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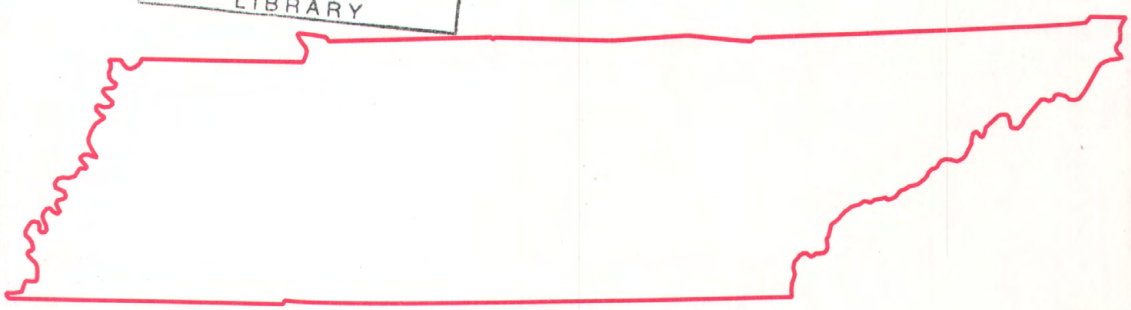
Water Resources Data Tennessee Water Year 1997



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-97-1
Prepared in cooperation with the State of Tennessee
and with other agencies

CALENDAR FOR WATER YEAR 1997

1996

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1997

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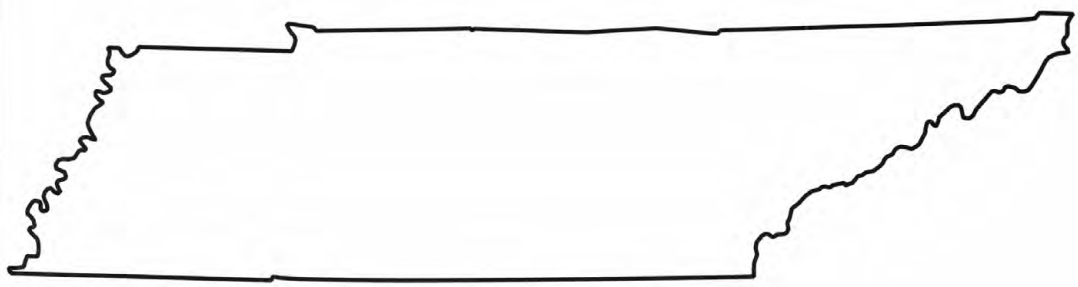
Water Resources Data Tennessee Water Year 1997

by D.F. Flohr, J.T. Hamilton, J.G. Lewis, and L.B. Thomas



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-97-1
Prepared in cooperation with the State of Tennessee
and with other agencies

U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, SECRETARY
U.S. GEOLOGICAL SURVEY
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Nashville, Tennessee 37211
1998

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.

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, most of the data were collected, computed, and processed from the subdistrict offices. The following individuals supervised the collection, processing, and tabulation of the data:

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The following individuals contributed to the collection, processing, and preparation of the data:

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D.E. Butner	D.E. League	R. Thomas
A.M. Fielder	R.L. Mitchell	T.D. Turner
W.K. Kelly	T.D. Phillips	K.C. Waltenbaugh

This report was prepared in cooperation with the State of Tennessee and with other agencies under the general supervision of Jerry F. Lowery, Data Management Section Chief, and Michael W. Bradley, Acting District Chief, Tennessee.

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Water resources data for the 1997 water year for Tennessee consists 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. This report contains records for water discharge at 60 gaging stations; stage only for 1 gaging station; elevation and contents for 32 lakes reservoirs; water quality at 21 gaging stations and 25 wells; and water levels for 21 observation wells; and 1 precipitation station. Also included are data for 108 crest-stage partial-record stations. Additional water data were collected at various steram sites not involved in the systematic data-collection program, and are published as miscellaneous measurements and analyses. 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.

14. SUBJECT TERMS
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ILLUSTRATIONS

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORD ARE PUBLISHED IN THIS VOLUME

[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (t) water temperature, (s) sediment, (e) elevation, gage heights, or contents]

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

GROUND-WATER WELLS, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVELS

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

QUALITY OF GROUND WATER, 1997 WATER YEAR

QUALITY OF PRECIPITATION

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with State, local, and Federal agencies, obtains a large amount of data pertaining to the water resources of Tennessee each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled "Water Resources Data - Tennessee."

This report consists of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains discharge records for 60 gaging stations; stage only at 1 gaging station; stage and contents at 32 lakes and reservoirs; water quality for 21 stations, and 25 wells; and water levels at 21 observation wells. Also included are data for 108 crest-stage partial-record stations. Locations of these sites are shown on figures 4 through 6. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and miscellaneous analyses or as seepage investigations.

This series of annual reports for Tennessee began with the 1961 water year with a report that contained only data relating to the quantities of surface water. 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, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several years concurrent with it, water-resources data for Tennessee were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Water of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from the Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225.

Publications similar to this report are published annually by the USGS for all States. These official Survey reports have 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-97-1." For archiving and general distribution, the reports for the 1971-74 water years also are 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, 5285 Port Royal Road, 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) 837-4700.

COOPERATION

The USGS and agencies of the State of Tennessee have had cooperative agreements for the systematic collection of streamflow 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:

Athens Utility District
Tennessee Department of Environment and Conservation
Tennessee Department of Transportation
Tennessee Wildlife Resources Agency
Duck River Development Agency
Eastside Utility Distrsict
Harpeth Valley Utility District
Savannah Valley Utility District
Cities, Towns, or Counties;
- Alcoa
- Bedford
- Blount
- Camden
- Dickson
- Franklin
- Harriman
- Jackson
- Lewisburg
- Lincoln
- Medina
- Memphis
- Metropolitan Government of Nashville and Davidson County
- Murfreesboro
- Red Boiling Springs
- Rogersville
- Sevierville
- Shelby
- Springfield
- Wartrace

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, Nashville District, in collecting records for 8 gaging stations and 4 water-quality stations, by the Tennessee Valley Authority for 10 gaging stations, and by the U.S. Department of Energy for 4 gaging stations on Oak Ridge Reservation. All data are published in this report.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

The State of Tennessee benefits from an abundance of streams, rivers, and lakes. The Tennessee and Cumberland are the largest rivers in the State, excluding the Mississippi River which flows along Tennessee's western boundary. The main stems of the Tennessee and Cumberland Rivers are highly regulated with a complex system of dams and reservoirs used for navigation, flood control, recreation, water supply, and hydroelectric power generation. Natural flow conditions occur only in tributaries to these rivers, or in other streams draining smaller basins throughout the State. Runoff data from these natural-flow streams can be used to describe the hydrologic conditions of the State for the 1997 water year.

A comparison of the mean discharges for the 1997 water year with the period-of-record mean at unregulated streams can be used to measure hydrologic conditions. The data for 1997 show that mean discharges at unregulated streams east of the Tennessee River (Kentucky Lake) were all above normal with several having exceeded the period of record annual mean discharge by more than 140 percent. In West Tennessee mean discharges for 1997 were also above normal with a high of 174 percent of the period-of-record mean at the Loosahatchie River near Arlington, Tennessee. This comparison indicates that runoff during the water year varied from average to above average in East, Middle and West Tennessee.

The most significant flooding to occur during the 1997 water year occurred on March 2-5, 1997 across much of the State. Peak discharges at many stations were recorded as a result of the rainfall received during this time period. Period of record maximum instantaneous peak discharges occurred at 4 streams. These streams were Mansker Creek above Goodlettesville, Tennessee with 12,500 cubic feet per second, Red River below Highway 161 near Barren Plains, Tennessee with 22,100 cubic feet per second, Sinking Creek near at Afton, Tennessee with 530 cubic feet per second, and Wolf River at LaGrange, Tennessee with 7,420 cubic feet per second.

Ground Water

Ground-water levels are recorded continuously at a series of observation wells across the State (fig. 1). Water levels at well Ld:F-4 (Lauderdale County) are representative of conditions in West Tennessee and were slightly above normal during most of the water year. Well Hm:O-15 (Hamilton County); and well Pm:C-1 (Putnam County) are representative of conditions in Middle and East Tennessee and were above normal during much of the water year. Well Hm:O-15 (Hamilton County) was normal for much of the year, while well Pm:C-1 (Putnam County) was slightly above normal for the year.

Water levels recorded from wells throughout Middle and East Tennessee generally respond faster and exhibit larger fluctuations than wells drilled into the sand and gravel aquifers of West Tennessee. Observation wells in Shelby County show that ground water levels are strongly affected by ground water withdrawals by the City of Memphis and surrounding communities. At well Sh:Q-1 (fig. 2), near downtown Memphis, water levels declined steadily since 1972, although a slower rate of decline began in 1988. The decline in ground water levels in the Memphis area are not indicative of a reduction in the available ground-water supplies, but the response of the aquifer to additional withdrawals. Hydrographs showing lowest monthly water levels for each of the continuous recording observation wells are included in the body of this report.

Water Quality

Water-quality data were collected at both surface- and ground-water sites during the 1997 water year. The majority of these sites were sampled as part of the U.S. Geological Survey's National Water-Quality Assessment project of the Upper Tennessee River Basin. Water-quality sampling for this project included samples collected from sixteen springs. Other water-quality activities in Tennessee included:

- Operation of four continuous monitors to measure temperature, dissolved oxygen, pH, and specific conductance in the Cumberland River Basin in support of the U.S. Army Corps of Engineers, Nashville District operations.

- Operation of a continuous monitor to measure temperature, dissolved oxygen, pH, and specific conductance in the West Fork Stones River in support of a water resources program for the City of Murfreesboro, Tennessee.

- Operation of a continuous monitor to measure temperature and dissolved oxygen of the Duck River in support of a water resources program with the Duck River Development Agency.

- Operation of a two continuous monitors to measure temperature, dissolved oxygen, pH, and specific conductance in the Cumberland River in support of a water resources program for the Davidson County Metropolitan area, Tennessee.

- Determination of water quality of Carter's Creek in Maury County in support of a water resources study in that area.

The data from these sites did not identify any significant water-quality problems. However, low concentrations of a few pesticides and volatile organic compounds were detected in samples collected for the National Water-Quality Assessment project in the Upper Tennessee River Basin.

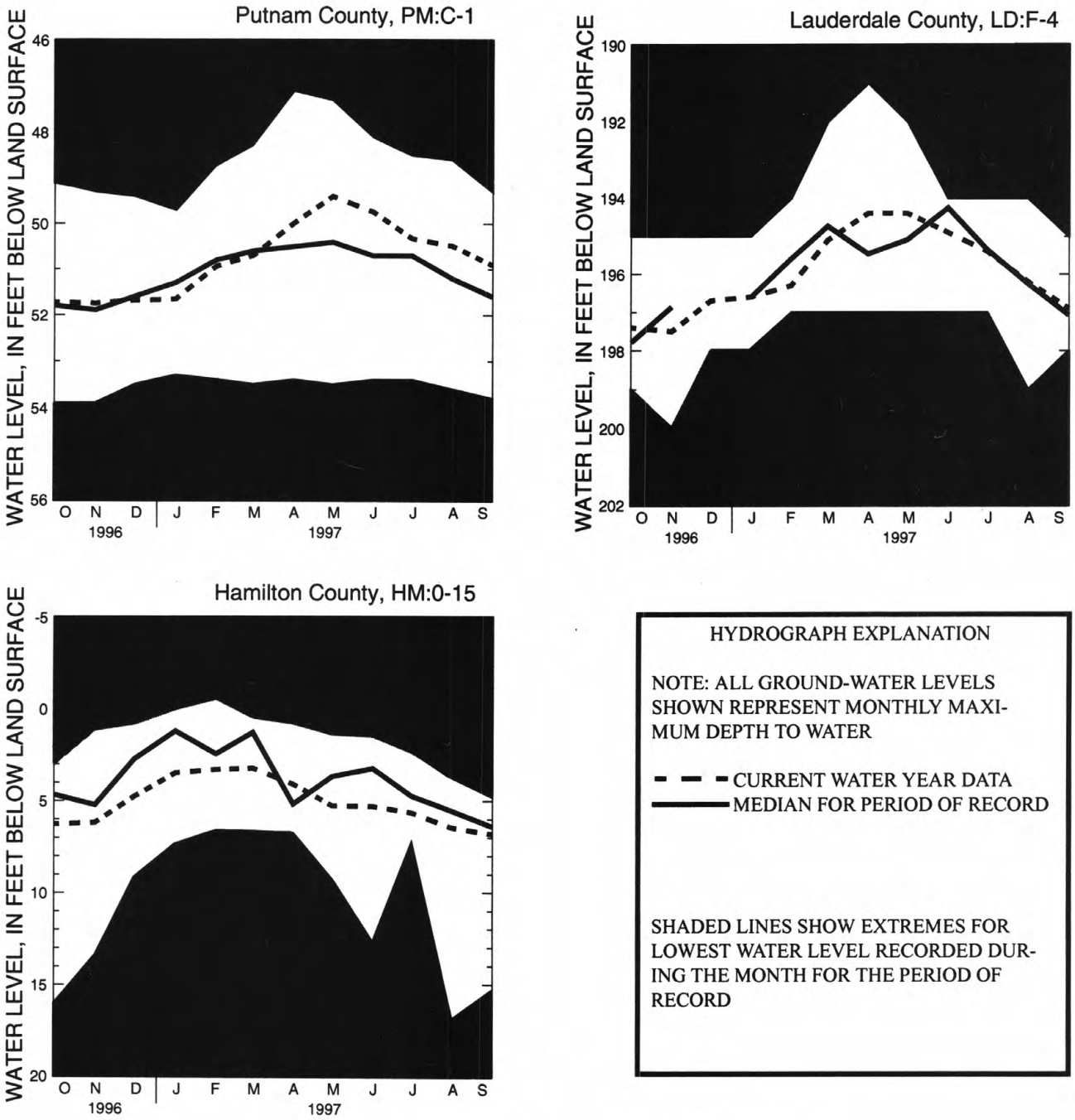

Figure 1. Ground-water levels for the 1997 water year compared to the maximum, minimum, and median water levels for the period of record.

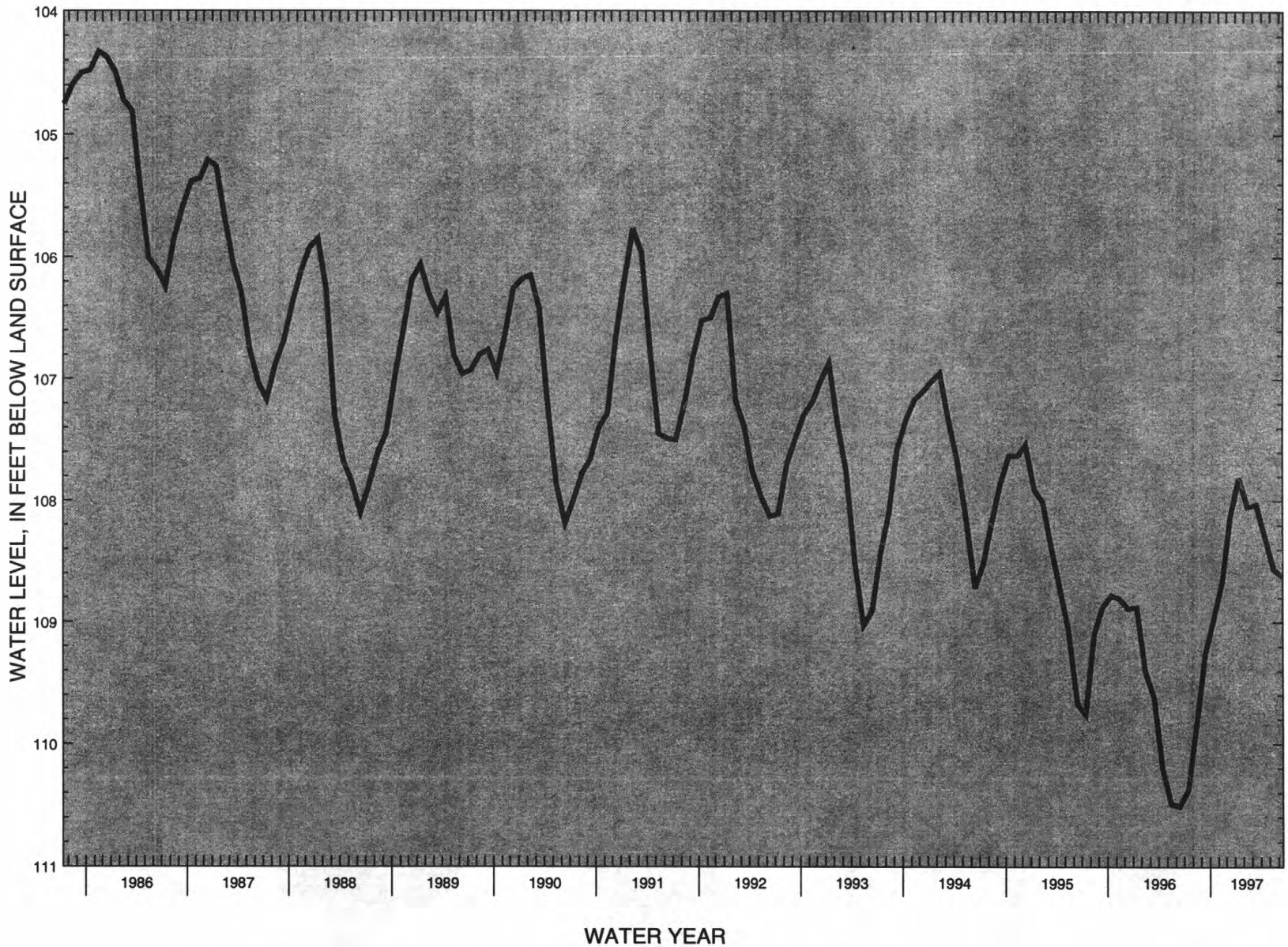

Figure 2. Hydrograph of well Sh:Q-1 in Shelby County showing long-term decline in water level.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO2 emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO2 and NOx schedules to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

http://nadp.nrel.colostate.edu/NADP

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

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.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface water. In addition to the surface water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF RECORDS

The surface-water and ground-water records published in this report are for the 1997 water year that began October 1, 1996, and ended September 30, 1997. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 4 through 7. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the USGS to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order System

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 mainstream station are listed before that station. A station on a tributary that enters between two mainstream 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 with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this 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.

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 USGS is based on the grid system of latitude 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.

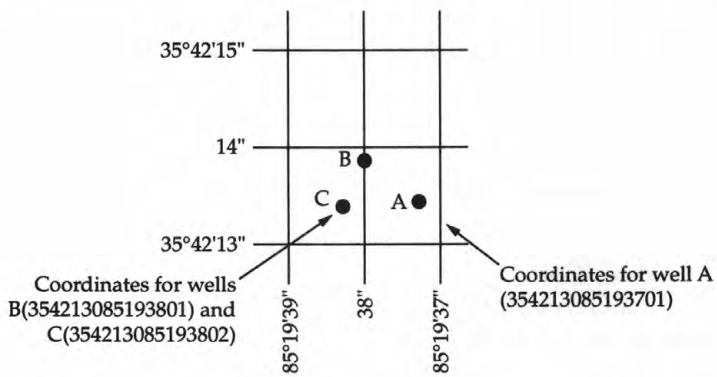

Figure 3.--System for numbering wells (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relation between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relation between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the USGS. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations (TWRI's), Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed from gage heights and rating tables. 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 of the personnel making the measurements are used in applying the gage heights to the rating tables. The shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and comparable records of discharge for other stations in the same or nearby basins.

At some stream-gaging stations, the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

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 from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileage is that determined and used by the USGS, Tennessee Valley Authority, U.S. Army Corps of Engineers, or other agencies using methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--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 reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted 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 most recently 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.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see "Definition of terms"), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent times. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the USGS.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually 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 or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum line (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS ____-____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar water year and for a designated period, as appropriate. The designated period selected, "WATER YEARS ____-____," will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. When the designated period is not the same as the station period of record published in the manuscript, values and dates of occurrence for daily and instantaneous extremes outside the designated period will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnote.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes. At least 5 complete years of record must be available before this statistic is published for the designated period.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF (AC-FT).--Indicates the depth, in acre-feet, to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.

ANNUAL RUNOFF (CFSM).--Indicates 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 for the year.

ANNUAL RUNOFF (INCHES).--Indicates the depth to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded 90 percent of the time for the designated period.

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 annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record 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. 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.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures to more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square 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.

Other Data Available

Records of discharge, not published by the USGS, are collected in Tennessee at several sites by the U.S. Army Corps of Engineers and Tennessee Valley Authority. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the USGS. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurements notes, gage-height records, temperature measurements, and rating tables are on file in the Tennessee District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are collected at or near stream-gaging stations. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

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. All samples obtained for the National Stream Quality Accounting Network (NASQAN) (see definitions) are obtained from at least several verticals.

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.

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Present data above the µg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the USGS will begin using new trace-element protocols in the near future.

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

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge 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 diurnal 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, maximum, minimum, and mean temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office and are also published in this report.

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 section.

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 water discharge. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

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 and 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 for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the USGS laboratories in Arvada, Colo. Methods used to analyze sediment samples and to compute sediment records are described in the TWRI Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, temperature recorder, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the USGS'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 USGS water-quality data should be aware of this update procedure because corrections are not documented in the State data-report series.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colon count)
L	Biological organisms count less than 0.5 percent (organisms may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant
V	Analyte was detected in both the environmental sample and the associated blanks.

Dissolved Trace-Element Concentrations

*NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level, Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the µg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Water Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples that may be collected by this district are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analyses of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collect in this district are:

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental

sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank - a blank solution that is treated with the sampler preservatives used for and environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well -established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Change in National Trends Network Procedures

*NOTE.--Samples handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/ NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Records of Ground-Water Levels

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.

Data Collection and Computation

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

Tables of water-level data are presented by counties arranged in alphabetical order. 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.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum 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 in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error 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.

Data Presentation

Each well record consists of three parts, the station description, the data table of water levels observed during the current water year, and a graph of the water levels for the current water year or other selected period. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings of the well description.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that are also water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the USGS and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level. A hydrograph for a selected period of record follows each water-level table.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey TWRI publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

EXPLANATION OF PRECIPITATION-QUALITY RECORDS

Collection of the Data

The precipitation-quality records in this report are for one site operated by the USGS in the National Trends Network. Field measurements of pH and specific conductance of weekly composite precipitation samples and daily precipitation quantity are made. Other chemical analyses for all National Trends Network sites are performed by the Central Analytical Laboratory of the Illinois Water Survey. A numerical agency code (17003) has been assigned to the Illinois Water-Survey for data storage purposes.

ACCESS TO WATSTORE DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

http://water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address on the back of the title page)

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 (SI) Units 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, while 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 KF-streptococcus 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.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate 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 [$(ft^3/s)/mi^2$] (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) 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.

Cubic foot per second-day [$(ft^3/s)/d$] 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 2,445 cubic meters.

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.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 - March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

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.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

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 eight-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 (µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, µg/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 dry 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.

National Stream Quality Accounting Network is a nationwide data-collection network designed by the USGS to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Parameter Code is a 5-digit number used in the U.S. Geological Survey's data system, National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency's data system, STORET.

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 the recommendation 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 matter 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, mass, or volume.

Pesticides are chemical compounds used to control undesirable organisms. 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^{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.

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.

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 of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

Sea level in this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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 mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

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

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

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 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 microsiemens 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 microsiemens). 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 (stage) and the 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 required 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 an instrument that continuously records variations of water temperature on a chart. The more general term "temperature recorder" is the term used in the table headings and refers to any instrument that records water temperature whether on a chart, a tape, or any other medium.

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 of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of substance in solution or suspension that passes a stream section during a 24-hour period.

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 determined 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 is the quantity of any individual constituent, as measured by dry mass or volume that passes through a section during a specified period. It is computed by multiplying the total stream 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.

Water year in USGS reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water Resources Data" in reports published prior to 1976).

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

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 1976.

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

PUBLICATION OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting 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) pertains to 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, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for 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-D2. Application of seismic-refraction techniques to hydrologic studies, by F.P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 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.

2-E2. *Borehole geophysics applies to ground-water investigations*, by W. Scott Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.

2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 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 in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.

3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 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-A12. *Fluorometric procedures for dye tracing*, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.

3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

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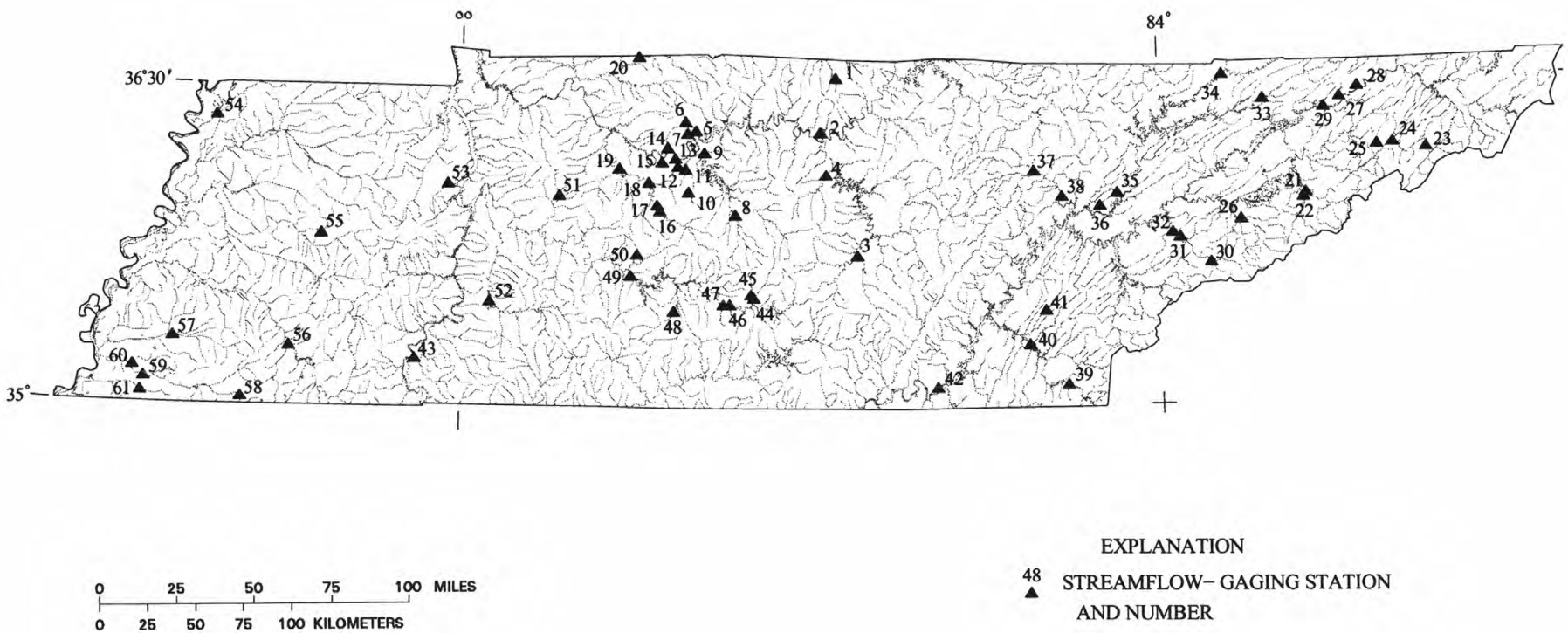


Figure 4.— Location of streamflow– gaging stations in Tennessee.

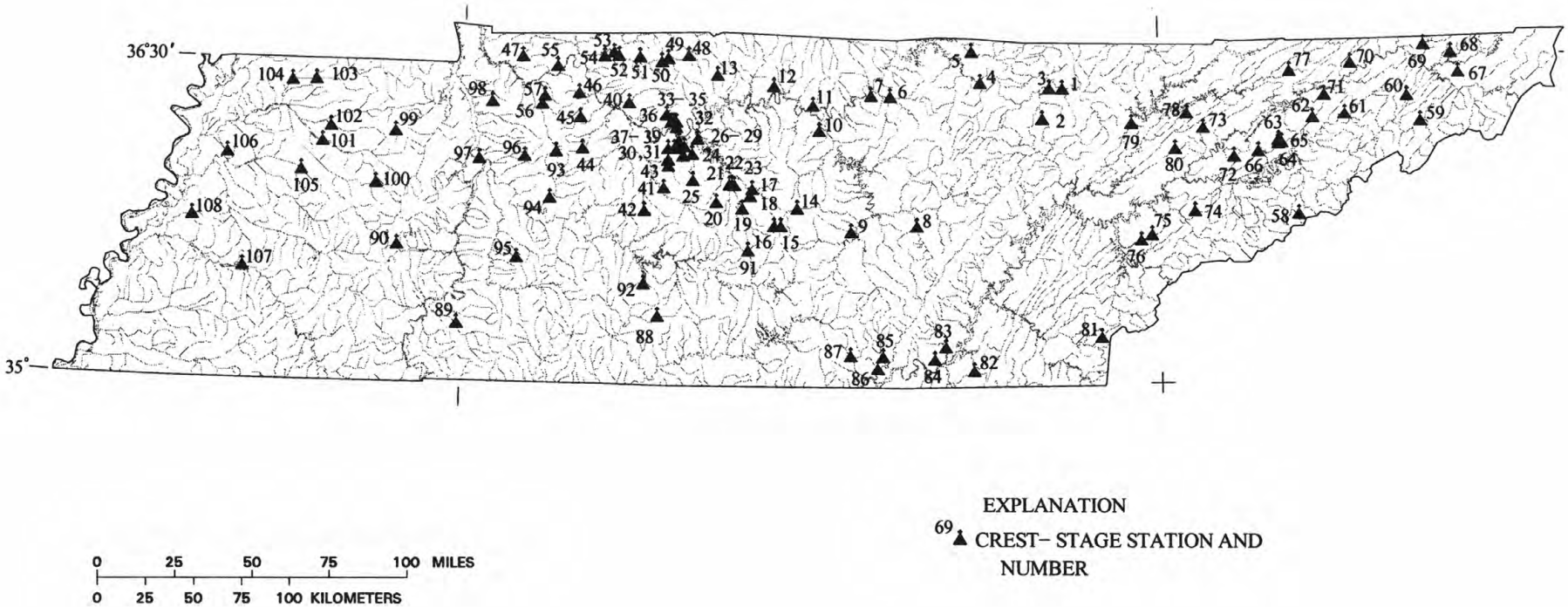


Figure 5.— Location of crest- stage stations in Tennessee.

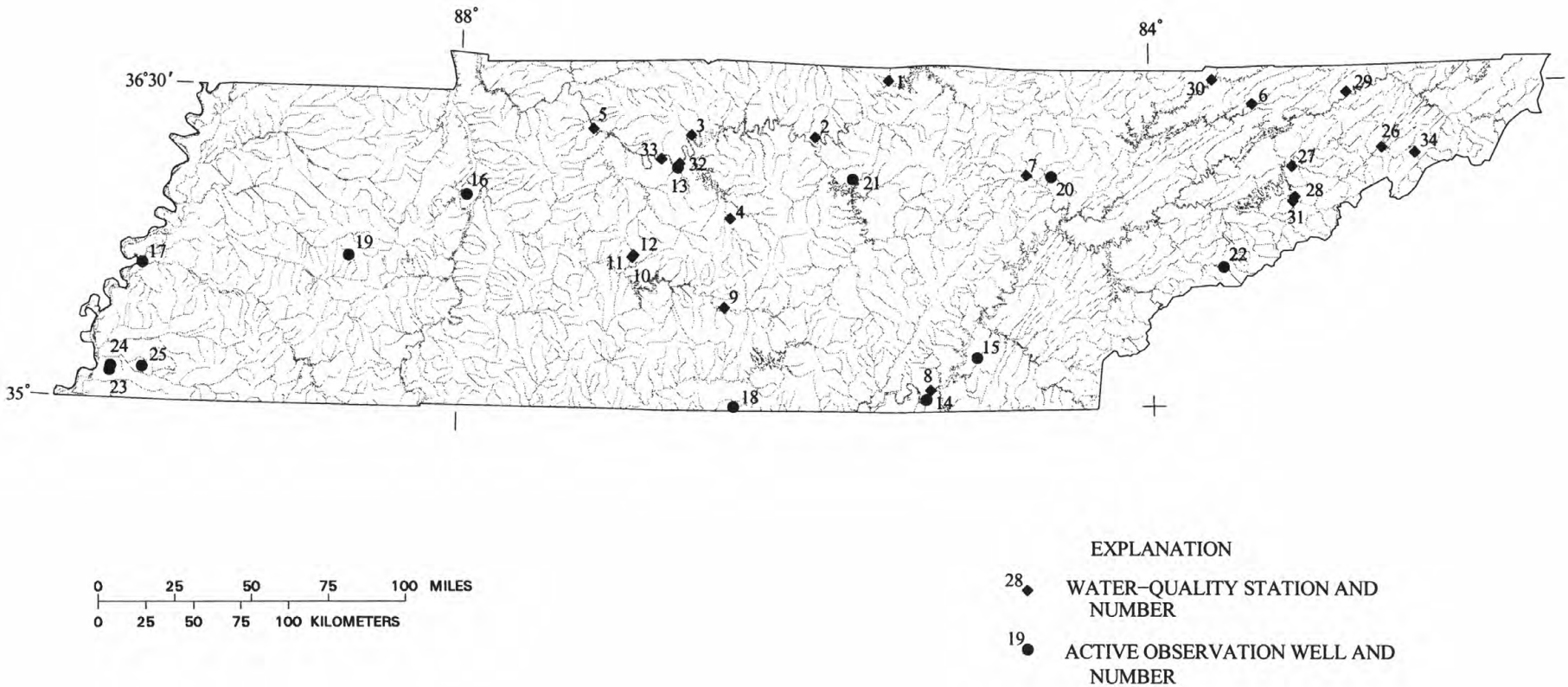


Figure 6.—Location of water–quality stations and active observation wells in Tennessee.

GREEN RIVER BASIN

03312255 SALT LICK CREEK AT RED BOILING SPRINGS, TN

LOCATION.--Lat 36°32'27", long 85°51'01", Macon County, Hydrologic Unit 05110002, near left bank on downstream end of bridge pier on Lake Road, 0.2 mi north of intersection of Lake Road and State Highway 50, 56, 0.6 mi north of Red Boiling Springs, and at mile 16.3.

DRAINAGE AREA.--12.6 mi^2.

PERIOD OF RECORD.--August 1991 to September 1997 (discontinued).

GAGE.--Data collection platform. Elevation of gage is 750 ft above sea level from topographic map.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 2	0515	653	5.93	Mar. 5	0915	814	6.28
Mar. 3	0615	*1,710	*7.90	Mar. 5	1430	907	6.51

Minimum discharge, 3.3 ft^3/s, Sept. 5, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	32	159	16	26	41	22	18	123	16	5.7	4.5
2	8.5	20	45	15	23	336	20	15	52	13	5.0	4.9
3	7.8	14	28	15	22	738	19	15	31	12	5.1	5.6
4	6.9	12	21	14	50	123	19	13	23	11	5.1	5.6
5	6.3	11	26	34	60	424	20	12	22	10	4.8	4.6
6	6.1	10	27	25	41	153	21	11	24	9.5	5.1	4.4
7	5.8	39	22	21	33	71	17	11	53	9.1	4.7	4.3
8	5.9	50	18	19	36	50	16	11	51	8.6	4.4	4.3
9	5.8	26	15	24	32	41	15	11	58	9.8	9.5	14
10	5.9	19	14	23	29	42	15	10	39	9.1	9.6	7.3
11	5.3	15	14	19	26	33	15	9.9	31	8.5	7.2	5.8
12	5.2	13	26	17	24	29	15	9.7	26	8.0	6.2	5.1
13	5.2	12	22	16	25	28	14	10	49	7.7	7.7	4.9
14	5.2	12	18	16	27	54	14	10	166	7.4	7.9	4.6
15	5.1	11	15	25	24	38	13	9.3	78	7.2	6.5	4.5
16	4.9	10	22	38	23	31	13	8.8	50	7.0	5.7	4.4
17	5.4	15	144	27	21	29	13	8.5	38	6.8	11	4.3
18	10	34	50	23	20	47	12	8.3	32	6.5	35	4.4
19	8.5	25	31	21	20	113	16	38	25	6.3	10	4.3
20	7.3	19	24	19	19	66	14	36	21	6.0	11	4.3
21	7.1	21	20	18	28	46	18	17	18	5.9	8.4	4.3
22	7.2	18	18	27	25	36	16	13	16	5.7	7.4	4.0
23	13	16	17	26	22	29	17	11	14	6.6	6.5	7.7
24	9.9	14	59	64	20	26	14	10	13	7.4	5.4	27
25	8.8	20	35	47	19	26	13	9.7	12	6.1	5.5	24
26	13	23	27	33	32	31	13	11	17	5.3	5.5	12
27	13	19	23	31	57	25	13	10	15	5.0	5.0	8.4
28	12	16	21	98	44	28	19	11	13	e5.2	5.0	7.2
29	11	14	19	51	---	33	28	13	16	e5.8	5.5	6.8
30	10	72	18	37	---	27	18	11	18	6.7	5.0	5.7
31	9.0	---	17	30	---	24	---	128	---	5.3	4.3	---
TOTAL	242.7	632	1015	889	828	2818	492	520.2	1144	244.5	230.7	213.2
MEAN	7.83	21.1	32.7	28.7	29.6	90.9	16.4	16.8	38.1	7.89	7.44	7.11
MAX	13	72	159	98	60	738	28	128	166	16	35	27
MIN	4.9	10	14	14	19	24	12	8.3	12	5.0	4.3	4.0
CFSM	.62	1.67	2.60	2.28	2.35	7.21	1.30	1.33	3.03	.63	.59	.56
IN.	.72	1.87	3.00	2.62	2.44	8.32	1.45	1.54	3.38	.72	.68	.63

e Estimated

GREEN RIVER BASIN

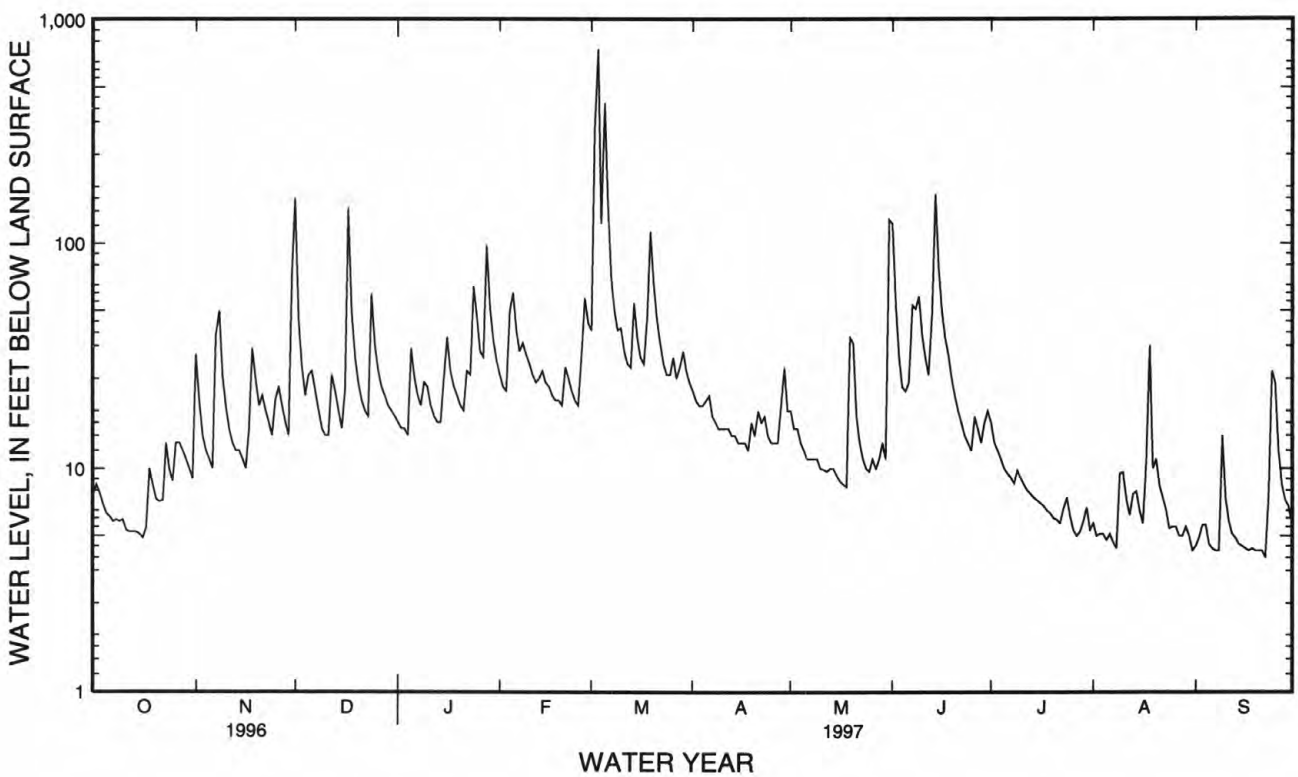
03312255 SALT LICK CREEK AT RED BOILING SPRINGS, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	8.50	18.7	31.9	36.4	34.9	58.0	27.5	20.7	18.4	9.36	6.39	5.71
MAX	13.4	29.2	63.6	48.9	95.2	90.9	55.7	34.9	38.1	17.6	9.13	9.29
(WY)	1996	1996	1992	1992	1994	1997	1994	1996	1997	1992	1992	1992
MIN	6.09	10.5	12.0	28.7	16.5	27.9	16.4	11.5	8.69	4.37	3.17	2.71
(WY)	1994	1992	1996	1997	1992	1993	1997	1992	1993	1993	1991	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	8668.3		9269.3			
ANNUAL MEAN	23.7		25.4		23.1	
HIGHEST ANNUAL MEAN					32.8	1994
LOWEST ANNUAL MEAN					15.2	1993
HIGHEST DAILY MEAN	260	May 7	738	Mar 3	783	Mar 9 1994
LOWEST DAILY MEAN	3.3	Sep 1	4.0	Sep 22	1.5	Sep 30 1995
ANNUAL SEVEN-DAY MINIMUM	3.6	Aug 27	4.3	Sep 16	1.8	Sep 26 1995
INSTANTANEOUS PEAK FLOW			1710	Mar 3	a3820	Dec 2 1991
INSTANTANEOUS PEAK STAGE			7.90	Mar 3	b9.97	Dec 2 1991
INSTANTANEOUS LOW FLOW			c3.3	Sep 5		
ANNUAL RUNOFF (CFSM)	1.88		2.02		1.83	
ANNUAL RUNOFF (INCHES)	25.59		27.37		24.88	
10 PERCENT EXCEEDS	50		44		40	
50 PERCENT EXCEEDS	18		15		13	
90 PERCENT EXCEEDS	5.0		5.3		4.3	

a From rating curve extended above 350 ft^3/s on basis of flood profile computations.
b From high-water marks.
c Also occurred Sept. 22.



CUMBERLAND RIVER BASIN

03417500 CUMBERLAND RIVER AT CELINA, TN

WATER-QUALITY RECORDS

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 mi^2.

PERIOD OF RECORD.--November 1991 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1991 to September 1997.
pH: November 1991 to September 1997.
WATER TEMPERATURE: November 1991 to September 1997.
DISSOLVED OXYGEN: October 1992 to September 1997.

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Flow regulated by Lake Cumberland (station 03413500) and Dale Hollow Lake (station 03416500). Interruptions in the record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 280 microsiemens, Aug. 29, 1992; minimum, 113 microsiemens, Mar. 27, 1994.
pH: Maximum, 8.5 units, Mar. 3, 4, 6, 1992; minimum, 6.2 units, Sept. 14, 1993.
WATER TEMPERATURE: Maximum, 19.4°C, Aug. 19, 1997; minimum, 2.5°C, Feb. 9, 1995.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L, Mar. 8, 1996; minimum, 6.9 mg/L, June 3, 4, July 9.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 223 microsiemens, Dec. 13; minimum, 165 microsiemens, July 10.
pH: Maximum, 8.0 units, Mar. 18, 19, 20, 21; minimum, 6.6 units, Jan. 17, 18, 19.
WATER TEMPERATURE: Maximum, 19.4°C, Aug. 19; minimum, 6.0°C, Jan. 18.
DISSOLVED OXYGEN: Maximum, 12.7 mg/L, Mar. 27, 28; minimum, 6.9 mg/L, June 3, 4, July 9, 1997.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	212	203	207	199	194	195	202	186	191	209	205	207
2	213	207	210	198	194	196	204	186	193	210	204	207
3	208	204	206	199	196	197	206	198	203	208	204	206
4	212	203	206	199	196	198	207	202	205	208	201	205
5	205	203	204	199	193	197	210	205	208	207	203	205
6	204	203	203	193	190	191	212	207	209	211	203	207
7	205	203	204	195	189	191	212	208	210	207	201	204
8	205	204	205	196	188	192	214	210	212	207	202	204
9	207	204	206	188	187	187	216	212	214	205	201	203
10	208	206	207	187	186	186	218	213	216	207	202	204
11	207	206	206	193	185	189	217	214	215	207	201	204
12	208	205	206	193	188	191	220	213	216	205	200	202
13	205	203	205	190	186	187	223	218	220	204	199	201
14	204	201	202	190	187	188	222	218	220	203	198	201
15	202	200	201	189	187	188	222	219	220	203	198	201
16	202	198	201	189	185	186	222	220	221	205	200	202
17	198	196	197	187	185	186	220	202	209	205	199	202
18	197	194	195	198	187	195	209	198	202	201	198	199
19	196	194	195	203	198	200	211	207	209	202	197	199
20	200	195	197	205	198	202	210	203	207	201	198	200
21	200	197	198	213	201	207	205	202	204	202	199	200
22	200	198	199	208	202	205	207	203	205	202	200	201
23	199	195	197	203	194	200	207	204	205	205	202	204
24	200	197	198	210	201	207	208	202	205	204	199	201
25	199	196	198	218	209	213	209	202	205	204	198	200
26	199	195	197	218	202	210	206	202	204	204	201	203
27	200	196	198	203	200	201	207	203	205	203	201	202
28	198	197	198	203	200	201	208	204	206	202	190	195
29	198	196	197	201	199	200	208	204	206	202	184	192
30	197	196	197	204	201	202	209	204	207	204	200	202
31	196	195	195	---	---	---	209	204	206	205	201	202
MONTH	213	194	201	218	185	196	223	186	208	211	184	202

CUMBERLAND RIVER BASIN
03417500 CUMBERLAND RIVER AT CELINA, TN--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	206	201	203	205	178	194	183	176	181	197	191	194
2	204	201	202	---	---	---	185	180	183	195	191	193
3	204	199	202	---	---	---	185	177	183	197	193	195
4	205	199	203	---	---	---	186	181	183	199	195	197
5	213	202	206	---	---	---	186	181	183	199	196	197
6	209	203	206	---	---	---	184	182	183	199	196	197
7	208	204	205	---	---	---	187	181	185	199	196	197
8	207	204	205	199	192	195	184	181	182	197	192	194
9	210	206	208	193	188	190	187	178	182	198	194	196
10	208	203	206	191	189	190	183	178	180	198	194	196
11	207	203	204	191	184	188	182	176	179	196	193	195
12	206	202	203	189	184	186	180	176	178	196	193	195
13	205	201	203	187	184	186	187	179	182	195	190	192
14	205	201	203	187	186	187	185	181	182	193	190	192
15	208	201	204	189	187	188	184	182	183	192	190	191
16	202	199	201	188	183	186	182	180	181	193	190	192
17	202	197	200	187	183	185	184	182	183	191	189	190
18	201	197	198	189	179	183	200	182	191	190	186	188
19	201	197	199	190	168	180	196	186	190	191	185	187
20	201	195	198	188	171	180	188	185	186	199	191	194
21	196	194	195	190	187	189	191	185	187	198	192	195
22	200	196	198	188	185	187	195	188	192	200	191	196
23	198	195	197	185	176	184	197	192	195	199	196	198
24	198	194	196	185	178	182	199	192	194	200	191	196
25	200	194	196	179	173	177	197	190	193	193	190	192
26	199	194	197	175	166	173	196	188	192	192	189	190
27	204	198	202	183	174	179	195	189	192	195	189	191
28	207	202	205	184	179	182	194	189	192	200	189	194
29	---	---	---	183	181	182	194	190	192	201	190	195
30	---	---	---	185	181	184	195	193	194	197	191	193
31	---	---	---	185	179	183	---	---	---	201	189	196
MONTH	213	194	202	205	166	185	200	176	186	201	185	194

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	192	182	187	185	181	183	177	173	175	185	183	184
2	198	181	188	186	183	185	177	174	175	185	184	184
3	194	187	189	186	182	184	177	173	175	185	182	183
4	196	192	195	189	183	186	179	176	177	183	181	182
5	193	191	192	188	181	183	179	177	178	183	181	182
6	193	190	192	188	181	183	179	175	177	183	181	182
7	192	190	191	186	181	183	177	175	176	184	182	183
8	194	190	193	187	181	184	178	176	177	184	182	183
9	193	189	191	182	168	174	178	176	177	186	182	183
10	195	193	194	176	165	171	181	176	177	186	181	183
11	195	191	193	175	168	171	183	179	181	187	182	184
12	194	189	192	172	168	170	187	183	185	186	182	183
13	190	186	188	173	169	171	184	180	182	184	181	182
14	191	187	189	178	171	175	186	180	183	185	182	183
15	192	185	191	179	175	176	187	179	182	185	184	184
16	193	186	190	179	176	177	185	181	183	187	184	185
17	190	184	186	178	175	176	184	181	183	186	182	184
18	187	185	186	177	174	175	195	184	188	185	182	183
19	188	184	186	177	174	176	193	183	187	183	181	182
20	---	---	---	177	174	176	187	181	184	184	181	182
21	---	---	---	177	174	176	187	183	185	185	182	183
22	---	---	---	176	174	175	186	183	185	185	182	183
23	---	---	---	179	173	175	186	182	184	184	182	183
24	---	---	---	181	174	177	185	183	184	185	180	181
25	---	---	---	178	173	175	187	184	185	186	181	183
26	180	177	179	177	173	175	185	184	184	187	181	184
27	181	178	179	177	173	175	187	182	184	187	183	184
28	182	177	180	178	174	176	184	182	183	186	182	184
29	183	179	180	182	173	176	183	182	183	186	183	185
30	183	180	182	183	176	178	184	182	183	187	183	185
31	---	---	---	177	175	176	184	183	183	---	---	---
MONTH	198	177	188	189	165	177	195	173	181	187	180	183

CUMBERLAND RIVER BASIN
03417500 CUMBERLAND RIVER AT CELINA, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.2	7.1	7.0	7.5	7.4	7.2	7.0	7.4	7.3	7.5	7.3
2	7.4	7.1	7.2	7.0	7.5	7.4	7.2	7.0	7.5	7.3	7.5	6.9
3	7.3	7.1	7.2	7.1	7.4	7.4	7.2	7.0	7.5	7.4	7.2	6.7
4	7.2	7.2	7.3	7.1	7.4	7.3	7.2	7.0	7.4	7.3	7.1	7.0
5	7.3	7.1	7.3	7.2	7.3	7.3	7.3	7.1	7.3	7.3	7.4	7.0
6	7.4	7.2	7.3	7.2	7.3	7.2	7.2	7.1	7.3	7.2	7.3	7.0
7	7.3	7.2	7.4	7.2	7.4	7.3	7.3	6.9	7.2	7.1	7.4	7.2
8	7.4	7.2	7.4	7.3	7.4	7.3	7.0	6.8	7.2	7.1	7.5	7.4
9	7.4	7.3	7.3	7.2	7.4	7.3	7.3	6.8	7.3	7.2	7.7	7.5
10	7.4	7.3	7.3	7.2	7.4	7.3	7.2	6.9	7.3	7.1	7.7	7.6
11	7.4	7.4	7.4	7.2	7.4	7.4	7.2	6.8	7.3	7.2	7.7	7.6
12	7.5	7.4	7.4	7.3	7.4	7.4	7.1	6.7	7.3	7.2	7.8	7.6
13	7.5	7.4	7.4	7.3	7.5	7.3	7.1	6.7	7.2	7.1	7.8	7.7
14	7.4	7.3	7.4	7.3	7.3	7.3	6.9	6.6	7.2	7.1	7.9	7.8
15	7.4	7.3	7.5	7.4	7.3	7.3	6.9	6.7	7.2	7.1	7.9	7.8
16	7.4	7.2	7.6	7.4	7.3	7.3	7.1	6.8	7.3	7.2	7.9	7.8
17	7.2	7.1	7.6	7.5	7.4	7.3	7.0	6.6	7.3	7.2	7.9	7.8
18	7.1	7.1	7.6	7.5	7.4	7.1	7.0	6.6	7.3	7.2	8.0	7.9
19	7.1	7.1	7.6	7.4	7.3	7.2	6.9	6.6	7.3	7.2	8.0	7.9
20	7.2	7.0	7.6	7.4	7.3	7.2	7.0	6.7	7.3	7.2	8.0	7.9
21	7.1	7.0	7.6	7.4	7.3	7.1	7.2	6.7	7.3	7.2	8.0	7.9
22	7.1	7.0	7.5	7.4	7.3	7.1	7.3	7.2	7.3	7.2	7.9	7.8
23	7.1	7.1	7.5	7.4	7.3	7.1	7.4	7.2	7.3	7.1	7.9	7.8
24	7.1	7.1	7.6	7.4	7.3	7.2	7.4	7.0	7.2	7.2	7.8	7.8
25	7.1	7.0	7.5	7.4	7.3	7.1	7.4	7.3	7.2	7.2	7.8	7.7
26	7.1	7.0	7.5	7.4	7.2	7.0	7.4	7.3	7.3	7.1	7.8	7.7
27	7.1	7.0	7.4	7.3	7.1	7.0	7.4	7.2	7.3	7.3	7.8	7.7
28	7.1	7.0	7.4	7.3	7.3	7.0	7.5	7.3	7.4	7.3	7.8	7.7
29	7.1	6.9	7.4	7.3	7.2	7.1	7.5	7.4	---	---	7.7	7.6
30	7.2	7.1	7.5	7.4	7.2	7.0	7.5	7.4	---	---	7.7	7.7
31	7.1	7.0	---	---	7.2	7.0	7.5	7.4	---	---	7.7	7.5
MONTH	7.6	6.9	7.6	7.0	7.5	7.0	7.5	6.6	7.5	7.1	8.0	6.7

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

CUMBERLAND RIVER BASIN
03417500 CUMBERLAND RIVER AT CELINA, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.8	17.3	17.5	16.4	14.7	15.3	12.5	12.2	12.3	10.6	10.5	10.6
2	17.9	17.6	17.8	14.8	14.3	14.6	12.2	11.8	12.0	10.6	10.4	10.5
3	17.7	17.3	17.6	14.3	13.8	14.1	12.0	11.3	11.6	10.8	10.5	10.7
4	17.3	16.6	16.8	13.8	13.1	13.3	12.0	11.6	11.8	11.0	10.7	10.9
5	16.7	16.2	16.5	13.8	12.8	13.1	11.9	11.4	11.5	11.0	10.6	10.9
6	17.6	16.6	17.0	15.4	13.8	14.8	11.8	11.1	11.4	10.6	9.7	10.2
7	17.7	17.3	17.5	16.2	15.4	15.8	11.9	11.7	11.8	9.7	8.9	9.1
8	17.9	17.4	17.6	15.7	14.8	15.4	11.9	11.4	11.6	8.9	8.5	8.6
9	17.8	17.4	17.6	14.8	13.3	13.9	11.4	10.8	11.0	8.6	8.4	8.5
10	17.4	16.7	17.1	13.3	12.5	12.9	11.4	10.7	11.0	8.6	8.0	8.3
11	16.7	15.5	16.2	12.5	11.6	12.0	12.4	11.4	11.8	8.0	7.2	7.5
12	16.1	15.5	15.8	12.1	11.4	11.7	12.4	12.3	12.4	7.4	6.9	7.2
13	15.7	15.4	15.6	12.7	12.0	12.5	12.3	11.7	12.0	7.4	7.0	7.3
14	16.2	15.2	15.5	12.6	12.0	12.3	11.7	11.2	11.4	7.4	6.8	7.1
15	17.0	16.0	16.4	12.5	11.7	12.1	11.2	10.9	11.1	8.0	7.1	7.5
16	17.0	16.5	16.8	13.2	12.1	12.7	11.3	11.0	11.1	8.0	7.2	7.7
17	17.3	16.6	17.0	13.7	13.0	13.3	11.3	10.2	10.7	7.2	6.1	6.5
18	17.3	16.6	16.9	13.6	13.4	13.4	10.2	9.7	9.8	6.6	6.0	6.3
19	16.6	15.8	16.1	13.4	13.2	13.4	9.7	9.1	9.3	6.9	6.6	6.7
20	15.8	14.8	15.1	13.2	12.8	13.0	9.1	8.6	8.8	7.4	6.9	7.1
21	15.0	14.5	14.7	13.2	12.2	12.9	9.1	8.8	9.0	7.6	7.2	7.4
22	15.7	14.8	15.2	12.2	10.9	11.6	9.5	9.1	9.2	8.1	7.6	7.8
23	15.8	15.5	15.6	10.9	10.0	10.3	10.4	9.5	9.9	8.1	7.6	7.8
24	15.8	15.2	15.5	11.2	10.3	10.8	10.5	9.8	10.2	8.1	7.5	7.8
25	15.6	14.9	15.1	12.0	11.1	11.4	9.8	9.0	9.2	8.1	7.6	7.8
26	15.6	14.9	15.1	12.8	11.9	12.4	9.2	8.6	8.9	7.7	7.0	7.1
27	16.5	15.5	15.9	12.7	11.9	12.2	9.9	9.2	9.4	7.4	6.8	7.0
28	17.0	16.5	16.8	12.1	11.5	11.8	10.6	9.9	10.2	7.8	7.2	7.5
29	16.9	16.8	16.9	12.1	11.7	11.9	11.0	10.6	10.8	7.2	6.6	6.8
30	17.3	16.9	17.1	12.5	11.9	12.1	11.0	10.7	10.8	7.1	6.4	6.7
31	17.1	16.4	16.6	---	---	---	10.7	10.5	10.5	7.4	6.8	7.1
MONTH	17.9	14.5	16.4	16.4	10.0	12.9	12.5	8.6	10.7	11.0	6.0	8.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.5	7.0	7.3	10.6	8.2	9.0	9.6	9.0	9.4	14.5	13.0	13.5
2	7.7	7.3	7.5	12.0	10.4	11.0	9.8	9.2	9.5	14.5	14.1	14.3
3	7.9	7.6	7.7	10.4	9.8	10.1	10.0	9.5	9.9	14.4	13.7	14.0
4	8.5	7.9	8.1	9.9	9.5	9.7	9.5	8.9	9.1	13.7	12.7	13.1
5	8.5	7.9	8.2	10.0	9.2	9.5	9.5	9.0	9.2	13.5	13.0	13.3
6	7.9	7.1	7.4	9.9	8.6	9.5	9.6	9.3	9.4	14.1	13.5	13.7
7	7.4	6.9	7.2	8.6	7.2	7.7	9.7	9.4	9.5	14.5	13.9	14.2
8	7.5	7.1	7.3	7.8	7.1	7.4	9.5	8.9	9.2	14.9	14.5	14.7
9	7.1	6.6	6.8	8.1	7.8	7.9	9.8	9.0	9.4	14.8	14.1	14.6
10	6.6	6.4	6.5	8.4	7.8	8.1	9.6	9.0	9.3	14.1	13.6	13.9
11	6.6	6.4	6.5	8.2	7.5	7.8	10.4	9.3	9.7	13.7	13.2	13.5
12	6.7	6.4	6.5	8.3	7.8	8.0	10.6	10.2	10.3	14.0	13.6	13.8
13	6.7	6.4	6.6	8.4	8.0	8.1	10.6	9.5	9.9	14.1	13.9	14.0
14	6.7	6.5	6.6	9.1	8.4	8.8	9.6	9.1	9.4	13.9	13.5	13.7
15	6.9	6.4	6.7	8.8	7.5	8.3	10.5	9.2	9.7	13.5	13.1	13.3
16	7.0	6.6	6.8	7.6	7.2	7.4	11.1	10.4	10.7	13.6	13.0	13.3
17	7.0	6.5	6.7	8.3	7.5	7.9	11.0	10.1	10.7	13.6	13.1	13.2
18	7.3	6.6	6.9	9.5	8.3	8.5	10.1	9.8	10.0	14.3	13.3	13.6
19	7.5	7.0	7.2	9.5	9.0	9.1	9.9	9.7	9.8	15.4	14.3	14.9
20	7.7	7.2	7.5	9.1	8.8	8.9	10.3	9.9	10.1	15.5	15.2	15.3
21	8.0	7.6	7.8	9.1	8.9	9.0	10.7	10.3	10.5	15.2	15.0	15.1
22	8.0	7.4	7.8	9.2	8.9	9.1	11.5	10.7	11.0	15.6	15.0	15.3
23	7.4	6.7	6.9	9.2	8.7	9.1	11.5	10.8	11.1	15.6	15.4	15.5
24	7.2	6.5	6.8	9.3	8.6	9.0	11.6	11.2	11.4	15.9	15.5	15.6
25	7.4	6.8	7.1	9.7	9.2	9.4	11.5	10.7	11.2	16.0	15.8	15.9
26	7.9	7.2	7.5	9.7	9.5	9.6	11.4	10.8	11.2	15.8	13.0	15.1
27	8.8	7.9	8.3	9.5	8.5	9.2	11.5	11.0	11.3	15.6	14.6	15.1
28	9.0	8.7	8.9	9.6	9.1	9.4	11.5	11.0	11.2	14.6	14.4	14.5
29	---	---	---	9.9	9.5	9.7	11.8	11.0	11.3	14.4	13.6	14.0
30	---	---	---	9.9	9.5	9.8	13.0	11.7	12.1	13.7	13.3	13.5
31	---	---	---	9.5	8.9	9.4	---	---	---	14.1	13.6	13.8
MONTH	9.0	6.4	7.3	12.0	7.1	8.9	13.0	8.9	10.2	16.0	12.7	14.2

CUMBERLAND RIVER BASIN
03417500 CUMBERLAND RIVER AT CELINA, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.1	13.9	14.5	14.5	14.0	14.2	17.5	16.8	17.2	18.6	17.2	17.7
2	15.1	13.7	14.6	15.1	14.5	14.8	17.4	16.9	17.1	19.0	18.6	18.9
3	13.7	12.4	12.7	15.8	15.0	15.3	17.7	17.0	17.4	18.8	16.8	17.5
4	12.8	11.9	12.3	15.7	14.6	15.2	17.6	17.3	17.5	16.9	16.2	16.5
5	12.0	11.8	11.9	14.6	14.0	14.3	18.4	17.4	18.0	16.6	15.7	16.1
6	11.9	11.6	11.7	14.7	14.1	14.4	17.4	15.9	16.2	17.2	16.2	16.7
7	12.0	11.7	11.9	14.9	14.3	14.6	16.1	15.6	15.9	17.4	16.9	17.2
8	12.1	11.7	11.9	14.9	14.5	14.7	16.4	15.7	16.0	18.0	17.0	17.3
9	12.6	11.9	12.2	14.9	14.6	14.8	16.4	15.6	15.9	18.3	17.6	17.9
10	12.1	12.0	12.0	14.9	14.5	14.8	15.9	15.3	15.6	18.3	17.0	17.4
11	12.2	12.0	12.1	15.6	14.6	15.0	16.9	15.5	16.0	17.0	16.8	16.9
12	12.4	12.1	12.2	15.8	14.9	15.3	18.0	16.9	17.4	16.9	16.7	16.8
13	13.4	12.4	12.9	16.0	15.1	15.5	17.8	16.2	16.8	16.9	16.7	16.8
14	14.0	13.4	13.7	16.5	15.2	15.8	16.6	16.3	16.5	17.0	16.8	16.9
15	14.4	13.7	14.0	16.7	16.2	16.4	17.1	16.5	16.7	17.9	16.8	17.2
16	13.8	13.2	13.6	16.6	16.0	16.3	17.7	17.1	17.3	18.7	17.4	18.2
17	13.2	12.9	13.1	16.6	15.9	16.2	17.8	17.5	17.6	18.6	17.4	18.1
18	13.5	13.1	13.2	16.8	16.1	16.4	19.0	17.2	18.3	17.9	17.2	17.5
19	13.6	13.1	13.4	16.8	16.4	16.6	19.4	18.7	19.0	17.4	16.8	17.1
20	13.8	13.2	13.5	16.7	16.1	16.5	18.7	15.7	16.4	17.5	17.2	17.4
21	13.8	12.8	13.2	17.0	16.2	16.6	16.7	16.0	16.3	17.9	17.2	17.5
22	13.7	13.1	13.4	17.0	16.3	16.7	16.8	16.6	16.7	17.6	17.0	17.2
23	13.7	13.1	13.3	16.9	16.3	16.6	16.9	16.8	16.8	17.5	17.1	17.3
24	13.9	13.2	13.5	16.8	16.0	16.4	17.1	16.5	16.8	17.2	16.0	16.6
25	14.1	13.3	13.6	17.0	16.2	16.6	17.4	15.9	16.8	16.3	15.9	16.1
26	13.8	13.3	13.6	17.0	16.3	16.7	17.9	17.4	17.6	17.5	16.2	16.9
27	13.6	13.1	13.4	16.9	16.0	16.5	17.9	16.8	17.3	17.5	17.1	17.3
28	14.1	13.4	13.8	18.2	16.9	17.5	17.5	17.0	17.3	17.5	17.4	17.5
29	14.0	13.5	13.7	18.3	17.4	17.9	17.3	17.1	17.2	18.0	17.0	17.5
30	14.0	13.7	13.8	18.2	16.2	16.8	17.4	17.1	17.2	18.1	17.8	18.0
31	---	---	---	17.3	16.3	16.7	17.6	17.2	17.4	---	---	---
MONTH	15.1	11.6	13.1	18.3	14.0	15.9	19.4	15.3	17.0	19.0	15.7	17.3

OXYGEN, DISSOLVED (DO) MG/L, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.9	7.2	7.5	8.6	7.1	7.8	10.4	9.9	10.1	11.0	10.1	10.6
2	7.7	7.1	7.4	8.8	7.1	8.2	10.1	9.6	9.9	11.4	10.2	10.7
3	8.1	7.2	7.7	9.1	7.9	8.5	9.9	9.6	9.7	11.4	10.5	10.9
4	7.9	7.2	7.6	9.8	8.2	9.0	10.0	9.4	9.8	11.3	10.2	10.9
5	8.3	7.2	7.7	10.3	9.0	9.9	10.3	9.4	9.8	11.2	10.5	10.9
6	8.6	7.6	8.2	10.2	9.3	9.6	10.2	9.6	9.8	11.3	10.2	10.7
7	8.8	8.3	8.6	9.4	8.7	9.2	10.1	9.6	9.9	11.0	10.5	10.7
8	9.2	8.1	8.8	9.4	8.4	9.0	10.2	9.5	9.9	11.2	10.1	10.5
9	9.2	8.3	8.9	8.6	7.9	8.3	10.4	9.8	10.1	11.2	10.0	10.6
10	9.3	8.6	8.9	8.5	7.8	8.2	10.7	9.9	10.2	11.3	10.8	11.1
11	9.4	8.8	9.1	10.4	7.9	9.2	10.2	9.8	10.1	11.6	10.6	11.2
12	9.9	9.0	9.4	10.5	8.8	9.8	10.0	9.5	9.8	11.7	10.6	11.2
13	10.0	9.2	9.6	10.3	9.9	10.0	10.2	9.7	9.9	11.7	10.7	11.3
14	10.1	9.3	9.7	10.5	9.9	10.2	10.4	9.7	10.2	11.8	11.0	11.4
15	10.2	9.6	9.9	10.7	10.4	10.5	10.5	9.8	10.2	11.8	10.9	11.6
16	10.1	8.9	9.6	10.7	10.5	10.6	10.4	9.7	10.0	11.8	11.2	11.6
17	8.9	8.5	8.6	10.6	10.0	10.5	10.7	9.7	10.5	12.0	10.3	11.4
18	8.6	8.1	8.4	10.7	9.8	10.2	12.0	10.6	11.2	12.0	10.6	11.5
19	8.7	8.2	8.4	10.4	9.0	9.9	12.2	11.4	11.9	12.1	11.2	11.7
20	9.1	8.1	8.5	10.5	9.2	9.9	12.4	11.4	12.0	12.0	10.9	11.6
21	8.5	8.1	8.3	10.4	9.6	10.0	12.0	11.3	11.7	11.7	11.4	11.6
22	9.5	8.5	9.1	10.3	8.3	9.5	12.1	11.4	11.7	11.8	11.3	11.6
23	9.5	9.1	9.3	10.4	8.5	9.8	12.1	11.4	11.6	11.4	11.0	11.2
24	9.3	8.9	9.0	10.5	9.5	10.2	11.8	11.1	11.4	12.5	10.7	11.5
25	9.1	8.2	8.7	10.5	9.7	10.2	12.1	10.8	11.5	12.6	11.6	12.3
26	9.1	8.3	8.7	10.5	9.1	10.0	11.7	11.0	11.3	12.3	11.6	11.9
27	9.1	8.6	8.9	9.5	8.9	9.2	11.7	10.8	11.3	12.3	11.0	11.8
28	9.0	8.4	8.7	9.8	8.9	9.4	11.4	10.8	11.2	12.2	11.2	11.7
29	8.6	7.9	8.4	9.9	9.3	9.7	11.4	11.1	11.2	12.0	11.1	11.6
30	8.6	7.6	8.4	9.9	9.7	9.8	11.4	9.7	10.7	11.3	10.3	10.7
31	8.3	7.3	7.9	---	---	---	11.1	9.5	10.6	11.2	10.1	10.5
MONTH	10.2	7.1	8.6	10.7	7.1	9.5	12.4	9.4	10.6	12.6	10.0	11.2

CUMBERLAND RIVER BASIN
03417500 CUMBERLAND RIVER AT CELINA, TN--Continued

OXYGEN, DISSOLVED (DO) MG/L, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.9	11.2	11.7	11.2	10.0	10.6	12.0	11.5	11.8	10.8	10.1	10.5
2	11.6	10.8	11.4	---	---	---	11.9	11.6	11.8	10.6	10.1	10.3
3	11.4	10.8	11.2	---	---	---	11.7	11.3	11.5	10.3	8.4	9.6
4	11.4	10.9	11.2	---	---	---	11.5	11.0	11.4	9.9	7.9	9.0
5	11.1	10.5	10.8	---	---	---	11.3	10.5	10.5	9.8	8.4	9.5
6	10.8	10.1	10.4	---	---	---	11.3	10.3	10.7	10.3	9.7	10.0
7	10.9	10.2	10.7	---	---	---	11.5	10.6	10.9	11.0	10.2	10.8
8	10.8	10.0	10.4	11.7	10.9	11.2	11.8	10.7	11.3	11.6	10.4	11.0
9	11.0	10.0	10.6	12.1	11.0	11.6	11.8	10.7	11.2	10.9	9.4	10.1
10	10.8	9.8	10.4	12.0	11.4	11.7	11.9	10.8	11.3	9.9	9.4	9.6
11	11.0	10.2	10.6	12.2	11.7	11.9	11.9	10.6	11.5	10.1	9.4	9.7
12	11.0	10.2	10.7	12.2	11.4	11.8	11.9	10.8	11.5	10.4	9.5	10.2
13	11.0	10.1	10.7	12.1	11.4	11.8	11.7	11.2	11.3	10.3	9.4	10.0
14	11.1	10.3	10.7	12.0	11.6	11.7	12.1	10.1	11.2	9.8	9.3	9.6
15	11.3	10.1	10.9	12.3	11.7	12.0	12.2	10.3	11.4	9.7	8.8	9.3
16	11.7	10.7	11.1	12.3	11.1	11.8	12.4	10.8	12.0	9.5	8.5	9.1
17	11.6	11.0	11.4	12.0	11.2	11.6	12.1	9.8	10.8	9.5	8.8	9.1
18	11.9	11.4	11.6	11.5	11.5	11.8	11.4	8.3	9.9	9.8	9.1	9.5
19	11.8	11.6	11.7	11.6	10.6	11.0	9.7	8.6	9.1	9.7	9.4	9.5
20	11.8	11.3	11.6	11.6	10.8	11.2	9.8	8.7	9.1	9.5	8.4	9.0
21	11.9	11.7	11.8	10.9	10.6	10.7	9.6	8.5	8.9	9.1	8.1	8.7
22	11.8	11.4	11.6	11.2	10.5	10.9	10.2	8.2	9.3	8.8	8.3	8.5
23	11.7	11.1	11.5	11.7	10.9	11.3	10.2	8.9	9.6	9.0	8.4	8.7
24	11.9	11.1	11.6	12.0	11.7	11.9	9.9	8.7	9.2	9.8	8.8	9.2
25	12.0	11.5	11.8	12.1	11.9	12.0	10.3	8.8	9.6	9.8	9.3	9.6
26	11.5	10.9	11.2	12.1	11.8	12.0	10.1	8.6	9.3	9.6	8.9	9.3
27	11.2	10.5	10.8	12.7	12.0	12.3	10.3	8.2	9.1	9.3	8.0	8.6
28	10.7	9.9	10.3	12.7	11.8	12.3	9.7	7.9	8.4	8.8	7.9	8.3
29	---	---	---	11.8	11.5	11.6	10.2	7.7	9.1	8.7	7.4	8.2
30	---	---	---	11.6	11.3	11.4	10.8	9.7	10.3	8.8	7.4	8.2
31	---	---	---	11.9	11.4	11.7	---	---	---	9.1	7.9	8.6
MONTH	12.0	9.8	11.1	12.7	10.0	11.6	12.4	7.7	10.4	11.6	7.4	9.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.0	8.4	8.6	9.0	8.2	8.7	8.0	7.0	7.5	8.4	7.3	7.8
2	8.9	7.8	8.4	9.3	8.9	9.1	---	---	---	8.6	8.1	8.4
3	8.9	6.9	7.8	9.3	8.8	9.1	---	---	---	8.1	7.6	7.9
4	8.4	6.9	7.7	9.5	8.6	9.0	---	---	---	8.0	7.7	7.8
5	8.7	7.3	7.8	9.0	7.6	8.6	8.4	7.5	7.5	8.0	7.7	7.8
6	8.2	7.1	7.5	9.1	7.6	8.6	7.8	7.2	7.5	8.2	8.0	8.1
7	9.1	7.2	8.2	9.1	7.7	8.7	8.1	7.6	7.8	8.2	7.6	8.0
8	8.8	7.1	8.0	9.2	7.2	8.4	8.3	7.7	8.0	8.5	7.4	8.0
9	9.1	8.3	8.8	8.7	6.9	7.9	8.5	8.0	8.2	8.5	8.1	8.3
10	8.5	7.5	8.1	8.9	7.8	8.3	8.6	8.0	8.3	8.3	7.7	7.9
11	8.8	7.6	8.1	9.7	8.2	9.0	9.1	8.4	8.7	7.9	7.2	7.7
12	8.9	7.7	8.3	10.1	8.6	9.6	9.5	9.0	9.2	7.9	7.2	7.6
13	9.0	8.1	8.8	10.3	9.1	9.8	9.2	8.7	8.9	8.0	7.1	7.6
14	9.3	8.6	8.8	9.9	8.4	9.0	9.2	8.9	9.0	8.1	7.2	7.6
15	9.0	8.6	8.8	8.9	8.3	8.5	9.4	9.0	9.2	8.1	7.2	7.7
16	9.4	8.2	8.7	8.9	8.4	8.7	9.5	9.0	9.3	8.9	7.1	8.4
17	8.9	8.3	8.7	9.0	8.3	8.7	9.7	8.3	9.1	8.9	8.1	8.4
18	8.9	8.3	8.7	9.0	8.4	8.7	9.7	7.2	8.1	8.2	7.4	7.9
19	9.0	8.4	8.8	9.1	8.5	8.8	9.2	7.2	8.6	8.0	7.1	7.6
20	---	---	---	8.9	8.4	8.7	8.5	7.8	8.0	7.8	7.1	7.5
21	---	---	---	8.8	8.1	8.5	8.3	7.7	7.9	8.3	7.2	7.6
22	---	---	---	8.8	8.1	8.5	8.3	7.5	7.9	7.8	7.0	7.3
23	---	---	---	8.9	8.1	8.4	8.2	7.7	7.9	8.8	7.1	8.2
24	---	---	---	8.6	8.1	8.4	8.2	7.4	7.9	8.5	7.8	8.0
25	---	---	---	8.6	8.0	8.3	8.1	7.3	7.8	8.1	7.1	7.6
26	9.0	8.6	8.8	8.5	8.1	8.3	8.6	8.0	8.3	7.9	7.1	7.6
27	9.0	8.5	8.8	8.3	7.4	7.9	8.3	7.8	8.0	8.3	7.0	7.6
28	8.9	8.4	8.7	8.7	7.2	8.0	7.9	7.5	7.8	7.7	7.0	7.3
29	8.9	8.3	8.6	9.1	7.3	8.2	8.2	7.5	7.8	8.3	7.0	7.4
30	8.9	8.0	8.4	8.3	7.4	7.8	8.0	7.5	7.8	8.1	7.1	7.5
31	---	---	---	8.1	7.0	7.5	8.0	7.4	7.8	---	---	---
MONTH	9.4	6.9	8.4	10.3	6.9	8.6	9.7	7.0	8.2	8.9	7.0	7.8

CUMBERLAND RIVER BASIN

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 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to September 1997 (discontinued). Equivalent record prior to 1981 published in annual reports of Tennessee Valley Authority entitled "Operation of TVA Reservoirs".

GAGE.--Datum of gage is sea level.

REMARKS.--Flow regulated by Lake Cumberland (station 03413500) and Dale Hollow Lake (station 03416500) (see p. 118).

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum daily discharge, 116,000 ft^3/s, Mar. 13, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 63,300 ft^3/s, Mar. 3; minimum daily, 2,500 ft^3/s, Oct. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6490	10700	36400	19800	20100	24400	35400	6100	32600	18500	9240	3930
2	8840	13000	33800	17100	19100	47100	32400	5780	21600	13900	8500	6060
3	10800	9720	20500	16200	21300	63300	34600	6510	19300	16500	8020	9690
4	10300	5150	19300	17500	19100	47600	34500	5460	17500	14700	5660	9530
5	9250	7920	20000	23100	25200	32000	33400	4140	21900	19700	6780	10600
6	6830	7900	14600	17000	20400	44000	29700	4810	26300	17000	11800	8130
7	4100	10200	15500	18500	20300	36700	29100	4510	21800	18600	11500	9000
8	2830	18200	20900	21300	20600	32600	29200	4150	21200	19000	8880	5340
9	2500	15200	18300	19300	18900	32200	24700	4200	26600	19400	10900	6760
10	2660	13700	14900	18200	17000	32200	23300	3850	25700	22200	10700	9220
11	2540	8780	13800	18200	17600	31700	24600	4150	20900	16000	6440	9230
12	2530	8720	18900	17300	17400	31400	26000	3800	24200	11900	7570	10700
13	2800	9690	17400	20300	19000	31200	19300	3490	23800	14000	10300	9530
14	2920	7030	18200	21000	18600	31700	13100	3500	38100	11900	13100	11500
15	3430	10600	17800	16500	17000	30900	8600	3480	36600	10500	9610	5270
16	5270	8960	19700	22700	18400	30800	8000	4090	31500	9680	9320	4530
17	6560	7210	20100	20600	22900	30800	8720	4070	30500	11900	8330	6890
18	6260	5150	27600	18000	23400	30200	8720	3390	35700	9760	6540	8590
19	5760	7640	20600	18200	26600	40900	9380	6500	32900	12100	7320	9920
20	4990	7300	20000	18700	21800	48700	9210	6190	32400	9080	16200	8490
21	4960	7390	21400	20100	21800	40700	8050	7180	32700	10700	12600	6530
22	5350	10600	20400	20900	20800	34300	5520	5280	32300	9780	9550	4750
23	6060	6690	18700	18300	22700	35000	5900	4050	32500	8570	7490	5800
24	6420	7710	17600	20500	21400	35800	5780	4050	33500	10300	7150	10900
25	6820	6800	20200	31100	16200	34200	6780	4050	29400	11700	5390	11100
26	8060	15900	19400	18700	16400	32900	5740	6300	29700	9860	6380	10500
27	9190	19200	18300	19300	18300	34800	6030	6650	29400	11400	10800	9220
28	9020	18100	17900	33200	21300	34700	5380	5980	29300	5900	10000	7670
29	9800	15400	18400	31400	---	34000	5580	7070	29900	5860	8560	6760
30	10200	15100	17600	23300	---	36600	6400	6740	27300	8610	9130	5330
31	11100	---	20700	21400	---	36600	---	17100	---	10900	8170	---
TOTAL	194640	315660	618900	637700	563600	1120000	503090	166620	847100	399900	281930	241470
MEAN	6279	10520	19960	20570	20130	36130	16770	5375	28240	12900	9095	8049
MAX	11100	19200	36400	33200	26600	63300	35400	17100	38100	22200	16200	11500
MIN	2500	5150	13800	16200	16200	24400	5380	3390	17500	5860	5390	3930
CFSM	.78	1.30	2.47	2.54	2.49	4.46	2.07	.66	3.49	1.59	1.12	.99
IN.	.89	1.45	2.84	2.93	2.59	5.15	2.31	.77	3.89	1.84	1.30	1.11

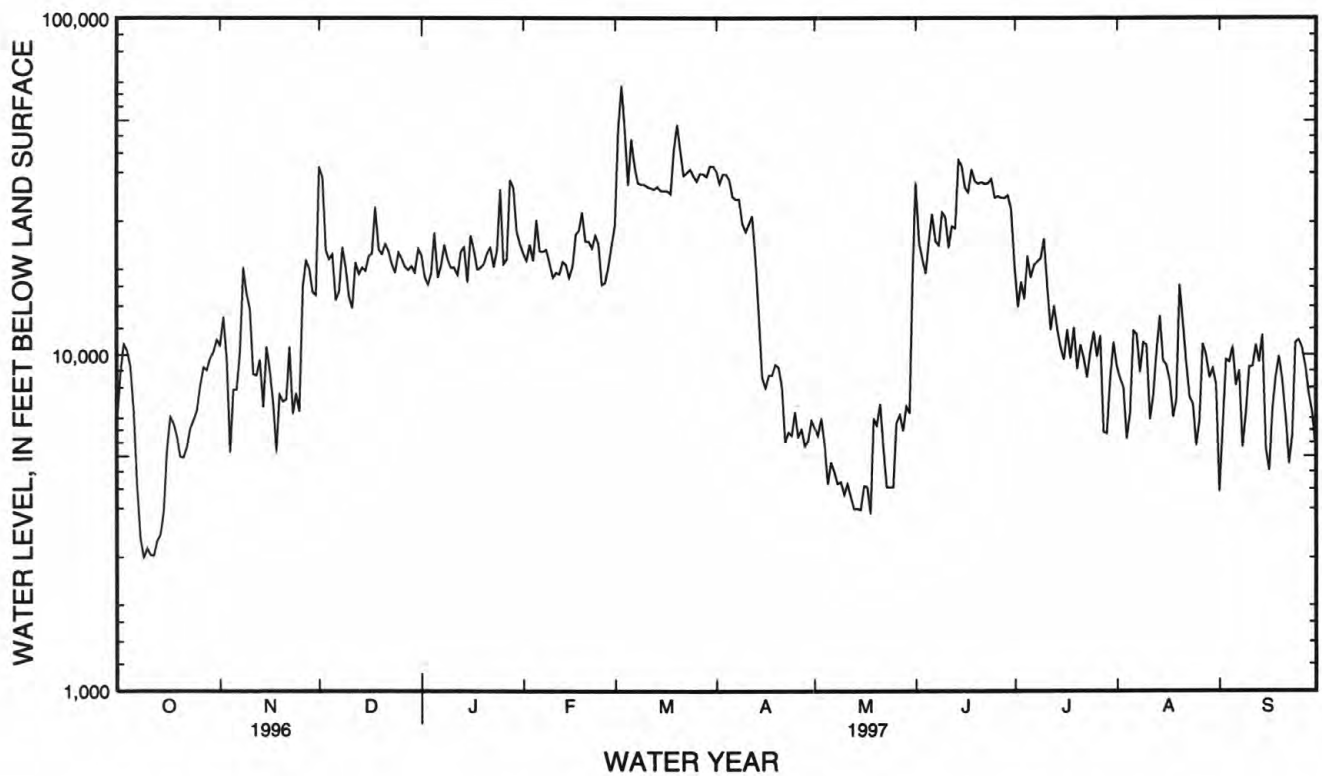
CUMBERLAND RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1997, BY WATER YEAR (WY)

MEAN	6600	8535	14070	16910	17110	19000	14500	12080	13390	10340	10110	8009
MAX	18890	20780	23440	32860	37630	45270	43170	37590	28240	19250	15800	16180
(WY)	1990	1990	1987	1991	1994	1994	1994	1984	1997	1989	1982	1982
MIN	3156	1795	2269	2493	4466	3686	4830	3926	5448	6092	5945	4409
(WY)	1989	1981	1981	1981	1981	1981	1981	1985	1985	1986	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1981 - 1997	
ANNUAL TOTAL	5441150		5890610			
ANNUAL MEAN	14870		16140		12540	
HIGHEST ANNUAL MEAN					19560	1994
LOWEST ANNUAL MEAN					6159	1988
HIGHEST DAILY MEAN	36400	Dec 1	63300	Mar 3	85200	May 8 1984
LOWEST DAILY MEAN	2500	Oct 9	2500	Oct 9	.00	Nov 2 1980
ANNUAL SEVEN-DAY MINIMUM	2680	Oct 8	2680	Oct 8	1290	Nov 22 1980
ANNUAL RUNOFF (CFSM)	1.84		1.99		1.55	
ANNUAL RUNOFF (INCHES)	25.00		27.07		21.04	
10 PERCENT EXCEEDS	22000		32300		25200	
50 PERCENT EXCEEDS	15300		14000		9550	
90 PERCENT EXCEEDS	6720		5310		4000	



CUMBERLAND RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1980 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1997.
pH: October 1990 to September 1997.
WATER TEMPERATURE: October 1980 to September 1997.
DISSOLVED OXYGEN: October 1980 to September 1997.

INSTRUMENTATION.--Data collection platform and water-quality monitor.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 290 microsiemens, Mar. 27, 1990; minimum, 140 microsiemens, Sept. 3, 1984.
pH: Maximum, 8.5 units, Mar. 9, 10, May 14, 16, 1992, June 16, 17, 1993; minimum 6.6 units, May 31, 1994.
WATER TEMPERATURE: Maximum, 23.7°C, July 13, 1995, July 31, 1997; minimum, 2.0°C, Jan. 12, 15-21, 1981.
DISSOLVED OXYGEN: Maximum, 15.5 mg/L, Mar. 4, 1983; minimum, 3.7 mg/L, Aug. 5, 1988.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 231 microsiemens, Nov. 27, 28; minimum, 152 microsiemens, Mar. 4.
pH: Maximum, 8.2 units, Sept. 4, 12, 14, 17; minimum, 6.8 units, Oct. 29, 30, 31.
WATER TEMPERATURE: Maximum, 23.7°C, July 31; minimum, 5.3°C, Jan. 19.
DISSOLVED OXYGEN: Maximum, 12.1 mg/L, Mar. 19, 20; minimum, 6.4 mg/L, Aug. 19, Sept. 24, 29.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER MAX	OCTOBER MIN	OCTOBER MEAN	NOVEMBER MAX	NOVEMBER MIN	NOVEMBER MEAN	DECEMBER MAX	DECEMBER MIN	DECEMBER MEAN	JANUARY MAX	JANUARY MIN	JANUARY MEAN
1	197	195	196	211	207	208	223	216	219	216	213	214
2	199	196	197	210	206	207	218	210	215	216	214	215
3	199	197	198	214	206	208	211	204	207	216	214	215
4	201	198	200	213	207	209	206	201	203	215	213	215
5	203	199	200	211	207	209	204	199	201	216	213	215
6	204	200	201	212	208	210	209	203	207	215	214	215
7	206	201	203	213	208	209	212	209	210	216	214	215
8	204	203	203	210	208	209	213	210	211	218	215	216
9	207	204	205	215	210	212	212	210	211	218	215	217
10	208	205	207	215	213	214	210	207	209	218	215	217
11	209	206	208	218	212	214	210	208	209	218	215	216
12	211	207	208	214	212	213	212	208	210	217	214	216
13	213	207	210	216	212	214	211	210	211	218	214	216
14	215	210	212	217	214	215	213	210	211	218	216	217
15	215	211	212	217	215	215	212	210	211	217	215	216
16	216	211	213	219	217	217	214	211	212	216	214	215
17	216	211	213	221	217	218	215	212	214	216	213	214
18	216	212	214	221	218	219	214	212	213	215	212	214
19	219	213	215	222	220	221	215	212	214	219	214	215
20	217	214	215	222	221	222	213	207	210	219	216	217
21	224	213	216	225	220	221	209	201	204	218	213	215
22	216	214	215	222	217	219	213	203	209	216	211	214
23	221	214	215	220	217	218	214	211	213	214	211	213
24	221	214	216	221	218	218	214	212	213	214	211	212
25	221	215	217	220	218	218	212	210	212	214	211	212
26	226	215	217	224	218	220	213	211	212	216	213	214
27	220	214	216	231	222	226	215	212	213	216	212	215
28	219	211	214	231	222	228	217	213	215	213	209	211
29	218	209	212	225	221	223	218	214	215	215	210	213
30	212	208	210	226	223	225	215	213	214	215	202	208
31	213	209	210	---	---	---	215	213	214	207	203	205
MONTH	226	195	209	231	206	216	223	199	211	219	202	214

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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	207	202	204	201	196	198	185	180	183	191	188	189
2	211	206	209	203	196	200	184	181	182	192	188	190
3	212	210	211	199	167	182	185	181	183	195	189	191
4	213	210	212	176	152	163	184	179	181	195	191	193
5	213	210	211	169	153	161	181	178	179	198	193	195
6	210	209	209	182	168	174	188	181	186	197	194	195
7	211	209	210	182	175	178	188	186	187	200	195	197
8	211	209	210	185	177	180	190	188	189	201	195	198
9	209	207	208	196	184	192	191	189	190	202	198	200
10	209	207	209	197	192	195	191	187	189	203	200	202
11	209	207	209	198	193	195	190	187	189	204	200	202
12	208	207	207	200	193	197	190	186	187	205	201	203
13	209	208	208	200	193	197	188	184	186	206	203	204
14	209	206	207	197	193	195	188	185	186	206	204	205
15	207	206	207	196	193	194	187	185	186	207	205	206
16	207	206	206	200	193	197	187	184	186	208	204	205
17	207	204	205	201	197	199	185	182	184	207	204	205
18	205	204	204	199	194	197	189	185	187	207	204	205
19	204	201	202	198	194	196	189	187	188	207	203	205
20	201	199	200	195	185	192	191	188	189	207	203	206
21	200	198	199	185	175	178	192	188	190	208	205	206
22	199	197	198	192	180	188	194	187	189	208	205	206
23	198	195	196	193	190	191	192	187	189	208	206	207
24	195	194	195	192	188	190	190	187	188	208	205	207
25	196	195	195	192	186	190	190	187	188	207	205	206
26	198	195	196	191	183	187	190	187	188	206	204	205
27	198	194	196	186	179	183	191	188	189	206	202	204
28	201	194	198	188	179	183	191	187	189	205	203	204
29	---	---	---	191	186	189	190	187	188	206	203	204
30	---	---	---	188	183	186	190	187	188	206	203	204
31	---	---	---	186	182	184	---	---	---	204	202	203
MONTH	213	194	204	203	152	188	194	178	187	208	188	202

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	203	202	203	177	175	176	187	184	185	192	188	190
2	205	203	204	177	176	176	190	184	186	194	189	191
3	208	205	206	178	176	176	188	185	186	194	188	190
4	211	204	206	177	175	176	189	185	186	194	189	191
5	207	202	204	180	175	176	189	185	187	193	190	191
6	202	199	200	181	177	178	188	186	187	193	188	190
7	203	200	201	191	178	180	189	187	188	192	188	189
8	201	196	199	183	178	180	189	187	188	193	189	190
9	197	195	195	179	174	176	189	187	188	191	188	189
10	197	194	195	177	172	174	189	187	188	192	188	190
11	196	194	195	178	173	175	191	187	188	193	188	190
12	197	194	195	189	174	178	190	185	187	194	187	190
13	196	193	195	186	174	177	190	184	186	193	189	190
14	195	192	193	185	173	179	189	183	185	192	188	190
15	196	194	195	186	174	179	195	184	188	194	187	190
16	195	192	193	191	175	182	191	183	187	194	189	191
17	197	194	196	190	174	181	192	184	187	194	190	192
18	198	195	196	186	181	184	193	183	187	194	191	192
19	197	191	194	189	185	186	192	184	188	194	191	192
20	193	191	192	189	184	186	190	185	187	194	191	192
21	192	190	191	188	184	186	188	185	187	196	191	193
22	190	187	189	190	185	187	190	185	187	196	191	193
23	189	186	188	190	185	187	189	185	187	195	191	193
24	186	185	185	188	185	186	191	186	187	195	191	192
25	185	184	184	188	186	186	191	186	188	197	191	192
26	184	181	183	190	186	187	191	187	189	198	189	192
27	181	180	181	190	186	187	191	186	188	197	189	191
28	180	179	180	190	185	187	190	186	188	196	188	191
29	180	178	179	188	185	186	191	187	189	197	188	192
30	178	176	176	189	184	186	191	187	188	198	188	193
31	---	---	---	188	184	186	193	188	190	---	---	---
MONTH	211	176	193	191	172	181	195	183	187	198	187	191

CUMBERLAND RIVER BASIN
03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued
PH (STANDARD UNITS), WATER, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.6	7.5	7.5	7.2	7.2	7.1	7.4	7.4	7.7	7.4	7.8	7.5
2	7.5	7.4	7.5	7.1	7.1	7.1	7.5	7.4	7.7	7.4	7.8	7.5
3	7.3	7.1	7.5	7.2	7.2	7.1	7.6	7.4	7.7	7.4	8.0	7.4
4	7.3	7.1	7.4	7.2	7.3	7.0	7.7	7.4	7.7	7.4	8.2	7.5
5	7.4	7.3	7.4	7.2	7.2	7.1	7.7	7.3	7.7	7.3	8.1	7.5
6	7.3	7.3	7.5	7.3	7.1	7.1	7.7	7.3	7.7	7.4	7.7	7.5
7	7.4	7.3	7.5	7.2	7.2	7.1	7.6	7.4	7.9	7.4	7.9	7.6
8	7.4	7.3	7.4	7.2	7.1	7.1	7.7	7.5	7.7	7.4	8.0	7.5
9	7.4	7.4	7.4	7.2	7.1	7.1	7.6	7.5	7.8	7.4	7.9	7.5
10	7.4	7.3	7.6	7.3	7.2	7.0	7.6	7.5	7.7	7.5	7.8	7.6
11	7.4	7.3	7.6	7.3	7.1	7.0	7.7	7.4	7.7	7.4	8.1	7.5
12	7.4	7.3	7.5	7.3	7.2	7.0	7.7	7.4	7.8	7.4	8.2	7.5
13	7.4	7.3	7.5	7.3	7.2	7.1	7.7	7.4	7.8	7.4	8.1	7.6
14	7.4	7.2	7.4	7.3	7.2	7.2	7.8	7.5	8.0	7.4	8.2	7.6
15	7.6	7.3	7.4	7.2	7.2	7.2	7.8	7.4	7.9	7.4	8.0	7.5
16	7.7	7.3	7.5	7.3	7.3	7.2	7.8	7.5	7.8	7.4	8.0	7.5
17	7.4	7.1	7.4	7.2	7.4	7.3	7.9	7.5	7.7	7.4	8.2	7.5
18	7.6	7.4	7.6	7.3	7.4	7.3	7.9	7.5	7.6	7.4	8.1	7.5
19	7.8	7.4	7.6	7.1	7.4	7.3	7.9	7.4	7.6	7.3	8.0	7.5
20	7.6	7.3	7.6	7.3	7.4	7.3	7.8	7.4	7.8	7.3	7.6	7.5
21	7.5	7.4	7.3	7.2	7.4	7.3	7.9	7.4	7.7	7.3	7.9	7.4
22	7.5	7.3	7.5	7.1	7.6	7.3	8.0	7.4	7.8	7.3	7.9	7.5
23	7.5	7.4	7.4	7.1	7.5	7.3	7.7	7.4	7.7	7.4	7.9	7.4
24	7.4	7.3	7.4	7.2	7.5	7.4	7.6	7.4	7.8	7.5	7.7	7.4
25	7.4	7.3	7.4	7.2	7.5	7.4	7.8	7.4	7.9	7.4	7.6	7.4
26	7.5	7.3	7.6	7.0	7.4	7.4	7.8	7.4	8.0	7.4	7.7	7.4
27	7.6	7.3	7.4	7.0	7.5	7.4	7.8	7.4	8.0	7.4	7.7	7.4
28	7.5	7.2	7.5	7.1	7.5	7.4	7.6	7.4	7.8	7.3	7.5	7.3
29	7.5	7.2	7.4	7.1	7.4	7.4	7.5	7.4	7.8	7.3	7.4	7.2
30	7.6	7.3	7.3	7.0	7.4	7.4	7.8	7.4	7.8	7.4	7.4	7.2
31	---	---	7.4	7.0	---	---	8.0	7.4	8.0	7.5	---	---
MONTH	7.8	7.1	7.6	7.0	7.6	7.0	8.0	7.3	8.0	7.3	8.2	7.2

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.6	19.0	19.3	16.4	15.9	16.2	11.1	10.6	10.9	10.9	10.3	10.6
2	19.5	19.1	19.3	16.0	15.3	15.8	11.4	11.1	11.2	11.2	10.9	11.0
3	19.2	18.7	19.1	15.3	14.8	15.0	11.6	11.3	11.5	11.5	11.2	11.3
4	18.8	18.4	18.6	15.0	14.5	14.7	11.5	11.2	11.3	11.6	11.3	11.4
5	18.6	18.4	18.5	14.9	14.5	14.7	11.2	10.7	11.0	11.6	11.5	11.6
6	18.8	18.3	18.5	15.0	14.8	14.8	10.7	10.5	10.6	11.5	11.0	11.3
7	18.7	18.2	18.4	15.1	14.9	15.0	10.7	10.5	10.6	11.0	10.4	10.7
8	18.5	18.1	18.3	15.0	14.7	14.8	10.6	10.4	10.5	10.4	9.6	10.1
9	18.1	17.6	17.9	14.7	13.9	14.2	10.4	10.1	10.2	9.6	8.9	9.4
10	17.7	17.4	17.5	13.9	13.2	13.5	10.4	10.0	10.2	8.9	7.6	8.4
11	17.7	17.3	17.5	13.2	12.7	12.9	10.9	10.4	10.6	7.6	6.8	7.2
12	18.1	17.1	17.5	12.7	12.3	12.5	11.1	10.8	11.0	6.8	6.3	6.5
13	17.9	17.1	17.5	12.5	12.2	12.4	11.1	11.0	11.1	6.3	5.9	6.1
14	19.0	17.3	17.7	12.4	12.1	12.2	11.1	10.9	11.0	5.9	5.6	5.8
15	17.8	17.3	17.5	12.1	11.9	12.0	11.4	11.0	11.2	5.9	5.6	5.7
16	18.1	17.3	17.6	11.9	11.7	11.8	11.4	11.3	11.4	5.9	5.7	5.9
17	18.5	17.6	17.9	11.7	11.5	11.6	11.3	10.7	11.0	5.7	5.4	5.6
18	18.0	17.3	17.7	11.5	11.3	11.4	10.7	9.9	10.3	5.5	5.4	5.4
19	17.6	17.0	17.4	11.4	11.2	11.3	9.9	9.1	9.5	5.6	5.3	5.5
20	17.3	16.6	17.1	11.3	11.1	11.2	9.1	8.5	8.8	5.7	5.5	5.6
21	17.3	16.8	17.1	11.3	11.0	11.2	8.5	7.9	8.1	6.0	5.5	5.7
22	17.3	17.0	17.2	11.1	10.8	11.0	7.9	7.8	7.9	6.6	6.0	6.2
23	17.2	16.6	17.0	10.9	10.7	10.8	8.4	7.9	8.1	7.1	6.6	6.8
24	16.9	16.4	16.7	11.2	10.7	10.9	8.5	8.4	8.4	7.6	7.1	7.3
25	16.6	16.4	16.5	11.3	11.1	11.2	8.5	8.3	8.4	8.0	7.6	7.8
26	16.5	16.4	16.4	11.2	11.0	11.1	8.6	8.3	8.4	7.9	7.6	7.7
27	16.6	16.4	16.5	11.2	10.9	11.1	9.1	8.6	8.8	7.8	7.6	7.6
28	16.6	16.4	16.5	11.0	10.3	10.7	9.3	9.1	9.2	7.8	7.2	7.6
29	16.8	16.4	16.6	10.3	9.9	10.0	9.4	9.1	9.3	7.2	6.8	6.9
30	16.8	16.4	16.7	10.6	10.0	10.2	9.7	9.3	9.5	7.4	6.9	7.1
31	16.5	16.2	16.4	---	---	---	10.4	9.7	10.0	7.3	7.2	7.2
MONTH	19.6	16.2	17.6	16.4	9.9	12.5	11.6	7.8	10.0	11.6	5.3	7.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.3	7.0	7.2	10.0	9.1	9.5	10.7	10.1	10.4	14.5	13.5	14.0
2	7.3	7.2	7.3	10.8	10.0	10.5	10.5	10.0	10.2	14.8	13.3	14.0
3	7.7	7.3	7.5	12.3	10.5	11.4	10.6	10.2	10.4	15.3	14.2	14.8
4	8.0	7.7	7.8	12.2	11.5	11.7	10.9	10.3	10.6	14.9	14.0	14.4
5	8.0	7.9	8.0	11.6	10.8	11.3	11.2	10.9	11.0	14.9	14.1	14.5
6	7.9	7.8	7.9	10.8	10.2	10.5	11.0	10.6	10.8	15.4	14.6	15.0
7	8.0	7.8	7.9	10.2	9.8	10.1	11.1	10.6	10.8	15.8	14.6	15.1
8	8.1	7.9	8.1	10.0	9.7	9.8	11.1	10.8	10.9	15.5	15.1	15.3
9	7.9	7.4	7.7	9.7	9.0	9.3	11.0	10.7	10.8	15.5	15.1	15.4
10	7.4	7.0	7.2	9.4	8.9	9.1	10.8	10.5	10.6	16.2	14.9	15.4
11	7.0	6.9	6.9	9.6	9.2	9.4	11.0	10.4	10.6	16.5	15.0	15.7
12	6.9	6.7	6.8	9.7	9.3	9.5	11.2	10.7	10.9	16.3	15.8	16.0
13	6.7	6.3	6.5	9.6	9.1	9.3	11.1	10.6	10.9	16.3	15.5	15.9
14	6.4	6.3	6.4	9.3	9.1	9.2	---	---	---	16.8	15.6	16.0
15	6.6	6.3	6.4	9.1	8.7	8.8	---	---	---	16.6	15.9	16.1
16	6.8	6.6	6.7	9.2	8.7	9.0	---	---	---	17.0	15.7	16.3
17	7.0	6.7	6.8	9.1	8.5	8.9	---	---	---	16.8	16.1	16.5
18	7.4	7.0	7.1	8.5	8.2	8.3	---	---	---	17.2	16.6	16.8
19	7.7	7.3	7.5	8.8	8.3	8.5	---	---	---	18.2	16.1	17.2
20	8.1	7.6	7.8	9.5	8.8	9.1	12.9	11.9	12.3	18.3	16.9	17.4
21	8.7	8.1	8.4	10.1	9.5	9.8	12.6	12.2	12.3	17.7	17.0	17.4
22	8.7	8.6	8.7	10.2	9.9	10.1	12.6	12.2	12.4	18.3	16.7	17.6
23	8.8	8.4	8.6	10.4	10.1	10.2	12.6	12.3	12.5	18.2	17.2	17.7
24	8.7	8.5	8.6	10.3	10.0	10.2	12.9	12.0	12.5	18.4	17.7	18.0
25	8.7	8.5	8.6	10.1	9.9	10.0	13.2	12.1	12.8	18.5	17.8	18.2
26	8.8	8.5	8.6	10.7	9.9	10.4	13.1	12.7	12.9	19.6	17.4	18.2
27	9.2	8.7	8.8	11.0	10.5	10.8	13.4	13.0	13.2	19.2	17.5	18.2
28	9.1	8.7	8.9	10.9	10.5	10.7	13.4	12.9	13.2	19.7	17.9	18.5
29	---	---	---	10.6	10.2	10.5	13.9	12.6	13.1	19.4	18.0	18.6
30	---	---	---	11.0	10.6	10.8	14.7	12.9	13.4	19.4	17.9	18.5
31	---	---	---	10.8	10.7	10.7	---	---	---	19.7	18.2	18.9
MONTH	9.2	6.3	7.7	12.3	8.2	9.9	14.7	10.0	11.6	19.7	13.3	16.5

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.8	18.2	18.5	16.2	15.6	15.9	22.9	20.6	21.8	21.9	20.5	21.2
2	18.2	17.3	17.7	16.9	16.1	16.5	22.8	20.7	21.7	22.3	20.6	21.2
3	17.3	16.2	16.8	17.8	16.5	17.0	22.8	20.7	21.4	22.5	20.4	21.2
4	16.5	15.9	16.2	18.6	16.9	17.5	22.4	20.7	21.2	22.5	20.5	21.3
5	16.4	16.1	16.2	18.5	16.9	17.9	22.8	20.6	21.2	22.3	20.8	21.2
6	16.5	16.1	16.3	18.7	17.7	18.2	22.2	20.8	21.6	21.3	20.5	21.0
7	16.1	15.3	15.8	18.9	18.1	18.5	23.3	21.0	21.6	21.7	20.7	21.0
8	15.3	14.6	15.0	19.3	18.5	18.9	22.3	20.6	21.1	22.0	20.5	20.9
9	14.6	14.1	14.4	19.1	18.6	18.8	22.7	20.8	21.6	21.8	20.4	20.9
10	14.1	13.5	13.7	18.8	18.4	18.6	22.4	21.0	21.6	21.3	20.5	20.8
11	13.6	13.5	13.5	19.2	18.3	18.6	21.7	20.6	21.1	21.9	20.3	20.8
12	14.1	13.6	13.8	19.3	18.3	18.7	21.9	20.5	21.0	21.8	20.1	20.8
13	14.2	14.0	14.1	19.8	18.2	19.0	21.8	20.1	21.0	21.8	19.9	20.8
14	14.3	14.1	14.2	20.4	18.9	19.5	22.2	19.7	20.9	21.9	20.1	21.0
15	14.9	14.3	14.6	20.2	18.6	19.4	22.1	19.5	21.0	21.7	20.5	20.9
16	15.5	14.9	15.3	21.0	19.0	19.8	21.9	19.7	20.7	21.7	20.5	20.8
17	15.7	15.3	15.5	20.8	19.1	20.0	21.7	19.7	20.7	21.5	20.4	20.9
18	15.7	15.3	15.6	21.3	19.5	20.3	21.1	19.7	20.5	21.4	20.0	20.9
19	15.4	15.3	15.4	21.7	19.5	20.5	21.6	19.9	20.8	21.4	19.9	20.8
20	15.8	15.1	15.4	21.9	20.0	20.9	22.3	19.9	21.2	20.8	19.9	20.4
21	15.8	15.3	15.5	22.5	20.6	21.3	21.8	20.1	21.0	21.2	19.8	20.4
22	15.9	15.4	15.7	22.9	20.0	21.5	22.2	20.4	21.1	21.1	19.9	20.3
23	16.1	15.6	16.0	22.3	20.1	21.3	22.0	20.7	21.2	21.2	19.9	20.4
24	16.2	15.9	16.1	21.9	20.2	21.0	21.9	20.6	21.2	21.0	20.0	20.6
25	16.5	16.0	16.3	22.6	20.5	21.5	21.9	20.7	21.1	20.9	20.2	20.5
26	16.4	16.1	16.2	23.0	20.8	21.9	22.2	20.7	21.1	20.9	20.0	20.4
27	16.4	16.0	16.2	23.1	20.7	21.9	22.4	20.4	21.1	20.7	19.8	20.2
28	16.4	16.1	16.2	22.4	21.0	21.7	21.9	20.1	21.1	20.4	19.7	20.0
29	16.1	15.8	16.0	21.7	20.8	21.2	22.4	20.0	21.0	20.0	19.4	19.7
30	15.8	15.6	15.7	22.9	20.9	21.8	22.4	20.1	21.0	20.4	19.2	19.5
31	---	---	---	23.7	20.9	22.1	22.4	20.3	21.2	---	---	---
MONTH	18.8	13.5	15.6	23.7	15.6	19.7	23.3	19.5	21.2	22.5	19.2	20.7

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

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

OXYGEN DISSOLVED (DO), MG/L WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.3	11.1	11.2	11.6	11.4	11.5	11.1	10.9	11.0	9.8	9.0	9.3
2	11.4	11.2	11.3	11.4	10.4	10.8	11.3	11.1	11.2	10.0	8.6	9.3
3	11.3	11.2	11.3	10.4	9.5	9.9	11.3	10.2	10.7	9.7	8.8	9.4
4	11.5	11.2	11.3	9.8	9.5	9.6	10.2	10.0	10.1	9.5	8.6	9.1
5	11.5	11.4	11.4	10.4	9.7	10.1	10.0	9.8	9.9	9.4	8.6	9.0
6	11.4	11.2	11.3	10.7	10.4	10.5	9.9	9.8	9.9	9.5	8.6	9.2
7	11.3	11.1	11.2	10.6	10.4	10.5	10.0	9.8	9.9	9.6	8.3	9.1
8	11.2	11.1	11.1	10.9	10.6	10.7	10.0	9.9	9.9	9.4	8.2	9.1
9	11.3	11.1	11.2	11.5	10.9	11.1	10.2	9.9	10.1	9.2	8.4	8.8
10	11.4	11.2	11.3	11.5	11.4	11.5	10.3	10.1	10.2	9.1	8.2	8.7
11	11.4	11.3	11.4	11.6	11.4	11.5	10.5	10.2	10.4	9.2	8.2	8.7
12	11.4	11.3	11.4	11.6	11.5	11.5	10.3	10.2	10.2	9.2	8.4	9.0
13	11.6	11.2	11.5	11.8	11.5	11.7	10.3	10.2	10.2	9.2	8.5	8.9
14	11.7	11.5	11.6	11.8	11.7	11.7	10.9	10.2	10.3	9.0	8.3	8.7
15	11.7	11.6	11.7	11.8	11.7	11.8	10.6	9.9	10.3	9.1	8.0	8.5
16	11.6	11.6	11.6	11.8	11.6	11.7	10.4	9.9	10.1	9.3	8.1	8.7
17	11.7	11.6	11.6	11.8	11.7	11.7	11.2	10.1	10.6	9.5	8.4	9.0
18	11.7	11.6	11.7	12.0	11.8	11.9	10.7	9.9	10.4	9.5	9.0	9.2
19	11.7	11.7	11.7	12.1	11.8	11.9	10.9	10.2	10.6	9.5	8.3	9.0
20	11.7	11.6	11.7	12.1	11.5	11.8	11.2	9.9	10.6	9.4	8.3	8.6
21	11.6	11.4	11.6	11.5	11.2	11.3	11.1	10.5	10.8	9.3	8.4	8.6
22	11.5	11.4	11.4	11.4	11.3	11.4	10.9	9.8	10.5	9.6	8.1	8.8
23	11.5	11.4	11.4	11.6	11.3	11.4	9.8	8.7	9.3	9.0	7.7	8.5
24	11.4	11.4	11.4	11.5	11.3	11.4	9.0	8.6	8.9	8.8	7.8	8.4
25	11.5	11.1	11.4	11.4	11.3	11.4	9.0	8.6	8.9	9.0	7.8	8.2
26	11.7	11.2	11.5	11.4	11.1	11.2	9.3	8.6	9.0	8.9	7.8	8.2
27	11.9	11.4	11.6	11.2	11.0	11.1	9.4	8.6	9.1	8.7	7.7	8.3
28	11.7	11.5	11.6	11.1	10.9	11.0	9.2	8.4	8.9	9.2	7.8	8.6
29	---	---	---	11.1	11.0	11.1	9.4	8.4	8.9	9.0	8.2	8.6
30	---	---	---	11.1	10.9	11.0	9.8	8.9	9.1	9.0	7.8	8.4
31	---	---	---	10.9	10.8	10.9	---	---	---	9.0	7.8	8.5
MONTH	11.9	11.1	11.4	12.1	9.5	11.2	11.3	8.4	10.0	10.0	7.7	8.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.2	8.5	8.8	8.8	8.4	8.6	9.1	8.0	8.5	8.9	7.9	8.2
2	9.6	9.1	9.3	9.4	8.4	8.7	9.1	8.1	8.4	9.2	7.5	8.1
3	10.1	9.4	9.7	9.5	8.5	8.9	9.1	7.9	8.4	9.3	7.1	8.1
4	10.4	9.3	9.8	9.5	8.4	8.9	9.1	7.7	8.2	9.5	7.7	8.4
5	10.5	9.1	9.5	9.4	8.3	8.9	9.1	7.5	8.2	9.3	7.6	8.2
6	9.2	8.9	9.0	9.5	8.3	9.0	9.0	8.1	8.6	8.5	7.2	8.0
7	9.7	8.8	9.4	9.5	8.5	9.1	9.0	7.6	8.3	9.2	7.3	8.3
8	9.9	9.5	9.7	9.8	8.9	9.4	9.0	7.6	8.0	8.5	7.2	7.8
9	9.9	9.4	9.7	9.6	9.1	9.4	8.8	7.8	8.4	8.5	7.4	7.9
10	10.3	9.4	9.9	9.5	9.2	9.4	8.6	7.7	8.3	8.4	7.6	8.0
11	10.0	8.7	9.7	9.6	8.5	9.1	8.8	7.2	8.0	9.5	7.7	8.5
12	10.1	8.8	9.6	9.4	8.2	8.7	9.3	7.7	8.3	9.7	8.2	9.0
13	10.1	9.6	9.9	9.9	8.5	9.3	9.3	7.8	8.4	9.6	8.7	9.1
14	10.1	9.8	10.0	9.9	8.3	9.3	9.4	7.7	8.4	9.4	8.5	9.0
15	9.8	9.4	9.6	10.0	8.5	9.3	9.3	7.4	8.3	8.9	8.3	8.6
16	9.4	8.9	9.2	9.8	8.5	9.2	8.9	7.5	8.2	8.6	7.9	8.2
17	9.2	9.1	9.1	10.1	8.4	9.1	8.6	7.3	8.0	8.7	7.4	8.1
18	9.6	8.9	9.1	9.8	8.7	9.1	8.5	7.1	7.6	8.2	6.9	7.5
19	9.5	9.1	9.4	9.6	9.0	9.3	7.8	6.4	7.2	8.3	6.8	7.6
20	9.4	9.3	9.3	10.0	8.8	9.3	8.0	6.5	7.3	7.7	6.8	7.3
21	9.4	9.1	9.2	10.0	8.3	9.2	8.4	6.8	7.5	8.3	6.5	7.3
22	9.3	8.9	9.1	10.1	8.2	8.9	9.0	7.3	8.0	8.1	6.8	7.3
23	9.1	8.9	9.0	9.4	8.3	8.8	9.3	7.6	8.3	8.3	6.5	7.2
24	8.9	8.8	8.9	9.4	8.4	8.8	9.4	7.8	8.5	7.9	6.4	7.3
25	8.9	8.7	8.8	9.6	8.3	8.9	9.7	7.6	8.4	8.1	6.7	7.3
26	8.8	8.7	8.7	9.6	8.1	8.9	8.6	8.0	8.3	8.3	6.7	7.5
27	8.9	8.7	8.8	9.6	7.9	8.9	8.8	7.9	8.4	8.4	6.9	7.7
28	8.8	8.7	8.8	9.1	8.1	8.6	8.8	7.4	8.1	8.4	7.2	7.7
29	8.8	8.6	8.7	8.9	8.1	8.5	8.8	7.1	7.7	8.1	6.4	7.4
30	8.9	8.6	8.7	9.3	7.8	8.6	9.0	7.3	7.9	8.1	6.5	7.4
31	---	---	---	9.7	8.1	8.7	9.2	7.6	8.2	---	---	---
MONTH	10.5	8.5	9.3	10.1	7.8	9.0	9.7	6.4	8.1	9.7	6.4	7.9

CUMBERLAND RIVER BASIN
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 mi^2.

