
NOV 18	17.08	FEB 16	10.89	MAY 22	7.84	SEP 11	15.56

360147089230700. Local number, Dy:H-7.

LOCATION.--Lat 36°01'47", long 89°23'07", Hydrologic Unit 08010204, 500 ft east of U.S. Highway 51 and on south side of Illinois Central railroad, at Dyersburg.
Owner: City of Dyersburg.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 to 10 in, depth 656 ft, cased to 605 ft, screened 605 to 655 ft.

DATUM.--Land-surface datum is 270.07 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 3.10 ft above land-surface datum.

PERIOD OF RECORD.--February 1954 to current year. Analog record February 1954 to February 1971, periodic measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.69 ft above land-surface datum, Mar. 1, 2, Apr. 19, 1962; lowest recorded, 17.1 ft below land-surface datum, Aug. 10, 1956; highest water level measured, 0.20 ft above land-surface datum, Mar. 20, 1975, lowest measured, 10.22 ft below land-surface datum, September 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	8.46	JAN 3	5.99	APR 6	6.88	JUN 21	9.15	SEP 11	7.15
NOV 18	8.69	FEB 16	8.60	MAY 22	5.15	JUL 30	6.78		

GROUND-WATER LEVELS

FAYETTE COUNTY

352226089330101. Local number, Fa:R-1.

LOCATION.--Lat 35°22'26", long 89°33'01", Hydrologic Unit 08010209, 80 ft south of State Highway 59, 1.2 mi southeast of U.S. Highway 70, near Braden.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Sand of Wilcox Group of early Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in, depth 1,025 ft, cased to 1,008 ft, screened 1,008 to 1,025 ft.

DATUM.--Land-surface datum is 317.50 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.70 ft above land-surface datum.

PERIOD OF RECORD.--August 1949 to current year. Analog record August 1949 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 64.89 ft below land-surface datum, Aug. 31, 1949; lowest recorded, 76.26 ft below land-surface datum, Dec. 5, 1970; highest water level measured, 73.61 ft below land-surface datum, Apr. 28, 1976; lowest measured, 80.25 ft below land-surface datum, Sept. 30, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 1	79.49	JAN 27	78.72	MAR 30	78.51	MAY 31	78.20	JUN 29	78.09	AUG 31	78.53
DEC 2	79.00	FEB 29	78.67	MAY 3	78.00	JUN 7	78.14	AUG 1	78.37	SEP 25	78.85
JAN 3	78.92										

352226089330102. Local number, Fa:R-2.

LOCATION.--Lat 35°22'26", long 89°33'01", Hydrologic Unit 08010209, 80 ft south of State Highway 59, 1.1 mi southeast of U.S. Highway 70, near Braden.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in , depth 365 ft, cased to 345 ft, screened 345 to 365 ft.

DATUM.--Land-surface datum is 317.20 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.20 ft above land-surface datum.

PERIOD OF RECORD.--October 1949 to current year. Analog record October 1949 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 37.25 ft below land-surface datum, Mar. 10, 1952; lowest recorded, 42.12 ft below land-surface datum, Nov. 30, 1967; highest water level measured, 39.38 ft below land-surface datum, May 2, 1980; lowest measured, 41.67 ft below land-surface datum, December 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 1	40.78	JAN 3	40.61	FEB 29	40.58	MAY 3	39.85	JUN 29	40.04	AUG 31	40.61
DEC 2	40.57	JAN 27	40.50	MAR 30	40.33	MAY 31	40.03	AUG 1	40.36	SEP 25	40.83

GROUND-WATER LEVELS

MADISON COUNTY

354223088380200. Local number, Md:N-1.

LOCATION.--Lat 35°42'23", long 88°38'02", Hydrologic Unit 08010205, 90 ft south of State Highway 20, about 0.4 mi east of Claybrook.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--McNairy Sand of late Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in, depth 659 ft, cased to 639 ft, screened 639 to 659 ft. (195 to 201 m).

DATUM.--Land-surface datum is 562.70 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land-surface datum.