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.--Data collection platform. 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.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 greater than base discharge of 11,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0800	*25,600	*23.07	Mar. 6	0700	11,600	14.41
Mar. 3	1930	25,100	22.84	May 3	2100	12,300	14.91

Minimum discharge, 117 ft^3/s, Sept. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	246	21800	5410	1840	5380	1190	1580	6610	1740	233	151
2	854	277	11100	3590	1520	4740	1070	1350	4600	1470	214	145
3	714	363	4970	2620	1370	18800	969	8140	2900	1120	202	171
4	614	378	2940	2050	2260	13900	891	7720	1940	929	197	165
5	531	344	2200	3030	3220	6730	837	3860	1870	944	199	150
6	468	321	2240	2860	2200	9320	866	2410	1360	764	199	146
7	424	345	2210	2110	1830	5090	954	1710	1140	661	198	145
8	387	2460	2800	1730	1940	3430	855	1320	972	578	188	141
9	352	2280	2200	3820	2030	2590	778	1180	3390	519	197	177
10	322	1810	1720	3580	1730	2100	729	1120	5490	480	203	265
11	297	1370	1440	2720	1520	1790	685	962	3060	444	193	212
12	275	1070	1580	2070	1330	1500	666	832	2590	417	191	170
13	262	868	2710	1670	1220	1290	653	753	5390	391	191	154
14	251	774	2030	1400	1320	1810	624	686	5240	364	207	147
15	239	774	1670	1320	1270	2870	584	630	4100	343	193	142
16	231	741	1410	4010	1110	2300	550	568	2670	325	186	137
17	224	677	1610	3190	1010	1790	534	520	2580	311	179	132
18	233	832	1800	2270	924	1500	514	485	3330	299	179	133
19	225	1460	1520	1790	863	4070	511	462	2300	283	167	129
20	239	1510	1270	1510	810	6120	544	628	1790	271	166	125
21	246	1310	1090	1290	912	3820	727	666	1350	262	168	124
22	231	1540	982	1200	2230	2600	3080	578	2620	253	157	120
23	243	1280	909	1580	1920	1950	2990	503	5670	258	151	126
24	244	1090	1020	1950	1460	1540	2220	450	3010	255	148	662
25	280	1080	1390	4230	1220	1300	1540	445	1760	246	145	6650
26	270	2100	1160	3490	1090	1200	1170	506	1440	240	144	2890
27	247	1980	1090	2400	1790	1090	992	761	1430	230	142	1190
28	239	1570	1110	6110	4300	1090	966	734	1590	228	140	732
29	237	1270	6370	4340	---	1520	2340	658	3530	227	137	552
30	233	5410	6470	2930	---	1440	2070	612	2390	261	133	435
31	227	---	4930	2270	---	1290	---	943	---	254	137	---
TOTAL	11039	37530	97741	84540	46239	115960	33099	43772	88112	15367	5484	16618
MEAN	356	1251	3153	2727	1651	3741	1103	1412	2937	496	177	554
MAX	1200	5410	21800	6110	4300	18800	3080	8140	6610	1740	233	6650
MIN	224	246	909	1200	810	1090	511	445	972	227	133	120
CFSM	.56	1.95	4.93	4.26	2.58	5.84	1.72	2.21	4.59	.77	.28	.87
IN.	.64	2.18	5.68	4.91	2.69	6.74	1.92	2.54	5.12	.89	.32	.97

CUMBERLAND RIVER BASIN

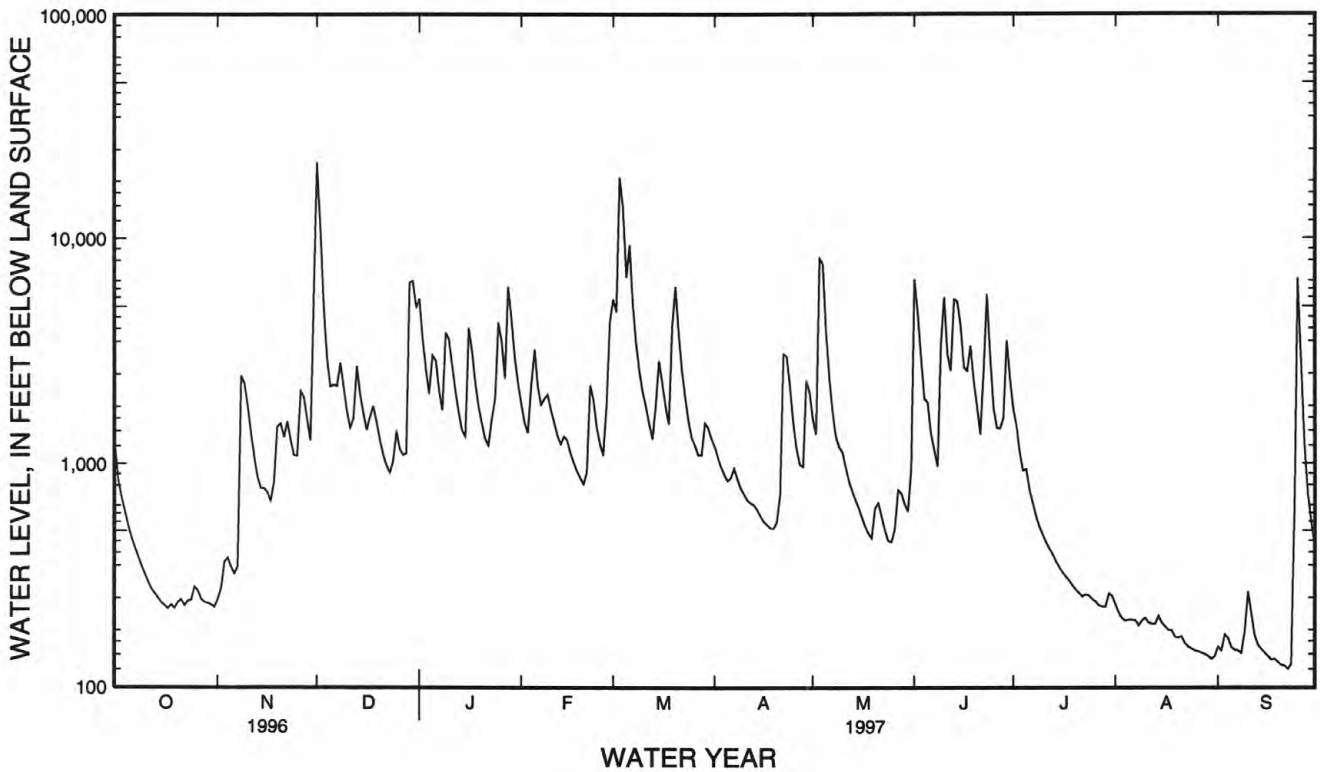
03421000 COLLINS RIVER NEAR MCMINNVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

MEAN	326	794	1626	2109	2394	2524	1770	1078	637	431	313	296
MAX	2345	4286	6783	6262	6564	6279	4412	3825	4216	2091	1439	1204
(WY)	1976	1958	1991	1974	1939	1929	1994	1984	1928	1989	1942	1992
MIN	63.5	69.0	107	126	391	619	462	225	85.9	115	76.2	62.9
(WY)	1932	1932	1940	1940	1941	1988	1986	1941	1988	1944	1925	1925

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1925 - 1997	
ANNUAL TOTAL	522261		595501			
ANNUAL MEAN	1427		1632		1186	
HIGHEST ANNUAL MEAN					2193	1973
LOWEST ANNUAL MEAN					409	1931
HIGHEST DAILY MEAN	21800	Dec 1	21800	Dec 1	64100	Dec 23 1990
LOWEST DAILY MEAN	172	Jul 13	120	Sep 22	a37	Oct 28 1961
ANNUAL SEVEN-DAY MINIMUM	178	Jul 9	127	Sep 17	50	Sep 24 1925
INSTANTANEOUS PEAK FLOW			25600	Dec 1	b75300	Mar 23 1929
INSTANTANEOUS PEAK STAGE			23.07	Dec 1	39.10	Mar 23 1929
INSTANTANEOUS LOW FLOW			c117	Sep 22	35	Sep 21 1930
ANNUAL RUNOFF (CFSM)	2.23		2.55		1.85	
ANNUAL RUNOFF (INCHES)	30.36		34.61		25.18	
10 PERCENT EXCEEDS	3060		3580		2600	
50 PERCENT EXCEEDS	863		1080		538	
90 PERCENT EXCEEDS	240		183		112	

a Caused by regulation from highway construction.
b From rating curve extended above 42,000 ft^3/s on basis of slope-area measurement of peak flow.
c Also occurred Sept. 23.



CUMBERLAND RIVER BASIN

03424730 SMITH FORK AT TEMPERANCE HALL, TN

LOCATION.--Lat 36°05'14", long 85°54'29", Dekalb County, Hydrologic Unit 05130108, on left bank 150 ft downstream from James Slager Memorial bridge on State Highway 264, 0.3 mi northwest of Temperance Hall, and at mile 8.8.

DRAINAGE AREA.--214 mi^2.

PERIOD OF RECORD.--August 1991 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 499.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 8	0130	5,540	13.05	Mar. 3	1130	*14,900	*22.47
Dec. 1	0100	11,900	20.09	Mar. 5	2130	13,200	21.18
Jan. 28	0800	8,590	16.66	May 31	2100	9,340	17.49
Mar. 2	1230	4,060	10.94	June 14	0930	7,950	15.95

Minimum discharge, 17.0 ft^3/s, Sept. 20, 21, 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	392	7000	647	423	1630	226	315	2390	386	31	20
2	1500	459	1400	508	348	2380	206	263	762	222	29	20
3	520	257	731	412	372	8850	192	498	568	144	27	22
4	312	197	490	351	1430	1930	182	389	329	108	26	32
5	229	171	443	1100	1200	5470	180	263	505	92	26	29
6	189	154	594	766	703	3760	225	211	275	85	25	26
7	165	598	440	515	525	1170	197	178	214	74	23	24
8	147	2640	356	404	617	702	172	158	225	70	23	22
9	132	717	304	710	581	491	161	154	850	68	26	24
10	120	431	271	644	475	421	152	138	384	65	31	35
11	111	332	254	488	399	354	147	122	266	61	34	39
12	105	269	249	394	343	298	145	113	684	58	33	32
13	98	229	260	341	319	268	140	108	653	55	33	28
14	93	217	235	305	488	323	128	101	4270	51	41	25
15	91	224	222	353	423	315	120	97	1640	48	41	22
16	88	209	218	1230	359	268	115	92	727	50	34	20
17	86	203	1360	630	316	250	113	82	595	45	29	20
18	91	881	703	465	287	272	110	79	531	42	30	20
19	98	845	470	379	266	1740	110	77	343	40	27	19
20	98	486	361	325	246	998	110	91	236	39	32	19
21	92	389	301	285	517	599	119	103	187	37	31	19
22	88	470	272	358	687	432	214	84	155	36	29	18
23	100	344	251	691	426	327	314	75	133	34	27	18
24	147	280	451	1430	343	272	252	71	115	34	25	35
25	126	316	474	1340	300	244	184	69	100	33	23	789
26	116	599	364	718	703	344	155	72	90	32	21	182
27	116	407	325	560	1340	288	142	75	98	31	21	91
28	119	318	295	4200	1340	294	173	77	135	32	21	64
29	122	267	592	1300	---	474	541	76	206	37	21	52
30	126	3460	881	749	---	313	291	74	282	36	20	44
31	119	---	715	538	---	263	---	2880	---	33	19	---
TOTAL	5749	16761	21282	23136	15776	35740	5516	7185	17948	2178	859	1810
MEAN	185	559	687	746	563	1153	184	32	598	70.3	27.7	60.3
MAX	1500	3460	7000	4200	1430	8850	541	2880	4270	386	41	789
MIN	86	154	218	285	246	244	110	69	90	31	19	18
CFSM	.87	2.61	3.21	3.49	2.63	5.39	.86	1.08	2.80	.33	.13	.28
IN.	.00	2.91	3.70	4.02	2.74	6.21	.96	1.25	3.12	.38	.15	.31

CUMBERLAND RIVER BASIN

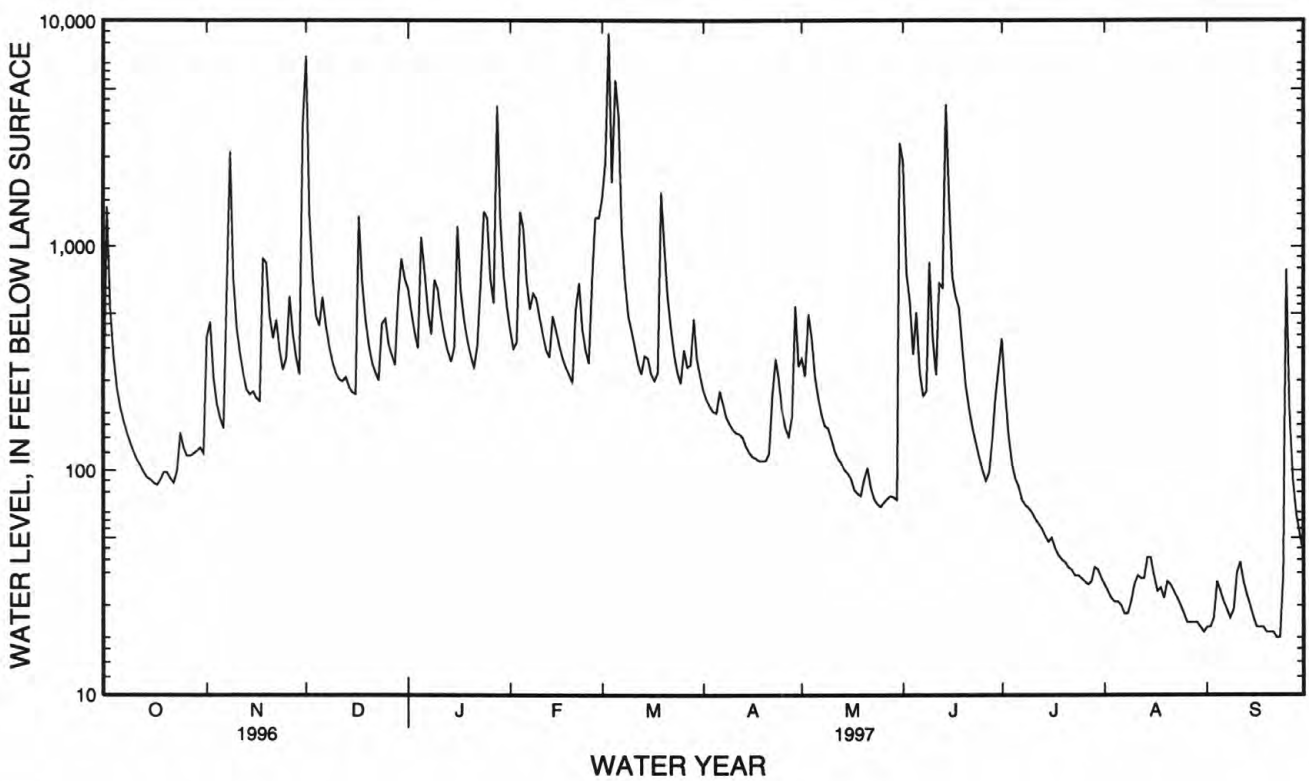
03424730 SMITH FORK AT TEMPERANCE HALL, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	120	279	563	598	487	820	427	250	198	150	86.5	104
MAX	270	559	811	767	1190	1516	1095	506	598	460	225	389
(WY)	1996	1997	1992	1994	1994	1994	1994	1995	1997	1992	1996	1992
MIN	21.0	37.2	234	463	212	477	158	61.4	52.7	49.5	22.8	26.8
(WY)	1994	1992	1996	1995	1993	1995	1992	1992	1993	1995	1993	1991

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	135661		153940			
ANNUAL MEAN	371		422		342	
HIGHEST ANNUAL MEAN					488	1994
LOWEST ANNUAL MEAN					234	1995
HIGHEST DAILY MEAN	7000	Dec 1	8850	Mar 3	10500	Mar 27 1994
LOWEST DAILY MEAN	26	Jul 19	18	Sep 22	10	Sep 7 1995
ANNUAL SEVEN-DAY MINIMUM	29	Jul 13	19	Sep 17	11	Sep 3 1995
INSTANTANEOUS PEAK FLOW			14900	Mar 3	16100	Mar 27 1994
INSTANTANEOUS PEAK STAGE			22.47	Mar 3	23.41	Mar 27 1994
INSTANTANEOUS LOW FLOW			a17	Sep 20	9.9	Sep 8 1995
ANNUAL RUNOFF (CFSM)	1.73		1.97		1.60	
ANNUAL RUNOFF (INCHES)	23.58		26.76		21.71	
10 PERCENT EXCEEDS	774		754		716	
50 PERCENT EXCEEDS	225		222		132	
90 PERCENT EXCEEDS	73		29		26	

a Also occurred Sept. 21, 22, 23.



CUMBERLAND RIVER BASIN

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

LOCATION.--Lat 36°17'47", long 86°39'28", Davidson County, Hydrologic Unit 05130202, at right bank in powerhouse, at Old Hickory Dam, 2.0 mi west of Hendersonville, and at mile 216.2.

DRAINAGE AREA.--11,673 mi^2.

WATER-DISCHARGE RECORDS

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". July 1953 to September 1986 published as "below Old Hickory".

GAGE.--Datum of gage is sea level.

REMARKS.--Flow regulated by six lakes or reservoirs (see p. 118).

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 173,000 ft^3/s, Jan. 29, 1937; maximum gage height, 438.80 ft, Mar. 14, 1975; minimum daily discharge, 86 ft^3/s, Aug. 15, 1936; minimum gage height since filling of Cheatham Lake on Oct. 1, 1956, 383.49 ft, Sept. 10, 1962, at present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, 437.4 ft Dec. 31, 1926, at present datum, from profile by U.S. Army Corps of Engineers, discharge, 200,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 102,000 ft^3/s, Mar. 4; minimum daily, 4,860 ft^3/s, May 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8100	12200	56800	31800	36000	36100	45500	13800	53800	38700	12400	7360
2	10600	16000	57800	29200	29100	60900	42000	9980	44300	26400	11300	6760
3	11700	18300	41700	25000	27200	101000	40700	12200	26700	21800	8410	7590
4	12600	8700	33100	26600	31700	102000	40700	12200	25100	19900	7060	12700
5	12700	7320	31700	29200	35700	82300	38600	12300	23300	20500	8050	13200
6	11800	10400	31000	33200	36100	83100	34500	12200	28200	21700	11100	10600
7	8180	12200	28600	26400	32200	78900	35400	12200	28400	24000	13100	7520
8	11400	26600	26300	26800	31400	66000	28800	12200	28100	21200	12800	8660
9	10800	25400	28400	26800	29000	56400	31200	13700	34800	24200	9270	7890
10	9750	16800	27100	29900	25400	50400	28200	12300	35500	25200	7840	8430
11	9520	15000	23700	26300	26000	50300	27100	12300	33100	24500	9250	12100
12	6720	13600	25200	24600	28400	47600	26400	9580	30200	16400	7700	12500
13	5410	10200	27900	30600	24300	46300	24500	9650	30000	14500	10500	11100
14	4880	11000	26800	30500	24400	47900	17400	8860	49900	13800	13400	11000
15	4910	11200	26700	28300	26800	50200	11600	8810	53400	14700	13100	8980
16	7680	10800	28900	26000	24100	49900	8250	9320	53700	14700	10700	6770
17	7670	9970	55100	30800	24900	46700	8340	8690	54100	12800	9220	8600
18	9620	12400	43300	31300	30700	46200	8370	5810	52900	14200	8380	9980
19	7640	13000	37400	30700	28200	58000	10100	5880	52900	13600	8390	12400
20	5900	12800	32500	25300	30800	69400	10300	14100	51300	11900	15700	11300
21	5900	12500	28100	27600	30000	68700	9180	9290	46100	12000	16000	8850
22	5920	13700	32100	30000	27900	60900	10900	9560	46200	14000	13700	6670
23	5960	12400	29200	27500	24700	55500	9200	8050	48000	13700	11500	5310
24	6470	11200	26500	33100	24100	55200	8690	5400	44200	9670	8520	9060
25	7260	10400	27700	40600	26200	52100	7430	5400	43100	11900	6780	16500
26	8380	13600	36300	45400	21700	50500	8390	4860	43400	12300	7650	11300
27	11300	29000	31900	29100	22000	50600	10200	7790	41400	10400	10300	11300
28	8800	28600	28000	41500	29200	48700	10600	7620	36700	10000	12100	9610
29	9800	26500	24900	52200	---	45800	8770	9180	36200	6510	12100	8440
30	7260	28200	23700	42600	---	45800	14200	10400	40300	6970	9480	7920
31	7130	---	25900	35500	---	45600	---	19500	---	14000	9380	---
TOTAL	261760	459990	1004300	974400	788200	1809000	615520	313130	1215300	516150	325180	290400
MEAN	8444	15330	32400	31430	28150	58350	20520	10100	40510	16650	10490	9680
MAX	12700	29000	57800	52200	36100	102000	45500	19500	54100	38700	16000	16500
MIN	4880	7320	23700	24600	21700	36100	7430	4860	23300	6510	6780	5310

CUMBERLAND RIVER BASIN

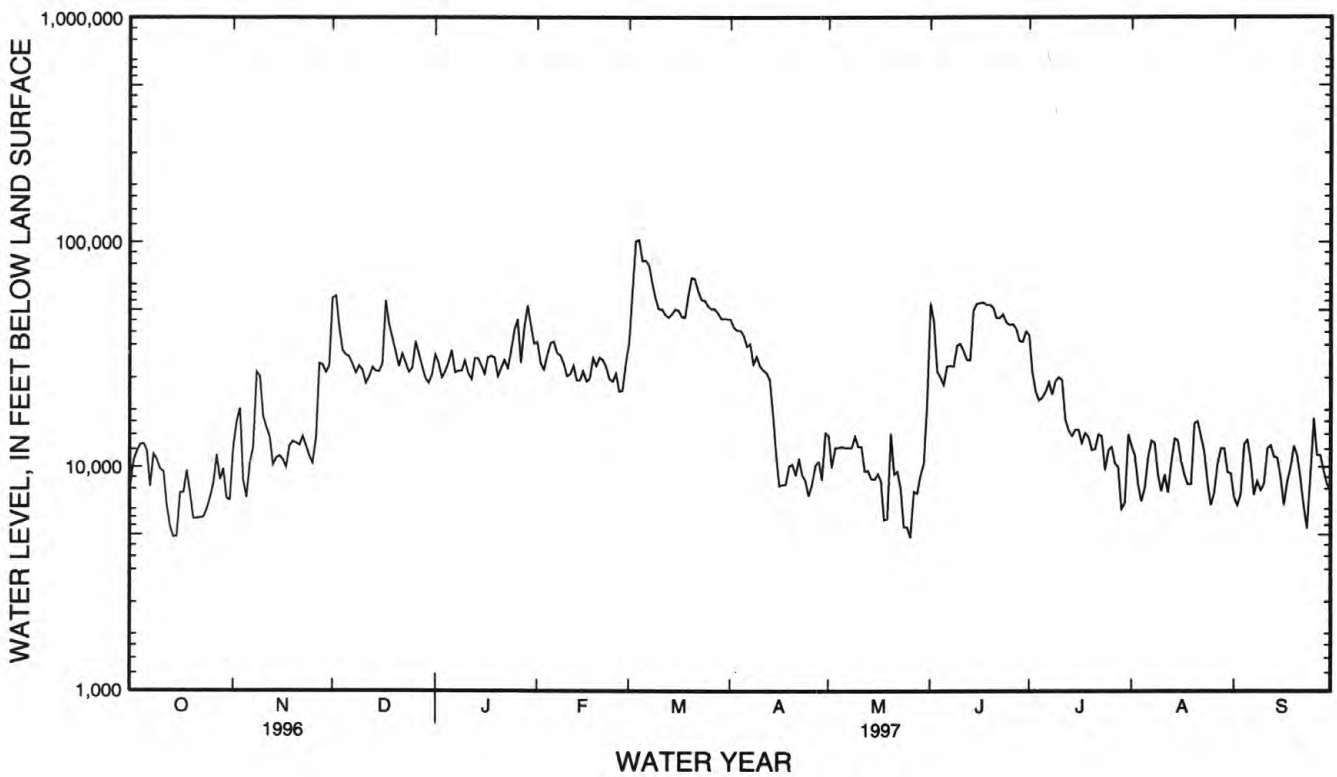
03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1997, BY WATER YEAR (WY)

MEAN	9360	12760	22920	29200	28000	32410	29020	20400	15740	12820	12030	10040
MAX	29430	29530	43590	79580	61700	73880	74400	65100	40510	28410	21400	27600
(WY)	1990	1980	1979	1974	1957	1975	1994	1984	1997	1967	1982	1979
MIN	2660	3449	3974	4656	8524	6778	6963	5465	6048	4211	4991	2723
(WY)	1969	1981	1981	1981	1981	1981	1986	1988	1988	1974	1975	1968

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		*WATER YEARS 1957 - 1997	
ANNUAL TOTAL	7549760		8573330			
ANNUAL MEAN	20630		23490		19520	
HIGHEST ANNUAL MEAN					28560	1974
LOWEST ANNUAL MEAN					8780	1988
HIGHEST DAILY MEAN	57800	Dec 2	102000	Mar 4	146000	Mar 14 1975
LOWEST DAILY MEAN	4880	Oct 14	4860	May 26	200	Nov 3 1957
ANNUAL SEVEN-DAY MINIMUM	6440	Oct 19	6440	Oct 19	1070	Oct 28 1969
10 PERCENT EXCEEDS	32600		47700		41300	
50 PERCENT EXCEEDS	19900		18300		14000	
90 PERCENT EXCEEDS	9360		7750		5310	

* Regulated period only.



CUMBERLAND RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1979 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1979 to September 1997.
pH: April 1979 to September 1997.
WATER TEMPERATURE: April 1979 to September 1997.
DISSOLVED OXYGEN: April 1979 to September 1997.
TURBIDITY: October 1992 to September 1997.

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

REMARKS.--Flow regulated by Old Hickory Dam and other reservoirs above station. Periods of missing record were due to instrument malfunctions. Supersaturation of dissolved oxygen may occur due to local hydraulic conditions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 262 microsiemens, Apr. 15, Dec. 2, 1988; minimum, 137 microsiemens, Mar. 14, 1994.
pH: Maximum, 9.8 units, Mar. 26, 1988; minimum, 6.4 units, July 28, 1991, July 24, 25, 26, 1993.
WATER TEMPERATURE: Maximum, 27.6°C, Aug. 8, 1988; minimum, 2.1°C, Dec. 24, 1989.
DISSOLVED OXYGEN: Maximum, 16.0 mg/L, March 25, 1994; minimum, 2.9 mg/L, Sept. 5, 1988, July 8, 1993.
TURBIDITY: Maximum recorded, 170 NTU, Mar. 5, 1997, minimum, 1 NTU, many days during the 1996 water year; Sept. 20, 1997.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 259 microsiemens, Nov. 20, 21; minimum, 178 microsiemens, Mar. 7.
pH: Maximum, 8.9 units, Apr. 27; minimum, 6.9 units, June 12, 13.
WATER TEMPERATURE: Maximum, 27.0, Aug. 7; minimum, 4.5°C, Jan. 18, 19.
DISSOLVED OXYGEN: Maximum, 14.8 mg/L, Jan. 30; minimum, 5.2 mg/L, Sept. 20, 21.
TURBIDITY: Maximum, 170 NTU, Mar. 5; minimum, 1 NTU, Sept. 20.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	205	204	205	220	218	219	---	---	---	232	230	231
2	208	205	206	224	220	221	---	---	---	231	229	230
3	210	207	208	228	223	225	---	---	---	235	230	233
4	208	207	208	230	228	229	232	226	230	235	231	233
5	209	208	209	230	228	229	236	232	235	232	229	231
6	209	208	208	236	229	232	240	236	238	230	228	229
7	209	208	208	239	235	237	240	230	232	230	226	227
8	208	207	208	240	237	238	---	---	---	228	223	225
9	209	207	208	245	238	243	---	---	---	227	224	225
10	216	209	212	246	245	246	230	227	229	229	227	228
11	217	216	216	247	246	246	231	228	229	229	224	227
12	220	217	218	247	246	247	231	229	230	225	220	223
13	223	220	221	247	245	246	232	229	231	221	218	220
14	224	222	223	246	244	245	231	228	230	221	219	220
15	225	223	224	245	244	245	231	228	229	221	216	219
16	226	225	225	248	245	246	230	227	229	218	213	216
17	228	225	227	249	246	248	232	227	230	213	211	212
18	230	226	229	256	248	251	238	230	235	213	209	211
19	230	229	230	258	254	257	240	229	234	212	208	210
20	231	230	230	259	257	258	230	228	229	213	209	211
21	231	230	231	259	258	259	239	230	236	214	210	212
22	232	231	231	258	255	257	242	238	240	212	209	211
23	231	230	230	255	250	253	242	238	239	210	208	209
24	230	228	230	252	248	250	238	234	236	209	206	207
25	229	222	225	249	244	247	235	230	232	207	204	206
26	222	220	221	245	238	242	232	226	229	---	---	---
27	221	216	219	246	235	238	234	230	232	212	208	211
28	217	215	216	254	246	251	236	232	234	210	208	209
29	218	216	217	253	241	248	239	234	236	213	209	211
30	218	215	217	241	232	237	239	234	236	214	206	211
31	219	218	218	---	---	---	236	232	234	211	204	207
MONTH	232	204	219	259	218	243	242	226	233	235	204	219

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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	214	210	211	216	211	213	197	192	195	199	197	198
2	218	214	216	227	214	219	195	193	194	199	197	198
3	216	213	215	227	209	219	194	192	193	201	198	200
4	213	210	211	209	201	205	193	192	193	202	200	201
5	213	207	209	203	184	194	193	191	192	203	201	202
6	209	206	208	200	185	192	191	189	190	205	201	204
7	217	208	214	200	178	185	189	188	189	204	203	204
8	225	217	222	189	179	182	188	186	187	204	203	203
9	227	223	225	200	189	196	188	186	187	206	203	205
10	226	223	225	193	190	191	191	188	190	207	205	206
11	224	217	221	192	188	190	193	191	191	206	204	205
12	219	215	217	197	192	195	194	192	193	206	203	204
13	217	216	217	197	195	196	193	192	192	208	202	204
14	218	215	216	196	194	195	194	192	193	206	198	201
15	218	215	217	195	193	194	197	192	193	201	195	197
16	217	214	216	194	193	193	198	192	194	199	193	196
17	215	214	214	194	191	193	197	192	193	196	192	194
18	216	213	214	192	189	191	194	192	193	193	190	191
19	216	214	215	195	189	192	195	193	194	193	190	191
20	215	213	214	202	195	198	196	194	195	195	189	191
21	215	213	214	201	195	197	196	194	195	191	187	188
22	213	210	211	200	198	199	197	195	197	190	188	189
23	211	209	210	198	188	194	200	197	199	190	188	189
24	210	207	209	189	187	188	200	197	198	191	188	189
25	209	205	208	191	188	190	198	196	197	191	187	188
26	209	205	207	191	189	190	198	194	196	190	187	188
27	209	207	208	190	188	189	195	194	195	190	187	188
28	211	209	210	190	188	189	196	193	195	190	189	190
29	---	---	---	190	187	188	197	193	195	190	189	190
30	---	---	---	189	187	188	198	196	197	191	189	190
31	---	---	---	192	187	190	---	---	---	191	188	189
MONTH	227	205	214	227	178	195	200	186	194	208	187	196

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	202	191	198	184	183	184	191	190	191	197	196	196
2	209	201	207	186	183	185	193	190	191	197	196	197
3	208	201	203	190	185	187	191	190	191	197	196	196
4	209	202	205	191	189	190	192	190	191	198	196	197
5	216	209	212	196	191	193	193	190	192	198	196	197
6	224	216	221	196	194	195	194	192	193	198	196	197
7	220	216	218	197	194	196	195	193	194	198	196	197
8	216	212	215	196	192	194	195	192	194	197	196	197
9	213	211	212	194	192	193	193	192	193	197	196	196
10	212	209	210	193	191	192	195	193	193	197	195	196
11	213	210	211	193	191	192	194	192	193	197	196	196
12	212	209	210	193	191	192	193	192	193	197	195	196
13	209	206	208	193	191	192	193	192	192	195	194	195
14	209	202	206	193	191	192	188	186	187	195	194	194
15	209	201	205	194	187	189	186	185	186	195	193	194
16	208	199	204	188	186	187	186	185	186	195	194	195
17	208	200	205	189	187	188	187	186	186	200	194	195
18	209	207	208	189	187	188	188	187	187	198	194	196
19	207	204	206	190	187	188	189	187	188	198	195	196
20	204	201	202	189	187	188	191	187	189	201	195	197
21	202	201	202	189	187	188	192	188	190	199	195	197
22	202	197	200	190	188	189	191	188	189	199	195	197
23	197	195	197	189	186	188	192	188	190	199	195	197
24	197	194	195	187	185	186	191	188	189	198	195	197
25	194	191	193	189	186	188	192	188	190	197	194	195
26	192	189	190	189	187	188	192	189	191	197	194	195
27	191	190	191	189	187	188	196	190	194	200	196	197
28	191	189	190	190	186	188	195	194	194	199	195	197
29	189	188	188	191	188	190	196	194	195	198	189	193
30	188	183	186	192	188	191	197	195	196	190	188	189
31	---	---	---	193	190	192	196	195	196	---	---	---
MONTH	224	183	203	197	183	190	197	185	191	201	188	196

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	7.7	7.4	7.3	---	---	7.3	7.0	7.8	7.6	8.3	8.2
2	8.0	7.4	7.5	7.4	---	---	7.3	7.2	7.8	7.7	8.2	8.1
3	7.4	7.2	7.5	7.3	---	---	7.3	7.2	7.8	7.5	8.1	7.7
4	7.7	7.3	7.5	7.3	7.4	7.1	7.4	7.1	7.8	7.5	7.7	7.7
5	8.0	7.4	7.6	7.4	7.3	7.2	7.4	7.3	7.9	7.8	7.7	7.6
6	7.9	7.5	7.6	7.4	7.4	7.3	7.4	7.3	7.9	7.8	7.7	7.7
7	7.7	7.5	7.9	7.6	---	---	7.5	7.3	7.9	7.6	7.7	7.7
8	7.6	7.4	7.9	7.6	---	---	7.4	7.3	8.1	7.6	7.7	7.7
9	7.9	7.4	7.9	7.7	7.3	7.1	7.5	7.3	8.1	8.0	7.8	7.7
10	7.9	7.6	7.8	7.7	7.3	7.2	7.6	7.4	8.1	8.0	7.8	7.8
11	7.9	7.6	7.8	7.8	7.3	7.2	7.6	7.5	8.0	7.9	7.8	7.8
12	7.9	7.6	7.9	7.8	7.3	7.1	7.6	7.5	8.0	8.0	7.9	7.8
13	7.7	7.6	7.9	7.8	7.4	7.3	7.6	7.5	8.1	8.0	8.0	7.9
14	7.7	7.4	7.9	7.7	7.4	7.3	7.6	7.4	8.1	8.0	8.0	7.9
15	7.8	7.4	7.8	7.7	7.3	7.2	7.4	7.2	8.0	8.0	8.0	7.9
16	8.0	7.4	7.8	7.7	7.3	7.1	7.6	7.4	8.0	8.0	8.0	8.0
17	8.2	7.3	7.8	7.5	7.6	7.2	7.6	7.5	8.0	8.0	8.0	7.9
18	7.9	7.3	7.6	7.2	7.6	7.5	7.6	7.5	8.0	8.0	8.0	7.9
19	7.6	7.4	7.6	7.5	7.5	7.4	7.5	7.5	8.1	8.0	8.0	7.9
20	7.8	7.4	7.6	7.5	7.5	7.4	7.5	7.5	8.1	8.0	7.9	7.9
21	7.8	7.6	7.6	7.5	7.5	7.4	7.5	7.4	8.1	8.0	7.9	7.8
22	7.8	7.6	7.8	7.6	7.5	7.2	7.5	7.0	8.1	8.0	7.9	7.9
23	8.0	7.7	7.7	7.6	7.5	7.2	7.5	7.0	8.1	8.1	7.9	7.8
24	8.0	7.7	7.8	7.6	7.6	7.2	7.5	7.4	8.2	8.1	7.9	7.8
25	7.7	7.6	7.9	7.7	7.6	7.5	7.5	7.4	8.3	8.2	7.9	7.9
26	7.7	7.6	7.9	7.5	7.5	7.1	---	---	8.3	8.2	8.0	7.9
27	7.6	7.5	7.6	7.4	7.4	7.2	7.3	7.0	8.3	8.2	8.0	7.9
28	7.5	7.4	7.6	7.4	7.3	7.2	7.4	7.2	8.3	8.2	8.0	7.9
29	7.8	7.3	7.5	7.2	7.3	7.2	7.7	7.3	---	---	8.0	7.9
30	7.6	7.3	7.5	7.2	7.3	7.3	7.8	7.6	---	---	8.0	7.9
31	7.4	7.2	---	---	7.3	7.0	7.7	7.5	---	---	8.0	7.9
MONTH	8.2	7.2	7.9	7.2	7.6	7.0	7.8	7.0	8.3	7.5	8.3	7.6

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.9	8.6	8.1	7.5	7.2	7.7	7.7	7.9	7.5	7.8	7.6
2	8.1	7.9	8.6	8.1	7.5	7.3	7.8	7.7	7.8	7.4	7.7	7.4
3	8.1	8.1	8.5	8.0	7.4	7.2	7.9	7.7	7.6	7.5	7.5	7.4
4	8.1	8.1	8.3	8.1	7.3	7.2	8.0	7.7	7.5	7.4	8.4	7.4
5	8.1	8.0	8.5	8.2	7.4	7.2	8.0	7.8	7.4	7.3	8.3	7.9
6	8.1	8.0	8.4	7.9	7.4	7.3	8.6	7.8	7.6	7.3	8.0	7.7
7	8.1	8.0	8.3	7.9	7.3	7.2	8.6	8.0	8.4	7.4	7.7	7.6
8	8.1	8.0	8.3	7.9	7.2	7.1	8.3	7.9	8.5	7.5	7.8	7.5
9	8.1	8.0	8.0	7.7	7.1	7.1	8.0	7.8	8.2	7.7	7.7	7.5
10	8.2	8.1	8.4	7.8	7.2	7.0	8.0	7.7	8.1	7.8	7.6	7.4
11	8.1	8.1	8.6	8.0	7.2	7.0	8.0	7.8	7.9	7.6	7.8	7.5
12	8.1	8.0	8.5	7.7	7.1	6.9	8.1	7.7	7.8	7.5	8.1	7.6
13	8.0	8.0	8.0	7.5	7.3	6.9	8.1	7.7	7.7	7.4	8.2	7.7
14	8.1	7.9	8.2	7.5	7.8	7.2	7.9	7.7	8.4	7.6	8.0	7.7
15	8.1	7.9	7.9	7.5	7.8	7.6	8.1	7.6	8.2	7.6	7.9	7.6
16	8.2	7.8	8.0	7.5	7.6	7.5	8.0	7.6	8.1	7.6	7.8	7.6
17	8.5	7.8	8.1	7.6	7.6	7.5	8.1	7.7	8.0	7.5	7.9	7.4
18	8.6	8.3	8.2	7.7	7.7	7.6	8.2	7.6	7.8	7.5	7.9	7.4
19	8.6	8.2	8.1	7.5	7.8	7.6	8.0	7.6	7.8	7.6	8.1	7.5
20	8.6	8.0	8.0	7.4	7.8	7.7	7.9	7.7	7.7	7.5	7.8	7.5
21	8.6	8.3	7.9	7.3	7.8	7.7	7.7	7.6	8.0	7.6	8.1	7.4
22	8.4	8.1	8.1	7.5	7.8	7.7	7.8	7.5	8.0	7.6	8.1	7.5
23	8.3	7.9	8.1	7.7	7.9	7.7	7.7	7.4	8.4	7.7	7.8	7.6
24	8.4	7.9	8.2	7.5	7.8	7.7	7.5	7.4	8.2	7.8	7.7	7.6
25	8.5	8.2	7.8	7.3	7.9	7.7	7.6	7.4	8.0	7.7	7.7	7.6
26	8.8	8.1	7.6	7.1	7.8	7.7	7.6	7.4	7.8	7.5	7.6	7.5
27	8.9	8.5	7.4	7.0	7.8	7.6	7.6	7.3	7.7	7.4	7.6	7.5
28	8.5	8.0	7.7	7.2	7.6	7.5	7.5	7.4	7.7	7.4	7.7	7.4
29	8.5	8.1	7.6	7.1	7.5	7.5	7.5	7.3	7.7	7.4	7.8	7.4
30	8.6	8.3	7.5	7.2	7.7	7.4	7.4	7.3	8.0	7.5	7.8	7.6
31	---	---	7.5	7.3	---	---	8.0	7.4	7.9	7.7	---	---
MONTH	8.9	7.8	8.6	7.0	7.9	6.9	8.6	7.3	8.5	7.3	8.4	7.4

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.2	21.0	21.1	17.1	16.6	16.8	---	---	---	10.2	9.8	10.0
2	21.2	20.8	21.0	16.6	15.8	16.3	---	---	---	10.5	10.2	10.4
3	20.8	20.2	20.4	15.8	15.2	15.4	---	---	---	10.8	10.5	10.6
4	20.2	19.9	20.0	15.2	14.9	15.0	10.8	10.6	10.7	11.4	10.8	11.1
5	19.9	19.6	19.8	15.1	14.8	14.9	10.6	10.3	10.5	11.6	11.3	11.4
6	19.6	19.3	19.4	15.2	15.1	15.1	10.3	10.1	10.2	11.5	11.2	11.5
7	19.5	19.2	19.4	15.4	15.2	15.3	---	---	---	11.2	10.6	10.9
8	19.3	19.0	19.2	15.2	14.7	14.9	---	---	---	10.6	9.7	10.1
9	19.0	18.9	18.9	14.8	14.1	14.4	10.4	10.1	10.2	9.7	9.3	9.5
10	19.0	17.9	18.4	14.1	13.4	13.8	10.3	9.9	10.1	9.3	8.4	8.9
11	18.0	17.7	17.8	13.4	12.7	13.1	10.8	10.2	10.5	8.4	7.5	7.8
12	17.9	17.5	17.6	12.7	12.3	12.5	11.1	10.8	10.9	7.5	6.8	7.1
13	17.8	17.4	17.6	12.3	11.9	12.1	11.1	10.9	11.0	6.8	6.4	6.5
14	17.9	17.3	17.6	11.9	11.4	11.7	11.0	10.8	10.9	6.4	6.0	6.2
15	17.9	17.4	17.7	11.5	11.1	11.3	11.1	10.8	10.9	6.0	5.8	5.9
16	18.3	17.7	18.0	11.4	11.1	11.2	11.1	11.0	11.0	6.0	5.4	5.7
17	18.9	17.9	18.4	11.3	11.2	11.2	11.0	10.6	10.8	5.4	4.8	5.1
18	18.9	18.0	18.3	11.4	11.3	11.4	10.6	9.7	10.1	4.8	4.5	4.7
19	18.1	17.7	17.8	11.6	11.3	11.5	9.7	8.9	9.3	5.0	4.5	4.8
20	18.0	17.7	17.8	11.7	11.4	11.5	8.9	8.2	8.6	5.4	5.0	5.2
21	18.0	17.7	17.9	11.7	11.5	11.6	8.2	8.0	8.2	5.9	5.3	5.5
22	18.1	17.7	17.9	11.5	11.0	11.2	8.1	7.9	8.0	6.2	5.9	6.1
23	17.8	17.0	17.4	11.0	10.7	10.9	8.6	8.0	8.3	6.7	6.2	6.5
24	17.2	16.9	17.0	11.1	10.8	10.9	8.7	8.3	8.5	7.1	6.7	6.9
25	17.0	16.8	16.9	11.2	11.1	11.1	8.3	8.0	8.2	7.2	7.0	7.1
26	16.8	16.7	16.7	11.2	10.8	11.0	8.0	7.9	7.9	---	---	---
27	17.0	16.7	16.8	10.8	10.2	10.5	8.4	7.9	8.2	7.5	7.3	7.4
28	17.0	16.9	16.9	10.6	10.3	10.4	9.0	8.4	8.7	7.5	7.2	7.4
29	17.9	17.0	17.3	10.4	10.2	10.2	9.3	9.0	9.1	7.3	7.0	7.2
30	17.8	17.1	17.5	10.6	10.2	10.3	9.6	9.2	9.4	7.5	7.2	7.3
31	17.3	17.0	17.1	---	---	---	9.8	9.5	9.7	7.7	7.4	7.5
MONTH	21.2	16.7	18.2	17.1	10.2	12.6	11.1	7.9	9.6	11.6	4.5	7.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.6	7.4	7.5	11.4	10.5	10.9	11.9	11.5	11.7	16.3	15.3	15.6
2	7.7	7.4	7.6	12.0	11.3	11.6	12.1	11.5	11.8	16.5	15.4	15.9
3	8.0	7.7	7.8	12.0	11.8	11.9	12.4	11.9	12.1	16.6	15.9	16.2
4	8.4	8.0	8.2	12.0	11.6	11.8	12.3	12.0	12.2	16.3	15.8	16.0
5	8.3	8.0	8.2	12.3	11.8	12.1	12.1	11.9	12.0	17.0	16.2	16.6
6	8.0	7.8	7.9	12.3	11.9	12.0	12.6	12.0	12.2	17.0	16.3	16.7
7	8.2	7.8	8.0	11.9	11.5	11.7	12.5	12.2	12.3	17.7	16.4	17.0
8	8.3	8.1	8.2	11.9	11.5	11.6	12.8	12.4	12.6	17.6	17.2	17.4
9	8.1	7.7	7.9	11.8	11.3	11.5	12.8	12.3	12.6	17.2	16.7	17.0
10	7.7	7.5	7.6	11.4	11.1	11.2	12.7	12.1	12.4	17.4	16.8	17.1
11	7.5	7.4	7.5	11.4	10.9	11.2	12.7	12.1	12.4	18.4	17.2	17.7
12	7.5	7.3	7.4	11.3	10.9	11.1	12.9	12.4	12.6	18.4	17.0	17.6
13	7.4	7.2	7.3	11.0	10.7	10.8	12.7	12.3	12.6	17.8	16.9	17.3
14	7.2	7.1	7.2	10.8	10.4	10.7	12.6	12.0	12.3	17.9	16.8	17.4
15	7.2	6.9	7.1	10.4	9.9	10.1	12.8	12.1	12.4	17.6	16.7	17.2
16	7.3	7.0	7.1	9.9	9.5	9.7	12.9	12.1	12.5	17.6	16.8	17.3
17	7.4	7.0	7.2	9.7	9.5	9.6	12.9	12.0	12.4	17.8	17.2	17.5
18	7.7	7.1	7.4	9.6	9.4	9.5	13.0	12.6	12.8	18.4	17.2	17.8
19	7.9	7.4	7.6	9.8	9.6	9.7	13.5	12.9	13.2	18.4	17.5	17.9
20	8.2	7.8	8.0	9.9	9.5	9.7	14.3	12.9	13.5	18.4	17.7	18.0
21	8.9	8.2	8.6	10.4	9.8	10.1	14.3	13.7	14.0	18.4	17.3	17.9
22	9.0	8.7	8.9	10.6	10.3	10.5	14.2	13.6	14.0	19.2	17.9	18.7
23	9.0	8.6	8.9	11.1	10.4	10.8	14.2	13.7	14.1	19.3	18.2	19.0
24	9.1	8.7	8.9	11.4	10.9	11.1	14.5	13.9	14.3	20.2	18.8	19.5
25	9.4	8.9	9.1	11.7	11.1	11.4	14.9	14.4	14.6	19.8	18.6	19.1
26	9.6	9.3	9.4	11.8	11.4	11.6	15.6	14.4	14.9	19.2	18.6	19.0
27	10.1	9.6	9.9	12.1	11.4	11.7	15.8	15.3	15.6	20.0	18.4	19.1
28	10.5	9.9	10.3	12.4	11.6	11.9	15.4	14.6	14.8	20.5	19.8	20.2
29	---	---	---	12.5	11.9	12.2	15.4	14.7	15.0	20.0	19.2	19.7
30	---	---	---	12.5	12.3	12.4	16.4	15.2	15.7	20.2	19.4	19.8
31	---	---	---	12.3	11.9	12.1	---	---	---	20.2	19.5	20.0
MONTH	10.5	6.9	8.1	12.5	9.4	11.1	16.4	11.5	13.2	20.5	15.3	17.8

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.9	19.4	19.7	19.2	18.7	18.9	26.7	25.4	26.1	25.2	24.6	24.8
2	19.8	19.2	19.5	19.9	19.2	19.6	26.5	25.3	25.8	25.1	24.5	24.9
3	19.5	19.0	19.1	20.2	19.5	19.8	25.9	25.6	25.7	24.7	24.3	24.5
4	19.5	18.9	19.1	20.8	19.9	20.3	25.8	25.1	25.5	26.0	24.6	25.3
5	19.3	19.0	19.2	21.0	20.4	20.8	25.5	24.9	25.3	25.6	25.0	25.4
6	19.0	18.7	18.9	21.9	20.6	21.2	26.0	25.2	25.7	25.0	24.5	24.7
7	18.7	18.4	18.6	22.1	20.9	21.5	27.0	25.5	26.3	24.5	24.2	24.4
8	18.4	18.0	18.1	22.0	21.0	21.4	26.7	25.5	26.2	24.6	24.1	24.4
9	18.0	17.8	17.9	21.7	21.2	21.4	25.8	25.3	25.6	24.3	24.1	24.2
10	17.8	17.4	17.6	22.2	21.4	21.7	25.3	25.0	25.1	24.1	23.9	24.0
11	17.6	17.4	17.4	22.5	22.0	22.3	25.2	24.8	25.0	24.4	23.8	24.1
12	17.5	17.0	17.2	22.9	21.9	22.3	25.2	24.7	24.9	24.4	23.8	24.1
13	17.7	17.2	17.4	23.1	21.8	22.4	25.5	24.6	24.9	24.4	23.6	24.0
14	17.5	17.0	17.3	23.2	21.9	22.4	25.3	24.6	25.0	24.3	23.6	23.9
15	17.3	16.8	17.0	23.5	21.8	22.6	25.3	24.5	24.9	24.4	23.6	23.9
16	17.4	17.0	17.2	23.5	22.5	22.9	25.6	24.4	25.0	24.1	23.7	23.9
17	17.4	17.0	17.2	24.1	22.8	23.2	25.6	24.5	25.0	24.3	23.7	23.9
18	17.5	17.0	17.2	24.5	22.6	23.5	25.5	24.4	25.0	24.5	23.5	24.0
19	18.2	17.5	17.7	24.3	22.8	23.4	25.8	25.1	25.4	24.5	23.7	24.2
20	18.8	17.9	18.3	24.5	23.1	23.7	25.7	25.2	25.4	24.2	23.5	23.9
21	18.7	18.4	18.6	24.3	23.4	23.8	26.1	24.9	25.6	24.2	23.3	23.8
22	18.5	18.3	18.4	25.2	23.2	24.4	25.6	24.8	25.3	24.2	23.6	24.0
23	19.0	18.2	18.6	25.3	23.5	24.3	25.7	25.1	25.4	23.9	23.3	23.6
24	19.3	18.6	18.9	24.5	23.5	24.0	25.4	25.0	25.2	23.3	23.1	23.2
25	19.6	18.9	19.2	25.1	24.1	24.6	25.1	24.7	24.9	23.1	22.4	22.8
26	19.5	19.0	19.2	25.9	24.2	24.9	24.9	24.4	24.7	22.5	22.2	22.3
27	19.9	19.1	19.5	25.8	24.7	25.1	24.9	24.2	24.5	22.6	22.2	22.4
28	19.4	19.1	19.3	25.5	24.6	25.0	24.9	24.0	24.5	22.5	22.0	22.3
29	19.3	19.0	19.2	25.4	24.4	24.9	24.6	24.0	24.4	22.2	21.7	22.0
30	19.1	18.8	18.9	25.7	24.5	25.1	25.1	24.2	24.6	22.2	21.8	21.9
31	---	---	---	26.8	25.2	26.2	25.3	24.7	24.9	---	---	---
MONTH	19.9	16.8	18.4	26.8	18.7	22.8	27.0	24.0	25.2	26.0	21.7	23.8

OXYGEN DISSOLVED (DO) MG/L, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.3	8.3	8.8	8.6	8.2	8.5	---	---	---	10.8	10.5	10.7
2	9.0	8.0	8.5	9.1	8.5	8.8	---	---	---	10.6	10.4	10.5
3	8.3	7.5	7.8	9.4	8.8	9.1	---	---	---	10.6	10.4	10.5
4	8.9	8.1	8.5	9.6	8.9	9.2	10.8	10.1	10.4	10.5	10.4	10.5
5	9.3	8.4	8.7	9.8	9.3	9.6	10.8	10.5	10.6	10.6	10.5	10.5
6	9.4	8.5	8.9	9.8	9.4	9.6	10.8	9.6	10.3	10.6	10.5	10.6
7	9.2	8.6	8.9	10.0	9.6	9.8	---	---	---	10.8	10.6	10.7
8	9.0	8.5	8.8	9.8	9.4	9.6	---	---	---	10.9	10.8	10.8
9	9.6	8.6	9.1	9.8	9.5	9.6	10.3	10.0	10.1	11.0	10.8	10.9
10	10.0	9.0	9.5	10.0	9.6	9.7	10.4	10.1	10.3	11.2	10.9	11.0
11	10.5	9.3	9.7	10.2	9.8	10.0	10.3	9.8	10.1	11.5	11.2	11.4
12	10.3	9.4	9.7	10.6	10.1	10.3	10.2	9.8	10.0	11.7	11.5	11.6
13	9.8	9.3	9.5	10.6	10.2	10.4	10.2	9.9	10.0	11.9	11.7	11.8
14	9.8	8.7	9.2	10.4	10.2	10.3	10.2	9.8	10.1	11.9	11.8	11.9
15	10.0	8.7	9.4	10.6	10.2	10.4	10.3	9.8	10.0	12.0	11.8	11.9
16	10.5	8.9	9.7	10.8	10.2	10.5	10.3	9.8	9.9	12.5	12.0	12.2
17	11.5	9.1	10.1	10.6	10.3	10.4	11.8	10.3	10.9	12.8	12.5	12.7
18	10.7	7.9	8.8	10.3	9.9	9.9	12.1	10.1	11.5	12.9	12.7	12.8
19	9.0	8.4	8.7	10.4	9.9	10.1	10.4	10.1	10.3	12.8	12.7	12.8
20	10.0	8.6	9.3	10.5	10.1	10.4	10.6	10.4	10.5	12.7	12.6	12.7
21	9.8	9.2	9.5	10.5	10.3	10.4	11.0	10.6	10.8	12.7	12.6	12.6
22	10.5	9.0	9.4	11.1	10.3	10.7	11.2	10.9	11.0	12.6	12.5	12.6
23	9.9	9.1	9.6	11.3	10.7	11.0	11.4	11.1	11.2	12.6	12.4	12.5
24	9.9	9.3	9.7	11.5	11.0	11.3	11.5	11.3	11.4	12.4	12.2	12.4
25	9.3	8.9	9.1	11.4	10.7	11.1	11.6	11.4	11.5	13.6	12.2	12.7
26	9.4	9.1	9.2	11.3	11.0	11.2	11.5	11.2	11.3	---	---	---
27	9.3	9.0	9.1	11.5	10.9	11.2	11.9	11.0	11.2	---	---	---
28	9.1	8.5	8.7	11.1	10.8	10.9	11.0	10.7	10.8	14.6	11.0	12.9
29	9.7	8.2	8.8	11.2	10.9	11.1	10.8	10.6	10.7	14.6	14.2	14.4
30	9.1	7.9	8.5	11.2	11.0	11.2	10.8	10.5	10.7	14.8	11.6	13.3
31	8.6	7.8	8.2	---	---	---	11.0	10.5	10.7	11.7	11.4	11.6
MONTH	11.5	7.5	9.1	11.5	8.2	10.2	12.1	9.6	10.6	14.8	10.4	11.8

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.8	11.5	11.6	10.5	10.3	10.4	13.5	12.9	13.4	11.0	9.5	9.9
2	11.9	11.7	11.8	10.8	10.2	10.5	13.5	12.1	12.6	10.6	9.5	10.1
3	11.8	11.6	11.7	10.5	10.2	10.4	12.2	12.0	12.1	10.3	9.6	9.8
4	11.7	11.3	11.4	10.9	10.3	10.7	12.2	12.0	12.1	10.1	9.6	9.9
5	11.5	11.3	11.4	10.6	10.0	10.3	12.2	11.9	12.0	11.0	10.0	10.4
6	11.8	11.4	11.6	10.2	9.8	10.0	11.9	11.3	11.3	10.8	9.8	10.2
7	11.8	11.4	11.6	9.8	9.6	9.7	11.4	11.2	11.3	11.3	9.8	10.6
8	11.5	11.2	11.4	10.2	9.7	9.9	11.4	11.1	11.3	11.2	10.3	10.6
9	11.7	11.4	11.5	11.1	10.1	10.6	11.4	11.2	11.3	10.4	9.8	10.1
10	11.7	11.5	11.6	11.6	11.1	11.4	11.7	11.3	11.5	10.9	9.8	10.5
11	11.5	11.3	11.4	11.9	11.6	11.7	11.6	11.4	11.5	12.2	10.5	11.4
12	11.3	11.2	11.2	12.1	11.5	12.0	11.5	11.2	11.3	12.1	9.7	10.9
13	11.2	10.5	11.0	12.3	11.5	12.1	11.2	10.9	11.1	11.5	9.7	10.7
14	11.5	10.6	11.2	12.5	12.2	12.4	11.3	10.9	11.0	12.0	9.6	10.8
15	11.1	11.0	11.1	12.8	12.5	12.6	11.6	10.9	11.4	11.0	9.3	10.3
16	11.2	11.1	11.1	13.0	12.8	12.9	11.9	11.1	11.4	11.7	9.3	10.9
17	11.2	11.1	11.1	13.3	12.7	13.0	11.4	10.9	11.1	11.3	10.1	10.7
18	11.2	11.0	11.1	13.4	13.2	13.3	11.4	11.0	11.2	10.8	9.8	10.1
19	11.1	11.0	11.1	13.4	13.0	13.2	11.3	10.8	11.1	10.0	8.5	9.5
20	11.1	11.0	11.1	13.1	12.9	13.0	11.7	10.6	11.2	9.8	8.4	9.4
21	11.0	10.9	11.0	12.9	12.6	12.8	11.7	11.1	11.3	10.5	8.5	9.7
22	10.9	10.7	10.8	13.2	12.7	12.9	11.4	10.9	11.1	10.3	8.7	9.8
23	10.8	10.7	10.8	13.2	12.8	13.1	11.2	10.8	11.0	9.6	8.5	9.1
24	10.9	10.7	10.8	13.0	12.7	12.9	11.7	10.8	11.1	9.8	7.6	9.0
25	10.9	10.7	10.8	13.0	12.8	12.9	11.0	10.1	10.5	9.7	7.9	8.9
26	10.8	10.6	10.7	13.1	13.0	13.0	11.2	10.6	10.8	10.0	7.2	9.1
27	10.6	10.5	10.5	13.1	12.7	13.0	11.0	10.9	10.9	9.7	7.2	8.9
28	10.7	10.4	10.5	13.0	12.9	13.0	10.9	10.1	10.5	11.1	9.1	10.1
29	---	---	---	13.1	12.5	13.0	11.0	10.1	10.7	10.4	7.9	9.6
30	---	---	---	13.1	12.8	13.0	11.4	10.6	11.0	10.6	7.7	9.1
31	---	---	---	13.4	12.9	13.2	---	---	---	10.3	9.1	9.7
MONTH	11.9	10.4	11.2	13.4	9.6	12.0	13.5	10.1	11.3	12.2	7.2	10.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.9	8.5	9.1	10.3	9.3	9.8	8.6	7.0	7.8	9.4	8.7	9.1
2	10.6	7.0	8.9	10.0	9.1	9.5	8.6	6.8	7.6	9.3	7.9	8.7
3	7.6	6.6	7.1	10.2	9.2	9.7	8.4	7.4	7.9	8.5	7.2	7.9
4	8.8	6.9	7.5	10.2	9.3	9.7	8.0	7.0	7.6	8.9	7.2	8.1
5	8.3	7.6	8.0	10.2	9.7	9.9	7.6	6.6	7.2	9.1	8.1	8.7
6	8.4	7.4	8.0	11.6	9.2	10.4	8.4	6.4	7.5	9.8	8.6	9.3
7	9.1	7.9	8.5	11.4	9.7	10.5	9.1	6.2	7.7	9.9	8.9	9.3
8	10.0	8.7	9.3	10.6	9.4	9.9	9.4	7.2	8.2	9.3	8.3	8.8
9	9.9	9.3	9.6	9.9	9.0	9.4	8.7	7.9	8.3	8.7	7.9	8.3
10	9.8	9.1	9.5	9.9	8.9	9.3	9.0	8.0	8.4	8.2	6.7	7.4
11	9.9	9.0	9.5	10.1	9.1	9.6	8.9	7.7	8.2	7.3	6.4	6.9
12	10.7	9.2	10.1	10.1	8.3	9.2	8.7	7.2	8.1	6.5	5.8	6.2
13	12.0	10.2	11.1	10.1	7.8	8.9	8.3	7.2	7.6	6.9	5.9	6.4
14	12.2	11.5	12.0	8.5	7.2	7.8	8.6	6.7	7.5	6.7	6.1	6.4
15	12.1	11.1	11.6	9.3	7.0	8.2	8.5	6.6	7.5	6.6	6.1	6.4
16	11.1	9.9	10.7	9.2	7.9	8.4	8.2	6.7	7.3	6.5	6.1	6.3
17	10.7	9.6	10.6	9.5	8.1	8.6	8.0	6.3	7.1	6.4	5.9	6.2
18	11.0	10.6	10.8	9.8	7.9	8.7	7.6	5.8	6.8	6.5	5.7	6.1
19	11.0	10.3	10.8	9.3	7.9	8.6	7.7	6.2	6.9	6.3	5.5	5.9
20	11.1	10.2	10.8	9.2	8.1	8.6	7.1	6.3	6.8	5.8	5.2	5.6
21	11.1	9.3	10.5	8.4	7.8	8.2	7.8	6.7	7.1	6.1	5.2	5.7
22	11.4	9.5	10.5	8.6	7.6	8.2	8.1	6.6	7.5	6.1	5.3	5.7
23	11.3	10.8	11.2	8.4	7.4	7.9	8.9	7.1	8.0	5.9	5.4	5.6
24	11.4	9.9	10.5	8.1	7.1	7.6	8.5	7.4	7.9	6.0	5.6	5.7
25	10.1	9.8	10.0	8.3	7.0	7.7	8.3	6.9	7.5	6.0	5.8	5.9
26	10.2	9.7	9.9	8.3	7.3	7.7	8.1	6.2	7.2	6.4	5.8	6.1
27	10.1	9.3	9.8	8.3	7.1	7.7	8.6	6.1	7.4	6.5	5.9	6.2
28	9.4	9.0	9.2	7.8	7.2	7.6	9.4	7.7	8.7	6.4	6.0	6.3
29	9.4	9.0	9.3	7.6	6.6	7.2	9.8	8.2	9.0	7.6	5.9	6.7
30	10.3	8.9	9.5	7.2	6.5	6.9	9.3	8.1	9.0	7.7	7.0	7.4
31	---	---	---	8.6	6.9	7.8	9.4	8.8	9.2	---	---	---
MONTH	12.2	6.6	9.8	11.6	6.5	8.7	9.8	5.8	7.8	9.9	5.2	7.0

CUMBERLAND RIVER BASIN
034263100 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17	7	26	8	---	---	8	6	41	20	12	8
2	16	10	27	14	---	---	8	6	21	16	17	3
3	22	10	23	11	---	---	10	8	22	16	130	5
4	24	11	22	7	24	17	10	8	22	19	130	74
5	23	14	15	4	18	13	10	8	21	18	170	95
6	22	11	11	3	14	11	9	8	20	14	160	94
7	24	10	11	5	---	---	10	9	16	13	130	99
8	22	9	11	9	---	---	10	9	21	15	110	87
9	17	7	11	9	13	8	11	9	19	13	87	67
10	15	6	11	8	10	8	11	10	16	12	75	55
11	18	12	12	7	11	6	11	10	13	10	58	40
12	21	12	12	7	7	5	11	10	11	9	40	30
13	22	12	10	5	7	5	12	9	13	10	32	24
14	21	11	10	5	6	4	12	10	13	10	27	24
15	24	13	10	4	6	4	14	11	13	10	33	23
16	32	18	8	4	8	5	13	11	10	5	24	22
17	33	20	8	4	10	5	12	10	10	3	25	21
18	33	20	9	4	15	6	12	10	8	4	22	19
19	29	18	6	2	19	12	13	11	9	8	22	18
20	22	17	5	2	21	17	16	13	9	7	27	20
21	18	15	7	2	21	13	17	14	9	7	39	27
22	27	14	7	3	18	9	15	14	10	8	31	26
23	23	10	8	2	11	6	16	14	10	8	47	29
24	12	8	12	3	12	7	19	13	9	7	54	33
25	14	7	12	3	16	10	17	13	13	8	43	25
26	10	5	---	---	15	11	---	---	10	8	31	21
27	11	5	4	4	14	10	23	21	13	8	23	20
28	9	3	10	8	18	11	23	16	11	9	21	18
29	11	4	11	9	15	8	16	12	---	---	20	18
30	19	8	14	11	17	9	34	15	---	---	23	18
31	17	7	---	---	13	6	43	30	---	---	24	19
MONTH	33	3	27	2	24	4	43	6	41	3	170	3

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	29	19	10	3	22	11	19	13	20	8	10	6
2	21	17	8	5	24	13	16	12	14	8	14	6
3	19	17	11	7	20	13	16	12	12	8	9	6
4	20	16	11	7	21	11	15	11	12	8	11	5
5	21	16	11	6	18	10	14	10	12	5	12	5
6	22	16	11	8	14	8	16	10	13	5	13	7
7	22	18	11	6	12	6	14	10	16	5	10	6
8	20	15	10	6	9	4	13	8	16	8	9	5
9	18	15	11	7	8	4	13	9	14	8	9	6
10	17	13	13	7	10	5	13	9	13	8	10	5
11	16	12	10	6	11	4	12	8	13	7	12	5
12	16	12	10	7	10	3	12	8	12	8	10	4
13	16	12	11	6	8	2	12	7	13	8	10	5
14	18	12	11	7	10	3	12	7	10	7	11	4
15	14	10	11	4	11	6	10	5	12	6	13	5
16	13	5	11	4	10	2	10	6	10	7	15	6
17	15	10	11	6	15	6	10	6	9	5	11	4
18	16	9	12	6	18	13	10	7	9	5	8	4
19	15	11	9	3	19	13	11	6	9	4	8	3
20	16	10	11	3	19	11	11	6	11	5	10	1
21	13	8	8	3	20	16	14	5	11	7	8	2
22	12	8	11	5	20	17	13	7	12	6	10	2
23	11	6	10	4	20	17	14	7	14	5	20	4
24	12	6	9	4	20	16	12	7	13	7	9	4
25	9	5	9	2	18	14	13	7	21	8	13	5
26	10	5	9	2	20	14	13	8	---	---	10	5
27	10	5	11	2	20	14	13	7	---	---	8	4
28	10	6	12	7	19	13	13	7	11	7	9	5
29	9	4	12	6	19	14	12	5	11	6	9	4
30	9	2	12	5	19	12	12	7	10	5	9	6
31	---	---	14	8	---	---	12	8	9	6	---	---
MONTH	29	2	14	2	24	2	19	5	21	4	20	1

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CUMBERLAND RIVER BASIN

03426385 MANSKER CREEK ABOVE GOODLETTSVILLE, TN

LOCATION.--Lat 36°20'20", long 86°43'04", Davidson County, Hydrologic Unit 05130202, on left bank at downstream end of bridge on U.S. Highway 31W, at mouth of Slater Creek, 400 ft below Lumsley Fork, and 1.2 mi north of Goodlettsville.

DRAINAGE AREA.--27.7 mi^2, includes Slater Creek.

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Data collection platform. Datum of gage is 434.99 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic obsevations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0115	1,420	6.82	Mar. 5	1300	2,750	9.50
Dec. 16	2145	2,890	9.79	Mar. 19	0130	1,680	7.38
Mar. 1	0830	3,150	10.30	June 8	1815	1,390	6.77
Mar. 2	0200	*12,500	*13.31	June 14	0145	3,990	11.99
Mar. 3	0400	4,330	12.08	June 17	0815	1,610	7.23

Minimum discharge, 1.3 ft^3/s, Aug. 7, 8, Sept. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	258	452	32	49	788	38	160	32	76	2.5	3.1
2	22	104	135	30	41	1890	34	70	20	38	2.1	2.1
3	17	60	87	28	40	1340	30	58	14	25	1.9	3.2
4	13	44	63	28	295	243	28	41	12	55	1.8	2.4
5	11	35	78	78	130	993	29	33	10	30	1.6	1.9
6	9.6	31	79	55	82	270	28	27	9.6	21	1.6	1.8
7	8.6	201	64	44	65	145	24	22	60	16	1.4	1.8
8	7.9	169	52	39	85	100	22	22	135	12	1.4	1.7
9	7.4	87	43	46	73	81	20	20	99	10	6.5	6.0
10	6.8	62	39	45	59	77	19	17	48	8.8	4.0	4.8
11	6.5	48	35	38	51	65	19	14	41	7.4	3.5	4.1
12	6.2	39	66	34	44	55	19	13	47	6.6	3.4	2.4
13	5.9	34	61	30	47	53	18	12	154	5.9	4.5	2.1
14	5.8	34	51	28	51	80	16	12	786	5.4	3.7	1.7
15	5.5	31	44	64	45	67	14	10	137	4.8	3.1	1.7
16	5.6	29	622	90	40	57	13	9.3	77	4.4	2.4	1.7
17	5.9	51	835	58	37	51	13	8.9	266	3.9	6.6	1.7
18	16	118	163	47	34	115	13	8.6	123	3.6	14	1.7
19	9.8	88	90	41	32	529	13	9.1	64	3.2	19	1.6
20	8.2	64	61	36	30	152	13	11	42	2.9	50	1.5
21	7.6	54	50	33	32	90	28	8.7	43	2.8	17	1.5
22	11	45	43	90	29	64	23	8.1	33	2.5	9.5	1.7
23	30	39	38	78	26	49	22	7.3	25	2.9	6.9	12
24	20	35	193	367	24	40	20	6.8	20	2.4	5.6	48
25	16	113	90	140	23	44	18	7.5	16	2.1	4.7	33
26	34	115	64	83	41	55	16	8.6	13	1.8	4.1	14
27	49	75	54	99	55	46	18	8.9	11	1.7	3.6	8.9
28	91	57	47	226	51	63	124	8.4	10	4.6	3.4	6.6
29	44	48	42	110	---	66	153	7.9	17	6.8	3.0	5.4
30	31	289	37	76	---	54	64	7.2	117	4.1	2.8	4.3
31	24	----	35	59	---	45	----	45	---	3.1	2.5	---
TOTAL	564.3	2457	3813	2252	1611	7767	909	702.3	2481.6	374.7	198.1	184.4
MEAN	18.2	81.9	123	72.6	57.5	251	30.3	22.7	82.7	12.1	6.39	6.15
MAX	91	289	835	367	295	1890	153	160	786	76	50	48
MIN	5.5	29	35	28	23	40	13	6.8	9.6	1.7	1.4	1.5
CFSM	.66	2.96	4.44	2.62	2.08	9.05	1.09	.82	2.99	.44	.23	.22
IN.	.76	3.30	5.12	3.02	2.16	10.43	1.22	.94	3.33	.50	.27	.25

CUMBERLAND RIVER BASIN

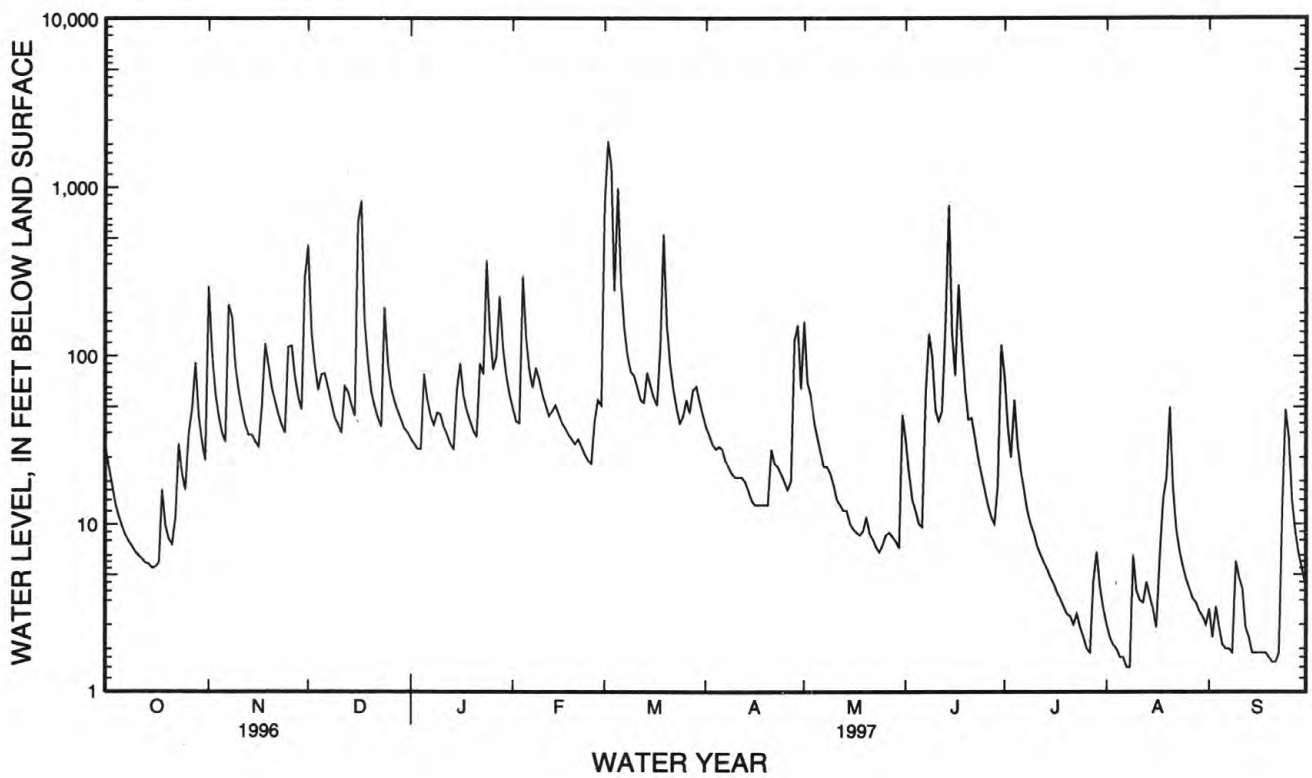
03426385 MANSKER CREEK ABOVE GOODLETTSVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

MEAN	14.8	47.0	65.8	76.3	81.5	141	63.4	49.7	37.2	7.31	5.95	13.7
MAX	21.7	81.9	123	89.2	169	251	114	69.2	82.7	12.1	14.0	52.2
(WY)	1996	1997	1997	1995	1994	1997	1994	1995	1997	1997	1994	1996
MIN	6.15	10.2	15.2	67.2	46.4	66.3	23.2	22.7	8.81	2.58	1.17	2.22
(WY)	1994	1994	1996	1996	1995	1995	1995	1997	1995	1995	1993	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1993 - 1997	
ANNUAL TOTAL	20584.1		23314.4			
ANNUAL MEAN	56.2		63.9		50.5	
HIGHEST ANNUAL MEAN					63.9	1997
LOWEST ANNUAL MEAN					34.1	1995
HIGHEST DAILY MEAN	835	Dec 17	1890	Mar 2	1890	Mar 2 1997
LOWEST DAILY MEAN	1.4	Aug 31	1.4	Aug 7	.29	Sep 13 1993
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 19	1.6	Sep 15	.53	Sep 8 1993
INSTANTANEOUS PEAK FLOW			12500	Mar 2	12500	Mar 2 1997
INSTANTANEOUS PEAK STAGE			13.31	Mar 2	13.31	Mar 2 1997
INSTANTANEOUS LOW FLOW			a1.3	Aug 7	.20	Aug 22 1993
ANNUAL RUNOFF (CFSM)	2.03		2.31		1.82	
ANNUAL RUNOFF (INCHES)	27.64		31.31		24.77	
10 PERCENT EXCEEDS	130		115		100	
50 PERCENT EXCEEDS	30		30		16	
90 PERCENT EXCEEDS	2.5		3.0		2.0	

a Also occurred Aug. 8, Sept. 20, 21.



CUMBERLAND RIVER BASIN

03426470 DRY CREEK NEAR EDENWOLD, TN

LOCATION.--Lat 36°17'05", long 86°42'24", Davidson County, Hydrologic Unit 05130202, on right wingwall on downstream side of bridge on Gallatin Pike, 0.6 mi southwest of Edenwold, 0.6 mi northeast of Amqui, and at mile 1.2.

DRAINAGE AREA.--7.64 mi^2.

PERIOD OF RECORD.--October 1996 to September 1997.

GAGE.--Data collection platform. Elevation of gage is 430 ft above sea level, from topographic map.

REMARKS.--Records good,except for estimated daily discharges, which are fair. Periodic obsevations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1050 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 16	2030	1,190	7.64	June 14	0130	1,950	8.26
Mar. 2	0130	1,610	8.00	June 21	1015	*3,720	*9.25
Mar. 3	0245	2,110	8.37	June 30	1700	1,440	7.86

Minimum discharge, 0.13 ft^3/s, Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.0	e71	117	7.3	9.7	154	6.8	8.8	16	28	1.3	.37
2	e6.2	e29	30	6.8	8.0	354	6.0	6.2	5.9	12	1.2	.34
3	e4.8	e15	19	6.2	7.9	370	5.3	6.6	3.5	7.8	1.0	1.1
4	e3.6	e9.8	13	8.7	73	53	4.9	4.6	2.5	6.6	.96	.65
5	e3.1	e7.6	20	31	24	262	5.4	3.8	1.9	5.1	.89	.50
6	e2.7	7.3	15	13	16	72	5.1	3.3	1.7	4.4	.85	.42
7	e2.4	97	12	10	13	30	4.3	2.9	5.4	3.8	.78	.37
8	e2.2	47	9.7	9.2	19	18	3.9	3.0	33	2.9	.74	.34
9	e2.1	25	8.4	12	13	13	3.6	2.8	21	2.5	2.8	.55
10	e1.7	18	7.6	10	11	12	3.3	2.4	8.8	2.2	1.8	.51
11	e1.8	13	6.9	8.9	8.9	9.1	3.2	2.1	13	2.0	1.6	.39
12	e1.7	11	19	8.1	7.8	7.8	3.1	2.0	14	1.8	e1.5	.32
13	e1.6	9.2	11	7.4	11	7.3	2.9	1.8	46	1.7	e2.2	.30
14	e1.5	11	9.1	6.9	10	36	2.7	1.7	224	1.6	1.4	.24
15	e1.5	9.9	7.9	23	8.4	12	2.7	1.5	27	1.5	1.0	.24
16	e1.6	8.9	256	19	7.5	9.2	2.6	1.4	19	1.4	.81	.23
17	e1.7	56	218	12	6.6	8.2	2.5	1.3	72	1.3	1.2	.20
18	e4.5	65	44	9.4	5.9	73	2.5	1.2	24	1.2	2.0	.20
19	e2.7	33	24	8.5	5.2	114	2.5	2.9	14	1.1	10	.17
20	e2.3	22	16	7.5	4.9	30	2.4	3.3	10	1.1	14	.17
21	e2.1	17	13	6.8	5.8	18	21	1.7	215	1.0	3.1	.17
22	e3.1	13	11	23	5.0	12	6.3	1.3	21	1.0	1.7	.19
23	e8.4	11	10	14	4.4	9.8	5.0	1.1	12	.94	1.3	6.5
24	e5.7	9.5	75	137	4.1	8.3	3.9	.99	8.6	.90	1.0	42
25	e4.5	55	21	29	4.0	12	3.3	1.5	6.6	.85	.85	12
26	e9.5	31	16	17	14	11	3.0	2.4	5.6	.82	.74	3.5
27	e14	20	13	42	11	8.2	3.7	2.2	4.8	.75	.63	1.8
28	e25	16	11	70	8.3	13	53	1.9	4.4	3.5	.57	1.2
29	e13	13	9.9	25	---	13	25	2.1	6.6	2.7	.52	1.1
30	e8.8	174	8.8	17	---	9.3	9.5	1.8	120	1.9	.46	1.2
31	e6.8	---	7.9	13	---	7.8	---	51	---	1.5	.41	---
TOTAL	159.6	925.2	1060.2	618.7	327.4	1767.0	209.4	131.59	967.3	105.86	59.31	77.27
MEAN	5.15	30.8	34.2	20.0	11.7	57.0	6.98	4.24	32.2	3.41	1.91	2.58
MAX	25	174	256	137	73	370	53	51	224	28	14	42
MIN	1.5	7.3	6.9	6.2	4.0	7.3	2.4	.99	1.7	.75	.41	.17
CFSM	.67	4.04	4.48	2.61	1.53	7.46	.91	.56	4.22	.45	.25	.34
IN.	.78	4.50	5.16	3.01	1.59	8.60	1.02	.64	4.71	.52	.29	.38

e Estimated

CUMBERLAND RIVER BASIN

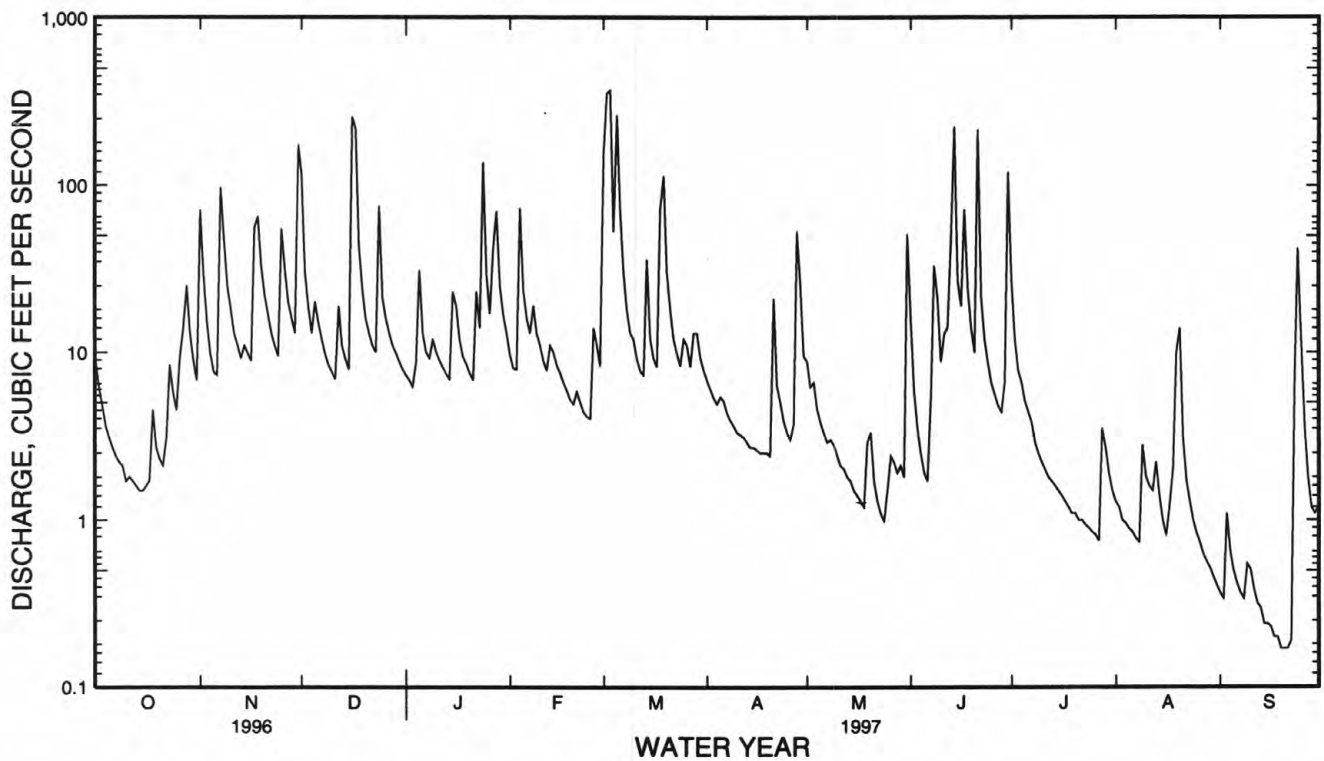
03426470 DRY CREEK NEAR EDENWOLD, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)

MEAN	5.15	30.8	34.2	20.0	11.7	57.0	6.98	4.24	32.2	3.41	1.91	2.58
MAX	5.15	30.8	34.2	20.0	11.7	57.0	6.98	4.24	32.2	3.41	1.91	2.58
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	5.15	30.8	34.2	20.0	11.7	57.0	6.98	4.24	32.2	3.41	1.91	2.58
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS FOR 1997 WATER YEAR

ANNUAL TOTAL	6408.83		
ANNUAL MEAN	17.6		
HIGHEST DAILY MEAN	370	Mar	3
LOWEST DAILY MEAN	.17	Sep	19
ANNUAL SEVEN-DAY MINIMUM	19	Sep	16
INSTANTANEOUS PEAK FLOW	3720	Jun	21
INSTANTANEOUS PEAK STAGE	9.25	Jun	21
INSTANTANEOUS LOW FLOW	.13	Sep	20
ANNUAL RUNOFF (CFSM)	2.30		
ANNUAL RUNOFF (INCHES)	31.21		
10 PERCENT EXCEEDS	31		
50 PERCENT EXCEEDS	6.6		
90 PERCENT EXCEEDS	.90		



CUMBERLAND RIVER BASIN

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN

LOCATION.--Lat 35°54'10", long 86°25'48", Rutherford County, Hydrologic Unit 05130203, on left bank at Murfreesboro sewage treatment plant outfall, 3,000 ft downstream from Sinking Creek, 4.5 mi northwest of the courthouse in Murfreesboro, and at mile 10.7.

DRAINAGE AREA.--177 mi^2, includes 17 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1972 to January 1982, January 1986 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 514.95 ft above sea level.

REMARKS.--Records good. Flow is affected by Murfreesboro sewage treatment plant outflow. An annual average of 11.6 ft^3/s, with a maximum of 15.5 ft^3/s is discharged to the West Fork Stones River 25 ft above the station. Prior to July 1987 an annual average of 7.7 ft^3/s was discharged. Natural flow of stream affected by transbasin diversion of water from East Fork Stones River basin into the West Fork Stones River basin.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0700	9,870	17.16	Mar. 5	2400	6,800	14.50
Jan. 28	1100	5,510	12.84	June 1	0300	*14,100	*19.29
Mar. 3	1400	9,870	17.16				

Minimum discharge 13.0 ft^3/s, Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	90	7160	607	392	945	150	176	6280	755	29	19
2	442	119	1390	436	332	1650	135	137	1390	419	27	19
3	282	131	745	358	329	6420	123	804	851	264	25	28
4	184	103	532	300	611	1610	114	440	569	197	24	28
5	131	86	493	1260	691	2660	133	271	438	169	25	23
6	102	75	616	697	506	2900	201	205	369	134	26	19
7	86	147	443	486	414	1020	185	162	318	114	23	19
8	73	1890	361	401	582	710	139	135	274	98	21	18
9	64	539	305	717	513	565	122	128	528	85	32	27
10	58	363	267	570	412	498	108	115	508	77	38	71
11	52	295	238	448	353	418	101	99	355	72	30	32
12	47	243	232	377	304	360	95	88	391	64	27	27
13	42	204	251	331	310	317	89	82	700	59	40	24
14	40	207	225	293	532	330	82	74	399	55	53	21
15	37	218	198	302	421	298	76	67	300	52	35	19
16	35	194	205	962	346	257	71	61	246	48	33	19
17	33	190	935	502	295	238	70	56	806	44	28	17
18	50	547	584	386	258	244	65	51	778	41	26	17
19	44	582	409	333	233	1280	62	62	433	37	25	18
20	35	383	324	296	212	746	63	1690	312	35	28	16
21	34	343	266	268	523	484	68	461	333	35	28	16
22	33	476	234	342	671	380	943	271	263	33	25	16
23	60	326	211	589	397	312	746	201	212	33	22	18
24	47	263	335	1320	323	267	369	151	178	31	21	140
25	43	260	404	925	273	239	238	120	147	29	21	878
26	54	489	298	596	338	240	176	190	145	27	20	343
27	50	327	274	495	587	204	143	1070	190	26	24	191
28	49	261	250	2790	1060	209	134	383	226	44	23	133
29	50	222	336	964	---	216	374	268	476	62	21	104
30	43	1890	617	628	---	189	219	213	477	38	19	82
31	40	---	763	481	---	172	---	3540	---	33	18	---
TOTAL	2443	11463	19901	19460	12218	26378	5594	11771	18892	3210	837	2402
MEAN	78.8	382	642	628	436	851	186	380	630	104	27.0	80.1
MAX	442	1890	7160	2790	1060	6420	943	3540	6280	755	53	878
MIN	33	75	198	268	212	172	62	51	145	26	18	16

CUMBERLAND RIVER BASIN

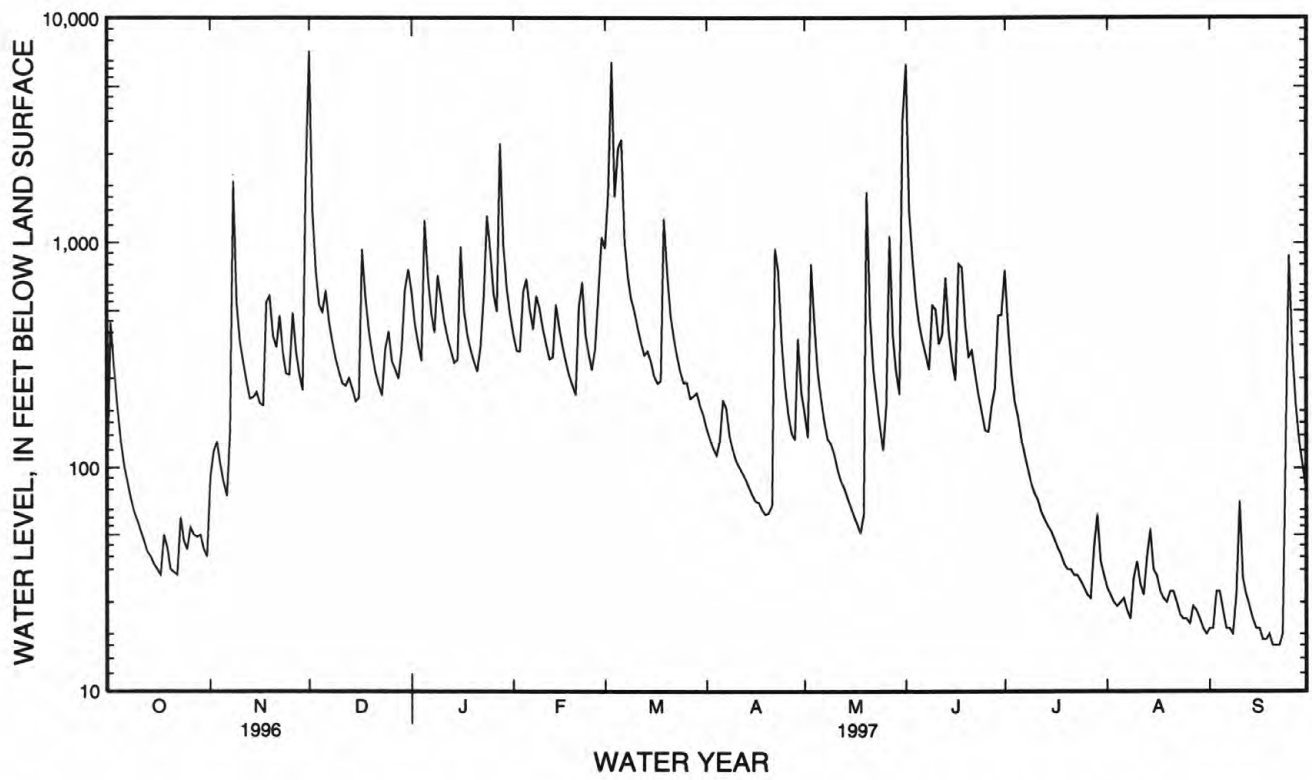
03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1997, BY WATER YEAR (WY)

MEAN	161	312	514	565	514	702	327	217	170	99.4	67.6	152
MAX	894	1035	1259	1453	1156	1773	954	818	765	658	348	880
(WY)	1976	1987	1991	1974	1991	1975	1994	1973	1989	1989	1996	1979
MIN	7.60	10.4	31.6	25.4	133	216	58.4	23.8	11.0	13.9	12.2	11.3
(WY)	1981	1981	1981	1981	1978	1981	1986	1981	1988	1988	1976	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		aWATER YEARS 1972 - 1997	
ANNUAL TOTAL	112511		134569			
ANNUAL MEAN	307		369		322	
HIGHEST ANNUAL MEAN					517	1973
LOWEST ANNUAL MEAN					76.0	1981
HIGHEST DAILY MEAN	7160	Dec 1	7160	Dec 1	21200	Mar 13 1975
LOWEST DAILY MEAN	19	Jul 4	16	Sep 20	4.7	Oct 13 1980
ANNUAL SEVEN-DAY MINIMUM	22	Jun 30	17	Sep 17	5.3	Nov 8 1980
INSTANTANEOUS PEAK FLOW			14100	Jun 1	31000	Mar 13 1975
INSTANTANEOUS PEAK STAGE			19.29	Jun 1	23.80	Mar 13 1975
INSTANTANEOUS LOW FLOW			13	Sep 20	2.9	Jul 7 1988
10 PERCENT EXCEEDS	583		728		660	
50 PERCENT EXCEEDS	192		212		112	
90 PERCENT EXCEEDS	37		27		14	

a See REMARKS.



CUMBERLAND RIVER BASIN

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

WATER-QUALITY RECORDS

LOCATION.--At bridge on Blanton Drive, 900 ft upstream from Sinking Creek, 0.7 mi upstream from discharge station.

PERIOD OF RECORD.--February 1986 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1986 to current year.
pH: February 1986 to current year.
WATER TEMPERATURE: February 1986 to current year.
DISSOLVED OXYGEN: February 1986 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Periods of missing record were due to equipment malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 520 microsiemens, Nov. 2, 1993; minimum 63 microsiemens, Dec. 25, 1987.
pH: Maximum, 9.0 units, Mar. 24, 1986; minimum, 5.8 units, June 18, 1992.
WATER TEMPERATURE: Maximum, 33.2°C, June 24, 1988; minimum, 0.2°C, Feb. 3, 4, 5, 6, 1996.
DISSOLVED OXYGEN: Maximum, 18.2 mg/L, March 20, 1988; minimum, 1.6 mg/L, Sept. 12, 1990.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 483 microsiemens, Nov. 17; minimum 117 microsiemens, May 31.
pH: Maximum, 8.5 units, Mar. 15, 23, 24; minimum, 6.6 units, May 31, June 1.
WATER TEMPERATURE: Maximum, 32.1°C, July 27; minimum, 2.2°C, Jan. 14.
DISSOLVED OXYGEN: Maximum, 15.8 mg/L, Dec. 15; minimum, 4.3 mg/L, July 26.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	197	195	196	211	207	208	223	216	219	216	213	214
2	199	196	197	210	206	207	218	210	215	216	214	215
3	199	197	198	214	206	208	211	204	207	216	214	215
4	201	198	200	213	207	209	206	201	203	215	213	215
5	203	199	200	211	207	209	204	199	201	216	213	215
6	204	200	201	212	208	210	209	203	207	215	214	215
7	206	201	203	213	208	209	212	209	210	216	214	215
8	204	203	203	210	208	209	213	210	211	218	215	216
9	207	204	205	215	210	212	212	210	211	218	215	217
10	208	205	207	215	213	214	210	207	209	218	215	217
11	209	206	208	218	212	214	210	208	209	218	215	216
12	211	207	208	214	212	213	212	208	210	217	214	216
13	213	207	210	216	212	214	211	210	211	218	214	216
14	215	210	212	217	214	215	213	210	211	218	216	217
15	215	211	212	217	215	215	212	210	211	217	215	216
16	216	211	213	219	217	217	214	211	212	216	214	215
17	216	211	213	221	217	218	215	212	214	216	213	214
18	216	212	214	221	218	219	214	212	213	215	212	214
19	219	213	215	222	220	221	215	212	214	219	214	215
20	217	214	215	222	221	222	213	207	210	219	216	217
21	224	213	216	225	220	221	209	201	204	218	213	215
22	216	214	215	222	217	219	213	203	209	216	211	214
23	221	214	215	220	217	218	214	211	213	214	211	213
24	221	214	216	221	218	218	214	212	213	214	211	212
25	221	215	217	220	218	218	212	210	212	214	211	212
26	226	215	217	224	218	220	213	211	212	216	213	214
27	220	214	216	231	222	226	215	212	213	216	212	215
28	219	211	214	231	222	228	217	213	215	213	209	211
29	218	209	212	225	221	223	218	214	215	215	210	213
30	212	208	210	226	223	225	215	213	214	215	202	208
31	213	209	210	---	---	---	215	213	214	207	203	205
MONTH	226	195	209	231	206	216	223	199	211	219	202	214

CUMBERLAND RIVER BASIN
03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	207	202	204	201	196	198	185	180	183	191	188	189
2	211	206	209	203	196	200	184	181	182	192	188	190
3	212	210	211	199	167	182	185	181	183	195	189	191
4	213	210	212	176	152	163	184	179	181	195	191	193
5	213	210	211	169	153	161	181	178	179	198	193	195
6	210	209	209	182	168	174	188	181	186	197	194	195
7	211	209	210	182	175	178	188	186	187	200	195	197
8	211	209	210	185	177	180	190	188	189	201	195	198
9	209	207	208	196	184	192	191	189	190	202	198	200
10	209	207	209	197	192	195	191	187	189	203	200	202
11	209	207	209	198	193	195	190	187	189	204	200	202
12	208	207	207	200	193	197	190	186	187	205	201	203
13	209	208	208	200	193	197	188	184	186	206	203	204
14	209	206	207	197	193	195	188	185	186	206	204	205
15	207	206	207	196	193	194	187	185	186	207	205	206
16	207	206	206	200	193	197	187	173	181	208	204	205
17	207	204	205	201	197	199	185	180	181	207	204	205
18	205	204	204	199	194	197	189	185	187	207	204	205
19	204	201	202	198	194	196	189	187	188	207	203	205
20	201	199	200	195	185	192	191	188	189	207	203	206
21	200	198	199	185	175	178	192	188	190	208	205	206
22	199	197	198	192	180	188	194	187	189	208	205	206
23	198	195	196	193	190	191	192	187	189	208	206	207
24	195	194	195	192	188	190	190	187	188	208	205	207
25	196	195	195	192	186	190	190	187	188	207	205	206
26	198	195	196	191	183	187	190	187	188	206	204	205
27	198	194	196	186	179	183	191	188	189	206	202	204
28	201	194	198	188	179	183	191	187	189	205	203	204
29	---	---	---	191	186	189	190	187	188	206	203	204
30	---	---	---	188	183	186	190	187	188	206	203	204
31	---	---	---	186	182	184	---	---	---	204	202	203
MONTH	213	194	204	203	152	188	194	173	187	208	188	202

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	203	202	203	177	175	176	187	184	185	192	188	190
2	205	203	204	177	176	176	190	184	186	194	189	191
3	208	205	206	178	176	176	188	185	186	194	188	190
4	211	204	206	177	175	176	189	185	186	194	189	191
5	207	202	204	180	175	176	189	185	187	193	190	191
6	202	199	200	181	177	178	188	186	187	193	188	190
7	203	200	201	191	178	180	189	187	188	192	188	189
8	201	196	199	183	178	180	189	187	188	193	189	190
9	197	195	195	179	174	176	189	187	188	191	188	189
10	197	194	195	177	172	174	189	187	188	198	188	190
11	196	194	195	178	173	175	191	187	188	193	188	190
12	197	194	195	189	174	178	190	185	187	203	187	191
13	196	193	195	186	174	177	190	184	186	193	189	190
14	195	192	193	185	173	179	189	183	185	192	188	190
15	196	194	195	186	174	179	195	184	188	194	187	190
16	195	192	193	191	175	182	191	183	187	194	189	191
17	197	194	196	190	174	181	192	184	187	194	190	192
18	198	195	196	186	181	184	193	183	187	194	191	192
19	197	191	194	189	185	186	192	184	188	194	191	192
20	193	191	192	189	184	186	190	185	187	194	191	192
21	192	190	191	188	184	186	188	185	187	196	191	193
22	190	187	189	190	185	187	190	185	187	196	191	193
23	189	186	188	190	185	187	189	185	187	195	191	193
24	186	185	185	188	185	186	191	186	187	195	191	192
25	185	184	184	188	186	186	191	186	188	197	191	192
26	184	181	183	190	186	187	191	187	189	198	189	192
27	181	180	181	190	186	187	191	186	188	197	189	191
28	180	179	180	190	185	187	190	186	188	196	188	191
29	180	178	179	188	185	186	191	187	189	197	188	192
30	178	176	176	189	184	186	191	187	188	198	188	193
31	---	---	---	188	184	186	193	188	190	---	---	---
MONTH	211	176	193	191	172	181	195	183	187	203	187	191

CUMBERLAND RIVER BASIN

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.6	7.5	7.5	7.2	7.2	7.1	7.4	7.4	7.7	7.4	7.8	7.5
2	7.5	7.4	7.5	7.1	7.1	7.1	7.5	7.4	7.7	7.4	7.8	7.5
3	7.3	7.1	7.5	7.2	7.2	7.1	7.6	7.4	7.7	7.4	8.0	7.4
4	7.3	7.1	7.4	7.2	7.3	7.0	7.7	7.4	7.7	7.4	8.2	7.5
5	7.4	7.3	7.4	7.2	7.2	7.1	7.7	7.3	7.7	7.3	8.1	7.5
6	7.3	7.3	7.5	7.3	7.1	7.1	7.7	7.3	7.7	7.4	7.7	7.5
7	7.4	7.3	7.5	7.2	7.2	7.1	7.6	7.4	7.9	7.4	7.9	7.6
8	7.4	7.3	7.4	7.2	7.1	7.1	7.7	7.5	7.7	7.4	8.0	7.5
9	7.4	7.4	7.4	7.2	7.1	7.1	7.6	7.5	7.8	7.4	7.9	7.5
10	7.4	7.3	7.6	7.3	7.2	7.0	7.6	7.5	7.7	7.5	7.8	7.6
11	7.4	7.3	7.6	7.3	7.1	7.0	7.7	7.4	7.7	7.4	8.1	7.5
12	7.4	7.3	7.5	7.3	7.2	7.0	7.7	7.4	7.8	7.4	8.2	7.5
13	7.4	7.3	7.5	7.3	7.2	7.1	7.7	7.4	7.8	7.4	8.1	7.6
14	7.4	7.0	7.4	7.3	7.2	7.2	7.8	7.5	8.0	7.4	8.2	7.6
15	7.6	6.9	7.4	7.2	7.2	7.2	7.8	7.4	7.9	7.4	8.0	7.5
16	7.7	6.8	7.5	7.3	7.3	7.2	7.8	7.5	7.8	7.4	8.0	7.5
17	7.4	6.8	7.4	7.2	7.4	7.3	7.9	7.5	7.7	7.4	8.2	7.5
18	7.6	6.9	7.6	7.3	7.4	7.3	7.9	7.5	7.6	7.4	8.1	7.5
19	7.8	7.4	7.8	7.1	7.4	7.3	7.9	7.4	7.6	7.3	8.0	7.5
20	7.6	7.3	7.6	7.3	7.4	7.3	7.8	7.4	7.8	7.3	7.6	7.5
21	7.5	7.4	7.3	7.2	7.4	7.3	7.9	7.4	7.7	7.3	7.9	7.4
22	7.5	7.3	7.5	7.1	7.6	7.3	8.0	7.4	7.8	7.3	7.9	7.5
23	7.5	7.4	7.4	7.1	7.5	7.3	7.7	7.4	7.7	7.4	7.9	7.4
24	7.4	7.3	7.4	7.2	7.5	7.4	7.6	7.4	7.8	7.5	7.7	7.4
25	7.4	7.3	7.4	7.2	7.5	7.4	7.8	7.4	7.9	7.4	7.6	7.4
26	7.5	7.3	7.6	7.0	7.4	7.4	7.8	7.4	8.0	7.4	7.7	7.4
27	7.6	7.3	7.4	7.0	7.5	7.4	7.8	7.4	8.0	7.4	7.7	7.4
28	7.5	7.2	7.5	7.1	7.5	7.4	7.6	7.4	7.8	7.3	7.5	7.3
29	7.5	7.2	7.4	7.1	7.4	7.4	7.5	7.4	7.8	7.3	7.4	7.2
30	7.6	7.3	7.3	7.0	7.4	7.4	7.8	7.4	7.8	7.4	7.4	7.2
31	---	---	7.4	7.0	---	---	8.0	7.4	8.0	7.5	---	---
MONTH	7.8	6.8	7.8	7.0	7.6	7.0	8.0	7.3	8.0	7.3	8.2	7.2

CUMBERLAND RIVER BASIN

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.6	19.0	19.3	16.4	15.9	16.2	11.1	10.6	10.9	10.9	10.3	10.6
2	19.5	19.1	19.3	16.0	15.3	15.8	11.4	11.1	11.2	11.2	10.9	11.0
3	19.2	18.7	19.1	15.3	14.8	15.0	11.6	11.3	11.5	11.5	11.2	11.3
4	18.8	18.4	18.6	15.0	14.5	14.7	11.5	11.2	11.3	11.6	11.3	11.4
5	18.6	18.4	18.5	14.9	14.5	14.7	11.2	10.7	11.0	11.6	11.5	11.6
6	18.8	18.3	18.5	15.0	14.8	14.8	10.7	10.5	10.6	11.5	11.0	11.3
7	18.7	18.2	18.4	15.1	14.9	15.0	10.7	10.5	10.6	11.0	10.4	10.7
8	18.5	18.1	18.3	15.0	14.7	14.8	10.6	10.4	10.5	10.4	9.6	10.1
9	18.1	17.6	17.9	14.7	13.9	14.2	10.4	10.1	10.2	9.6	8.9	9.4
10	17.7	17.4	17.5	13.9	13.2	13.5	10.4	10.0	10.2	8.9	7.6	8.4
11	17.7	17.3	17.5	13.2	12.7	12.9	10.9	10.4	10.6	7.6	6.8	7.2
12	18.1	17.1	17.5	12.7	12.3	12.5	11.1	10.8	11.0	6.8	6.3	6.5
13	17.9	17.1	17.5	12.5	12.2	12.4	11.1	11.0	11.1	6.3	5.9	6.1
14	19.0	17.3	17.7	12.4	12.1	12.2	11.1	10.9	11.0	5.9	5.6	5.8
15	17.8	17.3	17.5	12.1	11.9	12.0	11.4	11.0	11.2	5.9	5.6	5.7
16	18.1	17.3	17.6	11.9	11.7	11.8	11.4	11.3	11.4	5.9	5.7	5.9
17	18.5	17.6	17.9	11.7	11.5	11.6	11.3	10.7	11.0	5.7	5.4	5.6
18	18.0	17.3	17.7	11.5	11.3	11.4	10.7	9.9	10.3	5.5	5.4	5.4
19	17.6	17.0	17.4	11.4	11.2	11.3	9.9	9.1	9.5	5.6	5.3	5.5
20	17.3	16.6	17.1	11.3	11.1	11.2	9.1	8.5	8.8	5.7	5.5	5.6
21	17.3	16.8	17.1	11.3	11.0	11.2	8.5	7.9	8.1	6.0	5.5	5.7
22	17.3	17.0	17.2	11.1	10.8	11.0	7.9	7.8	7.9	6.6	6.0	6.2
23	17.2	16.6	17.0	10.9	10.7	10.8	8.4	7.9	8.1	7.1	6.6	6.8
24	16.9	16.4	16.7	11.2	10.7	10.9	8.5	8.4	8.4	7.6	7.1	7.3
25	16.6	16.4	16.5	11.3	11.1	11.2	8.5	8.3	8.4	8.0	7.6	7.8
26	16.5	16.4	16.4	11.2	11.0	11.1	8.6	8.3	8.4	7.9	7.6	7.7
27	16.6	16.4	16.5	11.2	10.9	11.1	9.1	8.6	8.8	7.8	7.6	7.6
28	16.6	16.4	16.5	11.0	10.3	10.7	9.3	9.1	9.2	7.8	7.2	7.6
29	16.8	16.4	16.6	10.3	9.9	10.0	9.4	9.1	9.3	7.2	6.8	6.9
30	16.8	16.4	16.7	10.6	10.0	10.2	9.7	9.3	9.5	7.4	6.9	7.1
31	16.5	16.2	16.4	---	---	---	10.4	9.7	10.0	7.3	7.2	7.2
MONTH	19.6	16.2	17.6	16.4	9.9	12.5	11.6	7.8	10.0	11.6	5.3	7.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.3	7.0	7.2	10.0	9.1	9.5	10.7	10.1	10.4	14.5	13.5	14.0
2	7.3	7.2	7.3	10.8	10.0	10.5	10.5	10.0	10.2	14.8	13.3	14.0
3	7.7	7.3	7.5	12.3	10.5	11.4	10.6	10.2	10.4	15.3	14.2	14.8
4	8.0	7.7	7.8	12.2	11.5	11.7	10.9	10.3	10.6	14.9	14.0	14.4
5	8.0	7.9	8.0	11.6	10.8	11.3	11.2	10.9	11.0	14.9	14.1	14.5
6	7.9	7.8	7.9	10.8	10.2	10.5	11.0	10.6	10.8	15.4	14.6	15.0
7	8.0	7.8	7.9	10.2	9.8	10.1	11.1	10.6	10.8	15.8	14.6	15.1
8	8.1	7.9	8.1	10.0	9.7	9.8	11.1	10.8	10.9	15.5	15.1	15.3
9	7.9	7.4	7.7	9.7	9.0	9.3	11.0	10.7	10.8	15.5	15.1	15.4
10	7.4	7.0	7.2	9.4	8.9	9.1	10.8	10.5	10.6	16.2	14.9	15.4
11	7.0	6.9	6.9	9.6	9.2	9.4	11.0	10.4	10.6	16.5	15.0	15.7
12	6.9	6.7	6.8	9.7	9.3	9.5	11.2	10.7	10.9	16.3	15.8	16.0
13	6.7	6.3	6.5	9.6	9.1	9.3	11.1	10.6	10.9	16.3	15.5	15.9
14	6.4	6.3	6.4	9.3	9.1	9.2	---	---	---	16.8	15.6	16.0
15	6.6	6.3	6.4	9.1	8.7	8.8	---	---	---	16.6	15.9	16.1
16	6.8	6.6	6.7	9.2	8.7	9.0	---	---	---	17.0	15.7	16.3
17	7.0	6.7	6.8	9.1	8.5	8.9	---	---	---	16.8	16.1	16.5
18	7.4	7.0	7.1	8.5	8.2	8.3	---	---	---	17.2	16.6	16.8
19	7.7	7.3	7.5	8.8	8.3	8.5	---	---	---	18.2	16.1	17.2
20	8.1	7.6	7.8	9.5	8.8	9.1	12.9	11.9	12.3	18.3	16.9	17.4
21	8.7	8.1	8.4	10.1	9.5	9.8	12.6	12.2	12.3	17.7	17.0	17.4
22	8.7	8.6	8.7	10.2	9.9	10.1	12.6	12.2	12.4	18.3	16.7	17.6
23	8.8	8.4	8.6	10.4	10.1	10.2	12.6	12.3	12.5	18.2	17.2	17.7
24	8.7	8.5	8.6	10.3	10.0	10.2	12.9	12.0	12.5	18.4	17.7	18.0
25	8.7	8.5	8.6	10.1	9.9	10.0	13.2	12.1	12.8	18.5	17.8	18.2
26	8.8	8.5	8.6	10.7	9.9	10.4	13.1	12.7	12.9	19.6	17.4	18.2
27	9.2	8.7	8.8	11.0	10.5	10.8	13.4	13.0	13.2	19.2	17.5	18.2
28	9.1	8.7	8.9	10.9	10.5	10.7	13.4	12.9	13.2	19.7	17.9	18.5
29	---	---	---	10.6	10.2	10.5	13.9	12.6	13.1	19.4	18.0	18.6
30	---	---	---	11.0	10.6	10.8	14.7	12.9	13.4	19.4	17.9	18.5
31	---	---	---	10.8	10.7	10.7	---	---	---	19.7	18.2	18.9
MONTH	9.2	6.3	7.7	12.3	8.2	9.9	14.7	10.0	11.6	19.7	13.3	16.5

CUMBERLAND RIVER BASIN

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.8	18.2	18.5	16.2	15.6	15.9	22.9	20.6	21.8	21.9	20.5	21.2
2	18.2	17.3	17.7	16.9	16.1	16.5	22.8	20.7	21.7	22.3	20.6	21.2
3	17.3	16.2	16.8	17.8	16.5	17.0	22.8	20.7	21.4	22.5	20.4	21.2
4	16.5	15.9	16.2	18.6	16.9	17.5	22.4	20.7	21.2	22.5	20.5	21.3
5	16.4	16.1	16.2	18.5	16.9	17.9	22.8	20.6	21.2	22.3	20.8	21.2
6	16.5	16.1	16.3	18.7	17.7	18.2	22.2	20.8	21.6	21.3	20.5	21.0
7	16.1	15.3	15.8	18.9	18.1	18.5	23.3	21.0	21.6	21.7	20.7	21.0
8	15.3	14.6	15.0	19.3	18.5	18.9	22.3	20.6	21.1	22.0	20.5	20.9
9	14.6	14.1	14.4	19.1	18.6	18.8	22.7	20.8	21.6	21.8	20.4	20.9
10	14.1	13.5	13.7	18.8	18.4	18.6	22.4	21.0	21.6	21.3	20.5	20.8
11	13.6	13.5	13.5	19.2	18.3	18.6	21.7	20.6	21.1	21.9	20.3	20.8
12	14.1	13.6	13.8	19.3	18.3	18.7	21.9	20.5	21.0	21.8	20.1	20.8
13	14.2	14.0	14.1	19.8	18.2	19.0	21.8	20.1	21.0	21.8	19.9	20.8
14	14.3	14.1	14.2	20.4	18.9	19.5	22.2	19.7	20.9	21.9	20.1	21.0
15	14.9	14.3	14.6	20.2	18.6	19.4	22.1	19.5	21.0	21.7	20.5	20.9
16	15.5	14.9	15.3	21.0	19.0	19.8	21.9	19.7	20.7	21.7	20.5	20.8
17	15.7	15.3	15.5	20.8	19.1	20.0	21.7	19.7	20.7	21.5	20.4	20.9
18	15.7	15.3	15.6	21.3	19.5	20.3	21.1	19.7	20.5	21.4	20.0	20.9
19	15.4	15.3	15.4	21.7	19.5	20.5	21.6	19.9	20.8	21.4	19.9	20.8
20	15.8	15.1	15.4	21.9	20.0	20.9	22.3	19.9	21.2	20.8	19.9	20.4
21	15.8	15.3	15.5	22.5	20.6	21.3	21.8	20.1	21.0	21.2	19.8	20.4
22	15.9	15.4	15.7	22.9	20.0	21.5	22.2	20.4	21.1	21.1	19.9	20.3
23	16.1	15.6	16.0	22.3	20.1	21.3	22.0	20.7	21.2	21.2	19.9	20.4
24	16.2	15.9	16.1	21.9	20.2	21.0	21.9	20.6	21.2	21.0	20.0	20.6
25	16.5	16.0	16.3	22.6	20.5	21.5	21.9	20.7	21.1	20.9	20.2	20.5
26	16.4	16.1	16.2	23.0	20.8	21.9	22.2	20.7	21.1	20.9	20.0	20.4
27	16.4	16.0	16.2	23.1	20.7	21.9	22.4	20.4	21.1	20.7	19.8	20.2
28	16.4	16.1	16.2	22.4	21.0	21.7	21.9	20.1	21.1	20.4	19.7	20.0
29	16.1	15.8	16.0	21.7	20.8	21.2	22.4	20.0	21.0	20.0	19.4	19.7
30	15.8	15.6	15.7	22.9	20.9	21.8	22.4	20.1	21.0	20.4	19.2	19.5
31	---	---	---	23.7	20.9	22.1	22.4	20.3	21.2	---	---	---
MONTH	18.8	13.5	15.6	23.7	15.6	19.7	23.3	19.5	21.2	22.5	19.2	20.7

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

CUMBERLAND RIVER BASIN
03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.3	11.1	11.2	11.6	11.4	11.5	11.1	10.9	11.0	9.8	9.0	9.3
2	11.4	11.2	11.3	11.4	10.4	10.8	11.3	11.1	11.2	10.0	8.6	9.3
3	11.3	11.2	11.3	10.4	9.5	9.9	11.3	10.2	10.7	9.7	8.8	9.4
4	11.5	11.2	11.3	9.8	9.5	9.6	10.2	10.0	10.1	9.5	8.6	9.1
5	11.5	11.4	11.4	10.4	9.7	10.1	10.0	9.8	9.9	9.4	8.6	9.0
6	11.4	11.2	11.3	11.3	10.4	10.5	9.9	9.8	9.9	9.5	8.6	9.2
7	11.3	11.1	11.2	10.6	10.4	10.5	10.0	9.8	9.9	9.6	8.3	9.1
8	11.2	11.1	11.1	10.9	10.6	10.7	10.0	9.9	9.9	9.4	8.2	9.1
9	11.3	11.1	11.2	11.5	10.9	11.1	10.2	9.9	10.1	9.2	8.4	8.8
10	11.4	11.2	11.3	11.5	11.4	11.5	10.3	10.1	10.2	9.1	8.2	8.7
11	11.4	11.3	11.4	11.6	11.4	11.5	10.5	10.2	10.4	9.2	8.2	8.7
12	11.4	11.3	11.4	11.6	11.5	11.5	10.3	10.2	10.2	9.2	8.4	9.0
13	11.6	11.2	11.5	11.8	11.5	11.7	10.3	10.2	10.2	9.2	8.5	8.9
14	11.7	11.5	11.6	11.8	11.7	11.7	10.9	10.2	10.3	9.0	8.3	8.7
15	11.7	11.6	11.7	11.8	11.7	11.8	10.6	9.9	10.3	9.1	8.0	8.5
16	11.6	11.6	11.6	11.8	11.6	11.7	10.4	9.9	10.1	9.3	8.1	8.7
17	11.7	11.6	11.6	11.8	11.7	11.7	11.2	10.1	10.6	9.5	8.4	9.0
18	11.7	11.6	11.7	12.0	11.8	11.9	10.7	9.9	10.4	9.5	9.0	9.2
19	11.7	11.7	11.7	12.1	11.8	11.9	10.9	10.2	10.6	9.5	8.3	9.0
20	11.7	11.6	11.7	12.1	11.5	11.8	11.2	9.9	10.6	9.4	8.3	8.6
21	11.6	11.4	11.6	11.5	11.2	11.3	11.1	10.5	10.8	9.3	8.4	8.6
22	11.5	11.4	11.4	11.4	11.3	11.4	10.9	9.8	10.5	9.6	8.1	8.8
23	11.5	11.4	11.4	11.6	11.3	11.4	9.8	8.7	9.3	9.0	7.7	8.5
24	11.4	11.4	11.4	11.5	11.3	11.4	9.0	8.6	8.9	8.8	7.8	8.4
25	11.5	11.1	11.4	11.4	11.3	11.4	9.0	8.6	8.9	9.0	7.8	8.2
26	11.7	11.2	11.5	11.4	11.1	11.2	9.3	8.6	9.0	8.9	7.8	8.2
27	11.9	11.4	11.6	11.2	11.0	11.1	9.4	8.6	9.1	8.7	7.7	8.3
28	11.7	11.5	11.6	11.1	10.9	11.0	9.2	8.4	8.9	9.2	7.8	8.6
29	---	---	---	11.1	11.0	11.1	9.4	8.4	8.9	9.0	8.2	8.6
30	---	---	---	11.1	10.9	11.0	9.8	8.9	9.1	9.0	7.8	8.4
31	---	---	---	10.9	10.8	10.9	---	---	---	9.0	7.8	8.5
MONTH	11.9	11.1	11.4	12.1	9.5	11.2	11.3	8.4	10.0	10.0	7.7	8.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.2	8.5	8.8	8.8	8.4	8.6	9.1	8.0	8.5	8.9	7.9	8.2
2	9.6	9.1	9.3	9.4	8.4	8.7	9.1	8.1	8.4	9.2	7.5	8.1
3	10.1	9.4	9.7	9.5	8.5	8.9	9.1	7.9	8.4	9.3	7.1	8.1
4	10.4	9.3	9.8	9.5	8.4	8.9	9.1	7.7	8.2	9.5	7.7	8.4
5	10.5	9.1	9.5	9.4	8.3	8.9	9.1	7.5	8.2	9.3	7.6	8.2
6	9.2	8.9	9.0	9.5	8.3	9.0	9.0	8.1	8.6	8.5	7.2	8.0
7	9.7	8.8	9.4	9.5	8.5	9.1	9.0	7.6	8.3	9.2	7.3	8.3
8	9.9	9.5	9.7	9.8	8.9	9.4	9.0	7.6	8.0	8.5	7.2	7.8
9	9.9	9.4	9.7	9.6	9.1	9.4	8.8	7.8	8.4	8.5	7.4	7.9
10	10.3	9.4	9.9	9.5	9.2	9.4	8.6	7.7	8.3	8.4	7.6	8.0
11	10.0	8.7	9.7	9.6	8.5	9.1	8.8	7.2	8.0	9.5	7.7	8.5
12	10.1	8.8	9.6	9.4	8.2	8.7	9.3	7.7	8.3	9.7	8.2	9.0
13	10.1	9.6	9.9	9.9	8.5	9.3	9.3	7.8	8.4	9.6	8.7	9.1
14	10.1	9.8	10.0	9.9	8.3	9.3	9.4	7.7	8.4	9.4	8.5	9.0
15	9.8	9.4	9.6	10.0	8.5	9.3	9.3	7.4	8.3	8.9	8.3	8.6
16	9.4	8.9	9.2	9.8	8.5	9.2	8.9	7.5	8.2	8.6	7.9	8.2
17	9.2	9.1	9.1	10.1	8.4	9.1	8.6	7.3	8.0	8.7	7.4	8.1
18	9.6	8.9	9.1	9.8	8.7	9.1	8.5	7.1	7.6	8.2	6.9	7.5
19	9.5	9.1	9.4	9.6	9.0	9.3	7.8	6.4	7.2	8.3	6.8	7.6
20	9.4	9.3	9.3	10.0	8.8	9.3	8.0	6.5	7.3	7.7	6.8	7.3
21	9.4	9.1	9.2	10.0	8.3	9.2	8.4	6.8	7.5	8.3	6.5	7.3
22	9.3	8.9	9.1	10.1	8.2	8.9	9.0	7.3	8.0	8.1	6.8	7.3
23	9.1	8.9	9.0	9.4	8.3	8.8	9.3	7.6	8.3	8.3	6.5	7.2
24	8.9	8.8	8.9	9.4	8.4	8.8	9.4	7.8	8.5	7.9	6.4	7.3
25	8.9	8.7	8.8	9.6	8.3	8.9	9.7	7.6	8.4	8.1	6.7	7.3
26	8.8	8.7	8.7	9.6	8.1	8.9	8.6	8.0	8.3	8.3	6.7	7.5
27	8.9	8.7	8.8	9.6	7.9	8.9	8.8	7.9	8.4	8.4	6.9	7.7
28	8.8	8.7	8.8	9.1	8.1	8.6	8.8	7.4	8.1	8.4	7.2	7.7
29	8.8	8.6	8.7	8.9	8.1	8.5	8.8	7.1	7.7	8.1	6.4	7.4
30	8.9	8.6	8.7	9.3	7.8	8.6	9.0	7.3	7.9	8.1	6.5	7.4
31	---	---	---	9.7	8.1	8.7	9.2	7.6	8.2	---	---	---
MONTH	10.5	8.5	9.3	10.1	7.8	9.0	9.7	6.4	8.1	9.7	6.4	7.9

CUMBERLAND RIVER BASIN
03430147 STONERS CREEK NEAR HERMITAGE, TN

LOCATION.--Lat 36°11'40", long 86°36'28", Davidson County, Hydrologic Unit 05130203, on downstream end of pier at center of culvert under Andrew Jackson Parkway, 0.8 mi southwest of Hermitage.

DRAINAGE AREA.--20.6 mi^2.

PERIOD OF RECORD.--January 1992 to current year.

GAGE.--Data logger. Datum of gage is 411.70 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0200	920	6.70	Mar. 19	0015	1,100	7.19
Dec. 16	2400	1,620	8.34	June 12	0845	814	6.46
Mar. 2	0515	1,420	7.93	June 14	0515	3,020	10.79
Mar. 3	0345	*3,120	*10.95	Sept. 24	2000	929	6.77
Mar. 5	1415	1,940	8.94				

Minimum discharge, 0.43 ft^3/s, Sept. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	97	321	21	35	99	20	32	92	82	1.4	.64
2	3.5	27	80	19	29	646	18	18	44	36	1.1	.81
3	2.9	15	52	18	28	1240	16	16	27	22	.96	5.0
4	2.6	11	37	19	62	171	15	12	19	16	.85	2.0
5	2.5	9.1	45	73	52	694	17	11	16	13	.73	1.3
6	2.3	7.9	40	42	40	199	16	9.2	14	10	.64	.98
7	2.2	02	30	31	33	100	13	8.2	12	8.7	.61	.69
8	2.2	73	24	28	44	68	12	8.4	56	7.4	.57	.60
9	2.1	38	20	36	35	52	11	8.6	79	6.5	3.9	1.2
10	2.1	27	18	30	30	47	10	7.1	36	5.5	2.4	.77
11	2.0	20	16	25	27	37	9.7	6.1	27	4.7	1.9	.76
12	2.0	16	110	22	23	32	9.5	5.6	157	4.1	13	.64
13	2.0	14	52	19	34	31	8.9	5.2	83	3.6	9.3	.52
14	2.0	18	36	18	40	57	8.3	4.8	972	3.3	5.2	.49
15	1.9	17	28	37	31	35	7.9	4.5	115	3.1	3.2	.48
16	1.9	14	283	57	27	31	7.6	4.0	66	2.7	2.2	.44
17	1.9	73	495	34	23	30	7.3	3.8	72	2.3	1.7	.47
18	7.6	121	108	28	21	121	6.9	3.5	45	2.0	4.8	.48
19	3.7	60	67	24	19	372	7.3	38	31	1.9	1.9	.47
20	2.3	39	48	21	17	108	6.9	45	23	1.7	10	.49
21	2.1	33	37	19	33	68	35	13	34	1.8	4.9	.59
22	3.9	25	31	41	26	50	18	8.8	24	1.6	3.0	.56
23	13	21	26	35	21	40	20	6.9	17	1.5	2.2	8.4
24	5.2	18	109	258	18	32	13	5.9	12	1.3	1.7	174
25	3.6	28	51	90	17	40	11	5.5	10	1.1	1.4	56
26	7.6	32	41	59	40	59	9.4	6.3	14	1.0	1.2	15
27	8.1	23	34	58	111	35	9.9	7.1	17	.97	1.0	8.7
28	20	19	29	204	58	36	28	5.6	11	5.7	.88	6.4
29	9.6	17	29	77	---	32	34	18	40	6.2	.80	4.7
30	6.7	178	25	56	---	27	19	10	133	2.6	.71	3.6
31	5.2	---	23	44	---	23	---	208	---	1.8	.66	---
TOTAL	138.8	1193.0	2345	1543	974	4612	425.6	546.1	2298	262.07	84.81	297.18
MEAN	4.48	39.8	75.6	49.8	34.8	149	14.2	17.6	76.6	8.45	2.74	9.91
MAX	20	178	495	258	111	1240	35	208	972	82	13	174
MIN	1.9	7.9	16	18	17	23	6.9	3.5	10	.97	.57	.44
CFSM	.22	1.93	3.67	2.42	1.69	7.22	.69	.86	3.72	.41	.13	.48
IN.	.25	2.15	4.23	2.79	1.76	8.33	.77	.99	4.15	.47	.15	.54

CUMBERLAND RIVER BASIN

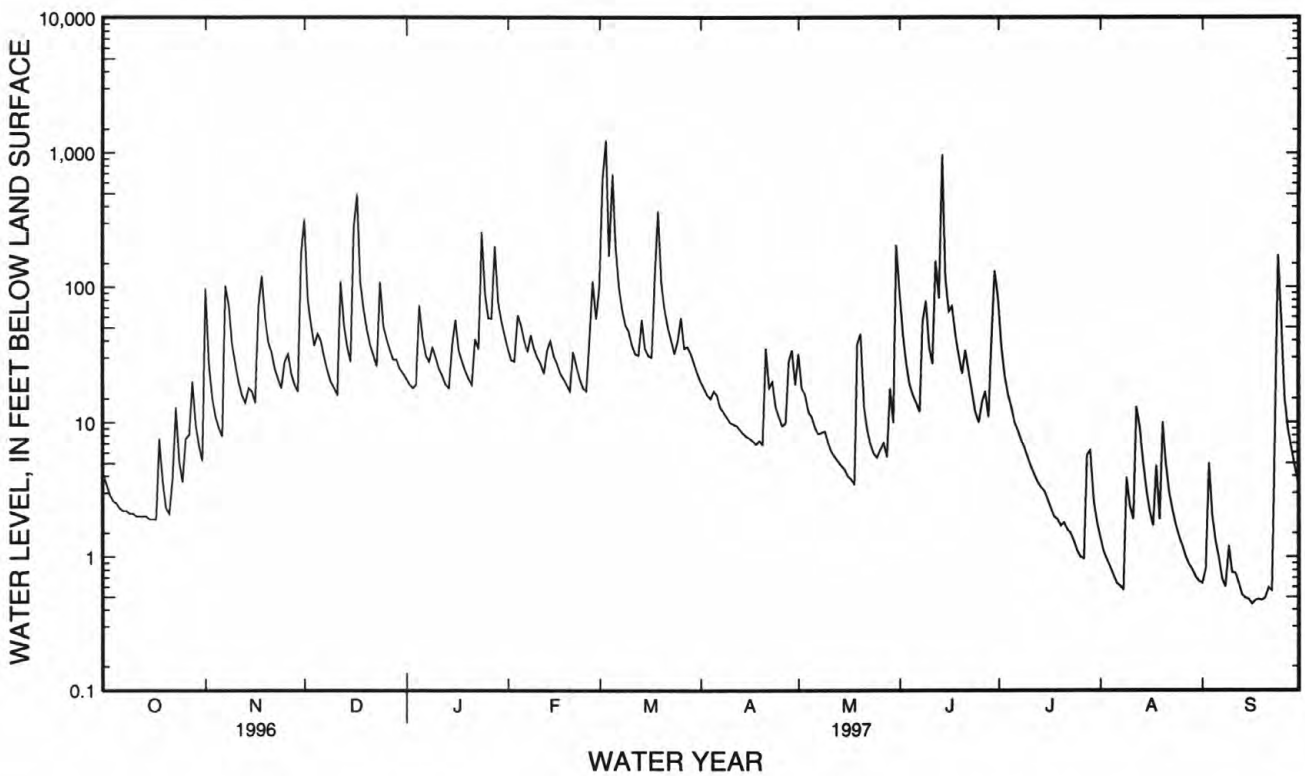
03430147 STONERS CREEK NEAR HERMITAGE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	13.2	31.7	47.1	52.6	45.5	86.7	37.6	30.6	24.7	15.1	4.92	6.98
MAX	43.3	53.1	75.6	67.7	119	149	112	83.6	76.6	62.0	13.3	11.5
(WY)	1996	1996	1997	1995	1994	1997	1994	1995	1997	1992	1994	1995
MIN	2.92	8.33	19.8	39.4	27.5	54.4	10.6	5.24	7.22	3.11	.79	1.46
(WY)	1994	1994	1996	1993	1995	1992	1992	1992	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1992 - 1997	
ANNUAL TOTAL	11787.7		14719.56			
ANNUAL MEAN	32.2		40.3		34.1	
HIGHEST ANNUAL MEAN			44.2			1994
LOWEST ANNUAL MEAN			23.1			1993
HIGHEST DAILY MEAN	495	Dec 17	1240	Mar 3	1260	Jul 3 1992
LOWEST DAILY MEAN	1.3	Jul 18	.44	Sep 16	.29	Aug 12 1993
ANNUAL SEVEN-DAY MINIMUM	1.7	Jul 1	.47	Sep 14	.34	Aug 27 1993
INSTANTANEOUS PEAK FLOW			3120	Mar 3	a4220	Jul 3 1992
INSTANTANEOUS PEAK STAGE			10.95	Mar 3	12.60	Jul 3 1992
INSTANTANEOUS LOW FLOW			.43	Sep 16	.27	Sep 12 1993
ANNUAL RUNOFF (CFSM)	1.56		1.96		1.66	
ANNUAL RUNOFF (INCHES)	21.29		26.58		22.51	
10 PERCENT EXCEEDS	75		75		67	
50 PERCENT EXCEEDS	18		17		12	
90 PERCENT EXCEEDS	2.0		1.3		1.6	

a From rating curve extended above 500 ft^3/s on basis of contracted-opening measurement of peak flow.



CUMBERLAND RIVER BASIN

03430550 MILL CREEK NEAR NOLENSVILLE, TN

LOCATION.--Lat 36°00'33", long 86°42'06", Davidson County, Hydrologic Unit 05130202, near left bank on downstream side of bridge on US Highway 31A, 800 ft upstream from Hoit Creek, 0.6 mi upstream from Owl Creek, 4.6 mi northwest of Nolensville, and at mile 19.6.

DRAINAGE AREA.--40.5 mi^2.

PERIOD OF RECORD.--March 1992 to current year.

REVISED RECORD.--WRD TN-94-1: 1992 (M).

GAGE.--Data logger. Datum of gage is 527.74 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0200	3,970	11.30	Mar. 3	0400	*10,500	*16.54
Dec. 17	0045	4,910	12.22	Mar. 5	1400	8,280	15.01
Jan. 24	0600	3,390	10.67	May 31	1200	4,210	11.54
Jan. 28	0100	2,960	10.15	June 14	0115	3,680	10.99
Mar. 2	0500	4,510	11.84				

Minimum daily discharge, 0.44 ft^3/s, Sept. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	220	917	56	76	313	45	14	282	108	.71	1.7
2	8.8	73	172	49	64	2030	40	11	128	56	.75	1.6
3	7.7	46	106	43	62	3250	35	12	79	37	1.0	2.9
4	7.2	33	75	40	198	328	32	9.5	58	27	1.3	3.0
5	6.3	27	112	278	160	2650	36	8.7	44	21	2.0	2.4
6	7.3	23	95	116	103	431	38	7.8	35	17	1.8	2.3
7	9.6	162	71	81	82	218	29	7.2	28	13	1.7	1.9
8	11	132	57	68	88	150	26	7.7	37	18	1.6	1.7
9	12	69	47	148	75	114	24	8.7	49	16	6.5	3.2
10	13	54	41	99	66	97	22	6.8	30	11	1.3	5.6
11	15	42	37	73	58	75	20	5.6	26	9.1	1.3	e4.9
12	15	33	51	60	52	63	20	5.2	24	7.9	1.8	e4.2
13	16	29	47	49	91	57	18	5.0	79	7.1	3.3	e3.6
14	16	41	40	43	113	83	16	4.7	672	6.8	3.1	e2.9
15	16	43	35	134	82	61	15	5.0	135	5.9	2.8	e2.2
16	16	35	588	143	68	52	14	5.2	100	5.6	2.1	1.5
17	16	47	1150	79	59	49	14	4.8	254	5.1	1.9	e.63
18	44	124	205	64	53	105	13	4.6	127	4.9	4.0	e.44
19	37	85	125	56	47	474	13	74	75	4.6	3.4	.63
20	33	64	87	47	43	161	12	151	53	3.6	6.1	.96
21	37	62	67	42	94	109	13	32	243	4.3	4.6	1.2
22	40	55	56	128	70	82	14	17	132	4.8	3.7	1.2
23	69	45	46	103	55	66	17	11	76	5.9	3.0	3.2
24	52	38	212	918	48	56	13	10	53	6.1	2.8	119
25	44	61	102	260	42	58	11	10	39	5.5	2.6	29
26	57	79	78	148	51	82	11	231	58	5.8	2.5	4.1
27	65	56	70	166	142	59	11	119	49	6.8	2.1	1.9
28	62	46	61	728	127	69	30	64	36	16	2.0	.99
29	61	39	62	181	---	80	37	41	75	5.2	1.9	.81
30	55	565	64	125	---	61	19	28	108	1.9	1.8	1.4
31	47	---	61	94	---	53	---	1070	---	.80	1.7	---
TOTAL	905.9	2428	4937	4619	2269	11536	658	1991.5	3184	447.70	77.16	211.06
MEAN	29.2	80.9	159	149	81.0	372	21.9	64.2	106	14.4	2.49	7.04
MAX	69	565	1150	918	198	3250	45	1070	672	108	6.5	119
MIN	6.3	23	35	40	42	49	11	4.6	24	.80	.71	.44
CFSM	.72	2.00	3.93	3.68	2.00	9.18	.54	1.59	2.62	.36	.06	.17
IN.	.83	2.23	4.53	4.24	2.08	10.59	.60	1.83	2.92	.41	.07	.19

e Estimated

CUMBERLAND RIVER BASIN

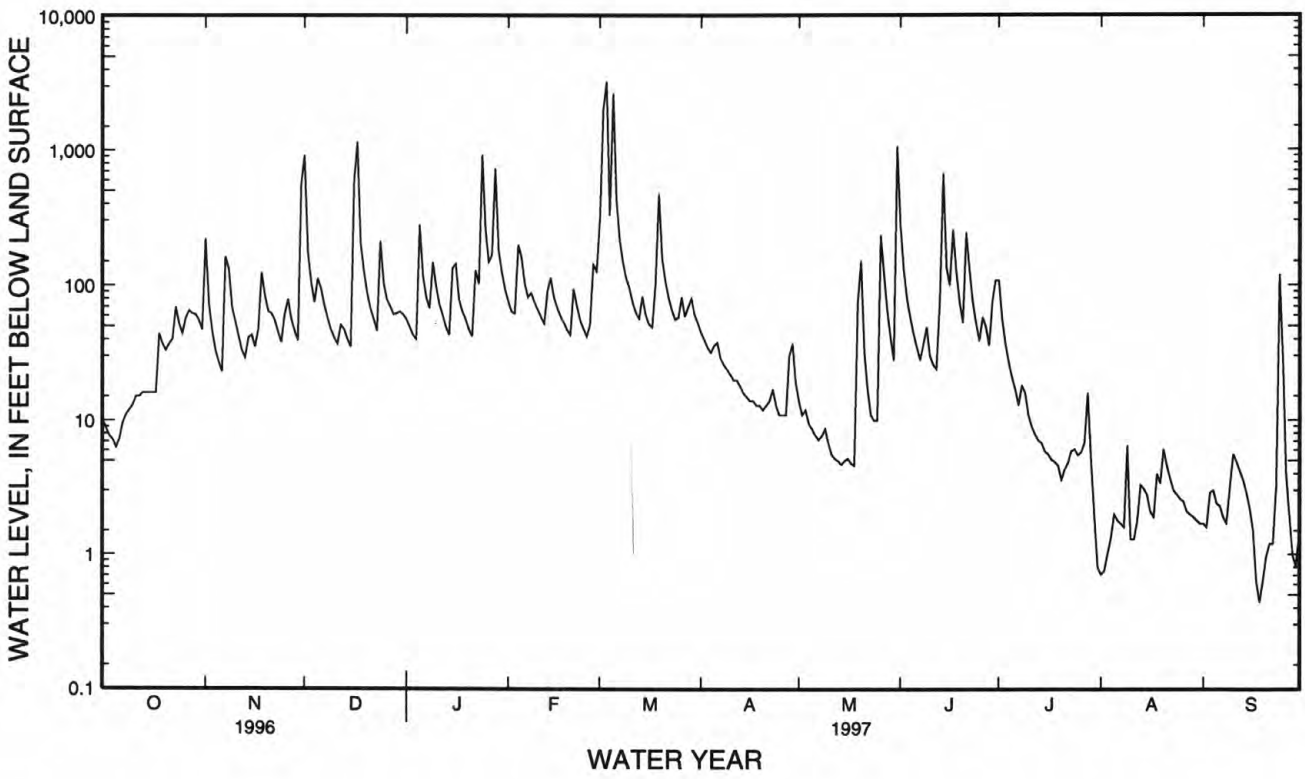
03430550 MILL CREEK NEAR NOLENSVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	40.2	60.8	94.4	124	108	223	76.7	65.0	41.0	24.6	12.1	8.82
MAX	146	122	159	156	263	372	209	190	106	58.8	35.0	16.1
(WY)	1996	1996	1997	1995	1994	1997	1994	1995	1997	1992	1995	1994
MIN	1.18	2.83	43.1	64.5	60.6	150	20.3	8.40	9.59	2.82	1.73	3.21
(WY)	1994	1994	1996	1993	1995	1992	1992	1992	1993	1995	1993	1993

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1992 - 1997	
ANNUAL TOTAL	26140.94		33264.32			
ANNUAL MEAN	71.4		91.1		76.2	
HIGHEST ANNUAL MEAN			104			1994
LOWEST ANNUAL MEAN			41.3			1993
HIGHEST DAILY MEAN	1150	Dec 17	3250	Mar 3	4070	Mar 27 1994
LOWEST DAILY MEAN	.52	Jul 6	.44	Sep 18	a.08	Sep 13 1993
ANNUAL SEVEN-DAY MINIMUM	.64	Jun 30	.94	Sep 16	.10	Sep 9 1993
INSTANTANEOUS PEAK FLOW			10500	Mar 3	13000	Oct 5 1995
INSTANTANEOUS PEAK STAGE			16.54	Mar 3	17.27	Oct 5 1995
ANNUAL RUNOFF (CFSM)	1.76		2.25		1.88	
ANNUAL RUNOFF (INCHES)	23.99		30.53		25.55	
10 PERCENT EXCEEDS	151		145		137	
50 PERCENT EXCEEDS	40		40		21	
90 PERCENT EXCEEDS	4.1		2.3		1.8	

a Also occurred Sept. 14, 1993.



CUMBERLAND RIVER BASIN

03431060 MILL CREEK AT THOMPSON LANE NEAR WOODBINE, TN

LOCATION.--Lat 36°07'04", long 86°43'08", Davidson County, Hydrologic Unit 0513020, at bridge on Thompson Lane, 1.4 miles west of Arlington Church, 1.5 miles upstream from U.S. Highway 41 and 70S, and 1.6 miles downstream from Sevenmile Creek, and at mile 6.3.

DRAINAGE AREA.--93.4 mi^2.

PERIOD OF RECORD.--Crest-stage gage July 1964 to September 1996. October 1996 to September 1997.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 432.55 ft above sea level. July 1964 to September 1996, crest-stage gage at same site and datum.

REMARKS.--Records good, except for estimated discharges which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft^3/s, May 4, 1979, gage height 20.63 ft.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0445	4,070	9.34	Mar. 5	1445	9,620	13.63
Dec. 17	0300	6,470	11.48	May 31	1600	4,620	9.88
Mar. 2	0730	5,280	10.48	June 14	0245	7,410	12.17
Mar. 3	0445	*12,300	*15.16				

Minimum discharge, 0.49 ft^3/s, Sept. 19, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e20	e440	1830	104	173	727	95	66	750	226	21	2.5
2	e18	e150	419	94	140	3390	83	41	319	127	17	1.7
3	e16	e100	228	85	148	6420	74	46	195	87	12	54
4	e14	e68	146	95	344	933	68	33	140	67	10	17
5	e13	e55	233	513	350	4760	94	28	106	57	12	8.1
6	e14	e47	192	238	216	1210	88	25	85	45	8.4	5.0
7	e19	e327	130	166	173	602	67	22	73	40	6.8	2.7
8	e22	e250	101	141	203	389	57	26	172	43	5.3	2.5
9	e24	e132	79	256	163	280	51	31	184	50	67	12
10	e26	e108	67	193	140	236	47	23	96	33	55	11
11	e30	e90	59	143	122	182	44	18	80	27	23	6.6
12	e31	e66	192	117	108	147	43	18	119	23	63	6.3
13	e32	e60	98	100	179	134	39	15	250	26	61	3.6
14	e33	e84	76	87	245	242	37	15	2400	24	36	1.7
15	e33	e88	64	200	168	150	33	17	477	20	29	1.5
16	e33	e73	1090	358	141	123	31	15	363	17	21	2.0
17	e33	e94	2720	176	120	115	30	13	688	15	15	1.5
18	e88	e250	580	137	105	338	28	12	373	13	39	1.8
19	e76	e165	331	118	94	1190	28	111	222	12	40	.87
20	e68	e130	222	102	85	429	25	376	156	11	102	1.3
21	e76	e127	170	90	195	279	42	83	686	18	35	3.4
22	e80	e108	141	263	147	208	42	49	379	11	25	8.2
23	e138	e90	120	215	107	163	47	36	202	10	17	167
24	e108	e80	490	1740	93	134	32	30	139	8.4	13	911
25	e92	e125	229	670	84	169	26	28	105	7.3	11	445
26	e110	e162	174	358	130	220	23	413	103	6.4	9.9	105
27	e132	e118	154	398	429	143	29	419	130	4.9	8.3	62
28	e126	e96	132	1410	295	154	93	154	96	307	7.3	46
29	e126	e81	122	459	---	181	127	117	160	102	5.7	38
30	e110	e1250	127	305	---	131	63	80	356	46	5.1	31
31	e94	---	114	224	---	113	---	1790	---	29	3.5	---
TOTAL	1835	5014	10830	9555	4897	23892	1586	4150	9604	1513.0	784.3	1960.27
MEAN	59.2	167	349	308	175	771	52.9	134	320	48.8	25.3	65.3
MAX	138	1250	2720	1740	429	6420	127	1790	2400	307	102	911
MIN	13	47	59	85	84	113	23	12	73	4.9	3.5	.87
CFSM	.63	1.79	3.74	3.30	1.87	8.25	.57	1.43	3.43	.52	.27	.70
IN.	.73	2.00	4.31	3.81	1.95	9.52	.63	1.65	3.83	.60	.31	.78

e Estimated

CUMBERLAND RIVER BASIN

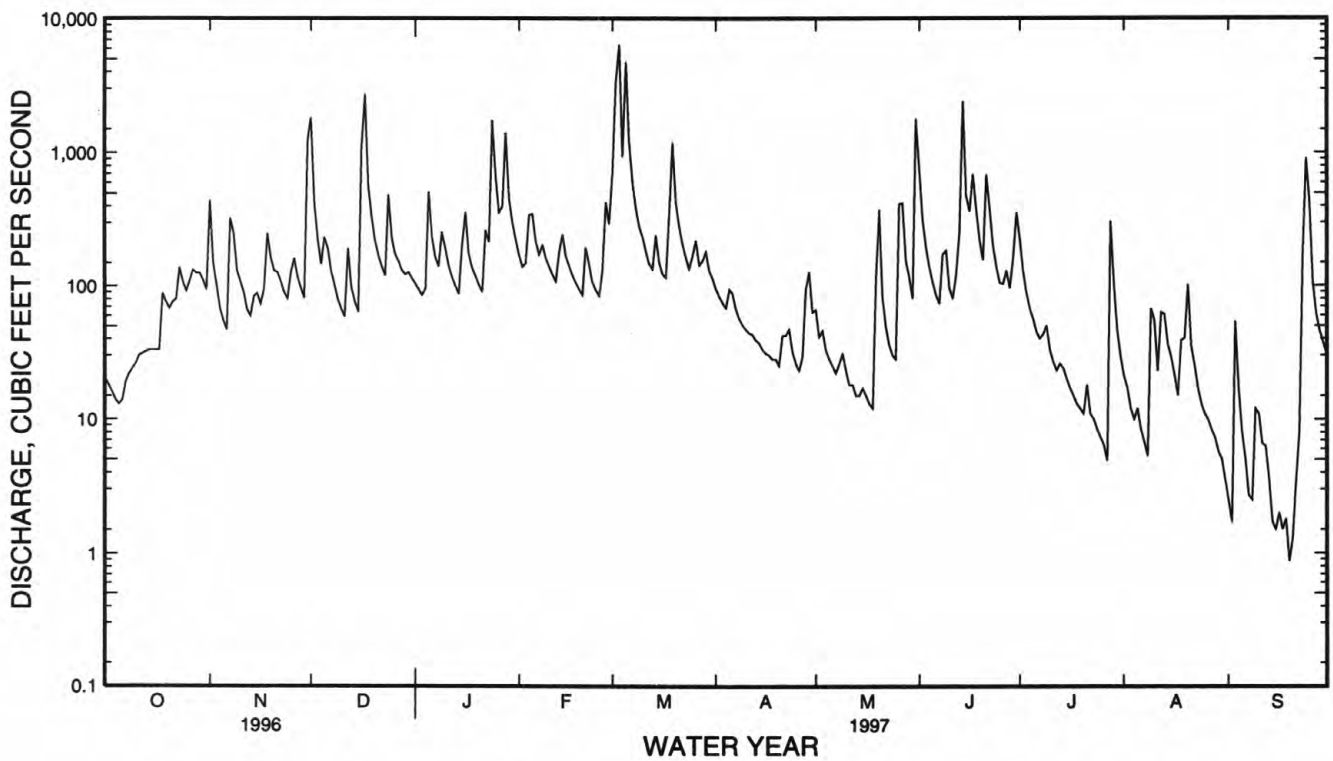
03431060 MILL CREEK AT THOMPSON LANE NEAR WOODBINE, TN

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)

MEAN	59.2	167	349	308	175	771	52.9	134	320	48.8	25.3	65.3
MAX	59.2	167	349	308	175	771	52.9	134	320	48.8	25.3	65.3
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	59.2	167	349	308	175	771	52.9	134	320	48.8	25.3	65.3
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS	FOR 1997 WATER YEAR	
ANNUAL TOTAL	75620.57	
ANNUAL MEAN	207	
HIGHEST DAILY MEAN	6420	Mar 3
LOWEST DAILY MEAN	.87	Sep 19
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 14
INSTANTANEOUS PEAK FLOW	12300	Mar 3
INSTANTANEOUS PEAK STAGE	15.16	Mar 3
INSTANTANEOUS LOW FLOW	a.49	Sep 19
ANNUAL RUNOFF (CFSM)	2.22	
ANNUAL RUNOFF (INCHES)	30.12	
10 PERCENT EXCEEDS	377	
50 PERCENT EXCEEDS	93	
90 PERCENT EXCEEDS	11	

a Also occurred Sept. 20.



CUMBERLAND RIVER BASIN

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°09'46", long 86°43'31", Davidson County, Hydrologic Unit 05130202, on left bank 0.8 mi downstream from Mill Creek, at intake of Omohundro Filtration Plant, and at mile 193.7

DRAINAGE AREA.--12,819 mi^2.

PERIOD OF RECORD.--October 1996 to September 1997.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1996 to September 1997.
pH: October 1996 to September 1997.
WATER TEMPERATURE: October 1996 to September 1997.
DISSOLVED OXYGEN: October 1996 to September 1997.

INSTRUMENTATION.--Water-quality monitor since October 1996.

REMARKS.--Flow regulated by Old Hickory Dam and other reservoirs above station. Periods of missing record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 276 microsiemens, Nov. 21, 29, 1996; minimum, 176 microsiemens, Aug. 17, 1997.
pH: Maximum, 8.6 units, May 3, 4, 6, 1997; minimum, 6.9 units, July 30, 1997.
WATER TEMPERATURE: Maximum, 27.3°C, July 31, 1997; minimum, 4.6°C, Jan. 19, 1997.
DISSOLVED OXYGEN: Maximum, 12.4 mg/L, Jan. 18, 1997; minimum, 4.9 mg/L, July 29, 1997.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 276 microsiemens, Nov. 21, 29; minimum, 176 microsiemens, Aug. 17.
pH: Maximum, 8.6 units, May 3, 4, 6; minimum, 6.9 units, July 30.
WATER TEMPERATURE: Maximum, 27.3°C, July 31; minimum, 4.6°C, Jan. 19.
DISSOLVED OXYGEN: Maximum, 12.4 mg/L, Jan. 18; minimum, 4.9 mg/L, July 29.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	252	222	240	257	232	239	238	219	224
2	---	---	---	245	225	236	248	238	243	236	220	227
3	---	---	---	243	223	227	247	242	244	239	221	230
4	---	---	---	249	225	237	245	240	242	239	225	233
5	---	---	---	252	233	244	249	240	244	240	222	230
6	---	---	---	253	230	242	249	245	247	237	221	232
7	---	---	---	249	233	242	251	242	246	246	224	235
8	---	---	---	245	232	238	243	234	239	239	223	233
9	---	---	---	241	230	236	235	230	233	237	220	232
10	---	---	---	254	238	245	238	230	233	240	223	235
11	---	---	---	254	240	248	243	232	235	244	228	237
12	---	---	---	252	242	248	245	233	237	242	227	236
13	---	---	---	255	243	250	238	231	235	240	219	226
14	---	---	---	257	241	251	238	223	233	234	218	227
15	---	---	---	255	245	252	236	221	230	237	219	226
16	---	---	---	262	248	255	234	219	228	240	219	228
17	---	---	---	263	247	253	230	212	220	229	213	223
18	---	---	---	272	248	256	238	230	234	232	208	220
19	---	---	---	272	258	267	238	232	236	226	208	213
20	---	---	---	275	259	267	233	220	228	229	210	217
21	---	---	---	276	260	268	239	225	233	236	212	218
22	---	---	---	274	259	266	241	225	235	228	212	218
23	---	---	---	272	256	265	241	226	234	230	211	219
24	---	---	---	272	252	260	245	226	236	229	213	219
25	245	225	232	267	252	258	238	222	231	219	206	213
26	238	218	227	271	256	263	235	215	225	219	205	214
27	221	217	220	265	248	256	235	217	227	228	210	219
28	250	214	220	274	259	266	239	221	226	228	222	226
29	250	221	236	276	263	271	236	222	227	232	229	230
30	246	218	230	271	253	262	240	224	230	237	229	233
31	245	219	234	---	---	---	238	222	227	235	227	229
MONTH	250	214	228	276	222	252	257	212	234	246	205	226

CUMBERLAND RIVER BASIN
03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	235	230	233	241	218	229	194	190	192	---	---	---
2	243	234	240	240	211	223	194	192	192	---	---	---
3	242	240	241	231	213	223	192	190	191	208	204	205
4	247	231	238	225	208	214	191	189	190	208	205	206
5	233	216	228	212	194	206	192	191	191	207	206	207
6	230	211	223	209	190	195	191	188	190	208	207	208
7	236	210	226	214	204	209	189	187	188	210	208	209
8	241	218	233	213	204	208	190	186	188	209	208	208
9	242	222	235	226	213	220	187	184	186	209	208	208
10	247	226	238	225	217	221	190	186	188	211	207	209
11	242	224	235	218	213	215	192	190	191	211	208	209
12	238	215	229	222	214	218	197	191	193	214	207	209
13	241	216	231	223	215	220	196	191	193	216	205	209
14	237	219	232	218	215	216	203	192	194	211	204	206
15	235	211	222	216	215	215	207	192	198	207	201	203
16	234	213	220	216	213	215	207	192	196	203	196	199
17	230	211	218	214	211	212	208	194	198	200	196	197
18	234	210	219	211	207	209	205	194	196	199	194	196
19	238	213	221	209	199	203	199	193	195	203	192	197
20	236	211	221	206	194	203	199	193	195	206	189	197
21	236	212	220	206	197	202	---	---	---	206	188	193
22	228	209	213	205	201	204	---	---	---	212	189	198
23	233	211	226	206	190	200	---	---	---	210	190	200
24	233	222	227	197	184	192	---	---	---	220	191	206
25	244	217	228	198	185	193	---	---	---	222	193	201
26	247	215	229	198	188	194	---	---	---	208	193	198
27	250	228	243	197	187	191	---	---	---	215	191	199
28	244	217	234	199	186	192	---	---	---	224	195	213
29	---	---	---	199	187	191	---	---	---	250	199	221
30	---	---	---	196	186	187	---	---	---	228	200	212
31	---	---	---	190	185	187	---	---	---	247	198	216
MONTH	250	209	229	241	184	207	208	184	192	250	188	205

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	206	192	198	202	187	193	185	182	184	198	193	195
2	214	201	207	207	188	193	186	182	184	198	195	197
3	221	214	217	211	191	198	186	183	184	200	196	197
4	224	216	220	196	191	194	187	184	186	211	195	198
5	230	222	226	228	195	199	197	185	187	201	193	195
6	238	227	232	220	199	205	189	185	187	197	192	195
7	237	232	234	215	199	206	189	184	185	197	193	195
8	234	230	231	224	199	207	190	184	186	197	195	196
9	234	225	229	219	198	205	190	184	187	196	192	195
10	228	224	226	217	198	203	193	188	190	197	192	195
11	228	224	226	215	197	202	191	187	189	197	192	195
12	231	223	228	215	196	203	197	186	188	223	191	196
13	228	220	225	205	196	199	192	188	190	196	190	192
14	223	205	215	202	197	199	192	187	189	194	189	191
15	218	208	213	211	197	200	193	186	188	195	188	190
16	220	213	217	201	197	199	191	186	188	192	189	191
17	222	210	214	209	198	201	198	176	187	197	191	193
18	219	217	218	207	197	200	191	185	188	196	190	192
19	218	216	217	207	196	199	192	189	190	194	190	192
20	216	209	213	201	198	199	203	189	193	193	190	191
21	217	213	214	199	196	198	194	188	190	193	187	191
22	216	211	214	199	194	197	197	189	193	193	188	191
23	211	200	207	199	192	196	196	189	192	205	189	194
24	210	199	207	197	190	193	196	190	193	212	184	195
25	210	195	202	199	190	194	196	189	193	217	194	201
26	205	192	199	198	187	193	199	193	195	228	198	217
27	205	191	196	203	189	194	197	190	193	230	196	217
28	203	191	193	204	191	199	194	189	191	229	199	219
29	196	189	190	204	198	200	197	188	192	229	200	218
30	203	188	193	209	188	195	198	192	194	232	198	222
31	---	---	---	188	184	186	196	194	195	---	---	---
MONTH	238	188	214	228	184	198	203	176	189	232	184	198

CUMBERLAND RIVER BASIN

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.7	7.6	---	---	7.5	7.2	7.5	7.3	7.8	7.4	7.8	7.5
2	7.7	7.5	---	---	7.3	7.2	7.5	7.3	7.7	7.2	7.7	7.4
3	7.6	7.5	8.6	8.2	7.3	7.2	7.7	7.3	7.6	7.3	7.6	7.3
4	7.6	7.5	8.6	8.1	7.3	7.2	7.7	7.5	7.4	7.3	7.7	7.3
5	7.6	7.5	8.5	8.2	7.3	7.0	7.8	7.4	7.3	7.2	8.3	7.7
6	7.5	7.5	8.6	8.3	7.2	7.0	8.0	7.5	7.3	7.2	8.3	7.7
7	7.5	7.4	8.4	7.8	7.4	7.2	8.1	7.8	7.7	7.3	8.0	7.6
8	7.5	7.4	8.2	8.1	7.6	7.4	8.0	7.7	8.0	7.4	7.7	7.5
9	7.5	7.4	8.1	7.7	7.7	7.5	7.9	7.6	7.9	7.4	7.7	7.5
10	7.6	7.5	7.8	7.4	7.5	7.5	8.0	7.6	7.7	7.4	7.7	7.5
11	7.6	7.5	7.9	7.6	7.5	7.3	8.1	7.7	7.8	7.5	7.7	7.4
12	7.5	7.4	8.0	7.7	7.4	7.3	7.9	7.8	7.6	7.4	7.9	7.6
13	7.4	7.4	7.7	7.2	7.4	7.3	8.0	7.7	7.8	7.3	8.1	7.7
14	7.6	7.4	7.8	7.3	7.4	7.4	8.0	7.6	7.5	7.2	8.0	7.7
15	7.6	7.5	7.9	7.4	7.5	7.3	8.0	7.7	7.8	7.3	8.1	7.7
16	7.7	7.6	7.7	7.4	7.3	7.2	8.0	7.7	7.8	7.5	8.0	7.6
17	7.8	7.5	7.9	7.6	7.3	7.2	8.0	7.7	7.9	7.4	7.8	7.6
18	7.8	7.5	7.9	7.6	7.3	7.3	8.0	7.7	7.7	7.3	7.9	7.6
19	8.1	7.8	7.9	7.6	7.4	7.3	8.1	7.6	7.6	7.3	8.0	7.6
20	8.1	7.7	7.7	7.2	7.3	7.3	8.0	7.6	7.5	7.3	7.9	7.6
21	---	---	7.7	7.4	7.3	7.3	7.8	7.7	7.9	7.3	7.8	7.6
22	---	---	7.7	7.2	7.4	7.3	7.8	7.5	7.7	7.4	8.1	7.6
23	---	---	7.9	7.4	7.4	7.4	8.0	7.1	7.9	7.5	8.0	7.8
24	---	---	7.7	7.3	7.4	7.3	7.7	7.2	8.2	7.7	7.8	7.3
25	---	---	7.6	7.3	7.4	7.3	7.4	7.0	8.1	7.6	7.9	7.5
26	---	---	7.6	7.1	7.4	7.3	7.4	7.2	7.9	7.6	7.7	7.4
27	---	---	7.6	7.3	7.4	7.3	7.3	7.1	7.7	7.1	7.7	7.4
28	---	---	7.6	7.3	7.4	7.2	7.2	7.1	7.6	7.5	7.6	7.2
29	---	---	7.7	7.5	7.3	7.2	7.1	7.0	7.7	7.5	7.5	7.2
30	---	---	7.8	7.5	7.4	7.2	7.3	6.9	7.8	7.5	7.7	7.1
31	---	---	7.6	7.4	---	---	7.8	7.2	7.9	7.5	---	---
MONTH	8.1	7.4	8.6	7.1	7.7	7.0	8.1	6.9	8.2	7.1	8.3	7.1

CUMBERLAND RIVER BASIN
03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	17.5	16.2	16.7	11.2	10.9	11.1	10.2	9.7	10.0
2	---	---	---	16.5	16.2	16.4	11.1	10.8	10.9	10.5	10.0	10.3
3	---	---	---	16.2	15.2	15.6	11.0	10.7	10.8	10.8	10.4	10.6
4	---	---	---	15.3	15.1	15.2	11.0	10.8	10.9	11.2	10.6	10.9
5	---	---	---	15.7	15.2	15.4	10.8	10.5	10.7	11.5	11.2	11.3
6	---	---	---	15.9	15.3	15.6	10.5	10.3	10.4	11.4	11.0	11.2
7	---	---	---	16.1	15.6	15.9	10.7	10.4	10.6	11.0	10.4	10.7
8	---	---	---	15.7	15.0	15.3	10.8	10.5	10.7	10.4	9.8	10.1
9	---	---	---	15.0	14.4	14.8	10.6	10.4	10.5	9.8	9.2	9.6
10	---	---	---	14.5	13.8	14.2	10.4	10.2	10.3	9.2	8.4	8.9
11	---	---	---	13.9	13.4	13.7	10.9	10.4	10.6	8.4	7.5	8.0
12	---	---	---	13.7	12.8	13.1	11.2	10.9	11.1	7.5	6.8	7.2
13	---	---	---	12.9	12.5	12.7	11.3	11.1	11.2	6.8	6.4	6.6
14	---	---	---	12.6	11.8	12.3	11.2	11.0	11.1	6.4	6.2	6.3
15	---	---	---	12.3	11.7	12.0	11.1	10.9	11.0	6.2	6.0	6.1
16	---	---	---	12.3	11.6	11.9	11.3	10.9	11.1	6.2	5.6	5.9
17	---	---	---	12.0	11.5	11.7	10.9	10.7	10.9	5.6	5.1	5.3
18	---	---	---	12.2	11.6	11.8	10.7	9.9	10.3	5.1	4.7	4.8
19	---	---	---	12.3	11.8	12.1	9.9	9.1	9.5	5.1	4.6	4.8
20	---	---	---	12.3	11.7	12.0	9.1	8.4	8.7	5.5	5.0	5.2
21	---	---	---	12.4	11.9	12.1	8.4	8.1	8.3	5.9	5.4	5.6
22	---	---	---	12.0	11.6	11.7	8.2	8.0	8.1	6.4	5.9	6.2
23	---	---	---	11.6	11.1	11.3	8.7	8.2	8.4	6.8	6.3	6.5
24	---	---	---	11.6	11.2	11.4	8.9	8.4	8.7	7.2	6.7	6.9
25	17.3	17.0	17.1	11.8	11.3	11.5	8.4	8.2	8.3	7.4	7.1	7.2
26	17.2	17.0	17.1	11.8	10.9	11.4	8.2	8.0	8.1	7.1	7.0	7.0
27	17.3	17.0	17.1	10.9	10.5	10.8	8.4	8.1	8.2	7.4	7.0	7.2
28	17.7	17.2	17.4	10.8	10.5	10.7	9.2	8.4	8.8	---	---	---
29	18.0	17.6	17.7	10.8	10.5	10.6	9.4	9.1	9.3	7.2	7.0	7.1
30	18.3	17.9	18.1	10.9	10.5	10.6	9.7	9.3	9.5	7.3	7.0	7.2
31	18.3	17.2	17.7	---	---	---	9.9	9.6	9.8	7.5	7.2	7.4
MONTH	18.3	17.0	17.5	17.5	10.5	13.0	11.3	8.0	9.9	11.5	4.6	7.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.6	7.3	7.5	11.6	10.5	11.1	12.0	11.7	11.8	---	---	---
2	7.6	7.3	7.5	12.3	11.6	11.8	12.1	11.6	11.8	---	---	---
3	7.8	7.6	7.7	12.0	11.7	11.9	12.5	11.9	12.2	16.8	16.0	16.5
4	8.5	7.8	8.2	12.0	11.8	11.9	12.4	12.2	12.3	16.8	15.9	16.3
5	8.3	8.0	8.2	12.2	11.8	12.0	12.3	12.1	12.2	16.9	16.1	16.5
6	8.0	7.8	7.9	12.2	11.9	12.1	12.7	12.0	12.3	17.7	16.7	17.1
7	7.9	7.8	7.9	11.9	11.5	11.7	12.7	12.2	12.5	17.6	16.3	16.9
8	8.1	7.9	8.0	11.8	11.5	11.6	12.9	12.3	12.6	17.7	17.4	17.7
9	8.0	7.6	7.9	11.9	11.6	11.7	12.9	12.4	12.7	17.7	17.5	17.6
10	7.7	7.3	7.5	11.8	11.4	11.5	12.7	12.3	12.5	17.8	16.7	17.2
11	7.4	7.2	7.3	11.5	11.1	11.3	12.8	12.2	12.5	18.3	17.3	17.7
12	7.4	7.1	7.2	11.4	11.1	11.3	12.9	12.7	12.8	18.5	18.1	18.3
13	7.2	7.0	7.1	11.3	11.0	11.1	12.9	12.4	12.6	18.1	17.1	17.7
14	7.2	6.9	7.1	11.2	10.8	11.1	12.6	12.2	12.4	18.0	17.3	17.7
15	7.2	6.9	7.0	10.8	10.3	10.5	12.8	12.2	12.5	18.3	17.7	17.9
16	7.3	6.6	7.0	10.3	10.0	10.1	12.9	12.5	12.7	17.7	17.3	17.5
17	7.3	6.9	7.1	10.1	9.9	10.0	12.9	12.1	12.7	17.9	17.7	17.8
18	7.6	7.2	7.4	10.1	9.9	10.0	12.9	11.9	12.3	18.7	17.8	18.2
19	7.8	7.5	7.6	10.2	10.0	10.1	13.4	12.8	13.0	19.0	18.7	18.8
20	8.3	7.8	8.0	10.1	9.9	10.0	13.4	13.1	13.3	19.2	18.2	18.8
21	9.0	8.2	8.6	10.5	9.9	10.2	---	---	---	19.1	18.4	18.8
22	9.0	8.7	8.8	10.8	10.5	10.6	---	---	---	19.3	18.2	18.5
23	9.0	8.6	8.8	11.1	10.5	10.8	---	---	---	19.8	18.8	19.2
24	9.1	8.8	8.9	11.5	10.9	11.2	---	---	---	20.0	19.2	19.6
25	9.3	8.9	9.1	11.9	11.2	11.5	---	---	---	20.1	19.5	19.9
26	9.5	9.1	9.3	12.0	11.4	11.7	---	---	---	20.3	19.4	20.0
27	10.3	9.5	9.9	12.1	11.6	11.8	---	---	---	20.0	19.1	19.6
28	10.5	9.9	10.2	12.4	11.8	12.0	---	---	---	19.9	18.5	19.0
29	---	---	---	12.7	12.0	12.4	---	---	---	20.1	19.0	19.4
30	---	---	---	12.7	12.4	12.5	---	---	---	20.4	19.4	19.8
31	---	---	---	12.4	12.0	12.2	---	---	---	20.0	19.5	19.7
MONTH	10.5	6.6	8.0	12.7	9.9	11.3	13.4	11.6	12.5	20.4	15.9	18.3

CUMBERLAND RIVER BASIN
03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.8	19.4	19.6	19.6	18.9	19.2	27.1	26.2	26.6	25.8	25.1	25.4
2	19.6	19.3	19.4	20.2	19.1	19.7	27.0	26.2	26.5	25.9	25.3	25.5
3	19.4	18.9	19.1	20.8	19.8	20.2	26.9	26.1	26.4	25.8	24.5	25.4
4	19.1	18.7	18.9	21.1	19.9	20.5	26.4	26.2	26.3	25.4	23.9	24.3
5	19.1	18.9	19.0	21.6	19.9	20.8	26.4	25.5	26.1	25.8	25.3	25.5
6	19.0	18.8	18.9	21.9	20.9	21.2	26.1	25.5	25.6	25.7	25.0	25.5
7	18.9	18.6	18.7	21.9	21.4	21.6	26.7	26.0	26.2	25.3	24.8	25.0
8	18.7	18.3	18.5	21.9	21.4	21.6	26.7	25.9	26.4	24.9	24.4	24.7
9	18.3	18.0	18.1	22.1	21.4	21.8	26.5	25.0	26.0	24.8	24.4	24.6
10	18.1	17.8	17.9	22.5	21.3	21.9	25.6	24.9	25.2	24.6	24.2	24.5
11	17.8	17.6	17.7	22.9	21.9	22.3	25.7	25.4	25.5	24.4	24.0	24.1
12	17.9	17.5	17.7	22.9	22.1	22.5	25.5	25.1	25.3	24.5	24.1	24.3
13	18.0	17.5	17.8	23.2	22.7	22.9	25.6	25.0	25.1	24.5	24.1	24.2
14	18.3	17.4	17.7	23.9	22.8	23.3	25.3	25.0	25.2	24.4	24.1	24.2
15	17.5	17.1	17.3	24.1	22.9	23.4	25.8	25.3	25.5	24.6	24.0	24.2
16	17.6	17.3	17.4	23.9	23.3	23.7	26.0	25.4	25.6	24.7	24.1	24.3
17	17.6	17.3	17.5	24.0	23.3	23.7	26.1	25.4	25.8	24.6	24.1	24.3
18	17.7	17.4	17.6	24.5	23.5	23.9	25.9	25.3	25.7	24.8	24.0	24.3
19	18.3	17.6	18.0	24.9	23.8	24.4	26.0	25.3	25.6	24.9	24.1	24.4
20	18.8	18.2	18.4	25.0	24.0	24.6	26.0	25.6	25.7	24.6	24.0	24.5
21	18.9	18.7	18.8	24.9	24.1	24.5	26.3	25.3	25.9	24.2	23.8	24.0
22	18.9	18.6	18.8	24.9	24.1	24.6	26.1	25.0	25.5	24.2	23.5	23.8
23	19.0	18.5	18.7	25.6	24.5	25.2	25.7	25.2	25.4	24.2	23.6	24.0
24	19.4	18.8	19.1	25.7	24.6	25.3	25.8	25.3	25.5	23.6	22.0	23.1
25	19.6	19.1	19.4	25.4	24.4	24.7	25.6	25.2	25.4	22.8	22.1	22.5
26	19.6	19.3	19.4	25.6	25.1	25.4	25.5	25.0	25.3	22.5	21.6	22.0
27	19.8	19.3	19.5	26.2	25.6	25.9	25.4	25.0	25.2	22.6	21.5	22.0
28	19.8	19.3	19.5	26.0	25.4	25.7	25.1	24.8	25.0	22.7	21.8	22.1
29	19.5	19.3	19.4	25.8	25.0	25.3	25.1	24.7	24.9	22.1	21.6	21.9
30	19.4	19.1	19.2	25.7	24.8	25.2	25.5	24.8	25.0	22.2	21.3	21.6
31	---	---	---	27.3	25.1	25.8	25.7	25.0	25.3	---	---	---
MONTH	19.8	17.1	18.6	27.3	18.9	23.3	27.1	24.7	25.6	25.9	21.3	24.0

OXYGEN DISSOLVED (DO) MG/L, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.8	7.0	7.5	11.0	10.1	10.6	10.7	10.5	10.6
2	---	---	---	8.6	7.5	8.0	10.9	10.5	10.8	10.6	10.3	10.4
3	---	---	---	9.0	8.4	8.7	10.5	9.7	10.2	10.6	10.3	10.4
4	---	---	---	9.2	8.4	8.8	9.9	9.6	9.8	10.6	10.4	10.5
5	---	---	---	9.4	8.4	8.8	10.0	9.7	9.8	10.6	10.4	10.5
6	---	---	---	9.4	8.7	9.1	10.3	10.0	10.1	10.6	10.4	10.5
7	---	---	---	9.3	8.6	8.9	10.2	9.9	10.1	10.7	10.4	10.5
8	---	---	---	9.0	8.6	8.8	10.1	9.9	10.0	10.7	10.6	10.7
9	---	---	---	9.3	8.8	9.0	10.4	9.9	10.2	10.8	10.6	10.7
10	---	---	---	9.4	8.8	9.2	10.4	10.1	10.2	11.0	10.7	10.8
11	---	---	---	9.7	9.2	9.4	10.6	10.3	10.4	11.3	11.0	11.1
12	---	---	---	9.9	9.3	9.6	10.5	10.3	10.4	11.5	11.2	11.3
13	---	---	---	9.9	9.5	9.6	10.7	10.4	10.5	11.6	11.4	11.5
14	---	---	---	9.9	9.2	9.6	10.6	10.4	10.5	11.6	11.4	11.5
15	---	---	---	9.6	8.8	9.3	10.7	10.4	10.6	11.6	11.4	11.5
16	---	---	---	9.4	8.8	9.0	10.7	10.4	10.5	11.9	11.6	11.7
17	---	---	---	9.5	9.2	9.3	11.4	10.3	10.9	12.2	11.9	12.0
18	---	---	---	9.4	8.8	9.1	11.1	10.6	10.9	12.4	12.2	12.2
19	---	---	---	9.1	8.6	8.9	10.7	10.4	10.5	12.3	12.1	12.2
20	---	---	---	9.4	9.0	9.2	10.7	10.5	10.6	12.3	12.0	12.1
21	---	---	---	9.5	9.1	9.3	10.9	10.7	10.8	12.2	12.0	12.0
22	---	---	---	9.8	9.2	9.5	11.1	10.9	11.0	12.1	12.0	12.0
23	---	---	---	10.6	9.6	10.0	11.2	10.9	11.1	12.1	11.9	12.0
24	---	---	---	10.9	10.0	10.5	11.3	11.1	11.2	12.0	11.6	11.8
25	8.5	7.8	8.3	10.8	10.3	10.5	11.4	11.2	11.2	11.9	11.7	11.8
26	7.9	7.6	7.7	10.5	9.9	10.2	11.2	10.9	11.1	12.1	11.8	11.9
27	8.3	7.8	8.0	10.6	10.0	10.3	11.0	10.8	10.9	12.0	11.4	11.6
28	8.1	7.1	7.9	10.3	10.0	10.2	11.0	10.7	10.8	---	---	---
29	7.8	6.9	7.2	10.4	10.0	10.2	10.8	10.7	10.8	---	---	---
30	8.9	7.2	8.1	10.6	10.2	10.3	10.9	10.7	10.8	12.0	11.3	11.7
31	7.8	7.0	7.6	---	---	---	10.8	10.6	10.7	11.3	11.0	11.1
MONTH	8.9	6.9	7.8	10.9	7.0	9.4	11.4	9.6	10.6	12.4	10.3	11.3

CUMBERLAND RIVER BASIN
03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.1	11.0	11.1	11.4	10.6	11.0	12.0	11.6	11.8	---	---	---
2	11.4	11.1	11.3	11.5	10.3	11.0	12.0	11.8	11.9	---	---	---
3	11.3	11.3	11.3	11.4	10.7	11.0	11.9	11.5	11.7	11.4	10.5	11.0
4	11.3	11.1	11.2	11.3	10.8	11.0	11.9	11.6	11.7	11.3	10.3	10.8
5	11.1	10.8	11.0	11.3	10.5	10.8	11.9	11.6	11.7	11.6	10.9	11.2
6	11.2	10.9	11.1	10.8	10.4	10.6	11.6	11.2	11.3	12.3	11.2	11.7
7	11.3	11.1	11.2	10.9	10.4	10.6	11.2	11.0	11.1	11.9	10.5	11.0
8	11.1	10.8	11.0	10.9	10.4	10.6	11.3	11.0	11.2	11.6	11.2	11.4
9	11.2	10.9	11.0	11.2	10.5	10.8	11.2	11.0	11.1	11.2	10.8	10.9
10	11.4	11.0	11.2	11.3	10.9	11.1	11.5	10.9	11.2	11.6	10.1	10.7
11	11.3	11.1	11.2	11.6	11.1	11.4	11.5	11.1	11.3	12.2	10.8	11.4
12	11.3	11.1	11.2	11.7	11.2	11.4	11.5	11.0	11.2	12.3	10.5	11.7
13	11.3	11.1	11.2	11.9	11.2	11.5	11.0	10.7	10.9	10.5	9.1	10.0
14	11.5	11.1	11.2	11.6	11.4	11.5	11.5	10.6	11.1	10.7	9.5	10.1
15	11.3	11.0	11.2	11.8	11.5	11.6	11.6	11.2	11.4	11.2	9.6	10.3
16	11.4	11.2	11.3	12.0	11.7	11.8	11.9	11.4	11.6	10.5	9.6	10.0
17	11.7	11.3	11.5	12.1	11.9	12.0	11.9	11.3	11.7	11.1	10.2	10.7
18	11.7	11.5	11.6	12.0	11.8	11.9	11.6	11.0	11.3	10.8	9.8	10.3
19	11.7	11.5	11.6	12.1	11.7	11.9	11.7	11.4	11.5	10.6	9.4	10.0
20	11.8	11.6	11.7	12.3	12.0	12.1	11.7	11.0	11.4	9.4	8.3	8.9
21	11.8	11.5	11.6	12.2	12.0	12.1	---	---	---	9.5	8.8	9.1
22	11.5	11.4	11.4	12.2	12.1	12.1	---	---	---	9.5	8.1	8.8
23	11.9	11.4	11.6	12.3	12.1	12.2	---	---	---	9.8	8.6	9.1
24	11.8	11.5	11.6	12.2	11.8	12.0	---	---	---	9.2	8.1	8.6
25	11.7	11.0	11.3	12.0	11.8	11.9	---	---	---	8.9	7.8	8.4
26	11.3	10.8	11.1	12.0	11.8	11.9	---	---	---	8.5	7.5	8.0
27	11.3	10.7	10.9	12.1	11.9	12.0	---	---	---	8.2	6.9	7.4
28	11.4	10.8	11.0	12.0	11.8	11.9	---	---	---	7.6	6.5	6.9
29	---	---	---	11.9	11.7	11.8	---	---	---	8.2	7.2	7.6
30	---	---	---	11.9	11.6	11.8	---	---	---	8.7	7.6	8.0
31	---	---	---	11.9	11.5	11.7	---	---	---	8.5	7.9	8.2
MONTH	11.9	10.7	11.3	12.3	10.3	11.5	12.0	10.6	11.4	12.3	6.5	9.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.7	7.4	8.2	8.9	8.0	8.5	7.0	5.9	6.4	9.6	8.4	9.0
2	9.0	8.4	8.7	8.3	7.5	8.1	7.2	5.9	6.4	8.9	8.1	8.6
3	8.4	8.2	8.3	8.7	7.1	8.0	7.1	5.9	6.4	8.6	7.9	8.2
4	8.7	8.2	8.4	9.0	8.4	8.7	6.9	6.0	6.5	8.4	7.6	8.0
5	8.9	7.5	8.2	9.2	8.0	8.6	6.6	5.8	6.2	9.8	8.4	9.1
6	7.7	7.2	7.4	9.6	8.1	8.8	6.4	5.7	5.9	10.2	9.3	9.6
7	7.9	7.4	7.6	9.6	8.2	9.2	7.4	6.2	6.8	10.3	9.2	9.6
8	8.0	7.7	7.9	9.3	8.3	8.9	8.0	7.0	7.4	9.5	8.0	8.8
9	8.1	7.2	7.8	9.2	7.9	8.7	8.1	6.9	7.5	8.8	8.0	8.4
10	9.0	7.3	7.9	9.2	8.0	8.6	7.8	6.6	7.2	8.6	7.8	8.2
11	9.0	8.5	8.7	9.4	8.2	8.9	8.7	7.4	7.9	8.3	7.5	7.7
12	9.4	8.7	9.0	9.0	8.4	8.6	8.4	7.3	7.9	9.0	8.1	8.5
13	9.8	9.0	9.4	8.9	8.0	8.6	8.8	6.9	7.4	9.4	8.4	8.9
14	10.5	9.4	9.9	9.2	7.5	8.6	7.8	6.9	7.4	9.1	8.3	8.7
15	11.1	10.4	10.7	8.7	7.9	8.3	8.8	7.5	8.2	9.1	8.0	8.5
16	10.4	9.7	10.0	8.6	7.7	8.3	8.7	7.8	8.2	8.7	7.8	8.2
17	10.2	9.5	9.7	8.7	7.6	8.2	8.8	7.4	8.1	8.3	7.5	7.8
18	10.1	9.8	9.9	8.6	7.5	7.9	8.2	6.9	7.6	8.3	7.2	7.7
19	10.1	9.8	10.0	8.7	7.7	8.2	7.8	6.7	7.2	8.4	7.3	7.7
20	10.4	9.7	9.9	8.6	7.7	8.2	7.3	6.5	7.0	8.3	7.5	8.0
21	9.9	9.5	9.6	8.2	7.5	7.8	8.3	6.2	7.3	8.0	7.5	7.8
22	9.9	9.3	9.5	7.8	6.3	7.1	8.1	6.9	7.3	8.3	7.5	7.9
23	10.2	9.7	9.9	6.8	6.3	6.5	8.6	6.9	7.7	8.1	7.6	7.8
24	10.2	9.5	9.8	6.9	6.4	6.7	9.4	8.1	8.6	7.6	6.0	7.0
25	10.0	9.4	9.7	6.8	6.3	6.5	8.9	7.7	8.3	7.3	6.5	7.1
26	9.9	9.2	9.6	6.9	6.4	6.6	8.5	7.6	8.1	7.7	6.2	6.7
27	9.9	9.2	9.6	6.7	6.4	6.5	8.3	7.2	7.6	8.0	6.0	6.7
28	9.6	8.8	9.3	6.6	6.3	6.5	7.5	7.0	7.3	8.1	6.3	6.8
29	9.2	8.9	9.0	6.6	4.9	5.7	7.7	6.5	7.2	7.9	6.3	6.9
30	8.9	7.7	8.3	6.7	5.1	5.8	---	---	---	9.1	5.7	6.8
31	---	---	---	7.0	5.1	5.7	---	---	---	---	---	---
MONTH	11.1	7.2	9.1	9.6	4.9	7.8	9.4	5.7	7.3	10.3	5.7	8.0

CUMBERLAND RIVER BASIN

03431300 BROWNS CREEK AT STATE FAIRGROUNDS, AT NASHVILLE, TN

LOCATION.--Lat 36°07'47", long 86°45'40", Davidson County, Hydrologic Unit 05130202, near center of span on downstream side of bridge on access road to pit area of the race track at State Fairgrounds, 300 ft west of Craighead Street, 0.3 mi upstream from bridge on U.S. Highway 31A and 41A, and 2.8 mi southwest of the State Capitol in Nashville.

DRAINAGE AREA.--11.8 mi^2.

PERIOD OF RECORD.--December 1963 to September 1975. August 1993 to current year.

REVISED RECORDS.--WDR TN-94-1: 1975 (p).

GAGE.--Data collection platform. Datum of gage is 439.81 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specfic conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 16	2050	946	5.89	June 12	0715	1,450	6.87
Mar. 2	0130	927	5.84	June 14	0050	*1,750	*7.33
Mar. 3	0230	1,590	7.10	July 28	1800	851	5.64
Mar. 5	1135	990	6.00	Aug. 12	1515	877	5.71
May 26	2245	1,420	6.82	Sept. 24	1810	1,050	6.12

Minimum discharge, 0.50 ft^3/s, Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	59	87	10	21	34	11	19	74	12	4.0	2.7
2	4.7	19	39	9.1	18	321	9.5	9.6	46	7.7	3.1	2.6
3	3.7	12	27	8.4	22	450	8.6	8.1	34	6.1	2.5	13
4	3.2	8.3	20	16	37	122	7.9	6.4	25	5.9	4.6	1.9
5	2.8	6.4	33	26	27	380	18	5.5	19	4.6	2.4	1.5
6	2.5	6.2	22	16	22	142	9.6	4.9	15	3.9	1.9	1.3
7	2.2	56	17	13	20	89	7.8	4.6	14	3.3	1.6	1.3
8	2.0	30	14	15	23	65	7.1	7.2	48	8.0	2.0	2.3
9	1.8	19	12	16	17	54	6.4	4.3	32	4.2	20	2.5
10	.7	16	10	14	15	47	5.9	3.4	20	3.2	5.6	1.1
11	1.6	11	9.0	12	13	39	5.6	3.1	19	2.7	3.5	.89
12	1.5	8.2	42	10	12	33	5.3	2.9	141	2.4	51	.88
13	1.4	7.4	18	9.2	23	33	5.0	2.6	149	20	18	.78
14	1.3	12	14	8.9	17	48	4.8	2.4	331	7.4	9.4	.77
15	1.2	7.5	12	25	14	31	4.6	2.1	79	5.1	6.7	.74
16	1.1	6.5	207	19	13	27	4.2	2.0	54	3.8	4.8	.70
17	1.1	33	229	15	11	27	4.1	1.9	53	3.2	3.8	.62
18	15	36	72	13	10	77	3.9	1.7	35	2.8	3.6	.59
19	2.4	24	46	12	9.7	89	3.7	48	27	2.5	18	.58
20	1.8	18	34	10	8.8	49	3.3	27	20	2.9	23	.57
21	1.6	15	26	9.4	15	39	11	10	41	2.1	8.6	.53
22	13	11	21	27	9.1	31	8.3	6.7	21	1.8	5.9	.53
23	6.0	9.2	17	16	8.1	25	5.1	5.4	15	1.8	4.6	28
24	3.2	7.7	59	113	7.5	20	4.1	4.4	12	1.6	4.0	150
25	2.5	20	27	46	7.0	32	3.6	5.0	9.5	1.5	3.6	41
26	14	11	23	34	16	25	3.2	114	7.9	1.3	3.4	18
27	16	9.1	20	50	26	18	5.3	61	6.7	1.2	3.2	11
28	16	7.8	17	65	21	21	37	27	12	47	2.9	7.8
29	6.6	7.5	15	40	---	17	18	44	9.1	30	2.8	6.1
30	4.9	66	13	32	---	14	10	23	28	12	2.8	5.0
31	6.7	---	11	27	---	12	---	165	---	6.1	2.7	---
TOTAL	149.2	559.8	1213.0	737.0	463.2	2411	241.9	632.2	1397.2	218.1	234.0	305.28
MEAN	4.81	18.7	39.1	23.8	16.5	77.8	8.06	20.4	46.6	7.04	7.55	10.2
MAX	16	66	229	113	37	450	37	165	331	47	51	150
MIN	1.1	6.2	9.0	8.4	7.0	12	3.2	1.7	6.7	1.2	1.6	.53
CFSM	.41	1.58	3.32	2.01	1.40	6.59	.68	1.73	3.95	.60	.64	.86
IN.	.47	1.76	3.82	2.32	1.46	7.60	.76	1.99	4.40	.69	.74	.96

CUMBERLAND RIVER BASIN

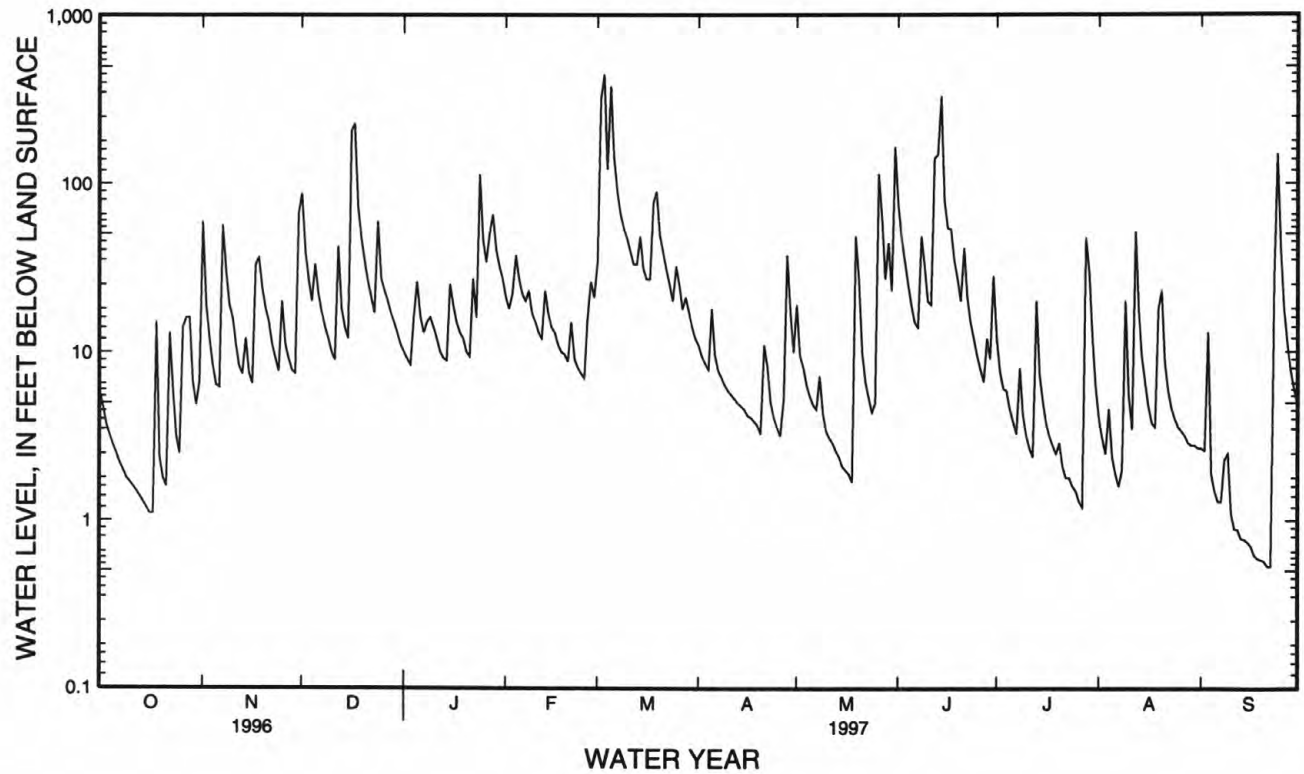
03431300 BROWNS CREEK AT STATE FAIRGROUNDS, AT NASHVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	5.36	13.7	21.7	25.7	24.7	39.7	24.2	18.7	12.9	6.78	6.47	6.09
MAX	24.5	34.8	63.8	86.5	49.2	102	50.3	38.5	46.6	19.8	23.2	21.0
(WY)	1996	1974	1973	1974	1969	1975	1973	1970	1997	1967	1971	1974
MIN	.71	1.36	1.28	5.79	5.87	9.70	4.36	5.42	1.71	.96	1.65	.92
(WY)	1966	1966	1966	1966	1967	1966	1967	1971	1966	1964	1968	1965

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	5888.59		8561.88			
ANNUAL MEAN	16.1		23.5		17.4	
HIGHEST ANNUAL MEAN					29.6	1973
LOWEST ANNUAL MEAN					6.67	1966
HIGHEST DAILY MEAN	229	Dec 17	450	Mar 3	696	Mar 12 1975
LOWEST DAILY MEAN	.81	Sep 1	.53	Sep 21	.29	Sep 5 1973
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 19	.59	Sep 16	.36	Sep 2 1973
INSTANTANEOUS PEAK FLOW			1750	Jun 14	2210	Nov 27 1994
INSTANTANEOUS PEAK STAGE			7.33	Jun 14	8.20	Nov 27 1994
INSTANTANEOUS LOW FLOW			a.50	Sep 21	.15	Sep 5 1973
ANNUAL RUNOFF (CFSM)	1.36		1.99		1.47	
ANNUAL RUNOFF (INCHES)	18.56		26.99		19.99	
10 PERCENT EXCEEDS	33		48		39	
50 PERCENT EXCEEDS	9.8		11		6.3	
90 PERCENT EXCEEDS	1.7		1.9		1.2	

a Also occurred Sept. 22.



CUMBERLAND RIVER BASIN

034315005 CUMBERLAND RIVER AT WOODLAND STREET AT NASHVILLE, TN

LOCATION.--Lat 36°10'02", long 86°46'35", Davidson County, Hydrologic Unit 05130202, on left bank at northwest corner of Woodland Street Bridge, at Nashville, 3.5 mi downstream from Mill Creek, and at mile 190.9.

DRAINAGE AREA.--12,860 mi^2, approximately.

PERIOD OF RECORD.--May 1992 to current year. October 1892 to September 1954, monthly and yearly discharges published in WSP 1306 and 1726, October 1986 to September 1991, gage height, published as "at Nashville." Gage height record collected in this vicinity since 1873 are contained in reports of U.S. Weather Bureau.

GAGE.--Data collection platform and acoustic velocity meter. Datum of gage is 368.17 ft above sea level. Prior to fall of 1922 inclined and vertical staff gage at site 350 ft downstream and from fall of 1922 to Apr. 9, 1940, staff gage at site 400 ft downstream, both gages at same datum. Nov. 1, 1930, to Sept. 30, 1954, upper staff gage at former lock 1, 2.7 mi downstream was used as auxiliary gage. Prior to May 1992 at site 0.2 mi upstream at same datum.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 203,000 ft^3/s, Jan. 1, 1927, gage height 56.2 ft; minimum gage height observed after first filling of pool at dam 1, 6.1 ft Oct. 19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 134,000 ft^3/s, Mar. 3, maximum gage height, 39.26 ft, Mar. 4, minimum daily discharge, 5,960 ft^3/s, Oct. 14; minimum gage height, 16.46 ft, May 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9470	15600	64300	35900	46200	44900	54200	15300	60800	51000	12700	8560
2	10900	18000	74000	35200	40100	72400	51400	11400	60500	35600	11900	6870
3	13400	21200	58200	31100	36300	e122000	48800	12400	37100	25100	9580	7750
4	15000	12900	46000	30100	38000	e110000	48400	12700	32200	22000	7960	12200
5	14300	9960	41000	33800	45500	e88900	47900	12800	30600	23100	8150	14400
6	12900	11500	38700	43400	46100	e92300	45000	12500	33800	23600	9740	12000
7	10800	15900	38700	34900	42900	e92600	44300	12900	35800	27800	13700	8510
8	12200	29800	34000	33100	38000	e81000	37100	12600	36300	25900	13800	9160
9	11300	33600	35900	35300	39300	e70700	36400	14800	43000	25500	11100	8530
10	12200	20800	35200	36800	31700	e64000	e33000	13300	45100	28300	8820	8550
11	11600	20900	31600	33800	31200	e64000	e32000	12900	43500	28000	9840	11900
12	7440	18400	31500	30300	34000	e60900	28900	11400	39500	21600	9110	13600
13	6390	14000	35900	33900	31600	e59500	28600	9780	38900	15600	10700	12000
14	5960	14300	33700	37300	29600	e61100	21500	10100	63100	13700	13600	11300
15	6360	15200	32500	33900	30000	e63500	12900	9960	66600	15600	13600	10100
16	8920	13100	35100	30100	27900	e63200	10100	10100	67900	16300	12500	7840
17	9790	10700	70500	37500	28700	e59700	8130	8890	69700	14500	9680	8580
18	11200	16300	61100	36400	32900	e59000	9720	8080	68000	14800	9250	10300
19	9980	17200	50000	37000	34000	e70800	11100	6670	66900	14200	8640	11900
20	6250	17200	44000	30400	35000	e81600	10600	15700	66000	12800	13200	12800
21	6500	16100	35900	29600	34500	e79500	10300	11100	60600	12800	20900	10000
22	6890	18000	36400	35600	32600	e71100	11200	10700	57500	13800	13700	7660
23	6830	15700	38300	33400	28600	e63200	10900	9980	59700	14500	12400	6020
24	7780	13600	31800	40300	26600	e62900	8660	8000	56200	11500	9740	9610
25	7960	12900	34100	49400	30200	e59600	8260	6400	51400	11900	7410	20300
26	8660	16800	41700	56600	27000	e57900	7440	6470	51200	12700	7540	16300
27	10900	31500	41200	43900	26200	e57200	10200	9590	49200	11600	10100	14500
28	12300	33300	33300	45700	33500	e52800	11400	10300	43600	10900	13000	12800
29	12300	33100	28700	65400	---	e50400	10900	11900	41700	8490	12500	11100
30	11000	31500	27100	58600	---	e49300	12000	12100	47900	6430	10200	9500
31	9140	---	28400	47600	---	e49300	---	19900	---	14500	10700	---
TOTAL	306620	569060	1268800	1196300	958200	2135300	721310	350720	1524300	584120	345760	324640
MEAN	9891	18970	40930	38590	34220	68880	24040	11310	50810	18840	11150	10820
MAX	15000	33600	74000	65400	46200	122000	54200	19900	69700	51000	20900	20300
MIN	5960	9960	27100	29600	26200	44900	7440	6800	30600	6430	7410	6020

e Estimated

CUMBERLAND RIVER BASIN

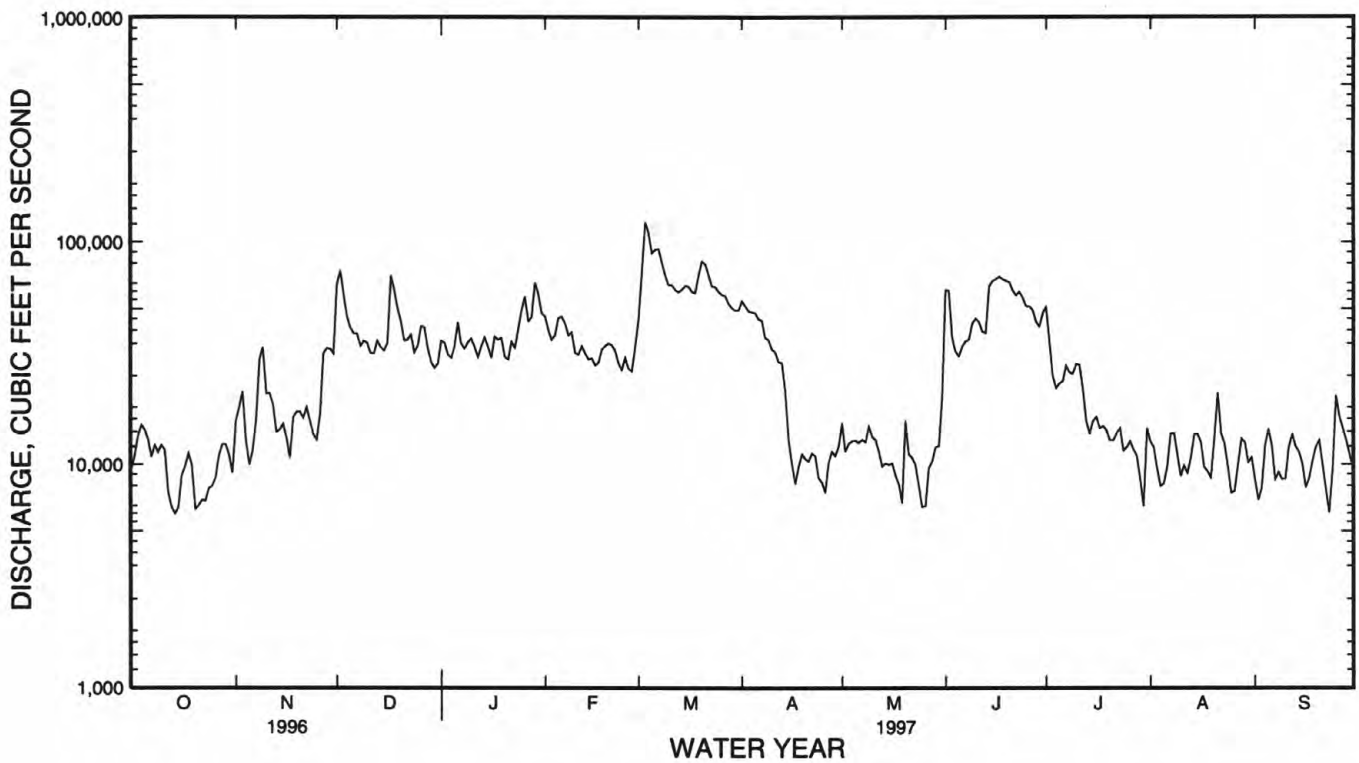
034315005 CUMBERLAND RIVER AT WOODLAND STREET AT NASHVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	11840	15970	26890	35740	34900	49350	38620	20880	21290	15150	14540	11720
MAX	18380	22670	40930	43570	71760	82050	92860	32790	50810	20320	20680	18820
(WY)	1993	1996	1997	1994	1994	1994	1994	1995	1997	1992	1996	1992
MIN	7649	8167	15830	22930	19200	29360	10680	7195	10210	11490	10490	8176
(WY)	1994	1994	1996	1995	1993	1995	1995	1992	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		*WATER YEARS 1992 - 1997	
ANNUAL TOTAL	8999290		10285130			
ANNUAL MEAN	24590		28180		24760	
HIGHEST ANNUAL MEAN					34940	1994
LOWEST ANNUAL MEAN					17510	1995
HIGHEST DAILY MEAN	74000	Dec 2	122000	Mar 3	122000	Mar 3 1997
LOWEST DAILY MEAN	5960	Oct 14	5960	Oct 14	4290	Oct 10 1993
ANNUAL SEVEN-DAY MINIMUM	7270	Oct 20	7270	Oct 20	5410	Oct 6 1993
INSTANTANEOUS PEAK FLOW			134000	Mar 3	134000	Mar 3 1997
INSTANTANEOUS PEAK STAGE			39.26	Mar 4	39.26	Mar 4 1997
10 PERCENT EXCEEDS	41300		59700		48500	
50 PERCENT EXCEEDS	23200		21500		16600	
90 PERCENT EXCEEDS	10100		8660		7960	

* Period of daily discharge only.



CUMBERLAND RIVER BASIN

03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°10'59", long 86°49'56", Davidson County, Hydrologic Unit 05130202, on center pier of Nashville to Ashland City Railroad Bridge, 2.6 mi upstream of Whiters Creek at mi 185.2.

DRAINAGE AREA.--12,862mi^2.

PERIOD OF RECORD.--November 1996 to September 1997.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1996 to September 1997.
pH: November 1996 to September 1997.
WATER TEMPERATURE: November 1996 to September 1997.
DISSOLVED OXYGEN: November 1996 to September 1997.

INSTRUMENTATION.--Water-quality monitor since November 1996.