PERIOD OF RECORD.--June 1949 to current year. Analog record June 1949 to February 1971, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 124.50 ft below land-surface datum, Mar. 10, 1952; lowest recorded, 129.13 ft below land-surface datum, Nov. 15, 1963; highest water level measured, 124.98 ft below land-surface datum, Apr. 8, 1980; lowest measured, 131.17 ft below land-surface datum, June 20, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	127.07	JAN 4	126.54	MAR 29	126.21	JUN 19	126.44
NOV 16	127.00	FEB 29	126.52	MAY 21	126.13	SEP 13	126.86

SHELBY COUNTY

352112089571200. Local number, Sh:U-1.

LOCATION.--Lat 35°21'12", long 89°57'12", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloanville.
Owner: Mrs. T. S. Welch

AQUIFER.--Sand of Wilcox Group of early Eocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 to 16 in, depth 1,558 ft, cased to 1,497 ft, screened 1,497 to 1,558 ft.

DATUM.--Land-surface datum is 264.20 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.60 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage at Memphis.

PERIOD OF RECORD.--August 1946 to current year. Analog record March 1948 to January 1971, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 35.5 ft below land-surface datum, Apr. 11, 1948; lowest recorded, 60.42 ft below land-surface datum, Dec. 20, 1970; highest water level measured, 33.20 ft, Apr. 21, 1947; lowest measured, 65.75 ft below land-surface datum, July 29, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	63.94	JAN 26	62.60	MAR 29	61.44	MAY 30	60.84	JUN 28	61.83	JUL 31	62.42
NOV 30	63.10	FEB 28	61.95	MAY 1	61.07	JUN 11	61.65	JUL 3	61.89	AUG 30	62.92
DEC 29	62.61										

GROUND-WATER LEVELS

SHELBY COUNTY--Continued

352112089571300. Local number, Sh:U-2.

LOCATION.--Lat 35°21'12", long 89°57'13", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloanville.
Owner: Mrs. F. E. Byrd

AQUIFER.--Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 18 to 12 in, depth 440 ft, cased to 360 ft, screened 360 to 440 ft.

DATUM.--Land-surface datum is 268.76 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.60 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--June 1953 to current year. Analog record June 1953 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.59 ft below land-surface datum, June 29, 1953; lowest recorded, 59.12 ft below land-surface datum during period August through September 1977, from maximum-minimum recorder.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	59.34	DEC 29	58.45	FEB 28	58.73	MAY 1	56.61	JUN 28	57.22	AUG 30	59.34
NOV 30	58.76	JAN 26	59.51	MAR 29	57.89	MAY 30	55.43	JUL 31	58.61		

WILLIAMSON COUNTY

355505086541100. Local number, Wm:M-1.

LOCATION.--Lat 35°55'05", long 86°54'11", Hydrologic Unit 05130204, on Horton Lane, 0.8 mi west of Carter's Creek Road, near Franklin.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Knox Dolomite of late Cambrian and early Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian test well, diameter 6 in, depth 1,160 ft, cased to 473 ft, open end.

DATUM.--Land-surface datum is 712 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 2.80 ft above land-surface datum.

REMARKS.--Period of record low resulted from water-level measurements on the well during a 72 hour aquifer test.

PERIOD OF RECORD.--January 1950 to current year. Water-level recorder December 1951 to February 1971, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 84.21 ft below land-surface datum, Mar. 10, 1952; lowest recorded 87.11 ft below land-surface datum, Sept. 10, 1970; highest water level measured, 85.43 ft below land-surface datum, Feb. 19, 1974; lowest measured, 114.81 ft below land-surface datum, Jan. 31, 1950.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	88.64	NOV 10	88.34	DEC 28	88.24	AUG 24	89.54

INDEX

*U.S. GOVERNMENT PRINTING OFFICE : 1985 O-547-165/BID

October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
Room A-413, Federal Building-U.S. Courthouse
801 Broadway, Nashville, TN 37203

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

SPECIAL 4TH CLASS BOOK RATE