REMARKS.--Flow regulated by Old Hickory Dam and other reservoirs above station. Periods of missing record were due to instrument malfunctions. Gage out of operation Feb. 1 to March 3.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 265 microsiemens, Nov. 21, 1996; minimum, 183 microsiemens, Mar. 24, 1997.
pH: Maximum, 8.7 units, May 1, 3, 1997; minimum, 6.6 units, Nov. 30, 1997, June 11, 1997.
WATER TEMPERATURE: Maximum, 27.6°C, Aug. 4, 1997; minimum, 4.6°C, Jan. 19, 1997.
DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Jan. 27, 1997; minimum,4.8 mg/L, July 31, 1997.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 265 microsiemens, Nov. 21; minimum, 183 microsiemens, Mar. 24.
pH: Maximum, 8.7 units, May 1, 3; minimum, 6.6 units, Nov. 30, June 11.
WATER TEMPERATURE: Maximum, 27.6°C, Aug. 4; minimum, 4.6°C, Jan. 19.
DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Jan. 27; minimum, 4.8 mg/L, July 31.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR NOVEMBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	241	221	230	253	234	241	234	216	221
2	---	---	---	240	223	232	244	237	241	232	217	223
3	---	---	---	235	218	224	243	239	241	236	220	228
4	---	---	---	232	220	225	240	237	238	236	221	229
5	---	---	---	244	227	236	244	238	241	236	222	230
6	---	---	---	251	232	240	246	242	244	234	219	229
7	---	---	---	244	229	235	247	240	244	241	222	232
8	---	---	---	245	226	235	240	232	238	241	222	232
9	---	---	---	234	223	229	232	227	229	235	219	230
10	---	---	---	245	227	236	233	226	228	237	222	233
11	---	---	---	243	233	238	237	229	232	241	227	235
12	---	---	---	245	237	241	244	229	233	239	225	234
13	---	---	---	246	238	241	236	230	233	240	217	228
14	---	---	---	248	236	243	235	222	232	234	218	225
15	---	---	---	247	235	242	234	218	228	249	221	231
16	---	---	---	247	239	243	237	217	228	243	221	231
17	---	---	---	246	236	242	230	212	220	239	219	229
18	---	---	---	250	240	246	239	227	233	236	216	226
19	---	---	---	263	249	257	240	235	237	233	213	219
20	---	---	---	263	252	258	235	223	230	236	217	223
21	---	---	---	265	253	259	238	222	233	239	218	223
22	---	---	---	264	251	258	241	224	235	234	217	225
23	---	---	---	259	250	255	241	224	231	238	219	227
24	---	---	---	257	247	252	249	226	238	236	218	228
25	---	---	---	258	246	251	240	221	233	234	216	225
26	---	---	---	260	247	254	235	215	225	235	217	228
27	---	---	---	260	241	248	233	216	224	247	226	235
28	---	---	---	263	242	253	239	221	229	253	222	238
29	---	---	---	264	257	261	234	220	226	236	230	233
30	---	---	---	261	251	256	239	221	229	241	233	236
31	---	---	---	---	---	---	237	219	226	241	239	240
MONTH	---	---	---	265	218	244	253	212	233	253	213	229

CUMBERLAND RIVER BASIN
03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR NOVEMBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	196	193	194	211	207	209
2	---	---	---	---	---	---	192	190	191	214	208	212
3	---	---	---	---	---	---	191	189	190	220	210	214
4	---	---	---	209	203	206	191	189	189	214	211	213
5	---	---	---	203	201	201	191	189	190	214	212	213
6	---	---	---	199	188	189	191	188	190	217	212	214
7	---	---	---	208	199	203	188	187	187	218	213	214
8	---	---	---	204	200	202	190	186	188	216	214	215
9	---	---	---	220	204	213	190	185	187	216	213	214
10	---	---	---	220	213	216	191	187	189	217	213	215
11	---	---	---	213	210	211	193	191	192	217	213	215
12	---	---	---	217	210	213	198	192	194	215	212	213
13	---	---	---	217	213	216	197	193	194	225	212	217
14	---	---	---	215	211	214	203	193	196	226	210	217
15	---	---	---	212	211	211	215	196	201	226	208	213
16	---	---	---	211	210	211	212	198	201	223	203	209
17	---	---	---	211	209	210	220	202	205	207	203	206
18	---	---	---	209	205	207	216	200	203	207	204	205
19	---	---	---	212	198	203	---	---	---	213	206	207
20	---	---	---	206	196	203	---	---	---	222	198	206
21	---	---	---	205	198	202	216	200	201	210	196	199
22	---	---	---	204	200	202	208	199	202	219	202	208
23	---	---	---	204	190	199	211	200	204	214	202	208
24	---	---	---	196	183	190	224	202	207	224	205	211
25	---	---	---	198	184	191	213	203	206	224	204	213
26	---	---	---	198	187	193	222	203	208	247	204	222
27	---	---	---	195	185	191	217	201	206	221	203	209
28	---	---	---	196	185	190	206	201	203	233	206	217
29	---	---	---	197	185	190	218	205	210	243	205	222
30	---	---	---	192	184	185	224	209	215	236	204	213
31	---	---	---	188	187	188	---	---	---	231	201	213
MONTH	---	---	---	220	183	202	224	185	198	247	196	212

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	214	199	205	205	190	197	201	195	198	202	196	199
2	228	213	217	206	190	197	202	195	198	204	197	200
3	230	224	228	213	190	201	202	196	199	212	201	205
4	227	222	224	194	190	192	204	196	200	207	198	204
5	232	224	228	194	192	193	214	199	204	209	196	202
6	236	229	232	222	193	206	217	200	205	202	197	199
7	237	233	235	211	195	204	207	197	201	204	197	202
8	234	231	232	212	197	204	214	197	201	203	199	201
9	233	223	228	216	193	205	205	199	202	207	200	203
10	226	223	225	212	192	199	208	200	203	212	200	205
11	224	220	221	209	192	198	207	200	204	210	199	205
12	232	221	225	209	192	201	205	197	202	210	198	204
13	226	219	223	198	194	196	209	197	203	220	198	208
14	---	---	---	199	195	196	204	197	201	206	195	203
15	---	---	---	202	193	197	203	195	199	206	196	202
16	218	215	217	197	193	194	200	194	198	208	200	203
17	230	215	223	202	195	197	202	197	200	212	201	205
18	230	228	229	202	195	197	205	197	202	211	191	202
19	229	226	227	201	192	196	211	198	204	210	196	203
20	226	219	222	198	192	195	214	199	206	216	196	205
21	228	220	222	196	191	195	207	197	200	213	199	205
22	224	216	220	196	194	195	208	199	204	217	196	205
23	216	205	212	197	193	195	207	198	202	214	200	204
24	214	203	211	200	194	196	206	197	201	219	198	212
25	216	204	210	201	192	197	206	197	202	220	205	212
26	215	201	208	198	193	196	209	201	203	235	204	224
27	212	199	204	197	194	195	207	197	203	239	203	228
28	212	196	201	198	195	197	202	195	200	235	203	225
29	207	193	197	---	---	---	201	195	199	238	204	228
30	208	192	197	---	---	---	207	196	199	236	208	216
31	---	---	---	220	198	203	202	196	199	---	---	---
MONTH	237	192	219	222	190	198	217	194	201	239	191	207

CUMBERLAND RIVER BASIN
03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN--Continued

PH (STANDARD UNITS), WATER YEAR NOVEMBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	7.4	7.1	7.3	6.8	7.6	7.3	---	---	---	---
2	---	---	7.4	7.3	7.5	7.3	7.6	7.5	---	---	---	---
3	---	---	7.5	7.4	7.5	7.5	7.6	7.6	---	---	---	---
4	---	---	7.6	7.4	7.6	7.5	7.6	7.4	---	---	---	---
5	---	---	7.7	7.5	7.6	6.9	7.7	7.6	---	---	---	---
6	---	---	7.7	7.2	7.5	7.3	7.7	7.7	---	---	7.2	7.0
7	---	---	7.8	7.2	7.6	7.5	7.8	7.7	---	---	7.4	7.2
8	---	---	7.5	7.1	7.6	7.5	7.8	7.3	---	---	7.4	7.4
9	---	---	7.5	7.0	7.7	7.5	7.8	7.4	---	---	7.5	7.4
10	---	---	7.5	7.1	7.7	7.6	7.8	7.7	---	---	7.5	7.5
11	---	---	7.6	7.5	7.8	7.6	7.8	7.7	---	---	7.5	7.4
12	---	---	7.6	7.5	7.8	7.4	7.8	7.7	---	---	7.6	7.4
13	---	---	7.7	7.2	7.7	7.6	7.7	7.7	---	---	7.6	7.6
14	---	---	7.6	7.2	7.7	7.6	7.7	7.6	---	---	7.6	7.6
15	---	---	7.6	7.6	7.8	7.6	7.7	7.3	---	---	7.6	7.6
16	---	---	7.7	7.6	7.7	7.3	7.7	7.6	---	---	7.6	7.6
17	---	---	7.6	7.3	7.7	7.3	7.8	7.7	---	---	7.7	7.6
18	---	---	7.6	7.2	7.7	7.6	7.8	7.7	---	---	7.8	7.7
19	---	---	7.8	7.2	7.7	7.5	7.8	7.7	---	---	7.7	7.6
20	---	---	7.7	7.4	8.0	7.6	7.8	7.8	---	---	7.6	7.6
21	---	---	7.7	7.3	7.8	7.7	7.9	7.5	---	---	7.7	7.6
22	---	---	7.7	7.6	7.8	7.4	7.9	7.3	---	---	7.7	7.7
23	---	---	7.8	7.7	7.8	7.2	8.1	7.8	---	---	7.7	7.6
24	---	---	7.9	7.7	7.7	7.2	7.9	7.6	---	---	7.6	7.6
25	---	---	8.0	7.5	7.8	7.6	7.8	7.8	---	---	7.8	7.6
26	---	---	8.0	7.7	7.8	6.9	7.8	7.8	---	---	7.9	7.7
27	---	---	7.9	7.8	7.6	6.9	7.8	7.5	---	---	7.8	7.8
28	---	---	7.8	7.8	7.6	7.3	7.8	7.7	---	---	8.1	7.8
29	---	---	7.8	6.9	7.6	7.2	7.8	7.7	---	---	8.1	8.0
30	---	---	7.0	6.6	7.6	7.4	7.8	7.8	---	---	8.1	8.0
31	---	---	---	---	7.6	7.2	7.8	7.7	---	---	8.1	8.0
MONTH	---	---	8.0	6.6	8.0	6.8	8.1	7.3	---	---	8.1	7.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.7	8.7	8.1	7.3	7.1	7.0	6.8	8.1	7.6	8.1	7.8
2	7.8	7.7	8.5	8.0	7.2	7.1	7.4	6.9	7.9	7.6	8.1	7.8
3	7.8	7.7	8.7	8.1	7.3	7.1	7.6	7.3	7.9	7.6	7.8	7.7
4	7.8	7.7	8.4	8.1	7.2	7.1	7.7	7.3	8.1	7.8	7.9	7.6
5	7.9	7.7	8.3	8.0	7.3	7.2	7.8	7.2	7.9	7.7	8.4	7.6
6	7.8	7.7	8.3	7.9	7.3	7.1	7.8	7.2	7.7	7.6	8.6	8.1
7	7.7	7.7	7.9	7.3	7.2	7.1	8.0	7.4	8.0	7.5	8.4	7.9
8	7.8	7.6	7.6	7.2	7.2	7.1	7.9	7.5	8.4	7.8	8.1	7.7
9	7.8	7.7	7.6	7.4	7.3	7.0	7.8	7.3	8.3	7.9	7.8	7.6
10	7.8	7.7	7.5	7.2	7.0	6.9	7.8	7.3	8.1	7.8	7.9	7.7
11	7.9	7.7	7.8	7.2	6.7	6.6	8.0	7.3	8.2	8.0	7.8	7.6
12	7.9	7.8	8.0	7.5	6.9	6.7	7.9	7.3	8.1	7.8	8.1	7.5
13	7.8	7.6	7.9	7.8	7.2	6.8	7.6	7.2	8.0	7.8	8.4	7.7
14	7.8	7.7	7.9	7.4	---	---	7.6	7.2	8.0	7.8	8.3	7.9
15	7.9	7.8	7.9	7.7	---	---	7.6	7.0	8.3	7.6	8.2	7.9
16	8.0	7.7	8.0	7.8	7.4	7.2	7.8	7.2	8.4	7.8	8.4	8.0
17	8.0	7.8	8.1	7.6	7.4	7.2	7.8	7.2	8.3	7.8	8.3	7.9
18	8.0	7.8	8.1	7.9	7.5	7.3	7.6	7.2	8.1	7.8	8.1	7.8
19	---	---	8.1	7.7	7.5	7.3	7.7	7.2	7.9	7.7	8.4	7.8
20	---	---	7.9	7.4	7.4	7.3	7.6	7.1	7.9	7.7	8.4	7.8
21	8.0	7.6	7.8	7.4	7.5	7.3	7.6	7.1	8.2	7.7	8.1	7.8
22	7.9	7.7	7.9	7.6	7.6	7.5	7.6	7.4	8.2	7.8	8.2	7.8
23	8.0	7.7	8.3	7.9	7.6	7.5	7.6	7.4	8.3	7.8	8.3	7.9
24	8.2	7.8	8.3	7.8	7.7	7.5	7.6	7.3	8.5	7.9	8.0	7.7
25	8.0	7.5	8.0	7.8	7.7	7.5	7.5	7.3	8.4	8.0	7.9	7.6
26	7.9	7.8	7.9	7.6	7.6	7.3	7.5	7.3	8.3	7.9	7.9	7.5
27	7.9	7.6	7.8	7.4	7.4	7.1	7.5	7.3	8.0	7.8	7.7	7.4
28	7.9	7.6	7.5	7.3	7.2	7.0	7.4	7.3	7.9	7.6	7.7	7.4
29	7.6	7.3	7.7	7.4	7.1	6.8	---	---	7.9	7.6	7.7	7.4
30	8.1	7.3	7.7	7.5	7.1	6.8	---	---	8.0	7.5	7.7	7.4
31	---	---	7.6	7.3	---	---	7.6	7.5	8.0	7.8	---	---
MONTH	8.2	7.3	8.7	7.2	7.7	6.6	8.0	6.8	8.5	7.5	8.6	7.4

CUMBERLAND RIVER BASIN
03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR NOVEMBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	17.8	16.3	16.9	11.2	10.7	11.1	10.2	9.8	10.0
2	---	---	---	16.6	16.1	16.3	11.1	10.8	10.9	10.6	10.1	10.4
3	---	---	---	16.2	15.5	15.8	10.9	10.6	10.8	11.0	10.5	10.7
4	---	---	---	15.5	15.1	15.3	10.9	10.8	10.9	11.3	10.8	11.0
5	---	---	---	15.7	15.1	15.4	10.8	10.6	10.7	11.6	11.2	11.4
6	---	---	---	15.9	15.5	15.7	10.6	10.3	10.4	11.5	11.0	11.2
7	---	---	---	16.1	15.7	15.9	10.7	10.4	10.6	11.0	10.3	10.8
8	---	---	---	16.1	15.1	15.5	10.7	10.5	10.6	10.3	9.8	10.1
9	---	---	---	15.1	14.5	14.9	10.7	10.4	10.5	9.8	9.2	9.5
10	---	---	---	14.5	14.0	14.3	10.4	10.2	10.3	9.2	8.4	8.8
11	---	---	---	14.1	13.5	13.7	10.9	10.4	10.6	8.4	7.6	8.0
12	---	---	---	13.7	12.9	13.3	11.2	10.9	11.1	7.6	7.0	7.2
13	---	---	---	13.0	12.5	12.8	11.3	11.1	11.2	7.0	6.4	6.6
14	---	---	---	12.7	11.9	12.4	11.3	11.0	11.1	6.4	6.2	6.3
15	---	---	---	12.3	11.8	12.1	11.2	10.9	11.0	6.2	6.1	6.1
16	---	---	---	12.3	11.7	12.0	11.3	11.0	11.1	6.1	5.6	5.9
17	---	---	---	12.1	11.7	11.8	11.0	10.8	10.9	5.6	5.0	5.3
18	---	---	---	12.0	11.8	11.9	10.8	10.1	10.5	5.0	4.7	4.8
19	---	---	---	12.3	11.8	12.1	10.1	9.3	9.7	5.0	4.6	4.8
20	---	---	---	12.2	11.9	12.1	9.3	8.7	8.9	5.4	4.9	5.1
21	---	---	---	12.5	11.9	12.2	8.7	8.4	8.5	5.9	5.3	5.6
22	---	---	---	12.0	11.5	11.8	8.4	8.2	8.3	6.3	5.9	6.1
23	---	---	---	11.6	11.2	11.5	8.8	8.3	8.5	6.8	6.3	6.5
24	---	---	---	11.7	11.3	11.5	9.1	8.7	9.0	7.2	6.8	7.0
25	---	---	---	11.8	11.5	11.6	8.7	8.4	8.5	7.3	7.1	7.2
26	---	---	---	11.7	11.1	11.5	8.4	8.1	8.2	7.1	6.9	7.0
27	---	---	---	11.1	10.6	10.8	8.5	8.2	8.3	7.3	7.0	7.2
28	---	---	---	10.8	10.6	10.7	9.3	8.5	8.9	7.5	7.2	7.4
29	---	---	---	10.7	10.5	10.6	9.6	9.3	9.5	7.3	7.0	7.2
30	---	---	---	10.8	10.5	10.6	9.8	9.6	9.7	7.3	7.0	7.2
31	---	---	---	---	---	---	10.0	9.8	9.9	7.4	7.1	7.3
MONTH	---	---	---	17.8	10.5	13.1	11.3	8.1	10.0	11.6	4.6	7.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	12.1	11.7	12.0	17.1	16.1	16.6
2	---	---	---	---	---	---	12.2	11.8	12.0	16.9	15.7	16.4
3	---	---	---	---	---	---	12.6	12.0	12.3	16.6	15.7	16.2
4	---	---	---	12.0	11.7	11.9	12.5	12.4	12.5	16.7	16.1	16.5
5	---	---	---	11.8	11.7	11.8	12.5	12.3	12.4	16.7	16.1	16.3
6	---	---	---	12.1	11.9	12.1	12.8	12.2	12.5	17.5	16.4	17.0
7	---	---	---	11.9	11.5	11.7	12.8	12.5	12.7	17.5	16.6	17.3
8	---	---	---	11.7	11.4	11.6	13.0	12.4	12.7	17.8	16.6	17.3
9	---	---	---	11.8	11.6	11.7	13.0	12.7	12.9	17.8	17.5	17.6
10	---	---	---	11.8	11.3	11.5	12.8	12.5	12.7	17.6	17.0	17.3
11	---	---	---	11.4	11.1	11.3	12.8	12.5	12.7	18.0	16.9	17.5
12	---	---	---	11.4	11.1	11.2	13.1	12.8	12.9	18.3	17.5	17.9
13	---	---	---	11.2	11.0	11.1	12.9	12.5	12.6	18.2	17.7	18.0
14	---	---	---	11.3	10.8	11.1	12.8	12.2	12.5	18.0	17.1	17.5
15	---	---	---	10.8	10.2	10.5	13.1	12.5	12.8	18.0	17.7	17.9
16	---	---	---	10.2	10.0	10.1	13.5	12.7	13.1	18.1	17.5	17.8
17	---	---	---	10.0	9.9	10.0	13.4	13.0	13.2	18.1	17.3	17.6
18	---	---	---	10.1	9.9	10.0	13.4	12.8	13.0	18.7	17.6	18.1
19	---	---	---	10.2	9.9	10.1	---	---	---	19.2	18.5	18.8
20	---	---	---	10.2	9.9	10.0	---	---	---	19.1	18.4	18.9
21	---	---	---	10.5	9.9	10.2	14.2	13.8	14.0	19.1	18.3	18.7
22	---	---	---	10.9	10.5	10.7	14.7	14.2	14.5	18.8	18.4	18.6
23	---	---	---	11.1	10.6	10.8	14.9	14.3	14.6	19.7	18.3	18.9
24	---	---	---	11.5	10.9	11.2	15.1	14.6	14.8	20.3	19.4	19.7
25	---	---	---	11.9	11.3	11.6	15.4	14.4	14.8	20.3	19.7	20.0
26	---	---	---	12.1	11.5	11.8	15.4	15.0	15.2	20.2	19.8	20.0
27	---	---	---	12.1	11.6	11.9	15.5	15.1	15.3	20.1	19.6	19.8
28	---	---	---	12.3	11.9	12.1	15.7	15.4	15.6	19.6	18.6	19.1
29	---	---	---	12.7	12.2	12.4	15.4	15.1	15.2	20.0	18.6	19.3
30	---	---	---	12.6	12.4	12.6	16.3	15.1	15.6	20.1	19.5	19.8
31	---	---	---	12.4	12.2	12.4	---	---	---	20.3	19.6	19.9
MONTH	---	---	---	12.7	9.9	11.3	16.3	11.7	13.5	20.3	15.7	18.1

CUMBERLAND RIVER BASIN
03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR NOVEMBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.8	19.4	19.6	19.6	19.1	19.3	27.4	25.8	26.8	26.0	25.4	25.6
2	19.6	19.4	19.4	20.4	19.3	19.7	27.1	26.2	26.6	26.2	25.6	25.8
3	19.4	19.0	19.2	20.8	20.2	20.4	26.9	26.2	26.6	25.8	25.3	25.6
4	19.0	18.7	18.9	21.0	20.4	20.7	27.6	26.7	26.9	25.3	24.0	24.7
5	19.1	18.9	19.0	21.4	20.5	20.9	26.9	26.5	26.6	25.6	24.0	25.0
6	19.0	18.9	18.9	21.9	21.0	21.4	26.5	25.6	26.1	26.0	25.3	25.6
7	18.9	18.7	18.8	22.0	21.6	21.8	26.5	25.3	25.9	25.5	25.0	25.2
8	18.7	18.5	18.6	22.1	21.6	21.8	26.5	26.0	26.3	25.3	24.8	25.0
9	18.3	18.2	18.2	22.5	21.6	22.0	26.4	25.7	25.9	24.8	24.5	24.6
10	18.2	17.8	18.0	22.5	21.5	22.0	25.8	25.2	25.4	25.0	24.5	24.7
11	17.8	17.7	17.8	23.0	21.9	22.4	26.0	25.5	25.7	24.5	24.0	24.3
12	18.1	17.6	17.9	23.0	22.4	22.7	25.7	25.5	25.6	24.6	23.7	24.1
13	18.2	17.8	18.0	23.6	22.8	23.1	25.7	25.3	25.4	24.7	23.9	24.2
14	---	---	---	24.1	22.8	23.4	25.7	25.3	25.5	24.5	23.9	24.2
15	---	---	---	24.2	22.9	23.5	26.1	25.0	25.5	24.8	24.0	24.3
16	17.6	17.4	17.5	24.5	23.2	23.8	26.2	25.3	25.7	24.9	24.3	24.5
17	17.6	17.5	17.6	24.4	23.5	23.8	26.4	25.6	26.0	24.8	24.4	24.5
18	17.9	17.6	17.7	25.0	23.7	24.1	26.3	25.7	26.0	24.7	24.2	24.5
19	18.4	17.7	18.0	25.4	23.7	24.4	26.2	25.8	25.9	24.7	24.3	24.5
20	18.8	18.2	18.5	25.4	23.9	24.6	26.1	25.9	26.0	24.7	24.4	24.6
21	19.0	18.8	18.9	25.2	24.4	24.8	26.2	25.4	25.8	24.5	23.9	24.2
22	19.1	18.8	18.9	25.4	24.5	24.9	26.2	25.1	25.9	24.0	23.6	23.8
23	19.1	18.7	18.9	25.9	24.3	25.2	26.0	25.1	25.5	23.9	23.6	23.8
24	19.5	18.9	19.2	26.2	24.7	25.3	26.1	25.2	25.6	23.7	22.2	23.3
25	19.7	19.4	19.5	25.6	24.9	25.2	25.9	25.6	25.7	22.7	22.1	22.4
26	19.7	19.5	19.6	26.1	24.9	25.5	26.1	25.5	25.7	22.7	21.9	22.2
27	19.9	19.3	19.6	26.6	25.2	25.9	25.9	25.5	25.7	22.5	21.8	22.1
28	19.9	19.5	19.7	26.3	25.9	26.1	25.7	25.1	25.4	22.5	22.1	22.3
29	19.6	19.4	19.5	---	---	---	25.5	24.8	25.2	22.5	21.8	22.1
30	19.6	19.3	19.4	---	---	---	25.6	24.6	25.1	22.2	21.5	21.9
31	---	---	---	26.0	25.2	25.6	25.7	25.2	25.4	---	---	---
MONTH	19.9	17.4	18.7	26.6	19.1	23.3	27.6	24.6	25.9	26.2	21.5	24.1

OXYGEN DISSOLVED (DO) MG/L, WATER YEAR NOVEMBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	8.1	7.8	7.9	10.4	9.6	9.9	10.4	9.7	10.0
2	---	---	---	8.9	7.7	8.3	10.2	9.7	10.0	10.1	9.9	9.9
3	---	---	---	9.5	8.5	9.0	9.8	9.0	9.6	10.1	9.8	9.9
4	---	---	---	9.7	9.2	9.5	9.6	9.0	9.3	10.2	9.6	9.9
5	---	---	---	9.8	8.9	9.3	9.9	9.2	9.5	10.1	9.8	10.0
6	---	---	---	9.9	9.1	9.4	10.1	9.5	9.9	10.2	10.0	10.1
7	---	---	---	9.6	9.0	9.2	10.1	9.5	9.7	10.4	10.0	10.2
8	---	---	---	9.3	8.9	9.0	10.0	9.4	9.7	10.6	10.2	10.4
9	---	---	---	9.6	9.0	9.2	10.1	9.5	9.8	10.8	10.1	10.4
10	---	---	---	9.6	9.2	9.3	10.0	9.4	9.7	10.7	10.4	10.5
11	---	---	---	9.8	9.4	9.6	10.2	9.5	9.8	11.1	10.5	10.9
12	---	---	---	10.0	9.5	9.7	10.1	9.6	9.9	11.3	10.6	11.1
13	---	---	---	10.1	9.6	9.9	10.2	9.8	10.0	11.4	10.9	11.2
14	---	---	---	10.0	9.4	9.7	10.3	10.0	10.1	11.4	11.1	11.3
15	---	---	---	10.0	9.6	9.8	10.3	9.8	10.1	11.8	11.2	11.4
16	---	---	---	10.4	9.9	10.2	10.1	9.7	10.0	11.8	11.4	11.6
17	---	---	---	10.3	10.0	10.1	10.2	9.5	9.9	12.1	11.7	12.0
18	---	---	---	10.0	9.7	9.9	10.2	9.8	10.0	12.3	12.1	12.2
19	---	---	---	9.7	9.4	9.6	10.1	9.7	9.9	12.3	12.1	12.2
20	---	---	---	10.0	9.4	9.8	10.4	9.8	10.1	12.3	12.1	12.2
21	---	---	---	10.1	9.6	9.9	10.6	10.1	10.3	12.3	12.0	12.2
22	---	---	---	10.4	9.7	10.1	10.8	10.0	10.5	12.3	11.7	12.1
23	---	---	---	10.9	10.1	10.5	10.7	10.2	10.4	12.4	11.7	12.2
24	---	---	---	11.2	10.5	10.8	10.9	10.4	10.7	12.3	11.7	12.1
25	---	---	---	11.1	10.3	10.7	11.1	10.6	11.0	12.1	12.0	12.1
26	---	---	---	10.5	10.1	10.3	11.0	10.7	10.8	12.5	12.1	12.3
27	---	---	---	10.7	10.2	10.4	10.7	10.4	10.6	12.6	11.4	12.0
28	---	---	---	10.5	10.0	10.3	10.7	10.3	10.5	12.1	11.7	11.8
29	---	---	---	10.4	10.0	10.2	10.5	10.3	10.4	12.5	12.1	12.5
30	---	---	---	10.4	10.1	10.2	10.6	10.3	10.5	12.5	12.0	12.3
31	---	---	---	---	---	---	10.5	10.0	10.3	12.0	11.5	11.6
MONTH	---	---	---	11.2	7.7	9.7	11.1	9.0	10.1	12.6	9.6	11.3

CUMBERLAND RIVER BASIN
03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR NOVEMBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	12.0	11.3	11.4	10.7	9.7	10.2
2	---	---	---	---	---	---	12.0	11.7	11.9	10.7	9.5	9.9
3	---	---	---	---	---	---	11.9	11.6	11.7	10.6	9.5	10.1
4	---	---	---	11.1	10.5	11.0	11.8	11.6	11.7	10.5	9.8	10.2
5	---	---	---	11.1	10.9	10.9	11.7	11.5	11.6	10.6	9.8	10.2
6	---	---	---	10.6	10.6	10.6	11.5	11.3	11.4	11.0	10.0	10.5
7	---	---	---	10.8	10.6	10.6	11.3	11.1	11.2	11.1	10.2	10.7
8	---	---	---	10.8	10.6	10.6	11.4	11.2	11.3	11.1	10.2	10.6
9	---	---	---	10.8	10.5	10.7	11.5	11.2	11.3	10.8	10.1	10.4
10	---	---	---	11.0	10.7	10.9	11.6	11.2	11.4	10.6	9.8	10.2
11	---	---	---	11.1	11.0	11.0	11.6	11.1	11.4	11.2	9.9	10.6
12	---	---	---	11.3	11.1	11.2	11.2	11.0	11.0	11.8	10.3	11.0
13	---	---	---	11.5	11.2	11.2	11.0	10.8	10.9	11.4	10.6	11.1
14	---	---	---	11.3	11.2	11.3	11.1	10.8	11.0	10.8	9.6	10.1
15	---	---	---	11.6	11.3	11.5	11.4	10.9	11.2	10.7	10.1	10.5
16	---	---	---	11.8	11.5	11.7	11.6	10.9	11.3	11.0	10.1	10.6
17	---	---	---	11.7	11.6	11.7	11.8	11.2	11.5	11.0	9.7	10.2
18	---	---	---	11.6	11.5	11.6	11.7	11.4	11.5	10.8	9.9	10.4
19	---	---	---	11.8	11.4	11.6	---	---	---	10.2	9.2	9.7
20	---	---	---	11.9	11.6	11.8	---	---	---	9.5	8.7	9.1
21	---	---	---	11.9	11.7	11.8	11.1	10.6	10.9	9.4	8.0	8.9
22	---	---	---	11.8	11.6	11.7	11.1	10.7	10.9	9.6	8.6	9.1
23	---	---	---	11.9	11.6	11.7	11.2	10.5	10.9	10.0	8.9	9.4
24	---	---	---	11.7	11.5	11.6	11.2	10.7	11.0	10.2	9.0	9.5
25	---	---	---	11.6	11.4	11.5	11.3	10.4	10.8	9.7	8.9	9.3
26	---	---	---	11.6	11.5	11.5	11.3	10.7	11.0	9.4	8.4	8.9
27	---	---	---	11.7	11.5	11.6	11.1	10.3	10.7	9.0	8.0	8.3
28	---	---	---	11.7	10.7	11.5	10.7	10.2	10.5	8.1	7.6	7.9
29	---	---	---	11.1	10.7	11.0	10.2	9.1	9.7	8.9	7.6	8.2
30	---	---	---	11.0	10.9	11.0	10.2	8.9	9.5	9.2	8.3	8.7
31	---	---	---	11.1	10.9	11.0	---	---	---	9.2	8.3	8.7
MONTH	---	---	---	11.9	10.5	11.3	12.0	8.9	11.1	11.8	7.6	9.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.1	8.1	8.7	9.8	7.5	8.9	7.1	5.1	6.3	7.8	7.2	7.4
2	9.4	8.8	9.2	8.6	7.1	7.9	6.8	5.4	6.2	7.8	6.8	7.3
3	8.8	8.3	8.5	8.2	7.5	7.9	6.7	5.8	6.3	7.2	6.4	6.8
4	8.3	7.9	8.2	8.3	7.1	7.7	7.7	6.0	6.6	6.8	6.3	6.5
5	8.4	8.1	8.2	8.0	7.2	7.7	7.4	6.0	6.7	7.8	6.0	6.9
6	8.4	7.9	8.2	8.7	7.3	7.9	6.9	5.7	6.4	8.4	6.8	7.6
7	8.7	8.1	8.4	9.2	7.6	8.5	6.6	5.6	6.1	8.3	7.1	7.7
8	8.9	8.5	8.7	9.0	7.8	8.4	7.0	5.6	6.4	8.2	7.1	7.6
9	8.4	8.1	8.3	8.8	7.4	8.0	6.9	5.9	6.3	7.3	6.6	7.0
10	8.2	8.0	8.1	8.5	7.1	8.0	6.5	5.8	6.2	8.0	6.8	7.3
11	8.0	7.7	7.8	8.7	7.3	8.1	7.4	6.1	6.7	7.7	6.8	7.2
12	8.1	7.6	7.8	9.0	7.4	8.2	7.4	6.9	7.1	8.6	6.7	7.6
13	8.3	7.9	8.1	9.0	7.5	8.3	7.3	6.5	6.9	9.3	7.3	8.3
14	---	---	---	8.9	7.3	8.1	7.5	6.6	7.0	9.0	7.8	8.4
15	---	---	---	8.7	7.2	7.9	8.4	6.0	7.1	9.1	7.7	8.4
16	---	---	---	9.1	7.1	8.1	8.5	6.8	7.7	9.0	7.6	8.4
17	8.7	7.6	8.1	9.0	7.1	7.9	9.1	7.0	7.9	8.8	7.6	8.0
18	8.7	7.3	7.6	8.8	7.1	7.9	8.0	7.0	7.5	8.3	7.3	7.8
19	8.1	7.4	7.7	8.7	7.1	7.8	7.7	6.9	7.2	8.4	7.5	7.9
20	8.2	7.4	7.8	8.4	7.0	7.7	7.4	6.5	7.0	8.7	7.1	7.9
21	9.5	7.6	8.0	8.0	7.1	7.6	8.0	6.3	7.0	8.5	7.5	8.0
22	9.0	7.8	8.2	7.6	6.4	7.2	8.1	7.2	7.7	8.6	7.6	8.1
23	9.4	8.6	9.1	7.3	6.2	6.8	8.7	7.1	8.0	8.6	7.5	8.1
24	9.8	9.0	9.3	7.4	6.1	6.7	9.5	7.5	8.4	8.0	7.4	7.7
25	9.7	7.8	8.6	6.9	6.1	6.6	9.1	8.3	8.7	7.9	7.2	7.6
26	8.0	7.4	7.7	6.9	5.7	6.3	9.1	7.4	8.4	7.9	6.3	7.1
27	8.3	6.8	7.7	6.6	5.6	6.1	8.6	7.4	8.1	8.3	6.1	7.0
28	7.8	7.1	7.6	6.2	5.5	5.9	8.1	6.8	7.6	8.3	6.3	7.1
29	7.7	7.1	7.3	---	---	---	7.9	6.8	7.3	8.1	5.7	6.8
30	7.4	7.2	7.3	6.8	5.5	6.3	8.2	6.2	7.3	8.4	5.8	7.5
31	---	---	---	5.9	4.8	5.5	8.0	7.1	7.5	---	---	---
MONTH	9.8	6.8	8.2	9.8	4.8	7.5	9.5	5.1	7.1	9.3	5.7	7.6

CUMBERLAND RIVER BASIN

03431599 WHITES CREEK NEAR BORDEAUX, TN

LOCATION.--Lat 36°13'03", long 86°49'13", Davidson County, Hydrologic Unit 05130202, on right bank on downstream side of bridge on Buena Vista Pike, 0.4 mi downstream from Ewing Creek, 2.1 mi above Drakes Branch, 1.8 mi northeast of Bordeaux, and at mile 6.1.

DRAINAGE AREA.--51.3 mi^2.

PERIOD OF RECORD.--October 1964 to April 1975 (published as at Tucker Road, near Bordeaux), August 1993 to current year. Occasional low-flow measurements, water years 1962-64.

GAGE.--Data collection platform. Datum of gage is 402.87 ft above sea level. Oct. 1964 to April 1975 at site 0.4 mi downstream at datum 1.23 ft lower, August 1993 to Sept. 1995 at datum 3.85 ft higher.

REMARKS.--No estimated daily discharges. Records good. Peak discharge of 12,200 ft^3/s, Feb. 23, 1975, gage height 17.06 ft, occurred at Tucker Road near Bordeaux site. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 28	0030	4,030	13.52	Mar. 5	1400	4,590	14.37
Dec. 16	2300	4,930	14.89	Mar. 18	2245	4,220	13.80
Mar. 2	0330	5,920	16.24	June 14	0315	5,840	16.12
Mar. 3	0430	*6,720	*17.30	June 30	1845	6,540	17.07

Minimum discharge, 2.4 ft^3/s, Sept. 16, 19, 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	580	747	55	91	851	64	107	77	339	5.9	4.7
2	39	194	246	51	70	2170	57	69	47	125	5.3	4.7
3	30	99	136	47	64	2430	51	70	33	79	4.8	16
4	24	64	89	51	364	416	48	54	28	55	4.4	7.9
5	19	47	96	189	217	1780	50	45	23	34	4.1	5.7
6	16	38	84	105	148	497	48	37	22	14	4.3	4.9
7	13	325	63	80	115	276	41	32	81	8.7	4.3	4.5
8	12	278	52	71	145	179	36	32	68	6.6	4.0	4.3
9	11	134	43	90	115	135	33	31	78	5.5	23	8.0
10	9.3	90	35	81	98	121	31	26	54	5.0	14	7.4
11	8.6	61	30	68	83	95	29	23	60	4.6	8.6	5.2
12	8.1	48	108	61	69	77	29	21	84	4.5	9.5	4.3
13	7.4	39	73	55	86	72	28	20	248	4.1	20	3.6
14	6.9	46	58	52	92	193	25	18	1550	9.8	17	3.4
15	6.6	40	49	105	78	107	23	16	237	10	13	3.1
16	6.3	34	1060	139	68	86	21	15	145	9.0	9.7	3.0
17	6.2	147	1690	99	59	76	21	12	257	7.9	7.1	2.8
18	31	283	378	82	53	604	20	11	149	7.2	33	2.7
19	16	157	240	66	49	994	21	22	97	6.7	39	2.5
20	11	97	160	56	45	297	20	38	68	6.1	78	2.5
21	8.3	68	118	50	52	170	100	19	208	5.9	29	2.6
22	14	50	97	123	45	116	60	14	93	5.4	17	3.1
23	49	40	78	108	38	90	52	12	63	5.5	11	21
24	25	32	428	704	33	74	41	11	48	5.1	8.9	241
25	19	166	200	292	31	84	33	16	36	4.8	7.4	100
26	51	136	146	173	81	106	29	19	31	4.8	6.6	35
27	176	85	119	157	92	78	33	20	26	4.7	5.9	18
28	587	61	97	477	79	94	217	19	29	17	5.4	12
29	127	50	86	233	---	111	238	20	56	26	5.2	9.6
30	74	447	71	157	---	87	106	15	1040	9.9	5.3	8.2
31	53	---	61	116	---	75	---	142	---	7.1	5.0	---
TOTAL	1519.7	3936	6938	4193	2560	12541	1605	1006	5036	837.9	415.7	551.7
MEAN	49.0	131	224	135	91.4	405	53.5	32.5	168	27.0	13.4	18.4
MAX	587	580	1690	704	364	2430	238	142	1550	339	78	241
MIN	6.2	32	30	47	31	72	20	11	22	4.1	4.0	2.5
CFSM	.96	2.56	4.36	2.64	1.78	7.89	1.04	.63	3.27	.53	.26	.36
IN.	1.10	2.85	5.03	3.04	1.86	9.09	1.16	.73	3.65	.61	.30	.40

CUMBERLAND RIVER BASIN

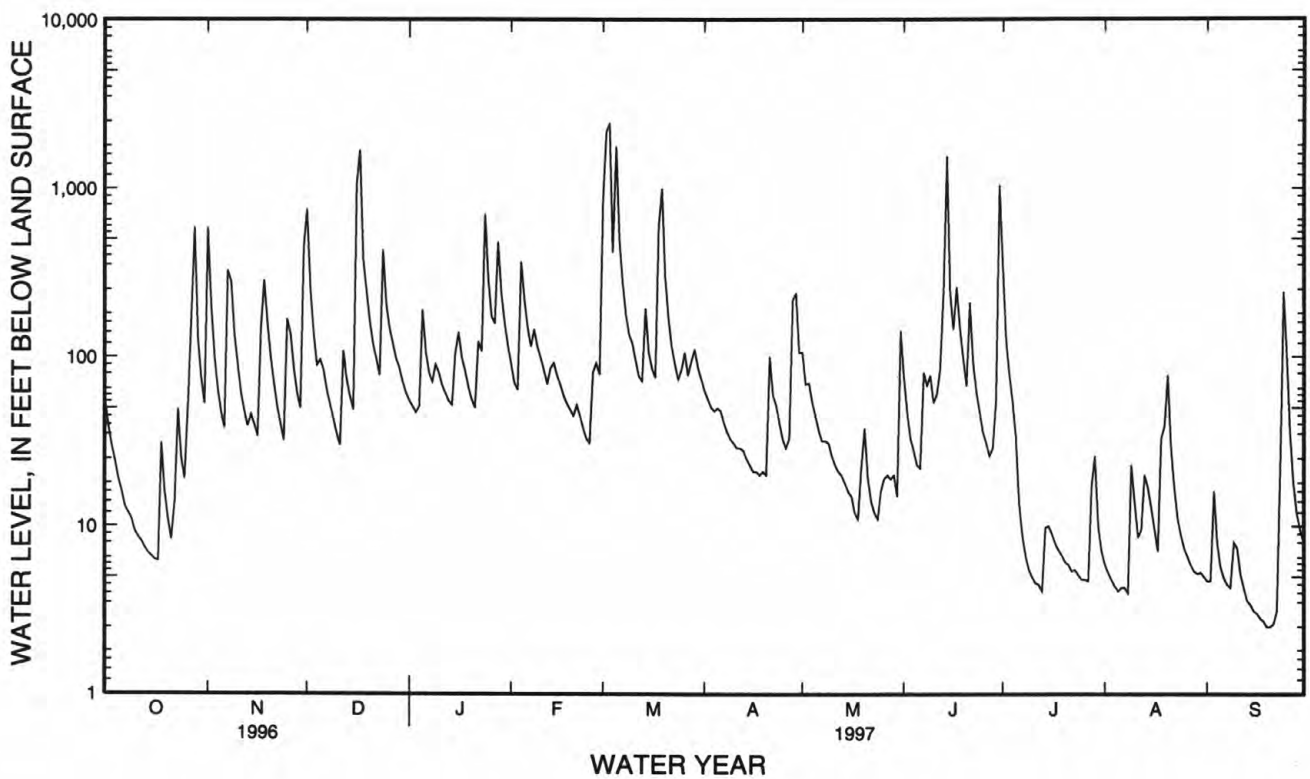
03431599 WHITES CREEK NEAR BORDEAUX, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1997, BY WATER YEAR (WY)

MEAN	16.3	61.4	115	133	153	206	124	89.6	40.7	15.1	18.7	20.7
MAX	67.1	138	286	288	369	530	286	277	168	48.3	87.2	122
(WY)	1996	1973	1973	1974	1975	1975	1994	1995	1997	1967	1972	1974
MIN	2.05	6.60	8.18	25.2	36.3	46.0	18.8	20.2	4.70	1.11	2.26	1.24
(WY)	1970	1966	1966	1966	1968	1966	1967	1969	1966	1966	1968	1968

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1965 - 1997	
ANNUAL TOTAL	34700.1		41140.0			
ANNUAL MEAN	94.8		113		79.0	
HIGHEST ANNUAL MEAN					129	1994
LOWEST ANNUAL MEAN					35.2	1966
HIGHEST DAILY MEAN	1690	Dec 17	2430	Mar 3	5100	Feb 23 1975
LOWEST DAILY MEAN	2.3	Aug 24	2.5	Sep 19	30	Jul 6 1966
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 18	2.7	Sep 15	42	Aug 28 1968
INSTANTANEOUS PEAK FLOW			6720	Mar 3	a12200	Feb 23 1975
INSTANTANEOUS PEAK STAGE			17.30	Mar 3	b18.27	Nov 27 1994
INSTANTANEOUS LOW FLOW			c2.4	Sep 16	d.20	Jul 6 1966
ANNUAL RUNOFF (CFSM)	1.85		2.20		1.54	
ANNUAL RUNOFF (INCHES)	25.16		29.83		20.93	
10 PERCENT EXCEEDS	213		223		180	
50 PERCENT EXCEEDS	47		49		23	
90 PERCENT EXCEEDS	4.4		5.4		2.8	

a From rating curve extended above 6,900 ft^3/s on basis of contracted opening measurment of peak flow
b See REMARKS.
c Also occurred Sept. 19, 20, 21.
c Also occurred Sept. 15, 1968.



CUMBERLAND RIVER BASIN

03431700 RICHLAND CREEK AT CHARLOTTE AVENUE, AT NASHVILLE, TN

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

DRAINAGE AREA.--24.3 mi^2.

PERIOD OF RECORD.--July 1964 to September 1990, August 1993 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 409.56 ft above sea level.

REMARKS.--Records good. Diversions above station used for irrigation of golf courses and water supply. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 16	2130	1,940	6.98	May 31	0645	1,740	6.59
Mar. 2	0300	2,140	7.33	June 12	0800	1,570	6.26
Mar. 3	0330	2,850	8.47	June 14	0045	*3,190	*8.99
Mar. 5	1200	2,170	7.38	Sept. 24	1845	1,500	6.11

Minimum discharge, 1.3 ft^3/s, Sept. 17, 18, 19, 20, 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	140	235	28	41	54	20	32	137	49	8.2	2.8
2	17	49	81	28	35	654	18	16	83	33	6.7	2.4
3	14	32	58	27	35	808	16	15	60	27	5.9	11
4	12	28	44	31	83	183	15	12	47	22	5.6	3.6
5	11	20	65	52	57	755	26	11	38	20	4.7	3.1
6	9.1	16	49	32	46	220	19	10	31	18	4.1	2.6
7	7.8	111	38	26	41	129	15	8.3	24	16	4.3	2.4
8	7.3	74	31	26	48	92	14	9.9	98	16	4.8	2.4
9	6.3	43	27	32	39	76	13	9.3	62	14	22	4.5
10	6.0	35	23	31	35	66	12	7.6	42	12	9.6	2.5
11	5.2	27	20	25	32	53	11	6.9	40	11	6.9	2.5
12	4.9	22	127	21	31	45	11	6.5	236	10	25	2.1
13	4.5	18	52	18	44	44	11	5.8	249	47	29	2.1
14	4.1	24	40	17	40	92	10	5.5	566	23	20	1.8
15	4.2	19	33	41	34	51	9.2	5.3	140	12	13	2.0
16	3.4	17	442	42	30	44	8.9	4.9	101	9.1	9.6	1.8
17	3.2	92	445	31	27	41	8.5	4.8	109	7.2	10	1.7
18	e15	110	123	27	25	134	8.3	4.5	77	6.5	7.4	1.7
19	e7.7	66	78	25	23	195	8.2	53	61	6.0	13	1.6
20	e5.3	46	57	22	21	88	7.4	56	50	5.1	33	1.6
21	e4.0	39	45	20	32	66	17	20	118	4.7	13	1.6
22	e6.7	30	37	49	29	53	12	14	65	4.9	9.1	1.6
23	20	24	32	36	21	43	11	11	48	4.5	7.4	36
24	11	20	103	245	18	37	9.2	8.8	37	4.7	6.1	234
25	8.6	63	47	84	17	45	8.0	11	29	3.6	5.3	68
26	23	42	40	62	32	44	7.3	139	26	3.5	4.3	32
27	15	33	37	79	38	33	8.8	83	22	3.2	3.6	24
28	20	31	33	145	32	33	41	44	33	46	3.3	16
29	12	29	33	74	---	30	29	58	33	32	3.3	9.5
30	11	120	31	58	---	25	18	38	68	22	2.9	7.7
31	11	---	29	48	---	22	---	427	---	11	2.8	---
TOTAL	312.3	1420	2535	1482	986	4255	422.8	1138.1	2730	504.0	303.9	486.6
MEAN	10.1	47.3	81.8	47.8	35.2	137	14.1	36.7	91.0	16.3	9.80	16.2
MAX	23	140	445	245	83	808	41	427	566	49	33	234
MIN	3.2	16	20	17	17	22	7.3	4.5	22	3.2	2.8	1.6
CFSM	.41	1.95	3.37	1.97	1.45	5.65	.58	1.51	3.74	.67	.40	.67
IN.	.48	2.17	3.88	2.27	1.51	6.51	.65	1.74	4.18	.77	.47	.74

e Estimated

CUMBERLAND RIVER BASIN

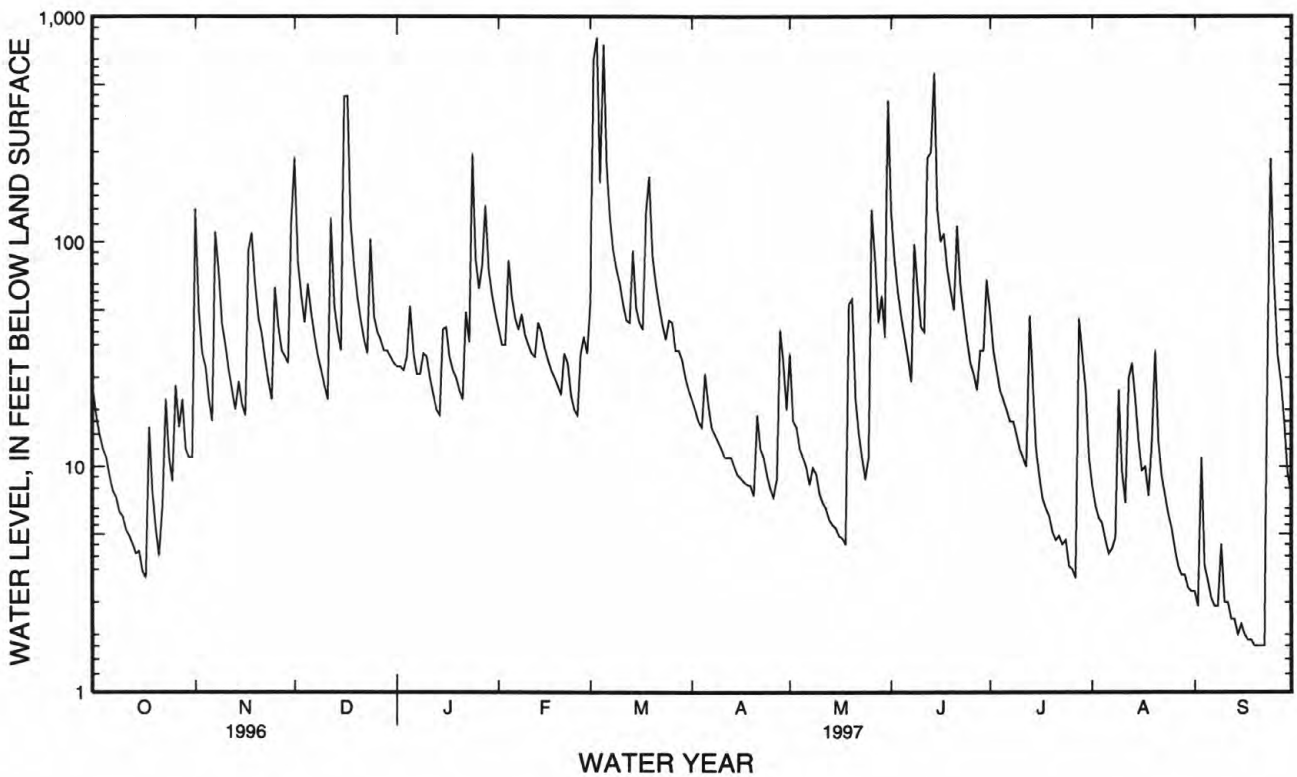
03431700 RICHLAND CREEK AT CHARLOTTE AVENUE, AT NASHVILLE, TN

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	11.7	34.3	57.4	52.2	56.2	66.3	44.8	37.8	20.6	11.5	8.11	13.0
MAX	53.0	89.8	247	151	205	208	146	131	91.0	42.0	24.6	127
(WY)	1976	1987	1965	1974	1989	1975	1979	1984	1997	1979	1994	1979
MIN	.41	1.79	2.57	3.96	10.3	18.2	5.76	5.06	1.33	1.34	1.18	.92
(WY)	1966	1972	1966	1986	1968	1966	1986	1977	1988	1966	1980	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	13084.6		16575.7			
ANNUAL MEAN	35.8		45.4		34.4	
HIGHEST ANNUAL MEAN					71.3	1979
LOWEST ANNUAL MEAN					13.6	1966
HIGHEST DAILY MEAN	445	Dec 17	808	Mar 3	7020	Nov 2 1990
LOWEST DAILY MEAN	1.9	Jul 19	1.6	Sep 19	.05	Oct 8 1980
ANNUAL SEVEN-DAY MINIMUM	3.1	Jul 1	1.7	Sep 16	.23	Oct 8 1965
INSTANTANEOUS PEAK FLOW			3190	Jun 14	9470	Sep 13 1979
INSTANTANEOUS PEAK STAGE			8.99	Jun 14	15.13	Sep 13 1979
INSTANTANEOUS LOW FLOW			a1.3	Sep 17	.05	Oct 7 1980
ANNUAL RUNOFF (CFSM)	1.47		1.87		1.42	
ANNUAL RUNOFF (INCHES)	20.03		25.38		19.26	
10 PERCENT EXCEEDS	78		86		76	
50 PERCENT EXCEEDS	23		24		11	
90 PERCENT EXCEEDS	4.6		4.4		1.5	

a Also occurred Sept. 18, 19, 20, 21, 22.



CUMBERLAND RIVER BASIN

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 State Highway 96 bridge, 0.4 mi southeast of the courthouse in Franklin, and at mile 88.1.

DRAINAGE AREA.--191 mi^2, includes 15 mi^2 without surface drainage.

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

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 604.42 ft above sea level.

REMARKS.--Records good except those below 5.0 ft^3/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 2.7 mi below gage. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	1230	5,690	20.35	Mar. 3	1700	*10,800	*27.21
Dec. 17	0930	4,670	18.51	Mar. 6	0330	8,470	24.50
Jan. 24	1230	3,220	15.05	June 1	0900	5,590	20.18
Jan. 28	0900	3,830	16.58				

Minimum discharge, 1.2 ft^3/s, Sept. 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	273	4850	332	487	1230	178	107	4590	1030	25	4.0
2	38	295	1480	265	396	2680	152	90	1300	497	28	2.3
3	32	177	814	225	457	9010	139	158	763	298	19	1.7
4	28	119	568	201	1020	4120	133	185	511	188	8.5	1.6
5	31	87	568	1120	1120	4090	150	108	376	146	13	1.6
6	28	64	626	806	680	5630	216	78	300	108	18	1.8
7	24	189	456	526	479	1470	178	64	258	95	11	1.8
8	15	876	376	414	488	1020	134	67	252	112	3.7	6.3
9	14	428	322	799	432	775	109	68	372	97	23	11
10	14	307	292	658	365	661	96	59	320	80	14	6.3
11	18	234	262	472	312	532	94	44	305	68	11	2.2
12	17	179	251	389	265	441	97	32	277	53	40	2.0
13	16	151	239	305	293	395	91	31	287	42	34	1.6
14	14	150	197	252	704	494	84	39	430	40	30	1.5
15	5.2	160	170	287	491	414	73	37	314	44	24	1.5
16	6.7	138	496	1060	395	338	60	27	261	39	23	1.5
17	9.0	128	3490	545	321	300	56	18	1350	29	24	1.4
18	19	391	1200	394	273	299	58	19	1100	20	22	1.3
19	15	448	733	320	246	1440	68	29	630	20	12	1.4
20	20	339	495	270	228	950	68	639	412	27	16	1.5
21	18	280	358	236	324	648	65	320	544	21	10	1.7
22	14	271	278	455	512	493	135	177	676	18	18	1.7
23	24	226	236	809	321	392	223	131	362	17	18	18
24	34	191	501	2160	242	321	172	99	245	22	11	141
25	29	192	444	1570	214	276	116	82	179	13	2.5	743
26	37	389	328	900	293	313	86	500	148	7.0	2.2	254
27	34	276	294	684	716	245	76	1300	193	15	3.1	114
28	33	210	269	2650	905	248	91	461	149	59	7.6	61
29	30	171	272	1220	---	338	130	285	140	148	6.0	38
30	29	1060	493	843	---	250	132	200	188	61	4.9	24
31	25	---	397	638	---	215	---	2050	---	33	4.4	---
TOTAL	723.9	8399	21755	21805	12979	40028	3460	7504	17232	3447.0	486.9	1450.7
MEAN	23.4	280	702	703	464	1291	115	242	574	111	15.7	48.4
MAX	53	1060	4850	2650	1120	9010	223	2050	4590	1030	40	743
MIN	5.2	64	170	201	214	215	56	18	140	7.0	2.2	1.3
CFSM	.12	1.47	3.67	3.68	2.43	6.76	.60	1.27	3.01	.58	.08	.25
IN.	.14	1.64	4.24	4.25	2.53	7.80	.67	1.46	3.36	.67	.09	.28

CUMBERLAND RIVER BASIN

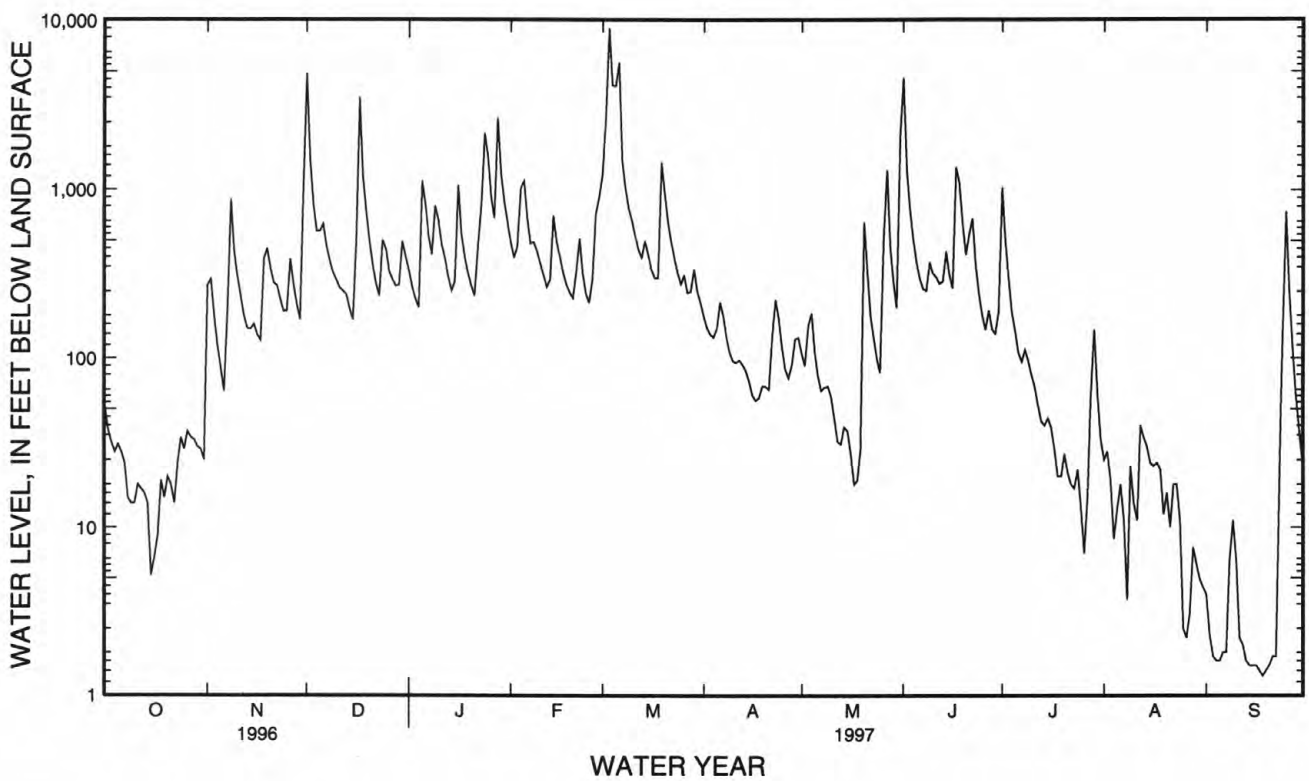
03432350 HARPETH RIVER AT FRANKLIN, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, BY WATER YEAR (WY)

MEAN	103	291	496	519	531	684	359	325	116	65.1	34.0	77.5
MAX	610	778	1172	1472	1358	1945	1066	1489	574	431	141	971
(WY)	1976	1980	1991	1979	1990	1975	1979	1984	1997	1989	1995	1979
MIN	.52	4.08	16.2	14.4	139	159	62.2	21.8	1.25	1.44	1.58	1.17
(WY)	1981	1981	1981	1986	1978	1985	1986	1988	1988	1988	1988	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1975 - 1997	
ANNUAL TOTAL	103760.42		139270.5			
ANNUAL MEAN	283		382		299	
HIGHEST ANNUAL MEAN					522	1979
LOWEST ANNUAL MEAN					68.7	1981
HIGHEST DAILY MEAN	4850	Dec 1	9010	Mar 3	18500	Mar 13 1975
LOWEST DAILY MEAN	.72	Aug 31	1.3	Sep 18	.30	Oct 14 1980
ANNUAL SEVEN-DAY MINIMUM	3.5	Aug 26	1.4	Sep 14	.32	Oct 20 1980
INSTANTANEOUS PEAK FLOW			10800	Mar 3	20200	Mar 13 1975
INSTANTANEOUS PEAK STAGE			27.21	Mar 3	33.65	Mar 13 1975
INSTANTANEOUS LOW FLOW			a1.2	Sep 17	b.30	Oct 14 1980
ANNUAL RUNOFF (CFSM)	1.48		2.00		1.57	
ANNUAL RUNOFF (INCHES)	20.21		27.12		21.29	
10 PERCENT EXCEEDS	617		807		652	
50 PERCENT EXCEEDS	171		179		97	
90 PERCENT EXCEEDS	9.4		11		3.0	

a Also occurred Sept. 18.
b Also occurred Aug. 31, 1996.



CUMBERLAND RIVER BASIN

03432400 HARPETH RIVER BELOW FRANKLIN, TN

LOCATION.--Lat 35°56'53", long 86°52'54", Williamson County, Hydrologic Unit 05130204, on right bank 0.1 mi below bridge on U.S. Highway 431, 1.2 mi downstream from Spence Creek, 1.8 mi northwest of the courthouse in Franklin, and at mile 84.3.

DRAINAGE AREA.--210 mi^2, includes 15 mi^2 without surface drainage.

PERIOD OF RECORD.--August 1988 to current year, discharge for gage height of 6.00 ft and below only.

GAGE.--Data collection platform.

REMARKS.--No estimated daily discharges. Records good. Flow is affected by Franklin sewage treatment plant outflow 1.1 mi upstream. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum gage height, 28.97 ft, Feb. 4, 1990; minimum discharge, 3.0 ft^3/s, Aug. 19, 1988; minimum daily, 4.1 ft^3/s, Aug. 18, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; maximum gage height, 26.20 ft, Mar. 3; minimum discharge, 5.3 ft^3/s, Sept. 22; minimum daily, 7.7 ft^3/s, Sept. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	335	---	375	528	---	218	141	---	---	36	11
2	53	302	---	319	445	---	194	123	---	---	36	10
3	46	198	---	284	---	---	179	164	---	296	30	14
4	41	150	---	265	---	---	172	187	---	206	22	11
5	43	118	---	---	---	---	199	119	438	171	22	9.1
6	41	94	---	---	---	---	234	92	370	143	27	9.0
7	36	---	477	---	---	---	213	76	321	117	24	8.9
8	26	---	388	457	527	---	175	84	---	125	18	16
9	24	438	334	---	487	---	151	84	460	111	44	25
10	23	308	306	---	424	---	140	73	373	92	31	14
11	28	243	279	501	372	---	136	62	329	79	23	11
12	27	199	272	411	328	472	138	52	309	66	82	10
13	26	179	259	351	349	422	130	49	---	55	55	11
14	25	183	223	306	---	---	121	56	---	52	42	9.9
15	16	184	200	---	494	442	110	53	370	54	34	8.4
16	15	168	---	---	405	372	97	47	311	50	29	8.9
17	20	174	---	---	347	339	94	36	---	43	28	9.7
18	72	394	---	439	303	---	92	35	---	33	37	9.1
19	29	480	---	368	277	---	98	---	---	32	24	7.7
20	34	358	---	325	258	---	98	---	414	37	39	8.7
21	31	307	437	291	323	---	95	---	---	33	24	8.3
22	35	292	362	---	---	---	150	179	---	30	26	8.3
23	63	253	316	---	329	420	223	137	375	29	24	60
24	55	222	---	---	268	356	191	109	270	33	19	---
25	50	235	---	---	244	328	143	93	215	27	14	---
26	69	397	392	---	299	355	116	---	192	20	13	302
27	59	296	357	---	---	298	106	---	213	25	13	146
28	68	236	333	---	---	298	173	---	200	---	13	88
29	57	205	320	---	---	347	169	299	178	184	13	60
30	54	---	---	---	---	275	167	213	224	76	12	43
31	48	---	431	---	---	248	---	---	---	48	11	---
TOTAL	1284	---	---	---	---	---	4522	---	---	---	865	---
MEAN	41.4	---	---	---	---	---	151	---	---	---	27.9	---
MAX	72	---	---	---	---	---	234	---	---	---	82	---
MIN	15	---	---	---	---	---	92	---	---	---	11	---

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CUMBERLAND RIVER BASIN

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 mi^2, includes 15 mi^2 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.--Data collection platform. Datum of gage is 541.04 ft above sea level (levels by U.S. Army Corps of Engineers). Apr. 11, 1920, to Oct. 31, 1929, Jan. 1, 1932, to Sept. 30, 1933, nonrecording gage at site 2.8 mi downstream at datum 7.85 ft lower.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 7,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	1530	9,240	13.94	Mar. 6	1000	13,100	16.96
Dec. 17	2100	11,600	15.96	June 1	0500	8,110	12.81
Mar. 3	2200	*17,500	*19.09	June 14	0430	9,410	14.11

Minimum discharge, 17 ft^3/s, Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	709	8450	759	1100	2690	498	333	7530	1500	106	24
2	175	815	4030	670	938	6390	439	276	3220	999	85	23
3	149	511	1730	593	882	14900	398	259	1670	627	78	29
4	130	382	1220	551	1630	12300	370	349	1170	459	67	27
5	118	306	1110	1640	2070	7650	383	268	919	361	53	27
6	113	259	1310	1640	1450	12000	515	215	763	306	49	23
7	105	511	1010	1120	1150	3880	479	185	652	259	53	21
8	93	1680	849	913	1090	2190	386	173	657	229	48	20
9	77	1010	717	1090	1020	1620	339	188	849	303	60	112
10	72	725	632	1180	908	1380	304	173	648	226	100	83
11	68	559	571	946	816	1160	285	153	534	190	74	45
12	70	447	661	803	718	997	283	130	615	171	139	34
13	66	381	596	690	733	894	271	117	817	164	177	27
14	64	378	501	592	1160	1130	253	111	4780	145	136	25
15	62	381	441	621	1030	1020	239	112	1210	126	104	24
16	52	359	1360	1590	884	851	220	107	912	119	83	22
17	47	390	10600	1130	774	760	207	94	2330	108	69	20
18	93	810	4440	890	681	759	198	80	2590	93	73	20
19	130	1020	1940	757	605	2740	198	284	1300	79	73	20
20	83	826	1350	661	566	2080	199	1150	922	73	86	19
21	79	680	1050	577	604	1400	204	789	1220	75	93	17
22	75	613	888	775	874	1120	264	384	1220	71	65	17
23	146	525	767	1440	684	938	362	277	825	67	58	41
24	159	461	1270	4640	560	814	375	225	616	64	53	319
25	134	543	1180	4010	496	717	277	191	488	66	45	1340
26	140	826	943	1970	534	860	230	1450	444	59	37	709
27	175	692	862	1460	1200	715	209	2810	410	49	33	315
28	200	538	804	5010	1340	674	277	1290	435	82	30	213
29	203	459	721	2830	---	787	620	845	437	468	28	159
30	173	1020	850	1750	---	641	414	605	423	229	28	124
31	154	---	845	1350	---	570	---	3270	---	148	26	---
TOTAL	3616	18816	53698	44648	26497	86627	9696	16893	40606	7915	2209	3899
MEAN	117	627	1732	1440	946	2794	323	545	1354	255	71.3	130
MAX	211	1680	10600	5010	2070	14900	620	3270	7530	1500	177	1340
MIN	47	259	441	551	496	570	198	80	410	49	26	17
CFSM	.29	1.54	4.25	3.53	2.32	6.85	.79	1.34	3.32	.63	.17	.32
IN.	.33	1.72	4.90	4.07	2.42	7.90	.88	1.54	3.70	.72	.20	.36

CUMBERLAND RIVER BASIN

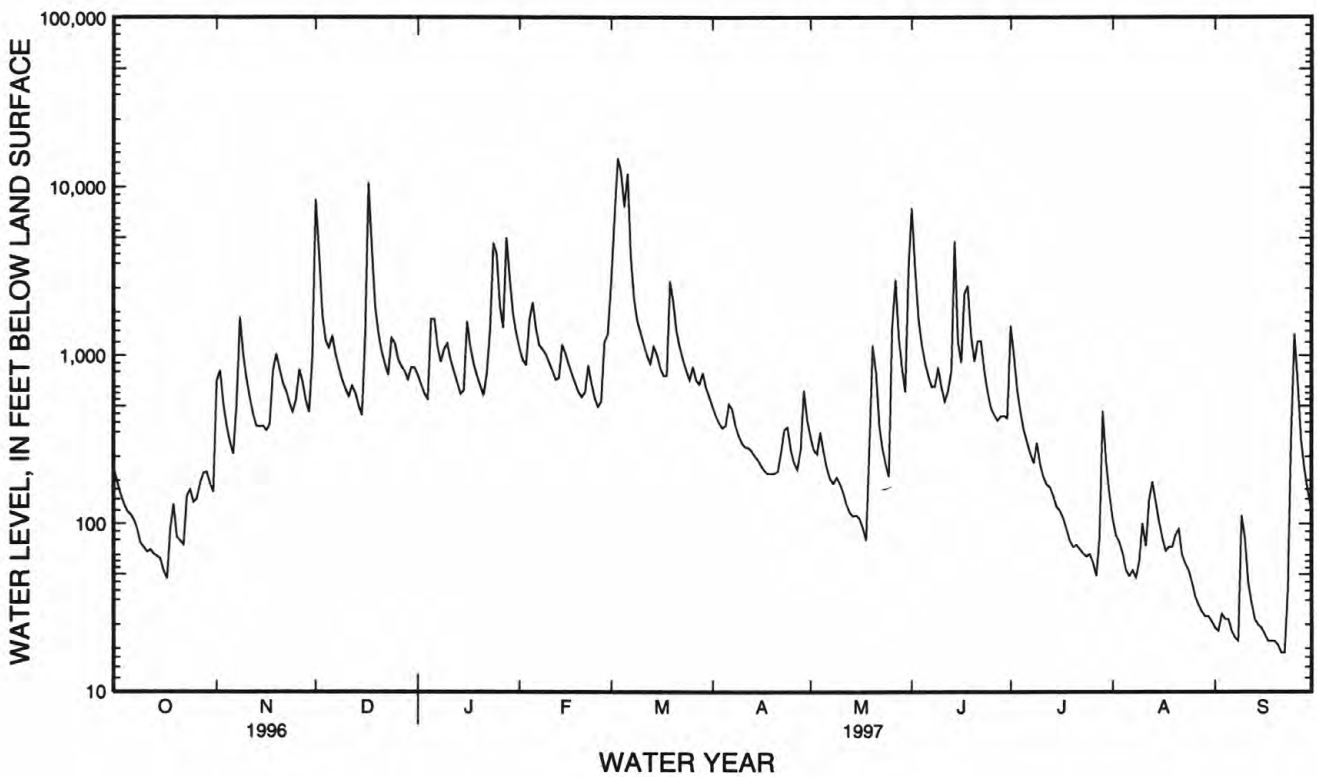
03433500 HARPETH RIVER AT BELLEVUE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1997, BY WATER YEAR (WY)

MEAN	115	376	844	1162	1283	1351	876	571	271	144	110	121
MAX	953	1678	3952	4305	3606	4263	2579	3232	1834	827	663	1685
(WY)	1976	1987	1927	1937	1950	1975	1927	1984	1928	1989	1926	1979
MIN	1.90	10.4	32.3	40.5	90.3	167	138	38.7	13.1	15.6	5.76	1.28
(WY)	1932	1940	1940	1940	1941	1941	1967	1941	1988	1954	1954	1948

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1920 - 1997	
ANNUAL TOTAL	244434		315120			
ANNUAL MEAN	668		863		599	
HIGHEST ANNUAL MEAN					1157	1973
LOWEST ANNUAL MEAN					137	1941
HIGHEST DAILY MEAN	10600	Dec 17	14900	Mar 3	32400	Mar 13 1975
LOWEST DAILY MEAN	32	Jul 6	b17	Sep 21	.00	Oct 5 1922
ANNUAL SEVEN-DAY MINIMUM	37	Jul 1	19	Sep 16	.07	Oct 4 1922
INSTANTANEOUS PEAK FLOW			17500	Mar 3	40000	Feb 13 1948
INSTANTANEOUS PEAK STAGE			19.09	Mar 3	a24.34	Feb 13 1948
INSTANTANEOUS LOW FLOW			b17	Sep 21	c.00	Oct 5 1922
ANNUAL RUNOFF (CFSM)	1.64		2.12		1.47	
ANNUAL RUNOFF (INCHES)	22.29		28.73		19.94	
10 PERCENT EXCEEDS	1350		1600		1390	
50 PERCENT EXCEEDS	456		461		189	
90 PERCENT EXCEEDS	63		56		17	

a From floodmarks.
b Also occurred Sept. 22.
c Also occurred Oct. 6-10, 1922.



CUMBERLAND RIVER BASIN
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 mi^2, includes 15 mi^2 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.--Data collection platform. Datum of gage is 447.04 ft above sea level. July 8, 1925, to Jan. 22, 1939, nonrecording gage at site 150 ft downstream, and Jan. 22, 1939, to July 26, 1988, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	1430	10,300	13.66	Mar. 5	2100	25,400	24.07
Dec. 17	1000	23,700	23.40	May 26	2130	12,100	15.65
Mar. 3	1100	*30,500	*25.91	June 14	0930	24,400	23.68

Minimum discharge, 83 ft3/s, Sept. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	2170	8440	1260	1900	3800	1060	829	8710	3080	269	115
2	441	1990	7130	1150	1590	10600	942	644	5780	2410	225	113
3	367	1220	2930	1050	1410	22500	850	597	2960	1460	204	124
4	317	871	2020	971	2390	17800	787	541	2120	1100	193	127
5	283	684	1760	2050	3150	15500	799	583	1640	895	183	116
6	259	569	2090	2810	2480	14900	1020	470	1370	742	164	112
7	241	920	1720	1920	1940	8800	958	382	1190	630	154	107
8	226	2930	1420	1540	1840	4080	814	341	1180	543	155	105
9	212	2060	1200	1530	1730	3090	709	356	1930	600	189	223
10	192	1380	1040	1890	1530	2660	628	336	1360	567	211	217
11	182	1070	944	1550	1370	2280	583	304	1170	445	220	190
12	175	862	1610	1300	1230	1940	567	280	1670	397	214	148
13	172	722	1430	1130	1250	1730	544	257	1650	371	424	129
14	167	718	1210	1010	1780	2390	496	238	15200	386	347	118
15	162	736	1080	1040	1800	2220	455	227	3720	341	267	111
16	160	687	2140	2320	1500	1780	426	217	2360	309	225	107
17	147	677	18100	2090	1310	1590	397	209	3730	288	198	105
18	258	1950	9170	1550	1170	1550	376	197	5090	271	190	102
19	276	1990	3550	1330	1070	5480	367	700	2690	250	184	97
20	244	1580	2460	1170	995	4320	362	4160	1890	233	295	94
21	198	1270	1910	1040	1020	2880	390	1800	1690	223	259	91
22	195	1090	1590	1310	1230	2280	392	941	2170	221	217	86
23	385	951	1380	2150	1280	1860	540	626	1540	219	183	101
24	365	834	2360	6570	1070	1580	590	481	1150	212	166	564
25	314	1210	2280	6910	862	1420	511	424	916	200	156	2020
26	344	1620	1780	3420	904	1710	412	3660	795	198	149	1400
27	398	1380	1590	2470	1430	1510	382	6080	814	190	139	677
28	471	1080	1460	5560	1930	1370	517	3260	1320	178	130	429
29	543	917	1360	5030	---	1520	1540	1990	1270	433	125	327
30	463	1380	1290	2980	---	1380	1000	1440	2090	545	121	265
31	385	---	1410	2310	---	1210	---	3560	---	340	119	---
TOTAL	9102	37518	89854	70411	43161	147730	19414	36130	81165	18277	6275	8520
MEAN	294	1251	2899	2271	1541	4765	647	1165	2706	590	202	284
MAX	560	2930	18100	6910	3150	22500	1540	6080	15200	3080	424	2020
MIN	147	569	944	971	862	1210	362	197	795	178	119	86
CFSM	.43	1.84	4.26	3.34	2.26	7.00	.95	1.71	3.97	.87	.30	.42
IN.	.50	2.05	4.91	3.85	2.36	8.07	1.06	1.97	4.43	1.00	.34	.47

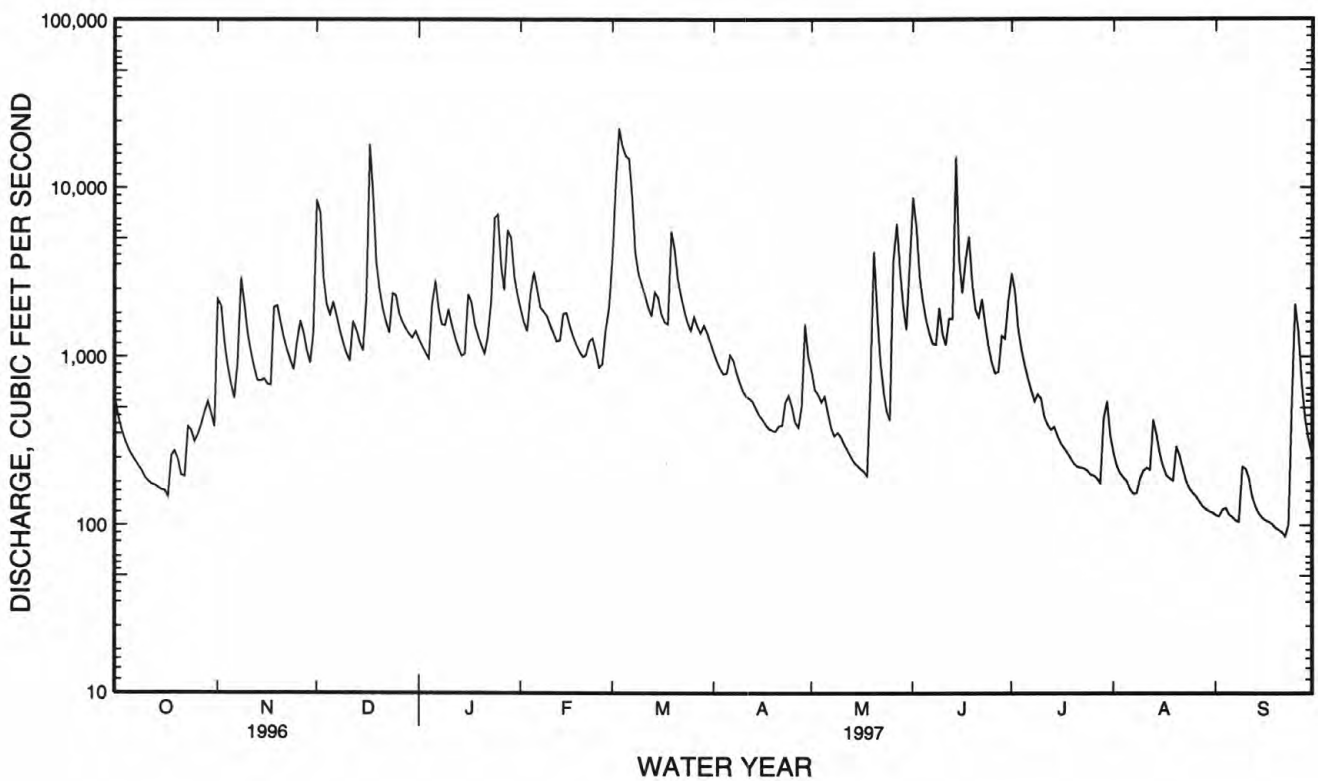
CUMBERLAND RIVER BASIN
03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

MEAN	229	632	1320	1871	2061	2185	1483	1028	505	270	208	218
MAX	1516	2761	6274	6975	6078	6806	3942	5107	2849	1071	1099	2530
(WY)	1976	1980	1927	1937	1950	1975	1927	1984	1928	1989	1926	1979
MIN	28.9	63.2	94.9	116	187	279	269	99.3	59.0	62.7	38.5	25.0
(WY)	1932	1955	1936	1940	1941	1941	1967	1941	1988	1954	1954	1939

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1925 - 1997	
ANNUAL TOTAL	422965		567557			
ANNUAL MEAN	1156		1555		996	
HIGHEST ANNUAL MEAN					2000	1973
LOWEST ANNUAL MEAN					249	1941
HIGHEST DAILY MEAN	18100	Dec 17	22500	Mar 3	43100	Feb 14 1948
LOWEST DAILY MEAN	107	Jul 7	86	Sep 22	16	Sep 28 1939
ANNUAL SEVEN-DAY MINIMUM	119	Jul 1	97	Sep 17	18	Sep 22 1939
INSTANTANEOUS PEAK FLOW			30500	Mar 3	60000	Jan 7 1946
INSTANTANEOUS PEAK STAGE			25.91	Mar 3	a32.20	Jan 7 1946
INSTANTANEOUS LOW FLOW			b83	Sep 22	12	Sep 18 1939
ANNUAL RUNOFF (CFSM)	1.70		2.28		1.46	
ANNUAL RUNOFF (INCHES)	23.10		31.00		19.88	
10 PERCENT EXCEEDS	2380		2940		2250	
50 PERCENT EXCEEDS	814		944		349	
90 PERCENT EXCEEDS	163		174		70	

a From high-water mark in gage house.
b Also occurred Sept. 23.



CUMBERLAND RIVER BASIN

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°19'22", long 87°13'42", Cheatham County, Hydrologic Unit 05130205, on left bank 0.4 mi downstream from Cheatham Dam, 2.0 mi southwest of Neptune, 2.6 mi upstream from Half Pone Creek, 9.7 mi west of Ashland City, and at mile 148.4.

DRAINAGE AREA.--14,163 mi^2.

PERIOD OF RECORD.--February 1993 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1993 to September 1997.
pH: February 1993 to September 1997.
WATER TEMPERATURE: February 1993 to September 1997.
DISSOLVED OXYGEN: February 1993 to September 1997.

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Flow regulated by Cheatham Dam and other reservoirs above station. Interruptions in the record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 298 microsiemens, May 4, 1995; minimum, 161 microsiemens, Mar. 29, 30, 1994.
pH: Maximum, 8.9 units, May 16, 17, 18, 1993; minimum, 6.0 units, June 13, 1993.
WATER TEMPERATURE: Maximum, 28.4°C, Aug. 2, 3, 1995; minimum, 2.3°C, Feb. 6, 1996.
DISSOLVED OXYGEN: Maximum, 13.7 mg/L, Feb. 18, 1996; minimum, 3.7 mg/L, June 29, 1994.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 280 microsiemens, Nov. 23; minimum, 185 microsiemens, Apr. 11, 12.
pH: Maximum, 8.4 units, April 20, July 14; minimum, 7.0 units, Dec. 17, 18, 19, 23.
WATER TEMPERATURE: Maximum, 27.9°C, Aug. 4; minimum, 4.9°C, Jan. 20.
DISSOLVED OXYGEN: Maximum, 12.8 mg/L, Dec. 28; minimum, 5.7 mg/L, Sept. 30.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	256	245	250	262	236	248	270	249	258	238	234	236
2	256	242	250	249	237	243	249	237	241	238	227	230
3	244	239	241	257	244	250	253	240	249	228	224	226
4	251	244	246	257	246	250	240	233	236	233	227	230
5	248	234	240	247	237	241	238	236	237	235	230	232
6	247	234	240	248	235	241	242	237	239	234	223	230
7	247	233	241	254	241	245	242	240	242	234	227	231
8	248	234	240	261	247	254	244	240	242	234	227	231
9	239	233	236	251	242	247	241	236	240	237	228	233
10	239	233	235	246	238	243	236	234	235	236	230	234
11	246	237	240	252	238	245	236	234	235	236	230	234
12	247	240	243	254	247	251	242	235	239	238	234	236
13	246	237	240	257	250	253	247	236	241	241	235	238
14	249	238	242	258	254	256	246	230	238	239	226	235
15	246	241	244	258	254	256	249	242	246	228	222	225
16	254	243	249	265	256	259	251	240	244	233	226	231
17	257	244	251	264	255	259	251	219	229	239	233	237
18	245	236	243	264	254	259	269	239	259	237	232	235
19	259	243	252	261	256	259	252	237	242	235	227	232
20	260	252	256	271	257	264	270	242	254	229	218	223
21	257	254	256	279	271	276	273	264	268	224	221	222
22	260	253	257	277	271	274	273	268	270	231	221	224
23	260	251	256	280	271	275	269	236	247	228	223	227
24	258	253	256	276	269	273	237	229	233	228	204	221
25	258	252	254	277	269	272	238	226	232	221	204	213
26	255	252	253	276	263	268	234	226	231	226	212	219
27	262	254	259	268	262	265	228	215	221	232	216	226
28	260	241	253	267	256	262	231	219	223	242	227	232
29	249	239	245	272	258	264	241	230	235	242	221	228
30	247	232	238	275	269	272	237	231	233	240	225	235
31	246	237	242	---	---	---	237	232	234	246	237	242
MONTH	262	232	247	280	235	257	273	215	241	246	204	230

CUMBERLAND RIVER BASIN

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	246	233	240	256	200	222	232	220	227	219	212	214
2	246	233	237	223	190	201	231	215	224	225	217	220
3	253	246	250	244	223	233	219	207	213	224	217	219
4	252	247	249	261	244	252	219	193	211	224	218	219
5	255	241	248	262	249	257	194	187	191	223	218	220
6	243	228	238	249	230	237	204	193	199	227	220	223
7	242	224	234	239	231	234	206	201	204	229	218	222
8	245	228	235	265	238	256	201	187	194	229	218	221
9	252	240	247	264	247	253	211	198	208	233	222	227
10	250	245	249	256	246	250	206	200	203	223	220	222
11	255	244	251	263	254	258	200	185	186	229	221	223
12	258	250	254	260	253	256	193	185	187	229	219	222
13	253	246	250	260	251	255	201	193	197	223	213	217
14	246	240	243	254	250	252	202	194	198	217	213	215
15	253	243	249	253	249	251	201	194	198	216	214	215
16	254	250	252	257	248	252	203	198	200	218	214	216
17	255	243	247	255	245	250	209	201	204	220	216	218
18	246	243	245	247	243	245	210	204	207	218	214	216
19	247	244	246	247	239	243	213	206	209	221	216	218
20	249	244	246	239	227	234	214	206	210	234	204	221
21	250	244	246	238	226	230	214	211	212	208	198	202
22	248	239	242	258	238	254	214	210	212	210	204	208
23	247	241	243	257	254	255	213	208	210	211	208	210
24	247	243	245	256	245	250	216	209	212	210	206	208
25	245	237	242	245	234	238	216	210	212	210	207	208
26	239	236	238	234	226	230	219	210	213	214	210	212
27	246	236	241	243	231	235	218	213	216	223	198	213
28	253	239	246	243	232	237	218	215	217	210	199	203
29	---	---	---	238	232	235	220	215	218	217	207	210
30	---	---	---	239	227	234	215	210	212	227	214	221
31	---	---	---	228	218	223	---	---	---	237	220	226
MONTH	258	224	245	265	190	242	232	185	207	237	198	216

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	237	205	220	205	190	197	208	197	203	200	194	198
2	212	198	206	211	197	201	209	201	206	199	193	196
3	233	212	222	214	205	210	202	197	199	198	191	195
4	235	230	233	218	202	208	199	195	197	193	190	191
5	231	227	229	216	202	205	200	196	197	195	188	192
6	236	227	231	207	202	204	200	194	197	198	195	197
7	238	232	235	222	201	209	200	194	196	198	188	194
8	240	235	237	216	204	210	203	197	199	195	189	192
9	240	229	233	215	202	208	203	194	198	193	188	190
10	---	---	---	217	200	209	196	192	194	202	193	196
11	237	232	233	208	197	201	198	196	197	208	202	206
12	236	229	233	206	194	200	200	194	196	211	203	207
13	237	232	235	206	194	198	202	196	199	209	207	208
14	232	196	210	208	202	205	203	198	201	210	204	207
15	230	198	216	206	196	200	204	198	201	211	205	207
16	233	224	228	199	196	197	204	194	199	215	207	212
17	233	225	230	200	196	198	198	193	197	211	207	208
18	235	224	229	200	195	198	198	192	195	214	207	210
19	228	224	227	202	197	199	197	192	194	211	205	209
20	224	216	221	203	198	201	199	191	195	215	210	213
21	217	212	214	203	199	201	204	191	198	212	206	210
22	219	211	215	202	199	201	206	196	201	217	207	211
23	215	207	211	202	197	200	199	194	197	218	205	208
24	210	202	207	204	197	200	200	193	196	---	---	---
25	212	203	209	204	201	202	203	196	200	203	194	197
26	212	203	208	203	200	201	201	195	198	210	199	206
27	211	200	206	202	200	201	201	194	197	218	208	213
28	212	192	204	203	198	201	200	194	197	230	208	216
29	212	201	204	200	195	198	202	197	199	234	217	226
30	205	197	199	199	196	197	201	195	198	238	215	231
31	---	---	---	201	197	198	199	193	196	---	---	---
MONTH	240	192	220	222	190	202	209	191	198	238	188	205

CUMBERLAND RIVER BASIN

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.6	7.6	7.7	7.6	7.8	7.7	7.3	7.2	7.4	7.3	7.7	7.3
2	7.6	7.6	7.8	7.6	7.7	7.6	7.3	7.2	7.4	7.2	7.8	7.1
3	7.6	7.6	8.0	7.8	7.7	7.6	7.3	7.2	7.6	7.3	7.8	7.4
4	7.6	7.6	8.0	7.9	7.7	7.6	7.3	7.2	7.7	7.5	7.8	7.6
5	7.6	7.6	8.0	7.8	7.6	7.6	7.3	7.2	7.6	7.4	7.8	7.6
6	7.6	7.6	8.0	7.9	7.6	7.6	7.3	7.2	7.8	7.4	7.7	7.3
7	7.6	7.6	8.2	7.9	7.6	7.6	7.5	7.2	7.8	7.6	7.6	7.3
8	7.6	7.3	8.2	7.8	7.7	7.6	7.7	7.4	7.6	7.3	7.7	7.4
9	7.4	7.3	8.0	7.7	7.7	7.6	7.7	7.4	7.3	7.2	8.0	7.4
10	7.5	7.4	8.0	7.7	---	---	7.7	7.4	7.4	7.2	8.0	7.8
11	7.9	7.5	7.9	7.7	7.6	7.6	7.6	7.4	7.4	7.2	7.9	7.7
12	8.0	7.8	7.8	7.7	7.6	7.6	7.7	7.5	7.5	7.3	7.8	7.7
13	7.9	7.7	7.7	7.5	7.6	7.6	8.3	7.6	7.6	7.3	7.9	7.6
14	8.0	7.8	7.9	7.5	7.6	7.4	8.4	8.1	7.8	7.4	7.8	7.7
15	8.0	7.9	7.9	7.8	7.5	7.4	8.3	7.9	7.7	7.5	8.1	7.7
16	8.1	7.8	8.1	7.9	7.5	7.5	8.3	7.8	7.8	7.4	8.1	7.9
17	8.0	7.8	8.2	8.0	7.5	7.4	8.0	7.8	7.8	7.6	8.2	8.0
18	8.2	7.9	8.2	8.0	7.5	7.4	8.1	7.8	7.8	7.6	8.2	7.9
19	8.3	8.0	8.3	8.0	7.5	7.4	8.0	7.8	7.8	7.6	8.2	7.9
20	8.4	8.0	8.2	7.8	7.5	7.5	7.8	7.7	7.8	7.5	8.0	7.8
21	8.2	8.0	7.8	7.6	7.6	7.4	7.7	7.6	7.7	7.4	7.9	7.8
22	8.1	7.8	7.8	7.7	7.4	7.3	7.7	7.5	7.8	7.4	7.9	7.5
23	8.1	7.8	7.7	7.5	7.5	7.4	7.5	7.5	7.7	7.6	---	---
24	7.9	7.7	7.8	7.5	7.5	7.4	7.5	7.3	8.1	7.6	---	---
25	8.1	7.7	7.8	7.7	7.5	7.4	7.6	7.4	8.0	7.8	7.5	7.4
26	8.0	7.8	7.8	7.6	7.5	7.4	7.6	7.4	7.9	7.7	7.5	7.5
27	7.9	7.8	7.8	7.6	7.5	7.4	7.6	7.4	8.0	7.6	7.7	7.5
28	7.9	7.7	7.7	7.6	7.4	7.3	7.5	7.4	8.2	7.9	7.7	7.6
29	7.7	7.5	7.8	7.6	7.3	7.3	7.5	7.3	8.1	7.4	7.7	7.6
30	7.7	7.6	7.8	7.6	7.3	7.3	7.5	7.4	7.8	7.4	7.7	7.5
31	---	---	7.8	7.6	---	---	7.5	7.3	7.8	7.4	---	---
MONTH	8.4	7.3	8.3	7.5	7.8	7.3	8.4	7.2	8.2	7.2	8.2	7.1

CUMBERLAND RIVER BASIN

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.0	20.8	20.9	17.5	16.3	17.1	11.2	10.6	10.9	10.3	10.1	10.2
2	21.0	20.7	20.8	16.3	15.4	15.9	11.2	10.9	11.1	10.6	10.3	10.4
3	21.2	20.9	21.1	15.4	15.0	15.1	10.9	10.6	10.7	11.0	10.6	10.8
4	21.0	20.8	20.9	15.1	14.7	14.9	10.7	10.5	10.6	11.3	11.0	11.1
5	21.0	20.7	20.8	14.8	14.5	14.7	10.6	10.4	10.5	11.5	11.3	11.4
6	20.7	20.4	20.5	15.2	14.7	14.9	10.4	10.2	10.3	11.5	11.2	11.4
7	20.6	20.2	20.4	15.4	15.2	15.3	10.4	10.2	10.3	11.2	10.8	11.0
8	20.5	19.9	20.1	15.5	15.3	15.4	10.4	10.2	10.3	10.8	10.0	10.4
9	19.9	19.6	19.7	15.3	14.3	14.8	10.3	10.1	10.2	10.0	9.5	9.8
10	19.7	19.4	19.5	14.3	13.7	13.9	10.3	10.1	10.2	9.5	8.6	9.1
11	19.5	19.0	19.3	13.7	13.3	13.5	10.7	10.3	10.5	8.6	7.9	8.1
12	19.3	18.9	19.1	13.3	12.8	13.1	11.1	10.7	10.9	7.9	7.4	7.5
13	19.2	18.8	18.9	12.8	12.4	12.6	11.4	11.1	11.2	7.4	6.7	7.0
14	19.1	18.6	18.9	12.5	11.9	12.3	11.3	11.0	11.2	6.7	6.3	6.4
15	19.2	18.7	19.0	12.1	11.6	11.8	11.0	10.8	10.9	6.3	6.1	6.2
16	19.5	18.8	19.1	11.8	11.5	11.6	10.9	10.4	10.8	6.2	5.5	5.9
17	19.5	19.0	19.2	11.7	11.4	11.5	10.4	9.7	9.9	5.6	5.3	5.4
18	19.4	18.9	19.2	11.8	11.5	11.6	10.0	9.8	9.9	5.4	5.1	5.2
19	18.9	18.5	18.7	11.9	11.6	11.8	9.8	9.2	9.5	5.1	5.0	5.0
20	18.7	18.2	18.5	12.0	11.8	11.9	9.2	8.5	8.8	5.3	4.9	5.0
21	18.8	18.3	18.4	12.2	11.9	12.1	8.5	8.2	8.3	5.7	5.3	5.4
22	18.7	18.2	18.4	11.9	11.5	11.7	8.4	8.1	8.2	6.3	5.7	6.0
23	18.3	17.8	18.0	11.6	11.5	11.5	8.7	8.2	8.4	6.8	6.3	6.5
24	17.8	17.3	17.6	11.6	11.4	11.5	9.0	8.7	8.9	7.6	6.8	7.1
25	17.3	17.2	17.2	11.7	11.5	11.6	8.9	8.6	8.7	7.8	7.6	7.7
26	17.2	17.0	17.1	11.5	11.0	11.2	8.6	8.1	8.4	7.6	7.1	7.3
27	17.5	17.2	17.3	11.0	10.7	10.8	8.3	8.0	8.1	7.4	7.1	7.2
28	17.6	17.4	17.5	10.7	10.2	10.3	9.0	8.3	8.6	7.4	7.1	7.2
29	17.9	17.5	17.7	10.4	10.2	10.3	9.5	9.0	9.3	7.2	7.0	7.1
30	18.2	17.8	18.0	10.8	10.3	10.4	9.9	9.5	9.7	7.2	6.9	7.1
31	18.0	17.5	17.9	---	---	---	10.1	9.9	10.0	7.4	6.9	7.1
MONTH	21.2	17.0	19.0	17.5	10.2	12.8	11.4	8.0	9.8	11.5	4.9	7.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.7	7.3	7.5	12.8	10.6	11.8	12.6	12.4	12.5	16.3	15.6	16.0
2	8.0	7.6	7.8	13.3	12.6	13.0	12.4	12.2	12.3	16.6	16.1	16.2
3	8.1	7.9	8.0	12.7	11.6	11.9	12.5	12.2	12.4	16.8	16.5	16.6
4	8.6	8.1	8.4	12.1	11.6	11.8	12.6	12.5	12.5	16.9	16.4	16.7
5	8.6	8.5	8.6	12.0	11.9	11.9	12.7	12.6	12.7	16.8	16.4	16.5
6	8.5	8.1	8.3	11.9	11.8	11.8	12.8	12.6	12.7	17.2	16.6	16.9
7	8.1	7.9	8.1	11.9	11.7	11.8	12.9	12.7	12.8	17.4	17.1	17.2
8	8.0	7.9	7.9	11.8	11.7	11.7	13.0	12.8	12.9	17.6	17.4	17.5
9	7.9	7.8	7.9	12.0	11.8	11.8	13.0	12.8	12.9	18.2	17.6	17.9
10	7.9	7.7	7.8	12.0	11.9	11.9	13.1	12.9	13.0	18.1	17.8	17.9
11	7.7	7.6	7.6	11.9	11.7	11.8	13.4	12.9	13.1	18.5	17.9	18.2
12	7.6	7.3	7.4	11.8	11.6	11.7	13.5	13.4	13.4	18.7	18.4	18.5
13	7.4	7.3	7.4	11.7	11.6	11.6	13.4	13.1	13.3	18.4	17.5	17.9
14	7.3	7.2	7.2	11.6	11.5	11.6	13.2	12.9	13.1	17.9	17.2	17.5
15	7.3	7.1	7.2	11.6	11.2	11.4	13.1	12.9	13.0	18.1	17.5	17.9
16	7.4	7.2	7.3	11.2	10.8	11.0	13.4	12.5	13.0	18.4	17.6	18.1
17	7.5	7.2	7.3	10.8	10.6	10.7	13.4	12.8	13.1	18.5	18.0	18.3
18	7.8	7.4	7.6	10.7	10.6	10.6	13.5	12.4	13.1	18.8	18.1	18.5
19	7.9	7.7	7.8	10.9	10.7	10.8	14.0	13.3	13.6	19.5	18.7	19.1
20	8.4	7.9	8.2	10.9	10.6	10.8	14.3	13.6	13.9	19.8	19.2	19.4
21	9.0	8.4	8.8	10.9	10.7	10.8	14.2	13.9	14.1	19.4	19.0	19.2
22	9.1	9.0	9.0	11.1	10.9	11.0	14.5	13.9	14.2	19.6	19.1	19.4
23	9.1	9.0	9.0	11.3	11.1	11.2	14.8	14.3	14.6	19.6	19.3	19.4
24	9.2	9.0	9.1	11.5	11.2	11.3	15.0	14.5	14.7	20.0	19.4	19.7
25	9.3	9.1	9.2	11.8	11.4	11.6	15.4	14.5	14.9	20.3	19.9	20.2
26	9.5	9.3	9.3	12.1	11.7	11.9	15.7	15.2	15.4	20.4	20.1	20.3
27	10.0	9.5	9.8	12.2	11.9	12.0	15.6	15.4	15.5	20.4	20.0	20.2
28	10.6	10.0	10.2	12.4	12.1	12.2	15.5	15.1	15.3	20.4	20.2	20.2
29	---	---	---	12.7	12.3	12.5	15.2	15.0	15.1	20.3	20.0	20.2
30	---	---	---	12.7	12.6	12.6	15.6	15.1	15.3	20.3	19.9	20.1
31	---	---	---	12.6	12.5	12.6	---	---	---	20.0	19.4	19.7
MONTH	10.6	7.1	8.2	13.3	10.6	11.6	15.7	12.2	13.6	20.4	15.6	18.4

CUMBERLAND RIVER BASIN

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.8	19.3	19.4	20.6	19.9	20.3	26.8	26.3	26.6	26.5	25.9	26.2
2	19.7	19.1	19.4	20.8	20.1	20.5	26.5	26.1	26.3	27.5	26.2	26.5
3	19.6	19.3	19.3	21.4	20.6	21.0	27.1	26.2	26.5	26.3	26.0	26.2
4	19.4	19.2	19.3	21.7	21.3	21.5	27.9	27.0	27.4	26.0	25.5	25.7
5	19.2	18.9	19.0	21.9	21.3	21.6	27.7	27.4	27.6	25.6	25.2	25.4
6	19.0	19.0	19.0	22.0	21.2	21.6	27.5	27.1	27.3	25.4	24.9	25.1
7	19.2	18.9	19.1	22.3	21.3	21.9	27.3	26.9	27.1	24.9	24.5	24.6
8	19.1	18.9	19.0	22.7	22.0	22.3	27.0	26.2	26.7	25.5	24.6	25.1
9	19.0	18.9	18.9	23.0	22.3	22.6	26.2	25.3	25.6	26.0	25.4	25.6
10	---	---	---	23.1	22.6	22.8	25.8	25.4	25.6	25.9	25.5	25.6
11	18.2	18.0	18.2	23.0	22.5	22.7	26.2	25.6	25.9	25.5	25.1	25.3
12	18.5	18.0	18.2	23.5	22.8	23.1	26.4	26.0	26.2	25.1	24.6	24.9
13	18.8	18.4	18.6	24.1	23.3	23.7	26.4	25.9	26.2	24.8	24.4	24.6
14	18.9	18.5	18.7	24.6	23.8	24.0	26.5	25.9	26.2	24.5	24.2	24.4
15	18.5	18.0	18.2	25.0	24.0	24.5	26.6	26.3	26.4	24.7	24.2	24.5
16	18.0	17.8	17.9	25.2	24.5	24.8	26.8	26.3	26.5	25.0	24.3	24.6
17	18.3	17.9	18.0	25.5	24.5	25.0	26.8	26.6	26.7	25.0	24.6	24.7
18	18.7	18.0	18.3	25.6	24.9	25.2	27.2	26.6	26.9	25.2	24.5	24.8
19	18.7	18.2	18.5	25.6	25.1	25.4	27.2	26.9	27.0	25.2	24.6	24.9
20	19.3	18.7	18.9	25.9	25.4	25.6	27.1	26.8	26.9	25.1	24.8	25.0
21	19.3	19.1	19.2	26.0	25.5	25.8	26.8	26.0	26.3	24.8	24.5	24.7
22	19.8	19.2	19.5	26.4	25.9	26.1	26.0	25.6	25.8	24.6	23.9	24.4
23	19.8	19.4	19.6	26.3	25.9	26.1	25.6	25.4	25.5	---	---	---
24	20.0	19.4	19.7	26.3	25.9	26.1	26.0	25.3	25.7	---	---	---
25	20.4	19.8	20.1	26.5	26.1	26.3	26.1	25.5	25.8	23.5	22.6	23.1
26	20.3	20.0	20.1	27.1	26.3	26.6	25.8	25.3	25.5	22.6	22.1	22.4
27	20.5	19.9	20.2	27.4	26.5	26.9	26.1	25.5	25.8	22.7	22.0	22.3
28	20.6	20.3	20.4	27.0	26.7	26.8	26.5	26.0	26.3	22.9	22.4	22.7
29	20.6	20.1	20.3	27.0	26.7	26.9	26.6	26.3	26.4	23.1	22.1	22.4
30	20.3	20.0	20.1	27.0	26.8	26.9	26.7	26.2	26.3	22.4	21.8	22.1
31	---	---	---	27.0	26.6	26.9	26.4	26.1	26.2	---	---	---
MONTH	20.6	17.8	19.1	27.4	19.9	24.2	27.9	25.3	26.4	27.5	21.8	24.6

OXYGEN DISSOLVED (DO) MG/L, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.0	6.3	6.5	8.8	8.1	8.4	11.3	10.6	11.0	11.8	8.4	10.6
2	7.4	6.3	6.8	9.6	8.8	9.2	11.7	10.9	11.4	11.1	8.4	10.2
3	7.5	7.1	7.3	9.0	8.7	8.8	12.0	11.1	11.5	10.8	9.7	10.3
4	7.7	7.1	7.4	9.9	8.7	9.4	11.1	10.6	10.9	9.7	8.9	9.3
5	8.3	7.3	7.8	10.3	9.8	10.1	10.7	10.5	10.6	9.3	8.6	9.0
6	8.2	7.1	7.7	10.6	10.1	10.3	10.8	10.6	10.7	11.9	8.5	10.5
7	8.4	7.2	7.8	10.4	10.1	10.3	11.0	10.8	10.9	11.3	10.7	10.9
8	8.5	7.4	8.0	10.1	9.7	10.0	11.2	10.9	11.0	11.7	10.9	11.3
9	8.6	8.1	8.4	10.0	9.6	9.8	11.0	10.9	10.9	11.7	11.2	11.5
10	8.9	8.4	8.6	10.3	9.9	10.1	11.0	10.8	10.9	11.5	10.6	11.0
11	8.7	8.2	8.4	10.6	10.1	10.3	11.0	10.9	10.9	11.1	10.9	11.1
12	8.6	8.1	8.3	10.5	10.2	10.4	11.0	10.6	10.9	11.7	10.9	11.3
13	9.0	8.1	8.6	10.6	10.3	10.4	10.9	10.8	10.8	11.2	10.7	10.9
14	9.1	8.3	8.8	10.5	10.3	10.4	---	---	---	12.1	10.3	11.4
15	9.2	8.3	8.8	11.0	10.4	10.7	---	---	---	12.3	12.1	12.2
16	8.9	8.2	8.6	11.1	10.7	10.9	11.3	10.4	10.9	12.6	11.8	12.0
17	8.9	7.9	8.5	11.1	10.8	11.0	11.3	9.3	10.5	12.2	11.6	11.9
18	9.5	9.0	9.2	11.0	10.7	10.9	---	---	---	11.6	11.3	11.5
19	9.4	9.0	9.2	10.8	10.6	10.7	---	---	---	12.3	10.8	11.5
20	9.4	8.9	9.2	10.6	10.1	10.4	---	---	---	12.4	12.1	12.3
21	9.7	8.9	9.1	10.2	10.0	10.1	---	---	---	12.3	11.3	11.8
22	9.2	8.1	8.7	10.6	10.2	10.4	---	---	---	12.5	11.9	12.2
23	9.0	8.0	8.6	10.9	10.5	10.7	---	---	---	12.0	11.5	11.8
24	9.2	8.4	8.8	11.1	10.6	10.8	10.6	9.7	10.1	12.3	11.4	11.8
25	9.3	8.6	9.0	11.2	11.0	11.1	11.6	10.6	11.1	11.9	11.7	11.8
26	9.2	8.7	9.0	11.4	11.1	11.2	12.4	10.7	11.0	12.0	11.7	11.8
27	8.7	8.1	8.4	11.4	11.2	11.3	12.7	12.4	12.6	12.1	11.5	11.9
28	8.8	8.3	8.5	11.6	11.3	11.4	12.8	11.4	12.0	11.8	11.4	11.6
29	8.5	8.1	8.3	11.6	11.2	11.3	11.8	10.2	11.0	11.7	11.2	11.4
30	8.6	7.9	8.3	11.3	11.1	11.2	11.6	10.5	11.0	11.7	11.0	11.3
31	8.3	8.0	8.2	---	---	---	11.3	10.5	10.8	11.4	10.5	11.1
MONTH	9.7	6.3	8.3	11.6	8.1	10.4	12.8	9.3	11.0	12.6	8.4	11.3

CUMBERLAND RIVER BASIN

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN--Continued

OXYGEN DISSOLVED (DO), MG/L WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.0	9.9	11.0	11.6	11.2	11.4	---	---	---	10.2	9.7	9.9
2	12.4	9.9	11.5	11.4	10.4	10.9	---	---	---	10.9	9.6	10.1
3	11.4	9.7	10.5	---	---	---	---	---	---	11.1	10.6	10.9
4	11.9	10.3	11.2	---	---	---	---	---	---	11.1	10.4	10.8
5	11.4	11.2	11.3	---	---	---	---	---	---	10.9	10.3	10.7
6	11.6	11.3	11.4	---	---	---	---	---	---	11.4	9.9	10.8
7	12.0	11.4	11.6	---	---	---	---	---	---	11.5	9.9	10.8
8	11.8	11.3	11.5	---	---	---	11.2	10.8	11.0	11.5	9.8	10.7
9	11.5	11.3	11.4	---	---	---	11.2	10.8	11.0	10.0	9.3	9.6
10	11.5	10.8	11.2	---	---	---	11.3	10.6	11.0	10.4	8.7	9.5
11	11.8	11.3	11.5	---	---	---	11.5	10.5	11.0	10.4	9.3	10.0
12	11.9	11.2	11.5	---	---	---	11.5	10.7	11.1	11.3	9.3	10.6
13	12.2	11.6	12.0	---	---	---	11.8	10.3	11.1	10.5	8.2	9.6
14	12.0	11.5	11.8	---	---	---	11.5	10.0	10.8	9.1	7.8	8.3
15	11.6	11.3	11.4	---	---	---	11.1	10.3	10.5	9.1	8.0	8.7
16	11.4	10.8	11.2	---	---	---	12.1	10.1	11.2	9.3	8.9	9.1
17	11.8	10.5	11.3	---	---	---	11.7	10.9	11.4	9.7	8.9	9.3
18	11.8	11.3	11.6	---	---	---	12.1	10.8	11.6	9.9	9.0	9.4
19	11.5	11.2	11.3	---	---	---	12.4	11.4	12.0	9.6	9.0	9.3
20	11.7	11.1	11.4	---	---	---	12.7	11.4	12.2	9.2	8.2	8.7
21	11.9	11.7	11.8	---	---	---	12.2	11.3	11.9	8.3	7.5	7.9
22	11.9	11.6	11.8	---	---	---	11.7	11.1	11.4	8.1	7.5	7.9
23	11.7	11.4	11.5	---	---	---	11.8	10.9	11.4	7.9	6.7	7.2
24	11.9	11.2	11.5	---	---	---	11.4	10.3	11.0	7.9	7.0	7.4
25	12.0	11.6	11.8	---	---	---	11.8	10.3	11.1	8.0	7.2	7.7
26	11.7	11.4	11.5	---	---	---	11.5	10.9	11.2	7.5	6.8	7.3
27	11.6	11.3	11.5	---	---	---	11.1	10.6	10.9	7.7	6.3	6.9
28	11.6	11.2	11.4	---	---	---	10.7	9.7	10.3	7.1	6.5	6.8
29	---	---	---	---	---	---	9.9	9.1	9.5	6.7	6.2	6.5
30	---	---	---	---	---	---	10.0	9.3	9.7	7.1	6.2	6.7
31	---	---	---	---	---	---	---	---	---	7.2	6.2	6.7
MONTH	12.4	9.7	11.4	11.6	10.4	11.1	12.7	9.1	11.1	11.5	6.2	8.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.7	7.2	7.6	8.5	7.8	8.1	7.2	5.9	6.5	8.7	7.5	8.1
2	8.6	7.5	8.2	8.6	8.0	8.4	7.7	6.2	6.9	8.7	7.7	8.3
3	8.7	8.4	8.6	8.9	7.8	8.3	8.1	6.6	7.2	8.8	7.4	8.4
4	8.4	8.1	8.3	8.9	8.1	8.6	8.1	7.1	7.6	8.9	7.9	8.3
5	8.3	7.6	7.9	9.3	8.2	8.8	7.9	7.0	7.6	8.9	7.8	8.4
6	8.4	7.6	8.0	9.0	8.4	8.8	7.7	6.9	7.3	8.5	6.5	7.7
7	8.9	8.4	8.6	8.9	6.7	8.1	8.5	7.2	7.9	8.3	6.5	7.5
8	8.8	6.8	8.3	7.9	6.8	7.2	8.3	7.5	7.9	8.2	6.7	7.4
9	9.0	6.8	8.5	7.9	7.2	7.6	7.5	6.7	7.1	8.1	6.9	7.6
10	---	---	---	8.2	7.3	7.8	7.3	6.5	6.9	7.9	6.5	7.5
11	8.5	7.4	8.1	8.2	7.2	7.7	7.6	6.6	7.1	7.5	6.4	6.9
12	8.2	7.0	7.6	7.9	7.1	7.5	7.5	6.8	7.2	7.7	6.8	7.2
13	7.0	6.7	6.8	8.1	7.2	7.6	7.6	6.7	7.1	7.5	6.7	7.1
14	6.9	6.5	6.7	8.1	7.4	7.8	8.4	7.1	7.7	7.6	6.7	7.2
15	9.0	6.8	7.8	8.1	7.2	7.7	8.3	7.9	8.1	8.8	6.8	8.0
16	9.3	8.5	8.9	8.3	7.4	7.8	8.7	7.7	8.2	8.4	6.3	7.3
17	8.5	7.9	8.2	8.1	7.1	7.6	8.7	7.9	8.2	---	---	---
18	8.3	8.0	8.1	8.4	7.5	7.9	8.8	7.9	8.3	9.2	7.3	8.1
19	8.9	8.2	8.4	8.1	7.4	7.9	8.9	8.0	8.4	8.3	7.0	7.6
20	8.7	8.3	8.5	8.3	7.7	8.0	8.2	7.5	8.0	7.5	6.6	7.1
21	8.5	8.1	8.3	7.9	7.5	7.7	8.1	7.1	7.5	8.4	6.7	7.5
22	8.2	7.8	8.0	8.0	7.4	7.7	7.6	6.7	7.1	---	---	---
23	8.8	8.1	8.4	8.0	7.2	7.6	7.1	6.4	6.7	---	---	---
24	9.1	8.6	8.9	7.9	6.8	7.4	8.4	6.8	7.5	---	---	---
25	9.2	8.7	8.9	7.8	7.1	7.4	8.4	7.7	8.0	7.9	7.3	7.5
26	9.2	8.2	8.7	7.9	7.3	7.6	8.7	7.6	8.1	7.5	6.3	7.0
27	8.9	8.3	8.7	8.1	7.6	7.8	8.7	7.6	8.2	8.5	5.9	7.1
28	9.1	8.5	8.9	8.0	7.0	7.6	9.5	8.1	8.9	8.3	7.0	7.7
29	8.8	8.4	8.7	7.9	7.1	7.5	9.3	6.8	8.1	---	---	---
30	8.6	8.4	8.5	7.8	7.3	7.5	9.1	7.2	7.9	6.9	5.7	6.4
31	---	---	---	7.6	6.8	7.2	8.8	7.7	8.3	---	---	---
MONTH	9.3	6.5	8.2	9.3	6.7	7.8	9.5	5.9	7.7	9.2	5.7	7.6

CUMBERLAND RIVER BASIN

03435305 RED RIVER BELOW HIGHWAY 161 NEAR BARREN PLAINS, TN

LOCATION.--Lat 36°38'32", long 86°59'18", Robertson County, Hydrologic Unit 05130206, on left bank in pump house of Springfield water plant, 0.2 mi south of Kentucky-Tennessee state line, 0.7 mi below Highway 161 bridge, 4.8 mi northwest of Barren Plains.

DRAINAGE AREA.--549 mi^2, includes 246 mi^2 without surface drainage.

PERIOD OF RECORD.--October 1994 to current year. Occasional low-flow measurements, water years 1966-1967 at site 1.8 mi upstream.

GAGE.-- Data Logger. Datum of gage is 440.00 above sea level (levels based on information provided by City of Springfield).

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	1445	6,890	13.49	Mar. 2	2315	*22,100	*28.49
Dec. 17	2100	15,900	21.83	Mar. 6	0530	14,300	20.10
Jan. 24	2030	4,620	11.52	Mar. 19	1430	8,630	14.95
Jan. 28	1430	4,670	11.57	June 4	1400	4,790	11.68
Feb. 4	1930	12,800	18.62				

Minimum discharge, 74 ft^3/s, Sept. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	625	5180	1120	1570	5630	1110	831	805	796	194	115
2	908	1240	3030	1060	1380	19700	1040	804	709	639	177	111
3	747	903	2130	1000	1250	19800	989	926	664	525	169	118
4	629	721	1720	954	8130	11400	946	1030	564	461	159	108
5	545	631	1550	1190	6660	7300	918	750	491	418	149	105
6	483	569	1800	1270	3140	10300	882	659	455	384	143	104
7	431	587	1530	1050	2480	4340	789	591	1890	354	139	100
8	390	1720	1320	966	2280	3280	715	548	1290	330	136	97
9	357	1370	1170	957	2120	2710	668	529	1150	317	176	102
10	326	1100	1070	990	1850	2670	631	503	952	299	175	104
11	301	945	1010	898	1670	2330	599	450	805	284	164	99
12	280	819	1240	794	1530	2010	589	421	730	269	154	97
13	259	723	1600	725	1440	1810	567	397	712	256	155	94
14	246	673	1170	680	1600	1840	535	382	3310	289	161	91
15	232	642	1040	683	1490	1760	509	356	2290	265	163	86
16	222	604	1270	1190	1320	1530	485	331	1540	244	150	83
17	210	584	12100	1100	1220	1430	466	317	2070	231	138	82
18	232	840	7150	893	1120	1990	448	303	2080	219	131	79
19	285	1160	3170	824	1060	7030	458	294	1470	212	157	79
20	287	1040	2410	782	1000	3690	467	791	1180	203	441	83
21	239	1090	1980	735	988	2620	468	540	1020	196	375	79
22	222	1500	1740	790	992	2180	469	383	928	200	251	77
23	253	1250	1580	1630	890	1840	468	328	796	283	200	79
24	391	1130	2920	2570	808	1620	433	297	703	242	174	105
25	330	1200	2480	3340	759	1500	401	288	635	223	159	196
26	311	2420	1840	2230	740	1670	377	329	584	192	147	195
27	438	1640	1650	1840	815	1500	457	449	641	181	140	137
28	512	1360	1560	3480	911	1360	853	399	537	178	134	112
29	756	1220	1440	2730	---	1430	1130	390	490	222	129	98
30	607	1890	1320	2100	---	1330	872	392	553	273	125	90
31	516	---	1200	1790	---	1200	---	369	---	236	121	---
TOTAL	13085	32196	72370	42361	51213	130800	19739	15377	32044	9421	5386	3105
MEAN	422	1073	2335	1366	1829	4219	658	496	1068	304	174	104
MAX	1140	2420	12100	3480	8130	19800	1130	1030	3310	796	441	196
MIN	210	569	1010	680	740	1200	377	288	455	178	121	77
CFSM	.77	1.95	4.25	2.49	3.33	7.69	1.20	.90	1.95	.55	.32	.19
IN.	.89	2.18	4.90	2.87	3.47	8.86	1.34	1.04	2.17	.64	.36	.21

CUMBERLAND RIVER BASIN

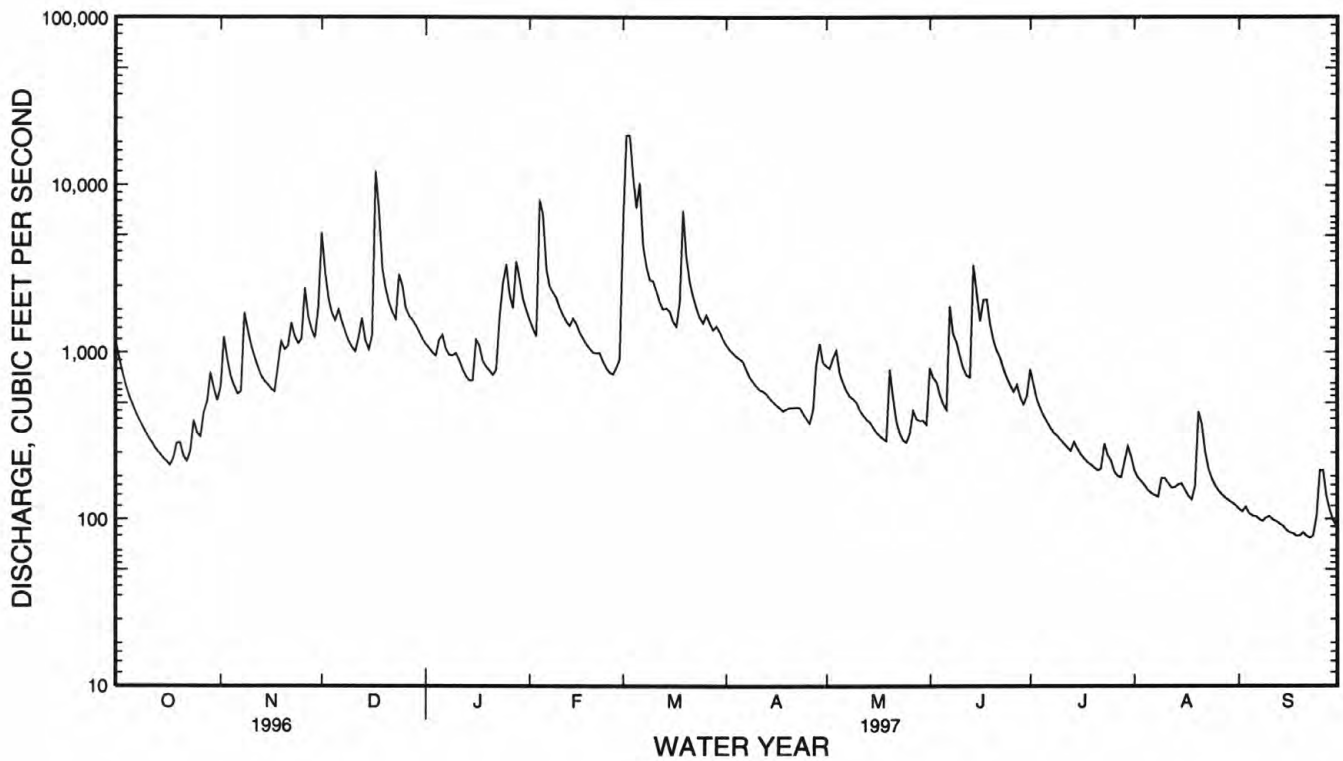
03435305 RED RIVER BELOW HIGHWAY 161 NEAR BARREN PLAINS, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

MEAN	250	631	1034	1128	1248	2383	801	1200	747	311	260	241
MAX	422	1073	2335	1366	1829	4219	1402	1794	1068	425	435	529
(WY)	1997	1997	1997	1997	1997	1997	1996	1995	1997	1996	1996	1996
MIN	91.9	168	224	976	920	1096	345	496	440	206	172	90.6
(WY)	1995	1995	1996	1995	1996	1995	1995	1997	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1994 - 1997	
ANNUAL TOTAL	380620		427097			
ANNUAL MEAN	1040		1170		853	
HIGHEST ANNUAL MEAN			1170			1997
LOWEST ANNUAL MEAN					577	1995
HIGHEST DAILY MEAN	12100	Dec 17	19800	Mar 3	19800	Mar 3 1997
LOWEST DAILY MEAN	120	Sep 15	77	Sep 22	60	Oct 7 1994
ANNUAL SEVEN-DAY MINIMUM	149	Sep 1	80	Sep 17	65	Oct 30 1994
INSTANTANEOUS PEAK FLOW			22100	Mar 2	22100	Mar 2 1997
INSTANTANEOUS PEAK STAGE			28.49	Mar 2	28.49	Mar 2 1997
INSTANTANEOUS LOW FLOW			b74	Sep 22	59	Oct 7 1994
ANNUAL RUNOFF (CFSM)	1.89		2.13		1.55	
ANNUAL RUNOFF (INCHES)	25.79		28.94		21.10	
10 PERCENT EXCEEDS	2190		2150		1800	
50 PERCENT EXCEEDS	762		703		455	
90 PERCENT EXCEEDS	193		140		104	

b Also occurred Sept. 23.



CUMBERLAND RIVER BASIN
RESERVOIRS IN CUMBERLAND RIVER BASIN

03413500 LAKE CUMBERLAND.--Lat 36°52'09", long 85°08'45", Russell County, KY, Hydrologic Unit 05130103, in pylon of Wolf Creek Dam on Cumberland River and 10 mi southwest of Jamestown, Ky. DRAINAGE AREA, 5,789 mi^2. 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.

REVISIONS.--WSP 1556: Drainage area.

REMARKS.--Reservoir is formed by earth embankment and concrete gravity dam surmounted by 10 taintor gates, each 37 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.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,444,700 cfs-days, Mar. 9, elevation, 739.16 ft; minimum, 1,408,000 cfs-days, Nov. 7, elevation, 697.05 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, 3.0 mi east of Celina, and 7.3 mi upstream from mouth. DRAINAGE AREA, 936 mi^2. 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.

REVISIONS.--WSP 1306: 1944. WSP 2110: Drainage area.

REMARKS.--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.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 727,600 cfs-days, June 15, elevation, 654.19 ft; minimum, 515,100 cfs-days, Nov. 5, elevation, 638.17 ft.

03418400 CORDELL HULL RESERVOIR.--Lat 36°17'23", long 85°56'39", Smith County, Hydrologic Unit 05130108, at Cordell Hull Dam Cumberland River, 2.7 mi north of Carthage, and at mile 313.5. DRAINAGE AREA, 8,095 mi^2. PERIOD OF RECORD, October 1972 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with five 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.

COOPERATION.--Records furnished by U.S. Army 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, 135,600 cfs-days, July 5, elevation, 504.80 ft; minimum, 103,300 cfs-days, Dec. 9, elevation, 499.00 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	03413500 LAKE CUMBERLAND			03416500 DALE HOLLOW LAKE			03418400 CORDELL HULL RESERVOIR		
Sept. 30...	701.33	1,501,000	-	640.86	548,100	-	504.04	130,900	-
Oct. 31...	698.33	1,435,600	-65,400	639.04	525,700	-22,400	502.40	121,300	-9,600
Nov. 30...	708.90	1,672,200	+236,600	642.12	564,000	+38,300	500.90	113,000	-8,300
Dec. 31...	714.13	1,867,900	+195,700	643.62	583,200	+19,200	500.24	109,600	-3,400
CAL YR 1996	-	-	+215,400	-	-	+30,400	-	-	-2,200
Jan. 31...	720.69	1,955,800	+87,900	643.68	584,000	+800	500.35	110,100	+500
Feb. 28...	717.23	1,870,300	-85,500	644.22	591,000	+7,000	500.78	112,400	+2,300
Mar. 31...	728.70	2,160,800	+290,500	651.06	683,200	+92,200	500.70	112,000	-400
Apr. 30...	718.72	1,906,900	-253,900	649.66	663,700	-19,500	504.21	131,900	+19,900
May 31...	723.49	2,026,300	+119,400	651.22	685,400	+21,700	504.42	133,200	+1,300
June 30...	725.27	2,071,800	+45,500	650.84	680,100	-5,300	503.93	130,200	-3,000
July 31...	716.76	1,858,800	-213,000	647.41	633,100	-47,000	504.30	132,500	+2,300
Aug. 31...	708.53	1,663,600	-195,200	643.41	580,500	-52,600	504.10	131,200	-1,300
Sept. 30...	700.35	1,479,500	-184,100	640.02	537,700	-42,800	504.16	131,600	+400
WTR YR 1997	-	-	-21,500	-	-	-10,400	-	-	+700

CUMBERLAND RIVER BASIN
RESERVOIRS IN CUMBERLAND RIVER BASIN--CONTINUED

03422000 GREAT FALLS LAKE.--Lat 35°48'21", long 85°38'09", Warren County, Hydrologic Unit 05130108, at pen-stock 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 mi^2. PERIOD OF RECORD, January 1917 to current year. GAGE, remote indicator gage. Datum of gage is sea level. REVISIONS.--WSP 2110: Drainage area.

REMARKS.--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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

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, 26,800 cfs-days, Dec. 1, elevation, 806.50 ft; minimum, 9,410 cfs-days, May 23, elevation, 784.03 ft.

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 mi^2. 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. REVISIONS.--WSP 1910: Drainage area.

REMARKS.--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.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

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, 775,400 cfs-days, Mar. 7, elevation, 659.01 ft; minimum, 519,600 cfs-days, Nov. 5, elevation, 630.57 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 mi^2. PERIOD OF RECORD, June 1954 to current year. GAGE, water-stage recorder. Datum of gage is sea level; gage readings have been reduced to elevations NGVD. Prior to Apr. 4, 1957, nonrecording gage at same site and datum. REVISIONS.--WSP 2110: Drainage area.

REMARKS.--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.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

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, 239,900 cfs-days, Mar. 3, elevation, 447.37 ft; minimum, 186,300 cfs-days, Oct. 23, elevation, 442.65 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	03422000 GREAT FALLS LAKE			03424000 CENTER HILL LAKE			03426300 OLD HICKORY LAKE		
Sept. 30...	804.13	24,100	-	634.08	548,400	-	444.97	211,300	-
Oct. 31...	789.68	12,800	-11,300	630.95	522,600	-25,800	444.53	206,300	-5,000
Nov. 30...	805.97	26,000	+13,200	635.77	562,600	+40,000	445.02	211,800	+5,500
Dec. 31...	808.29	26,400	+400	637.21	574,800	+12,200	444.00	211,600	-200
CAL YEAR 1996	-	-	+9,900	-	-	+45,200	-	-	+5,300
Jan. 31...	805.64	25,700	-700	638.77	588,100	+13,300	444.83	209,700	-1,900
Feb. 28...	805.89	25,900	+200	637.58	577,900	-10,200	445.00	211,600	+1,900
Mar. 31...	804.51	24,500	-1,400	645.94	651,500	+73,600	445.02	211,800	+200
Apr. 30...	802.12	22,300	-2,200	647.49	665,600	+14,100	444.60	207,100	-4,700
May 31...	788.46	10,800	-11,500	647.78	668,300	+2,700	445.38	216,000	+8,900
June 30...	805.73	26,800	+16,000	649.39	683,100	+14,800	445.35	215,600	-400
July 31...	797.37	18,300	-8,500	642.61	621,700	-61,400	445.05	212,200	-3,400
Aug. 31...	799.97	20,400	+2,100	638.25	583,700	-38,000	444.60	207,100	-5,100
Sept. 30...	801.68	21,900	+1,500	635.69	561,900	-21,800	444.39	204,800	-2,300
WTR YR 1997		-	-2,200	-	-	+13,500	-	-	-6,500

CUMBERLAND RIVER BASIN
RESERVOIRS IN CUMBERLAND RIVER BASIN--CONTINUED

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 mi^2. PERIOD OF RECORD, September 1967 to current year. GAGE, water-stage recorder. Datum of gage is sea level. Prior to Dec. 15, 1967, nonrecording gage at same site and datum.

REMARKS.--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.

COOPERATION.--Records furnished by U.S. Army 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, 260,800 cfs-days, Mar. 7, elevation, 497.89 ft; minimum, 148,600 cfs-days, Jan. 15, elevation, 482.38 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 mi^2.

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

03438210 LAKE BARKLEY.--Lat 37°01'17", long 88°13'16", Lyon County, KY, 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 mi^2. PERIOD OF RECORD, July 1964 to current year. GAGE, water-stage recorder. Datum of gage is sea level, (levels by U.S. Army Corps of Engineers). Prior to Jan. 1, 1966, nonrecording gage, 1,200 ft upstream from Barkley Dam at same datum.

REMARKS.--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.

COOPERATION.--Records furnished by U.S. Army 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, 680,400 cfs-days, Mar. 13, elevation, 366.27 ft; minimum content, 303,600 cfs-days, Feb. 14, minimum, 353.82 ft. Contents based on backwater profile.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03430050 J. PERCY PRIEST LAKE			*03438210 LAKE BARKLEY		
Sept. 30.....	490.29	199,700	-	356.40	366,200	-
Oct. 31.....	487.74	181,900	-17,800	356.30	363,600	-2,600
Nov. 30.....	485.95	170,300	-11,600	356.25	362,300	-1,300
Dec. 31.....	483.84	157,300	-13,000	354.50	319,100	-43,200
CAL YR 1996	-	-	+8,100	-	-	-5,300
Jan. 31.....	486.08	171,100	+13,800	354.45	318,000	-1,100
Feb. 28.....	483.82	157,200	-13,900	354.60	321,500	+3,500
Mar. 31.....	485.59	168,000	+10,800	355.10	333,400	+11,900
Apr. 30.....	488.56	187,500	+19,500	359.35	448,400	+115,000
May 31.....	492.54	216,500	+29,000	359.36	448,600	+200
June 30.....	490.74	203,000	-13,500	359.25	445,400	-3,200
July 31.....	490.20	199,100	-3,900	357.50	395,600	-49,800
Aug. 31.....	490.26	199,500	+400	356.50	368,800	-26,800
Sept. 30.....	490.10	198,400	-1,100	355.00	331,000	-37,800
WTR YR 1997	-	-	-1,300	-	-	-35,200

* Contents based on backwater profile.

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TENNESSEE RIVER BASIN
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 321, 1.0 mi northeast of Newport city limits, 3.7 mi upstream from Pigeon River, and at mile 77.5.

DRAINAGE AREA.--1,858 mi^2.

WATER-DISCHARGE RECORDS

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 September 1994, October 1996 to September 1997. 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 above sea level. See WSP 1910 for history of changes prior to Mar. 31, 1934.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation during low flow caused by powerplants above station.

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 ft^3/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 ft^3/s; and July 17, 1916, gage height, 22.5 ft present datum, discharge estimated 97,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 28	2115	*25,900	*10.98	Mar. 3	2000	19,100	9.02

Minimum discharge, 785 ft^3/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

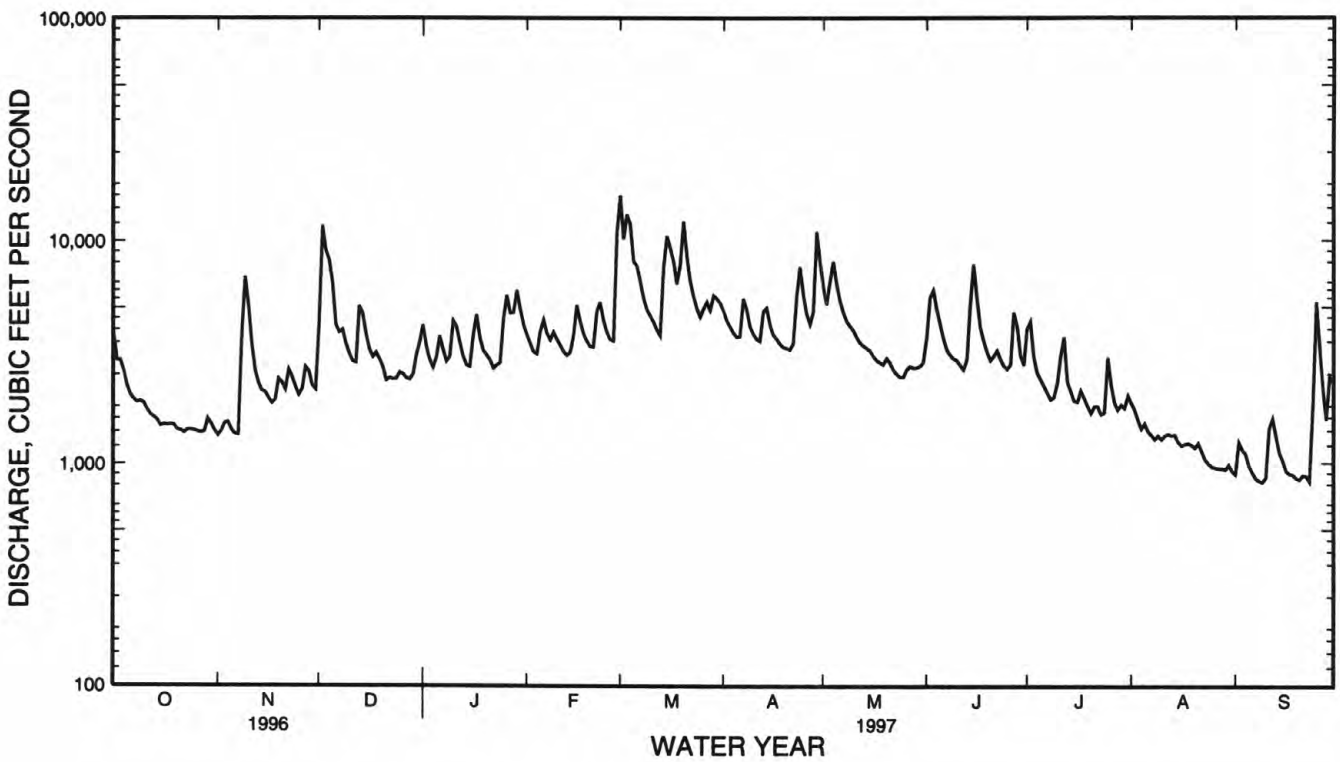
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3830	1340	4180	4180	3780	15900	4870	6230	3690	4010	1870	889
2	2910	1400	11700	3340	3450	10200	4400	5180	5550	4330	1740	1240
3	2910	1520	9100	2930	3170	13100	4110	6640	6000	3020	1570	1150
4	2610	1540	8210	2690	3100	11900	3870	8060	4930	2550	1430	1100
5	2250	1420	6530	2980	3890	8090	3690	6400	4230	2390	1510	973
6	2040	1360	4190	3720	4400	7720	3710	5370	3640	2230	1390	905
7	1950	1350	3880	3260	3840	6580	5490	4760	3240	2080	1340	855
8	1890	3830	3980	2870	3580	5550	4930	4330	3070	1940	1280	829
9	1910	6900	3460	3000	3870	4900	4130	4140	2950	1980	1330	819
10	1870	5080	3110	4360	3600	4600	3810	3940	2900	2300	1280	860
11	1750	3420	2880	4120	3390	4320	3610	3670	2760	3020	1330	1430
12	1660	2610	2840	3470	3170	3980	3540	3480	2640	3680	1350	1580
13	1620	2290	5080	3020	3050	3740	4810	3370	2930	2330	1330	1330
14	1570	2120	4690	2760	3160	7580	4990	3280	5230	2100	1340	1110
15	1480	2090	3770	2720	3720	10500	4190	3200	7840	1910	1250	1030
16	1500	1960	3250	3770	5110	9330	3780	3020	5490	1890	1200	921
17	1490	1870	3000	4640	4380	8060	3620	2910	4070	2120	1220	895
18	1500	1940	3140	3650	3820	6420	3440	2830	3530	1960	1230	886
19	1490	2400	2930	3190	3550	7860	3320	2780	3170	1810	1210	854
20	1420	2310	2710	3060	3350	12200	3290	2960	2900	1680	1170	843
21	1410	2150	2360	2910	3320	8530	3240	2840	3030	1800	1230	881
22	1380	2640	2420	2670	4780	6620	3460	2630	3200	1800	1130	874
23	1420	2450	2390	2760	5290	5620	5650	2520	2940	1660	1040	824
24	1420	2210	2400	2820	4400	4970	7650	2440	2740	1690	993	1870
25	1410	2030	2560	4460	3880	4540	5740	2440	2650	2970	963	5280
26	1390	2160	2520	5690	3600	4940	4700	2640	2780	2270	953	3250
27	1380	2710	2410	4710	3540	5310	4220	2730	4750	1870	943	2160
28	1400	2590	2380	4740	10800	4880	4780	2680	4090	1740	943	1570
29	1590	2240	2510	5990	---	5680	11000	2690	3040	1830	934	2450
30	1510	2150	3070	4940	---	5500	8140	2730	2760	1770	983	2290
31	1410	---	3520	4200	---	5250	---	2850	---	2010	921	---
TOTAL	55370	72080	121170	113620	112990	224370	140180	115740	112740	70740	38403	41948
MEAN	1786	2403	3909	3665	4035	7238	4673	3734	3758	2282	1239	1398
MAX	3830	6900	11700	5990	10800	15900	11000	8060	7840	4330	1870	5280
MIN	1380	1340	2360	2670	3050	3740	3240	2440	2640	1660	921	819
CFSM	.96	1.29	2.10	1.97	2.17	3.90	2.51	2.01	2.02	1.23	.67	.75
IN.	1.11	1.44	2.43	2.27	2.26	4.49	2.81	2.32	2.26	1.42	.77	.84

TENNESSEE RIVER BASIN
03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 1997, BY WATER YEAR (WY)

MEAN	1919	2165	2900	3551	4228	4899	4367	3383	2642	2248	2335	1773
MAX	9875	7249	7478	9533	8814	12710	11650	9448	6148	7620	14640	6358
(WY)	1965	1980	1962	1937	1990	1903	1903	1901	1901	1905	1901	1928
MIN	508	713	819	968	1450	1399	1362	1252	722	711	380	421
(WY)	1955	1932	1940	1956	1941	1988	1986	1941	1988	1986	1925	1925

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1901 - 1997	
ANNUAL TOTAL	1219351			
ANNUAL MEAN	3341		2974	
HIGHEST ANNUAL MEAN			4641	1973
LOWEST ANNUAL MEAN			1348	1988
HIGHEST DAILY MEAN	15900	Mar 1	62200	Apr 8 1903
LOWEST DAILY MEAN	819	Sep 9	240	Sep 9 1925
ANNUAL SEVEN-DAY MINIMUM	865	Sep 17	276	Aug 25 1925
INSTANTANEOUS PEAK FLOW	25900	Feb 28	76300	Aug 30 1940
INSTANTANEOUS PEAK STAGE	10.98	Feb 28	19.25	Aug 30 1940
INSTANTANEOUS LOW FLOW	785	Sep 7	208	Oct 23 1952
ANNUAL RUNOFF (CFSM)	1.80		1.60	
ANNUAL RUNOFF (INCHES)	24.41		21.75	
10 PERCENT EXCEEDS	5630		5500	
50 PERCENT EXCEEDS	2930		2300	
90 PERCENT EXCEEDS	1250		979	



TENNESSEE RIVER BASIN
03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1946-47, 1960-61, 1969-70, 1974-75, 1979-80, April 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
11...	1245	86	7.5	13.5	747	10.2	99	K46	K59	--	--	19
NOV												
18...	1315	74	7.4	7.5	741	11.4	98	K96	2300	--	--	18
DEC												
05...	1300	46	7.2	7.0	733	11.1	95	340	--	--	--	11
JAN												
29...	1515	65	7.1	6.0	745	11.8	97	1000	1300	--	--	17
FEB												
19...	1200	67	7.1	6.5	746	11.6	97	K57	K150	--	--	17
MAR												
18...	1145	46	7.0	10.0	743	10.7	98	170	--	--	--	13
APR												
07...	1300	63	7.4	15.5	740	9.4	97	330	--	--	2600	16
MAY												
01...	1245	56	7.5	16.0	732	9.3	99	300	--	290	6800	16
JUN												
05...	1015	60	7.0	18.0	733	11.1	122	420	--	490	1500	16
JUL												
10...	1215	72	7.6	24.0	736	7.3	90	--	--	1000	260	20
AUG												
01...	1245	85	6.7	23.5	746	7.8	94	250	--	--	930	18
SEP												
18...	1100	98	7.6	23.0	736	7.4	89	62	--	48	K260	22

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT												
11...	0	5.0	1.6	7.7	44	0.8	1.9	--	27	22	5.9	5.4
NOV												
18...	0	4.9	1.4	7.6	45	0.8	1.7	--	29	24	5.6	4.9
DEC												
05...	0	2.7	0.96	3.1	35	0.4	1.6	0	15	12	3.7	2.0
JAN												
29...	2	4.5	1.5	4.6	34	0.5	1.4	0	19	15	5.6	3.7
FEB												
19...	0	4.6	1.3	4.9	37	0.5	1.2	0	20	17	5.1	3.8
MAR												
18...	3	3.5	1.1	2.7	29	0.3	1.0	0	13	11	3.8	1.8
APR												
07...	0	4.1	1.3	4.5	36	0.5	1.3	0	19	16	5.0	2.9
MAY												
01...	2	4.3	1.4	3.2	28	0.3	1.2	0	18	15	4.8	2.2
JUN												
05...	1	4.1	1.3	4.2	34	0.5	1.5	--	18	15	4.6	2.9
JUL												
10...	0	5.3	1.6	4.7	32	0.5	1.5	--	25	20	3.9	3.2
AUG												
01...	0	4.8	1.5	8.0	45	0.8	2.0	0	27	22	5.4	5.0
SEP												
18...	0	5.9	1.9	8.9	43	0.8	2.2	0	32	26	7.8	4.4

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

TENNESSEE RIVER BASIN

03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT 11...	<0.10	9.9	59	53	0.08	0.428	0.012	0.440	<0.015	<0.20	0.22	0.66
NOV 18...	<0.10	9.7	57	53	0.08	0.510	0.020	0.530	0.070	<0.20	0.30	0.83
DEC 05...	<0.10	6.8	41	30	0.06	0.280	0.020	0.300	0.020	<0.20	0.40	0.70
JAN 29...	<0.10	9.3	42	42	0.06	0.440	0.020	0.460	0.030	<0.20	0.50	0.96
FEB 19...	<0.10	8.8	53	42	0.07	0.560	0.020	0.580	<0.015	<0.20	<0.20	--
MAR 18...	<0.10	8.0	34	30	0.05	--	<0.010	0.380	<0.015	<0.20	0.30	0.68
APR 07...	<0.10	9.4	43	40	0.06	0.440	0.010	0.450	0.020	<0.20	0.30	0.75
MAY 01...	<0.10	9.6	40	37	0.05	--	<0.010	0.414	<0.015	<0.20	0.40	0.81
JUN 05...	<0.10	9.1	47	39	0.06	0.557	0.019	0.576	0.053	<0.20	0.45	1.0
JUL 10...	<0.10	9.3	52	44	0.07	--	<0.010	0.585	<0.015	<0.20	<0.20	--
AUG 01...	<0.10	10	57	54	0.08	0.809	0.013	0.822	0.023	<0.20	0.44	1.3
SEP 18...	<0.10	8.1	59	58	0.08	--	<0.010	0.584	<0.015	<0.20	0.26	0.84

DATE	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)
OCT 11...	0.058	0.050	0.054	0.06	99	4.0	1.8	0.30	<0.002	<0.002	E0.004	<0.002
NOV 18...	0.070	0.050	0.050	0.07	93	6.0	1.8	0.30	<0.002	<0.002	<0.001	<0.002
DEC 05...	0.100	0.010	0.020	0.10	62	6.0	1.8	1.2	<0.002	<0.002	0.009	<0.002
JAN 29...	0.200	0.020	0.020	0.20	67	3.0	1.7	2.9	<0.002	<0.002	0.008	<0.002
FEB 19...	0.020	<0.010	<0.010	0.02	49	4.0	1.2	0.60	<0.002	<0.002	0.011	<0.002
MAR 18...	0.080	<0.010	0.010	0.08	39	4.0	1.6	1.0	<0.002	<0.002	0.008	<0.002
APR 07...	0.110	0.040	0.030	0.11	40	2.0	--	--	<0.002	<0.002	0.005	<0.002
MAY 01...	0.095	0.010	0.020	0.09	19	1.4	1.4	0.20	<0.002	0.012	0.149	<0.002
JUN 05...	0.118	0.029	0.037	0.12	66	3.8	1.9	1.2	0.007	0.034	0.304	<0.002
JUL 10...	0.061	0.037	0.047	0.06	100	7.0	1.6	0.90	<0.002	<0.002	<0.001	<0.002
AUG 01...	0.168	0.069	0.076	0.17	61	7.0	2.4	1.1	0.006	<0.002	0.028	<0.002
SEP 18...	0.116	0.092	0.089	0.12	130	11	2.2	0.40	<0.002	<0.002	E0.003	<0.002

E--Estimated

TENNESSEE RIVER BASIN

03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT 11...	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
NOV 18...	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006
DEC 05...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.013	<0.006
JAN 29...	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006
FEB 19...	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.007	<0.006
MAR 18...	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.006	<0.006
APR 07...	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006
MAY 01...	<0.002	<0.004	<0.004	E0.005	0.005	<0.001	<0.003	<0.004	<0.005	<0.004	0.110	<0.006
JUN 05...	<0.002	0.011	0.027	E0.015	0.017	<0.001	<0.003	<0.004	<0.005	<0.004	0.161	<0.006
JUL 10...	<0.002	E0.003	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.008	<0.006
AUG 01...	<0.002	0.007	<0.004	E0.006	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.027	<0.006
SEP 18...	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006

DATE	PARATHION, DISSOLVED (UG/L) (39542)	PROPCHLOR, WATER, DISS, REC (UG/L) (04024)	PROMETON, WATER, DISS, REC (UG/L) (04037)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT 11...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
NOV 18...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
DEC 05...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JAN 29...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
FEB 19...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAR 18...	<0.004	<0.007	<0.018	0.010	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
APR 07...	<0.004	<0.007	<0.018	E0.003	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAY 01...	<0.004	<0.007	<0.018	0.010	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JUN 05...	<0.004	<0.007	E0.015	0.032	<0.002	E0.036	<0.003	<0.002	<0.003	<0.017	<0.004
JUL 10...	<0.004	<0.007	E0.006	0.009	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
AUG 01...	<0.004	<0.007	E0.009	0.023	<0.002	E0.011	<0.003	<0.002	<0.003	<0.017	<0.004
SEP 18...	<0.004	<0.007	E0.005	0.012	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

E--Estimated

TENNESSEE RIVER BASIN

03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT 11...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
NOV 18...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
DEC 05...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN 29...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB 19...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAR 18...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
APR 07...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAY 01...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUN 05...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUL 10...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
AUG 01...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
SEP 18...	<0.003	<0.002	<0.002	<0.050	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 11...	<0.003	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	5	90
NOV 18...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	6	97
DEC 05...	<0.003	<0.004	<0.013	E0.005	<0.007	<0.013	<0.001	<0.002	<0.002	69	62
JAN 29...	<0.003	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	0.006	<0.002	101	82
FEB 19...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	11	59
MAR 18...	<0.003	<0.004	<0.013	E0.005	<0.007	<0.013	<0.001	<0.002	<0.002	57	53
APR 07...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	69	67
MAY 01...	<0.003	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	53	74
JUN 05...	<0.003	<0.004	<0.013	0.056	<0.007	<0.013	<0.001	<0.002	<0.002	67	87
JUL 10...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	14	92
AUG 01...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	33	83
SEP 18...	<0.003	<0.004	<0.013	E0.008	<0.007	<0.013	<0.001	<0.002	<0.002	13	92

E--Estimated

TENNESSEE RIVER BASIN
03461500 PIGEON RIVER AT NEWPORT, TN

LOCATION.--Lat 35°57'38", long 83°10'28", Cocke County, Hydrologic Unit 06010106, on left bank 100 ft upstream from bridge on U.S. Highway 25 and 70 at Newport, 0.6 mi downstream from Morell Branch, and at mile 6.8

DRAINAGE AREA.--666 mi^2.

WATER-DISCHARGE RECORD

PERIOD OF RECORD.-- September 1900 to September 1929, October 1944 to September 1946, August 1948 to February 1982, October 1996 to current year. Monthly discharge only for some peiods, published in WSP 1306. Published as "near Newport" 1945-46.

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

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

REMARKS.--No estimated daily discharges. Records good. Considerable regulation by Lakes Junaluska, Logan, and Walters for periods of low flow, combined usable capacity of reservoirs about 12,500 cfs-days. The largest of these, Lake Walters, usable capacity, 10,400 cfs-days was completed in 1929.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Mar. 7, 1867, and June 17, 1876, reached a stage of 23 ft present datum, about 21.1 ft present conditions, due to removal of mill dam in 1945, discharge, 48,000 ft^3/s, and flood of August 30, 1940, reached a stage of 19.3 ft present datum, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 2	0015	10,200	8.82	Mar. 3	1715	*17,900	*11.76
Feb. 28	2145	16,600	11.32	Mar. 19	2215	7,830	7.77

Minimum discharge, 100 ft^3/s, Oct. 21, 27, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	985	282	4430	2060	2110	8650	3040	2780	1720	2430	437	231
2	1170	378	5450	1750	1860	4680	1730	2070	1760	1970	459	307
3	2020	128	3100	1700	1300	10300	1830	4050	1930	1350	291	765
4	940	662	2690	887	2280	7260	1360	4490	2070	1020	248	388
5	482	679	2580	1900	1800	4680	1920	3280	1790	1010	312	360
6	425	355	1960	1930	1350	5320	1790	2980	998	675	847	141
7	937	337	1650	1740	1490	3980	2730	2740	1310	961	630	180
8	1080	3100	2310	1900	949	3330	2650	2440	899	936	398	176
9	466	2730	1810	1970	1720	2990	2070	1630	1440	1500	390	345
10	565	1900	1510	2710	2010	2930	1550	1370	1120	1280	321	355
11	618	1750	1200	1840	2250	2690	1370	1540	787	692	436	394
12	357	1640	1500	1280	1170	1980	1630	1520	1150	838	496	380
13	324	1590	2700	1230	1230	2370	2110	1450	1310	1000	357	201
14	639	908	2650	1520	2130	4080	1370	971	2470	1120	380	145
15	916	612	2240	1050	945	4200	1200	1190	3450	85	252	141
16	902	602	2010	2360	944	3250	1330	1060	2290	903	335	138
17	677	1000	1110	2180	887	2910	1190	1510	1900	1110	252	135
18	1040	655	1060	1570	1880	2790	1220	576	1980	755	318	265
19	527	1970	1060	1860	1760	4320	1240	1240	1940	905	554	440
20	112	1110	1000	1870	1770	5300	968	1340	1240	464	909	138
21	317	816	700	1770	1860	3840	2270	1370	1090	938	966	138
22	804	1070	501	942	2200	3230	1670	1050	539	729	671	259
23	1040	775	372	816	902	2880	2100	1120	921	500	578	730
24	833	720	240	1200	1320	2750	3330	910	803	576	247	1960
25	534	1170	530	2870	2230	2670	2290	629	1460	333	144	2790
26	218	1720	1580	2840	1420	2830	1250	697	1350	763	145	944
27	101	1830	2220	2440	1860	2760	2440	1050	3250	930	511	213
28	112	1110	991	2530	7030	2470	2570	2070	2220	1080	526	463
29	607	635	1080	2720	---	2770	6080	833	1100	976	564	1100
30	490	355	1390	2910	---	2730	3750	1420	1800	682	371	1070
31	387	---	1110	1960	---	3170	---	1240	---	545	254	---
TOTAL	20625	32589	54734	58305	50657	120110	62048	52616	48087	29856	13599	15292
MEAN	665	1086	1766	1881	1809	3875	2068	1697	1603	963	439	510
MAX	2020	3100	5450	2910	7030	10300	6080	4490	3450	2430	966	2790
MIN	101	128	240	816	887	1980	968	576	539	333	144	135
CFSM	1.00	1.63	2.65	2.82	2.72	5.82	3.11	2.55	2.41	1.45	.66	.77
IN.	1.15	1.82	3.06	3.26	2.83	6.71	3.47	2.94	2.69	1.67	.76	.85

TENNESSEE RIVER BASIN

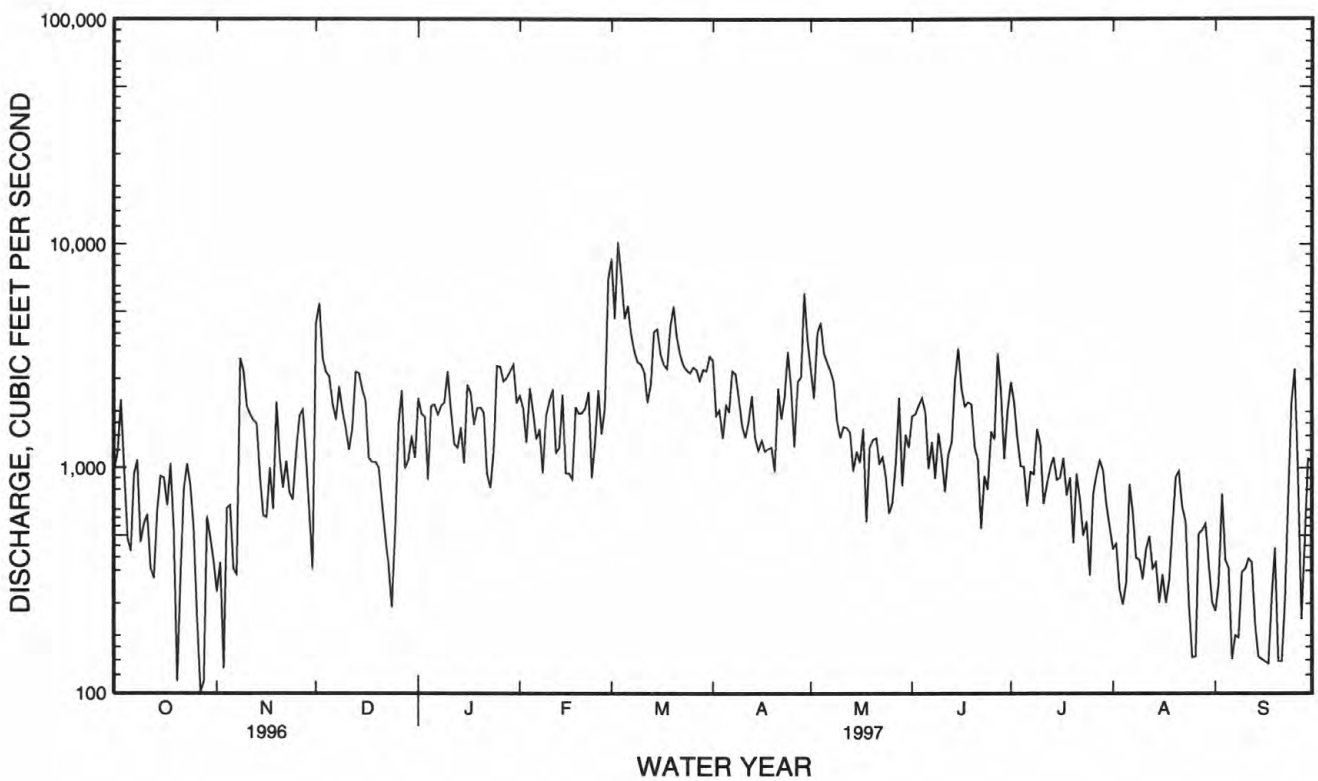
03461500 PIGEON RIVER AT NEWPORT, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 1997, BY WATER YEAR (WY)

MEAN	648	778	1272	1604	1831	2230	1821	1327	1084	913	786	624
MAX	2263	2265	3271	3407	4762	5136	4270	2693	2436	2498	2229	2182
(WY)	1965	1980	1962	1974	1957	1963	1903	1929	1967	1916	1928	1928
MIN	148	235	391	369	853	907	716	651	457	328	158	145
(WY)	1979	1954	1904	1981	1904	1915	1967	1914	1925	1925	1925	1953

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1901 - 1997	
ANNUAL TOTAL	558518			
ANNUAL MEAN	1530		1236	
HIGHEST ANNUAL MEAN			1761	1909
LOWEST ANNUAL MEAN			644	1914
HIGHEST DAILY MEAN	10300	Mar 3	31000	Apr 2 1920
LOWEST DAILY MEAN	101	Oct 27	48	Sep 21 1953
ANNUAL SEVEN-DAY MINIMUM	199	Sep 15	65	Nov 7 1980
INSTANTANEOUS PEAK FLOW	17900	Mar 3	50000	Feb 28 1902
INSTANTANEOUS PEAK STAGE	11.76	Mar 3	a23.40	Feb 28 1902
INSTANTANEOUS LOW FLOW	b100	Oct 21	38	Oct 5 1952
ANNUAL RUNOFF (CFSM)	2.30		1.86	
ANNUAL RUNOFF (INCHES)	31.20		25.22	
10 PERCENT EXCEEDS	2870		2440	
50 PERCENT EXCEEDS	1200		938	
90 PERCENT EXCEEDS	334		334	

a Present datum, but due to removal of dam 1.3 mi downstream in 1945, the stage for this flood would be about 1.9 ft lower under present conditions, from reports of Tennessee Valley Authority.
b Also occurred Oct. 27, 28.



TENNESSEE RIVER BASIN

03461500 PIGEON RIVER AT NEWPORT, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1974-75, 1979-80, April 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
OCT												
29...	1230	192	8.4	17.5	732	10.0	110	--	--	31	0	8.8
JAN												
29...	1215	90	7.3	5.5	744	12.2	99	96	130	19	0	5.3

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT												
29...	2.3	25	61	2	2.5	--	55	45	28	8.7	<0.10	7.2
JAN												
29...	1.4	9.3	50	0.9	1.2	0	23	19	11	5.3	<0.10	8.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROSOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	GEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
OCT											
29...	112	111	0.15	0.190	0.020	0.210	0.330	<0.20	<0.20	0.030	<0.010
JAN											
29...	56	55	0.08	0.340	0.010	0.350	<0.015	<0.20	<0.20	0.020	<0.010

DATE	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)
OCT											
29...	0.020	0.03	68	4.0	4.4	0.30	<0.002	<0.002	<0.001	<0.002	<0.002
JAN											
29...	<0.010	0.02	37	9.0	2.0	3.0	<0.002	<0.002	<0.001	<0.002	<0.002

TENNESSEE RIVER BASIN

03461500 PIGEON RIVER AT NEWPORT, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT											
29...	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
JAN											
29...	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT											
29...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JAN											
29...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT											
29...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN											
29...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
29...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	2	86
JAN											
29...	<0.003	<0.004	<0.013	0.015	<0.007	<0.013	<0.001	<0.002	<0.002	10	89

TENNESSEE RIVER BASIN

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 mi^2.

WATER-DISCHARGE RECORD

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.--Data collection platform. Datum of gage is 1,519.30 ft above sea level. 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 downstream at datum 6.33 ft lower.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 21, 1901, reached a stage of 24 ft, discharge, 120,000 ft^3/s, present site and datum, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	2215	*12,400	*5.74	Mar. 3	1730	11,200	5.45
Feb. 28	2315	9,860	5.12				

Minimum discharge, 265 ft^3/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	488	6170	2460	1560	6750	2410	2630	2260	1500	736	324
2	931	530	6790	1970	1410	4130	2140	2240	2570	1980	597	337
3	1100	535	3410	1660	1290	6510	1980	2530	1980	1400	542	347
4	1000	503	2450	1470	1420	6840	1840	2910	1960	1200	512	352
5	809	481	1970	1760	1910	4360	1720	2340	1780	1040	508	311
6	728	477	1770	2190	1740	4920	1790	2110	1520	963	502	287
7	687	78	1750	1750	1540	3810	2350	1900	1370	864	473	276
8	674	3520	1880	1520	1590	3040	1830	1730	1310	812	472	270
9	733	3630	1630	1720	1640	2550	1670	1690	1250	811	519	272
10	701	1840	1430	1920	1510	2430	1570	1590	1220	871	458	309
11	624	1350	1330	1670	1440	2230	1490	1460	120	983	e430	513
12	591	1110	1340	1380	1330	1970	1510	1380	1100	1060	e500	523
13	570	977	2940	1270	1290	1800	1910	1330	1300	853	588	401
14	556	937	2410	1200	1310	4460	1550	1280	1760	782	574	340
15	539	921	1910	1200	1650	4020	1420	1230	2030	732	522	318
16	516	850	1640	1860	1810	2800	1360	1150	1470	701	457	299
17	514	806	1500	1730	1600	2390	1320	1100	1250	983	433	282
18	520	900	1450	1190	1470	2230	1270	1070	1160	842	517	280
19	548	1580	1300	1180	1410	4650	1240	1060	1080	702	483	280
20	494	1440	1150	1310	1380	6260	1250	1330	1020	650	510	274
21	481	1210	968	1240	1560	4160	1260	1270	1740	685	536	275
22	477	1460	1020	1240	3200	3260	1690	1100	1670	909	465	279
23	480	1370	1120	1410	2410	2690	4020	1010	1250	1060	401	270
24	496	1170	1110	1470	1980	2330	4700	972	1070	940	375	420
25	477	1070	1250	1730	1760	2100	3220	980	977	792	365	1860
26	466	1330	1110	1760	1620	3030	2480	1450	980	692	358	828
27	508	1480	1060	1530	1600	2910	2140	1860	1250	688	359	516
28	554	1180	1060	1900	5150	2560	2220	2030	1190	691	359	445
29	617	1070	1170	2370	---	3160	3870	1650	1060	650	379	1140
30	567	1240	1340	1980	---	2680	3260	1580	1030	676	373	776
31	519	---	2030	1760	---	2670	---	1550	---	967	333	---
TOTAL	19547	35933	59458	50800	49580	109700	62480	49512	42727	28479	14636	13404
MEAN	631	1198	1918	1639	1771	3539	2083	1597	1424	919	472	447
MAX	1100	3630	6790	2460	5150	6840	4700	2910	2570	1980	736	1860
MIN	466	477	968	1180	1290	1800	1240	972	977	650	333	270
CFSM	.78	1.49	2.38	2.04	2.20	4.40	2.59	1.98	1.77	1.14	.59	.56
IN.	.90	1.66	2.75	2.35	2.29	5.07	2.89	2.29	1.97	1.32	.68	.62

e Estimated

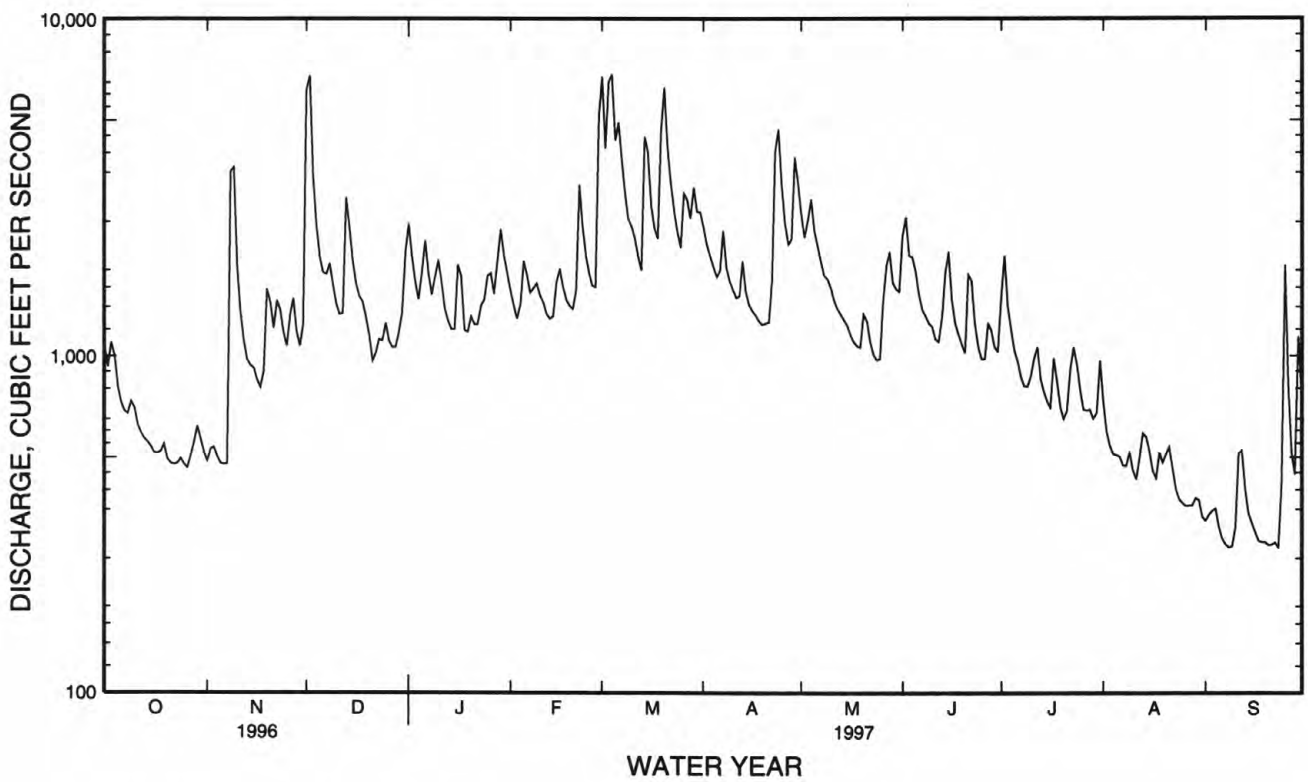
TENNESSEE RIVER BASIN
03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1997, BY WATER YEAR (WY)

MEAN	830	1028	1307	1707	2045	2359	2013	1577	1135	938	923	773
MAX	2630	4720	3073	4020	4494	5102	4169	3171	3196	2525	4876	2648
(WY)	1930	1978	1962	1995	1957	1963	1983	1984	1992	1949	1940	1928
MIN	246	294	353	382	635	649	699	597	376	351	182	187
(WY)	1954	1940	1940	1940	1941	1988	1986	1941	1988	1988	1925	1925

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1920 - 1997	
ANNUAL TOTAL	592976		536256			
ANNUAL MEAN	1620		1469		1382	
HIGHEST ANNUAL MEAN					1948	1974
LOWEST ANNUAL MEAN					694	1988
HIGHEST DAILY MEAN	21300	Jan 19	6840	Mar 4	50800	Nov 6 1977
LOWEST DAILY MEAN	400	Sep 27	270	Sep 8	88	Sep 8 1925
ANNUAL SEVEN-DAY MINIMUM	438	Sep 21	277	Sep 17	121	Sep 3 1925
INSTANTANEOUS PEAK FLOW			12400	Dec 1	a110000	Nov 6 1977
INSTANTANEOUS PEAK STAGE			5.74	Dec 1	21.52	Nov 6 1977
INSTANTANEOUS LOW FLOW			265	Sep 9	b85	Sep 8 1925
ANNUAL RUNOFF (CFSM)	2.01		1.83		1.72	
ANNUAL RUNOFF (INCHES)	27.40		24.78		23.33	
10 PERCENT EXCEEDS	2780		2590		2570	
50 PERCENT EXCEEDS	1260		1260		1010	
90 PERCENT EXCEEDS	531		462		407	

a From rating curve extended above 48,000 ft^3/s on basis of contracted opening and slope-area measurements of peak flow.
b Also occurred on Sept. 9, 1925.



TENNESSEE RIVER BASIN
03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years August 1979 to September 1982, March 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS PER 100 ML) (31673)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED (COLS PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
24...	1630	79	8.2	14.5	721	10.0	104	K4	170	--	--	27
JAN												
23...	1330	66	7.0	4.0	729	12.8	103	68	99	--	--	20
FEB												
20...	1200	63	7.4	7.5	732	11.4	99	K10	K4	--	--	20
MAR												
03...	1645	53	7.3	13.0	721	9.8	99	--	--	--	--	17
31...	1430	55	7.4	11.5	723	10.5	102	--	--	--	--	18
APR												
25...	1315	47	7.5	10.5	728	10.6	100	150	--	--	2900	16
MAY												
06...	1230	52	7.5	15.5	727	9.4	99	K43	--	K46	3400	17
JUN												
12...	1200	61	7.4	19.0	719	9.6	110	K24	--	K51	92	20

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT												
24...	2	7.0	2.3	4.2	24	0.4	1.2	2	26	25	5.4	4.1
JAN												
23...	5	5.4	1.7	3.5	26	0.3	0.90	0	19	16	4.5	4.3
FEB												
20...	4	5.4	1.7	3.4	26	0.3	0.80	0	20	16	4.3	3.6
MAR												
03...	4	4.4	1.4	2.4	22	0.3	1.0	0	15	12	4.2	2.6
31...	1	4.5	1.6	2.5	22	0.3	0.80	0	21	17	3.9	2.3
APR												
25...	3	4.0	1.4	2.0	21	0.2	0.88	0	16	13	4.5	1.8
MAY												
06...	3	4.4	1.5	2.2	21	0.2	0.76	0	18	15	3.8	2.2
JUN												
12...	2	5.4	1.7	2.6	21	0.2	0.85	--	22	18	3.6	2.6

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

TENNESSEE RIVER BASIN
03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT												
24...	0.30	9.2	51	49	0.07	0.080	0.010	0.090	0.020	<0.20	<0.20	--
JAN												
23...	0.20	9.1	42	41	0.06	0.450	0.020	0.470	<0.015	<0.20	<0.20	--
FEB												
20...	0.20	8.5	40	40	0.05	0.420	0.010	0.430	<0.015	<0.20	<0.20	--
MAR												
03...	0.10	7.9	37	33	0.05	--	<0.010	0.430	<0.015	<0.20	0.60	1.0
31...	0.20	9.2	37	37	0.05	--	<0.010	0.410	<0.015	<0.20	<0.20	--
APR												
25...	0.12	8.7	35	33	0.05	--	<0.010	0.325	<0.015	<0.20	0.30	0.63
MAY												
06...	0.10	9.2	34	34	0.05	--	<0.010	0.265	<0.015	<0.20	<0.20	--
JUN												
12...	0.22	8.3	39	37	0.05	--	<0.010	0.183	<0.015	<0.20	<0.20	--

DATE	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)
OCT												
24...	<0.010	<0.010	<0.010	--	53	5.0	2.4	0.30	<0.002	<0.002	0.005	<0.002
JAN												
23...	0.020	<0.010	<0.010	0.02	36	6.0	0.80	0.40	<0.002	<0.002	0.009	<0.002
FEB												
20...	<0.010	<0.010	0.010	--	42	7.0	0.90	0.20	<0.002	<0.002	0.015	<0.002
MAR												
03...	0.230	0.010	<0.010	0.23	30	5.0	1.4	3.0	<0.002	<0.002	0.005	<0.002
31...	0.010	<0.010	<0.010	0.01	23	4.0	1.0	0.90	<0.002	<0.002	0.012	<0.002
APR												
25...	0.061	<0.010	<0.010	0.06	20	18	1.1	0.90	<0.002	<0.002	0.042	<0.002
MAY												
06...	<0.010	<0.010	<0.010	--	28	4.4	0.80	0.50	<0.002	<0.002	0.014	<0.002
JUN												
12...	<0.010	<0.010	<0.010	--	57	11	1.7	0.20	<0.002	<0.002	0.008	<0.002

DATE	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT												
24...	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
JAN												
23...	<0.002	<0.004	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
FEB												
20...	<0.002	<0.004	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
MAR												
03...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
31...	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
APR												
25...	<0.002	<0.004	<0.004	E0.004	E0.003	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
MAY												
06...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
JUN												
12...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006

E--Estimated

TENNESSEE RIVER BASIN
03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN--Continued
WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT											
24...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JAN											
23...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
FEB											
20...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAR											
03...	<0.004	<0.007	<0.018	0.007	<0.002	E0.014	<0.003	<0.002	<0.003	<0.017	<0.004
31...	<0.004	<0.007	<0.018	0.021	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
APR											
25...	<0.004	<0.007	<0.018	0.045	<0.002	<0.020	<0.003	<0.002	<0.003	<0.017	<0.004
MAY											
06...	<0.004	<0.007	<0.018	0.022	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JUN											
12...	<0.004	<0.007	<0.018	0.009	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT											
24...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN											
23...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB											
20...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAR											
03...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
31...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
APR											
25...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAY											
06...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUN											
12...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

E--Estimated

TENNESSEE RIVER BASIN
03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
24...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	3	80
JAN											
23...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	18	46
FEB											
20...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	4	64
MAR											
03...	<0.003	<0.004	<0.013	E0.008	<0.007	<0.013	<0.001	<0.002	<0.002	212	49
31...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	17	71
APR											
25...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	93	40
MAY											
06...	<0.003	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	10	85
JUN											
12...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	5	59

E--Estimated

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN

LOCATION.--Lat 36°12'21", long 82°39'02", Greene County, Hydrologic Unit 06010108, on right bank, 0.6 mi above confluence with Nolichucky River, 1.8 miles southwest of Limestone, and at river mile 0.6.

DRAINAGE AREA.--79.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,340 ft above sea level from topographic map.

NOTE.--Records not available for inclusion in this report. These records will be included in the 1998 report.

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
02...	1030	473	8.1	18.0	737	8.5	93	1000	--	--	--	250
08...	1245	463	8.2	15.0	721	9.0	94	400	340	--	--	240
15...	1415	456	8.3	15.0	733	10.6	109	K360	470	--	--	220
25...	0945	450	7.8	11.0	729	9.4	89	--	480	--	--	230
30...	1330	457	8.2	19.0	725	9.4	107	--	--	--	--	230
NOV												
19...	1200	449	8.1	11.5	723	9.6	93	K15000	K11000	--	--	210
DEC												
11...	1100	487	8.1	8.0	733	11.6	101	400	290	--	--	250
JAN												
16...	1215	323	8.0	5.5	725	12.3	103	--	--	--	--	140
28...	1145	392	8.3	9.5	735	10.7	97	K11000	K48000	--	--	180
FEB												
18...	1245	459	8.4	8.5	740	13.0	115	230	1900	--	--	230
MAR												
03...	1130	285	7.9	14.0	722	8.7	89	--	--	--	--	120
19...	1215	313	8.0	12.0	729	10.2	99	K72000	--	--	--	150
APR												
03...	1300	433	8.3	13.0	734	12.8	127	260	--	--	930	230
MAY												
09...	1315	440	8.3	15.5	729	9.4	99	1200	--	930	2200	240
JUN												
09...	1400	450	8.2	16.5	729	11.8	126	1200	--	1200	3100	230
JUL												
16...	1330	433	8.3	23.0	731	10.5	128	2100	--	--	2800	220
AUG												
07...	1215	437	8.0	20.0	735	9.0	102	450	--	370	900	230
SEP												
19...	1215	427	8.3	21.0	728	9.0	106	380	--	350	--	220

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

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER1997

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT												
02...	14	77	14	2.7	2	0.1	4.5	--	288	236	11	6.6
08...	19	72	14	2.7	2	0.1	3.6	--	266	218	8.9	5.5
15...	1	67	13	2.5	2	0.1	3.6	--	268	220	9.0	5.2
25...	10	71	14	2.6	2	0.1	3.9	--	274	225	9.3	5.3
30...	8	70	14	2.7	2	0.1	4.4	5	264	224	9.3	5.3
NOV												
19...	5	64	11	3.7	4	0.1	7.1	--	244	200	15	8.2
DEC												
11...	18	78	13	2.8	2	0.1	3.6	0	281	230	11	6.4
JAN												
16...	6	42	7.8	4.2	6	0.2	7.1	0	160	131	9.0	9.7
28...	15	56	10	3.3	4	0.1	5.3	2	198	166	11	7.0
FEB												
18...	11	73	12	2.5	2	0.1	2.7	10	249	220	9.8	6.0
MAR												
03...	0	37	6.7	2.1	3	0.1	6.3	0	154	126	6.9	4.5
19...	11	45	8.2	2.3	3	0.1	6.9	0	165	135	9.0	5.0
APR												
03...	27	71	12	2.3	2	0.1	2.6	10	224	200	9.4	5.4
MAY												
09...	27	75	13	2.2	2	0.1	3.0	7	244	212	8.3	4.8
JUN												
09...	44	71	13	2.2	2	0.1	2.9	5	220	188	8.3	4.9
JUL												
16...	33	65	13	2.0	2	0.1	3.8	2	220	182	7.4	5.3
AUG												
07...	13	68	13	2.1	2	0.1	3.2	0	259	212	7.6	5.0
SEP												
19...	17	68	13	1.9	2	0.1	3.6	10	232	206	8.0	4.7

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT												
02...	0.20	9.8	277	275	0.38	--	<0.010	1.70	<0.020	<0.20	0.30	2.0
08...	0.20	8.8	265	254	0.36	--	<0.010	1.60	0.020	<0.20	<0.20	--
15...	0.20	7.8	260	247	0.35	1.49	0.010	1.50	0.030	<0.20	<0.20	--
25...	0.20	7.7	260	254	0.35	1.08	0.020	1.10	0.020	<0.20	<0.20	--
30...	0.20	8.5	262	254	0.36	1.07	0.030	1.10	0.020	<0.20	0.30	1.4
NOV												
19...	0.20	7.7	260	245	0.35	1.66	0.040	1.70	0.130	0.50	0.90	2.6
DEC												
11...	0.20	9.0	273	274	0.37	2.57	0.030	2.60	0.040	<0.20	0.20	2.8
JAN												
16...	0.10	5.7	186	172	0.25	1.37	0.030	1.40	0.400	1.2	3.7	5.1
28...	0.20	7.0	222	209	0.30	1.87	0.030	1.90	0.180	0.50	4.7	6.6
FEB												
18...	0.20	7.6	257	256	0.35	2.39	0.010	2.40	<0.015	<0.20	<0.20	--
MAR												
03...	0.20	5.7	167	152	0.23	1.28	0.020	1.30	0.140	0.70	4.0	5.3
19...	0.10	5.7	179	170	0.24	1.28	0.020	1.30	0.240	1.0	2.5	3.8
APR												
03...	0.20	6.9	246	239	0.33	--	<0.010	2.10	<0.015	<0.20	<0.20	--
MAY												
09...	0.16	8.5	235	250	0.32	1.92	0.014	1.94	0.021	<0.20	0.27	2.2
JUN												
09...	0.16	9.6	257	233	0.35	1.62	0.019	1.64	<0.015	<0.20	0.47	2.1
JUL												
16...	0.18	6.8	260	224	0.35	2.04	0.023	2.06	<0.015	<0.20	0.24	2.3
AUG												
07...	0.20	8.7	259	244	0.35	1.74	0.018	1.76	0.027	<0.20	0.25	2.0
SEP												
19...	0.18	8.5	242	238	0.33	--	<0.010	1.31	<0.015	<0.20	<0.20	--

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN-Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
OCT												
02...	0.070	0.060	0.080	0.07	5.0	15	1.8	0.70	<0.002	<0.002	0.067	<0.002
08...	0.050	0.040	0.040	0.05	7.0	13	1.4	0.40	<0.002	<0.002	0.070	<0.002
15...	0.060	0.040	0.050	0.06	12	9.0	1.3	0.40	<0.002	<0.002	0.078	<0.002
25...	0.050	0.030	0.040	0.05	10	9.0	1.9	0.40	<0.002	<0.002	0.070	<0.002
30...	0.070	0.070	0.060	0.07	11	14	2.2	0.60	<0.002	<0.002	0.067	<0.002
NOV												
19...	0.260	0.190	0.160	0.26	32	22	4.5	1.4	<0.002	<0.002	0.043	<0.002
DEC												
11...	0.070	0.030	0.030	0.07	10	16	1.4	0.40	<0.002	<0.002	0.064	<0.002
JAN												
16...	1.00	0.240	0.250	1.0	140	7.0	6.9	15	<0.002	<0.002	0.034	<0.002
28...	1.00	0.160	0.160	1.0	37	8.0	3.7	13	<0.002	<0.002	0.047	<0.002
FEB												
18...	0.010	<0.010	<0.010	0.01	4.0	15	0.90	1.0	<0.002	<0.002	0.057	<0.002
MAR												
03...	1.40	0.220	0.210	1.4	76	23	7.0	>17	<0.002	<0.002	0.034	<0.002
19...	0.640	0.260	0.240	0.64	55	8.0	6.4	8.1	<0.002	<0.002	0.032	<0.002
APR												
03...	0.040	0.010	0.020	0.04	7.0	12	1.1	0.50	<0.002	<0.002	0.055	<0.002
MAY												
09...	0.038	0.016	0.024	0.04	10	18	1.3	0.40	<0.002	<0.002	0.046	<0.002
JUN												
09...	0.088	0.019	0.034	0.09	9.0	14	2.4	0.70	<0.002	<0.002	0.101	<0.002
JUL												
16...	0.088	<0.010	0.039	0.09	<3.0	10	1.4	0.40	<0.002	<0.002	0.222	<0.002
AUG												
07...	0.047	0.055	0.051	0.05	4.4	11	1.2	0.80	<0.002	<0.002	0.125	<0.002
SEP												
19...	0.049	0.031	0.039	0.05	9.7	10	1.5	0.30	<0.002	<0.002	0.069	<0.002

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT												
02...	<0.002	<0.004	<0.004	E0.069	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.007	<0.006
08...	<0.002	<0.004	<0.004	E0.032	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006
15...	<0.002	<0.004	<0.004	E0.046	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.004	<0.006
25...	<0.002	<0.004	<0.004	E0.049	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.004	<0.006
30...	<0.002	<0.004	<0.004	E0.050	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.004	<0.006
NOV												
19...	<0.002	<0.004	<0.004	E0.018	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.006	<0.006
DEC												
11...	<0.002	<0.004	<0.004	E0.064	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.006	<0.006
JAN												
16...	<0.002	<0.004	<0.004	E0.024	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.010	<0.006
28...	<0.002	<0.004	<0.004	E0.043	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.019	<0.006
FEB												
18...	<0.002	<0.004	<0.004	E0.083	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.004	<0.006
MAR												
03...	<0.002	<0.004	<0.004	E0.037	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.008	<0.006
19...	<0.002	0.004	<0.004	E0.018	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.010	<0.006
APR												
03...	<0.002	<0.004	<0.004	E0.037	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.004	<0.006
MAY												
09...	<0.002	<0.004	<0.004	E0.032	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.010	<0.006
JUN												
09...	<0.002	<0.004	<0.004	E0.050	0.006	<0.001	<0.003	<0.004	<0.005	<0.004	0.015	<0.006
JUL												
16...	<0.002	<0.004	<0.004	E0.095	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.050	<0.006
AUG												
07...	<0.002	<0.004	<0.004	E0.041	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.016	<0.006
SEP												
19...	<0.002	<0.004	<0.004	E0.051	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006

E--Estimated

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT											
02...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
08...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
15...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
25...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
30...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
NOV											
19...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
DEC											
11...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JAN											
16...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
28...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
FEB											
18...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAR											
03...	<0.004	<0.007	<0.018	<0.005	<0.002	E0.013	<0.003	<0.002	<0.003	<0.017	<0.004
19...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
APR											
03...	<0.004	<0.007	E0.005	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAY											
09...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JUN											
09...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JUL											
16...	<0.004	<0.007	E0.005	0.008	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
AUG											
07...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
SEP											
19...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

E--Estimated

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT											
02...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
08...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
15...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
25...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
30...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
NOV											
19...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
DEC											
11...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN											
16...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
28...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB											
18...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAR											
03...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
19...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
APR											
03...	<0.003	<0.002	<0.002	<0.110	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAY											
09...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUN											
09...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUL											
16...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
AUG											
07...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
SEP											
19...	<0.003	<0.002	<0.002	<0.070	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
02...	<0.003	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	12	94
08...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	5	84
15...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	7	91
25...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	3	79
30...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	4	81
NOV											
19...	<0.003	<0.004	<0.013	E0.009	<0.007	<0.013	<0.001	<0.002	<0.002	33	99
DEC											
11...	<0.003	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	33	55
JAN											
16...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	572	97
28...	<0.003	<0.004	<0.013	0.024	<0.007	<0.013	<0.001	<0.002	<0.002	465	96
FEB											
18...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	55	61
MAR											
03...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	926	93
19...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	340	93
APR											
03...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	53	52
MAY											
09...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	55	54
JUN											
09...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	73	59
JUL											
16...	<0.003	<0.004	<0.013	E0.010	<0.007	<0.013	<0.001	<0.002	<0.002	31	68
AUG											
07...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	18	68
SEP											
19...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	10	97

E--Estimated

TENNESSEE RIVER BASIN

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)
OCT											
15...	1420	<0.100	<0.050	<0.050	<0.200	<0.100	E0.010	<0.050	<0.050	<0.050	<0.100
25...	0950	<0.100	<0.050	<0.050	<0.200	<0.100	E0.009	<0.050	<0.050	<0.050	<0.100
30...	1340	<0.200	<0.100	<0.100	<0.400	<0.200	E0.010	<0.100	<0.100	<0.100	<0.200
APR											
03...	1255	<0.100	<0.050	<0.050	<0.200	<0.100	E0.010	<0.050	<0.050	<0.050	<0.100

DATE	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)
OCT											
15...	<0.050	<0.100	E0.020	<0.100	E0.001	<0.100	<0.050	<0.100	<0.050	<0.100	<0.100
25...	<0.050	<0.100	<0.200	<0.100	<0.050	<0.100	<0.050	<0.100	<0.050	<0.100	<0.100
30...	<0.100	<0.200	<0.400	<0.200	<0.100	<0.200	<0.100	<0.200	<0.100	<0.200	<0.200
APR											
03...	<0.050	<0.100	<0.200	<0.100	<0.050	<0.100	<0.050	<0.100	<0.050	<0.100	<0.100

DATE	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
OCT											
15...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.200	<0.100	<0.100	<0.100	<0.050	<0.050
25...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.200	<0.100	<0.100	<0.100	<0.050	E0.007
30...	<0.100	<0.100	<0.100	<0.100	<0.100	<0.400	<0.200	<0.200	<0.200	<0.100	<0.100
APR											
03...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.200	<0.100	<0.100	<0.100	<0.050	<0.050

E--Estimated

TENNESSEE RIVER BASIN

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 mi^2.

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 1,459.36 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 180 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 28	1645	233	3.53	Apr. 28	2215	*530	*4.82
Mar. 3	1615	273	3.74	July 1	1600	435	4.46

Minimum discharge, 4.8 ft^3/s, Oct. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.7	36	30	24	54	28	27	30	185	9.6	6.2
2	6.1	6.1	21	24	22	43	26	24	28	31	9.5	6.1
3	6.0	5.5	16	21	21	140	24	30	21	21	9.4	6.2
4	6.1	5.4	14	19	24	54	23	23	20	18	9.2	6.2
5	6.0	5.3	13	37	55	52	22	21	17	18	9.4	6.1
6	5.9	5.1	12	25	30	67	22	20	15	16	9.1	6.1
7	5.9	5.1	30	21	26	43	21	19	15	15	9.0	6.0
8	6.1	14	21	20	31	37	20	18	14	15	8.8	6.0
9	6.1	9.1	16	56	29	34	20	18	14	14	8.8	6.1
10	6.1	7.4	15	32	26	43	19	17	13	13	8.8	6.9
11	6.1	6.8	14	25	25	34	19	16	13	13	8.5	6.7
12	5.9	6.2	14	22	23	31	20	16	13	12	8.4	6.1
13	5.9	5.9	15	21	24	29	20	16	14	12	9.6	6.0
14	5.9	6.1	14	20	26	35	18	15	45	12	9.7	5.9
15	5.9	5.9	13	20	25	33	18	15	22	12	8.8	5.8
16	5.8	5.6	12	64	22	28	17	14	18	12	8.5	5.8
17	5.8	5.5	12	26	21	27	17	14	16	11	8.4	5.7
18	5.9	12	11	22	21	28	17	14	16	11	10	5.7
19	6.1	14	11	21	20	101	17	13	15	11	8.8	5.7
20	5.8	9.3	11	20	19	54	16	16	14	11	9.0	5.8
21	5.7	14	11	20	45	40	18	14	13	11	8.0	5.9
22	5.6	17	11	20	50	35	22	13	18	12	7.3	5.9
23	5.5	11	11	28	27	32	23	13	15	12	7.2	6.1
24	5.5	9.6	17	26	24	30	25	13	13	11	7.1	8.2
25	5.5	8.9	18	36	22	28	20	13	13	11	6.9	7.5
26	5.6	10	14	26	21	50	18	21	12	10	6.8	6.5
27	5.6	8.9	14	23	49	33	17	15	12	13	6.7	6.1
28	5.6	8.2	13	57	130	31	58	17	12	11	6.7	6.9
29	5.6	7.9	28	35	---	36	113	14	12	11	6.6	8.9
30	5.2	14	21	28	---	30	33	14	11	10	6.3	7.0
31	5.2	---	61	26	---	32	---	14	---	10	6.3	---
TOTAL	180.2	255.5	540	871	882	1344	751	527	504	585	257.2	190.1
MEAN	5.81	8.52	17.4	28.1	31.5	43.4	25.0	17.0	16.8	18.9	8.30	6.34
MAX	6.2	17	61	64	130	140	113	30	45	185	10	8.9
MIN	5.2	5.1	11	19	19	27	16	13	11	10	6.3	5.7
CFSM	.42	.62	1.27	2.05	2.30	3.16	1.83	1.24	1.23	1.38	.61	.46
IN.	.49	.69	1.47	2.37	2.39	3.65	2.04	1.43	1.37	1.59	.70	.52

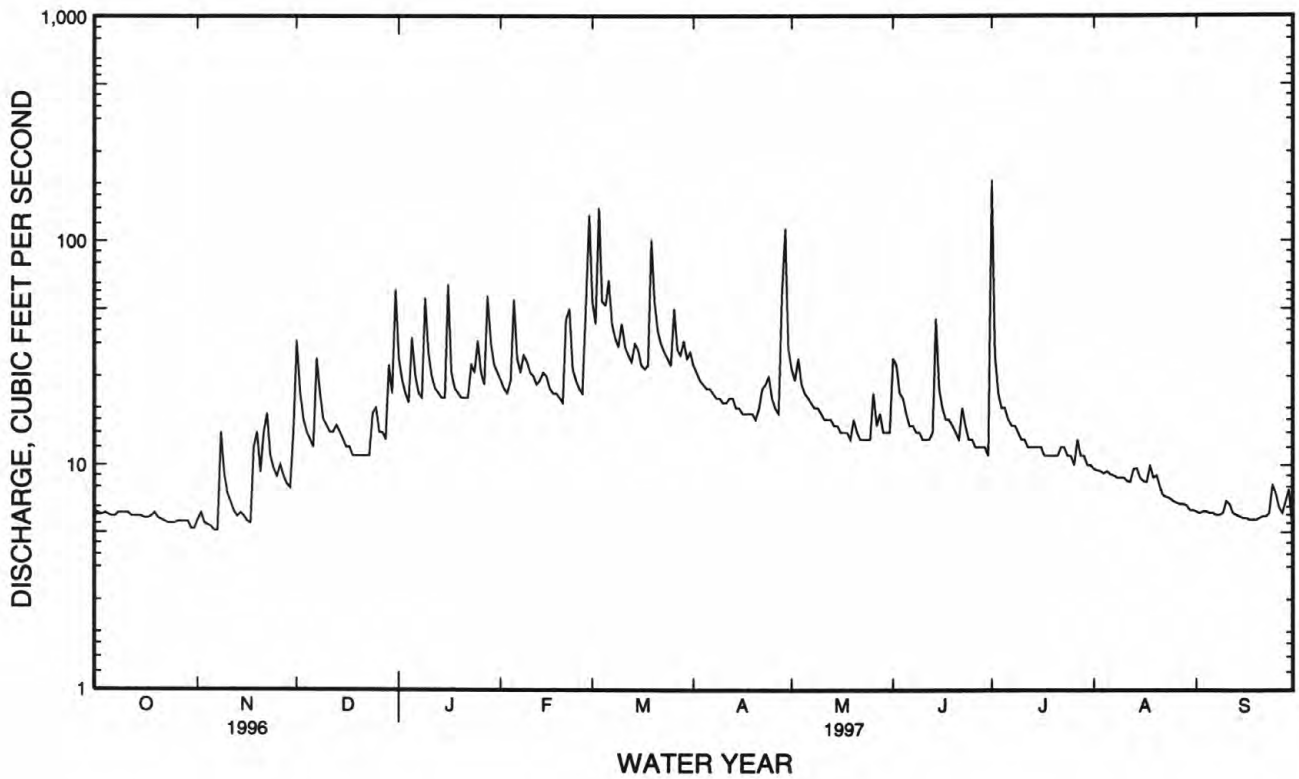
TENNESSEE RIVER BASIN

03466228 SINKING CREEK AT AFTON, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	4.84	6.97	11.9	19.2	26.0	25.0	18.2	14.9	11.7	11.0	7.16	5.80
MAX	10.5	26.0	32.6	38.4	57.1	53.1	48.9	50.6	21.0	32.5	14.6	18.5
(WY)	1990	1978	1992	1996	1994	1994	1994	1984	1989	1979	1984	1982
MIN	1.28	2.16	3.04	3.23	10.7	5.96	4.13	3.49	2.11	1.86	1.68	1.49
(WY)	1989	1987	1988	1981	1981	1988	1988	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	6611.1		6887.0			
ANNUAL MEAN	18.1		18.9		13.5	
HIGHEST ANNUAL MEAN					21.5	1994
LOWEST ANNUAL MEAN					3.62	1988
HIGHEST DAILY MEAN	267	Jan 27	185	Jul 1	561	May 7 1984
LOWEST DAILY MEAN	5.1	Nov 6	5.1	Nov 6	1.1	Sep 22 1988
ANNUAL SEVEN-DAY MINIMUM	5.5	Nov 1	5.5	Nov 1	1.1	Oct 20 1988
INSTANTANEOUS PEAK FLOW			530	Apr 28	1510	Jul 21 1979
INSTANTANEOUS PEAK STAGE			4.82	Apr 28	7.79	Jul 21 1979
INSTANTANEOUS LOW FLOW			4.8	Oct 30	.90	Jul 9 1988
ANNUAL RUNOFF (CFSM)	1.32		1.38		.98	
ANNUAL RUNOFF (INCHES)	17.95		18.70		13.38	
10 PERCENT EXCEEDS	31		33		26	
50 PERCENT EXCEEDS	14		14		8.9	
90 PERCENT EXCEEDS	6.1		5.9		3.1	



TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°07'34", long 83°10'31", Cocke County, Hydrologic Unit 06010108, on left bank at Jones Bridge on Tennessee Highway 160, 2.85 miles southeast of Lowland, and at river mile 10.3.

DRAINAGE AREA.--1,687 mi^2.

PERIOD OF RECORD.--March 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1996 to current year.
WATER TEMPERATURE: March 1996 to current year.

INSTRUMENTATION.--Two-parameter water-quality monitor since March 1996.

REMARKS.--Records good. Interruptions in the record were due to equipment malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 340 microsiemens, May 26, 1997; minimum, 107 microsiemens, Apr. 29, 1997.
WATER TEMPERATURE: Maximum, 30.0°C, July 21, 22, 1997; minimum, 0.2°C, Jan. 19, 1997.

EXTREMES FOR MARCH TO SEPTEMBER 1996.--
SPECIFIC CONDUCTANCE: Maximum, 288 microsiemens, Aug. 27, 28; minimum, 127 microsiemens, Sept. 30.
WATER TEMPERATURE: Maximum, 28.2°C, July 24; minimum, 4.8°C, Mar. 23.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 340 microsiemens, May 26; minimum, 107 microsiemens, Apr. 29.
WATER TEMPERATURE: Maximum, 30.0°C, July 21, 22; minumum, 0.2°C, Jan. 19.

SPECIFIC CONDUCTANCE,(MICROSIEMENS/CM @ 25 DEG. C), MARCH TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	206	187	196	220	196	207
2	---	---	---	---	---	---	217	195	204	212	188	199
3	---	---	---	---	---	---	217	196	206	200	185	191
4	---	---	---	---	---	---	210	195	203	204	189	198
5	---	---	---	---	---	---	212	198	206	206	193	199
6	---	---	---	---	---	---	216	203	209	248	196	210
7	---	---	---	---	---	---	220	207	213	234	210	221
8	---	---	---	---	---	---	222	205	215	224	192	207
9	---	---	---	---	---	---	252	215	232	199	174	183
10	---	---	---	---	---	---	247	226	237	202	169	184
11	---	---	---	---	---	---	249	226	234	204	185	193
12	---	---	---	---	---	---	239	223	229	198	170	187
13	---	---	---	---	---	---	237	225	231	180	158	167
14	---	---	---	206	187	196	246	231	239	183	166	175
15	---	---	---	211	191	200	241	228	235	201	178	190
16	---	---	---	240	200	218	243	230	236	219	189	202
17	---	---	---	230	212	220	241	218	226	218	198	212
18	---	---	---	225	202	212	229	212	222	215	168	194
19	---	---	---	228	201	216	222	209	215	200	168	189
20	---	---	---	229	198	213	222	206	215	201	188	194
21	---	---	---	202	179	187	233	210	221	193	166	183
22	---	---	---	197	179	190	224	200	212	182	166	174
23	---	---	---	206	185	197	209	187	199	188	175	179
24	---	---	---	214	195	203	209	196	202	189	174	182
25	---	---	---	208	188	200	224	205	212	194	176	183
26	---	---	---	207	186	194	225	207	216	238	194	207
27	---	---	---	197	179	188	228	195	216	229	198	217
28	---	---	---	226	179	196	203	179	192	232	192	212
29	---	---	---	229	198	212	201	178	186	211	185	199
30	---	---	---	214	189	199	214	189	200	211	188	202
31	---	---	---	203	188	195	---	---	---	233	199	220
MONTH	---	---	---	240	179	202	252	178	215	248	158	195

TENNESSEE RIVER BASIN
03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), MARCH TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	230	215	224	---	---	---	238	210	224	190	186	188
2	226	210	220	---	---	---	216	189	203	197	189	193
3	230	217	223	---	---	---	225	200	212	200	194	197
4	234	219	226	---	---	---	234	210	221	202	195	198
5	239	224	230	---	---	---	254	230	244	204	198	200
6	237	222	229	---	---	---	277	243	264	206	197	202
7	232	223	228	---	---	---	278	264	270	206	168	187
8	234	220	228	---	---	---	266	233	257	168	152	160
9	252	220	238	---	---	---	247	234	241	156	149	153
10	245	229	239	219	213	216	248	196	224	161	149	154
11	242	179	196	222	212	216	197	182	191	175	160	168
12	190	164	177	221	215	217	197	179	189	184	173	180
13	208	177	188	220	214	216	207	190	197	195	184	189
14	233	190	214	262	209	229	194	182	187	200	195	198
15	224	203	217	235	197	213	224	187	207	205	198	202
16	223	207	217	229	212	218	245	224	235	208	201	205
17	219	209	214	223	215	219	253	240	246	213	203	209
18	216	208	213	233	220	226	261	245	252	211	207	209
19	211	199	206	220	207	213	272	255	263	213	208	211
20	201	193	198	214	208	211	269	256	262	220	212	217
21	209	193	203	217	212	216	280	253	265	215	208	212
22	204	184	195	224	214	219	280	269	277	211	201	207
23	186	179	183	230	223	225	284	269	279	211	201	205
24	184	175	179	225	221	223	284	277	280	215	206	211
25	206	177	190	231	223	228	282	262	272	218	208	214
26	231	206	220	238	227	232	268	261	264	216	207	211
27	212	194	202	242	237	240	288	268	276	216	207	210
28	---	---	---	243	235	238	288	197	240	213	207	210
29	---	---	---	240	230	234	198	182	190	214	197	210
30	---	---	---	235	218	229	189	182	186	197	127	161
31	---	---	---	229	211	219	187	184	185	---	---	---
MONTH	252	164	211	262	197	223	288	179	236	220	127	196

TEMPERATURE, WATER (DEG. C), MARCH TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	11.4	10.6	11.3	16.8	15.0	15.9
2	---	---	---	---	---	---	11.5	9.6	10.5	17.3	15.2	16.3
3	---	---	---	---	---	---	11.9	9.6	10.8	18.1	15.7	16.9
4	---	---	---	---	---	---	13.2	10.9	11.9	19.3	17.3	18.3
5	---	---	---	---	---	---	13.2	11.9	12.3	20.3	18.5	19.3
6	---	---	---	---	---	---	12.0	10.7	11.5	20.7	19.4	20.0
7	---	---	---	---	---	---	11.7	9.8	10.7	19.8	18.9	19.3
8	---	---	---	---	---	---	11.0	9.0	9.8	20.6	18.9	19.7
9	---	---	---	---	---	---	10.1	8.5	9.2	21.1	19.0	20.1
10	---	---	---	---	---	---	10.4	8.1	9.2	21.5	19.5	20.5
11	---	---	---	---	---	---	11.5	8.7	10.0	21.3	20.0	20.4
12	---	---	---	---	---	---	13.0	10.1	11.5	20.2	18.8	19.5
13	---	---	---	---	---	---	13.2	12.1	12.7	19.3	17.1	18.0
14	---	---	---	9.1	7.0	7.9	15.9	12.7	14.0	18.0	15.8	16.9
15	---	---	---	10.1	8.9	9.4	16.2	14.9	15.5	17.4	15.9	16.4
16	---	---	---	11.1	9.6	10.3	15.9	14.3	15.0	17.1	15.8	16.4
17	---	---	---	12.1	10.6	11.3	15.8	13.3	14.6	19.3	16.5	17.7
18	---	---	---	12.1	10.8	11.6	15.8	13.6	14.8	20.9	18.0	19.3
19	---	---	---	12.2	10.1	11.5	16.5	14.7	15.6	22.5	19.7	20.9
20	---	---	---	10.1	8.1	9.0	16.0	15.4	15.6	24.2	21.4	22.6
21	---	---	---	8.1	6.0	6.8	16.8	15.2	16.0	25.2	22.7	23.8
22	---	---	---	6.5	4.9	5.7	17.5	15.8	16.7	25.7	23.5	24.6
23	---	---	---	6.9	4.8	5.9	17.5	16.4	17.1	25.7	23.1	24.4
24	---	---	---	8.4	5.9	7.1	17.4	15.1	16.2	26.2	24.0	25.0
25	---	---	---	9.9	8.1	8.8	17.8	15.4	16.6	26.5	24.5	25.3
26	---	---	---	10.7	9.3	10.0	17.5	16.1	16.9	25.1	22.3	23.7
27	---	---	---	10.9	9.8	10.4	17.3	15.3	16.3	23.4	22.0	22.5
28	---	---	---	10.8	9.9	10.2	16.7	15.3	16.1	22.6	21.0	21.8
29	---	---	---	10.5	10.1	10.3	18.3	16.0	17.1	22.6	21.9	22.1
30	---	---	---	11.1	9.7	10.4	18.1	16.2	17.1	22.0	21.1	21.5
31	---	---	---	11.4	10.6	10.9	---	---	---	21.8	20.1	21.0
MONTH	---	---	---	12.2	4.8	9.3	18.3	8.1	13.8	26.5	15.0	20.3

TENNESSEE RIVER BASIN
03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

TEMPERATURE, WATER (DEG. C.), MARCH TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	20.0	21.1	---	---	---	23.1	21.8	22.4	26.5	24.0	25.0
2	21.4	20.2	20.9	---	---	---	23.1	21.8	22.5	25.4	24.0	24.5
3	22.3	20.5	21.2	---	---	---	24.3	22.4	23.3	25.0	23.3	24.0
4	22.7	20.8	21.6	---	---	---	25.5	23.3	24.2	26.0	23.5	24.5
5	23.3	20.6	21.8	---	---	---	26.3	24.3	25.1	25.3	23.5	24.4
6	23.6	21.0	22.2	---	---	---	26.9	24.6	25.7	25.0	24.0	24.3
7	24.4	22.0	23.0	---	---	---	26.9	25.3	26.1	25.4	23.4	24.3
8	23.3	22.3	22.9	---	---	---	27.0	24.5	25.8	25.0	23.9	24.4
9	23.2	21.9	22.6	---	---	---	26.8	24.5	25.5	24.6	23.7	24.1
10	23.3	21.9	22.6	27.2	24.5	25.7	26.1	24.7	25.4	24.0	23.5	23.7
11	22.7	21.7	22.2	26.1	24.3	24.8	25.3	24.4	24.9	24.8	22.7	23.6
12	22.3	21.6	22.0	27.0	23.4	24.8	24.6	23.2	23.7	25.1	22.6	23.7
13	22.5	21.4	21.9	27.2	24.5	25.7	23.3	22.5	22.9	24.1	22.4	23.1
14	23.7	21.3	22.3	27.0	25.0	26.1	23.2	21.7	22.4	22.7	20.6	21.6
15	25.1	22.4	23.6	26.4	25.2	25.8	23.6	21.6	22.6	21.8	19.6	20.8
16	26.2	23.5	24.6	27.0	24.7	25.6	24.3	22.5	23.3	21.5	20.4	21.0
17	26.4	24.5	25.3	26.8	25.2	25.9	25.3	23.3	24.2	21.1	20.3	20.7
18	27.3	25.3	26.1	27.4	25.5	26.3	25.7	23.9	24.7	20.6	19.2	19.9
19	27.3	25.4	26.4	28.0	26.3	26.9	26.4	24.3	25.2	21.0	18.9	19.7
20	27.2	25.6	26.4	27.3	26.3	26.7	26.9	25.1	25.8	21.2	18.4	19.7
21	27.3	25.3	26.2	28.0	25.5	26.6	27.1	25.5	26.1	20.4	18.6	19.7
22	27.1	25.2	26.3	27.6	26.6	26.9	27.6	25.5	26.3	21.5	18.7	19.9
23	28.0	25.7	26.7	27.9	25.8	26.7	28.0	25.6	26.6	22.0	18.8	20.2
24	27.2	26.5	26.8	28.2	25.3	26.6	26.9	25.6	26.3	21.1	19.2	20.2
25	27.1	25.7	26.3	27.3	24.8	25.8	26.5	25.1	25.6	22.0	19.4	20.5
26	26.5	24.7	25.6	26.3	23.8	24.8	26.8	25.1	25.8	22.3	19.7	21.0
27	27.4	25.1	25.9	26.6	23.8	25.1	26.5	25.4	25.7	21.9	20.6	21.4
28	---	---	---	25.8	24.4	24.9	25.8	24.4	25.1	21.7	19.9	20.8
29	---	---	---	25.0	23.7	24.4	26.3	24.5	25.3	20.4	18.5	19.3
30	---	---	---	24.6	23.5	24.1	26.0	24.4	25.1	19.7	17.8	18.5
31	---	---	---	24.0	22.6	23.2	26.0	24.5	25.1	---	---	---
MONTH	28.0	20.0	23.9	28.2	22.6	25.6	28.0	21.6	24.8	26.5	17.8	22.0

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	127	117	120	210	203	207	216	206	212	208	191	198
2	129	118	123	209	206	207	211	116	169	197	186	190
3	142	126	135	209	206	208	129	111	119	205	190	200
4	151	140	146	213	208	211	137	127	132	215	200	207
5	156	149	154	216	211	213	150	134	142	236	213	221
6	161	155	159	213	205	201	169	147	158	231	218	222
7	163	158	160	207	201	204	190	162	175	222	201	216
8	166	160	164	245	201	230	190	175	183	208	202	204
9	173	164	170	261	160	219	193	183	188	224	207	215
10	177	172	174	160	127	135	196	189	192	217	212	214
11	183	177	180	140	129	135	201	190	196	224	216	221
12	185	179	182	151	137	145	215	200	206	225	219	221
13	187	180	184	165	148	156	218	204	213	233	220	226
14	188	181	184	172	161	167	213	171	194	243	233	240
15	189	184	188	179	170	175	171	162	167	253	243	250
16	191	184	188	187	178	184	178	162	171	251	227	237
17	191	184	189	189	186	187	184	176	181	238	229	233
18	201	188	197	209	185	191	192	182	189	232	223	228
19	206	199	203	241	205	224	197	191	195	239	221	229
20	204	199	202	227	205	214	198	195	197	248	239	245
21	206	197	202	210	195	204	204	192	199	252	247	249
22	208	204	205	214	187	201	211	202	208	255	248	251
23	206	194	201	207	197	203	216	210	212	263	251	257
24	198	194	196	210	200	206	230	212	217	265	240	255
25	203	194	198	205	195	199	247	230	240	246	240	243
26	211	202	206	213	195	204	244	219	233	242	232	237
27	213	207	210	218	213	216	222	217	219	239	223	231
28	213	208	210	213	203	206	219	215	218	224	213	220
29	214	208	211	207	191	200	235	212	221	227	216	221
30	213	205	210	207	190	195	235	220	227	222	213	218
31	206	202	204	---	---	---	229	199	211	218	213	215
MONTH	214	117	182	261	127	195	247	111	193	265	186	226

TENNESSEE RIVER BASIN
03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	223	216	219	190	133	165	192	186	189	202	183	191
2	232	222	226	162	133	149	189	184	187	211	199	206
3	237	230	233	173	161	168	192	184	188	215	200	207
4	250	235	244	174	138	154	196	187	191	216	202	210
5	253	241	247	162	138	150	201	192	196	204	190	197
6	244	233	239	172	162	169	203	198	200	200	190	194
7	237	232	235	173	165	169	207	197	203	200	193	196
8	240	231	235	187	166	177	198	190	194	204	195	199
9	249	239	245	192	185	188	193	189	191	208	201	205
10	245	236	240	204	189	197	203	192	198	212	205	208
11	237	231	234	209	200	204	205	198	202	213	206	209
12	238	234	236	209	202	205	209	201	205	215	209	212
13	245	236	241	209	200	203	212	206	209	221	214	217
14	254	244	248	221	206	213	208	200	202	227	219	223
15	249	243	246	226	158	198	205	199	202	234	225	230
16	248	231	242	174	159	168	207	199	204	237	230	233
17	234	219	226	184	174	179	209	202	206	243	233	237
18	224	215	218	193	183	187	212	206	209	256	242	247
19	228	221	225	207	189	198	214	208	211	268	251	259
20	240	221	230	192	157	180	220	213	217	268	230	252
21	247	220	238	172	156	162	217	205	213	237	224	229
22	241	211	224	183	169	177	227	205	218	247	229	236
23	211	178	197	183	177	180	221	211	217	281	247	263
24	189	178	184	190	183	186	215	157	188	310	281	293
25	192	181	185	198	187	192	164	153	157	335	310	321
26	203	192	197	210	195	201	169	157	163	340	315	330
27	224	201	208	204	177	190	176	167	172	315	208	262
28	231	179	204	179	173	175	184	173	179	208	181	196
29	---	---	---	193	178	186	182	107	173	183	173	176
30	---	---	---	188	182	185	188	181	185	182	175	179
31	---	---	---	189	183	186	---	---	---	190	179	184
MONTH	254	178	227	226	133	182	227	107	196	340	173	226

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	203	185	192	197	147	172	211	205	209	251	233	244
2	204	166	192	179	163	171	211	204	208	---	---	---
3	169	154	160	191	172	183	210	205	207	---	---	---
4	160	155	157	194	186	189	208	201	204	---	---	---
5	171	160	168	218	194	206	210	201	206	---	---	---
6	171	163	167	247	218	230	215	208	212	---	---	---
7	176	167	171	251	241	245	218	214	216	---	---	---
8	189	171	180	244	225	233	224	214	221	---	---	---
9	193	182	186	229	217	222	234	221	229	---	---	---
10	195	187	191	226	215	221	235	229	233	---	---	---
11	196	188	192	221	214	218	232	227	230	---	---	---
12	203	193	198	219	211	215	233	227	231	260	247	254
13	207	195	200	230	213	220	235	216	227	250	244	246
14	217	175	198	230	217	223	220	212	216	258	242	250
15	200	177	191	227	216	223	231	216	226	245	227	240
16	203	186	193	218	209	212	232	224	229	---	---	---
17	192	181	187	216	209	212	231	221	226	---	---	---
18	198	183	191	230	213	221	226	213	219	---	---	---
19	210	189	197	235	228	232	225	213	221	---	---	---
20	214	204	210	232	223	228	223	211	216	---	---	---
21	232	202	219	229	211	220	224	212	220	---	---	---
22	202	184	193	212	204	208	224	217	221	---	---	---
23	192	180	186	223	205	215	234	221	229	249	237	245
24	214	188	198	234	223	230	232	226	230	244	237	241
25	237	210	222	233	206	218	230	224	227	258	241	249
26	246	234	241	209	203	207	228	222	225	262	233	243
27	257	239	247	207	202	204	230	221	225	234	207	221
28	272	254	264	210	203	206	230	219	224	207	177	192
29	271	202	242	208	201	204	237	228	233	177	171	174
30	210	196	204	211	207	209	245	233	240	183	174	177
31	---	---	---	212	205	208	250	239	243	---	---	---
MONTH	272	154	198	251	147	213	250	201	223	262	171	229

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.2	17.7	18.4	16.8	15.2	15.7	8.5	7.3	7.9	11.7	11.1	11.4
2	19.7	18.6	19.1	15.2	13.6	14.5	8.9	7.9	8.4	11.9	11.6	11.7
3	20.5	19.3	19.7	13.6	11.6	12.5	8.6	8.0	8.4	12.3	11.6	11.9
4	20.2	18.7	19.3	12.2	10.2	11.3	8.1	7.2	7.6	12.4	11.5	12.0
5	19.1	18.0	18.6	11.8	10.6	11.3	7.2	6.5	6.7	12.7	12.1	12.4
6	18.5	17.1	17.8	12.6	10.9	11.7	6.7	5.8	6.3	12.1	11.1	11.4
7	18.5	17.0	17.6	14.1	11.9	13.0	7.0	6.3	6.6	11.1	9.2	10.2
8	18.3	16.7	17.5	14.4	12.5	13.6	6.8	6.0	6.4	9.2	7.6	8.1
9	17.7	16.3	16.9	12.5	11.3	11.9	6.4	5.5	5.8	7.6	6.6	7.0
10	16.3	14.6	15.1	11.7	9.6	10.5	5.5	4.5	5.1	6.6	5.4	6.0
11	15.4	13.4	14.3	9.6	7.9	8.8	6.3	5.3	5.7	5.4	3.6	4.2
12	15.6	13.0	14.2	7.9	6.7	7.2	7.5	6.2	6.6	3.6	2.5	2.9
13	15.6	12.8	14.1	6.8	5.9	6.2	7.8	7.2	7.5	2.7	1.5	2.1
14	15.9	13.0	14.4	6.0	5.9	5.9	8.0	7.1	7.5	2.0	.9	1.5
15	16.8	13.8	15.2	6.5	5.1	5.7	8.0	7.1	7.6	2.8	1.4	1.9
16	17.4	14.6	16.0	6.6	5.2	5.7	7.7	6.9	7.2	3.8	2.8	3.3
17	17.4	15.3	16.4	6.8	5.6	6.2	7.6	7.2	7.3	2.8	1.7	2.1
18	16.6	15.0	15.8	8.1	6.7	7.3	7.3	6.7	7.0	1.8	.7	1.1
19	15.2	13.4	14.3	9.3	8.1	8.7	6.8	4.7	6.0	.8	.2	.5
20	14.8	12.4	13.5	9.8	8.7	9.2	4.7	3.3	3.9	1.7	.5	1.0
21	13.9	12.4	13.1	9.9	9.7	9.9	3.4	2.3	2.9	3.4	1.5	2.3
23	16.0	13.6	14.6	9.1	8.0	8.6	3.7	2.5	3.0	6.0	4.7	5.3
24	15.4	12.8	14.1	8.7	7.6	8.2	4.3	3.3	3.8	6.9	6.0	6.4
25	14.4	12.5	13.6	8.2	7.8	8.0	4.4	3.4	4.0	7.7	6.8	7.1
26	14.8	13.6	14.2	8.5	7.8	8.3	4.8	4.0	4.4	6.9	5.8	6.1
27	15.9	14.5	15.1	7.8	6.7	7.3	6.0	4.8	5.4	6.4	5.7	6.0
28	16.4	15.2	15.8	7.4	6.4	6.9	6.8	5.9	6.3	7.0	6.4	6.6
29	17.8	15.5	16.5	6.7	6.0	6.3	8.9	6.6	7.7	6.8	5.8	6.3
30	18.8	16.6	17.5	7.3	6.2	6.6	9.7	8.8	9.1	6.8	6.2	6.5
31	17.9	15.7	16.8	---	---	---	11.7	9.7	10.9	7.1	6.0	6.6
MONTH	20.5	12.4	15.9	16.8	5.1	9.2	11.7	2.3	6.3	12.7	.2	6.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.6	6.2	6.9	12.9	11.8	12.2	13.9	12.1	13.0	18.0	16.1	16.8
2	7.8	6.8	7.3	14.0	12.8	13.4	13.2	11.5	12.5	18.3	16.2	17.3
3	8.7	7.7	8.2	15.0	13.7	14.3	13.2	11.1	12.3	18.3	17.0	17.6
4	10.0	8.7	9.3	14.6	13.7	14.1	13.8	11.7	12.8	17.3	16.0	16.6
5	9.9	9.1	9.7	13.8	12.9	13.3	15.6	13.3	14.4	16.9	15.1	16.1
6	9.4	8.6	9.0	13.3	11.9	12.4	16.4	15.2	15.7	17.4	15.3	16.3
7	9.3	8.6	9.0	11.9	10.6	11.2	17.1	15.2	16.1	17.6	15.3	16.5
8	9.3	8.4	8.8	11.1	10.2	10.7	16.0	14.4	15.4	17.3	16.0	16.6
9	8.4	7.8	8.0	11.4	10.0	10.6	15.9	14.3	15.1	17.2	16.3	16.9
10	7.8	6.7	7.3	12.2	11.2	11.6	14.4	12.7	13.7	17.1	15.1	16.1
11	6.7	5.8	6.2	13.0	11.3	12.1	15.0	12.6	13.8	17.4	14.8	16.1
12	5.8	5.0	5.5	13.2	11.8	12.6	15.0	14.1	14.5	17.9	15.4	16.6
13	5.7	5.3	5.4	13.3	12.2	12.7	14.6	13.2	14.1	17.6	16.1	16.8
14	5.7	5.3	5.4	13.4	12.9	13.1	14.5	12.2	13.2	17.4	15.5	16.4
15	6.9	5.4	6.0	13.1	11.4	12.2	14.8	12.2	13.5	18.6	16.6	17.4
16	6.7	5.3	6.1	11.4	10.0	10.7	15.1	12.5	13.8	18.0	15.5	16.8
17	7.1	5.6	6.4	10.5	9.2	9.7	15.0	13.7	14.3	18.0	15.7	16.9
18	7.6	5.7	6.7	10.2	9.4	9.8	14.7	12.3	13.5	19.6	16.4	17.8
19	8.3	6.8	7.5	11.0	10.0	10.4	13.7	12.6	13.0	20.1	18.2	19.1
20	9.9	8.3	9.1	12.1	10.9	11.4	14.1	12.1	13.0	20.6	19.3	19.8
21	11.4	9.9	10.6	13.1	11.2	12.1	13.7	12.6	13.0	20.8	18.7	19.6
22	11.3	10.6	10.9	13.7	12.2	12.9	14.2	12.4	13.3	20.7	18.3	19.6
23	10.6	9.6	10.1	13.5	12.0	12.8	14.2	13.1	13.5	20.9	18.3	19.6
24	9.8	8.4	9.0	13.5	11.7	12.7	13.8	12.8	13.2	20.9	19.3	20.1
25	9.4	8.3	8.8	14.0	12.1	13.1	13.7	11.8	12.7	21.2	20.3	20.6
26	9.3	8.4	8.9	14.6	13.0	13.8	13.1	12.3	12.7	21.5	20.3	20.9
27	10.3	9.2	9.7	14.6	13.0	13.8	14.1	12.7	13.4	21.3	20.3	21.0
28	11.8	10.2	10.8	13.7	12.7	12.9	14.0	13.4	13.7	20.5	19.1	19.6
29	---	---	---	14.5	12.3	13.3	14.1	13.0	13.5	19.1	17.5	18.1
30	---	---	---	14.6	13.0	13.8	16.3	13.4	14.5	17.5	16.7	17.1
31	---	---	---	14.4	13.2	13.8	---	---	---	18.3	16.5	17.3
MONTH	11.8	5.0	8.1	15.0	9.2	12.4	17.1	11.1	13.7	21.5	14.8	17.9

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.9	17.8	18.3	25.2	22.5	24.1	27.0	24.4	25.5	27.2	24.0	25.5
2	19.4	18.1	18.7	25.5	23.9	24.5	27.1	24.4	25.4	---	---	---
3	20.9	18.3	19.4	27.3	24.8	25.8	27.4	24.3	25.7	---	---	---
4	20.7	19.3	20.1	27.3	25.8	26.6	27.4	24.5	25.9	---	---	---
5	20.3	19.0	19.7	26.8	24.7	25.6	26.7	24.8	25.6	---	---	---
6	20.6	18.6	19.5	25.7	23.5	24.5	25.4	23.3	24.5	---	---	---
7	19.9	18.2	18.8	25.0	24.0	24.5	26.5	23.2	24.7	---	---	---
8	19.0	17.8	18.3	26.1	23.3	24.5	26.1	23.5	24.9	---	---	---
9	18.8	17.7	18.1	25.8	24.5	25.0	25.4	23.8	24.6	---	---	---
10	19.6	17.3	18.3	26.0	24.1	24.9	25.1	22.9	23.8	---	---	---
11	19.9	18.7	19.3	26.3	24.7	25.3	26.9	23.0	24.6	---	---	---
12	20.6	19.6	20.0	26.5	24.8	25.5	27.8	24.3	25.9	23.1	20.6	21.7
13	22.7	20.3	21.1	26.8	25.4	26.0	27.3	25.2	26.3	23.9	21.1	22.5
14	21.9	20.6	21.1	27.6	25.8	26.6	28.1	25.2	26.5	24.0	21.5	22.7
15	22.4	20.4	21.2	28.5	26.2	27.1	28.1	25.6	26.8	24.3	21.2	22.6
16	22.7	21.4	22.1	27.6	26.5	27.1	29.4	26.2	27.6	---	---	---
17	23.2	22.1	22.6	28.3	25.9	26.8	29.3	26.6	27.9	---	---	---
18	23.6	22.4	22.9	28.6	26.5	27.3	28.8	26.6	27.7	---	---	---
19	24.4	22.1	23.1	28.7	26.9	27.6	28.7	25.8	27.2	---	---	---
20	25.0	23.2	24.0	29.3	27.0	27.9	27.9	26.4	26.9	---	---	---
21	24.9	22.9	23.8	30.0	27.1	28.4	27.2	25.2	26.1	---	---	---
22	24.8	22.9	23.6	30.0	27.5	28.6	26.1	23.9	25.1	---	---	---
23	25.7	23.5	24.5	28.8	27.5	28.0	25.7	22.8	24.1	22.3	21.9	22.1
24	25.8	23.8	24.8	28.3	26.8	27.5	25.5	21.7	23.5	22.0	20.6	21.2
25	26.3	24.5	25.4	28.3	26.3	27.1	25.2	22.3	23.6	21.5	19.9	20.6
26	26.6	25.0	25.7	28.8	26.8	27.6	25.6	22.8	24.2	21.5	20.0	20.8
27	26.3	25.2	25.7	29.3	27.0	27.9	26.1	23.3	24.6	22.0	19.8	20.8
28	26.5	24.8	25.6	29.4	27.3	28.3	26.4	24.2	25.2	21.2	20.2	20.6
29	25.6	24.6	25.2	28.9	27.2	27.9	26.3	24.2	25.2	21.4	19.1	20.1
30	25.8	24.5	25.0	28.0	26.7	27.3	26.8	23.4	25.0	21.0	19.1	20.0
31	---	---	---	27.5	24.5	25.9	26.6	23.5	25.0	---	---	---
MONTH	26.6	17.3	21.9	30.0	22.5	26.5	29.4	21.7	25.5	27.2	19.1	21.6

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
01...	1145	121	7.6	17.5	742	8.4	91	290	360	--	--	48
07...	1430	161	8.1	18.0	736	9.6	106	K19	K42	--	--	68
18...	1445	191	8.4	15.5	733	9.5	100	K46	130	--	--	79
21...	1230	205	8.4	13.0	740	12.7	125	--	--	--	--	90
29...	1245	209	8.2	16.5	738	11.8	125	--	--	--	--	91
NOV												
20...	1330	216	8.8	9.0	733	10.4	93	190	2300	--	--	93
DEC												
10...	1400	205	7.8	5.0	739	11.5	92	180	K400	--	--	88
JAN												
27...	1330	229	8.1	6.5	743	11.8	98	89	550	--	--	100
FEB												
07...	1400	236	7.8	9.0	741	11.6	104	2200	690	--	--	110
MAR												
04...	1130	158	7.5	13.5	741	9.4	93	--	--	--	--	68
17...	1345	180	7.8	9.5	745	11.0	98	570	--	--	--	82
APR												
02...	1200	193	8.0	12.0	746	10.5	100	--	--	--	130	83
MAY												
02...	1230	208	8.0	17.5	737	8.4	91	430	--	370	2200	100
JUN												
04...	0915	157	7.6	19.5	731	9.6	109	1800	--	1600	4900	65
JUL												
02...	1000	175	7.8	24.0	729	7.5	94	K2400	--	--	2800	74
AUG												
05...	1345	203	7.6	25.5	738	--	--	K40	--	K15	570	89

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT												
01...	8	14	3.2	3.4	13	0.2	2.1	0	49	40	6.9	3.6
07...	7	20	4.4	4.4	12	0.2	2.1	--	75	61	7.2	5.0
18...	0	23	5.2	4.7	11	0.2	2.0	1	93	79	7.8	5.3
21...	5	27	5.6	5.1	11	0.2	2.2	1	102	84	8.1	5.9
29...	3	27	5.7	5.2	11	0.2	2.4	1	105	86	9.2	5.9
NOV												
20...	16	28	5.6	3.8	8	0.2	2.7	--	94	77	16	4.8
DEC												
10...	--	27	5.1	3.0	7	0.1	2.1	--	--	--	16	3.7
JAN												
27...	17	31	6.1	3.8	7	0.2	1.7	0	104	85	15	4.8
FEB												
07...	20	35	6.0	3.1	6	0.1	1.8	0	112	92	18	4.0
MAR												
04...	6	21	3.7	2.3	7	0.1	2.2	0	76	62	8.5	2.8
17...	21	25	4.8	2.6	6	0.1	1.3	0	74	61	11	3.3
APR												
02...	9	25	5.0	2.9	7	0.1	1.3	0	90	74	12	3.4
MAY												
02...	17	31	5.5	2.3	5	0.1	1.7	0	101	83	14	2.7
JUN												
04...	10	20	4.0	2.7	8	0.1	2.2	--	68	56	10	3.4
JUL												
02...	5	23	4.0	2.2	6	0.1	2.9	--	83	68	8.3	3.0
AUG												
05...	11	26	5.6	3.9	8	0.2	2.0	0	95	78	8.7	5.3

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

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT												
01...	0.30	8.5	82	68	0.11	--	<0.010	0.490	0.040	0.20	0.40	0.89
07...	0.20	8.2	91	90	0.12	--	<0.010	0.410	0.020	<0.20	<0.20	--
18...	0.30	5.1	110	102	0.15	0.250	0.020	0.270	<0.015	<0.20	<0.20	--
21...	0.30	5.5	86	113	0.12	--	<0.010	0.310	<0.015	<0.20	<0.20	--
29...	0.30	5.9	110	115	0.15	0.220	0.020	0.240	0.020	<0.20	<0.20	--
NOV												
20...	0.30	7.9	129	119	0.18	0.700	0.010	0.710	<0.015	<0.20	0.40	1.1
DEC												
10...	0.10	7.5	120	115	0.16	0.660	0.020	0.680	0.030	<0.20	0.30	0.98
JAN												
27...	0.20	8.5	129	126	0.18	0.730	0.010	0.740	<0.015	<0.20	<0.20	--
FEB												
07...	0.20	7.4	132	134	0.18	--	<0.010	0.750	<0.015	0.20	0.40	1.1
MAR												
04...	0.10	7.1	94	88	0.13	--	<0.010	0.600	0.020	0.20	1.4	2.0
17...	0.10	7.4	103	95	0.14	--	<0.010	0.740	<0.015	<0.20	0.30	1.0
APR												
02...	0.20	7.9	--	105	0.14	--	<0.010	0.700	<0.015	<0.20	<0.20	--
MAY												
02...	<0.10	8.1	122	118	0.17	--	<0.010	0.603	<0.015	<0.20	0.42	1.0
JUN												
04...	0.23	8.1	99	86	0.13	0.547	0.012	0.559	0.040	<0.20	0.47	1.0
JUL												
02...	0.18	6.9	118	94	0.16	0.579	0.012	0.591	0.028	0.32	0.63	1.2
AUG												
05...	0.29	8.0	123	109	0.17	0.581	0.010	0.591	<0.015	<0.20	0.20	0.80

DATE	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOS PHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	SUSPENDED TOTAL (MG/L AS C) (00689)	CARBON, ORGANIC CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALACHLOR, WATER FLTRD REC (UG/L) (49260)	ACETOZINE, WATER, DISS, REC (UG/L) (39632)	ATRA-ALPHA BHC DISSOLVED (UG/L) (34253)
OCT												
01...	0.080	<0.010	0.010	0.08	21	2.0	2.7	2.5	<0.002	<0.002	0.014	<0.002
07...	0.020	0.010	0.010	0.02	41	6.0	1.4	0.30	<0.002	<0.002	0.012	<0.002
18...	0.030	<0.010	0.010	0.03	36	5.0	1.2	0.30	<0.002	<0.002	0.013	<0.002
21...	0.030	<0.010	0.010	0.03	39	5.0	1.4	0.40	<0.002	<0.002	0.014	<0.002
29...	0.030	<0.010	<0.010	0.03	33	7.0	1.6	0.40	<0.002	<0.002	0.013	<0.002
NOV												
20...	0.130	0.040	0.050	0.13	32	7.0	2.6	1.2	<0.002	<0.002	0.015	<0.002
DEC												
10...	0.070	0.030	0.030	0.07	29	7.0	2.9	1.3	<0.002	<0.002	0.013	<0.002
JAN												
27...	0.030	0.020	0.010	0.03	45	8.0	1.7	0.60	<0.002	<0.002	0.050	<0.002
FEB												
07...	0.050	0.030	0.020	0.05	40	7.0	2.4	0.80	<0.002	<0.002	0.014	<0.002
MAR												
04...	0.350	0.070	0.030	0.35	31	3.0	3.5	7.3	<0.002	<0.002	0.027	<0.002
17...	0.080	<0.010	0.010	0.08	12	6.0	1.6	1.3	<0.002	<0.002	0.015	<0.002
APR												
02...	0.030	0.010	<0.010	0.03	11	6.0	1.2	0.40	<0.002	<0.002	0.014	<0.002
MAY												
02...	0.075	<0.010	0.019	0.07	13	5.8	2.3	0.40	<0.002	<0.002	0.130	<0.002
JUN												
04...	0.106	0.037	0.034	0.11	23	1.9	2.3	1.5	0.004	0.010	0.311	<0.002
JUL												
02...	0.179	0.068	0.060	0.18	42	3.1	4.9	2.8	<0.002	<0.002	0.395	<0.002
AUG												
05...	0.022	0.015	0.032	0.02	17	5.3	1.4	0.60	<0.002	<0.002	0.044	<0.002

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

WATER-QUAITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT												
01...	<0.002	<0.004	<0.004	E0.008	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.008	<0.006
07...	<0.002	<0.004	<0.004	E0.006	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006
18...	<0.002	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006
21...	<0.002	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
29...	<0.002	<0.004	<0.004	E0.008	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006
NOV												
20...	<0.002	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.009	<0.006
DEC												
10...	<0.002	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006
JAN												
27...	<0.002	<0.004	<0.004	E0.011	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.007	<0.006
FEB												
07...	<0.002	<0.004	<0.004	E0.011	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.004	<0.006
MAR												
04...	<0.002	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.004	<0.006
17...	<0.002	<0.004	<0.004	E0.007	E0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006
APR												
02...	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006
MAY												
02...	<0.002	<0.004	<0.004	E0.008	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.073	<0.006
JUN												
04...	<0.002	<0.004	<0.004	E0.018	0.005	<0.001	<0.003	<0.004	<0.005	0.252	0.131	<0.006
JUL												
02...	<0.002	<0.004	<0.004	E0.055	<0.002	<0.001	<0.003	<0.004	<0.005	0.009	0.074	<0.006
AUG												
05...	<0.002	<0.004	<0.004	E0.008	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.011	<0.006

DATE	PARATHION, DISSOLVED (UG/L) (39542)	PROPCHLOR, WATER, DISS, REC (UG/L) (04024)	PROMETON, WATER, DISS, REC (UG/L) (04037)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT											
01...	<0.004	<0.007	E0.007	0.010	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
07...	<0.004	<0.007	<0.018	E0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
18...	<0.004	<0.007	E0.004	E0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
21...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
29...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
NOV											
20...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
DEC											
10...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JAN											
27...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
FEB											
07...	<0.004	<0.007	<0.018	<0.005	<0.002	E0.005	<0.003	<0.002	<0.003	<0.017	<0.004
MAR											
04...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
17...	<0.004	<0.007	<0.018	0.017	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
APR											
02...	<0.004	<0.007	<0.018	0.012	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAY											
02...	<0.004	<0.007	<0.018	0.148	<0.002	<0.003	E0.135	<0.002	<0.003	<0.017	<0.004
JUN											
04...	<0.004	<0.007	E0.008	0.020	<0.002	E0.007	0.008	<0.002	<0.003	<0.017	<0.004
JUL											
02...	<0.004	<0.007	E0.006	0.013	<0.002	E0.020	<0.003	<0.002	<0.003	<0.017	<0.004
AUG											
05...	<0.004	<0.007	<0.018	0.010	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

E--Estimated

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT											
01...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
07...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
18...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
21...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
29...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
NOV											
20...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
DEC											
10...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN											
27...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB											
07...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAR											
04...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
17...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
APR											
02...	<0.003	<0.002	<0.002	<0.220	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAY											
02...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUN											
04...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	0.026	<0.004	0.011	<0.005	<0.002
JUL											
02...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	0.020	<0.004	<0.004	<0.005	<0.002
AUG											
05...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
01...	<0.003	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	49	97
07...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	6	90
18...	<0.003	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	2	70
21...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	3	83
29...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	2	76
NOV											
20...	<0.003	<0.004	<0.013	0.017	<0.007	<0.013	<0.001	<0.002	<0.002	43	93
DEC											
10...	<0.003	<0.004	<0.013	0.039	<0.007	<0.013	<0.001	<0.002	<0.002	25	94
JAN											
27...	<0.003	<0.004	<0.013	0.015	<0.007	<0.013	<0.001	<0.002	<0.002	26	94
FEB											
07...	<0.003	<0.004	<0.013	0.026	<0.007	<0.013	<0.001	<0.002	<0.002	44	88
MAR											
04...	<0.003	<0.004	<0.013	0.034	<0.007	<0.013	<0.001	<0.002	<0.002	250	83
17...	<0.003	<0.004	<0.013	E0.008	<0.007	<0.013	<0.001	<0.002	<0.002	55	86
APR											
02...	<0.003	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	28	83
MAY											
02...	<0.003	<0.004	<0.013	0.017	<0.007	<0.013	<0.001	<0.002	<0.002	54	84
JUN											
04...	<0.003	<0.004	<0.013	0.027	<0.007	<0.013	<0.001	<0.002	<0.002	64	92
JUL											
02...	<0.003	<0.004	<0.013	E0.038	<0.007	<0.013	<0.001	<0.002	<0.002	81	88
AUG											
05...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	11	69

E--Estimated

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
SEP												
19...	1100	222	7.7	23.0	741	9.6	115	K37	<2	K270	100	13
25...	1345	248	7.7	20.5	730	8.7	101	210	290	1400	110	17
26...	1200	234	7.6	20.5	737	7.6	88	K1300	530	K500	100	21

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
SEP												
19...	30	6.4	4.1	8	0.2	2.0	0	107	88	10	5.9	0.30
25...	34	7.1	4.7	8	0.2	2.4	0	118	97	13	6.0	0.36
26...	32	6.3	4.4	8	0.2	2.2	0	102	84	11	6.2	0.40

DATE	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
SEP												
19...	6.7	120	120	0.16	<0.010	0.461	<0.015	<0.20	<0.20	--	<0.010	<0.010
25...	6.4	140	134	0.19	<0.010	0.560	0.024	<0.20	<0.20	--	0.029	0.020
26...	6.7	132	121	0.18	<0.010	0.574	0.017	<0.20	0.43	1.0	0.092	0.023

DATE	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)
SEP											
19...	0.011	--	15	7.6	1.3	0.30	<0.002	<0.002	0.031	<0.002	<0.002
25...	0.024	0.03	9.2	6.0	1.6	0.30	<0.002	<0.002	0.014	<0.002	<0.002
26...	0.030	0.09	10	1.8	1.3	1.1	<0.002	<0.002	0.014	<0.002	<0.002

DATE	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
SEP											
19...	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.016	<0.006
25...	<0.004	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006
26...	<0.004	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006

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

TENNESSEE RIVER BASIN

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
SEP											
19...	<0.004	<0.007	<0.018	0.006	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
25...	<0.004	<0.007	<0.018	E0.004	<0.002	E0.921	<0.003	<0.002	<0.003	<0.017	<0.004
26...	<0.004	<0.007	<0.018	0.012	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
SEP											
19...	<0.003	<0.002	<0.002	<0.020	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
25...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
26...	<0.003	<0.002	<0.002	<0.030	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
SEP											
19...	<0.003	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	10	76
25...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	11	94
26...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	62	92

E--Estimated

TENNESSEE RIVER BASIN

03469175 LITTLE PIGEON RIVER ABOVE SEVIERVILLE, TN

LOCATION.--Lat 35°51'55", long 83°32'01", Sevier County, Hydrologic Unit 06010107, on left bank of county road, 1.2 mi downstream from East Fork, 1.2 mi upstream from West Prong, 0.8 mi east of Sevierville, and at mi 7.5.

DRAINAGE AREA.-- 184 mi^2.

PERIOD OF RECORD.--August 1988 to current year.

REVISED RECORD.--WDR TN-94-1: 1989-91 (M): 1992, 1993(P).

GAGE.--Data collection platform. Datum of gage is 898.08 ft above sea level.

REMARKS.--Records good. The town of Sevierville diverts an average of about 1.5 ft^3/s (1.0 MGD) for municipal supply above gage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 28	1545	5,890	9.60	Apr. 29	0415	5,720	9.43
Mar. 3	1400	*8,350	*11.80	June 15	0015	6,420	10.11

Minimum discharge 32 ft^3/s, Sept. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	89	1970	1400	475	2240	821	973	576	577	85	41
2	150	121	927	799	397	1270	619	641	397	551	80	39
3	276	119	530	573	345	4320	500	2320	298	377	75	38
4	213	99	392	459	448	2200	425	1570	295	302	75	40
5	167	91	320	973	822	1510	371	925	250	312	100	41
6	144	87	291	865	495	2050	438	658	208	242	89	38
7	128	84	972	620	404	1290	463	505	181	212	78	37
8	118	1150	946	494	497	883	342	419	166	194	70	36
9	111	719	562	716	483	662	301	387	164	558	72	38
10	101	381	418	665	433	616	271	360	169	1120	72	45
11	97	271	348	530	391	536	252	297	150	460	75	86
12	91	212	527	423	342	445	290	269	147	320	72	74
13	86	182	872	362	349	393	323	253	348	262	73	55
14	82	188	542	e315	397	1050	257	236	2300	224	66	46
15	79	226	419	286	415	996	231	216	3260	199	62	41
16	76	189	351	852	380	663	216	195	1000	192	58	39
17	73	178	338	606	353	529	224	184	635	241	55	36
18	87	354	301	464	321	458	207	174	497	180	66	38
19	127	765	269	393	301	1570	205	165	382	160	66	40
20	91	413	233	344	288	1670	206	179	318	146	70	36
21	80	437	e214	304	578	1050	205	161	445	163	77	42
22	76	808	213	289	889	734	302	145	397	183	64	49
23	77	480	207	308	519	557	649	137	280	160	56	42
24	91	358	250	411	420	454	1430	131	245	139	53	941
25	79	292	329	890	366	392	826	131	268	125	51	704
26	76	698	262	565	332	560	544	177	400	113	49	219
27	75	407	264	445	451	489	433	193	2470	106	47	132
28	78	327	255	1360	3190	498	747	346	1270	101	50	103
29	122	278	478	1240	---	723	4190	224	967	96	48	221
30	106	316	544	784	---	576	1620	204	575	96	45	161
31	92	---	1290	584	---	1100	---	188	---	96	43	---
TOTAL	3431	10319	15834	19319	15081	32484	17908	12963	19058	8207	2042	3498
MEAN	111	344	511	623	539	1048	597	418	635	265	65.9	117
MAX	276	1150	1970	1400	3190	4320	4190	2320	3260	1120	100	941
MIN	73	84	207	286	288	392	205	131	147	96	43	36
CFSM	.60	1.87	2.78	3.39	2.93	5.69	3.24	2.27	3.45	1.44	.36	.63
IN.	.69	2.09	3.20	3.91	3.05	6.57	3.62	2.62	3.85	1.66	.41	.71

e Estimated

TENNESSEE RIVER BASIN

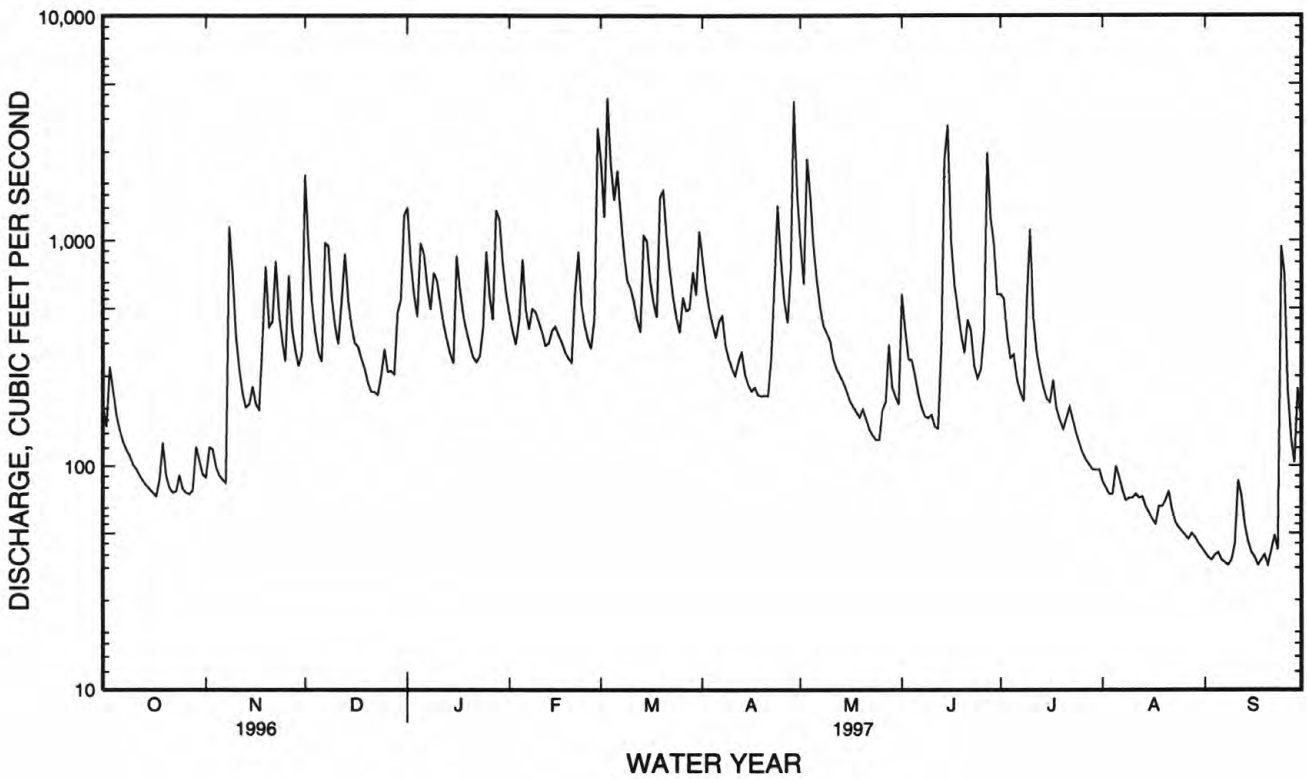
03469175 LITTLE PIGEON RIVER ABOVE SEVIERVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	148	237	426	577	636	783	438	370	346	228	212	170
MAX	335	374	743	873	1024	1426	1141	576	635	412	477	530
(WY)	1990	1990	1992	1994	1994	1994	1994	1989	1997	1989	1996	1989
MIN	54.8	101	135	317	240	463	124	192	121	90.7	65.9	68.7
(WY)	1992	1991	1989	1991	1993	1996	1995	1995	1990	1993	1997	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	153421		160144			
ANNUAL MEAN	419		439		381	
HIGHEST ANNUAL MEAN					573	1994
LOWEST ANNUAL MEAN					221	1995
HIGHEST DAILY MEAN	5830	Jan 27	4320	Mar 3	10900	Mar 28 1994
LOWEST DAILY MEAN	73	Oct 17	36	Sep 8	31	Aug 19 1995
ANNUAL SEVEN-DAY MINIMUM	79	Oct 22	38	Sep 3	37	Sep 7 1995
INSTANTANEOUS PEAK FLOW			8350	Mar 3	19700	Mar 28 1994
INSTANTANEOUS PEAK STAGE			11.80	Mar 3	17.50	Mar 28 1994
INSTANTANEOUS LOW FLOW			a32	Sep 20	29	Aug 20 1995
ANNUAL RUNOFF (CFSM)	2.28		2.38		2.07	
ANNUAL RUNOFF (INCHES)	31.02		32.38		28.15	
10 PERCENT EXCEEDS	798		943		804	
50 PERCENT EXCEEDS	300		295		229	
90 PERCENT EXCEEDS	101		66		69	

a Also occurred on Sept. 21.



TENNESSEE RIVER BASIN

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 mi^2, includes that of Surgoinsville Creek.

PERIOD OF RECORD.--October 1940 to September 1988, March 1996 to current year. Prior to April 1941 monthly discharge only, published in WSP 1306.

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

REMARKS.--Records good, which are fair. Flow partly regulated by four reservoirs (see p. 241).

EXTREMES FOR CURRENT PERIOD.--March 1996 to September 1997. Maximum discharge, 22,200 ft^3/s, Mar. 4, 1997 gage height, 9.23 ft; minimum, 1,290 ft^3/s, July 7, 8, 1997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR MARCH 1996 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e5500	5430	4680	6660	3290	6260	3020
2	---	---	---	---	---	4110	5730	3560	6220	4100	8450	2980
3	---	---	---	---	---	4080	4870	2870	6030	4950	5010	2980
4	---	---	---	---	---	4190	3960	3400	6040	5530	3250	3690
5	---	---	---	---	---	3200	4510	2620	5330	5010	2950	4420
6	---	---	---	---	---	3300	4490	2570	5180	3960	3330	4430
7	---	---	---	---	---	4230	3780	2360	5120	2940	3180	3710
8	---	---	---	---	---	5860	4460	7230	5330	2930	e3000	2600
9	---	---	---	---	---	5850	4080	7540	5410	3350	e2500	3120
10	---	---	---	---	---	4250	4020	6180	5340	3700	e2300	3810
11	---	---	---	---	---	3710	2630	6350	5300	3240	e2600	4140
12	---	---	---	---	---	3310	2490	5490	4370	2580	e3500	3790
13	---	---	---	---	---	2620	2440	5140	4230	2640	e5000	3790
14	---	---	---	---	---	2490	2450	4390	4920	3790	e7600	3610
15	---	---	---	---	---	2930	2470	3980	4120	3960	e6400	2520
16	---	---	---	---	---	3770	2800	3880	3630	4210	e5600	3550
17	---	---	---	---	---	3640	3510	6710	3900	5200	e5000	4020
18	---	---	---	---	---	3840	3270	5800	3910	5470	e4500	3500
19	---	---	---	---	---	4090	3030	4310	4500	5300	e5400	3980
20	---	---	---	---	---	4330	3030	3950	4120	4840	e5000	4140
21	---	---	---	---	---	5030	3250	3980	4040	3440	4550	3330
22	---	---	---	---	---	4290	3870	4350	4640	4070	4170	2410
23	---	---	---	---	---	3790	4610	4210	4620	5080	4540	2670
24	---	---	---	---	---	3490	3210	3610	3730	4730	3800	3110
25	---	---	---	---	---	3320	2610	5670	4700	4850	2800	2620
26	---	---	---	---	---	3270	2700	9410	4560	5200	3340	3000
27	---	---	---	---	---	4150	2790	13700	4140	4120	4300	2860
28	---	---	---	---	---	6830	2670	13300	3220	2960	3080	3660
29	---	---	---	---	---	7550	2570	14100	2970	2970	4150	3240
30	---	---	---	---	---	6440	3950	11600	3120	2980	4210	4260
31	---	---	---	---	---	5270	---	8820	---	3310	3710	---
TOTAL	---	---	---	---	---	132730	105680	185760	139400	124700	133480	102960
MEAN	---	---	---	---	---	7550	5730	14100	6660	5530	8450	4430
MIN	---	---	---	---	---	2490	2440	2360	2970	2580	2300	2410
CFSM	---	---	---	---	---	1.49	1.23	2.09	1.62	1.40	1.50	1.20
IN.	---	---	---	---	---	1.72	1.37	2.41	1.81	1.62	1.73	1.33

e Estimated

TENNESSEE RIVER BASIN

03490500 HOLSTON RIVER AT SURGOINSVILLE, TN--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4800	2050	9460	5530	5360	10700	4970	6560	8250	6780	3190	2170
2	4400	2110	18300	4880	4240	12000	4320	6450	7410	4550	3550	2190
3	4660	2640	11700	4370	3950	14400	4180	6090	6320	3670	2880	3400
4	5000	2530	7060	4010	4190	20300	3860	4730	6460	2320	2930	3090
5	4090	3070	6510	4160	7090	14300	3560	5200	6830	2480	3770	2570
6	2730	2540	6490	6080	7990	14400	3260	5500	6370	2280	3540	3540
7	2560	2740	6130	7160	5700	11400	2900	4630	4910	1820	3140	2160
8	4600	4650	7470	6890	5370	8180	3090	4710	4200	2590	3280	2200
9	4920	4900	8340	11000	5900	7490	2590	3250	3930	2670	2270	3260
11	4230	2510	6360	8960	4920	6320	2610	3320	3960	2990	2360	3380
12	2820	2170	6480	7480	4620	7640	2660	3490	3910	2870	2510	3290
13	2250	2970	7770	7400	4580	7520	2990	3720	5900	2790	3140	3030
14	2780	4030	6470	6870	4790	7720	3150	3610	6030	2710	3530	2160
15	3620	4670	4390	6170	4340	7370	2980	3530	6030	3600	3520	2190
16	3750	3140	4860	6280	3790	6440	2620	3540	5010	3480	3510	2990
17	3700	2200	5620	8210	4190	5370	2240	3090	4630	2570	2430	2940
18	3750	2740	7040	7340	3680	6180	2460	2560	4680	2670	3120	2900
19	3250	3860	7950	5600	3320	8380	2800	2390	4800	2990	3140	2330
21	2320	3750	6170	4190	3290	8660	2770	3110	3450	2500	3410	2310
22	2460	6450	4160	4270	4560	5090	3350	3440	3590	3380	3280	2320
23	2280	6090	4540	5350	4510	4330	5560	3130	3850	4100	3010	3200
24	2150	3760	5490	6160	4440	4590	6760	3410	4360	3840	2440	3460
25	2110	4560	6030	7250	4340	7720	6350	3460	4350	3920	2310	3790
26	2120	7050	6730	6700	4110	6460	4680	3270	4580	3660	3080	2630
27	2110	6550	6550	5880	4700	5560	3790	10100	2930	3690	3270	2050
28	2150	4440	4650	6310	7140	4910	5690	11100	2980	4100	4250	2160
29	2140	4380	3620	9970	---	4200	8420	10000	2810	4240	4210	2110
30	2100	4480	3810	10600	---	4050	7210	8990	3970	3420	3150	2820
31	2030	---	4900	8360	---	3850	---	8250	---	2990	3290	---
TOTAL	97920	114230	209490	208080	133810	255390	117310	151470	144370	100690	97510	82490
MEAN	3159	3808	6758	6712	4779	8238	3910	4886	4812	3248	3145	2750
MAX	5000	7050	18300	11000	7990	20300	8420	11100	8250	6780	4250	3790
MIN	2030	2050	3620	4010	3010	3850	2240	2390	2810	1820	2270	2050
CFSM	1.10	1.33	2.35	2.34	1.67	2.87	1.36	1.70	1.68	1.13	1.10	.96
IN.	1.27	1.48	2.72	2.70	1.73	3.31	1.52	1.96	1.87	1.31	1.26	1.07

TENNESSEE RIVER BASIN

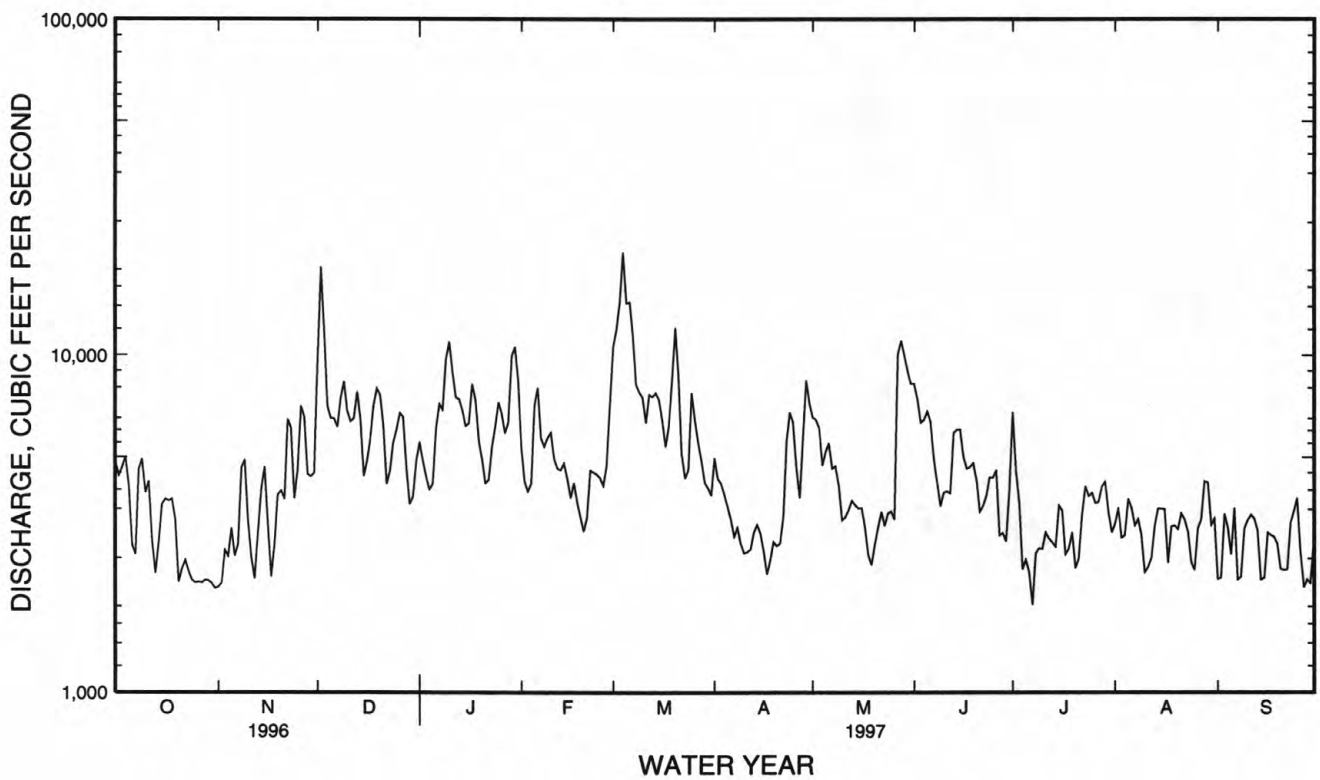
03490500 HOLSTON RIVER AT SURGOINSVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	2593	2962	4127	4937	5549	5277	4367	3813	3010	2956	2990	2673
MAX	6767	9802	10680	13430	15280	12100	10750	8586	4812	5648	5627	5617
(WY)	1978	1978	1973	1974	1957	1975	1987	1958	1997	1949	1942	1979
MIN	607	657	1005	1326	1731	1711	1224	1245	1003	950	895	800
(WY)	1942	1954	1942	1942	1954	1988	1986	1941	1941	1944	1944	1946

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1941 - 1997	
ANNUAL TOTAL	1712760			
ANNUAL MEAN	4692		3766	
HIGHEST ANNUAL MEAN			6229	1974
LOWEST ANNUAL MEAN			1837	1988
HIGHEST DAILY MEAN	20300	Mar 4	52500	Jan 21 1947
LOWEST DAILY MEAN	1820	Jul 7	528	Oct 21 1941
ANNUAL SEVEN-DAY MINIMUM	2100	Oct 27	566	Oct 20 1941
INSTANTANEOUS PEAK FLOW	22200	Mar 4	59600	Feb 18 1944
INSTANTANEOUS PEAK STAGE	9.23	Mar 4	17.48	Feb 18 1944
INSTANTANEOUS LOW FLOW	a1290	Jul 7	470	Oct 21 1941
ANNUAL RUNOFF (CFSM)	1.64		1.31	
ANNUAL RUNOFF (INCHES)	22.20		17.83	
10 PERCENT EXCEEDS	7620		6830	
50 PERCENT EXCEEDS	3970		3000	
90 PERCENT EXCEEDS	2380		1200	

a Also occurred July 8.



TENNESSEE RIVER BASIN

03490500 HOLSTON RIVER AT SURGOINSVILLE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-82, April 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 28...	1400	320	8.1	17.5	739	8.4	91	--	--	--	--	110
DEC 04...	1445	243	7.8	9.5	744	10.4	93	160	--	--	--	100
FEB 11...	1300	310	8.2	6.5	742	11.9	99	100	340	--	--	120
APR 29...	1345	267	8.1	15.0	732	8.7	90	K1500	--	1700	>8000	110
JUN 11...	1230	267	8.2	19.5	736	11.0	124	K23	--	K46	330	110
AUG 13...	1300	249	7.9	23.5	737	10.5	128	120	--	73	1300	94

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIEL MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 28...	16	32	8.0	17	24	0.7	2.2	--	118	97	30	15
DEC 04...	12	30	6.9	6.9	12	0.3	1.8	0	111	91	16	7.2
FEB 11...	12	36	7.8	12	17	0.5	1.5	0	134	110	21	13
APR 29...	18	33	6.7	8.6	14	0.4	1.8	0	113	93	18	10
JUN 11...	17	30	7.3	11	19	0.5	1.8	1	107	88	20	12
AUG 13...	12	27	6.8	11	20	0.5	1.9	0	100	82	20	10

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT 28...	0.20	3.8	174	169	0.24	0.600	0.030	0.630	0.050	<0.20	0.20	0.83
DEC 04...	<0.10	5.6	136	133	0.18	0.840	0.020	0.860	0.040	<0.20	0.40	1.3
FEB 11...	<0.10	5.4	168	167	0.23	0.910	0.020	0.930	0.020	<0.20	<0.20	--
APR 29...	<0.10	5.0	148	143	0.20	0.739	0.016	0.755	0.051	<0.20	0.55	1.3
JUN 11...	0.11	4.2	150	143	0.20	0.536	0.013	0.549	<0.015	<0.20	0.29	0.84
AUG 13...	0.17	5.0	148	134	0.20	0.634	0.019	0.653	0.026	0.25	0.25	0.90

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

TENNESSEE RIVER BASIN

03490500 HOLSTON RIVER AT SURGOINSVILLE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
OCT												
28...	0.080	0.060	0.070	0.08	7.0	8.0	2.2	0.40	<0.002	<0.002	0.018	<0.002
DEC												
04...	0.060	0.020	0.030	0.06	9.0	5.0	1.8	0.90	<0.002	<0.002	0.012	<0.002
FEB												
11...	0.020	0.050	0.020	0.02	6.0	4.0	1.6	--	<0.002	<0.002	0.009	<0.002
APR												
29...	0.088	0.036	0.033	0.09	13	6.8	2.2	0.90	<0.002	<0.002	0.017	<0.002
JUN												
11...	0.060	0.038	0.043	0.06	17	4.6	3.0	0.20	<0.002	<0.002	0.030	<0.002
AUG												
13...	0.071	0.054	0.062	0.07	8.7	6.2	2.0	--	<0.002	<0.002	0.017	<0.002

DATE	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT												
28...	<0.002	<0.004	<0.004	E0.008	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005	<0.006
DEC												
04...	<0.002	<0.004	<0.004	E0.008	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.004	<0.006
FEB												
11...	<0.002	0.005	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.004	<0.006
APR												
29...	<0.002	0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	<0.006
JUN												
11...	<0.002	<0.004	<0.004	E0.006	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.012	<0.006
AUG												
13...	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.004	<0.006

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT											
28...	<0.004	<0.007	E0.008	<0.005	<0.002	<0.003	<0.003	<0.002	0.009	<0.017	<0.004
DEC											
04...	<0.004	<0.007	E0.004	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
FEB											
11...	<0.004	<0.007	E0.004	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
APR											
29...	<0.004	<0.007	E0.012	0.026	<0.002	<0.003	<0.003	<0.002	0.318	<0.017	<0.004
JUN											
11...	<0.004	<0.007	E0.007	0.009	<0.002	<0.003	<0.003	<0.002	0.004	<0.017	<0.004
AUG											
13...	<0.004	<0.007	E0.013	0.021	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

E--Estimated

TENNESSEE RIVER BASIN

03490500 HOLSTON RIVER AT SURGOINSVILLE, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT											
28...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
DEC											
04...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB											
11...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
APR											
29...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUN											
11...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
AUG											
13...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
28...	<0.003	<0.004	<0.013	0.018	<0.007	<0.013	<0.001	<0.002	<0.002	4	84
DEC											
04...	<0.003	<0.004	<0.013	0.018	<0.007	<0.013	<0.001	<0.002	<0.002	22	92
FEB											
11...	<0.003	<0.004	<0.013	0.016	<0.007	<0.013	<0.001	<0.002	<0.002	8	97
APR											
29...	<0.003	<0.004	<0.013	0.026	<0.007	<0.013	<0.001	<0.002	<0.002	65	91
JUN											
11...	<0.003	<0.004	<0.013	0.018	<0.007	<0.013	<0.001	<0.002	<0.002	8	87
AUG											
13...	<0.003	<0.004	<0.013	0.020	<0.007	<0.013	<0.001	<0.002	<0.002	8	81

TENNESSEE RIVER BASIN

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 mi^2

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.--Data collection platform and crest-stage gage. Datum of gage is 1,128.9 ft above sea level (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.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 3	1445	*2,420	*6.04	No other peak greater than base discharge.			

Minimum discharge, 4.1 ft^3/s, Sept. 3, 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	679	192	96	296	74	131	46	66	12	4.9
2	11	15	245	129	82	266	67	98	53	45	11	4.9
3	12	15	132	100	72	1300	61	170	40	28	10	4.6
4	12	12	93	83	137	453	56	147	132	23	9.6	4.5
5	10	11	76	216	347	328	52	106	58	25	9.3	4.6
6	9.4	10	86	172	196	599	56	88	40	22	8.7	5.2
7	9.1	9.8	236	115	141	264	59	72	33	19	8.1	5.2
8	8.9	127	193	91	162	196	49	63	33	17	7.6	5.1
9	8.8	68	118	309	170	157	45	59	38	16	7.7	5.2
10	9.0	40	88	227	134	158	42	55	37	15	7.6	11
11	9.0	34	74	146	112	133	40	47	30	15	7.9	17
12	8.3	28	91	109	96	115	48	43	28	14	8.1	11
13	7.9	23	164	92	86	103	140	42	30	13	7.8	8.3
14	7.9	22	112	80	83	238	89	42	79	13	11	6.8
15	7.7	20	88	74	74	231	67	40	110	12	10	6.0
16	7.6	18	75	220	65	157	57	35	61	11	8.6	5.7
17	7.4	17	66	139	60	130	52	32	46	11	7.4	5.5
18	7.7	31	57	103	55	121	47	31	40	10	7.1	5.6
19	8.8	110	51	87	53	567	45	29	40	9.3	7.2	5.7
20	11	54	44	76	50	336	44	35	34	9.2	7.8	5.4
21	9.6	50	38	67	126	205	48	33	29	8.9	9.6	5.2
22	8.9	126	38	64	274	158	163	27	26	10	8.1	6.0
23	8.9	61	36	95	139	125	150	25	25	54	6.9	5.9
24	9.9	45	54	121	106	104	147	24	22	29	6.4	7.6
25	11	38	91	216	90	92	108	24	20	19	6.0	14
26	9.8	92	65	143	86	90	83	33	20	14	5.9	11
27	9.9	65	57	111	259	78	71	48	22	13	6.0	8.1
28	10	48	52	232	374	73	82	38	20	16	6.0	6.9
29	14	40	78	192	---	114	395	30	18	32	5.7	7.3
30	13	108	97	139	---	100	186	33	17	20	5.3	8.1
31	10	---	279	113	---	89	---	30	---	15	5.1	---
TOTAL	301.5	1348.8	3653	4253	3725	7376	2623	1710	1227	624.4	245.5	212.3
MEAN	9.73	45.0	118	137	133	238	87.4	55.2	40.9	20.1	7.92	7.08
MAX	14	127	679	309	374	1300	395	170	132	66	12	17
MIN	7.4	9.8	36	64	50	73	40	24	17	8.9	5.1	4.5
CFSM	.21	.95	2.49	2.90	2.81	5.03	1.85	1.17	.86	.43	.17	.15
IN.	.24	1.06	2.87	3.34	2.93	5.80	2.06	1.34	.96	.49	.19	.17

TENNESSEE RIVER BASIN

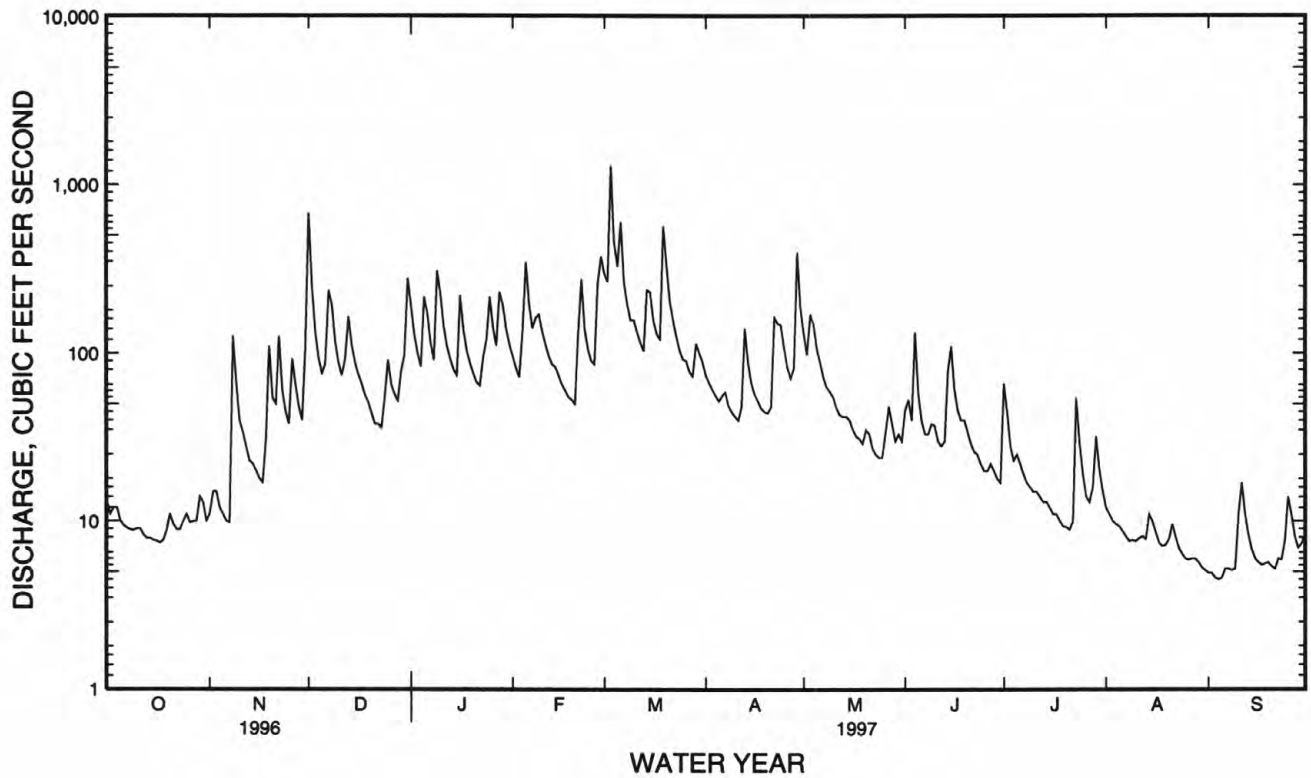
03491000 BIG CREEK NEAR ROGERSVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	15.0	30.9	73.9	106	136	134	86.4	57.8	30.7	23.4	17.6	12.1
MAX	109	124	258	331	472	366	220	206	150	96.5	67.1	58.7
(WY)	1972	1974	1992	1974	1994	1963	1977	1958	1989	1960	1942	1989
MIN	3.53	4.43	5.06	9.33	34.4	27.4	15.4	10.7	7.61	4.35	2.45	3.38
(WY)	1989	1988	1966	1981	1968	1983	1986	1985	1941	1988	1988	1984

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1941 - 1997	
ANNUAL TOTAL	30111.3		27299.5			
ANNUAL MEAN	82.3		74.8		59.9	
HIGHEST ANNUAL MEAN					123	1994
LOWEST ANNUAL MEAN					20.9	1988
HIGHEST DAILY MEAN	1450	Jan 27	1300	Mar 3	a,e4000	Feb 11 1994
LOWEST DAILY MEAN	7.4	Oct 17	4.5	Sep 4	1.4	Aug 18 1988
ANNUAL SEVEN-DAY MINIMUM	7.8	Oct 12	4.8	Aug 31	1.8	Aug 14 1988
INSTANTANEOUS PEAK FLOW			2420	Mar 3	a5760	Mar 12 1963
INSTANTANEOUS PEAK STAGE			6.04	Mar 3	b,c12.14	Mar 27 1994
INSTANTANEOUS LOW FLOW			d4.1	Sep 3	1.3	Sep 23 1955
ANNUAL RUNOFF (CFSM)	1.74		1.58		1.27	
ANNUAL RUNOFF (INCHES)	23.68		21.47		17.21	
10 PERCENT EXCEEDS	164		166		129	
50 PERCENT EXCEEDS	53		42		24	
90 PERCENT EXCEEDS	11		7.6		5.5	

a From rating curve extended above 3,000 ft^3/s on basis of contracted-opening measurement of peak flow.
b Due to backwater from log jam.
c From flood marks.
d Also occurred on Sept. 4.
e Estimated.



TENNESSEE RIVER BASIN

03491544 CROCKETT CREEK BELOW ROGERSVILLE, TN

LOCATION.--Lat 36°22'47", long 83°02'48", Hawkins County, Hydrologic Unit 06010104, on right bank at Rogersville sewage treatment plant, 3.0 mi southwest of Rogersville, and at mile 1.2.

DRAINAGE AREA.--4.67 mi^2.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1092.53 ft above sea level.

REMARKS.--Records good. Periodic observations of water tempersture and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 3	Unknown	*303	*3.29	No other peak greater than base discharge.			

Minimum discharge, 0.40 ft^3/s, Sept. 5, 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.9	31	12	7.3	29	5.2	10	8.8	32	.98	.59
2	1.7	2.7	12	8.5	6.3	25	4.8	7.8	3.4	5.3	.97	.58
3	1.8	1.7	9.0	7.0	5.8	e65	4.4	24	3.0	3.9	.95	.57
4	1.3	1.5	7.3	6.0	11	31	4.1	11	2.8	6.0	.95	.45
5	1.2	1.4	6.7	14	25	44	3.8	8.2	2.5	3.5	.95	.44
6	1.1	1.3	6.5	8.0	14	39	10	7.0	2.2	2.6	.81	.46
7	1.1	1.2	41	6.6	11	20	5.0	5.8	2.2	2.2	.79	.48
8	1.0	22	13	6.2	18	14	4.4	5.2	2.2	1.9	.77	.51
9	1.0	4.7	8.5	37	13	12	4.0	5.6	3.5	1.9	.77	7.4
10	.97	4.5	6.9	16	10	15	3.6	4.1	2.4	1.8	.75	17
11	.91	3.7	6.4	11	8.1	9.8	3.3	3.6	2.4	1.6	.77	2.3
12	.88	3.0	13	8.3	7.0	8.2	7.5	3.3	3.4	1.6	.76	1.5
13	.87	2.7	9.5	6.9	7.1	7.8	5.3	4.0	7.4	1.6	4.6	1.2
14	.86	2.9	7.7	6.1	6.1	27	4.1	3.1	18	1.5	1.5	1.0
15	.86	2.5	6.4	9.7	5.6	15	3.8	3.0	5.3	1.5	1.1	.96
16	.81	2.3	5.8	18	5.0	11	3.5	2.9	3.6	3.2	1.0	.86
17	.78	2.1	5.1	9.4	4.6	9.0	3.4	2.4	3.2	1.6	.90	.81
18	1.4	8.9	4.4	7.6	4.3	12	3.0	2.5	3.1	1.5	1.3	.77
19	1.0	5.7	4.0	6.5	4.1	48	3.0	2.3	2.5	1.4	.90	.71
20	.94	4.1	3.6	5.8	3.8	24	2.8	2.5	2.3	1.4	1.8	.76
21	.88	7.1	3.3	5.4	17	15	9.5	1.9	2.2	1.4	1.1	.71
22	.87	4.9	3.1	6.9	17	11	6.2	1.8	1.8	6.9	.82	.68
23	1.5	3.9	3.0	6.4	11	9.2	7.3	2.0	2.0	2.5	.71	.76
24	1.1	3.7	6.5	13	8.9	8.0	6.0	2.4	1.9	1.8	.67	4.5
25	1.0	4.5	4.3	12	7.9	7.0	4.9	3.3	1.8	1.6	.68	1.9
26	1.2	4.7	3.9	8.7	8.0	8.5	4.2	4.0	1.9	1.4	.67	1.3
27	1.2	3.5	3.9	7.4	23	5.9	4.6	4.1	1.6	1.5	.68	1.1
28	1.4	3.5	3.6	25	42	5.8	27	2.6	1.4	5.4	.70	1.3
29	1.3	3.0	9.5	13	---	9.6	39	2.3	1.3	1.7	.66	2.2
30	1.1	19	7.4	10	---	6.9	15	2.4	1.3	1.3	.62	1.2
31	1.1	---	25	8.5	---	6.0	---	2.3	---	1.1	.60	---
TOTAL	34.63	139.6	281.3	326.9	311.9	558.7	212.7	147.4	101.4	104.6	31.23	55.00
MEAN	1.12	4.65	9.07	10.5	11.1	18.0	7.09	4.75	3.38	3.37	1.01	1.83
MAX	1.8	22	41	37	42	65	39	24	18	32	4.6	17
MIN	.78	1.2	3.0	5.4	3.8	5.8	2.8	1.8	1.3	1.1	.60	.44
CFSM	.24	1.00	1.94	2.26	2.39	3.86	1.52	1.02	.72	.72	.22	.39
IN.	.28	1.11	2.24	2.60	2.48	4.45	1.69	1.17	.81	.83	.25	.44

e Estimated

TENNESSEE RIVER BASIN

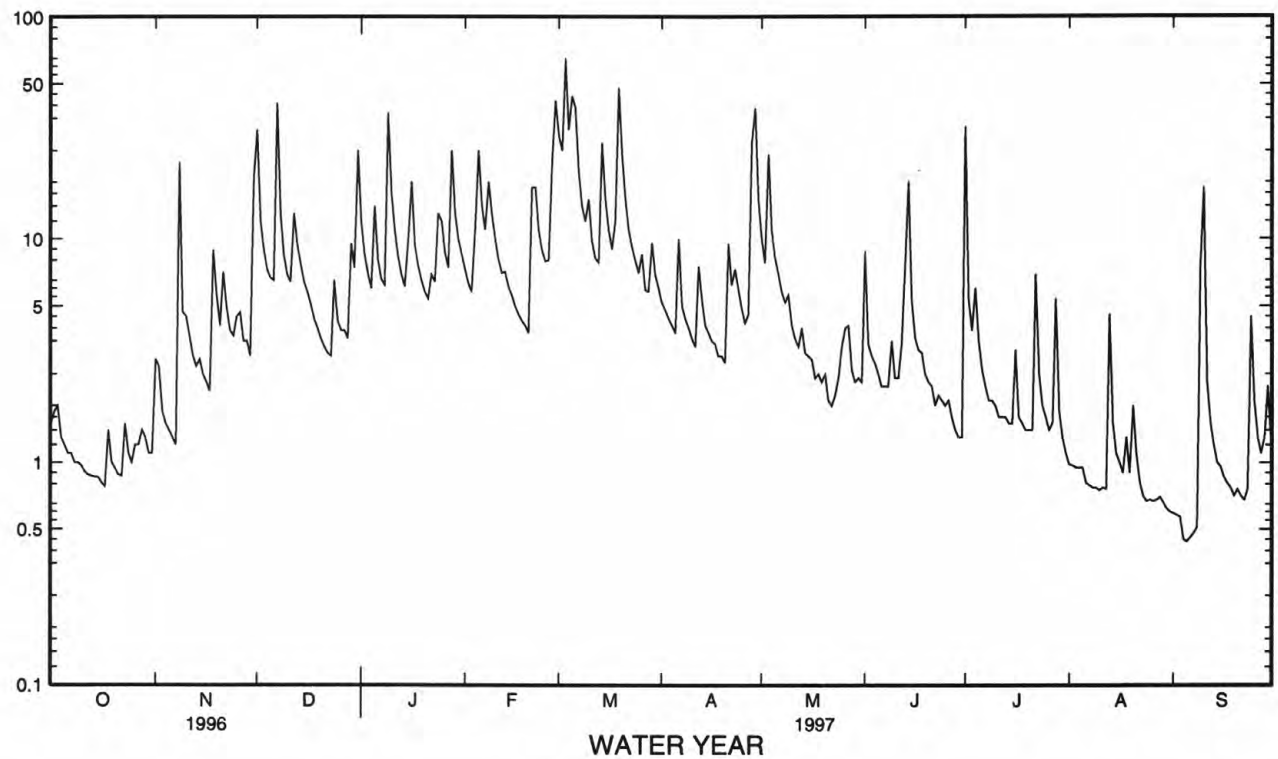
03491544 CROCKETT CREEK BELOW ROGERSVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	1.59	3.28	8.02	10.3	14.2	12.4	6.73	5.33	4.60	3.11	2.96	2.50
MAX	3.75	4.69	18.7	16.2	31.3	26.4	18.1	9.82	9.95	7.51	5.39	7.63
(WY)	1990	1990	1992	1996	1994	1994	1994	1995	1989	1996	1994	1989
MIN	.53	1.37	2.41	7.30	6.73	6.38	1.62	2.37	1.01	.59	1.01	.80
(WY)	1989	1991	1995	1991	1992	1992	1995	1994	1993	1993	1997	1992

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	2519.93		2305.36			
ANNUAL MEAN	6.89		6.32		6.20	
HIGHEST ANNUAL MEAN					10.1	1994
LOWEST ANNUAL MEAN					4.42	1995
HIGHEST DAILY MEAN	72	Jan 27	65	Mar 3	223	Mar 27 1994
LOWEST DAILY MEAN	.78	Oct 17	.44	Sep 5	.31	Oct 20 1988
ANNUAL SEVEN-DAY MINIMUM	.85	Oct 11	.50	Sep 2	.34	Oct 14 1988
INSTANTANEOUS PEAK FLOW			303	Mar 3	UNKNOWN	Sep 15 1989
INSTANTANEOUS PEAK STAGE			a3.29	Mar 3	5.10	Sep 15 1989
INSTANTANEOUS LOW FLOW			b.40	Sep 5	c.31	Oct 20 1988
ANNUAL RUNOFF (CFSM)	1.47		1.35		1.33	
ANNUAL RUNOFF (INCHES)	20.07		18.36		18.05	
10 PERCENT EXCEEDS	14		14		13	
50 PERCENT EXCEEDS	4.4		3.6		3.1	
90 PERCENT EXCEEDS	1.3		.86		.89	

a From crest-stage gage.
b Also occurred Sept. 6.
c Also occurred July 24, 25, 1993.



TENNESSEE RIVER BASIN

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 Tennessee 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 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Data logger and crest-stage gage. Datum of gage is 1,106.92 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	1230	3,110	5.65	Mar. 3	1130	*8,050	*8.71
Feb. 28	1345	4,530	6.67	June 14	1015	5,670	7.38

Minimum discharge, 25 ft^3/s, Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	90	1730	508	435	1520	686	696	646	477	86	44
2	177	158	953	472	370	938	552	529	535	408	81	54
3	368	119	619	405	326	3700	464	1700	498	339	77	42
4	230	107	463	350	408	1770	400	1110	416	306	73	40
5	189	101	394	637	699	1110	353	749	339	325	116	36
6	162	97	340	574	496	1190	474	579	290	251	91	34
7	144	95	564	479	432	863	416	463	257	226	73	32
8	129	908	552	407	488	675	357	388	230	208	70	31
9	119	620	442	545	450	546	324	366	229	261	67	33
10	108	400	375	493	423	529	293	311	213	362	68	44
11	104	302	332	430	372	441	269	273	197	261	78	42
12	95	249	684	363	332	384	334	250	196	230	107	38
13	89	220	735	318	348	351	301	235	651	208	73	34
14	85	250	565	287	343	736	263	215	2800	188	68	32
15	81	250	462	282	339	694	246	200	1380	240	62	30
16	77	238	390	613	311	560	231	183	785	312	58	29
17	75	231	388	459	294	474	242	173	579	228	56	27
18	100	326	324	393	275	415	214	163	460	194	62	29
19	105	472	292	353	261	1050	220	157	379	173	57	29
20	78	378	255	314	249	1010	214	162	432	161	54	26
21	74	368	237	282	398	743	204	147	573	175	62	30
22	72	399	227	285	488	586	275	134	447	149	52	31
23	103	350	221	346	386	474	450	127	331	161	48	29
24	90	309	278	459	344	399	705	122	284	145	45	627
25	78	289	265	918	315	351	534	139	274	130	44	309
26	77	453	243	679	297	505	428	275	465	118	42	131
27	88	351	251	532	454	417	374	330	1080	110	41	85
28	91	317	238	929	2270	484	594	662	828	104	41	71
29	114	284	317	834	---	805	1870	401	856	100	40	94
30	99	383	303	648	---	697	1010	351	567	99	38	71
31	89	---	453	521	---	850	---	299	---	96	36	---
TOTAL	3695	9114	13892	15115	12603	25267	13297	11889	17217	6745	1966	2184
MEAN	119	304	448	488	450	815	443	384	574	218	63.4	72.8
MAX	368	908	1730	929	2270	3700	1870	1700	2800	477	116	627
MIN	72	90	221	282	249	351	204	122	196	96	36	26
CFSM	1.12	2.87	4.23	4.60	4.25	7.69	4.18	3.62	5.41	2.05	.60	.69
IN.	1.30	3.20	4.88	5.30	4.42	8.87	4.67	4.17	6.04	2.37	.69	.77

TENNESSEE RIVER BASIN

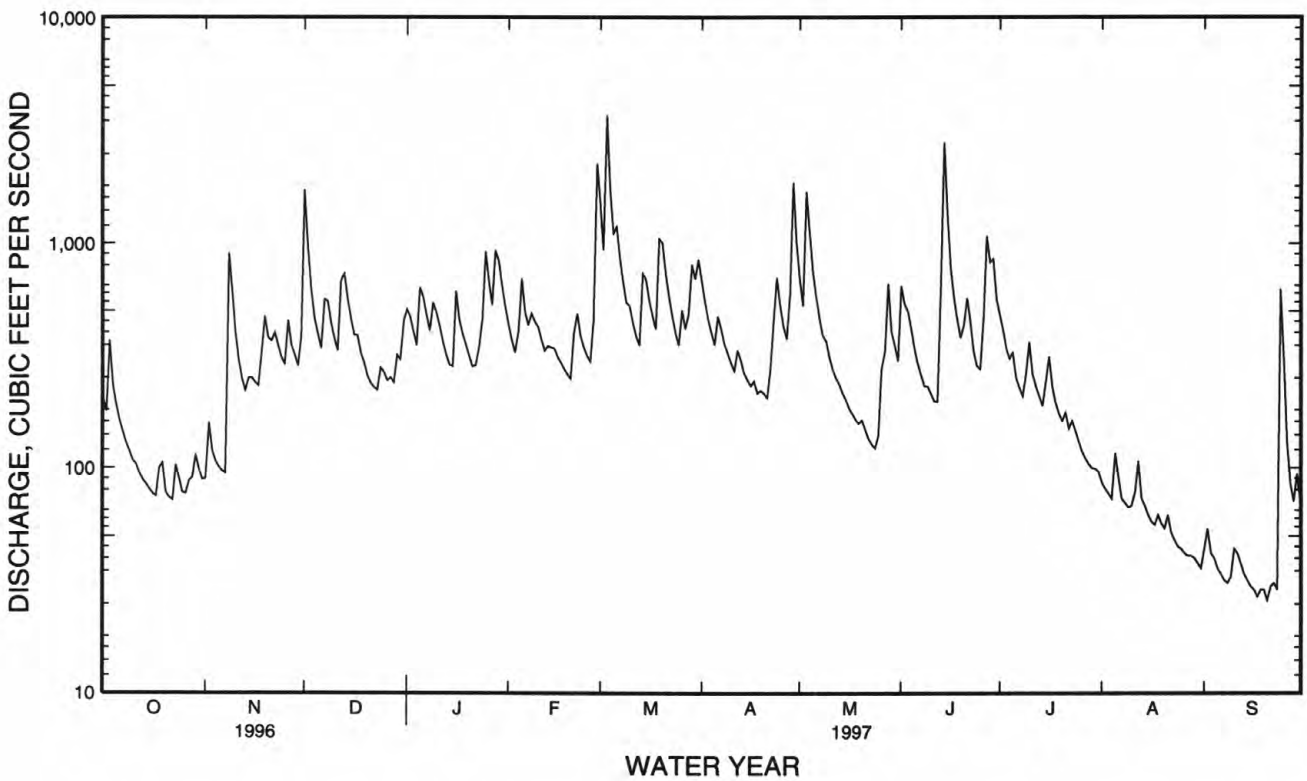
03497300 LITTLE RIVER ABOVE TOWNSEND, TN--Continued
(Hydrologic bench-mark station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	130	215	352	415	454	531	383	282	224	195	177	121
MAX	373	436	725	796	857	1195	808	774	648	815	530	493
(WY)	1973	1967	1992	1996	1990	1994	1994	1984	1989	1971	1966	1989
MIN	28.9	36.0	58.8	72.7	191	185	141	124	50.4	63.8	40.5	43.2
(WY)	1988	1988	1966	1981	1978	1988	1995	1986	1988	1993	1987	1987

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	126676		132984			
ANNUAL MEAN	346		364		289	
HIGHEST ANNUAL MEAN					460	1994
LOWEST ANNUAL MEAN					141	1988
HIGHEST DAILY MEAN	4860	Jan 27	3700	Mar 3	9000	Mar 28 1994
LOWEST DAILY MEAN	64	Sep 15	26	Sep 20	23	Oct 18 1987
ANNUAL SEVEN-DAY MINIMUM	75	Jul 8	29	Sep 15	25	Oct 14 1987
INSTANTANEOUS PEAK FLOW			8050	Mar 3	27100	Mar 27 1994
INSTANTANEOUS PEAK STAGE			8.71	Mar 3	a15.75	Mar 27 1994
INSTANTANEOUS LOW FLOW			25	Sep 20	b21	Jan 18 1981
ANNUAL RUNOFF (CFSM)	3.27		3.44		2.73	
ANNUAL RUNOFF (INCHES)	44.46		46.67		37.08	
10 PERCENT EXCEEDS	602		695		563	
50 PERCENT EXCEEDS	278		297		199	
90 PERCENT EXCEEDS	89		58		63	

a From floodmarks in gage house.
b Result of freeze-up.



TENNESSEE RIVER BASIN

03498500 LITTLE RIVER NEAR MARYVILLE, TN

LOCATION.--Lat 35°47'10", long 83°53'04", Blount County, Hydrologic Unit 06010201, on left bank 200 ft above 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 mi^2.

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

GAGE.--Data-collection platform and crest-stage gage. Datum of gage is 850.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuations of flow caused by small mills above station. The town of Maryville diverted an average of about 4.0 ft^3/s (2.6 MGD) for municipal supply 100 ft upstream from gage. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1875, reached a stage of 31 ft, discharge, 50,000 ft^3/s, and flood of April 1, 1896, reached a stage of 26 ft, discharge, 36,000 ft^3/s, from reports by Tennessee Valley Authority. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 28	1845	8,790	14.12	May 3	1500	6,900	12.94
Mar. 3	1600	12,200	16.03	June 14	1300	*12,300	*16.10

Minimum discharge, 68 ft^3/s, Sept. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	154	2360	1300	841	3540	1160	1250	769	807	172	86
2	239	218	1660	964	735	1930	946	932	792	727	164	99
3	428	210	993	793	649	6840	821	4040	800	604	157	98
4	336	178	768	685	683	3560	735	2500	691	530	150	88
5	277	172	642	1420	1000	2330	663	1390	572	623	179	85
6	244	166	596	1210	824	3130	708	1050	477	453	190	80
7	218	162	1710	913	747	1830	750	857	423	396	155	78
8	204	1190	1380	773	912	1330	619	745	380	368	146	76
9	192	993	884	1220	914	1070	566	696	390	581	145	78
10	181	621	723	1050	835	1020	512	647	402	908	146	90
11	176	476	628	880	756	886	475	543	343	567	148	98
12	167	388	833	739	671	788	529	493	318	448	180	92
13	160	340	1220	644	665	724	563	458	1280	391	152	84
14	154	347	900	571	729	1020	457	421	6690	351	138	80
15	149	377	763	549	679	1080	421	390	3210	318	132	76
16	144	347	662	1510	616	909	397	359	1500	524	126	73
17	139	334	657	978	575	807	425	337	1110	381	122	72
18	149	541	566	803	530	736	389	318	937	322	131	72
19	197	906	506	712	499	2050	381	302	806	291	127	72
20	155	621	436	636	470	2060	384	313	691	268	135	70
21	143	618	388	560	915	1360	363	290	1010	279	131	70
22	139	725	374	526	1490	1060	502	262	813	258	123	71
23	151	566	364	625	894	877	794	249	632	1220	112	73
24	184	499	483	1120	758	764	1080	241	529	299	108	661
25	150	461	585	2090	676	689	885	255	544	253	103	710
26	145	701	478	1310	619	878	734	429	527	228	100	246
27	146	544	471	988	917	791	649	453	1800	213	97	164
28	159	487	433	2320	4320	827	940	1030	1300	202	94	136
29	173	444	698	1880	---	1200	4090	673	1540	197	94	143
30	168	564	712	1250	---	1100	2070	580	984	190	92	138
31	155	---	1160	988	---	1440	---	501	---	185	87	---
TOTAL	5902	14350	25033	32007	24919	48626	24008	23004	32260	13382	4136	4059
MEAN	190	478	808	1032	890	1569	800	742	1075	432	133	135
MAX	428	1190	2360	2320	4320	6840	4090	4040	6690	1220	190	710
MIN	139	154	364	526	470	689	363	241	318	185	87	70
CFSM	.71	1.78	3.00	3.84	3.31	5.83	2.97	2.76	4.00	1.60	.50	.50
IN.	.82	1.98	3.46	4.43	3.45	6.72	3.32	3.18	4.46	1.85	.57	.56

TENNESSEE RIVER BASIN

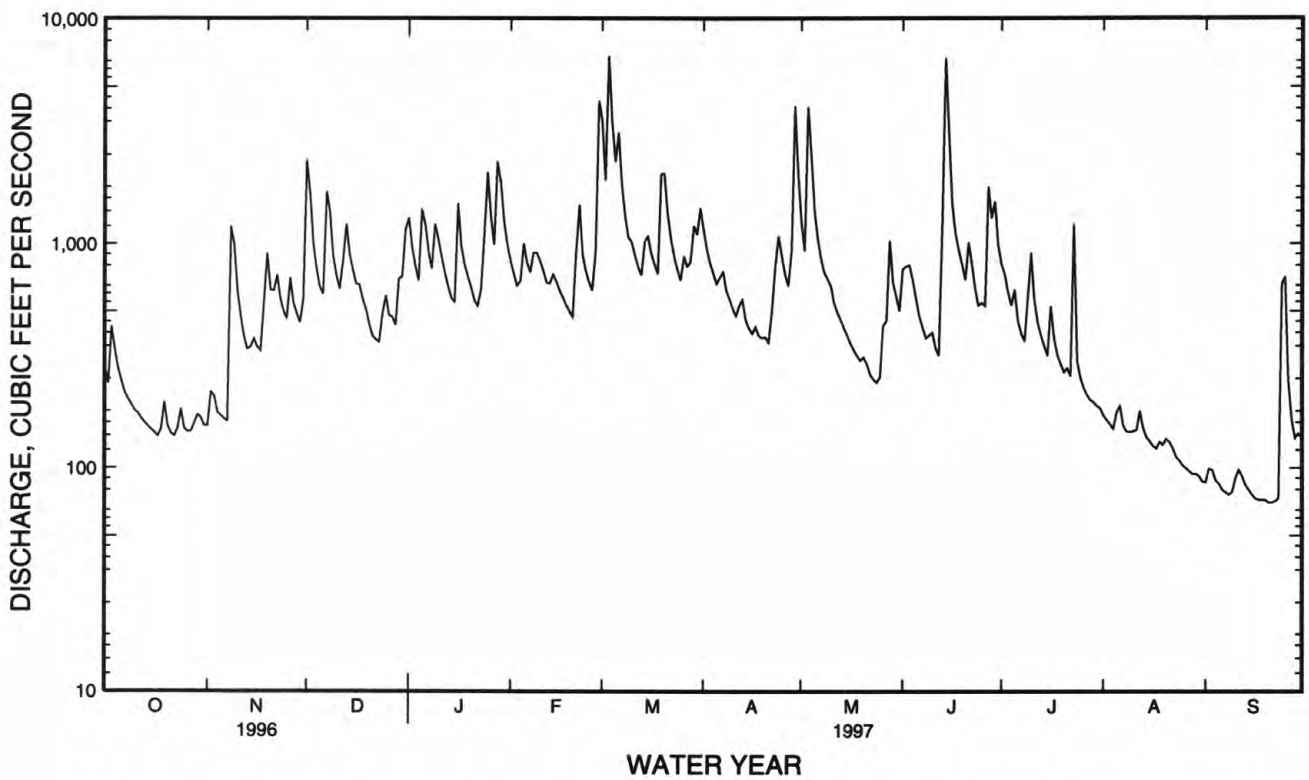
03498500 LITTLE RIVER NEAR MARYVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	203	350	639	806	954	1030	743	495	376	319	260	181
MAX	830	1160	1679	1792	2254	2517	1701	1782	1261	1391	867	1019
(WY)	1973	1958	1962	1974	1957	1994	1994	1984	1989	1971	1971	1989
MIN	50.7	65.4	103	121	308	385	224	208	86.1	100	78.1	55.6
(WY)	1988	1988	1966	1981	1954	1988	1986	1986	1988	1952	1987	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	212591		251686			
ANNUAL MEAN	581		690		528	
HIGHEST ANNUAL MEAN					862	1994
LOWEST ANNUAL MEAN					220	1988
HIGHEST DAILY MEAN	7940	Jan 27	6840	Mar 3	23100	Mar 28 1994
LOWEST DAILY MEAN	100	Jul 13	a70	Sep 20	43	Oct 19 1987
ANNUAL SEVEN-DAY MINIMUM	116	Jul 7	71	Sep 16	45	Oct 14 1987
INSTANTANEOUS PEAK FLOW			12300	Jun 14	b42100	Mar 28 1994
INSTANTANEOUS PEAK STAGE			16.10	Jun 14	27.95	Mar 28 1994
INSTANTANEOUS LOW FLOW			a68	Sep 20	32	Aug 27 1956
ANNUAL RUNOFF (CFSM)	2.16		2.56		1.96	
ANNUAL RUNOFF (INCHES)	29.40		34.81		26.66	
10 PERCENT EXCEEDS	1010		1290		1040	
50 PERCENT EXCEEDS	477		541		319	
90 PERCENT EXCEEDS	150		129		102	

a Also occurred Sept. 21.
b From rating curve extended above 14,800 ft^3/s on the basis of a contracted opening measurement and road overflow computations.



TENNESSEE RIVER BASIN

03498850 LITTLE RIVER NEAR ALCOA, TN

LOCATION.--Lat 35°48'32", long 83°55'36", Blount County, Hydrologic Unit 06010201, at Singleton Bend on left bank, 3.0 mi northeast of Alcoa, and at mile 9.7.

DRAINAGE AREA.--300 mi^2.

PERIOD OF RECORD.--October 1986 to current year, discharge for gage-height 14.7 and below only.

GAGE.--Water-stage recorder. Datum of gage is 814.22 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuations at low flow caused by small mills above station. The town of Maryville diverts an average of about 4.0 ft^3/s (2.6 MGD) for municipal supply 7.6 mi upstream from gage and the town of Alcoa at the gage diverts about 17.2 ft^3/s (11.1 MGD). Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 9,460 ft^3/s, June 14, gage height 14.34 ft; minimum 43 ft^3/s Sept. 8, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	126	2450	1360	877	4000	1140	1250	792	813	209	83
2	239	175	1740	998	749	1990	930	930	805	743	184	91
3	400	221	1000	815	669	6180	804	4090	858	652	186	98
4	355	177	763	706	682	4200	719	2720	732	582	170	85
5	273	170	659	1380	962	2480	657	1420	639	669	196	82
6	235	152	630	1250	832	3510	699	1060	565	535	240	76
7	211	141	1640	929	748	1960	735	865	519	468	179	72
8	199	1110	1470	778	889	1410	617	751	472	439	164	58
9	182	1140	889	1270	928	1130	574	705	475	597	163	71
10	168	676	730	1120	837	1050	536	678	503	954	164	83
11	166	515	651	907	763	930	515	577	433	631	167	97
12	156	413	703	761	688	810	556	543	406	508	195	90
13	143	353	1260	679	659	746	578	518	1240	467	183	82
14	142	336	905	611	738	967	503	495	5920	434	149	69
15	129	370	753	593	686	1100	475	464	3840	380	134	79
16	126	347	663	1520	639	913	452	435	1600	548	134	63
17	128	337	656	1030	600	811	480	412	1120	450	118	57
18	129	499	595	822	566	741	447	390	976	388	135	61
19	180	995	547	730	541	1920	428	386	855	353	135	59
20	145	654	499	664	527	2140	440	469	715	327	156	60
21	132	611	453	594	870	1390	424	366	995	335	139	61
22	123	789	437	560	1600	1070	527	332	853	326	132	62
23	127	594	427	636	922	885	744	326	663	1520	117	66
24	173	524	489	1010	761	767	1020	322	592	431	103	428
25	137	474	616	2110	697	696	845	319	617	326	105	901
26	131	729	522	1350	639	852	714	443	565	285	102	329
27	132	577	522	997	962	790	636	547	1690	270	98	174
28	141	508	490	2290	3690	806	948	1010	1190	255	86	141
29	166	467	771	1980	---	1150	4200	717	1580	254	93	154
30	177	565	765	1300	---	1040	2120	636	982	237	92	151
31	147	---	1150	1020	---	1370	---	586	---	228	86	---
TOTAL	5576	14745	845	32770	24721	49804	24463	24762	33192	15405	4514	3983
MEAN	180	492	834	1057	883	1607	815	799	1106	497	146	133
MAX	400	1140	2450	2290	3690	6180	4200	4090	5920	1520	240	901
MIN	123	126	427	560	527	696	424	319	406	228	86	57

TENNESSEE RIVER BASIN

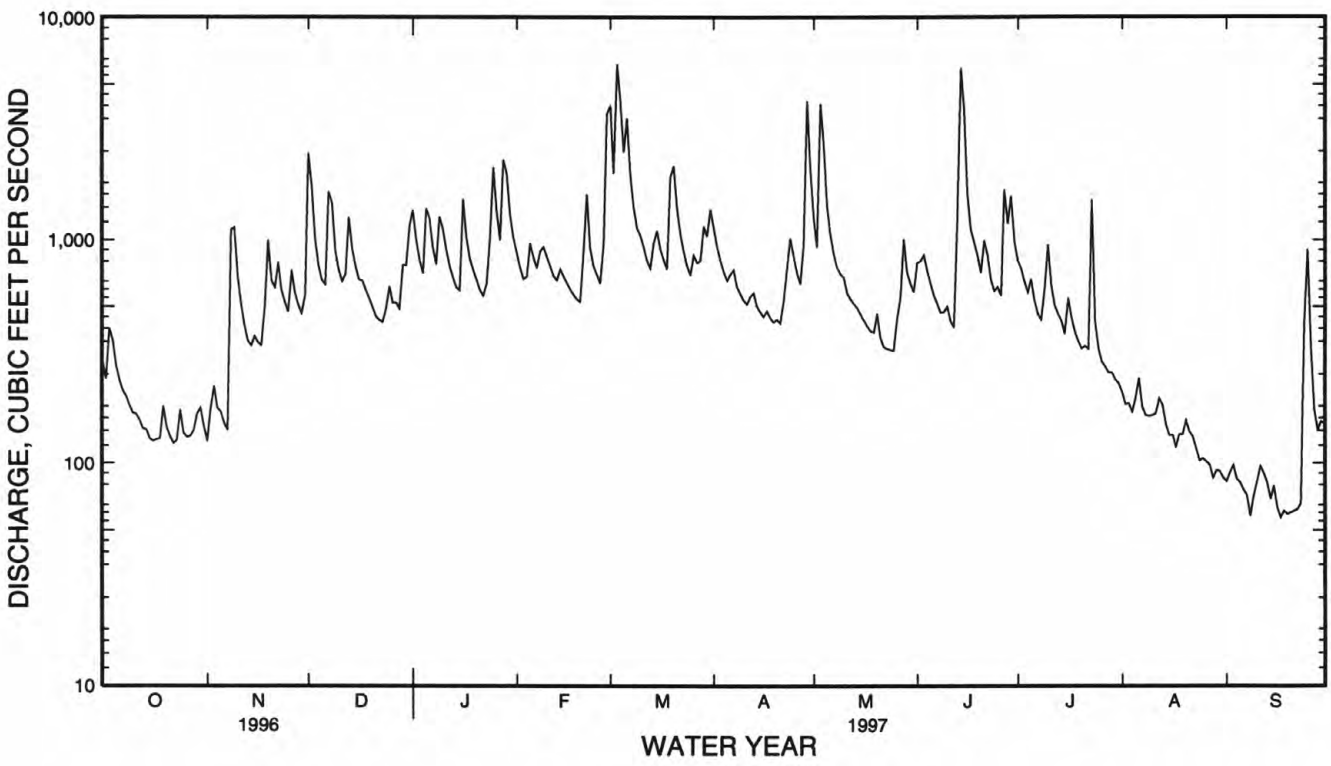
03498850 LITTLE RIVER NEAR ALCOA, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

MEAN	208	341	703	940	1064	1202	734	527	490	314	254	239
MAX	779	783	1624	1410	1980	2764	2008	989	1335	775	586	1123
(WY)	1990	1990	1992	1996	1994	1994	1994	1989	1989	1989	1994	1989
MIN	43.4	60.6	76	432	435	403	295	199	73.6	106	69.0	64.1
(WY)	1988	1988	1988	1988	1988	1988	1995	1988	1988	1988	1987	1987

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1987 - 1997	
ANNUAL TOTAL	224528		259780			
ANNUAL MEAN	613		712		582	
HIGHEST ANNUAL MEAN					953	1994
LOWEST ANNUAL MEAN					220	1988
HIGHEST DAILY MEAN	9000	Jan 27	6180	Mar 3	e28000	Mar 28 1994
LOWEST DAILY MEAN	111	Jul 13	57	Sep 17	28	Jul 10 1988
ANNUAL SEVEN-DAY MINIMUM	124	Jul 7	60	Sep 16	35	Oct 14 1987
INSTANTANEOUS PEAK STAGE			14.34	Jun 14	25.63	Mar 28 1994
INSTANTANEOUS LOW FLOW			a 43	Sep 8	23	Jul 10 1988
10 PERCENT EXCEEDS	1040		1320		1150	
50 PERCENT EXCEEDS	499		574		359	
90 PERCENT EXCEEDS	142		127		92	

a Also occurred Sept. 20.
e Estimated



TENNESSEE RIVER BASIN
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 mi^2.

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.--Data collection platform. Datum of gage is 1,060.7 ft above sea level. April 1, 1919, to Sept. 30, 1927, nonrecording gage on railroad bridge 23.3 mi downstream at 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.--No estimated daily discharges. Records good.

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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 2	0900	25,800	13.76	Mar. 6	2100	17,500	10.88
Mar. 4	1300	*27,700	*14.36				

Minimum discharge, 188 ft^3/s, Sept. 6, 7, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1990	519	16100	4360	4020	7890	2350	3760	2280	2260	878	225
2	1440	566	24800	4050	3330	6880	2630	3430	2560	1410	663	225
3	1670	552	15500	3550	2810	15500	2460	3960	2200	1050	555	225
4	4130	522	7430	3040	3170	26600	2220	4800	2440	919	486	219
5	2950	502	4790	3720	6480	20400	2030	3860	2090	1320	450	210
6	1910	489	3920	4820	9110	16600	1890	3040	1740	1260	435	197
7	1430	475	4050	4170	6320	14800	1790	2530	1490	1000	439	188
8	1150	1920	5840	3400	4950	9340	1640	2140	1370	909	419	188
9	973	4050	6600	4170	5200	6340	1490	1920	1600	759	409	193
10	857	4950	4860	5410	5400	5070	1370	1820	1570	667	381	213
11	786	3220	3760	4870	4610	4390	1290	1650	1350	613	372	258
12	724	2320	3170	3930	3850	3810	1270	1510	1200	610	351	327
13	663	1800	3690	3200	3290	3320	1630	1410	1140	629	345	358
14	612	1490	4670	2680	2930	3230	1690	1350	2160	572	332	388
15	575	1300	4080	2360	2660	4260	1540	1350	3990	521	333	338
16	548	1150	430	3250	2410	4690	1400	1450	3750	485	302	285
17	522	1040	2960	4370	2230	3920	1290	1380	2420	483	314	255
18	514	1270	2620	4090	2090	3430	1220	1280	1990	508	316	236
19	530	2370	2280	3280	1960	5600	1200	1190	2040	458	299	220
20	530	2330	2010	2830	1870	7760	1170	1340	2250	459	287	212
21	546	2220	1770	2560	2000	9280	1180	1630	1860	425	287	203
22	544	5230	1570	2310	3440	6350	1690	1430	1540	400	316	202
23	541	8240	1460	2530	3390	4730	2320	1290	1270	569	302	195
24	523	4920	1640	3070	3040	3770	3380	1140	1150	662	285	226
25	489	3350	2620	4580	2680	3140	4810	1060	989	722	274	271
26	481	3240	3400	4960	2500	2830	4270	1210	880	640	266	271
27	479	3840	3140	4210	3450	2630	3230	4170	871	627	258	253
28	489	3900	2690	4810	6930	2520	2750	5070	890	644	255	250
29	538	3160	2620	7300	---	2360	4800	2950	853	1070	244	250
30	527	3570	2880	6570	---	2350	4790	2290	884	1250	233	265
31	513	---	4100	5020	---	2370	---	1960	---	1230	225	---
TOTAL	30174	74505	154450	123470	106120	216160	66790	69370	52817	25131	11311	7346
MEAN	973	2484	4982	3983	3790	6973	2226	2238	1761	811	365	245
MAX	4130	8240	24800	7300	9110	26600	4810	5070	3990	2260	878	388
MIN	479	475	1460	2310	1870	2350	1170	1060	853	400	225	188
CFSM	.66	1.68	3.38	2.70	2.57	4.73	1.51	1.52	1.19	.55	.25	.17
IN.	.76	1.88	3.90	3.12	2.68	5.46	1.69	1.75	1.33	.63	.29	.19

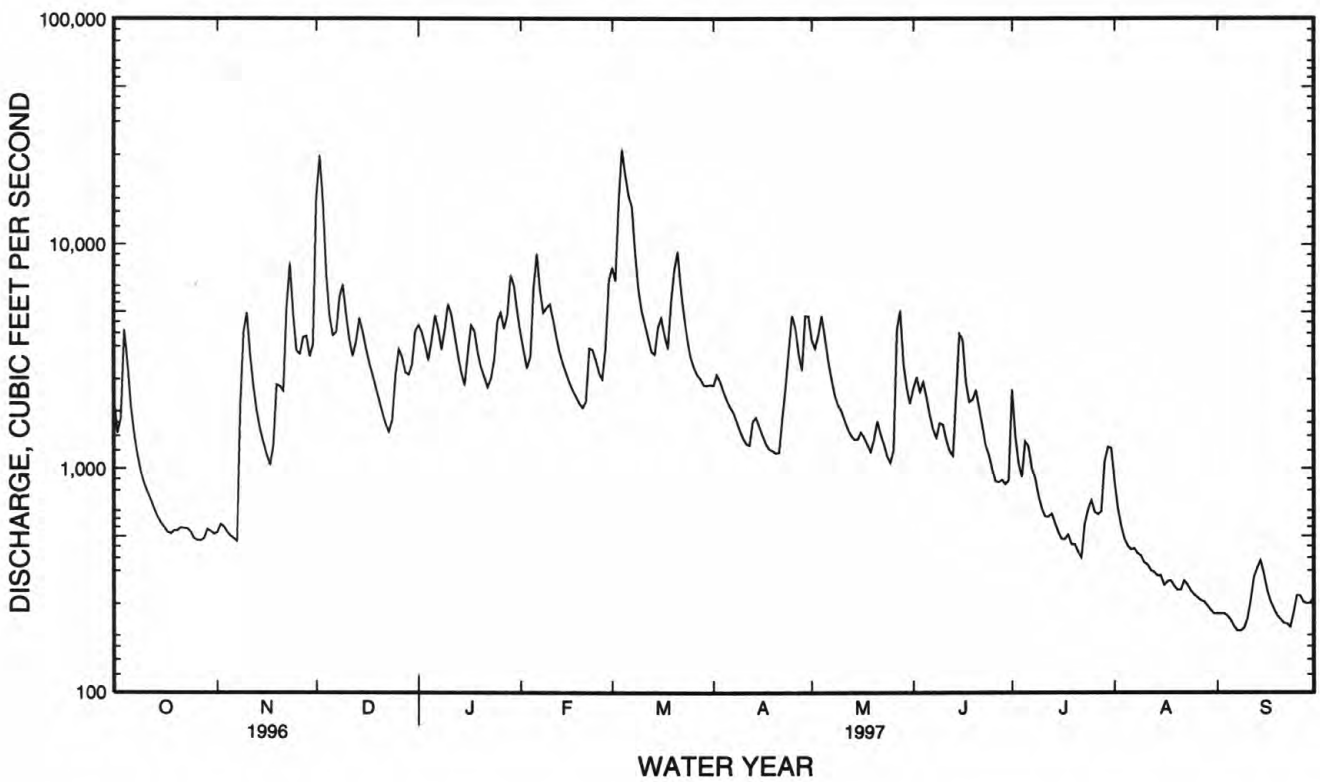
TENNESSEE RIVER BASIN
03528000 CLINCH RIVER ABOVE TAZEWELL, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1997, BY WATER YEAR (WY)

MEAN	669	1127	2388	3497	4165	4320	3043	2308	1284	960	869	537
MAX	2871	4794	9107	9500	9426	11950	8860	6382	3865	3251	4411	2939
(WY)	1990	1978	1927	1937	1957	1963	1977	1929	1989	1938	1942	1989
MIN	145	159	217	285	572	990	711	547	301	239	169	136
(WY)	1964	1940	1940	1940	1941	1988	1986	1941	1988	1988	1925	1955

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1919 - 1997	
ANNUAL TOTAL	1091928		937644			
ANNUAL MEAN	2983		2569		2088	
HIGHEST ANNUAL MEAN					3269	1927
LOWEST ANNUAL MEAN					850	1941
HIGHEST DAILY MEAN	24800	Dec 2	26600	Mar 4	83300	Apr 5 1977
LOWEST DAILY MEAN	387	Sep 27	a188	Sep 7	108	Sep 11 1925
ANNUAL SEVEN-DAY MINIMUM	446	Sep 22	201	Sep 4	116	Sep 17 1955
INSTANTANEOUS PEAK FLOW			27700	Mar 4	98100	Apr 5 1977
INSTANTANEOUS PEAK STAGE			14.36	Mar 4	b29.32	Apr 5 1977
INSTANTANEOUS LOW FLOW			c188	Sep 6	108	Sep 11 1925
ANNUAL RUNOFF (CFSM)	2.02		1.74		1.42	
ANNUAL RUNOFF (INCHES)	27.56		23.66		19.25	
10 PERCENT EXCEEDS	6060		4930		4680	
50 PERCENT EXCEEDS	2150		1790		1120	
90 PERCENT EXCEEDS	550		294		272	

a Also occurred Sept. 8.
b From floodmarks.
c Also occurred Sept. 7, 8, 9.



TENNESSEE RIVER BASIN

03528000 CLINCH RIVER ABOVE TAZEWELL, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-65, 1971-80, April 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	E. COLI WATER WHOLE TOTAL UREASE (COL/100 ML) (31633)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
OCT												
23...	1230	358	8.2	14.0	731	11.9	120	K20	53	--	--	160
NOV												
25...	1345	269	8.1	7.5	736	10.7	92	490	680	--	--	120
DEC												
16...	1315	--	8.1	8.0	737	11.3	--	200	120	--	--	140
JAN												
21...	1330	295	8.0	2.0	745	13.5	100	K10	K10	--	--	130
FEB												
06...	1330	216	7.8	8.5	744	11.4	100	760	530	--	--	100
MAR												
20...	1400	256	7.9	11.0	735	10.7	101	770	--	--	--	120
APR												
24...	1230	283	8.4	13.5	732	9.4	94	380	--	--	4400	130
MAY												
13...	1230	294	8.3	16.5	732	10.4	111	98	--	K23	1600	130
JUN												
23...	1230	264	8.2	25.0	736	--	--	220	--	K58	1200	120
JUL												
22...	1315	361	7.7	30.0	740	8.1	111	K5	--	K13	K100	150
23...	1615	353	7.6	29.5	737	9.5	129	320	--	340	700	150
AUG												
14...	1215	355	8.3	28.0	738	--	--	57	--	47	130	150
SEP												
22...	1400	468	8.3	22.0	738	9.1	108	K10	--	K3	K36	170

DATE	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT												
23...	17	42	14	9.5	11	0.3	2.1	10	156	144	30	6.6
NOV												
25...	17	35	8.3	4.9	8	0.2	1.7	--	128	105	17	4.0
DEC												
16...	21	38	9.8	5.2	8	0.2	1.5	1	137	114	21	4.3
JAN												
21...	10	35	9.4	5.6	9	0.2	1.2	2	138	116	20	5.5
FEB												
06...	21	29	7.3	3.4	7	0.1	1.3	0	99	81	18	3.3
MAR												
20...	10	34	8.4	3.7	6	0.1	1.4	0	133	109	18	2.8
APR												
24...	16	33	10	6.8	10	0.3	1.6	2	129	110	25	3.3
MAY												
13...	11	36	11	6.9	10	0.3	1.4	5	140	115	25	3.4
JUN												
23...	11	33	9.3	5.8	9	0.2	1.5	--	134	110	19	3.5
JUL												
22...	9	38	14	14	17	0.5	2.0	--	173	142	32	5.8
23...	5	37	13	14	17	0.5	2.1	--	173	142	30	5.4
AUG												
14...	7	38	14	14	17	0.5	2.2	5	167	137	36	5.4
SEP												
22...	34	40	18	30	27	1	2.8	7	157	141	75	8.3

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

TENNESSEE RIVER BASIN

03528000 CLINCH RIVER ABOVE TAZEWELL, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT												
23...	<0.10	2.0	202	193	0.27	0.223	0.017	0.240	0.023	<0.20	<0.20	--
NOV												
25...	0.10	5.9	148	144	0.20	0.860	0.010	0.870	0.020	<0.20	0.30	1.2
DEC												
16...	<0.10	6.0	161	158	0.22	--	<0.010	0.790	0.030	<0.20	<0.20	--
JAN												
21...	<0.10	5.1	163	155	0.22	--	<0.010	0.740	<0.015	<0.20	<0.20	--
FEB												
06...	0.10	5.0	117	119	0.16	--	<0.010	0.560	<0.015	<0.20	0.40	0.96
MAR												
20...	<0.10	5.6	140	142	0.19	--	<0.010	0.580	<0.015	<0.20	0.20	0.78
APR												
24...	<0.10	3.3	159	151	0.22	--	<0.010	0.358	<0.015	<0.20	0.25	0.61
MAY												
13...	<0.10	1.3	161	159	0.22	--	<0.010	0.173	<0.015	<0.20	<0.20	--
JUN												
23...	<0.10	4.6	153	144	0.21	--	<0.010	0.370	<0.015	<0.20	<0.20	--
JUL												
22...	<0.10	6.1	214	197	0.29	--	<0.010	0.307	0.015	<0.20	0.34	0.64
23...	<0.10	5.9	209	194	0.28	--	<0.010	0.313	<0.015	0.28	0.22	0.53
AUG												
14...	<0.10	4.5	207	202	0.28	--	<0.010	0.261	0.026	<0.20	0.25	0.51
SEP												
22...	0.13	2.9	271	262	0.37	--	<0.010	0.083	<0.015	<0.20	<0.20	--

DATE	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)
OCT												
23...	<0.010	<0.010	<0.010	--	24	4.5	1.9	0.30	<0.002	<0.002	0.006	<0.002
NOV												
25...	0.030	<0.010	<0.010	0.03	6.0	1.0	1.6	1.4	<0.002	<0.002	<0.001	<0.002
DEC												
16...	<0.010	<0.010	<0.010	--	5.0	2.0	1.0	0.50	<0.002	<0.002	<0.001	<0.002
JAN												
21...	<0.010	<0.010	<0.010	--	8.0	5.0	0.80	0.20	<0.002	<0.002	E0.004	<0.002
FEB												
06...	0.050	0.020	<0.010	0.05	19	2.0	1.3	1.0	<0.002	<0.002	E0.003	<0.002
MAR												
20...	<0.010	<0.010	<0.010	--	<3.0	<1.0	1.2	0.90	<0.002	<0.002	0.008	<0.002
APR												
24...	<0.010	<0.010	<0.010	--	12	1.9	1.2	--	<0.002	<0.002	0.010	<0.002
MAY												
13...	<0.010	<0.010	<0.010	--	19	3.7	1.0	0.30	E0.001	<0.002	0.006	<0.002
JUN												
23...	0.011	<0.010	<0.010	0.01	10	5.4	1.3	0.40	<0.002	<0.002	0.016	<0.002
JUL												
22...	0.016	<0.010	<0.010	0.02	5.2	8.6	1.9	0.40	<0.002	<0.002	0.017	<0.002
23...	0.016	<0.010	0.010	0.02	5.8	8.1	2.2	0.60	<0.002	<0.002	0.014	<0.002
AUG												
14...	<0.010	<0.010	<0.010	--	<3.0	5.4	2.0	0.30	<0.002	<0.002	0.007	<0.002
SEP												
22...	<0.010	<0.010	<0.010	--	9.2	4.4	1.9	0.50	<0.002	<0.002	E0.004	<0.002

E--Estimated

TENNESSEE RIVER BASIN

03528000 CLINCH RIVER ABOVE TAZEWELL, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT 23...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
NOV 25...	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
DEC 16...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
JAN 21...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
FEB 06...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
MAR 20...	<0.002	E0.003	<0.004	E0.002	E0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
APR 24...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
MAY 13...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.003	E0.001
JUN 23...	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
JUL 22...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.015	<0.006
23...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.007	<0.006
AUG 14...	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
SEP 22...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006

DATE	PARATHION, DISSOLVED (UG/L) (39542)	PROPCHLOR, WATER, DISS, REC (UG/L) (04024)	PROMETON, WATER, DISS, REC (UG/L) (04037)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT 23...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
NOV 25...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
DEC 16...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JAN 21...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
FEB 06...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAR 20...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
APR 24...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
MAY 13...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	E0.001	<0.003	<0.017	<0.004
JUN 23...	<0.004	<0.007	<0.018	0.019	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JUL 22...	<0.004	<0.007	E0.008	0.008	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
23...	<0.004	<0.007	E0.006	0.007	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
AUG 14...	<0.004	<0.007	E0.006	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
SEP 22...	<0.004	<0.007	E0.005	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

E--Estimated

TENNESSEE RIVER BASIN

03528000 CLINCH RIVER ABOVE TAZEWELL, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT 23...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
NOV 25...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
DEC 16...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN 21...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB 06...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAR 20...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
APR 24...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAY 13...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUN 23...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUL 22...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
23...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
AUG 14...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
SEP 22...	<0.003	<0.002	<0.002	<0.030	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 23...	<0.003	<0.004	<0.013	0.017	<0.007	<0.013	<0.001	<0.002	<0.002	3	81
NOV 25...	<0.003	<0.004	<0.013	0.022	<0.007	<0.013	<0.001	<0.002	<0.002	33	98
DEC 16...	<0.003	<0.004	<0.013	0.015	<0.007	<0.013	<0.001	<0.002	<0.002	15	96
JAN 21...	<0.003	<0.004	<0.013	0.015	<0.007	<0.013	<0.001	<0.002	<0.002	5	97
FEB 06...	<0.003	<0.004	<0.013	0.011	<0.007	<0.013	<0.001	<0.002	<0.002	90	92
MAR 20...	<0.003	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	58	91
APR 24...	<0.003	<0.004	<0.013	E0.008	<0.007	<0.013	<0.001	<0.002	<0.002	27	87
MAY 13...	<0.003	<0.004	<0.013	E0.009	<0.007	<0.013	<0.001	<0.002	<0.002	4	63
JUN 23...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	9	84
JUL 22...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	6	57
23...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	17	82
AUG 14...	<0.003	<0.004	<0.013	0.016	<0.007	<0.013	<0.001	<0.002	<0.002	9	56
SEP 22...	<0.003	<0.004	<0.013	E0.008	<0.007	<0.013	<0.001	<0.002	<0.002	13	76

E--Estimated

TENNESSEE RIVER BASIN
03532000 POWELL RIVER NEAR ARTHUR, TN

LOCATION.--Lat 36°32'30", long 83°37'49", Claiborne County, Hydrologic Unit 06010206, on left bank, 500 ft upstream from bridge on U.S. Highway 25E, 2.3 mi east of Arthur, 2.4 mi downstream from Indian Creek, and at mile 65.4 .

DRAINAGE AREA.--685 mi^2 .

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1919 to February 1982, October 1996 to current year. Gage-height records collected at same site December 1892 to August 1893, September 1904 to March 1925 are in reports of U.S. Weather Bureau (published as "near Tazewell").

REVISED RECORDS.--WSP 1336: 1920, 1921(M), 1923.

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

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1826 reached a stage of 29.5 ft present datum, discharge, 34,000 ft^3/s , and flood of Jan. 29, 1918, reached as stage of 29.2 ft present datum, discharge, 33,000 ft^3/s .

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft^3/s and maximum (*).

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 2	unknown	*17,000	*20.03	Mar. 4	2200	14,900	18.49

Minimum discharge, 125 ft^3/s, Sept. 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	923	391	e6000	1790	2250	4280	1070	2150	1390	745	262	149
2	691	423	e10000	1720	1820	4120	1060	1900	1790	700	235	148
3	941	382	e5000	1580	1530	9780	1010	2020	1740	670	219	143
4	1980	356	e3500	1420	1650	13700	960	2340	1870	560	216	143
5	1220	338	2750	1920	2870	10400	919	2280	1950	500	221	139
6	881	320	2210	2760	3730	8550	904	1850	1530	445	211	135
7	716	322	2090	2560	3060	8260	871	1530	1380	417	197	135
8	627	3360	2260	2000	2450	4840	823	1290	1310	405	201	127
9	556	3930	2330	2150	2210	3320	767	1150	1500	408	191	137
10	498	2690	1970	2660	1980	2650	723	1060	1510	424	192	164
11	450	1710	1670	2590	1750	2340	691	973	1230	371	189	182
12	410	1280	1540	2110	1570	1980	702	873	1070	345	183	173
13	374	1030	1590	1720	1410	1720	761	832	998	330	192	198
14	350	903	1750	1470	1290	1660	753	798	1720	316	209	235
15	330	816	1640	1310	1200	1860	715	811	2600	302	200	227
16	316	739	1490	1660	1100	1960	662	850	2920	290	207	188
17	304	681	1380	2060	1010	1730	637	804	1950	279	197	166
18	321	1040	1270	1890	939	1610	617	724	1900	275	201	158
19	335	2060	1150	1620	890	3330	610	687	2190	276	188	147
20	329	2330	1030	1440	851	4090	609	891	2120	267	183	146
21	362	1860	945	1290	906	3870	631	1060	1680	258	176	146
22	337	2560	863	1180	1240	2840	825	922	1370	256	181	138
23	323	3990	820	1240	1470	2200	1090	788	1140	250	192	139
24	321	2420	916	1890	1460	1770	1280	708	985	285	185	164
25	308	1760	1380	2970	1290	1510	1530	683	860	270	172	194
26	325	1830	1760	3090	1230	1380	1390	789	788	289	165	176
27	316	1970	1530	2610	1830	1290	1160	2090	746	282	160	165
28	329	1800	1360	3420	3550	1200	1070	3570	705	257	156	166
29	437	1550	1350	5040	---	1200	1530	2090	716	270	154	169
30	457	e3000	1460	4090	---	1210	2690	1670	643	392	154	157
31	380	---	1630	2880	---	1160	---	1460	---	300	152	---
TOTAL	16447	47841	66634	68130	48536	111810	29060	41643	44301	11434	5941	4854
MEAN	531	1595	2149	2198	1733	3607	969	1343	1477	369	192	162
MAX	1980	3990	10000	5040	3730	13700	2690	3570	2920	745	262	235
MIN	304	320	820	1180	851	1160	609	683	643	250	152	127
CFSM	.77	2.33	3.14	3.21	2.53	5.27	1.41	1.96	2.16	.54	.28	.24
IN.	.89	2.60	3.62	3.70	2.64	6.07	1.58	2.26	2.41	.62	.32	.26

e Estimated

TENNESSEE RIVER BASIN

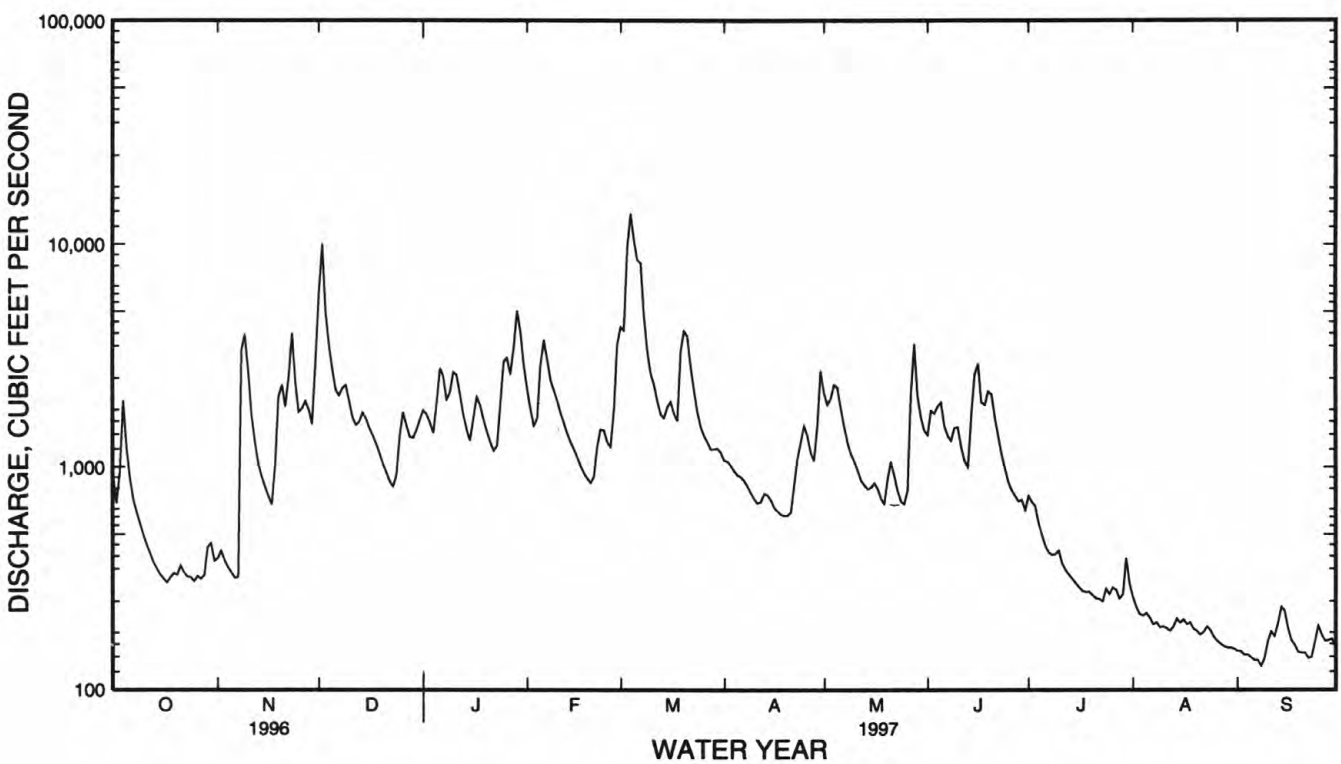
03532000 POWELL RIVER NEAR ARTHUR, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1997, BY WATER YEAR (WY)

MEAN	328	688	1373	2034	2226	2432	1693	1133	680	560	450	251
MAX	1648	3045	5557	5812	4887	6596	5224	4220	2495	1917	2030	1081
(WY)	1978	1974	1927	1937	1956	1963	1977	1929	1928	1941	1942	1928
MIN	75.5	96.4	117	143	268	887	477	268	168	137	117	79.7
(WY)	1955	1940	1966	1940	1941	1931	1942	1941	1936	1944	1925	1955

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1920 - 1997	
ANNUAL TOTAL	496631			
ANNUAL MEAN	1361		1148	
HIGHEST ANNUAL MEAN			1858	1974
LOWEST ANNUAL MEAN			486	1941
HIGHEST DAILY MEAN	13700	Mar 4	50300	Apr 6 1977
LOWEST DAILY MEAN	127	Sep 8	60	Sep 23 1955
ANNUAL SEVEN-DAY MINIMUM	137	Sep 3	65	Sep 17 1955
INSTANTANEOUS PEAK FLOW	17000	Dec 2	59500	Apr 6 1977
INSTANTANEOUS PEAK STAGE	a 20.03	Dec 2	38.96	Apr 6 1977
INSTANTANEOUS LOW FLOW	b125	Sep 8	47	Jan 6 1940
ANNUAL RUNOFF (CFSM)	1.99		1.68	
ANNUAL RUNOFF (INCHES)	26.97		22.78	
10 PERCENT EXCEEDS	2690		2580	
50 PERCENT EXCEEDS	1010		590	
90 PERCENT EXCEEDS	184		138	

a From floodmarks.
b Also occurred Sept. 9.



TENNESSEE RIVER BASIN

03532000 POWELL RIVER NEAR ARTHUR, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
OCT												
22...	1230	384	8.4	13.0	733	10.8	106	K12	K43	160	9	40
JAN												
22...	1300	294	8.2	5.0	738	13.5	109	K20	K44	120	12	33

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DS-I SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
OCT											
22...	14	15	17	0.5	2.2	3	175	148	44	4.8	<0.10
JAN											
22...	9.8	7.4	11	0.3	1.4	0	135	111	28	3.5	<0.10

DATE	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
OCT											
22...	2.5	216	213	0.29	0.370	0.020	0.390	0.020	<0.20	<0.20	<0.010
JAN											
22...	5.0	163	158	0.22	--	<0.010	0.850	<0.015	<0.20	<0.20	<0.010

DATE	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)
OCT											
22...	<0.010	<0.010	13	4.0	1.6	0.30	<0.002	<0.002	0.006	<0.002	<0.002
JAN											
22...	<0.010	<0.010	5.0	3.0	0.80	0.20	<0.002	<0.002	0.005	<0.002	<0.002

DATE	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P DDE DISSOLV (UG/L) (34653)
OCT											
22...	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006
JAN											
22...	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002	<0.006

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

TENNESSEE RIVER BASIN

03532000 POWELL RIVER NEAR ARTHUR, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT											
22...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
JAN											
22...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT											
22...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN											
22...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
22...	<0.003	<0.004	<0.013	0.023	<0.007	<0.013	<0.001	<0.002	<0.002	2	88
JAN											
22...	<0.003	<0.004	<0.013	0.025	<0.007	<0.013	<0.001	<0.002	<0.002	3	95

TENNESSEE RIVER BASIN

03538235 EAST FORK POPLAR CREEK AT BEAR CREEK ROAD AT OAK RIDGE, TN

LOCATION.--Lat 35°59'48", long 84°14'25", Anderson County, Hydrologic Unit 06010207, on left bank upstream from bridge on Bear Creek Road, 0.5 mi south of Oak Ridge, and at mile 14.4.

DRAINAGE AREA.--1.69 mi^2.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 890 ft above sea level, from topographic map.

REMARKS.--Records good below 100 ft^3/s, fair above, estimated days fair. Flow affected by operations of the Department of Energy, Y-12 Plant. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 2,000 ft^3/s, gage height, 14.36 ft, (due to backwater) July 23; minimum, 1.7 ft^3/s, gage height, 1.11 ft, July 24, 25; minimum daily, 6.5 ft^3/s, Dec. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	39	14	12	20	11	e10	25	25	11	10
2	15	10	13	13	12	30	11	e10	14	9.4	11	e10
3	12	9.2	11	12	12	62	11	e40	13	9.5	10	e10
4	11	9.3	10	12	20	16	11	e20	13	12	11	e10
5	11	8.9	11	31	14	33	11	e15	18	9.5	14	e10
6	11	9.0	9.8	13	12	19	13	12	10	9.8	13	e10
7	11	39	27	12	13	15	11	11	11	9.6	9.8	e10
8	11	27	9.8	14	16	14	11	11	11	9.5	11	e10
9	11	14	9.8	32	12	13	11	12	14	48	13	e13
10	11	13	9.8	15	12	14	11	11	11	11	11	e10
11	10	12	9.8	13	12	12	11	11	10	9.6	11	e11
12	11	11	11	12	11	12	16	11	11	9.6	12	e10
13	11	10	9.8	12	12	12	12	13	10	9.7	13	e10
14	11	11	7.4	11	11	18	11	11	42	9.7	12	e10
15	11	9.7	6.7	17	11	12	11	10	12	9.9	14	e10
16	11	10	6.5	16	11	12	11	10	12	9.7	12	e10
17	11	10	12	12	11	12	11	10	13	9.7	12	9.9
18	14	27	11	12	11	12	10	10	11	9.7	15	10
19	11	14	11	12	11	32	12	10	9.4	9.6	24	10
20	11	8.4	11	11	11	15	10	10	9.5	9.9	34	10
21	11	13	11	11	32	13	e60	10	9.4	9.7	11	10
22	10	10	11	16	16	12	e20	8.7	15	e90	10	11
23	14	12	11	13	12	12	e12	11	9.4	e125	10	14
24	9.5	11	17	50	12	12	e11	11	9.3	11	10	30
25	9.5	22	12	20	12	12	e10	21	9.4	11	10	17
26	9.7	12	11	14	11	13	e10	29	11	12	10	11
27	9.6	11	11	13	23	11	e10	21	9.3	12	10	10
28	9.6	11	11	20	33	13	e12	17	10	14	10	10
29	9.5	11	27	13	---	11	e30	19	9.5	13	10	10
30	9.4	47	16	13	---	11	e11	14	10	11	10	10
31	9.1	---	30	12	---	12	---	18	---	11	10	---
TOTAL	338.9	435.5	414.4	491	398	517	413	437.7	382.2	570.1	384.8	336.9
MEAN	10.9	14.5	13.4	15.8	14.2	16.7	13.8	14.1	12.7	18.4	12.4	11.2
MAX	15	47	39	50	33	62	60	40	42	125	34	30
MIN	9.1	8.4	6.5	11	11	11	10	8.7	9.3	9.4	9.8	9.9

e Estimated

TENNESSEE RIVER BASIN

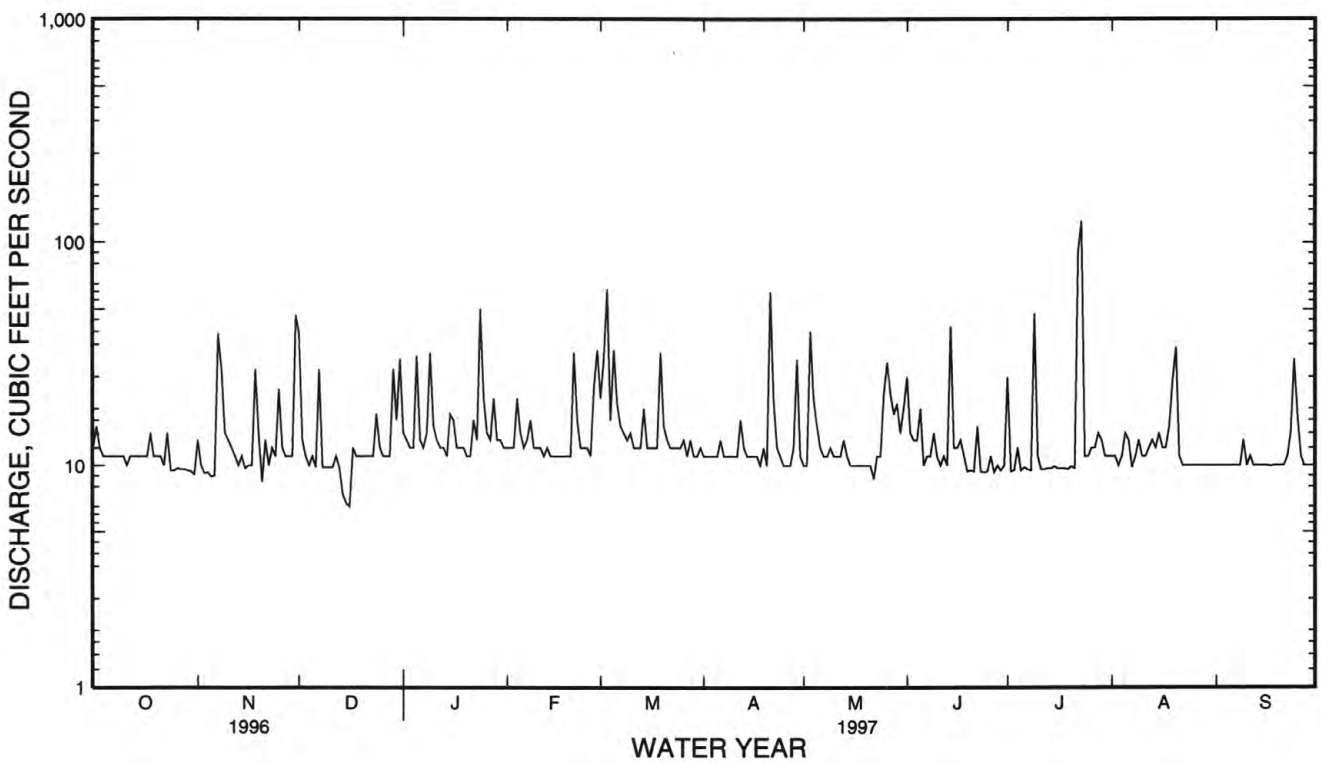
03538235 EAST FORK POPLAR CREEK AT BEAR CREEK ROAD AT OAK RIDGE, TN-Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

MEAN	6.94	8.84	9.35	10.7	11.3	11.6	10.2	8.98	8.69	9.96	9.19	8.39
MAX	10.9	14.5	13.4	15.8	18.1	16.7	17.9	14.1	12.7	18.4	15.5	12.4
(WY)	1997	1997	1997	1997	1994	1997	1994	1997	1997	1997	1996	1996
MIN	5.47	6.47	5.82	7.56	7.42	7.37	4.87	6.04	4.53	4.14	5.03	5.28
(WY)	1995	1995	1995	1993	1995	1995	1995	1994	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1993 - 1997	
ANNUAL TOTAL	4026.4		5119.5			
ANNUAL MEAN	11.0		14.0		9.96	
HIGHEST ANNUAL MEAN					14.0	1997
LOWEST ANNUAL MEAN					6.30	1995
HIGHEST DAILY MEAN	134	Jul 31	125	Jul 23	163	Dec 4 1993
LOWEST DAILY MEAN	4.1	Jul 4	6.5	Dec 16	3.3	Sep 30 1995
ANNUAL SEVEN-DAY MINIMUM	4.4	Jun 30	8.7	Dec 10	3.6	Oct 16 1995
INSTANTANEOUS PEAK FLOW			a2000	Jul 23	a2000	Jul 23 1997
INSTANTANEOUS PEAK STAGE			b14.36	Jul 23	b14.36	Jul 23 1997
INSTANTANEOUS LOW FLOW			c1.7	Jul 24	c1.7	Jul 24 1997
10 PERCENT EXCEEDS	17		20		15	
50 PERCENT EXCEEDS	9.6		11		6.3	
90 PERCENT EXCEEDS	5.0		9.7		4.3	

a Estimated by area-velocity estimate at contracted section downstream.
b Affected by backwater. From high-water marks.
c Caused by regulation. Also occurred July 25, 1997.



TENNESSEE RIVER BASIN
03538270 BEAR CREEK AT STATE HIGHWAY 95 NEAR OAK RIDGE, TN

LOCATION.--Lat 35°56'14", long 84°20'22", Roane County, Hydrologic Unit 06010207, on right bank upstream from bridge on Tennessee Highway 95, in triangle formed by intersection of Highway 95 and Bear Creek Road, 6.8 mi southwest of Oak Ridge, and at mile 2.8.

DRAINAGE AREA.--4.34 mi^2.

PERIOD OF RECORD.--April 1959 to June 1964 (discharge measurements only), March 1985 to current year.

REVISED RECORDS.--WDR TN-87-1: Drainage area. WDR TN-89-1: 1985-88 (M).

GAGE.--Water-stage recorder and Cippolletti-weir. Datum of gage is 801.15 ft above sea level.

REMARKS.--No estimated daily discharges. Records poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0900	219	2.58	Apr. 21	1545	*650	*3.70
Jan. 24	1445	173	2.36	June 14	1915	305	2.92
Jan. 24	2400	183	2.41	Aug. 20	0230	199	2.47
Mar. 3	0815	317	2.96				

Minimum discharge, 0.55 ft^3/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.5	108	32	12	43	5.8	15	46	8.4	1.7	1.5
2	2.1	1.9	32	21	11	42	5.6	11	18	4.2	1.7	1.1
3	2.2	1.9	19	15	9.5	162	5.4	49	12	3.3	1.7	1.0
4	2.1	1.8	13	12	13	42	5.3	21	9.3	3.5	1.7	.90
5	2.0	1.6	11	38	12	42	4.9	14	14	4.0	1.8	.78
6	1.9	1.5	11	21	11	39	5.2	11	12	2.9	1.8	.82
7	1.8	5.8	31	16	11	23	4.5	8.7	10	2.6	1.6	.70
8	1.9	49	19	13	13	18	4.0	7.7	8.4	2.4	1.7	.66
9	1.9	15	14	49	12	14	3.7	6.8	9.5	10	1.8	.77
10	1.7	11	11	27	11	13	3.5	6.2	10	5.3	1.9	.94
11	1.7	9.2	10	18	9.8	11	3.4	5.3	8.7	3.3	1.7	1.1
12	1.6	7.8	9.6	14	9.3	9.3	5.7	5.0	8.2	2.6	1.8	1.1
13	1.5	7.4	8.6	12	8.9	8.1	5.6	5.1	9.5	2.3	1.9	.96
14	1.5	6.9	7.1	10	8.6	13	5.1	4.7	94	2.0	2.4	.90
15	1.1	6.9	6.5	9.9	8.0	12	4.5	4.1	46	1.9	2.3	.79
16	1.2	6.1	5.8	19	7.0	9.6	4.1	3.8	22	1.7	2.8	.79
17	1.8	6.1	12	12	6.5	8.6	3.9	3.5	18	1.6	2.6	.87
18	3.3	34	9.8	11	6.0	7.8	3.8	3.6	15	1.5	2.9	.93
19	3.2	24	8.7	10	5.8	39	4.0	3.4	12	1.5	4.5	.96
20	2.4	15	7.3	9.4	5.6	27	3.8	3.2	8.6	1.4	39	.94
21	1.6	15	6.3	8.3	28	18	144	2.9	7.1	1.4	6.2	.94
22	1.4	14	5.9	12	29	14	56	2.5	8.1	1.6	3.3	.82
23	1.5	12	5.9	13	18	11	31	2.4	6.3	26	2.5	.78
24	1.6	11	9.9	73	14	9.2	20	2.3	5.2	5.0	2.1	2.4
25	1.5	22	9.1	67	12	8.1	15	5.0	4.4	2.6	2.0	3.0
26	1.5	29	8.1	28	11	8.1	11	9.0	3.8	1.8	2.0	1.8
27	1.6	18	8.0	20	27	7.1	11	10	3.6	1.4	1.9	1.6
28	1.6	14	7.7	29	54	7.6	23	17	3.3	3.2	1.9	1.4
29	1.3	12	38	20	---	7.5	34	13	3.2	2.9	1.8	1.3
30	1.1	57	24	17	---	6.8	20	12	3.4	2.3	1.7	1.3
31	1.4	---	61	14	---	6.3	---	10	---	1.9	1.5	---
TOTAL	55.3	418.4	538.3	670.6	384.0	687.1	456.8	278.2	439.6	116.5	106.2	33.85
MEAN	1.78	13.9	17.4	21.6	13.7	22.2	15.2	8.97	14.7	3.76	3.43	1.13
MAX	3.3	57	108	73	54	162	144	49	94	26	39	3.0
MIN	1.1	1.5	5.8	8.3	5.6	6.3	3.4	2.3	3.2	1.4	1.5	.66
CFSM	.41	3.21	4.00	4.98	3.16	5.11	3.51	2.07	3.38	.87	.79	.26
IN.	.47	3.59	4.61	5.75	3.29	5.89	3.92	2.38	3.77	1.00	.91	.29

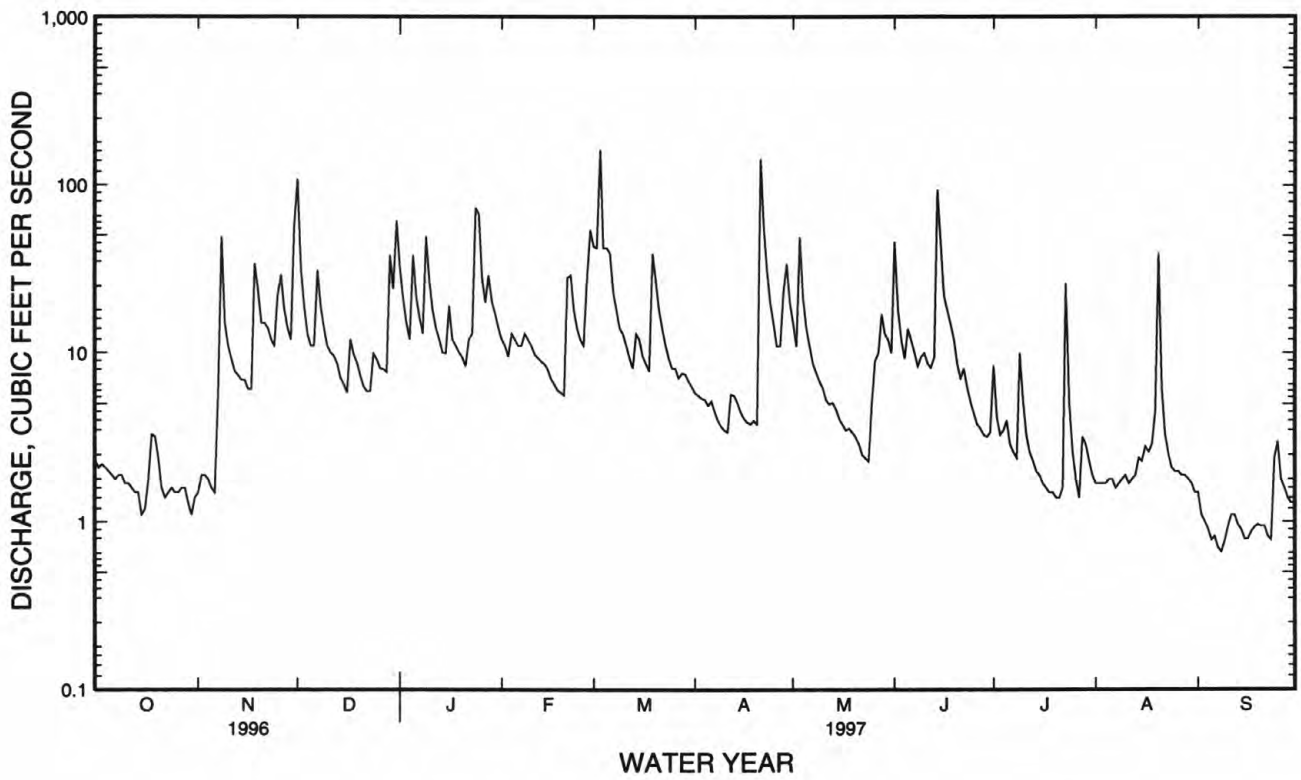
TENNESSEE RIVER BASIN
03538270 BEAR CREEK AT STATE HIGHWAY 95 NEAR OAK RIDGE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

MEAN	1.99	5.26	12.1	14.3	16.9	14.4	9.27	5.98	5.60	2.90	3.01	1.84
MAX	10.3	13.9	34.8	24.2	40.2	30.0	32.6	14.1	19.4	6.53	8.92	9.26
(WY)	1990	1997	1991	1989	1994	1994	1994	1996	1989	1996	1990	1989
MIN	.43	.62	1.54	2.85	4.67	5.52	2.41	1.26	32	.75	.31	.55
(WY)	1988	1988	1988	1986	1988	1985	1986	1988	1988	1995	1987	1987

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1985 - 1997	
ANNUAL TOTAL	3942.1		4184.85			
ANNUAL MEAN	10.8		11.5		7.87	
HIGHEST ANNUAL MEAN					12.7	1994
LOWEST ANNUAL MEAN					2.57	1988
HIGHEST DAILY MEAN	109	Aug 1	162	Mar 3	329	Feb 11 1994
LOWEST DAILY MEAN	1.1	Sep 5	.66	Sep 8	.19	Sep 4 1987
ANNUAL SEVEN-DAY MINIMUM	1.3	Jul 7	.80	Sep 4	.21	Sep 1 1987
INSTANTANEOUS PEAK FLOW			650	Apr 21	a783	Dec 23 1990
INSTANTANEOUS PEAK STAGE			3.70	Apr 21	3.88	Dec 23 1990
INSTANTANEOUS LOW FLOW			.55	Sep 9	b.18	Sep 3 1987
ANNUAL RUNOFF (CFSM)	2.48		2.64		1.81	
ANNUAL RUNOFF (INCHES)	33.79		35.87		24.64	
10 PERCENT EXCEEDS	22		27		16	
50 PERCENT EXCEEDS	6.5		6.8		3.1	
90 PERCENT EXCEEDS	1.7		1.5		.59	

a From rating curve extended above 120 ft^3/s based on indirect measurement of peak flow.
b Also occurred Sept. 4, 1987.



TENNESSEE RIVER BASIN

03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN

LOCATION.--Lat 36°06'11", long 84°43'06", Morgan County, Hydrologic Unit 06010208, on right bank 200 yards upstream of Lilly Bridge, 0.1 mi downstream of Little Clear Creek, 3.8 mi west-southwest of Lancing, and at mile 1.6.

DRAINAGE AREA.--170 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1997 to current year.

GAGE.--Data collection platform. Datum of gage is 1,060 ft above sea level from topographic map.

NOTE.--Records not available for inclusion in this report. These records will be included in the 1998 report.

TENNESSEE RIVER BASIN

03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
MAR												
13...	1430	36	6.8	10.5	738	10.7	99	K12	--	--	10	5
25...	1215	34	6.9	11.0	741	11.0	102	--	--	100	10	6
APR												
28...	1300	36	6.8	12.0	729	10.6	103	--	K30	--	10	4
MAY												
15...	1300	36	7.1	16.5	736	9.8	104	K2	<10	110	11	4
JUN												
16...	1400	33	7.6	17.5	730	10.3	112	--	--	--	10	4
JUL												
15...	1145	50	6.8	27.5	735	7.4	98	K6	<2	110	14	--
AUG												
06...	1200	67	6.6	25.5	741	7.1	90	K7	5	21	15	--
SEP												
16...	1145	105	7.2	23.0	735	7.8	94	130	530	K320	15	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
MAR												
13...	2.9	.76	1.5	22	.2	.80	0	6	5	2.1	5.7	1.9
25...	2.8	.74	1.5	23	.2	.80	0	5	4	1.6	5.6	1.9
APR												
28...	2.8	.75	1.4	22	.2	.79	0	7	6	2.2	5.2	1.9
MAY												
15...	2.9	.82	1.5	22	.2	.84	0	8	7	1.3	5.5	1.9
JUN												
16...	2.8	.72	1.0	17	.1	.87	0	7	6	.4	4.6	1.6
JUL												
15...	4.1	.95	2.6	27	.3	1.2	0	--	--	3.9	5.8	3.0
AUG												
06...	4.1	1.1	6.0	45	.7	1.3	0	20	16	9.9	5.7	5.7
SEP												
16...	3.8	1.2	14	65	2	1.4	0	31	26	4.0	4.8	11

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

TENNESSEE RIVER BASIN

03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AM MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
MAR												
13...	<.10	3.6	23	21	.03	<.010	.150	<.015	<.20	<.20	--	<.010
25...	<.10	3.6	43	20	.06	<.010	.110	<.015	<.20	<.20	--	.010
APR												
28...	.24	3.2	21	20	.03	<.010	<.050	<.015	<.20	<.20	--	<.010
MAY												
15...	<.10	2.9	23	20	.03	<.010	<.050	<.015	<.20	<.20	--	<.010
JUN												
16...	<.10	4.2	25	20	.03	<.010	.121	<.015	<.20	<.20	--	<.010
JUL												
15...	<.10	2.4	34	28	.05	<.010	.103	<.015	<.20	<.20	--	<.010
AUG												
06...	<.10	1.1	44	35	.06	<.010	.057	.015	<.20	.30	.35	<.010
SEP												
16...	<.10	.83	55	53	.07	<.010	<.050	<.015	<.20	<.20	--	.041

DATE	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)
MAR											
13...	<.010	<.010	22	5.0	1.1	.10	<.002	<.0020	.006	<.0020	<.0020
25...	<.010	<.010	22	5.0	.90	.60	<.002	<.0020	.010	<.0020	<.0020
APR											
28...	<.010	<.010	17	4.8	1.0	.10	E.002	<.0020	.020	<.0020	<.0020
MAY											
15...	<.010	<.010	16	6.3	1.1	--	E.002	<.0020	.030	<.0020	<.0020
JUN											
16...	<.010	<.010	52	7.7	1.6	.20	.005	<.0020	.085	<.0020	<.0020
JUL											
15...	<.010	<.010	76	13	1.5	.20	<.002	<.0020	.040	<.0020	<.0020
AUG											
06...	<.010	<.010	70	24	2.0	.40	<.002	<.0020	.020	<.0020	<.0020
SEP											
16...	<.010	.010	78	12	2.3	.20	<.002	<.0020	.006	<.0020	<.0020

E--Estimated

TENNESSEE RIVER BASIN

03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
MAR											
13...	<.0040	<.0040	E.0029	<.002	<.001	<.0030	<.004	<.005	<.004	<.002	<.0060
25...	<.0040	<.0040	E.0030	<.002	<.001	<.0030	<.004	<.005	<.004	<.002	<.0060
APR											
28...	<.0040	<.0040	E.0030	<.002	<.001	<.0030	<.004	<.005	<.004	E.002	<.0060
MAY											
15...	<.0040	<.0040	E.0045	<.002	<.001	<.0030	<.004	<.005	<.004	E.003	E.0017
JUN											
16...	<.0040	<.0040	E.0101	<.002	<.001	<.0030	<.004	<.005	<.004	.011	<.0060
JUL											
15...	<.0040	<.0040	E.0172	<.002	<.001	<.0030	<.004	<.005	<.004	E.003	<.0060
AUG											
06...	<.0040	<.0040	E.0052	<.002	<.001	<.0030	<.004	<.005	<.004	<.002	<.0060
SEP											
16...	<.0040	<.0040	E.0024	<.002	<.001	<.0030	<.004	<.005	<.004	<.002	<.0060

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAR											
13...	<.004	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040
25...	<.004	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040
APR											
28...	<.004	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040
MAY											
15...	<.004	<.0070	<.0180	E.0032	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040
JUN											
16...	<.004	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040
JUL											
15...	<.004	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040
AUG											
06...	<.004	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040
SEP											
16...	<.004	<.0070	<.0180	<.0050	<.0020	<.0030	<.0030	<.0020	<.0030	<.0170	<.0040

E--Estimated

TENNESSEE RIVER BASIN

03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
MAR											
13...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020
25...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020
APR											
28...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020
MAY											
15...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020
JUN											
16...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020
JUL											
15...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020
AUG											
06...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020
SEP											
16...	<.0030	<.0020	<.0020	<.0010	<.0060	<.0040	<.0030	<.0040	<.0040	<.0050	<.0020

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR											
13...	<.0030	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	2	46
25...	<.0030	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	2	44
APR											
28...	<.0030	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	2	79
MAY											
15...	<.0030	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	1	73
JUN											
16...	<.0030	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	5	72
JUL											
15...	<.0030	<.0040	<.0130	.0387	<.0070	<.0130	<.0010	<.0020	<.0020	3	42
AUG											
06...	<.0030	<.0040	<.0130	<.0100	<.0070	<.0130	<.0010	<.0020	<.0020	1	60
SEP											
16...	<.0030	<.0040	<.0130	.0135	<.0070	<.0130	<.0010	<.0020	<.0020	3	55

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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 mi^2.

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.--Data collection platform and data logger. Datum of gage is 761.38 ft above sea level. 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.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 greater than base discharge of 19,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	0100	*108,000	*32.93	June 1	0700	48,300	23.87
Mar. 3	1430	47,200	23.64	June 14	1430	23,500	17.96
Mar. 6	0130	21,000	17.14				

Minimum discharge, 8.3 ft^3/s, Sept. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	838	160	62600	4480	2300	7720	1210	2300	26800	5240	170	19
2	628	317	12800	3290	1830	6540	1080	2160	8680	3130	130	17
3	621	427	5530	2490	1530	27100	969	5960	4770	1540	95	17
4	466	405	3450	1960	2120	12300	881	5730	2960	1010	71	15
5	366	354	2600	2370	3060	7650	819	3320	4120	757	60	13
6	297	356	2640	2840	2710	14500	784	2320	5890	593	53	13
7	245	423	2600	2270	2290	6530	740	1680	3700	454	45	12
8	207	8830	2690	1830	2240	4060	623	1320	2980	359	38	13
9	174	4480	2200	3430	2440	2850	551	1160	2380	326	35	16
10	148	2590	1800	4550	2130	2380	495	1060	2780	359	39	18
11	188	1830	1550	3350	1820	2120	457	859	2300	287	39	16
12	191	1390	1370	2500	1560	1730	510	738	1940	253	37	15
13	121	1070	1910	1980	1380	1490	600	662	3750	201	34	14
14	96	939	1730	1620	1370	2550	564	599	14600	166	33	15
15	88	908	1500	1450	1320	3640	498	539	11700	136	46	25
16	97	846	1340	2850	1140	2750	458	495	4840	111	50	21
17	80	763	1750	3040	1000	2170	437	415	3060	95	53	18
18	110	2110	2240	2280	908	1860	413	364	2710	84	46	17
19	128	4570	1890	1870	842	4410	416	335	2070	76	49	15
20	116	2830	1570	1590	789	6780	450	337	1480	68	54	13
21	101	2100	1320	1370	904	4170	852	328	1110	62	68	11
22	93	2680	1180	1260	2070	2950	5080	294	1250	56	122	9.5
23	124	2260	1140	1650	1900	2220	3500	253	1220	277	89	8.5
24	180	1730	1180	3880	1550	1760	2560	226	899	21	69	15
25	167	1720	1560	7600	1350	1460	1850	255	723	145	60	32
26	174	6160	1450	4270	1260	1380	1430	533	630	120	52	55
27	161	4140	1380	2960	3040	1340	1220	1300	1170	89	42	101
28	156	2700	1350	7780	7000	1220	1270	4330	930	77	35	81
29	145	2010	3700	6900	---	1490	2650	4580	869	100	30	63
30	143	23100	5620	4070	---	1370	2730	4140	711	178	25	51
31	137	---	4850	2940	---	1330	---	3140	---	205	21	---
TOTAL	6786	84198	140490	96720	53853	141820	36097	51732	123022	16766	1790	749.0
MEAN	219	2807	4532	3120	1923	4575	1203	1669	4101	541	57.7	25.0
MAX	838	23100	62600	7780	7000	27100	5080	5960	26800	5240	170	101
MIN	80	160	1140	1260	789	1220	413	226	630	56	21	8.5
CFSM	.29	3.67	5.93	4.08	2.52	5.99	1.57	2.18	5.37	.71	.08	.03
IN.	.33	4.10	6.84	4.71	2.62	6.91	1.76	2.52	5.99	82	.09	.04

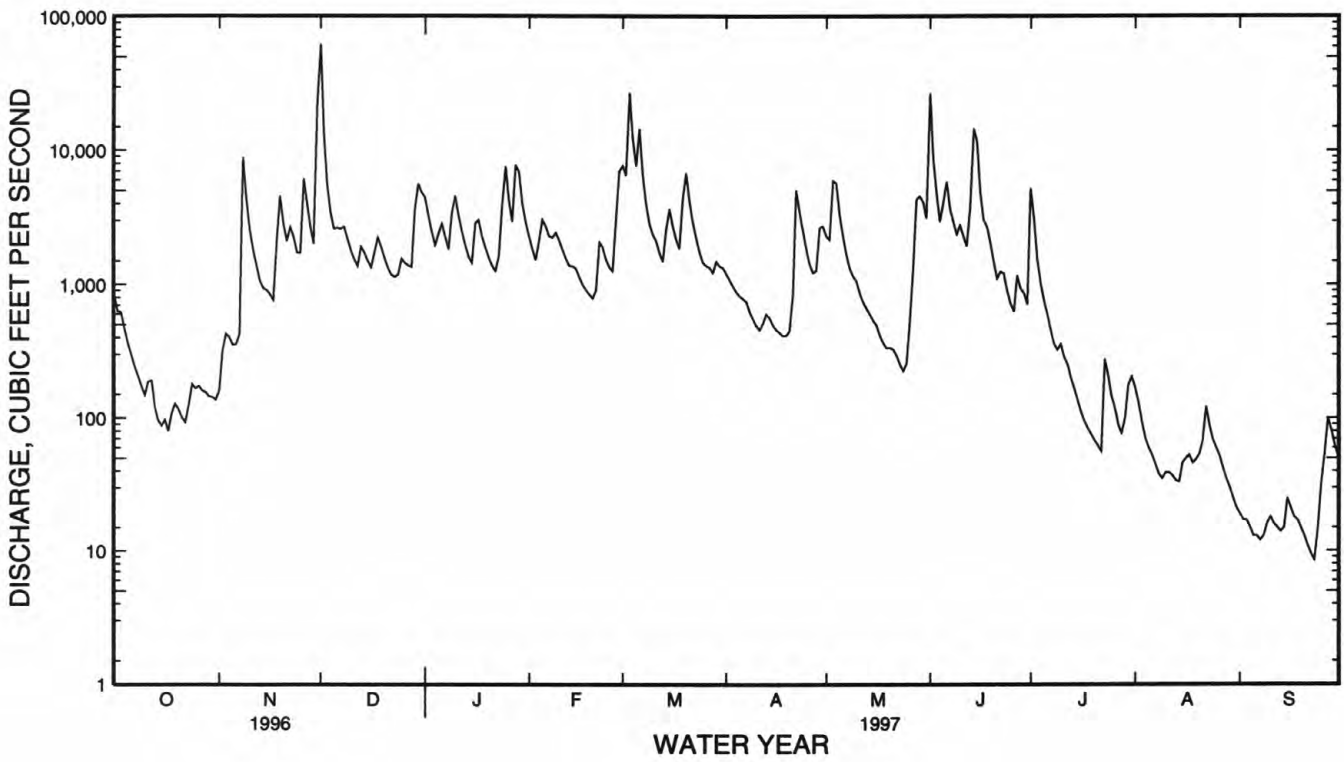
TENNESSEE RIVER BASIN
03540500 EMORY RIVER AT OAKDALE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1997, BY WATER YEAR (WY)

MEAN	296	1115	2284	2820	3002	3198	2137	1320	702	483	286	240
MAX	1971	6214	7938	7941	8136	8962	5808	5804	6731	3694	2107	1562
(WY)	1976	1958	1991	1937	1939	1975	1977	1973	1989	1967	1942	1944
MIN	.57	.37	42.1	97.8	422	946	374	140	16.3	5.55	7.70	.91
(WY)	1954	1954	1940	1981	1941	1985	1986	1962	1936	1944	1930	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1927 - 1997	
ANNUAL TOTAL	698256		754023.0			
ANNUAL MEAN	1908		2066		1483	
HIGHEST ANNUAL MEAN					2653	1973
LOWEST ANNUAL MEAN					670	1981
HIGHEST DAILY MEAN	62600	Dec 1	62600	Dec 1	103000	Dec 23 1990
LOWEST DAILY MEAN	25	Jul 13	8.5	Sep 23	a.00	Aug 13 1944
ANNUAL SEVEN-DAY MINIMUM	34	Jul 7	13	Sep 18	.00	Nov 7 1953
INSTANTANEOUS PEAK FLOW			b108000	Dec 1	b195000	Mar 23 1929
INSTANTANEOUS PEAK STAGE			32.93	Dec 1	c 41.20	Mar 23 1929
INSTANTANEOUS LOW FLOW			8.3	Sep 23	a.00	Aug 13 1944
ANNUAL RUNOFF (CFSM)	2.50		2.70		1.94	
ANNUAL RUNOFF (INCHES)	34.00		36.71		26.38	
10 PERCENT EXCEEDS	4130		4440		3420	
50 PERCENT EXCEEDS	1090		1140		560	
90 PERCENT EXCEEDS	89		41		21	

a Also occurred Aug. 14, 15, 1944; Nov. 7, 8, 9, 1952.
b From rating curve extended above 85,000 ft^3/s.
c Maximum stage from floodmarks and flood profile, present site and datum; 61.1 ft at site and datum then in use.



TENNESSEE RIVER BASIN
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 mi^2.

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 above sea level.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Blue Ridge Lake (station 03558500), in Water Resources Data for Georgia, Ocoee No. 3 Lake (station 03562500) (see p. 241), and by powerplant above station. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 19, 1906, discharge, 62,000 ft^3/s, was the greatest known since at least 1840, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,300 ft^3/s, May 3, gage height, 8.57 ft; minimum, 44 ft^3/s, Oct. 13, gage height, 2.57 ft; minimum daily, 207 ft^3/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	742	2930	1480	1510	3660	2830	2770	2570	1480	1080	1080
2	1270	876	2320	1470	1490	1930	2760	2700	2800	1510	1100	987
3	1170	615	1120	1460	1480	4610	1710	5980	1790	1490	846	991
4	1270	637	1210	1470	1490	2530	1510	4070	1980	1490	799	768
5	1260	741	1470	1510	1510	1880	1510	3710	1870	1460	970	729
6	1250	733	1670	1500	1500	2770	2340	3360	1480	1340	974	958
7	1180	770	834	1520	1500	2760	2160	3170	1480	1480	833	878
8	1140	1580	318	1490	1510	2670	2370	2950	1380	1050	1110	777
9	1390	1310	680	1550	1500	1870	1960	2960	1470	979	1110	772
10	1280	944	485	1550	1300	2490	2520	2580	1670	1060	1110	845
11	1310	1120	1330	1520	1490	2130	2030	2250	1460	1070	1050	757
12	985	1050	1400	1500	1490	1750	2420	2120	1500	1090	977	981
13	1080	1300	1640	1490	1530	2020	1580	2330	1460	1090	887	951
14	964	1030	207	1480	1550	2320	2290	2190	1740	1160	1060	822
15	1020	975	1720	1480	1540	2020	2620	1790	2330	1070	1080	689
16	1130	1100	906	1550	1520	1770	2310	1480	1500	1050	1100	690
17	1300	986	543	1520	1300	1800	2050	1480	1500	1200	1100	678
18	1270	974	920	1500	1290	1740	1510	1480	1510	1190	1070	459
19	1180	918	1450	1490	1270	2170	1520	1470	1520	1100	1010	977
20	1120	923	1670	1480	1280	1900	1520	1470	1490	1100	989	935
21	964	974	1760	1470	1340	1570	1500	1470	1490	1300	1080	1080
22	961	1060	1940	1470	1630	1550	2130	1480	1490	1170	1060	736
23	841	1060	1870	1490	1540	1520	3910	1480	1480	1170	1100	975
24	963	1000	2120	1640	1510	1550	2910	1330	1470	1180	1100	1130
25	963	1090	2110	3410	1300	1490	2390	1310	1490	1210	1060	1570
26	1090	2040	2100	1680	1290	1870	2520	1460	1510	1220	987	1300
27	1080	1190	1880	1550	1330	1520	2230	1520	1510	1200	979	942
28	960	1020	1480	2070	5010	1510	2930	2210	1510	1070	999	803
29	728	998	1740	2170	---	3930	3680	2280	1530	987	1110	986
30	726	1280	1530	1540	---	2050	2660	2480	1500	977	1110	981
31	730	---	1330	1520	---	2180	---	2280	---	731	1100	---
TOTAL	33915	31036	44683	50020	44000	67530	68380	71610	49480	36674	31940	27227
MEAN	1094	1035	1441	1614	1571	2178	2279	2310	1649	1183	1030	908
MAX	1390	2040	2930	3410	5010	4610	3910	5980	2800	1510	1110	1570
MIN	726	615	207	1460	1270	1490	1500	1310	1380	731	799	459
(†)	-13600	-1000	+5300	+2300	+7600	+20500	+4500	-700	+200	-8200	-11600	-6600
MEAN‡	655	1001	1612	1688	1843	2840	2429	2287	1656	919	656	688
CFSM‡	1.25	1.91	3.08	3.22	3.51	5.42	4.64	4.36	3.16	1.75	1.25	1.31
IN‡	1.44	2.13	3.54	3.71	3.66	6.25	5.17	5.03	3.53	2.02	1.44	1.46

CAL YR 1996 MEAN‡ 1608 CFSM‡ 3.07 IN‡ 41.77
WTR YR 1997 MEAN‡ 1521 CFSM‡ 2.90 IN‡ 39.40

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

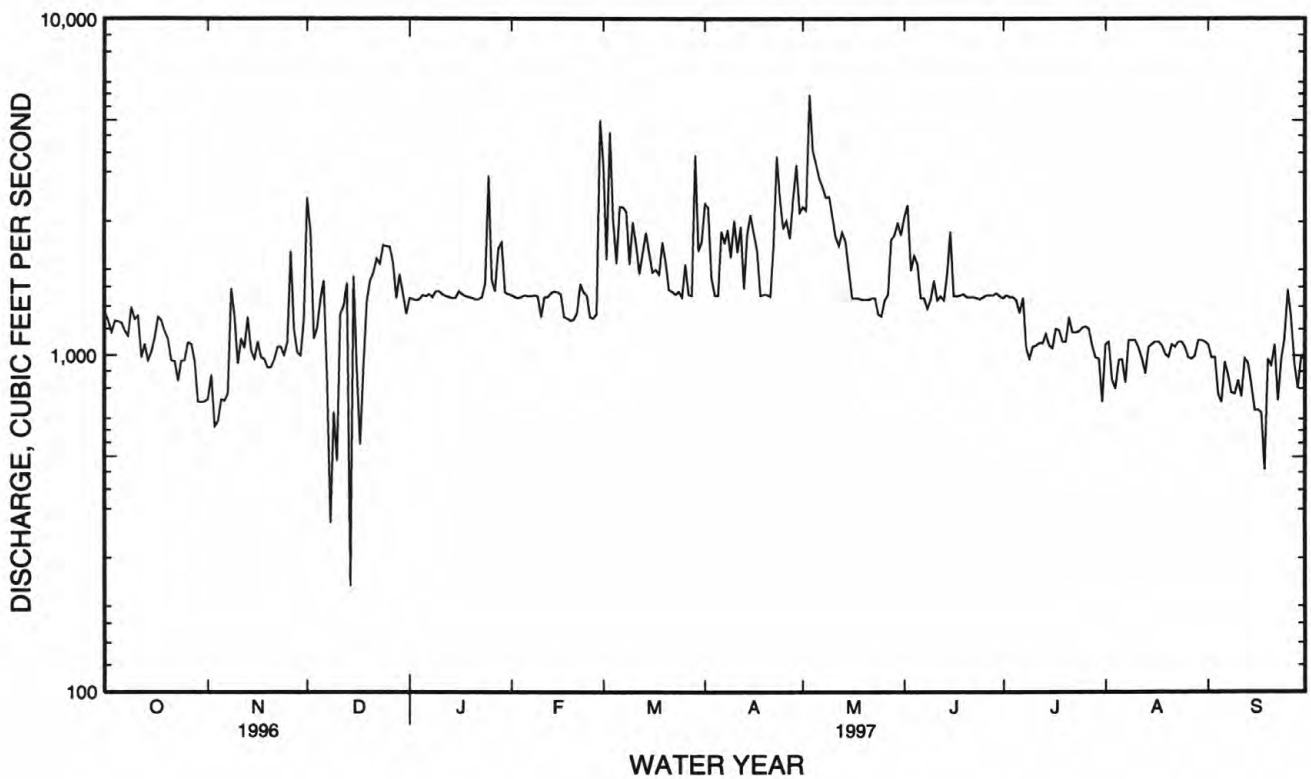
TENNESSEE RIVER BASIN
03563000 OCOEE RIVER AT EMF, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1997, BY WATER YEAR (WY)

MEAN	1056	1006	1132	1295	1433	1499	1545	1333	1177	1116	1114	1077
MAX	2312	1685	3415	2780	4688	4111	4040	2786	2272	2439	2014	1604
(WY)	1965	1996	1933	1933	1990	1990	1936	1946	1973	1938	1967	1949
MIN	410	260	278	448	357	381	351	328	436	432	459	472
(WY)	1931	1988	1988	1931	1934	1988	1941	1988	1940	1940	1986	1986

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1931 - 1997	
ANNUAL TOTAL	585053		556495			
ANNUAL MEAN	1599		1525		1231	
HIGHEST ANNUAL MEAN					1868	1990
LOWEST ANNUAL MEAN					570	1988
HIGHEST DAILY MEAN	10800	Jan 27	5980	May 3	24000	Feb 16 1990
LOWEST DAILY MEAN	207	Dec 14	207	Dec 14	4.6	Sep 14 1962
ANNUAL SEVEN-DAY MINIMUM	722	Oct 29	722	Oct 29	6.0	Jul 27 1944
INSTANTANEOUS PEAK FLOW			9300	May 3	a51400	Feb 16 1990
INSTANTANEOUS PEAK STAGE			8.57	May 3	b17.06	Feb 16 1990
INSTANTANEOUS LOW FLOW			44	Oct 13	3.4	Sep 20 1962
10 PERCENT EXCEEDS	2930		2380		1750	
50 PERCENT EXCEEDS	1400		1470		1090	
90 PERCENT EXCEEDS	919		898		596	

a From rating curve extended above 17,000 ft^3/s.
b From high-water mark in gage house.



TENNESSEE RIVER BASIN

03566000 HIWASSEE RIVER AT CHARLESTON, TN

LOCATION.--Lat 35°17'16", long 84°45'07", until April 9, 1996, lat 35°17'17", long 84°45'10" thereafter, Hydrologic Unit 06020002, on left bank 250 ft upstream from Norfolk Southern Railway bridge until April 9, 1996, at Norfolk Southern Railway bridge thereafter, 0.3 mi upstream from bridge on U.S. Highway 11 at Charleston, and at mile 18.9.

DRAINAGE AREA.--2,298 mi^2.

PERIOD OF RECORD.--November 1898 to April 1899, November 1899 to April 1903, October 1919 to January 1940, January 1963 to January 1977, September 1979 to December 1981 (vane lost), August 1987 to current year. Gage-height records collected at this station during the period December 1884 to December 1889 are contained in the United States War Department Stages of Ohio River and Principal Tributaries, 1858-89, Part 1, and during period January 1890 to December 1943 in reports of the U.S. Weather Bureau.

REVISED RECORDS.--WSP 853: Drainage area. WSP 1436: 1902, 1922(M), 1928, 1936(M).

GAGE.--Water-stage recorder and velocity recorder. Datum of gage is 665.56 ft above sea level. Prior to July 18, 1925, non-recording gages, and July 18, 1925 to September 6, 1926, water-stage recorder, at present site, at datum 1.50 ft higher. September 1926 to January 1940, January 1963 to January 1977, September 1979 to December 1981, August 1987 to April 1996, on left bank 250 ft upstream of present site, at same datum.

REMARKS.--Records good except for October, November, and March 3-18, which are poor. Some diversions above gage for industrial and municipal water supplies. Flow regulated by seven reservoirs (see p. 241 and Water Resources Data for Georgia and North Carolina). Daily discharge figures computed using areas as determined from a stage-area curve and velocities as determined from a velocity curve. Reverse flow has occurred for short periods each year since closure of Chickamauga Dam on Tennessee River in 1939. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 31, 1886, reached a stage of 34.0 ft, present datum, discharge about 70,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4120	2940	7990	6070	6630	15100	6050	6740	6990	4950	3850	3340
2	4760	3500	12400	5840	6170	11600	5700	6660	7120	5200	3830	3830
3	4290	4010	8980	6300	5880	e20000	5360	13300	5810	5060	3440	3720
4	4310	3890	8420	5730	6060	e15000	4460	16100	5150	5080	3580	3480
5	4420	3910	8120	5910	6360	e10000	3870	11100	4950	4750	2730	3490
6	4220	3730	7530	6400	6050	e12000	4230	8670	4950	4770	2490	3000
7	4550	3700	5850	6260	6290	e10000	5510	7500	4430	4430	3800	2430
8	4390	5330	6010	6040	5420	e11000	5070	7230	4360	4150	3820	2740
9	4530	5530	6210	6790	6150	e11000	4480	6850	4480	4040	3610	3060
10	4140	4980	5480	7410	6260	e10000	4650	6430	4510	4270	3590	3090
11	4470	4960	6710	6240	5640	e10000	4850	6160	4720	4160	3600	3210
12	4000	4840	6530	5820	5290	e10000	4040	6040	4930	3930	3600	3380
13	3280	4630	9030	5690	5420	e9500	3210	5700	5240	3860	3760	2960
14	3930	4410	9070	5510	5800	e9500	3830	5580	5930	3870	3940	2600
15	4070	4820	7370	5230	5990	e7000	4900	5220	7350	4210	4000	2640
16	4080	5380	7220	6210	5740	e6500	4280	5130	6970	4200	3540	2890
17	4620	5160	7580	6660	5520	e6000	3990	4960	6730	4190	3370	2890
18	4990	5540	7810	5960	4920	e6500	4480	4960	7410	4260	3600	2880
19	4760	6630	7850	5710	4870	7400	3690	5060	6280	4070	3790	3160
20	4320	6390	8350	5750	4620	10100	3180	5140	6170	3850	3720	3160
21	4410	5880	7800	5150	5820	8450	3160	4550	5900	3940	3980	2760
22	e4400	6230	8180	5340	7900	6080	3960	4010	5670	4140	3580	2750
23	e4400	6160	8710	5830	6080	5440	6020	4130	5720	4210	3450	3170
24	e4400	5610	8860	5270	5670	5470	5490	3740	5550	4420	3440	3880
25	e4350	5780	8530	13300	5160	5540	5420	3920	5540	4330	3560	4990
26	e4300	6700	7950	10800	4500	5720	4880	4090	5550	3970	3780	5430
27	e4350	5660	7860	8660	4960	5360	3810	4310	5480	3800	3860	3910
28	e4300	5370	6250	9910	10500	5160	5120	5080	5650	4140	3980	3410
29	3740	5380	5660	10400	---	6320	11100	5400	6420	4200	4040	3480
30	2880	5100	6060	9460	---	6780	8390	5190	5590	3860	3250	3520
31	2640	---	6380	8870	---	6470	---	4690	---	4050	3290	---
TOTAL	130420	152150	236750	214520	165670	274990	147180	193640	171550	132360	111870	99250
MEAN	4207	5072	7637	6920	5917	8871	4906	6246	5718	4270	3609	3308
MAX	4990	6700	12400	13300	10500	20000	11100	16100	7410	5200	4040	5430
MIN	2640	2940	5480	5150	4500	5160	3160	3740	4360	3800	2490	2430

e Estimated

TENNESSEE RIVER BASIN

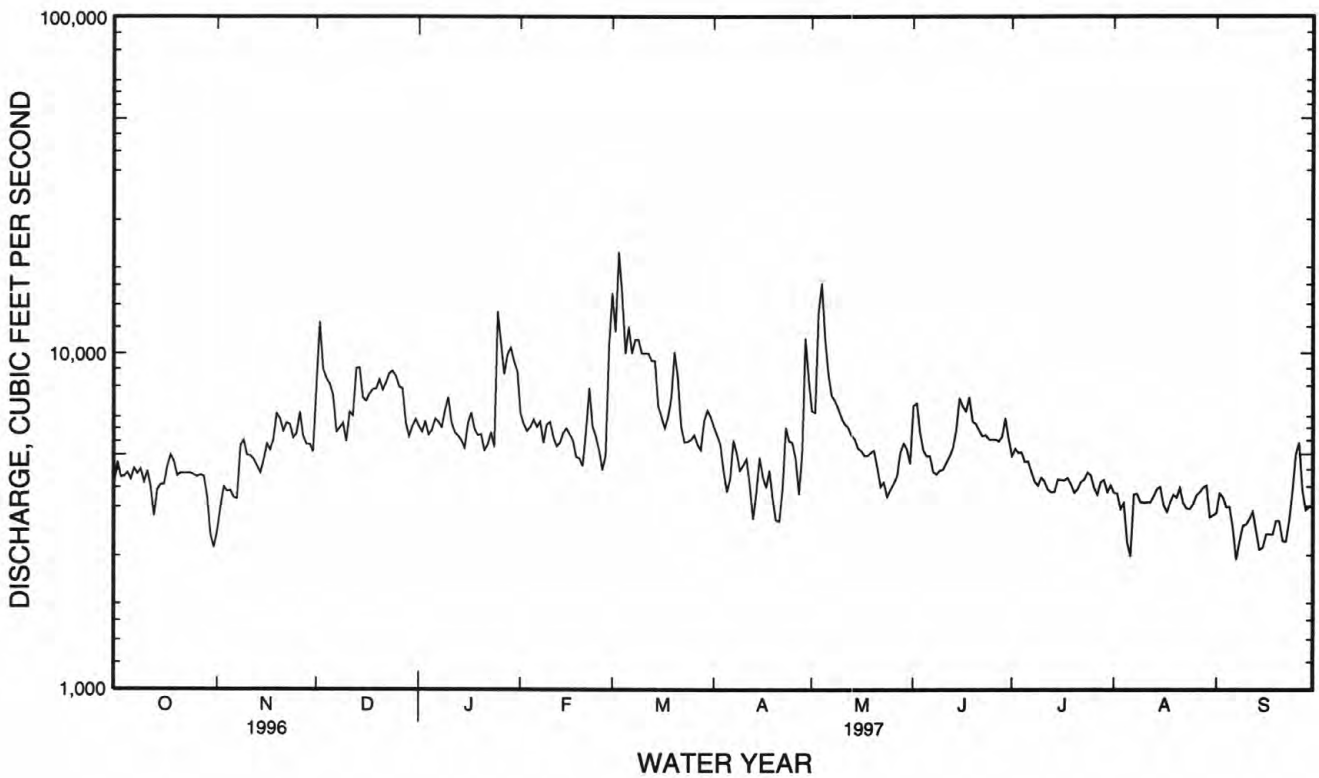
03566000 HIWASSEE RIVER AT CHARLESTON, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	4036	4451	5727	6306	6669	6424	4524	3862	4009	3892	3914	3649
MAX	9332	8638	12980	13060	16270	13860	11950	7922	8897	6975	6201	5118
(WY)	1990	1968	1968	1974	1990	1990	1994	1973	1989	1967	1967	1967
MIN	1442	1681	2070	2601	2680	1866	1110	971	1395	1750	1810	1747
(WY)	1989	1982	1988	1981	1988	1988	1988	1988	1988	1988	1988	1987

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	2004290		2030350			
ANNUAL MEAN	5476		5563		4813	
HIGHEST ANNUAL MEAN					6891	1990
LOWEST ANNUAL MEAN					1940	1988
HIGHEST DAILY MEAN	22900	Jan 27	e 20000	Mar 3	54000	Mar 17 1973
LOWEST DAILY MEAN	2190	Jul 7	2430	Sep 7	524	May 24 1981
ANNUAL SEVEN-DAY MINIMUM	2470	Jul 5	2860	Sep 13	817	Oct 29 1988
INSTANTANEOUS PEAK FLOW			21300	May 3	57000	Mar 17 1973
INSTANTANEOUS PEAK STAGE			20.22	May 3	29.42	Mar 28 1994
10 PERCENT EXCEEDS	8370		8430		7750	
50 PERCENT EXCEEDS	4530		5140		4150	
90 PERCENT EXCEEDS	3260		3480		2200	

e Estimated



TENNESSEE RIVER BASIN

035661285 NORTH MOUSE CREEK NEAR ROCKY MOUNT HOLLOW NEAR ATHENS, TN

LOCATION.--Lat 35°26'55", long 84°39'23", McMinn County, Hydrologic Unit 06020002, on right bank at downstream end of culvert at county road, 1.5 mi west of Athens.

DRAINAGE AREA.--42.1 mi^2

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 775 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 3	0915	1,030	11.91	June 14	1430	*1,910	13.51

Minimum discharge, 20 ft^3/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	26	752	168	150	370	86	149	448	88	34	28
2	33	33	294	147	134	281	81	132	161	79	34	26
3	33	25	180	131	128	790	78	635	126	74	33	26
4	30	24	146	114	132	364	76	238	108	73	33	26
5	28	23	132	258	121	380	73	180	221	69	33	25
6	27	22	124	161	108	512	120	156	128	64	32	25
7	27	34	230	139	104	258	87	137	104	62	32	24
8	26	187	150	129	120	213	79	125	92	61	31	25
9	26	66	127	334	108	183	75	119	121	58	31	28
10	25	53	112	203	105	165	72	108	120	57	32	28
11	25	49	102	162	101	149	70	100	102	55	32	26
12	23	45	115	138	95	136	84	93	98	53	31	25
13	23	42	106	124	100	129	74	89	194	51	31	25
14	23	45	90	112	99	128	68	83	1050	50	31	24
15	22	43	83	117	90	115	66	80	546	49	30	24
16	22	40	80	237	85	106	64	75	234	48	29	24
17	23	38	111	138	83	100	64	71	204	47	29	24
18	26	127	88	123	81	95	61	68	196	46	30	24
19	24	109	80	114	77	291	61	67	162	45	29	23
20	23	75	73	108	73	180	66	67	135	44	29	23
21	23	72	70	101	244	153	92	64	120	51	29	22
22	23	67	67	98	228	137	190	61	154	47	29	23
23	26	56	65	94	138	122	128	60	130	45	28	28
24	23	52	72	242	125	113	105	58	108	46	27	174
25	22	133	66	222	116	107	93	59	100	43	28	236
26	22	172	62	161	111	107	84	57	100	42	27	60
27	23	97	64	143	260	96	87	79	92	41	27	48
28	23	82	62	509	470	112	297	188	100	44	27	62
29	24	74	247	241	---	111	427	87	189	39	26	47
30	25	301	144	195	---	94	179	83	98	36	25	41
31	24	---	200	168	---	91	---	95	---	35	27	---
TOTAL	780	2212	4294	5331	3786	6188	3187	3663	5741	1642	926	1244
MEAN	25.2	73.7	139	172	135	200	106	118	191	53.0	29.9	41.5
MAX	33	301	752	509	470	790	427	635	1050	88	34	236
MIN	22	22	62	94	73	91	61	57	92	35	25	22
CFSM	.60	1.75	3.29	4.08	3.21	4.74	2.52	2.81	4.55	1.26	.71	.98
IN.	.69	1.95	3.79	4.71	3.35	5.47	2.82	3.24	5.07	1.45	.82	1.10

TENNESSEE RIVER BASIN

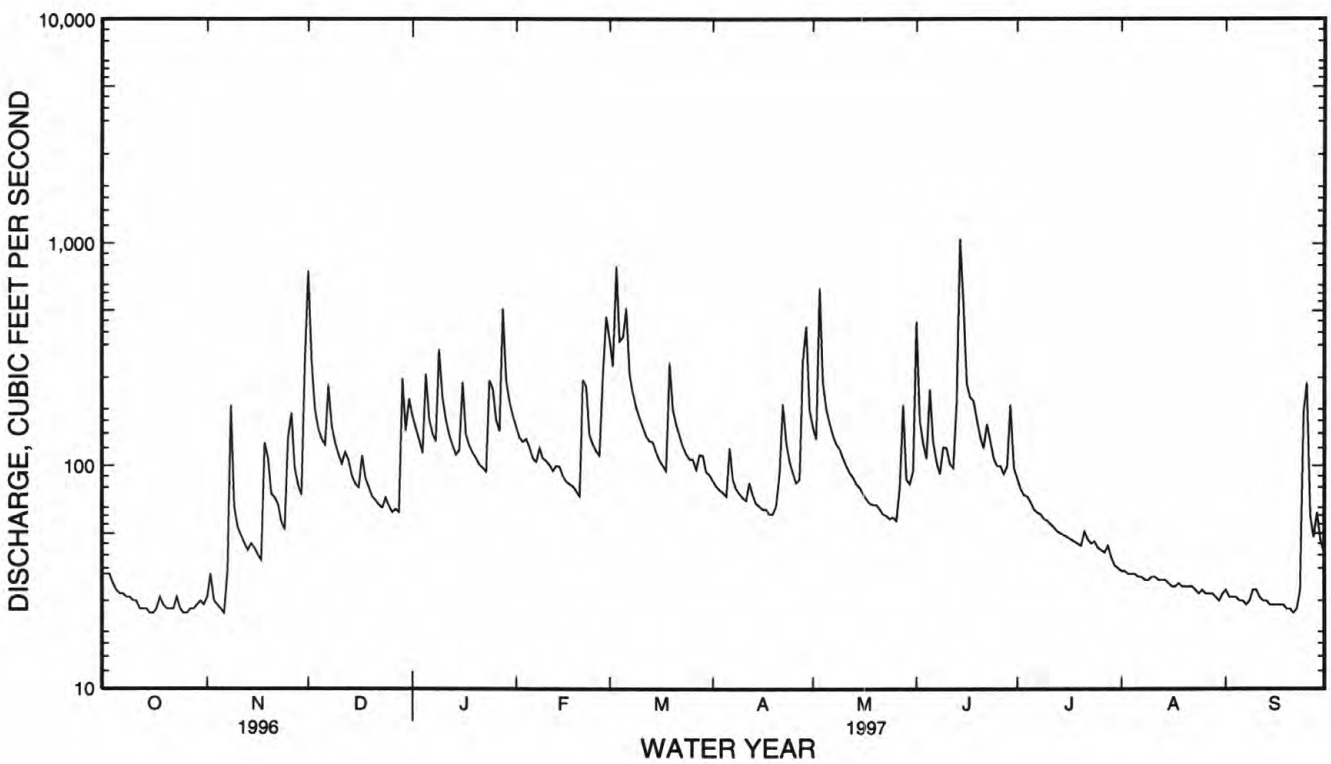
035661285 NORTH MOUSE CREEK NEAR ROCKY MOUNT HOLLOW NEAR ATHENS, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

MEAN	36.0	62.4	85.6	168	162	195	159	90.0	99.3	62.5	45.0	36.5
MAX	59.5	113	139	225	258	297	381	118	191	113	80.7	41.5
(WY)	1996	1996	1997	1996	1994	1994	1994	1997	1997	1994	1994	1997
MIN	15.1	20.0	57.2	125	119	139	53.1	69.0	39.4	30.7	29.7	30.5
(WY)	1994	1994	1994	1994	1995	1996	1995	1994	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1994 - 1997	
ANNUAL TOTAL	34973		38994			
ANNUAL MEAN	95.6		107		99.7	
HIGHEST ANNUAL MEAN					125	1994
LOWEST ANNUAL MEAN					70.4	1995
HIGHEST DAILY MEAN	901	Jan 27	1050	Jun 14	2580	Apr 11 1994
LOWEST DAILY MEAN	22	Oct 15	22	Oct 15	13	Oct 28 1993
ANNUAL SEVEN-DAY MINIMUM	23	Oct 11	23	Oct 11	14	Nov 8 1993
INSTANTANEOUS PEAK FLOW			1910	Jun 14	5790	Apr 11 1994
INSTANTANEOUS PEAK STAGE			13.51	Jun 14	15.74	Apr 11 1994
INSTANTANEOUS LOW FLOW			20	Sep 15	a12	Oct 28 1993
ANNUAL RUNOFF (CFSM)	2.27		2.54		2.37	
ANNUAL RUNOFF (INCHES)	30.90		34.46		32.17	
10 PERCENT EXCEEDS	181		203		182	
50 PERCENT EXCEEDS	70		80		65	
90 PERCENT EXCEEDS	29		25		26	

a Also occurred Oct. 29, 1993.



TENNESSEE RIVER BASIN

03568000 TENNESSEE RIVER AT CHATTANOOGA, TN

LOCATION.--Lat 35°05'12", long 85°16'43", Hamilton County, Hydrologic Unit 06020001, 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 mi^2, approximately.

WATER-DISCHARGE RECORDS

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 above sea level. 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.--No estimated discharges. Records good. Flow regulated since 1936 by many upstream reservoirs (see p. 241 and Water Resources Data for adjoining states).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 410,000 ft^3/s, Mar. 1, 1875, gage height, 53.8 ft, present datum, at Walnut Street, from rating curve extended above 250,000 ft^3/s; minimum daily, 1,200 ft^3/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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 138,000 ft^3/s, Mar. 4; maximum gage height, 26.85 ft, Mar. 4; minimum daily discharge, 10,300 ft^3/s, April 20; minimum gage height, 11.35 ft, Apr. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33300	42800	68100	46500	72900	60600	46500	47200	54700	46300	29600	28400
2	32500	32400	89500	50000	74200	130000	46200	46700	85900	48200	29100	34000
3	32900	42900	108000	59100	72900	132000	40800	58700	66100	50800	27500	34600
4	32500	45600	102000	59200	72800	137000	37400	74700	53800	50700	27200	31000
5	32900	44400	81300	59000	68400	122000	18700	72600	46600	48600	35300	27500
6	40900	41300	80400	60000	60300	97800	13400	69100	47000	47400	31500	21800
7	44000	36300	78600	59600	59100	121000	20800	66900	47300	46000	30900	19200
8	40600	39100	76500	59400	56900	117000	21100	62300	47300	36100	30600	30300
9	44900	47800	69700	64600	56700	113000	18700	43200	44100	36300	25500	32400
10	44800	45900	60600	80400	51100	103000	21100	33700	37400	31200	30800	34100
11	41900	45400	54200	79300	51000	86900	21900	32200	36500	33000	35000	35800
12	25300	45000	52600	78900	49100	85800	10800	32500	36900	32800	37300	41600
13	24500	41400	77700	77800	45400	85800	10800	31300	37900	32700	37300	28100
14	37200	40300	76600	77500	46800	86900	15500	28900	41500	35300	36000	21400
15	44500	40000	72600	76600	46900	87400	21400	28600	85800	35700	36900	28600
16	44500	44200	71900	70600	46700	85500	13300	25900	92900	33500	30600	38000
17	43400	44900	72600	56500	45400	78300	11400	21600	104000	31600	28100	39500
18	44600	43700	72500	56300	37800	64500	12400	21900	88500	31600	36400	39100
19	27800	44500	68900	56000	32300	69800	11100	26600	53700	30000	36000	41700
20	22900	44800	62000	55500	37900	80600	10300	25000	51700	33400	35400	36600
21	38600	44000	61800	55100	36800	71500	20300	25200	49200	33300	37100	20200
22	41200	45400	61900	54600	31600	47700	23800	20200	48700	32700	29700	27900
23	38200	46100	61700	55300	40900	46600	30100	23200	48400	30800	19500	32800
24	37300	44700	61600	56400	46300	46500	34900	15900	48700	35400	26800	34100
25	35500	48700	62700	62000	45800	47000	35100	13100	47200	36700	37600	45300
26	28200	63200	58800	62700	46000	46900	28200	12700	45600	35800	37400	32200
27	28400	63400	45900	57200	46600	46700	34600	27800	43800	37000	36400	29300
28	39000	63000	44000	75500	49300	47000	35600	37800	34500	37700	39400	25200
29	41800	61900	45100	79500	---	47800	38000	48000	39100	34900	35900	23600
30	42800	61900	45900	77100	---	47100	41600	48300	41500	33700	32600	33300
31	42400	---	46300	74500	---	46600	---	48000	---	36100	32000	---
TOTAL	1149300	1395000	2092000	1992700	1427900	2486300	745800	1169800	1606300	1155300	1011400	947600
MEAN	37070	46500	67480	64280	51000	80200	24860	37740	53540	37270	32630	31590
MAX	44900	63400	108000	80400	74200	137000	46500	74700	104000	50800	39400	45300
MIN	22900	32400	44000	46500	31600	46500	10300	12700	34500	30000	19500	19200

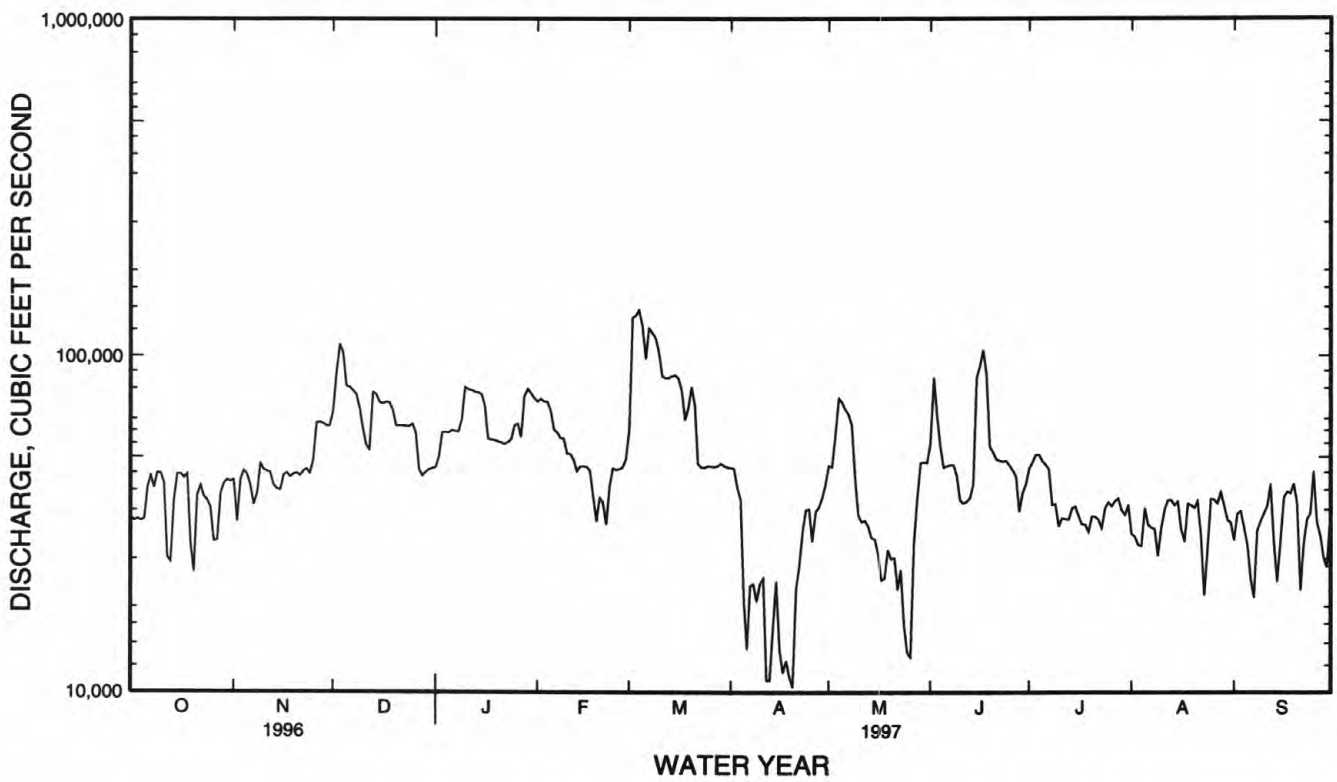
TENNESSEE RIVER BASIN
03568000 TENNESSEE RIVER AT CHATTANOOGA, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

MEAN	29370	34640	45170	49520	50760	47860	28460	28490	29880	29770	31430	28820
MAX	63270	68330	94270	127900	132800	98850	107800	87890	65280	49670	41590	42140
(WY)	1990	1958	1973	1974	1957	1963	1994	1984	1989	1989	1994	1967
MIN	16690	16340	13660	17370	22570	14380	7503	7805	11310	11230	12740	14090
(WY)	1984	1988	1988	1986	1986	1988	1986	1988	1988	1988	1988	1968

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		*WATER YEARS 1954 - 1997	
ANNUAL TOTAL	15909830		17179400			
ANNUAL MEAN	43470		47070		36130	
HIGHEST ANNUAL MEAN					53260	1973
LOWEST ANNUAL MEAN					15070	1988
HIGHEST DAILY MEAN	140000	Jan 28	137000	Mar 4	251000	Mar 18 1973
LOWEST DAILY MEAN	8230	Apr 19	10300	Apr 20	1200	Nov 1 1953
ANNUAL SEVEN-DAY MINIMUM	12300	Apr 14	13600	Apr 14	6790	May 29 1986
INSTANTANEOUS PEAK FLOW			138000	Mar 4	267000	Mar 18 1973
INSTANTANEOUS PEAK STAGE			26.85	Mar 4	38.98	Mar 18 1973
10 PERCENT EXCEEDS	72400		76800		58600	
50 PERCENT EXCEEDS	39600		44000		31600	
90 PERCENT EXCEEDS	23800		25300		16200	

* Regulated period only.



TENNESSEE RIVER BASIN

03568000 TENNESSEE RIVER AT CHATTANOOGA, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	COLIFORM, FECAL, 0.7 UM-MF (COLS/ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
OCT											
17...	1145	193	7.8	20.5	749	K6	K18	71	5	20	5.2
DEC											
17...	1430	168	7.6	10.0	747	88	K24	66	9	19	4.6
FEB											
14...	1230	171	7.9	8.0	750	K8	K21	69	8	20	4.6
APR											
23...	1315	155	7.9	17.5	737	K8	--	60	5	17	4.2
JUN											
10...	1230	135	7.7	20.5	747	K60	--	53	11	15	3.6
AUG											
12...	1345	175	7.6	28.0	753	K6	--	70	1	20	5.1

DATE	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)
OCT											
17...	7.5	18	0.4	1.6	67	14	6.3	<0.10	5.7	112	102
DEC											
17...	6.1	16	0.3	1.6	58	12	5.6	<0.10	5.4	94	91
FEB											
14...	5.3	14	0.4	1.3	61	11	5.3	<0.10	5.5	92	92
APR											
23...	4.7	14	0.3	1.4	54	11	5.3	<0.10	3.5	87	80
JUN											
10...	3.7	13	0.2	1.2	42	7.7	3.8	<0.10	4.1	75	65
AUG											
12...	5.8	15	0.3	1.4	69	11	6.3	<0.10	4.6	101	96

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2) (71856)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4) (71846)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT									
17...	0.15	0.270	0.020	0.07	0.290	0.05	--	0.040	<0.20
DEC									
17...	0.13	0.410	0.010	0.03	0.420	0.06	--	0.050	<0.20
FEB									
14...	0.13	--	<0.010	--	0.480	0.03	--	0.020	<0.20
APR									
23...	0.12	--	<0.010	--	0.256	0.05	0.21	0.036	0.24
JUN									
10...	0.10	--	<0.010	--	0.197	0.07	--	0.056	<0.20
AUG									
12...	0.14	0.244	0.012	0.04	0.256	0.06	0.18	0.047	0.23

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

TENNESSEE RIVER BASIN

03568000 TENNESSEE RIVER AT CHATTANOOGA, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN DISSOLVED (MG/L AS N) (00602)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	SEDIMENT, SUSPENDED (MG/L) (80154)
OCT											
17...	0.20	--	0.49	0.020	<0.010	0.020	<3.0	3.0	1.5	0.30	5
DEC											
17...	<0.20	--	--	0.020	<0.010	0.010	6.0	3.0	1.7	0.50	13
FEB											
14...	<0.20	--	--	0.010	<0.010	0.010	10	10	1.3	0.20	7
APR											
23...	0.30	0.50	0.56	<0.010	<0.010	0.010	5.6	2.9	1.4	0.40	10
JUN											
10...	0.49	--	0.69	0.030	<0.010	0.010	5.7	5.0	2.7	0.30	12
AUG											
12...	0.29	0.49	0.55	0.023	<0.010	0.014	<3.0	2.9	1.6	0.30	7

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	DIELDRIN DISSOLVED (UG/L) (39381)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	MALATHION, DISSOLVED (UG/L) (39532)	DIAZINON, DISSOLVED (UG/L) (39572)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDICARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDICARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICARB SULFOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)
OCT										
17...	95	<0.001	0.018	<0.005	<0.002	0.047	<0.002	<0.016	<0.016	<0.021
DEC										
17...	98	<0.001	0.07	<0.005	<0.002	0.015	<0.002	<0.016	<0.016	<0.021
FEB										
14...	89	<0.001	E0.003	<0.005	<0.002	0.014	<0.002	<0.016	<0.016	<0.021
APR										
23...	94	<0.001	0.019	<0.005	<0.004	0.041	<0.002	--	--	--
JUN										
10...	81	<0.001	0.038	<0.005	<0.002	0.110	E0.004	--	--	--
AUG										
12...	74	<0.001	0.009	<0.005	<0.002	0.39	<0.002	--	--	--

E--Estimated

TENNESSEE RIVER BASIN
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 mi^2 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 TN-73-1: 1973-96. WRD TN-74-1: 1973. WRD TN-85-1: 1985. WRD TN-90-1: 1989.

GAGE.--Data collection platform. Datum of gage is 350.06 ft above sea level (Levels by Tennessee Valley Authority). Prior to Oct. 1, 1992, at datum 50.06 ft lower, prior to Apr. 7, 1945, at datum 8.45 ft lower. Oct. 1, 1948 to Apr. 13, 1978 and Oct. 1, 1989 to present, auxiliary water-stage recorder on downstream end of lockwall in lower pool at Pickwick Landing Dam Apr. 13, 1978 to Sept. 30, 1989, auxiliary water-stage recorder over tailwater elevation well adjacent to the powerhouse which is an integral part of Pickwick Landing Dam, both sites 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. 241) and Water Resources Data for adjoining states). Periodic observations of specific conductance and water temperature are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1867, 101.2 ft, Mar. 21, 1897, datum then in use, from floodmarks, discharge, 450,000 ft^3/s, from rating curve extended above 320,000 ft^3/s. Flood of Jan. 2, 1927, reached a stage of 92.7 ft datum then in use, discharge, 349,000 ft^3/s. Minimum stage since 1905, 38.8 ft datum then in use, Sept. 8, 1925.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 260,000 ft^3/s, Mar. 4; maximum gage height, 32.01 ft, Mar. 6, 7; minimum daily discharge, 8,840 ft^3/s, Apr. 19, minimum gage height, 4.95 ft, Sept. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63600	67200	125000	93200	153000	115000	62200	63600	118000	e84000	e35000	17000
2	64000	45400	177000	88500	148000	185000	54300	60100	139000	e82200	e19000	37400
3	64500	60800	190000	93100	144000	232000	49700	106000	123000	e78000	e18000	28200
4	65200	61700	194000	93100	135000	257000	46200	153000	112000	e76000	e34800	28500
5	24300	60500	186000	94100	120000	252000	32900	170000	107000	e75400	e35300	23500
6	21100	61400	168000	94000	117000	250000	24100	144000	100000	e58000	e31900	10600
7	54500	59000	157000	94000	107000	245000	33600	111000	74300	e62000	e34000	11800
8	56500	55300	148000	93800	95200	228000	25200	93400	69800	e64000	e25000	29500
9	54500	63100	e135000	108000	93800	218000	29600	93000	83200	e56000	e23300	38100
10	57900	67000	e118000	130000	91200	197000	37900	42100	122000	e55000	e22700	32700
11	63400	72900	e111000	132000	69200	171000	44600	37600	123000	e60000	e50300	27500
12	28300	81400	e112000	132000	56300	173000	12900	62300	119000	e25200	e48500	28500
13	22600	66300	e111000	132000	68200	170000	12600	46100	112000	e22000	e47000	19000
14	46700	60200	112000	131000	74000	153000	15400	45200	104000	e59700	e47500	18200
15	51500	59200	118000	130000	79600	135000	34800	41100	120000	e50000	e50000	36000
16	50200	49700	119000	120000	76900	131000	19100	39400	122000	e53000	e33000	32700
17	58300	46200	146000	106000	78100	111000	14100	19100	137000	e47000	e34500	34100
18	56900	63300	162000	104000	75600	96500	9220	20000	184000	e42000	e46000	38600
19	23300	68900	155000	104000	67700	104000	8840	40400	186000	e15000	e43000	32400
20	22800	69100	133000	104000	74700	110000	8970	40700	154000	e14000	e33500	29500
21	51900	68600	113000	103000	68300	111000	22900	33600	116000	e47500	e35000	12400
22	51800	80000	110000	98900	62100	112000	21400	34000	128000	e44500	e32000	20400
23	52100	72900	101000	93600	61200	112000	e22000	23800	127000	e51800	e19500	20300
24	55300	60700	94000	102000	84500	112000	e40500	17300	103000	e45000	e22000	22300
25	60000	61800	77100	111000	91500	111000	e56500	16900	e91000	e40000	e49000	54800
26	14600	77700	75900	110000	91900	105000	e35500	16700	e89000	e22800	35500	72600
27	11000	84500	72900	116000	92300	96000	e36000	48000	e89300	e20000	44500	21000
28	55200	70700	47200	142000	92700	96300	e37400	78800	e75000	e44500	34400	32300
29	68300	81200	42400	167000	---	53200	e43500	77000	e76000	e43000	40800	51800
30	73900	91600	81400	174000	---	44300	e59000	70000	e82000	e45000	23300	39200
31	71000	---	92500	164000	---	53400	---	66000	---	e40500	14000	---
TOTAL	1515200	1988300	3784400	3558300	2569000	4539700	950930	1910200	3385600	1523100	1062300	900900
MEAN	48880	66280	122100	114800	91750	146400	31700	61620	112900	49130	34270	30030
MAX	73900	91600	194000	174000	153000	257000	62200	170000	186000	84000	50300	72600
MIN	11000	45400	42400	88500	56300	44300	8840	16700	69800	14000	14000	10600

e Estimated

TENNESSEE RIVER BASIN

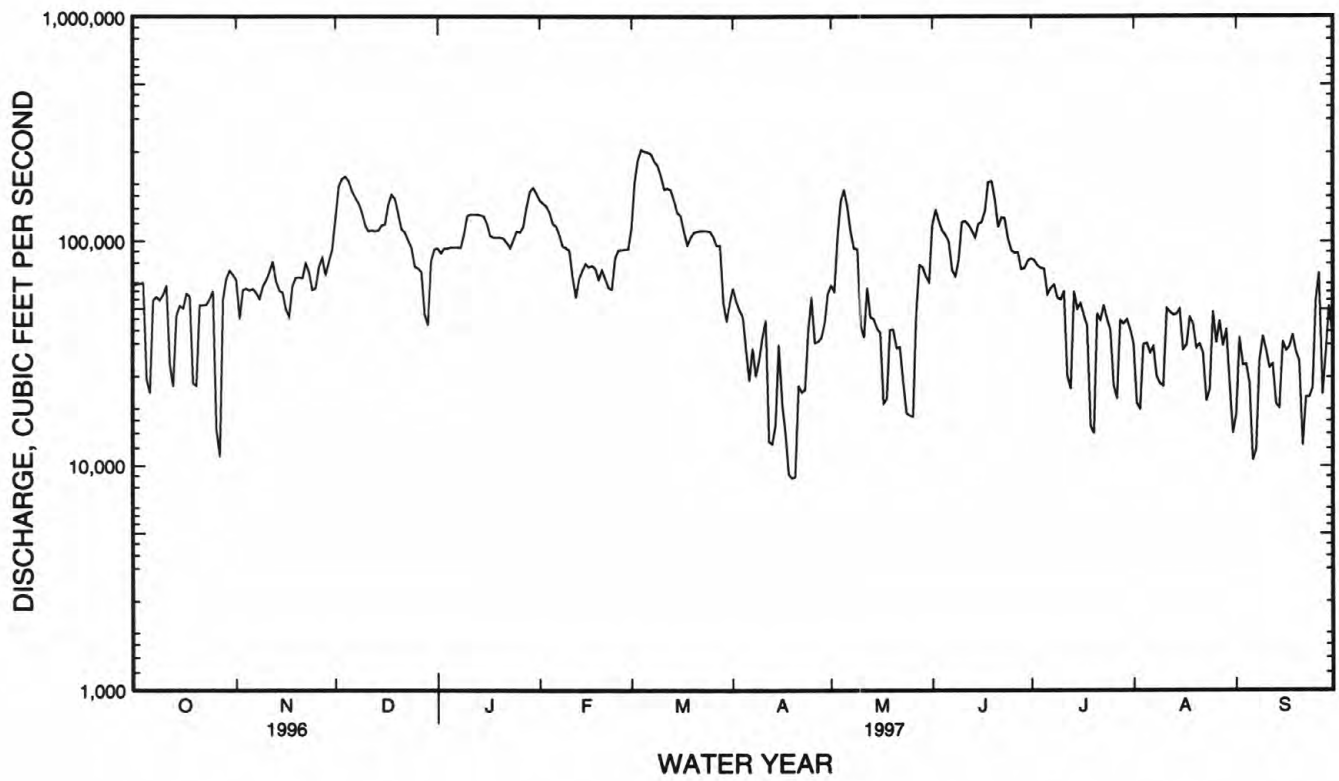
03593500 TENNESSEE RIVER AT SAVANNAH, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1997, BY WATER YEAR (WY)

MEAN	36830	48050	74040	89420	94510	87360	55580	48140	41080	38740	37480	35210
MAX	97010	147000	160100	223100	228100	185600	172300	140400	112900	84810	64740	71700
(WY)	1990	1958	1992	1974	1957	1973	1994	1984	1997	1989	1967	1950
MIN	18820	20510	26850	23710	39170	19840	11150	8977	10490	12910	15910	15800
(WY)	1955	1954	1981	1986	1988	1988	1986	1988	1988	1988	1988	1968

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		*WATER YEARS 1946 - 1997	
ANNUAL TOTAL	24377440		27687930			
ANNUAL MEAN	66610		75860		57060	
HIGHEST ANNUAL MEAN					86040	1973
LOWEST ANNUAL MEAN					23090	1988
HIGHEST DAILY MEAN	201000	Jan 30	257000	Mar 4	495000	Mar 18 1973
LOWEST DAILY MEAN	8480	Apr 13	8840	Apr 19	60	Apr 23 1966
ANNUAL SEVEN-DAY MINIMUM	18800	Jun 29	14900	Apr 16	5890	May 20 1986
INSTANTANEOUS PEAK FLOW			260000	Mar 4	507000	Mar 18 1973
INSTANTANEOUS PEAK STAGE			a32.01	Mar 6	b96.11	Mar 20 1973
INSTANTANEOUS LOW FLOW					60	Apr 23 1966
10 PERCENT EXCEEDS	135000		138000		109000	
50 PERCENT EXCEEDS	56300		63500		42800	
90 PERCENT EXCEEDS	21900		22000		22700	

* Regulated period only.
a Also occurred Mar 7.
b Datum then in use; see GAGE paragraph.



TENNESSEE RIVER BASIN

03597210 GARRISON FORK ABOVE L&N RAILROAD AT WARTRACE, TN

LOCATION.--Lat 35°30'42", long 86°19'26", Bedford County, Hydrologic Unit 06040002, on right bank 0.3 mi above L&N Railroad bridge, 0.6 mi below Knob Creek, 1.2 mi southeast of Wartrace, and at mile 3.2.

DRAINAGE AREA.--85.5 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 769.30 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic regulation by a small powerplant, 6.8 miles upstream. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 7	2015	3,580	11.25	Mar. 3	0800	7,390	14.68
Nov. 30	1930	*8,920	*15.87	Apr. 21	2115	5,680	13.22
Jan. 28	0400	4,910	12.53	May 31	1930	7,150	14.49

Minimum discharge, 4.1 ft^3/s, Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	44	3340	359	183	627	101	112	1410	230	18	8.7
2	350	87	583	263	149	1290	94	224	527	144	16	11
3	180	62	311	205	224	3980	89	1510	298	103	15	12
4	114	48	207	169	307	737	86	501	204	138	14	15
5	77	43	205	598	264	993	90	281	166	132	15	13
6	58	40	185	313	217	739	108	196	134	84	15	11
7	48	812	152	221	188	414	86	140	113	70	14	10
8	43	815	124	201	249	283	78	117	97	139	13	9.5
9	38	255	105	467	201	215	75	114	875	114	16	11
10	34	164	93	280	180	185	71	96	396	64	22	12
11	32	119	87	209	157	156	70	84	242	52	19	12
12	30	91	296	164	139	135	72	78	468	46	16	10
13	28	74	234	137	144	124	68	74	624	41	18	9.1
14	27	75	172	121	170	141	63	69	343	39	24	7.1
15	26	70	138	282	143	119	60	64	229	36	19	6.2
16	26	63	126	402	129	106	59	59	178	33	16	5.6
17	26	64	325	230	118	102	59	57	335	31	14	5.2
18	34	230	202	184	111	114	57	55	233	29	13	5.4
19	35	221	163	156	105	869	58	57	167	27	13	5.0
20	30	160	130	132	99	398	64	186	131	25	14	4.8
21	29	178	110	114	202	261	1140	91	109	26	14	4.5
22	29	170	100	172	189	197	663	69	95	26	14	5.2
23	58	134	89	178	147	155	474	61	84	25	13	7.5
24	44	109	243	469	130	132	264	56	74	24	12	119
25	36	163	184	359	120	119	176	57	67	21	12	674
26	35	165	153	247	117	111	135	406	66	20	12	102
27	34	124	142	232	137	99	118	242	72	19	13	44
28	34	105	184	1880	1100	196	135	129	520	19	11	28
29	34	90	1020	512	---	144	183	99	283	23	7.0	22
30	33	4100	367	313	---	122	127	84	265	23	4.8	18
31	32	---	477	232	---	113	---	2730	---	20	7.7	---
TOTAL	1792	8875	10247	9801	5619	13376	4923	8098	8805	1823	444.5	1207.8
MEAN	57.8	296	331	316	201	431	164	261	294	58.8	14.3	40.3
MAX	350	4100	3340	1880	1100	3980	1140	2730	1410	230	24	674
MIN	26	40	87	114	99	99	57	55	66	19	4.8	4.5
CFSM	.68	3.46	3.87	3.70	2.35	5.05	1.92	3.06	3.43	.69	.17	.47
IN.	.78	3.86	4.46	4.26	2.44	5.82	2.14	3.52	3.83	.79	.19	.53

TENNESSEE RIVER BASIN

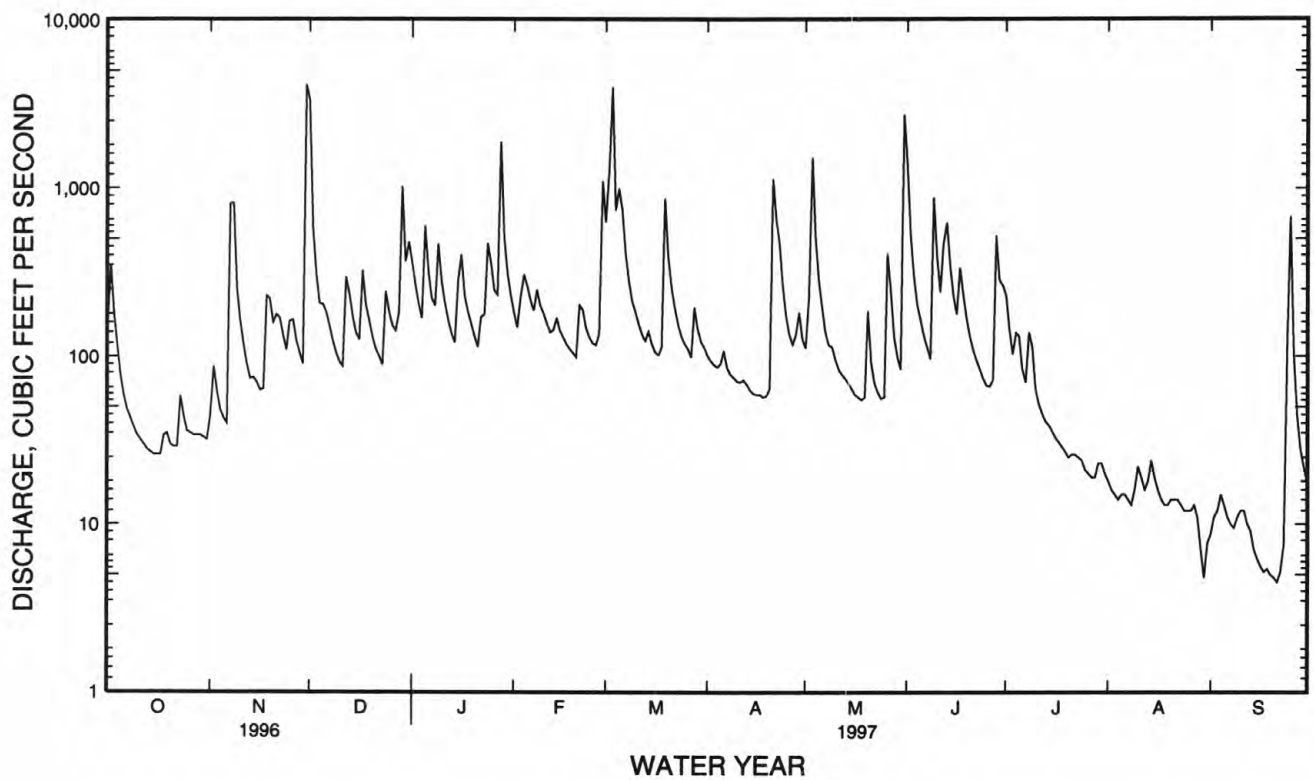
03597210 GARRISON FORK ABOVE L&N RAILROAD AT WARTRACE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	84.9	148	358	269	329	356	187	127	85.9	42.4	33.2	53.0
MAX	285	296	825	335	793	726	503	261	294	78.5	92.1	240
(WY)	1996	1997	1991	1990	1991	1994	1994	1997	1997	1994	1996	1992
MIN	7.93	24.8	121	183	106	195	84.1	30.8	19.5	13.9	8.76	9.92
(WY)	1994	1994	1990	1995	1995	1992	1992	1992	1990	1993	1990	1993

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	59501		75011.3			
ANNUAL MEAN	163		206		172	
HIGHEST ANNUAL MEAN					233	1994
LOWEST ANNUAL MEAN					113	1995
HIGHEST DAILY MEAN	4100	Nov 30	4100	Nov 30	7390	Dec 22 1990
LOWEST DAILY MEAN	11	Jul 19	4.5	Sep 21	2.2	Sep 2 1990
ANNUAL SEVEN-DAY MINIMUM	13	Jul 1	5.1	Sep 16	4.8	Aug 23 1990
INSTANTANEOUS PEAK FLOW			8920	Nov 30	9800	Dec 22 1990
INSTANTANEOUS PEAK STAGE			15.87	Nov 30	16.45	Dec 22 1990
INSTANTANEOUS LOW FLOW			a4.1	Sep 21	2.2	Sep 2 1990
ANNUAL RUNOFF (CFSM)	1.90		2.40		2.01	
ANNUAL RUNOFF (INCHES)	25.89		32.64		27.36	
10 PERCENT EXCEEDS	341		400		344	
50 PERCENT EXCEEDS	85		111		63	
90 PERCENT EXCEEDS	22		14		11	

a Also occurred Sept. 22.



TENNESSEE RIVER BASIN

03597590 WARTRACE CREEK BELOW COUNTY ROAD AT WARTRACE, TN

LOCATION.--Lat 35°31'38", long 86°20'25", Bedford County, Hydrologic Unit 06040002, on right bank 300 ft below county road bridge, 0.4 mi upstream from Louisville and Nashville Railroad bridge, 0.4 mi west of Wartrace, and at mile 2.3.

DRAINAGE AREA.--35.7 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 781.66 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 7	2215	2,770	10.22	Mar. 3	0615	3,440	11.17
Nov. 30	1845	*5,310	*12.93	Apr. 21	2230	3,130	10.75
Jan. 28	0500	3,100	10.71	May 31	1845	4,870	12.58

No flow Sept. 18-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	25	1480	127	56	210	23	32	621	99	2.8	.10
2	353	48	192	91	45	664	21	125	212	47	2.0	.08
3	105	26	105	70	117	1540	19	598	92	32	1.4	.09
4	57	20	70	58	150	191	18	98	60	52	1.1	.09
5	37	17	86	424	107	617	23	59	43	37	.97	.07
6	27	15	72	108	75	218	41	43	35	22	.89	.32
7	22	648	55	72	62	105	24	32	29	18	.75	.30
8	18	481	43	70	129	73	20	27	26	25	.60	.23
9	16	115	35	253	79	57	18	30	607	22	.98	.27
10	13	74	31	92	65	50	17	23	121	15	1.1	.21
11	11	55	29	66	54	39	16	19	73	12	1.2	.14
12	9.8	41	161	52	45	32	16	17	493	10	.90	.11
13	8.5	34	84	43	65	30	15	16	295	8.6	2.0	.08
14	7.7	38	58	37	93	36	13	15	124	7.5	2.5	.06
15	7.0	35	44	215	62	28	12	13	71	6.5	2.0	.04
16	6.5	30	48	197	51	24	11	11	52	5.7	1.2	.02
17	6.2	37	321	72	43	23	12	10	182	4.9	.77	.01
18	11	195	93	55	38	31	11	9.7	78	4.3	.56	.00
19	10	112	66	46	34	617	11	11	49	3.9	.51	.00
20	7.6	72	49	39	31	111	12	100	35	3.6	.97	.00
21	6.8	112	40	34	180	69	653	26	29	3.6	.73	.00
22	6.6	83	36	90	86	51	311	17	25	5.6	.58	.00
23	23	60	32	74	56	39	166	14	21	5.5	.60	.01
24	14	46	190	438	44	32	69	12	18	5.7	.56	34
25	10	142	83	159	38	28	45	11	16	3.4	.46	493
26	9.9	96	62	87	37	26	33	189	97	2.8	.35	31
27	9.9	61	60	93	74	23	29	81	52	2.4	4.0	16
28	9.4	48	58	1100	588	67	87	36	560	1.8	1.4	9.9
29	13	39	405	150	---	39	76	26	119	3.3	.57	6.8
30	11	2360	121	95	---	29	41	21	64	12	.29	5.1
31	9.3	---	235	70	---	27	---	1810	---	3.8	.13	---
TOTAL	963.2	5165	4444	4577	2504	5126	1863	3531.7	4299	485.9	34.87	598.03
MEAN	31.1	172	143	148	89.4	165	62.1	114	143	15.7	1.12	19.9
MAX	353	2360	1480	1100	588	1540	653	1810	621	99	4.0	493
MIN	6.2	15	29	34	31	23	11	9.7	16	1.8	.13	.00
CFSM	.87	4.82	4.02	4.14	2.51	4.63	1.74	3.19	4.01	.44	.03	.56
IN.	1.00	5.38	4.63	4.77	2.61	5.34	1.94	3.68	4.48	.51	.04	.62

TENNESSEE RIVER BASIN

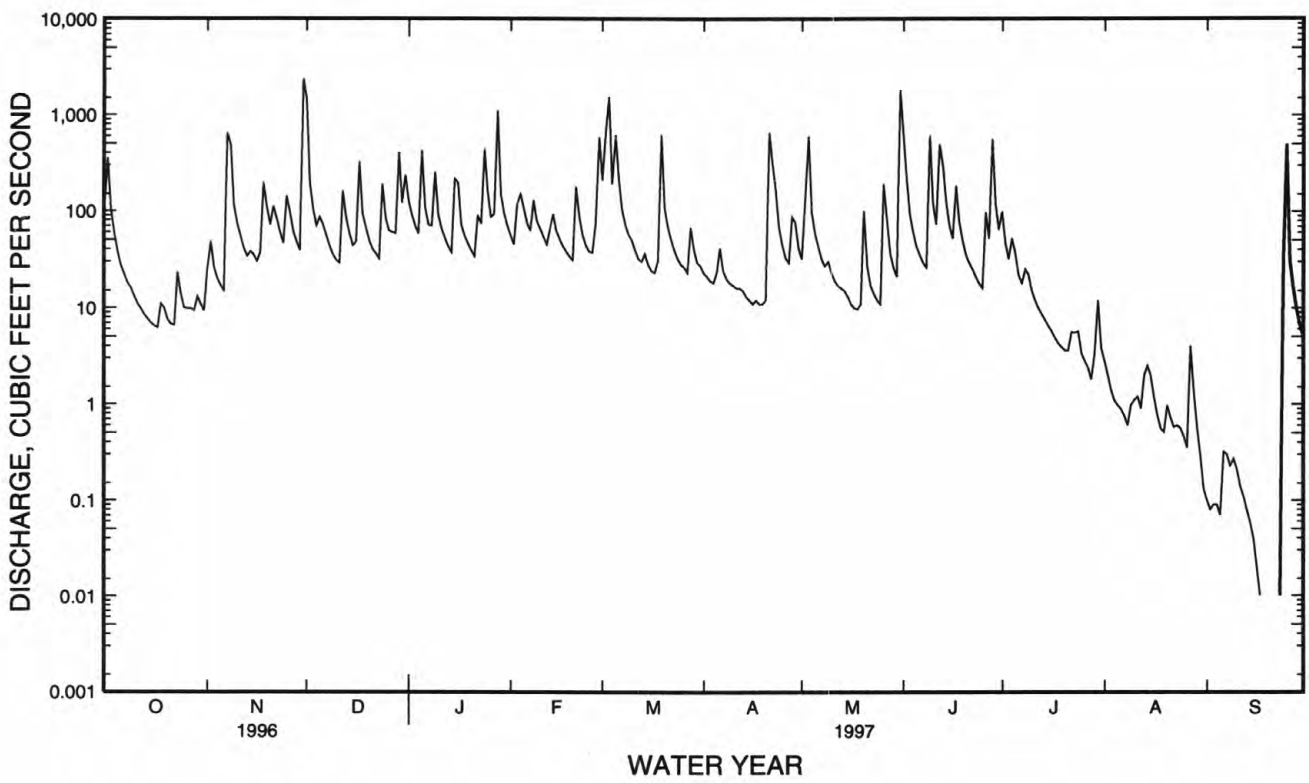
03597590 WARTRACE CREEK BELOW COUNTY ROAD AT WARTRACE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	35.8	72.6	160	120	136	147	72.9	43.3	26.9	11.3	21.3	32.3
MAX	109	172	350	148	326	311	207	114	143	23.7	79.5	167
(WY)	1996	1997	1991	1997	1991	1994	1994	1997	1997	1992	1992	1992
MIN	.065	2.93	55.4	84.5	43.3	78.8	20.4	2.23	1.57	1.73	.012	.18
(WY)	1994	1994	1990	1995	1995	1992	1992	1992	1990	1995	1991	1993

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	28072.85		33591.70			
ANNUAL MEAN	76.7		92.0		73.2	
HIGHEST ANNUAL MEAN					97.2	1994
LOWEST ANNUAL MEAN					46.8	1995
HIGHEST DAILY MEAN	2360	Nov 30	2360	Nov 30	4000	Sep 22 1992
LOWEST DAILY MEAN	.54	Jul 7	.00	Sep 18	.00	Aug 24 1990
ANNUAL SEVEN-DAY MINIMUM	.65	Jul 2	.00	Sep 17	.00	Aug 24 1990
INSTANTANEOUS PEAK FLOW			5310	Nov 30	8690	Sep 22 1992
INSTANTANEOUS PEAK STAGE			12.93	Nov 30	15.12	Sep 22 1992
INSTANTANEOUS LOW FLOW			a.00	Sep 18	b.00	Aug 24 1990
ANNUAL RUNOFF (CFSM)	2.15		2.58		2.05	
ANNUAL RUNOFF (INCHES)	29.25		35.00		27.84	
10 PERCENT EXCEEDS	150		189		132	
50 PERCENT EXCEEDS	27		33		18	
90 PERCENT EXCEEDS	3.1		.76		.35	

a Also occurred Sept. 19-22.
b No flow many days most years.



TENNESSEE RIVER BASIN

03597860 DUCK RIVER AT SHELBYVILLE, TN

LOCATION.--Lat 35°28'51", long 86°27'45", Bedford County, Hydrologic Unit 06040002, on right bank 125 ft upstream from U.S. Highway 231 bridge, one block west of the southwest corner of the public square, and at mile 221.4.

DRAINAGE AREA.--425 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to current year, discharge for gage height of 12.00 ft and below only. Continuous stage records were collected by Tennessee Valley Authority from December 1981 to September 1991.

GAGE.--Data collection platform. Datum of gage is 680.00 ft above sea level. Prior to Oct. 10, 1991 at datum 10.00 ft higher.

REMARKS.--Records good. Flow regulated by Normandy Reservoir (station 03596460) since January 1976.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum gage height, 33.13 ft, Mar. 28, 1994; minimum discharge, 129 ft^3/s, May 20, 1992; minimum daily discharge, 131 ft^3/s, May 20, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; maximum gage height, 21.92 ft, June 1; minimum discharge, 139 ft^3/s, Aug. 19; minimum daily discharge, 147 ft^3/s, Aug 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	331	640	---	---	---	---	320	309	---	---	171	154
2	---	---	---	---	---	---	295	---	---	---	197	164
3	---	724	---	---	---	---	278	---	---	603	198	166
4	454	666	---	---	---	---	265	---	---	428	195	169
5	340	639	---	---	---	---	271	---	---	550	183	168
6	272	613	---	---	---	---	350	---	---	389	170	165
7	232	---	---	---	---	---	288	---	---	342	161	167
8	206	---	---	---	---	---	252	700	651	257	189	166
9	188	---	---	---	---	---	239	671	---	342	216	173
10	173	---	---	---	---	---	223	379	---	213	223	177
11	201	---	---	---	---	---	218	319	---	276	210	176
12	199	---	---	---	---	---	221	296	---	278	206	174
13	193	---	---	---	716	---	216	243	---	269	213	173
14	188	---	---	---	---	---	199	227	---	262	---	172
15	185	---	---	---	651	---	190	312	---	205	212	167
16	181	---	---	---	595	---	173	240	---	182	181	165
17	177	---	---	---	556	---	179	226	---	174	169	166
18	190	---	---	---	525	---	176	221	---	169	163	162
19	190	---	---	---	504	---	175	216	---	189	147	160
20	181	---	---	---	486	---	184	---	664	184	198	165
21	174	---	---	---	---	---	185	440	590	178	168	158
22	173	---	---	---	---	---	---	361	552	183	164	159
23	237	---	---	---	696	---	---	333	589	176	163	167
24	234	---	---	---	619	---	593	372	564	179	164	---
25	198	---	---	---	595	429	405	374	538	374	172	---
26	192	---	663	---	576	481	318	385	522	209	173	---
27	186	---	736	---	---	426	276	---	---	194	187	326
28	193	---	---	---	---	e360	314	702	---	197	173	229
29	197	---	---	---	---	e450	509	627	---	208	169	469
30	200	---	---	---	---	e400	336	494	---	212	165	240
31	573	---	---	---	---	e380	---	---	---	184	158	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

TENNESSEE RIVER BASIN

03597860 DUCK RIVER AT SHELBYVILLE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1991 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1991 to current year.
DISSOLVED OXYGEN: October 1991 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1991.

REMARKS.--Records good. Interruptions in the record were due to equipment malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 28.0°C, Aug 17, 18, 1997; minimum, 0.1°C, Feb. 4, 5, 6, 1996.
DISSOLVED OXYGEN: Maximum, 14.2, mg/L, Mar. 15, 1993; minimum, 5.8 mg/L, Sept. 22, 1992.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 28.0°C, Aug. 17, 19; minimum,4.8°C, Jan. 18.
DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Jan. 30; minimum, 6.8 mg/L, June 29.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.0	17.3	17.8	17.0	15.6	16.3	13.2	11.1	12.3	12.7	11.4	11.7
2	18.8	18.0	18.6	15.6	13.8	14.7	12.8	10.9	11.4	11.6	11.2	11.4
3	18.8	18.2	18.6	13.8	13.0	13.3	10.9	10.5	10.8	11.7	11.2	11.3
4	18.2	17.8	18.0	13.2	12.8	13.0	10.9	10.3	10.6	12.3	11.6	11.8
5	18.5	17.7	18.1	15.2	13.2	14.2	10.3	9.5	9.8	13.2	12.1	12.5
6	18.3	17.4	17.9	16.9	15.2	16.0	10.1	8.9	9.3	12.1	10.5	11.0
7	17.9	17.0	17.5	17.5	16.7	17.1	11.3	10.1	10.9	10.5	8.9	9.5
8	17.7	16.8	17.3	16.7	14.1	15.1	10.9	9.9	10.1	8.9	8.5	8.6
9	17.5	16.8	17.1	14.1	12.9	13.6	9.9	9.1	9.4	8.5	7.9	8.3
10	17.2	16.0	16.6	12.9	12.4	12.7	10.5	9.3	9.7	8.5	7.1	7.9
11	16.0	15.0	15.6	12.4	11.8	12.0	11.7	10.5	11.1	7.1	5.9	6.2
12	15.6	14.2	14.8	11.8	11.4	11.6	12.6	11.7	12.2	6.0	5.4	5.7
13	15.7	14.1	14.8	12.6	11.6	12.1	12.6	11.5	12.1	5.8	5.4	5.6
14	16.1	14.7	15.3	12.6	12.4	12.5	11.5	10.5	10.8	5.6	5.1	5.4
15	17.1	15.3	15.9	12.4	11.8	12.1	10.9	10.3	10.5	7.6	5.6	6.4
16	17.8	15.9	16.6	12.4	11.8	12.1	10.9	10.5	10.6	7.8	6.4	7.0
17	18.4	16.9	17.5	12.6	11.8	12.2	10.7	9.7	10.0	6.4	5.0	5.4
18	18.0	17.3	17.7	12.9	12.6	12.7	9.7	8.7	9.2	5.1	4.8	5.0
19	17.8	16.3	17.2	12.7	12.4	12.6	8.7	7.2	7.9	6.3	5.1	5.7
20	16.3	14.5	15.2	12.4	11.6	11.8	7.2	6.6	6.9	6.6	6.2	6.4
21	14.5	13.5	13.9	13.3	12.0	12.8	6.7	6.3	6.5	7.7	6.6	7.1
22	14.7	13.5	14.1	12.9	11.6	12.2	7.8	6.7	7.3	8.8	7.7	8.5
23	15.7	14.3	14.9	11.6	10.6	10.9	10.0	7.8	8.9	8.6	8.5	8.6
24	15.6	14.5	14.9	11.8	10.8	11.3	10.8	9.6	10.3	10.3	8.6	9.3
25	14.8	14.0	14.4	12.9	11.8	12.3	9.6	7.1	8.3	10.4	8.9	9.8
26	15.2	14.2	14.7	12.8	10.9	12.1	7.1	6.3	6.5	8.9	7.3	7.8
27	17.0	15.2	16.2	10.9	9.7	10.1	9.4	6.7	7.9	8.3	7.3	7.7
28	18.5	17.0	17.8	9.9	9.5	9.7	12.4	9.4	10.6	9.4	7.8	8.7
29	20.1	18.5	19.3	10.3	9.9	10.0	13.7	12.4	13.6	7.8	6.9	7.3
30	20.1	19.3	19.6	11.1	10.3	10.7	13.7	12.5	13.4	8.0	7.5	7.7
31	19.3	17.0	18.1	---	---	---	13.1	12.0	12.5	8.0	7.2	7.5
MONTH	20.1	13.5	16.6	17.5	9.5	12.7	13.7	6.3	10.0	13.2	4.8	8.2

TENNESSEE RIVER BASIN

03597860 DUCK RIVER AT SHELBYVILLE, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.0	7.4	7.7	15.9	13.6	14.9	14.5	13.1	13.9	19.4	16.8	18.0
2	8.6	8.0	8.2	16.0	14.5	15.4	14.8	12.9	13.7	19.5	18.1	18.7
3	9.2	8.6	8.8	14.5	12.7	13.8	15.7	13.0	14.2	18.3	16.1	16.8
4	10.5	9.2	10.1	13.2	11.8	12.5	15.6	14.0	14.9	16.1	14.7	15.3
5	10.4	8.7	9.7	13.4	12.4	12.9	15.6	14.9	15.3	16.2	14.6	15.4
6	8.7	7.6	7.9	13.4	11.4	12.0	16.7	15.3	15.9	17.1	15.5	16.3
7	8.5	8.0	8.2	12.0	10.5	11.2	17.6	16.2	16.7	17.6	16.8	17.1
8	8.6	7.9	8.3	12.9	11.6	12.3	16.5	13.2	15.2	18.3	17.3	17.8
9	7.9	6.9	7.3	13.7	11.9	12.7	---	---	---	18.5	17.8	18.1
10	6.9	6.7	6.8	13.7	12.5	13.2	---	---	---	18.2	17.5	17.9
11	6.7	6.6	6.7	13.7	12.6	13.3	---	---	---	19.0	17.4	17.9
12	6.9	6.5	6.7	13.7	12.4	13.1	---	---	---	19.0	17.3	18.0
13	7.4	6.9	7.2	13.7	13.3	13.5	---	---	---	19.0	17.4	18.1
14	7.7	7.2	7.5	14.2	12.7	13.8	---	---	---	19.4	17.2	18.1
15	7.7	7.3	7.5	12.7	11.3	11.7	---	---	---	19.4	17.5	18.4
16	7.9	7.2	7.6	11.8	10.7	11.3	---	---	---	19.8	18.0	18.8
17	8.3	7.5	7.9	11.7	11.0	11.4	---	---	---	19.9	17.6	18.7
18	9.0	8.0	8.4	12.3	11.6	11.9	---	---	---	21.2	17.9	19.3
19	10.3	9.0	9.5	12.8	12.1	12.5	---	---	---	21.6	19.1	20.2
20	11.5	10.3	10.7	13.3	11.7	12.3	---	---	---	21.0	19.7	20.4
21	13.3	11.5	12.4	13.9	12.3	13.1	---	---	---	19.7	18.6	19.1
22	13.1	11.2	12.5	14.0	12.8	13.5	14.4	13.2	13.8	19.1	18.0	18.6
23	11.2	9.3	9.9	13.5	12.3	12.9	14.7	14.0	14.3	19.7	18.0	18.7
24	9.5	8.8	9.2	13.3	12.2	12.8	14.4	13.7	14.1	20.3	18.9	19.9
25	10.4	9.2	9.7	14.6	13.3	13.8	15.3	14.4	14.7	20.1	19.5	20.0
26	11.2	10.4	10.7	15.6	14.6	15.2	15.6	14.6	15.2	19.6	19.2	19.4
27	13.6	11.2	12.3	15.5	14.3	14.9	15.5	15.0	15.3	19.2	18.7	19.0
28	13.6	12.5	13.1	---	---	---	15.2	14.8	15.0	19.0	17.5	18.2
29	---	---	---	---	---	---	15.5	14.4	15.0	17.5	16.8	17.0
30	---	---	---	---	---	---	17.6	15.5	16.5	17.7	16.7	17.1
31	---	---	---	15.0	13.8	14.7	---	---	---	17.9	17.6	17.8
MONTH	13.6	6.5	9.0	16.0	10.5	13.1	17.6	12.9	14.9	21.6	14.6	18.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.6	15.9	16.5	21.9	21.4	21.6	26.1	24.7	25.3	26.4	25.0	25.6
2	17.6	16.2	16.9	22.8	21.8	22.2	26.1	24.6	25.2	26.2	25.3	25.7
3	18.0	17.4	17.7	23.6	22.4	23.0	26.0	24.4	25.2	25.9	25.1	25.5
4	18.5	17.5	18.0	24.1	23.3	23.5	25.8	24.5	25.2	25.1	24.0	24.6
5	18.4	17.8	18.1	23.9	22.8	23.2	25.9	24.9	25.4	24.0	22.5	23.1
6	18.0	17.6	17.8	23.2	22.3	22.7	25.6	24.8	25.2	22.7	21.8	22.2
7	18.1	17.8	17.9	22.9	22.1	22.5	25.2	24.5	24.8	22.9	21.6	22.1
8	17.8	17.5	17.6	23.6	22.0	22.6	24.7	23.9	24.2	23.0	22.1	22.6
9	17.7	16.9	17.3	24.1	22.3	23.3	24.0	22.5	23.3	23.9	22.7	23.1
10	17.6	17.1	17.3	25.1	23.5	24.4	23.0	21.6	22.2	23.7	23.0	23.3
11	18.0	17.6	17.8	25.8	24.0	24.8	23.6	21.3	22.3	23.4	22.7	23.0
12	18.9	18.0	18.4	25.7	24.3	24.9	24.7	22.4	23.5	23.4	22.1	22.6
13	19.9	18.9	19.5	25.2	23.9	24.5	25.0	23.9	24.3	23.0	21.8	22.3
14	19.4	18.8	19.1	25.5	23.8	24.6	24.6	23.8	24.1	22.7	21.8	22.2
15	19.8	18.1	18.9	25.9	24.1	25.0	25.8	23.9	24.7	22.8	21.9	22.4
16	19.8	19.1	19.4	26.1	24.8	25.5	27.1	24.5	25.7	23.7	22.1	22.7
17	19.8	19.4	19.5	26.6	25.2	25.9	28.0	25.7	26.7	23.6	22.4	23.0
18	20.3	19.4	19.8	26.9	25.5	26.2	27.7	26.5	27.1	24.1	22.9	23.4
19	20.9	19.9	20.4	27.0	25.7	26.3	28.0	26.6	27.1	24.8	23.3	24.0
20	21.8	20.5	21.2	27.3	25.8	26.6	26.9	26.0	26.4	24.1	23.5	23.9
21	21.8	21.3	21.6	27.7	26.2	26.9	26.0	25.0	25.5	24.2	23.7	24.0
22	21.6	21.0	21.4	27.9	26.5	27.1	25.0	24.0	24.4	24.0	23.2	23.6
23	21.9	21.4	21.6	27.6	26.6	27.0	24.0	23.0	23.4	23.2	22.5	22.8
24	22.6	21.5	22.1	27.4	26.6	27.0	23.1	22.1	22.6	22.5	20.3	21.3
25	22.9	22.2	22.6	27.0	25.5	26.4	23.3	21.9	22.5	20.3	19.8	20.1
26	22.9	22.2	22.5	25.6	24.8	25.2	24.1	22.3	23.0	20.6	19.5	20.0
27	22.4	21.3	21.8	26.4	24.2	25.3	24.6	23.1	23.8	21.3	20.4	20.8
28	22.4	21.3	22.0	26.7	25.6	26.2	25.5	24.0	24.6	22.0	20.8	21.3
29	21.6	21.0	21.3	26.3	25.6	26.0	25.4	24.5	25.0	21.9	21.2	21.5
30	21.5	20.2	20.7	25.8	25.0	25.4	25.7	24.8	25.3	21.6	20.8	21.3
31	---	---	---	26.4	24.9	25.5	25.9	24.9	25.3	---	---	---
MONTH	22.9	15.9	19.6	27.9	21.4	24.9	28.0	21.3	24.6	26.4	19.5	22.8

TENNESSEE RIVER BASIN

03597860 DUCK RIVER AT SHELBYVILLE, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.1	8.8	8.9	9.2	8.8	9.0	9.5	8.6	9.0	11.5	10.1	10.9
2	9.1	8.4	8.6	9.7	9.2	9.4	10.4	9.5	10.0	11.3	10.1	10.9
3	8.9	8.5	8.7	10.1	9.7	9.9	11.2	10.2	10.6	11.0	10.3	10.7
4	9.1	8.8	8.9	10.2	10.0	10.1	11.6	11.1	11.3	10.5	9.9	10.0
5	9.1	8.9	9.0	10.1	9.5	9.8	11.5	10.8	11.3	10.7	9.9	10.3
6	8.9	8.8	8.9	9.6	9.4	9.5	11.5	11.2	11.4	10.8	10.5	10.6
7	8.9	8.7	8.8	9.4	8.5	9.2	11.2	10.8	11.0	10.9	10.4	10.6
8	9.0	8.8	8.9	9.3	7.7	8.4	11.4	11.0	11.2	11.0	10.7	10.9
9	9.0	8.5	8.7	10.1	9.3	9.7	11.7	11.3	11.6	10.8	10.0	10.5
10	9.1	8.7	9.0	10.3	9.2	9.9	11.7	11.3	11.5	11.1	10.4	10.8
11	9.5	9.1	9.3	10.6	9.9	10.2	11.3	10.9	11.1	11.6	10.8	11.2
12	9.8	9.4	9.6	11.0	10.5	10.7	11.0	10.2	10.6	11.6	10.2	11.1
13	9.9	9.7	9.8	11.4	10.3	10.9	10.9	10.0	10.4	11.6	10.4	10.7
14	9.7	9.5	9.6	11.2	10.7	11.0	11.3	10.8	11.1	11.0	10.4	10.7
15	9.6	9.4	9.5	11.3	10.1	10.8	11.4	11.1	11.3	11.4	10.9	11.2
16	9.5	9.2	9.3	11.0	10.2	10.6	11.3	10.9	11.1	11.3	9.4	9.8
17	9.3	8.8	9.1	11.4	10.5	11.2	11.0	10.6	10.8	11.6	9.3	10.2
18	8.9	8.6	8.8	11.1	10.6	10.8	11.4	10.8	11.1	11.2	10.2	10.7
19	8.9	8.7	8.8	11.0	10.8	10.9	12.0	11.4	11.7	10.8	10.0	10.3
20	9.4	8.9	9.2	11.1	10.4	10.8	12.3	12.0	12.2	11.2	10.3	10.8
21	9.6	9.4	9.5	10.9	10.3	10.7	12.4	12.1	12.3	11.5	10.4	10.7
22	9.6	9.1	9.4	11.2	10.8	11.0	12.2	11.9	12.0	---	---	---
23	9.4	9.0	9.3	11.7	11.2	11.5	11.9	11.2	11.5	11.8	10.4	11.5
24	9.5	9.0	9.3	11.7	10.7	11.2	11.3	10.7	10.9	11.7	10.2	11.1
25	9.5	9.3	9.5	11.3	10.6	10.9	11.8	10.7	11.2	11.2	10.3	11.0
26	9.5	9.4	9.5	11.2	10.6	10.8	12.3	11.8	12.1	10.8	10.1	10.3
27	9.4	8.9	9.2	11.9	11.2	11.6	12.2	11.3	11.8	11.9	10.0	10.4
28	8.9	8.4	8.7	11.9	11.4	11.7	11.4	10.7	11.1	11.9	11.2	11.4
29	8.4	7.7	8.0	11.8	11.4	11.5	10.7	9.0	9.6	12.3	11.3	11.9
30	7.9	7.4	7.7	11.4	9.3	10.6	11.1	9.8	10.3	12.6	10.1	11.3
31	8.8	7.8	8.4	---	---	---	11.1	9.4	10.7	11.6	10.3	10.9
MONTH	9.9	7.4	9.0	11.9	7.7	10.5	12.4	8.6	11.1	12.6	9.3	10.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.4	10.3	10.9	9.2	8.5	8.8	10.7	9.5	10.1	9.5	8.6	9.0
2	12.1	11.0	11.6	---	---	---	11.0	9.8	10.4	9.3	8.4	8.8
3	12.0	10.2	11.2	9.2	8.2	8.5	11.1	9.8	10.4	9.3	8.1	8.7
4	12.0	10.2	11.1	10.1	9.2	9.6	10.9	9.7	10.1	10.2	9.2	9.8
5	12.4	11.0	11.5	10.0	9.1	9.6	10.5	9.3	9.8	10.3	9.7	10.0
6	11.5	10.5	11.1	10.2	9.1	9.8	9.9	9.1	9.5	10.1	9.7	9.9
7	11.3	10.0	10.6	10.6	10.0	10.3	10.5	9.0	9.6	9.9	9.7	9.8
8	11.4	10.0	10.7	10.1	9.8	10.0	---	---	---	9.9	9.4	9.7
9	11.2	10.1	10.4	10.4	9.8	10.0	---	---	---	9.7	9.3	9.5
10	12.0	10.3	11.3	10.1	9.6	9.8	---	---	---	9.9	9.2	9.6
11	12.1	11.4	11.8	10.7	9.6	10.1	---	---	---	10.0	9.3	9.6
12	11.8	11.1	11.4	10.2	9.9	10.1	---	---	---	10.1	9.2	9.6
13	11.7	11.1	11.3	10.3	9.9	10.0	---	---	---	10.2	9.3	9.6
14	11.4	10.9	11.0	10.5	9.7	9.9	---	---	---	10.2	9.2	9.7
15	11.4	10.9	11.1	10.4	9.8	10.3	---	---	---	10.4	9.4	9.9
16	11.6	11.1	11.2	10.5	10.3	10.4	---	---	---	10.3	9.3	9.8
17	11.6	11.1	11.2	10.9	10.3	10.4	---	---	---	10.1	9.4	9.7
18	11.4	10.9	11.1	10.7	10.2	10.3	---	---	---	10.0	9.3	9.6
19	11.0	10.6	10.8	10.4	9.7	10.0	---	---	---	9.6	8.8	9.3
20	10.6	10.2	10.4	10.3	10.0	10.2	---	---	---	9.4	8.8	9.2
21	10.3	9.1	9.8	10.3	10.1	10.2	---	---	---	9.4	9.1	9.2
22	10.0	9.0	9.3	10.4	10.1	10.2	10.1	8.7	9.8	10.2	9.4	9.9
23	11.0	9.9	10.5	10.5	10.2	10.4	10.3	9.8	10.0	10.6	9.8	10.2
24	11.2	10.8	10.9	10.6	10.3	10.4	10.7	10.3	10.6	10.1	9.4	9.8
25	11.3	10.6	10.8	10.7	10.2	10.3	10.8	10.2	10.6	9.8	9.4	9.6
26	11.0	10.1	10.5	10.6	10.1	10.4	11.0	9.7	10.4	9.8	9.6	9.7
27	10.5	9.4	10.0	10.5	10.2	10.3	10.7	10.1	10.4	9.8	9.2	9.4
28	9.5	8.7	9.1	---	---	---	10.4	9.5	10.0	10.6	9.6	10.2
29	---	---	---	---	---	---	10.0	9.4	9.7	10.8	10.6	10.7
30	---	---	---	---	---	---	9.6	8.9	9.3	10.8	10.4	10.7
31	---	---	---	10.8	9.4	10.3	---	---	---	10.5	8.7	10.0
MONTH	12.4	8.7	10.8	10.9	8.2	10.0	11.1	8.7	10.0	10.8	8.1	9.7

TENNESSEE RIVER BASIN

03597860 DUCK RIVER AT SHELBYVILLE, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.4	8.5	9.5	8.7	8.4	8.5	8.4	8.0	8.2	8.6	8.2	8.4
2	10.5	10.2	10.4	8.7	8.4	8.5	8.4	8.0	8.1	8.5	8.1	8.3
3	10.7	10.3	10.5	8.5	8.2	8.4	8.4	8.0	8.2	8.4	8.1	8.2
4	10.6	9.2	10.0	8.2	7.9	8.1	8.4	7.9	8.2	8.7	8.2	8.4
5	10.2	9.3	9.6	8.3	7.9	8.2	8.3	7.9	8.1	8.9	8.4	8.7
6	10.7	10.2	10.4	8.2	8.0	8.2	8.3	8.0	8.1	9.2	8.7	8.9
7	10.7	10.6	10.6	8.5	8.1	8.3	8.4	8.0	8.2	9.1	8.7	8.9
8	10.8	10.7	10.8	8.5	8.1	8.3	8.6	8.1	8.4	9.0	8.4	8.7
9	10.8	9.4	10.1	8.4	7.9	8.2	8.7	8.3	8.5	8.8	8.2	8.4
10	10.6	10.1	10.3	7.9	7.4	7.7	9.0	8.7	8.8	8.6	8.1	8.4
11	10.5	10.4	10.4	7.9	7.4	7.7	9.1	8.6	8.9	8.6	8.1	8.3
12	10.5	9.7	10.1	8.1	7.8	7.9	8.8	8.3	8.6	8.7	8.1	8.4
13	9.7	8.8	9.2	8.1	7.8	7.9	8.4	8.0	8.3	8.8	8.0	8.4
14	9.8	9.3	9.6	8.3	7.8	8.1	8.7	8.1	8.4	8.9	8.1	8.4
15	9.7	9.4	9.6	8.2	7.8	8.0	8.2	7.6	7.9	8.7	7.7	8.1
16	9.7	8.9	9.5	8.1	7.7	7.9	8.1	7.5	7.8	8.6	7.6	8.0
17	9.6	7.4	8.7	8.1	7.7	7.9	8.2	7.6	7.9	8.4	7.6	8.0
18	8.3	7.7	8.0	8.0	7.6	7.7	8.1	7.7	7.9	8.6	7.6	8.0
19	8.4	8.1	8.3	7.9	7.4	7.6	8.5	7.7	8.0	8.1	7.2	7.7
20	8.4	8.0	8.2	8.0	7.6	7.8	8.8	7.9	8.2	8.9	7.5	8.3
21	8.2	7.9	8.0	7.9	7.4	7.6	8.5	7.9	8.1	9.0	7.5	8.3
22	8.2	8.0	8.1	7.7	7.4	7.5	8.3	7.6	7.9	8.5	7.6	7.9
23	8.4	8.2	8.3	7.8	7.4	7.5	---	---	---	8.0	7.7	7.9
24	8.4	8.2	8.3	7.8	7.4	7.6	---	---	---	8.6	7.9	8.3
25	8.3	8.0	8.2	8.0	7.5	7.9	---	---	---	8.5	7.4	7.9
26	8.3	8.1	8.2	8.3	7.9	8.1	9.2	8.8	9.0	8.9	8.5	8.7
27	8.9	7.9	8.4	8.2	7.8	8.1	9.0	8.4	8.7	8.5	8.1	8.4
28	8.3	7.0	7.9	7.9	7.6	7.8	8.7	8.3	8.5	8.2	7.9	8.1
29	8.3	6.8	7.7	8.0	7.7	7.8	8.7	8.2	8.4	8.4	8.0	8.3
30	8.8	8.3	8.5	8.1	7.8	8.0	8.6	8.1	8.3	8.4	8.1	8.3
31	---	---	---	8.3	7.9	8.1	8.6	8.3	8.4	---	---	---
MONTH	10.8	6.8	9.2	8.7	7.4	8.0	9.2	7.5	8.3	9.2	7.2	8.3

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TENNESSEE RIVER BASIN
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 mi^2.

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.--Data collection platform. Datum of gage is 683.51 ft above sea level. Prior to Sept. 2, 1966, at datum 2.0 ft higher.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge prior to regulation, 62,900 ft^3/s, Feb. 13, 1948, gage height, 38.40 ft, present datum, from floodmarks, from rating curve extended above 35,000 ft^3/s on basis of slope-area measurement of peak flow. Prior to 1948, diurnal fluctuation caused by powerplant upstream. Flow regulated by Normandy Reservoir (station 03596460) since January 1976. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of 39.6 ft present datum, discharge, about 70,000 ft^3/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, 18,900 ft^3/s, at 0830 hours Dec. 1, gage height 26.36 ft; minimum, 174 ft^3/s, Aug. 19, Sept. 21, 22, 23; minimum daily, 174 ft^3/s, Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	697	16700	3440	1550	2790	396	393	7530	819	190	180
2	1780	977	4220	2770	1370	3320	361	399	3560	702	208	192
3	979	839	2110	2320	1690	11100	338	4520	2900	601	212	191
4	594	747	1510	2030	2160	5510	323	2790	2420	444	209	193
5	442	708	1460	3730	2080	4400	329	2390	2220	552	200	191
6	351	670	1540	2700	1760	5250	425	1940	1850	398	191	187
7	303	1370	1950	2140	1540	3640	353	891	807	354	181	186
8	271	4710	1830	1850	1710	3040	304	795	709	283	196	185
9	247	1750	1700	3450	1490	2650	287	769	4030	347	229	191
10	228	1210	1670	2500	1350	2390	269	460	4250	244	235	197
11	242	1010	1590	2040	1230	2150	263	377	3580	277	222	191
12	244	904	2630	1730	984	1930	264	347	3450	287	216	189
13	238	964	2590	1530	853	1760	261	295	2940	274	225	185
14	230	964	1960	1390	900	1340	244	273	2370	266	498	183
15	227	949	1680	1490	782	1750	233	339	2010	224	240	181
16	224	911	1570	3030	705	1600	219	282	1630	200	211	179
17	221	898	3170	1830	654	1500	220	263	1880	196	199	179
18	240	1200	2130	1550	612	901	218	258	1520	191	194	178
19	239	867	1700	1390	585	4970	217	254	975	202	179	176
20	228	929	1420	1270	559	3160	228	528	789	203	227	180
21	220	984	1170	1160	1080	2330	225	498	682	199	203	174
22	217	1120	1100	1020	1250	1940	2220	398	626	200	200	176
23	298	945	1000	1230	856	1670	1070	362	649	196	197	185
24	299	874	1100	2580	739	1420	663	402	622	195	197	1110
25	253	1010	998	2490	694	540	463	405	592	343	194	3110
26	246	1520	812	1800	666	564	362	419	570	234	193	1010
27	239	1160	889	1520	885	520	312	1150	687	210	205	383
28	246	1060	887	6710	3700	611	336	756	871	212	196	267
29	252	1000	11500	3330	---	717	588	668	1760	223	187	450
30	241	6570	3070	2390	---	503	406	535	822	223	182	278
31	578	---	4250	1920	---	458	---	3090	---	204	179	---
TOTAL	11023	39517	81906	70330	34434	76424	12397	27246	59301	9503	6595	10857
MEAN	356	1317	2642	2269	1230	2465	413	879	1977	307	213	362
MAX	1780	6570	16700	6710	3700	11100	2220	4520	7530	819	498	3110
MIN	217	670	812	1020	559	458	217	254	570	191	179	174
(†)	-1900	-6100	+2100	-7000	+2500	+2400	+7100	+4400	-900	-1600	-1800	+1100
MEAN‡	294	1114	2710	2043	1319	2543	650	1021	1947	255	155	399
CFSM‡	.61	2.32	5.63	4.25	2.74	5.29	1.35	2.12	4.05	.53	.32	.83
IN.‡	.71	2.58	6.50	4.90	2.86	6.10	1.51	2.45	4.52	.61	.37	.92

CAL YR	1996	MEAN‡	995	CFSM‡	2.07	IN‡	28.16
WTR YR	1996	MEAN‡	1204	CFSM‡	2.50	IN‡	33.98

† Change in contents, in cfs-days in Normandy Lake.
‡ Adjusted for change in contents.
NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

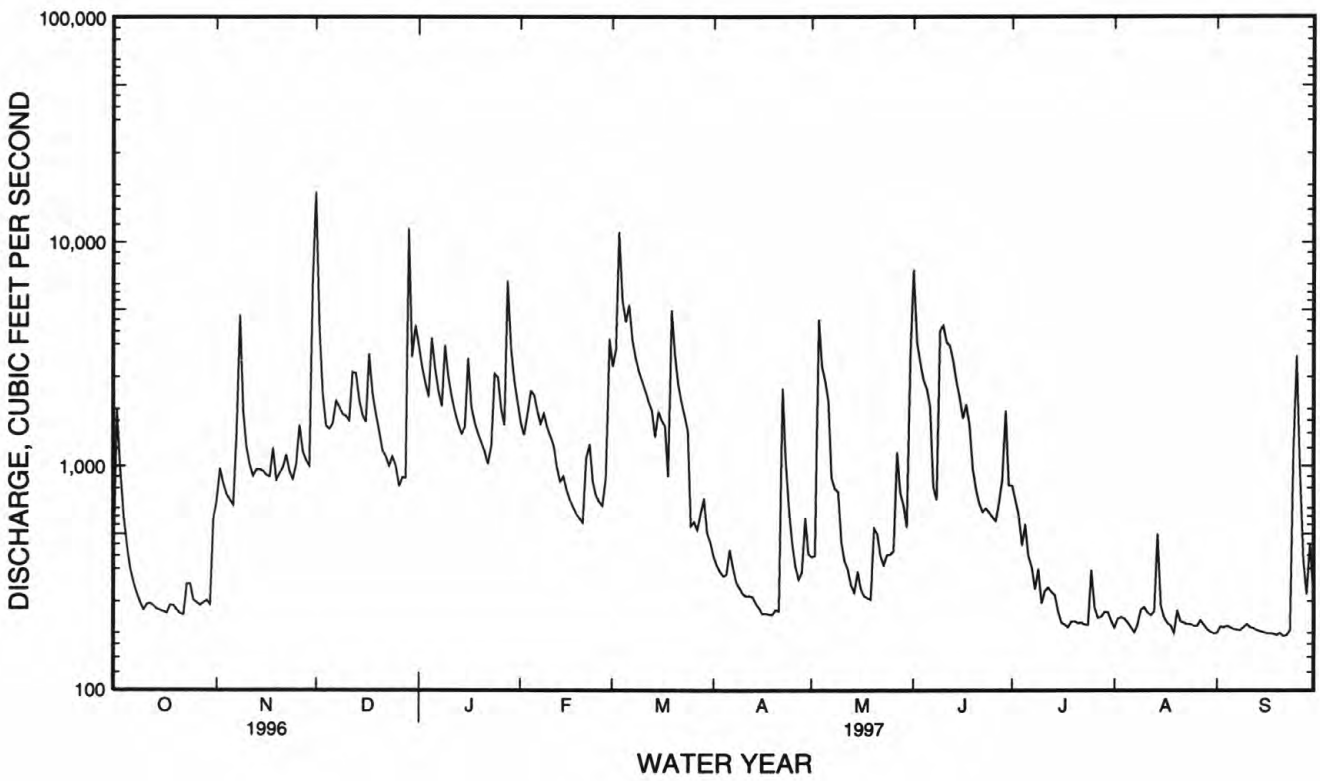
TENNESSEE RIVER BASIN
03598000 DUCK RIVER NEAR SHELBYVILLE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	410	1020	1443	1313	1283	1481	899	741	526	331	271	322
MAX	1314	2277	4132	2873	3731	3649	2992	2753	2151	1670	728	1036
(WY)	1990	1987	1992	1979	1994	1980	1994	1983	1989	1989	1982	1992
MIN	157	170	337	175	339	308	165	137	166	166	154	163
(WY)	1988	1988	1981	1986	1978	1988	1986	1988	1988	1987	1983	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		*WATER YEARS 1977 - 1997	
ANNUAL TOTAL	364151		439533			
ANNUAL MEAN	995		1204		835	
HIGHEST ANNUAL MEAN					1253	1991
LOWEST ANNUAL MEAN			257			1981
HIGHEST DAILY MEAN	16700	Dec 1	16700	Dec 1	21700	Dec 23 1990
LOWEST DAILY MEAN	214	Sep 20	174	Sep 21	72	Oct 1 1982
ANNUAL SEVEN-DAY MINIMUM	223	Jul 1	177	Sep 16	88	Sep 25 1982
INSTANTANEOUS PEAK FLOW			18900	Dec 1	26100	Dec 23 1990
INSTANTANEOUS PEAK STAGE			26.36	Dec 1	29.88	Dec 23 1990
INSTANTANEOUS LOW FLOW			a174	Aug 19	71	Sep 30 1982
10 PERCENT EXCEEDS	2080		2790		2080	
50 PERCENT EXCEEDS	556		682		313	
90 PERCENT EXCEEDS	228		196		170	

* Regulated period only.
a Also occurred Sept. 21, 22, 23.



TENNESSEE RIVER BASIN
03599000 BIG ROCK CREEK AT LEWISBURG, TN

LOCATION.--Lat 35°26'56", long 86°47'09", Marshall County, Hydrologic Unit 06040002, on downstream side of center pier of bridge on U.S. Highway 431, State Highway 50/431, 800 ft east of Marshall County courthouse in Lewisburg, and at mile 17.9.

DRAINAGE AREA.--24.9 mi^2.

PERIOD OF RECORD.--October 1953 to September 1961, March 1966 to September 1968, July 1995 to current year. Occasional measurements, water years, 1902, 1932-33 (published as West Rock Creek) 1945, 1950-52, 1955, 1963-64, 1988, 1990; water years 1962-66, 1969-70, annual maximums. Prior to December 1953 monthly discharges only published in WSP 1726.

GAGE.--Data collection platform. Datum of gage is 699.78 ft (supplement adjustment of 1955) above sea level. Prior to July 1, 1995 at datum 5.00 ft higher.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1939 (discharge, 16,300 ft^3/s) exceeded all previously known floods, including those in 1902, and 1856, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 30	1345	2,770	11.16	Mar. 5	1830	1,520	9.42
Dec. 29	0100	*8,810	*16.33	May 31	1200	8,550	16.15
Jan. 28	0030	3,510	11.92	June 9	0630	3,050	11.46
Feb. 28	0730	1,520	9.41	June 29	1000	1,590	9.55
Mar. 3	0400	2,710	11.09	Sept. 25	0230	2,140	10.35

Minimum discharge, 0.22 ft^3/s, Sept. 16, 17, 18, 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	67	854	134	65	159	30	17	552	188	3.4	.71
2	24	69	226	91	45	516	29	137	364	74	2.5	.74
3	18	39	135	65	52	1010	28	335	170	44	2.2	.58
4	15	28	89	49	98	259	26	77	100	39	1.9	.63
5	12	23	115	231	98	508	43	44	63	31	1.9	.51
6	11	19	84	98	66	247	46	32	42	23	1.9	.45
7	10	269	59	64	54	137	31	26	33	20	1.5	.36
8	9.2	186	45	70	99	91	28	23	27	18	1.4	.40
9	8.4	82	36	141	62	65	27	22	1040	16	3.2	.49
10	7.8	50	31	77	51	52	26	20	265	15	3.3	.48
11	7.2	35	29	54	41	39	25	18	139	15	2.4	.48
12	6.8	27	188	41	35	32	24	17	100	14	2.8	.48
13	6.5	23	94	33	57	28	22	18	66	28	3.6	.37
14	6.3	23	62	29	52	29	22	17	49	22	2.9	.29
15	6.3	22	46	115	40	24	20	17	37	15	2.1	.27
16	6.2	19	159	108	34	21	19	17	32	13	1.8	.26
17	6.2	23	424	56	31	21	18	17	114	10	1.2	.24
18	12	43	148	42	28	69	17	18	101	9.2	1.0	.23
19	8.6	38	93	37	26	466	17	34	55	8.1	.95	.35
20	7.4	32	63	30	25	142	17	65	37	7.6	3.7	.87
21	6.9	30	48	25	246	85	16	26	60	8.0	2.5	1.1
22	7.7	26	39	53	93	58	24	20	41	6.9	1.4	1.2
23	19	24	34	43	59	42	28	17	29	6.1	1.1	2.4
24	13	22	119	308	44	34	22	15	23	6.2	.95	41
25	11	103	64	130	36	30	20	15	21	5.4	.93	458
26	12	78	51	80	33	27	18	150	21	5.0	.87	36
27	12	49	50	180	70	25	17	61	18	4.5	.76	18
28	13	37	195	745	399	62	17	34	18	4.4	.67	13
29	14	31	1170	179	---	57	17	25	300	5.4	.66	9.8
30	13	1160	185	111	---	37	16	21	167	4.6	.62	8.1
31	11	---	226	78	---	33	---	2090	---	4.0	.54	---
TOTAL	340.5	2677	5161	3497	2039	4405	710	3445	4084	670.4	56.65	597.79
MEAN	11.0	89.2	166	113	72.8	142	23.7	111	136	21.6	1.83	19.9
MAX	24	1160	1170	745	399	1010	46	2090	1040	188	3.7	458
MIN	6.2	19	29	25	25	21	16	15	18	4.0	.54	.23
CFSM	.44	3.58	6.69	4.53	2.92	5.71	.95	4.46	5.47	.87	.07	.80
IN.	.51	4.00	7.71	5.22	3.05	6.58	1.06	5.15	6.10	1.00	.08	.89

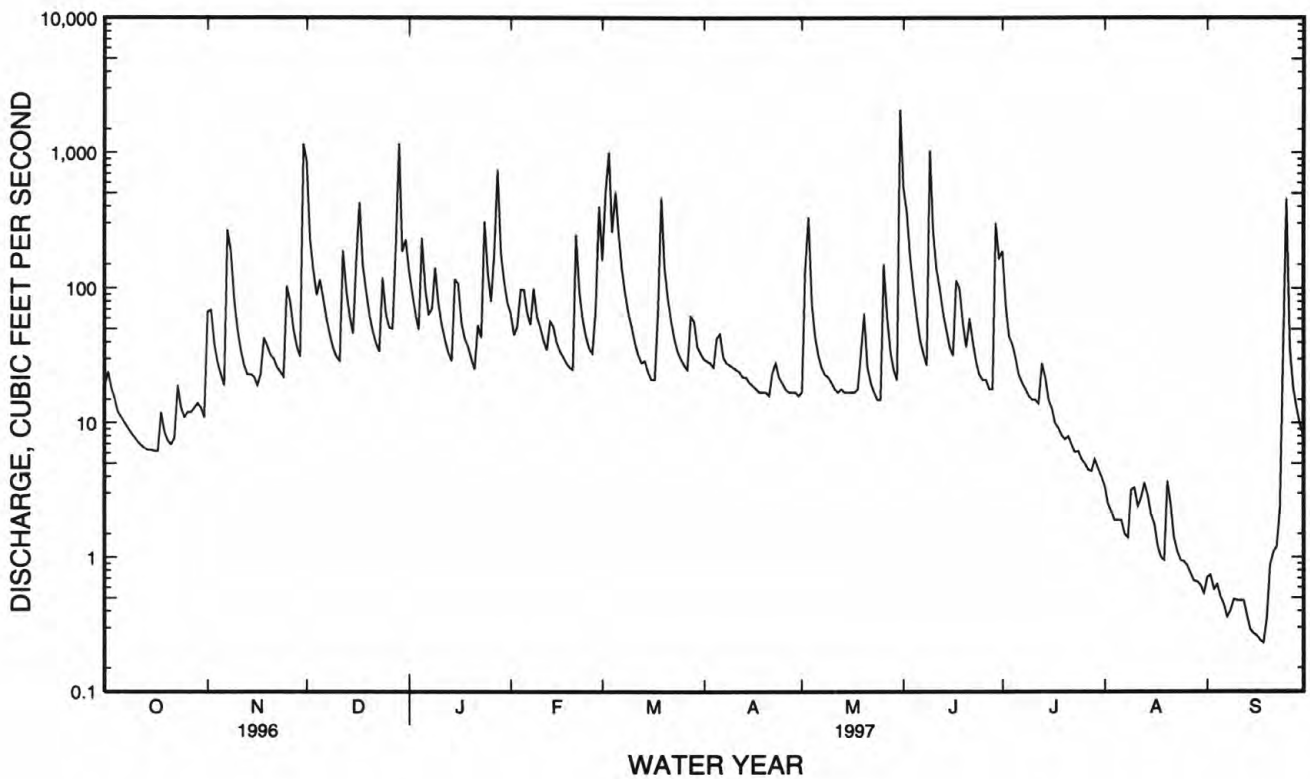
TENNESSEE RIVER BASIN
03599000 BIG ROCK CREEK AT LEWISBURG, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

MEAN	14.2	41.5	74.5	73.4	79.8	93.5	48.3	47.7	19.4	10.7	8.18	15.5
MAX	89.5	146	166	174	172	234	109	168	136	75.3	49.4	74.3
(WY)	1996	1958	1997	1957	1956	1955	1958	1967	1997	1967	1967	1957
MIN	.002	1.16	9.08	24.0	23.3	12.6	11.4	5.65	1.77	.029	.007	.005
(WY)	1956	1955	1959	1967	1968	1966	1967	1956	1956	1954	1954	1955

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	20056.58		27683.34			
ANNUAL MEAN	54.8		75.8		42.3	
HIGHEST ANNUAL MEAN					75.8	1997
LOWEST ANNUAL MEAN					13.0	1966
HIGHEST DAILY MEAN	1170	Dec 29	2090	May 31	3800	Mar 21 1955
LOWEST DAILY MEAN	.62	Jul 6	.23	Sep 18	a.00	Jul 2 1954
ANNUAL SEVEN-DAY MINIMUM	.80	Jun 30	.29	Sep 13	.00	Jul 24 1954
INSTANTANEOUS PEAK FLOW			8810	Dec 29	b16700	Mar 21 1955
INSTANTANEOUS PEAK STAGE			16.33	Dec 29	c23.62	Mar 21 1955
INSTANTANEOUS LOW FLOW			d.22	Sep 16	a.00	Jul 2 1954
ANNUAL RUNOFF (CFSM)	2.20		3.05		1.70	
ANNUAL RUNOFF (INCHES)	29.96		41.36		23.10	
10 PERCENT EXCEEDS	109		159		88	
50 PERCENT EXCEEDS	22		28		12	
90 PERCENT EXCEEDS	4.0		1.5		.29	

a Occurred at times, 1954-57, 1968.
b From rating curve extended above, 2,400 ft^3/s on basis of contracted opening measurement of peak flow at site 0.6 mi upstream (drainage area 19.0 mi2).
c Current datum, from floodmarks.
d Also occurred Sept. 17, 18, 19.



TENNESSEE RIVER BASIN
03599500 DUCK RIVER AT COLUMBIA, TN

LOCATION.--Lat 35°37'05", long 87°01'56", Maury County, Hydrologic Unit 06040003, on right bank 4 ft downstream from bridge on former U.S. Highway 31, 2 blocks north of public square in Columbia, 2.4 mi upstream from Rutherford Creek, and at mile 132.8.

DRAINAGE AREA.--1,208 mi^2.

PERIOD OF RECORD.--October 1904 to December 1908, April 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at same site, 1887-95, 1911 (fragmentary), 1947-71, published in reports of U.S. Weather Bureau. Discharge records furnished by Tennessee Valley Authority, 1983-1991.

REVISED RECORD.--WSP 783: 1929(M). WSP 853: Drainage area. WSP 1306: 1905-9, 1920-22, 1923(M).

GAGE.--Data collection platform. Datum of gage is 535.33 ft above sea level, supplementary adjustment of 1955. Prior to Jan. 9, 1925, nonrecording gages near this site; all gages at datum 2.37 ft higher prior to Oct. 1, 1933.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data Maximum discharge prior to regulation, 61,500 ft^3/s, Mar. 17, 1973; maximum gage height, 51.75 ft Feb. 14, 1948; no flow Oct. 22, 1922, caused by regulation by power plant .75 mi upstream. Flow regulated by Normandy Lake (station 03596460) since January 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 30, 1902, reached a stage of 48.0 ft, present datum, discharge, 50,700 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,000 ft^3/s, at 1700 hours Mar. 3, gage height, 35.29 ft; minimum, 140 ft^3/s, Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	500	18900	7240	3850	9750	1200	928	21700	3290	278	165
2	892	1240	25400	5950	3060	10700	1030	754	22700	2960	256	160
3	1950	1890	22700	4560	2690	25000	900	2740	13000	1900	220	159
4	1820	1600	7390	3710	3960	26700	815	7830	6150	1440	218	159
5	1190	1290	3970	5370	5250	21700	821	4730	4500	1140	232	171
6	872	1120	4060	8060	4690	17400	1000	3320	3690	1030	249	168
7	710	1300	3840	5440	3690	12500	1470	2720	3150	921	224	170
8	581	5460	3310	3980	3400	7340	1120	1770	2060	816	205	169
9	483	8680	3010	4630	4010	5590	866	1360	2870	843	206	170
10	410	4150	2680	6470	3380	4660	746	1230	9380	668	225	169
11	356	2480	2500	4800	2840	4040	678	1030	7830	612	254	164
12	319	1920	2810	3710	2500	3500	633	745	5710	479	297	173
13	305	1610	4530	3070	2240	3080	597	643	5950	459	334	168
14	308	1520	4570	2660	3060	2980	563	582	4890	488	376	163
15	293	1550	3240	2510	3240	2660	528	538	3770	447	515	160
16	279	1560	3060	4620	2450	2630	490	470	3120	422	608	158
17	270	1450	11000	5930	2030	2480	463	482	3240	362	357	154
18	279	1880	10100	3760	1780	2370	433	436	4790	306	272	151
19	269	3140	5680	2960	1610	7150	412	424	4130	283	239	148
20	285	2650	3910	2580	1470	11900	411	1690	2440	269	230	145
21	289	2010	3040	2300	1550	7160	451	2680	2090	268	214	141
22	281	2160	2460	2250	4090	4660	869	1460	2780	293	220	141
23	293	2250	2160	2820	3530	3600	3470	959	1950	263	216	164
24	335	1860	2590	6210	2300	2970	2570	747	1510	257	206	713
25	511	1700	3700	9170	1870	2580	1600	671	1290	249	194	4340
26	503	2560	3080	6350	1730	1790	1090	1050	1140	236	191	5770
27	405	3200	2370	4280	2190	1370	862	2310	1060	349	187	2520
28	381	2360	2310	9230	3840	1430	824	2640	1110	315	181	1240
29	383	1970	4750	14900	---	1770	821	1740	1300	266	183	711
30	431	3980	15100	8400	---	1970	894	1370	3130	309	189	508
31	442	---	9140	5010	---	1460	---	8730	---	301	173	---
TOTAL	17375	71040	197360	162930	82300	214890	28627	58779	152430	22241	7949	19492
MEAN	560	2368	6366	5256	2939	6932	954	1896	5081	717	256	650
MAX	1950	8680	25400	14900	5250	26700	3470	8730	22700	3290	608	5770
MIN	269	500	2160	2250	1470	1370	411	424	1060	236	173	141
(†)	-1900	-6100	+2100	-7000	+2500	+2400	+7100	+4400	-900	-1600	-1800	+1100
MEAN ‡	499	2165	6434	5030	3029	7009	1191	2038	5051	666	198	686
CFSM‡	.41	1.79	5.33	4.16	2.51	5.80	.99	1.69	4.18	.55	.16	.57
IN.‡	.48	2.00	6.14	4.80	2.61	6.69	1.10	1.95	4.67	.64	.19	.63

CAL YR 1996 MEAN‡ 2238 CFSM‡ 1.85 IN.‡ 25.22
WTR YR 1997 MEAN‡ 2837 CFMS‡ 2.35 IN.‡ 31.88

† Change in contents, in cfs-days, in Normandy Lake
‡ Adjusted for change in contents.
Note.--(cfs-days) for adjustments furnished by Tennessee Valley Authority.

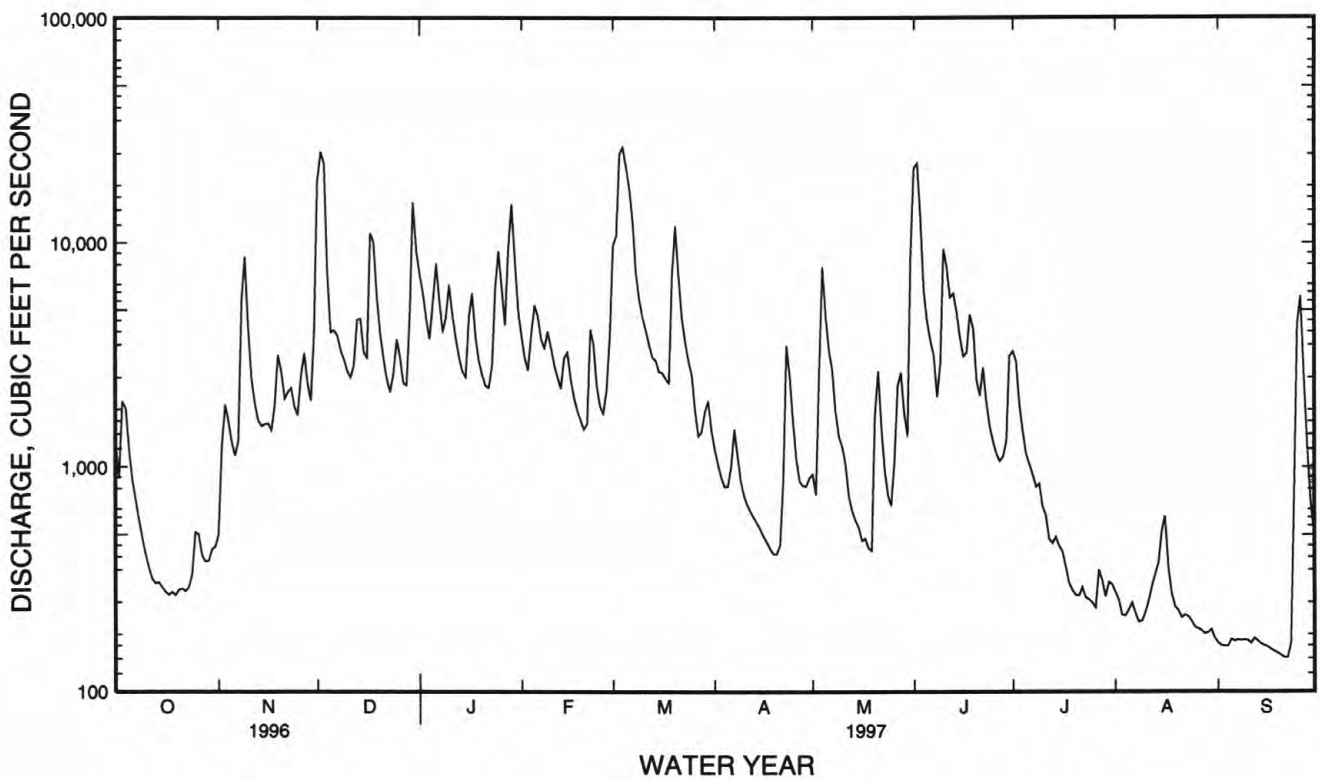
TENNESSEE RIVER BASIN
03599500 DUCK RIVER AT COLUMBIA, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	878	2322	3774	3548	3545	4236	2607	2082	1038	656	428	679
MAX	3642	5925	10360	8513	9901	10090	7464	9107	5081	4740	1065	3832
(WY)	1990	1987	1991	1979	1991	1980	1994	1983	1997	1989	1996	1979
MIN	180	236	418	273	953	1104	325	244	167	220	185	163
(WY)	1988	1981	1981	1986	1978	1985	1986	1988	1988	1988	1991	1984

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		*WATER YEARS 1977 - 1997	
ANNUAL TOTAL	819081		1035413			
ANNUAL MEAN	2238		2837		2144	
HIGHEST ANNUAL MEAN					3282	1989
LOWEST ANNUAL MEAN					553	1981
HIGHEST DAILY MEAN	25400	Dec 2	26700	Mar 4	52300	Feb 20 1991
LOWEST DAILY MEAN	184	Jul 6	141	Sep 21	86	Oct 4 1982
ANNUAL SEVEN-DAY MINIMUM	195	Jul 1	148	Sep 16	100	Sep 28 1982
INSTANTANEOUS PEAK FLOW			28000	Mar 3	52300	Feb 20 1991
INSTANTANEOUS PEAK STAGE			35.29	Mar 3	45.82	Feb 20 1991
INSTANTANEOUS LOW FLOW			a140	Sep 21		
10 PERCENT EXCEEDS	5160		6170		4980	
50 PERCENT EXCEEDS	1290		1600		797	
90 PERCENT EXCEEDS	281		219		191	

* Regulated period only.
a Also occurred Sept. 22.



TENNESSEE RIVER BASIN

03600085 CARTERS CREEK AT PETTY LANE NEAR CARTERS CREEK, TN

LOCATION.--Lat 35°43'39", long 86°59'19", Maury County, Hydrologic Unit 06040003, at bridge on Petty Lane, 0.8 mile north of Carters Creek, and at mile 4.7.

DRAINAGE AREA.--16.6 mi^2.

PERIOD OF RECORD.--October 1986 to current year

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
NOV 26...	0900	80020	39	367	10.0	7.6	757	10.4	93
FEB 19...	0915	80020	22	366	9.5	7.4	760	13.2	116
JUN 03...	0900	80020	59	291	15.5	7.3	749	10.1	104
SEP 24...	1130	80020	34	309	19.0	7.5	746	9.2	102

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
NOV 26...	K940	K1100	<1	<100	<1	<1	3	<1	<0.10
FEB 19...	440	170	<1	<100	<1	<1	<1	<1	<0.10
JUN 03...	1100	800	<1	<100	<1	1	<1	<1	<0.10
SEP 24...	K10000	K29000	1	<100	<1	<1	13	1	<0.10

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 26...	2	<1	<1	10	<0.010	<1	12	1.3	90
FEB 19...	<1	<1	<1	<10	<0.010	<1	18	1.1	86
JUN 03..	<1	<1	<1	<10	<0.010	<1	21	3.3	63
SEP 24...	2	<1	<1	<10	<0.010	<1	50	4.6	81

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

TENNESSEE RIVER BASIN

03600086 CARTERS CREEK TRIBUTARY NEAR CARTERS CREEK, TN

LOCATION.--Lat 35°43'34", long 86°59'19", Maury County, Hydrologic Unit 06040003, at culvert on Carters Creek Road, 0.7 mile north of Carters Creek.

DRAINAGE AREA.--2.94 mi^2.

PERIOD OF RECORD.--October 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
NOV 26...	1045	80020	6.1	633	11.0	7.5	757	10.1	92
FEB 19...	1030	80020	4.1	715	11.0	7.4	760	13.0	118
JUN 03...	0945	80020	10	753	17.5	7.2	749	9.7	104
SEP 24...	1240	80020	7.6	487	20.5	7.4	746	7.9	89

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
NOV 26...	120	520	<1	<100	<1	<1	<1	<1	<0.10
FEB 19...	K9	72	<1	<100	<1	<1	<1	<1	0.10
JUN 03...	190	430	<1	<100	<1	2	1	<1	<0.10
SEP 24...	K5200	K17000	<1	<100	<1	<1	1	<1	<0.10

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 26...	1	<1	<1	10	<0.010	<1	6	0.10	86
FEB 19...	<1	<1	<1	<10	<0.010	<1	7	0.08	91
JUN 03...	<1	<1	<1	<10	<0.010	1	7	0.20	91
SEP 24...	1	<1	5	<10	<0.010	2	19	0.39	75

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

TENNESSEE RIVER BASIN

03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK, TN

LOCATION.--Lat 35°43'02", long 86°59'45", Maury County, Hydrologic Unit 06040003, on left bank at end of Butler Road bridge, 0.1 mi west of Carters Creek, 0.3 mi upstream from Terrell Branch, 3.7 mi upstream from Rutherford Creek, and at mile 3.7.

DRAINAGE AREA.--20.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1986 to current year. Occasional low-flow measurements, water year 1986.

GAGE.--Data collection platform, crest-stage gage and concrete weir. Datum of gage is 605.94 ft above sea level.

REMARKS.--Records good. Diurnal fluctuation caused by industrial development upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 30	1630	2,360	12.70	May 31	1045	1,270	8.90
Dec. 16	Unknown	Unknown	Unknown	June 17	0830	1,660	10.20
Mar. 3	0300	*2,660	13.76	Sept. 24	2015	1,530	9.78

Minimum discharge, 0.29 ft^3/s, Sept. 21, 22.

REVISIONS.--The peak discharges and annual maximum (*) reported for water years 1992, 1993, 1994, 1995, and 1996 have been revised as shown in the following table. They supersede figures published in the reports for 1992, 1993, 1994, 1995, and 1996

Water Year	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
1992	Dec. 1, 1991	Unknown	Unknown	Unknown
	Dec. 2, 1991	Unknown	Unknown	Unknown
	Dec. 2, 1991	1800	*2630	*13.65
	Feb. 23, 1992	Unknown	Unknown	Unknown
	Mar. 10, 1992	Unknown	Unknown	Unknown
	June 4, 1992	0330	2,150	11.83
	July 5, 1992	1430	1,250	8.82
1993	Nov. 25, 1992	0515	1.320	9.06
	May 3, 1993	2200	*3,330	*15.90
1994	Dec. 4, 1993	1245	1,810	10.71
	Jan. 28, 1994	Unknown	Unknown	Unknown
	Feb. 22, 1994	2030	1,680	10.27
	Mar. 9, 1994	Unknown	Unknown	Unknown
	Mar. 24, 1994	Unknown	Unknown	Unknown
	Mar. 27, 1994	Unknown	Unknown	Unknown
	Apr. 5, 1994	Unknown	Unknown	Unknown
	Apr. 11, 1994	Unknown	Unknown	Unknown
	Apr. 15, 1994	1800	*2,400	*12.87
1995	Nov. 27, 1994	2315	*2,210	*12.04
	Dec. 10, 1994	Unknown	Unknown	Unknown
	Mar. 7, 1995	1845	1,600	10.00
	May 1, 1995	Unknown	Unknown	Unknown
	May 9, 1997	1115	1,660	10.22
1996	Oct. 5, 1995	Unknown	Unknown	Unknown
	Nov. 2, 1995	0830	1,940	11.14
	Nov. 7, 1995	Unknown	Unknown	Unknown

TENNESSEE RIVER BASIN

03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	45	320	35	49	229	24	19	155	59	4.0	.85
2	14	34	115	32	42	619	21	16	92	33	3.4	.73
3	12	24	79	30	112	901	19	17	64	24	2.9	.70
4	10	18	58	30	122	189	18	13	46	18	2.5	.71
5	8.9	15	61	138	92	380	26	11	37	14	2.3	.65
6	7.6	13	52	74	68	214	30	10	32	12	2.1	.64
7	6.8	64	42	53	54	126	23	9.1	27	10	1.9	.62
8	6.3	68	36	46	51	93	20	9.0	33	21	1.9	.62
9	6.0	40	31	71	43	74	17	9.3	39	17	3.1	.67
10	5.1	32	29	54	39	62	16	7.9	28	12	3.2	.69
11	4.8	26	26	43	35	48	15	7.1	27	9.5	2.8	.78
12	4.4	21	29	38	32	39	14	6.5	25	7.6	2.8	.65
13	4.2	19	27	34	45	37	13	6.3	22	6.6	4.1	.58
14	4.0	21	24	31	49	61	12	5.7	27	6.2	4.9	.52
15	4.0	20	22	69	41	42	11	5.9	22	5.8	3.6	.48
16	3.2	18	e282	73	37	36	10	5.2	19	5.4	2.9	.44
17	3.3	21	e427	49	33	33	9.9	5.1	281	5.1	2.5	.37
18	5.4	63	137	41	30	54	8.9	4.6	88	4.8	2.1	.36
19	5.1	52	91	36	28	168	8.9	51	47	4.2	2.2	.34
20	4.2	40	66	32	26	85	8.3	68	34	3.7	2.5	.31
21	3.9	35	50	29	34	64	32	26	72	3.4	2.2	.29
22	4.2	29	42	80	31	49	28	17	44	3.3	2.0	.29
23	13	26	37	63	27	40	25	13	32	3.1	1.8	.64
24	8.3	23	80	256	25	35	18	11	25	2.9	1.6	161
25	6.4	45	53	114	23	34	14	11	20	2.7	1.4	59
26	7.7	42	44	80	29	39	12	91	19	2.7	1.4	24
27	9.2	34	42	105	67	32	12	88	17	2.4	1.3	14
28	9.3	29	38	207	82	41	24	56	50	5.9	1.2	8.8
29	12	27	38	107	---	34	30	37	28	15	1.1	6.3
30	10	516	38	80	---	30	21	28	29	8.1	.99	4.9
31	8.3	---	37	63	---	27	---	422	---	5.1	.89	---
TOTAL	228.6	1460	2453	2193	1346	3915	541.0	1086.7	1481	333.5	73.58	290.93
MEAN	7.37	48.7	79.1	70.7	48.1	126	18.0	35.1	49.4	10.8	2.37	9.70
MAX	17	516	427	256	122	901	32	422	281	59	4.9	161
MIN	3.2	13	22	29	23	27	8.3	4.6	17	2.4	.89	.29
CFSM	.37	2.42	3.94	3.52	2.39	6.28	.90	1.74	2.46	.54	.12	.48
IN.	.42	2.70	4.54	4.06	2.49	7.25	1.00	2.01	2.74	.62	.14	.54

e Estimated

TENNESSEE RIVER BASIN

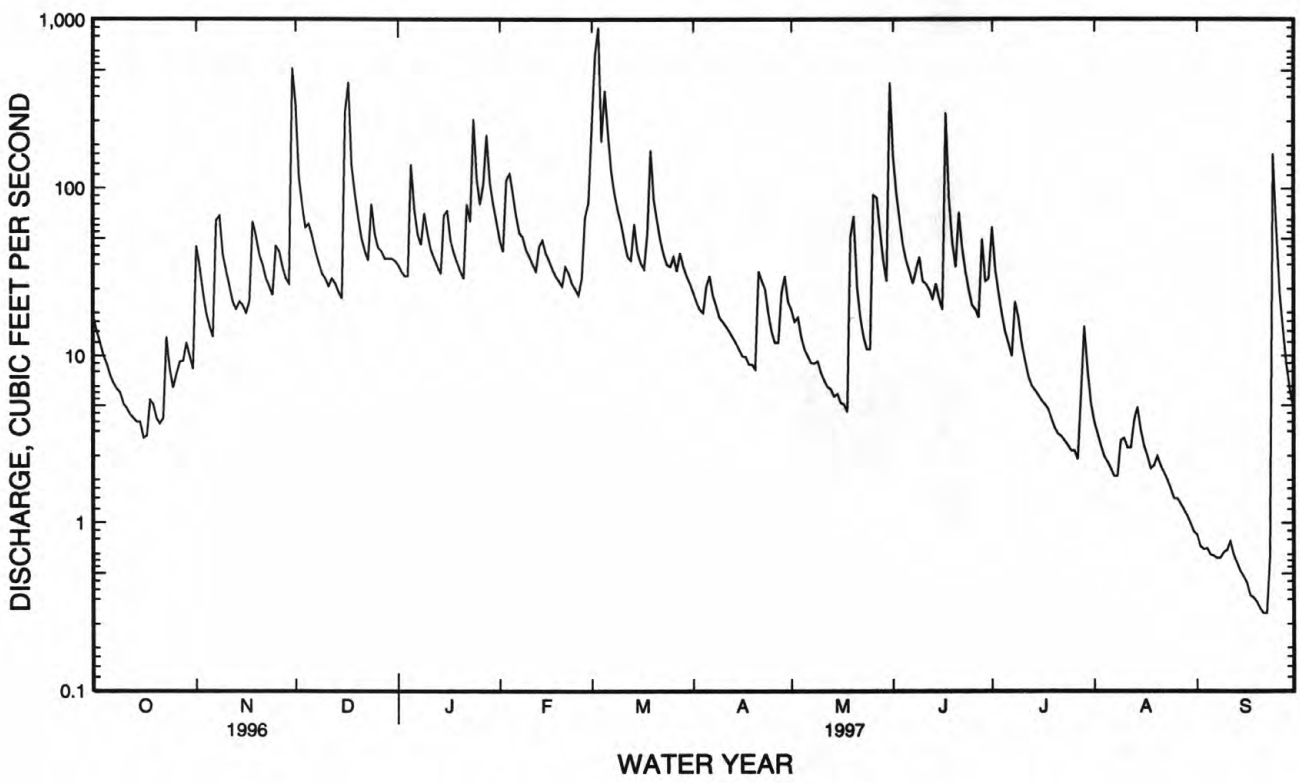
03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK, TN

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

MEAN	9.05	33.7	61.3	59.1	72.3	70.5	36.8	29.7	15.8	10.2	3.50	7.49
MAX	44.8	64.7	126	93.4	146	138	97.2	93.4	49.4	45.5	8.05	20.3
(WY)	1990	1989	1991	1989	1990	1994	1994	1991	1997	1989	1995	1989
MIN	.51	2.49	18.7	33.6	20.8	20.5	13.9	3.11	.51	.54	.47	.99
(WY)	1988	1994	1990	1987	1995	1988	1992	1988	1988	1988	1987	1987

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1987 - 1997	
ANNUAL TOTAL	12617.11		15402.31			
ANNUAL MEAN	34.5		42.2		34.0	
HIGHEST ANNUAL MEAN			50.0			1989
LOWEST ANNUAL MEAN			17.4			1988
HIGHEST DAILY MEAN	516	Nov 30	901	Mar 3	1430	Feb 3 1990
LOWEST DAILY MEAN	.95	Aug 30	.29	Sep 21	.12	Aug 15 1987
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 25	.34	Sep 16	.15	Jun 25 1988
INSTANTANEOUS PEAK FLOW			2660	Mar 3	c3300	May 3 1993
INSTANTANEOUS PEAK STAGE			13.76	Mar 3	c15.90	May 3 1993
INSTANTANEOUS LOW FLOW			b .26	Sep 21	a.11	Aug 15 1987
ANNUAL RUNOFF (CFSM)	1.72		2.10		1.69	
ANNUAL RUNOFF (INCHES)	23.35		28.51		22.96	
10 PERCENT EXCEEDS	69		80		70	
50 PERCENT EXCEEDS	23		24		13	
90 PERCENT EXCEEDS	2.5		2.1		.91	

a Also occurred Aug. 16, 1987, June 26, 1988.
b Also occurred Sept. 22.
c Revised.



TENNESSEE RIVER BASIN

03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK, TN--Continued

PERIOD OF RECORD.--October 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
NOV 26...	1215	80020	42	411	10.0	7.9	757	11.6	104
FEB 19...	1150	80020	28	416	11.5	7.8	760	11.1	102
JUN 03...	1040	80020	67	417	16.5	7.4	749	10.4	109
SEP 24...	1325	80020	30	327	19.5	7.6	746	8.9	99

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
NOV 26...	K660	700	<1	<100	<1	<1	<1	<1	<0.10
FEB 19...	84	61	<1	<100	<1	<1	<1	<1	<0.10
JUN 03...	1000	810	<1	<100	<1	<1	<1	<1	<0.10
SEP 24...	K7800	K26000	1	<100	<1	<1	2	<1	<0.10

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 26...	<1	<1	<1	<10	<0.010	<1	7	0.79	74
FEB 19...	<1	<1	<1	<10	<0.010	<1	16	1.2	62
JUN 03...	<1	<1	<1	<10	<0.010	2	9	1.6	92
SEP 24...	1	<1	<1	<10	<0.010	<1	30	2.4	80

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

TENNESSEE RIVER BASIN

03602219 PINEY RIVER AT CEDAR HILL, TN

LOCATION.--Lat 35°59'43", long 87°26'22", Dickson County, Hydrologic Unit 06040003, on right bank 300 ft upstream of Interstate Highway 40 bridge, 0.2 mi southeast of Cedar Hill, 0.5 mi upstream from Double Branch, and at mile 22.

DRAINAGE AREA.--46.6 mi^2.

PERIOD OF RECORD.--October 1987 to current year, discharge for stage of 7.00 ft and below only.

GAGE.--Data collection platform. Datum of gage is 552.20 ft above sea level.

REMARKS.--Records good. The City of Dickson diverts water for municipal water supply at confluence of West Piney River, 1.6 mi upstream from gage. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum gage height, 19.78 ft, May 27, 1991; minimum discharge, 7.6 ft^3/s, Sept. 4, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; maximum gage height, 9.85 ft, March 19; minimum discharge, 17 ft^3/s, Sept. 19, 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	---	---	105	153	---	89	64	119	---	28	21
2	54	181	259	97	129	---	83	59	102	299	28	21
3	48	114	167	89	118	---	80	58	84	195	27	21
4	43	89	118	86	348	---	77	53	72	144	25	21
5	40	77	133	213	262	---	81	49	65	118	25	20
6	37	67	128	149	199	---	78	47	63	97	24	20
7	34	170	106	122	171	429	70	45	61	83	24	20
8	34	202	88	110	176	343	66	45	72	77	25	20
9	32	129	76	118	148	291	66	43	102	69	32	21
10	30	103	69	108	133	261	63	42	89	60	29	21
11	29	87	65	93	121	209	62	40	104	53	26	21
12	28	75	148	84	111	176	62	38	165	50	33	20
13	28	68	112	76	145	163	60	38	---	63	35	20
14	27	70	90	71	162	258	58	37	---	55	29	20
15	26	66	77	114	137	195	56	35	348	50	27	19
16	26	63	---	180	123	165	54	34	247	45	25	19
17	26	80	---	128	109	151	53	34	---	43	24	19
18	40	162	443	111	103	---	52	33	318	40	24	19
19	31	143	289	101	97	---	51	35	210	39	25	18
20	29	118	206	92	91	458	50	40	151	38	52	19
21	27	104	159	83	95	336	53	34	126	35	31	19
22	31	89	131	200	88	270	51	33	118	34	27	18
23	52	81	115	192	80	205	49	32	93	34	26	25
24	36	75	---	---	74	165	44	32	80	33	25	---
25	34	132	227	363	69	165	42	34	70	32	23	97
26	50	132	182	247	80	200	42	---	63	31	23	45
27	51	107	172	204	99	152	44	269	58	30	23	34
28	57	96	152	---	97	144	64	185	---	29	22	29
29	63	89	142	267	---	126	81	120	156	37	22	27
30	59	215	124	214	---	111	69	86	---	32	22	25
31	53	---	114	180	---	100	---	119	---	29	22	---
TOTAL	1217	---	---	---	3718	---	1850	---	---	---	833	---
MEAN	39.3	---	---	---	133	---	61.7	---	---	---	26.9	---
MAX	63	---	---	---	348	---	89	---	---	---	52	---
MIN	26	---	---	---	69	---	42	---	---	---	22	---
CFSM	.84	---	---	---	2.85	---	1.32	---	---	---	.58	---
IN.	.97	---	---	---	2.97	---	1.48	---	---	---	.66	---

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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 mi^2.

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-71:1970.

GAGE.--Data collection platform. Datum of gage is 513.58 ft above sea level. Prior to May 27, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of May 27, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 1	2000	8,720	13.27	Mar. 20	0130	5,680	10.28
Dec. 17	1830	14,600	17.70	June 1	0730	10,300	14.50
Jan. 25	0200	5,680	10.28	July 1	1230	5,190	9.79
Mar. 3	1630	*24,200	*23.06	Sept. 25	1130	4,990	9.95
Mar. 6	1400	6,280	10.88				

Minimum discharge, 271 ft^3/s, Sept. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	462	586	5770	1160	1310	2840	940	973	8380	4090	456	412
2	422	823	4870	1060	1160	4450	885	959	2900	2830	422	410
3	398	846	2170	981	1070	18300	831	1030	1840	1650	401	368
4	384	722	1470	918	1620	10000	781	1110	1390	1240	387	349
5	364	618	1170	1480	1960	3570	785	923	1160	1060	378	336
6	344	563	1090	2090	1590	5860	954	830	1020	922	368	329
7	331	551	1010	1500	1350	3100	911	759	901	804	358	324
8	321	1230	886	1240	1280	2040	808	701	806	729	355	324
9	314	1510	735	1290	1220	1600	765	685	763	675	399	352
10	306	1100	665	1490	1090	1390	725	646	1010	619	438	348
11	300	891	622	1270	1010	1260	697	598	1590	575	422	328
12	296	740	1080	1110	929	1130	687	571	2090	540	419	315
13	292	642	1770	1000	924	1030	664	554	1620	518	531	306
14	290	587	1200	903	1050	1180	631	537	1320	514	581	302
15	290	562	952	875	1020	1090	607	520	1110	543	800	298
16	288	530	1030	1350	924	962	588	500	1010	489	647	294
17	284	496	10700	1420	870	920	576	485	2000	468	489	295
18	319	524	7080	1170	827	997	564	474	2580	453	429	294
19	372	653	2430	1020	788	3960	548	476	1560	429	405	290
20	334	717	1690	945	761	4240	545	645	1180	424	526	285
21	313	690	1320	877	782	2280	548	636	1000	418	610	280
22	312	659	1120	911	862	1630	1030	532	1720	413	482	276
23	386	613	993	1180	781	1310	1090	492	1340	409	423	274
24	447	571	1290	3080	721	1140	963	476	1020	401	396	475
25	395	556	1460	4300	696	1070	816	493	872	387	378	3930
26	377	739	1220	2220	707	1130	733	503	862	377	368	2150
27	417	809	1170	1650	871	975	695	755	1100	369	363	1030
28	896	726	1110	2560	1110	1030	731	1030	974	384	357	749
29	1130	661	1080	2770	---	1150	1070	796	1120	736	353	623
30	811	669	1270	1890	---	1110	986	677	1540	700	361	546
31	624	---	1090	1520	---	1020	---	3170	---	518	378	---
TOTAL	12819	21584	61513	47230	29283	83764	23154	23536	47778	24684	13680	16892
MEAN	414	719	1984	1524	1046	2702	772	759	1593	796	441	563
MAX	1130	1510	10700	4300	1960	18300	1090	3170	8380	4090	800	3930
MIN	284	496	622	875	696	920	545	474	763	369	353	274
CFSM	.93	1.61	4.44	3.41	2.34	6.04	1.73	1.70	3.56	1.78	.99	1.26
IN.	1.07	1.80	5.12	3.93	2.44	6.97	1.93	1.96	3.98	2.05	1.14	1.41

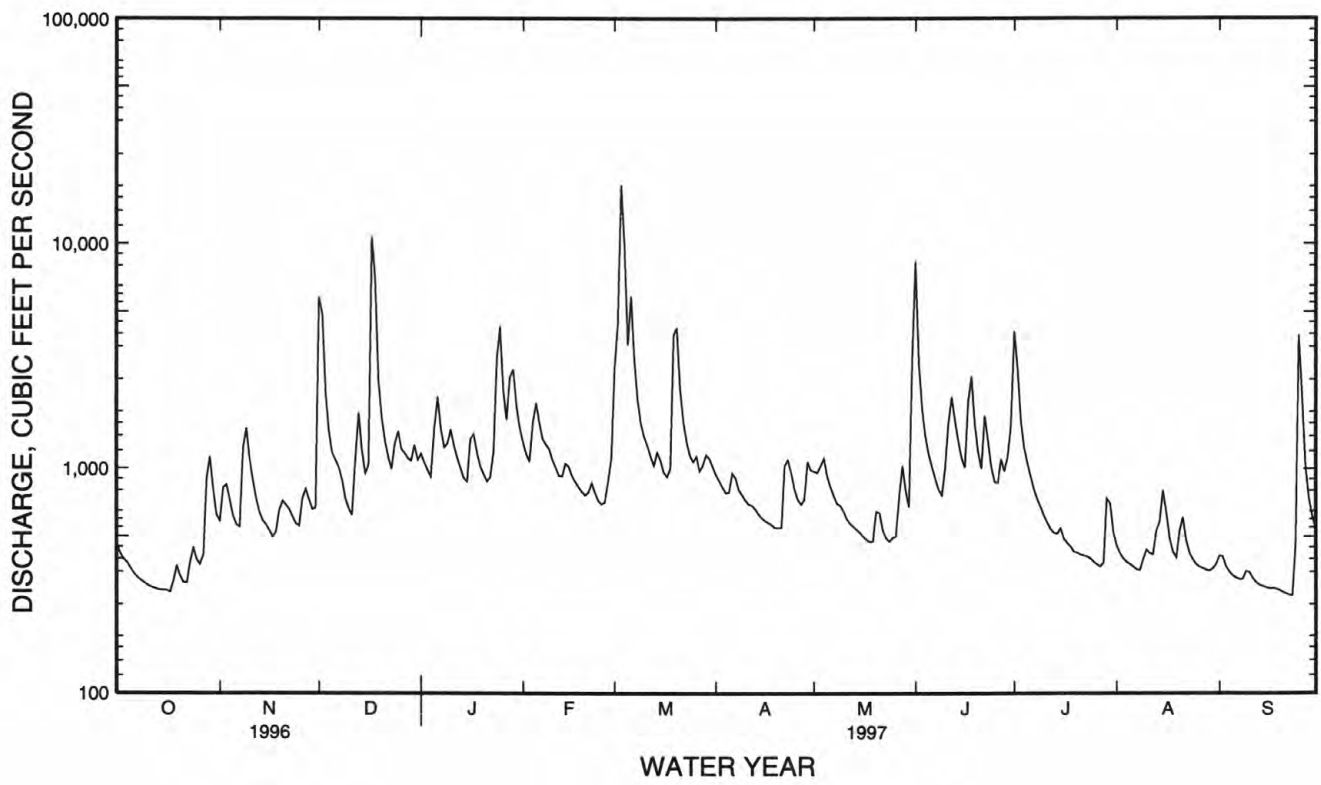
TENNESSEE RIVER BASIN
03604000 BUFFALO RIVER NEAR FLAT WOODS, TN--Continued
(Hydrologic bench-mark station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1997, BY WATER YEAR (WY)

MEAN	283	526	938	1204	1365	1484	1182	885	464	356	288	274
MAX	1418	2554	3568	3854	4901	4405	3034	5227	1642	1824	1008	1286
(WY)	1933	1958	1927	1937	1948	1973	1964	1991	1974	1932	1923	1979
MIN	112	174	213	234	316	458	303	210	146	121	117	94.2
(WY)	1932	1925	1964	1940	1926	1966	1986	1942	1941	1943	1925	1925

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1920 - 1997	
ANNUAL TOTAL	297387		405917			
ANNUAL MEAN	813		1112		767	
HIGHEST ANNUAL MEAN					1583	1973
LOWEST ANNUAL MEAN			323			1942
HIGHEST DAILY MEAN	10700	Dec 17	18300	Mar 3	75800	May 27 1991
LOWEST DAILY MEAN	246	Jul 19	274	Sep 23	65	Sep 9 1925
ANNUAL SEVEN-DAY MINIMUM	259	Jul 1	285	Sep 17	71	Sep 5 1925
INSTANTANEOUS PEAK FLOW			24200	Mar 3	a96300	May 27 1991
INSTANTANEOUS PEAK STAGE			23.06	Mar 3	b32.19	May 27 1991
INSTANTANEOUS LOW FLOW			271	Sep 23	65	Sep 9 1925
ANNUAL RUNOFF (CFSM)	1.82		2.49		1.72	
ANNUAL RUNOFF (INCHES)	24.75		33.78		23.33	
10 PERCENT EXCEEDS	1290		1800		1460	
50 PERCENT EXCEEDS	620		788		392	
90 PERCENT EXCEEDS	294		353		178	

a From rating curve extended above 50,000 ft 3/s on basis of slope-area and contracted opening measurements and rainfall-runoff study.
b From high-water mark in gage house.



TENNESSEE RIVER BASIN

03605078 CYPRESS CREEK AT CAMDEN, TN

LOCATION.--Lat 36°02'49", long 88°04'33", Benton County, Hydrologic Unit 06040005, on left bank, adjacent to southwest corner of third sewage lagoon at Camden Sewage Treatment Plant, 1.5 mi southeast of Camden, and 1.4 mi upstream from Kentucky Lake.

DRAINAGE AREA.--27.3 mi^2.

PERIOD OF RECORD.--January 1992 to current year, discharge for stage of 4.30 ft and below only.

GAGE.--Water-stage recorder. Datum of gage is 360.00 ft above sea level.

REMARKS.--Records fair, except for estimated daily discharges which are poor. Periodic observations of specific conductance and water temperature are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; maximum gage height, 10.64 ft, Mar. 2; minimum discharge, 2.6 ft^3/s, Aug. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	e41	---	45	42	---	24	---	22	62	5.1	4.7
2	20	e106	---	44	40	---	22	27	19	53	4.2	4.0
3	16	e67	63	42	---	---	21	26	13	42	3.6	6.6
4	e25	e52	44	41	---	---	23	18	11	33	3.6	7.5
5	e23	e45	---	---	---	---	---	16	13	27	3.4	6.6
6	e22	e39	---	76	---	---	---	15	13	22	3.1	6.1
7	e20	e99	46	44	---	---	33	12	12	18	2.9	4.6
8	e20	e118	37	39	---	---	27	13	13	15	2.9	---
9	e19	e76	31	46	---	---	22	14	29	14	8.8	---
10	e18	e60	29	42	---	---	21	11	14	13	39	21
11	e17	e51	30	30	---	---	21	9.8	17	12	11	15
12	e16	e40	---	27	---	---	32	9.3	21	11	---	10
13	e16	e41	53	24	---	---	22	9.2	---	13	---	8.5
14	e16	e39	41	24	---	---	19	8.5	---	19	20	7.4
15	e15	36	33	---	---	---	17	7.0	---	19	17	6.3
16	e15	35	---	---	---	---	16	6.1	26	18	8.9	5.8
17	e15	---	---	49	109	---	14	5.8	---	15	6.5	5.7
18	e23	---	---	41	89	---	14	5.5	---	13	5.6	7.3
19	e18	59	---	37	78	---	14	---	---	12	5.4	13
20	e17	43	53	34	72	---	13	---	44	10	32	11
21	e16	37	44	33	---	---	19	11	---	8.5	9.8	10
22	e18	28	42	---	---	---	18	7.4	---	8.9	6.4	9.3
23	e30	27	40	---	76	---	20	6.4	---	11	5.3	22
24	e21	25	---	---	65	56	14	5.7	---	5.7	4.9	---
25	e20	---	---	---	59	---	12	5.8	33	4.0	4.4	---
26	e29	---	---	74	---	---	10	20	24	3.7	4.2	32
27	e30	57	---	---	---	57	---	---	20	3.3	4.3	20
28	e33	47	---	---	---	44	---	26	17	9.3	4.0	16
29	e37	42	74	---	---	40	---	16	14	---	6.8	14
30	e35	---	55	62	---	34	49	12	23	---	8.8	12
31	e31	---	47	48	---	29	---	22	---	7.5	5.6	---
TOTAL	673	---	---	---	---	---	---	---	---	---	---	---
MEAN	21.7	---	---	---	---	---	---	---	---	---	---	---
MAX	37	---	---	---	---	---	---	---	---	---	---	---
MIN	15	---	---	---	---	---	---	---	---	---	---	---
CFSM	.80	---	---	---	---	---	---	---	---	---	---	---
IN.	.92	---	---	---	---	---	---	---	---	---	---	---

e Estimated

TENNESSEE RIVER BASIN
RESERVOIRS IN TENNESSEE RIVER BASIN

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 mi^2. PERIOD OF RECORD, February 1943 to current year. GAGE,water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir formed by concrete main dam and 10 saddle dams. Spillway equipped with 11 radial gates, each 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.

COOPERATION.--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, 649,100 cfs-days, July 5, elevation, 996.22 ft; minimum, 107,500 cfs-days, Feb. 4, elevation, 940.34 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 mi^2. PERIOD OF RECORD, November 1950 to current year. GAGE, water-stage recorder. Datum of gage is sea level. Prior to May 11, 1951, non-recording gage at same site and datum.

REMARKS.--Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers, each 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.

COOPERATION.--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.--Maximim contents, 338,500 cfs-days, May 27, elevation 1,730.76 ft: minimum, 216,000 cfs-days, Dec. 27, elevation, 1,694.34 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 mi^2. PERIOD OF RECORD, December 1948 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers, each 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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 300,800 cfs-days, Apr. 19, 1987, elevation, 1,963.28 ft; minimum after first filling, 25,100 cfs-days, Jan. 13, 1956, elevation, 1,813.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 292,400 cfs-days, May 28, elevation, 1,960.76 ft; minimum, 210,800 cfs-days, Jan. 1, elevation, 1,933.56 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	03468500 DOUGLAS LAKE			03476000 SOUTH HOLSTON LAKE			03483500 WATAUGA LAKE		
Sept. 30...	976.88	401,600	-	1,707.96	257,600	-	1,941.95	234,400	-
Oct. 31...	961.69	252,300	-149,300	1,698.00	226,800	-30,800	1,936.05	217,800	-16,600
Nov. 30...	953.86	190,100	-62,200	1,695.78	220,200	-6,600	1,936.47	218,900	+1,100
Dec. 31...	946.09	138,800	-51,300	1,695.35	218,900	-1,300	1,935.81	217,100	-1,800
CAL YR 1996	-	-	+22,200	-	-	-7,300	-	-	+3,000
Jan. 31...	943.15	122,000	-16,800	1,698.34	227,800	+8,900	1,933.90	211,800	-5,300
Feb. 28...	952.35	179,400	+57,400	1,708.10	258,100	+30,300	1,940.05	229,000	+17,200
Mar. 31...	974.83	379,400	+200,000	1,718.31	292,500	+34,400	1,952.92	267,100	+38,100
Apr. 30...	989.17	550,000	+170,600	1,727.62	326,500	+34,000	1,958.02	283,400	+16,300
May 31...	993.73	613,000	+63,000	1,729.45	333,400	+6,900	1,959.22	287,300	+3,900
June 30...	994.78	628,100	+15,100	1,725.40	318,100	-15,300	1,957.35	281,200	-6,100
July 31...	990.04	561,700	-66,400	1,721.86	305,100	-13,000	1,950.99	261,200	-20,000
Aug. 31...	976.93	402,100	-159,600	1,714.33	278,700	-26,400	1,943.61	239,200	-22,000
Sept. 30...	964.28	275,300	-126,800	1,705.84	250,900	-27,800	1,939.54	227,600	-11,600
WTR YR 1997	-	-	-126,300	-	-	-6,700	-	-	-6,800

TENNESSEE RIVER BASIN
RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

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 mi^2. PERIOD OF RECORD, December 1952 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by gravity nonover-flow type concrete dam. Spillway is equipped with five radial gates, each 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.

COOPERATION.--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, 93,600 cfs-days, May 27, elevation, 1,383.22 ft; minimum, 45,400 cfs-days, Jan. 11, elevation, 1,353.54 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 mi^2. PERIOD OF RECORD, October 1953 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by gravity nonover-flow type concrete dam. Spillway is equipped with five radial gates, each 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.

COOPERATION.--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, 2,690 cfs-days, Sept. 19, 1986, elevation, 1,226.33 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,600 cfs-days, Nov. 2, elevation, 1,263.02 ft; minimum, 11,300 cfs-days, June 23, elevation, 1,257.77 ft.

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 mi^2. PERIOD OF RECORD, December 1941 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with nine radial gates, each 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.

COOPERATION.--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, 722,000 cfs-days, June 17, elevation, 1,071.32 ft; minimum, 273,300 cfs-days, Jan. 1, elevation, 1,030.85 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	03486800 BOONE LAKE			03487000 FORT PATRICK HENRY LAKE			03493500 CHEROKEE LAKE		
Sept. 30...	1,378.68	84,200	-	1,260.32	12,400	-	1,052.30	476,900	-
Oct. 31...	1,373.37	74,400	-9,800	1,262.07	13,200	+800	1,042.60	375,400	-101,500
Nov. 30...	1,364.62	60,200	-14,200	1,259.83	12,200	-1,000	1,038.83	340,200	-35,200
Dec. 31...	1,358.14	51,100	-9,100	1,261.44	12,900	+700	1,033.36	293,300	-46,900
CAL YR 1996	-	-	+2,800	-	-	-200	-	-	+36,700
Jan. 31...	1,357.92	50,800	-300	1,259.97	12,200	-700	1,033.61	295,300	+2,000
Feb. 28...	1,367.18	64,200	+13,400	1,261.59	12,900	+700	1,042.53	374,800	+79,500
Mar. 31...	1,373.31	74,300	+10,100	1,260.75	12,600	-300	1,053.50	490,600	+115,800
Apr. 30...	1,380.91	88,700	+14,400	1,260.26	12,400	-200	1,061.66	589,800	+99,200
May 31...	1,380.07	87,000	-1,700	1,262.05	13,100	+700	1,070.77	714,000	+124,200
June 30...	1,381.53	90,000	+3,000	1,261.33	12,800	-300	1,068.39	680,100	-33,900
July 31...	1,382.38	91,800	+1,800	1,262.45	13,300	+500	1,061.20	583,900	-96,200
Aug. 31...	1,381.38	89,700	-2,100	1,261.80	13,000	-300	1,050.48	456,700	-127,200
Sept. 30...	1,377.88	82,700	-7,000	1,261.36	12,800	-200	1,042.28	372,400	-84,300
WTR YR 1997	-	-	+1,500	-	-	+400	-	-	-104,500

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 mi^2. PERIOD OF RECORD, July 1943 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir formed by concrete dam with earth embankment. Spillway equipped with 14 radial gates, each 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. 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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

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, 194,100 cfs-days, June 14; maximum elevation, 814.49 ft, May 4; minimum midnight contents, 146,300 cfs-days, Feb. 16, minimum elevation, 807.14 ft, Feb. 17. Contents based on backwater profile.

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 mi^2. PERIOD OF RECORD, December 1979 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir formed by concrete dam with earth embankment. Spillway equipped with 3 radial gates, each 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. 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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 228,700 cfs-days, May 8, 1984, elevation, 815.37 ft; minimum after first filling, 155,300 cfs-days, Feb. 17, 1997, elevation, 807.30 ft; minimum elevation, 806.96 ft, Jan. 14, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 211,400 cfs-days, June 14, elevation, 814.72 ft; minimum, 155,300 cfs-days, Feb. 17, elevation, 807.30 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 mi^2. PERIOD OF RECORD, June 1935 to current year. GAGE, water-stage recorder. Datum of stage is 0.11 ft above sea level. Gage readings have been reduced to sea level.

REMARKS.--Reservoir is formed by concrete gravity dam with three drum gates, each 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.

COOPERATION.--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, 1,072,300 cfs-days, June 20, elevation, 1022.64 ft; minimum, 571,400 cfs-days, Nov. 22, elevation, 987.58 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	*03499500 FORT LOUDOUN LAKE			03519800 TELLICO LAKE			03532500 NORRIS LAKE		
Sept. 30...	812.70	181,600	-	812.75	197,600	-	1,004.89	791,200	-
Oct. 31...	812.34	178,800	-2,800	812.43	193,200	-4,400	992.27	626,100	-165,100
Nov. 30...	809.44	158,700	-20,100	809.56	171,500	-21,700	990.58	606,000	-20,100
Dec. 31...	808.95	155,500	-3,200	809.09	168,000	-3,500	990.65	606,800	+800
CAL YR 1996	-	-	+3,700	-	-	+3,800	-	-	+55,400
Jan. 31...	811.45	172,900	+17,400	811.58	186,600	+18,600	993.00	634,900	+28,100
Feb. 28...	811.30	172,200	-700	811.47	185,800	-800	994.08	637,600	+2,700
Mar. 31...	809.62	159,800	-12,400	809.76	173,000	-12,800	1,007.73	832,200	+194,600
Apr. 30...	813.60	187,700	+27,900	813.75	203,600	+30,600	1,012.36	902,200	+70,000
May 31...	812.33	178,500	-9,200	812.48	193,600	-10,000	1,019.02	1,010,000	+107,800
June 30...	812.58	180,600	+2,100	812.70	195,300	+1,700	1,020.98	1,043,400	+33,400
July 31...	812.36	178,800	-1,800	812.48	193,600	-1,700	1,015.76	956,200	-87,200
Aug. 31...	812.73	181,200	+2,400	812.81	196,100	+2,500	1,007.34	826,500	-129,700
Sept. 30...	812.35	179,100	-2,100	812.46	193,400	-2,700	997.69	693,700	-132,800
WTR YR 1997	-	-	-2,500	-	-	-4,200	-	-	-97,500

* Contents based on backwater profile.

TENNESSEE RIVER BASIN
RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03535900 MELTON HILL LAKE.--Lat 35°53'04", long 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 mi^2. PERIOD OF RECORD, August 1962 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--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.

COOPERATION.--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, 61,100 cfs-days, Dec. 1, elevation, 795.21 ft; minimum, 48,400 cfs-days, Apr. 5, elevation, 790.39 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 mi^2, approximately. PERIOD OF RECORD, October 1941 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with 20 radial gates, each 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.

COOPERATION.--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, 550,600 cfs-days, June 14; maximum elevation, 742.93 ft, June 15; minimum midnight contents, 408,400 cfs-days, Feb. 10; minimum elevation , 735.13 ft, Jan. 22. 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 mi^2. 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 above sea level. Gage readings have been reduced to sea level.

REMARKS.--Reservoir is formed by concrete dam with 347 ft of spillway. Spillway is equipped with four floodgates, each 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.

COOPERATION.--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, 42,000 cfs-days, May 3, elevation, 837.7 ft; minimum 32,400 cfs-days, Mar. 10, elevation, 826.9 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	03535900 MELTON HILL LAKE			*03543000 WATTS BAR LAKE			03564000 LAKE OCOEE		
Sept. 30...	793.61	56,500	-	741.14	512,400	-	835.1	39,500	-
Oct. 31...	792.66	54,000	-2,500	740.29	496,100	-16,300	835.0	39,400	-100
Nov. 30...	794.78	59,800	+5,800	740.08	492,600	-3,500	831.6	36,300	-3,100
Dec. 31...	793.74	56,900	-2,900	737.86	451,800	-40,800	827.9	33,200	-3,100
CAL YR 1996	-	-	+900	-	-	+30,300	-	-	+400
Jan. 31...	793.84	57,200	+300	737.95	454,400	+2,600	827.1	32,600	-600
Feb. 28...	794.15	58,000	+800	737.47	445,100	-9,300	832.9	37,400	+4,800
Mar. 31...	793.12	55,200	-2,800	737.55	446,200	+1,100	830.8	35,600	-1,800
Apr. 30...	794.27	58,400	+3,200	741.84	527,000	+80,800	836.1	40,500	+4,900
May 31...	793.91	57,400	-1,000	740.85	507,200	-19,800	835.6	40,000	-500
June 30...	793.29	55,700	-1,700	740.21	494,700	-12,500	834.7	39,100	-900
July 31...	793.40	56,000	+300	741.02	510,000	+15,300	835.0	39,400	+300
Aug. 31...	794.05	57,800	+1,800	740.29	495,400	-14,600	835.0	39,400	0
Sept. 30...	792.53	53,700	-4,100	740.51	500,100	+4,700	834.9	39,300	-100
WTR YR 1997	-	-	-2,800	-	-	-12,300	-	-	-200

* Contents based on backwater profile.

TENNESSEE RIVER BASIN
RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

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 mi^2, approximately. PERIOD OF RECORD, October 1939 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with eighteen 2-section lift gates, each 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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 686.19 ft, Mar. 29, 1994; minimum after first filling, 673.27 ft, Jan. 21, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 352,500 cfs-days, June 15; maximum elevation, 684.20 ft, June 16; minimum midnight contents, 210,300 cfs-days, Feb. 8; minimum elevation, 675.32 ft, Feb. 9. 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 mi^2, approximately. PERIOD OF RECORD, December 1967 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--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.

COOPERATION.--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, 141,300 cfs-days, Mar. 3; maximum elevation, 634.31 ft, Aug. 27; minimum midnight contents, 115,100 cfs-days, July 10; minimum elevation, 632.00 ft, Nov. 27. Contents based on backwater profile.

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 mi^2. PERIOD OF RECORD, May 1952 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete gravity and earthfill-type dam with riprapped embankments. Spillway equipped with three radial gates, each 25 ft high by 50 ft wide, and two sluice gates, each 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.

COOPERATION.--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, 39,800 cfs-days, May 3, elevation, 959.76 ft; minimum midnight contents, 36,000 cfs-days, Jan. 25; elevation, 957.80 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	*03566500 CHICKAMAUGA LAKE			*03570520 NICKAJACK LAKE			03579000 WOODS RESERVOIR		
Sept. 30...	682.06	306,100	-	633.14	118,700	-	959.45	39,200	-
Oct. 31...	678.23	246,800	-59,300	633.12	119,500	+800	958.60	37,500	-1,700
Nov. 30...	677.82	243,800	-3,000	632.02	118,100	-1,400	958.21	36,800	-700
Dec. 31...	677.20	233,600	-10,200	633.60	122,800	+4,700	958.13	36,600	-200
CAL YR 1996	-	-	+8,200	-	-	+2,800	-	-	+300
Jan. 31...	677.71	243,900	+10,300	632.00	120,800	-2,000	958.00	36,400	-200
Feb. 28...	678.99	260,400	+16,500	633.61	124,200	+3,400	958.17	36,700	+300
Mar. 31...	677.50	238,100	-22,300	633.35	121,600	-2,600	959.46	39,200	+2,500
Apr. 30...	638.50	332,600	+94,500	633.75	124,200	+2,600	959.50	39,300	+100
May 31...	682.55	319,200	-13,400	633.57	123,400	-800	959.65	39,600	+300
June 30...	682.50	316,600	-2,600	633.70	122,400	-1,000	959.45	39,200	-400
July 31...	681.00	287,400	-29,200	633.69	121,000	-1,400	959.43	39,100	-100
Aug. 31...	681.70	301,900	+14,500	633.22	117,900	-3,100	959.62	39,500	+400
Sept. 30...	681.54	299,100	-2,800	633.22	118,700	+800	959.53	39,300	-200
WTR YR 1997	-	-	-7,000	-	-	0	-	-	+100

* Contents based on backwater profile.

TENNESSEE RIVER BASIN
RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

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 mi^2. PERIOD OF RECORD, December 1970 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete dam with compacted rockfill impervious earth core embankments. Spillway equipped with three radial gates, each 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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 298,600 cfs-days, Dec. 23, 1990, elevation, 893.62 ft; minimum after first filling 154,000 cfs-days, Oct. 15, 1972, elevation, 862.24 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 277,600 cfs-days, June 10, elevation, 889.91 ft; minimum, 163,600 cfs-days, Dec. 16, elevation, 864.87 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 mi^2, approximately. PERIOD OF RECORD, October 1937 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with twenty-two 2-section lift gates, each 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.

COOPERATION.--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, 573,400 cfs-days, Dec. 1; maximum elevation, 416.85 ft, June 19; minimum midnight contents, 442,600 cfs-days, Dec. 24, minimum elevation, 408.12 ft, Dec. 24. Contents based on backwater profile.

03596460 NORMANDY LAKE.--Lat 35°27'55", long 86°14'55", 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 mi^2. PERIOD OF RECORD, January 1976 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete gravity dam with riprapped and rolled earthfill embankment on left side. Spillway is equipped with two radial gates, each 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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 63,800 cfs-days, Feb. 20, 1991, elevation, 880.12 ft; minimum after first filling, 26,800 cfs-days, Nov. 27, 1981, elevation, 853.12 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 59,600 cfs-days, June 1, elevation, 877.65 ft; minimum 39,500 cfs-days, Feb. 12, elevation, 864.12 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Content (cfs-days)	Change in contents (cfs-days)
	03580740	TIMS FORD LAKE		*03593000	PICKWICK LAKE		03596460	NORMANDY LAKE	
Sept. 30...	885.79	255,500	-	411.87	510,200	-	874.22	54,100	-
Oct. 31...	878.74	221,000	-34,500	410.48	476,400	-33,800	873.02	52,200	-1,900
Nov. 30...	870.42	185,200	-35,800	411.88	519,600	+43,200	868.88	46,100	-6,100
Dec. 31...	869.20	180,300	-4,900	410.98	491,700	-27,900	870.37	48,200	+2,100
CAL YR 1996	-	-	-17,600	-	-	+14,200	-	-	+7,800
Jan. 31...	872.83	195,100	+14,800	410.10	485,900	-5,800	865.35	41,200	-7,000
Feb. 28...	877.05	213,400	+18,300	410.99	499,800	+13,900	867.19	43,700	+2,500
Mar. 31...	883.12	242,000	+28,600	412.50	526,400	+26,600	868.90	48,100	+4,400
Apr. 30...	884.63	249,600	+7,600	413.93	559,100	+32,700	873.68	53,200	+5,100
May 31...	887.81	266,200	+16,600	414.73	586,800	+27,700	876.46	57,600	+4,400
June 30...	887.71	265,600	-600	414.53	581,100	-5,700	875.89	56,700	-900
July 31...	885.96	256,400	-9,200	412.74	532,600	-48,500	874.88	55,100	-1,600
Aug. 31...	885.14	252,200	-4,200	412.00	512,700	-19,900	873.72	53,300	-1,800
Sept. 30...	883.57	244,200	-8,000	411.41	504,200	-8,500	874.45	54,400	+1,100
WTR YR 1997	-	-	-11,300	-	-	-6,000	-	-	+300

* Contents based on backwater profile.

TENNESSEE RIVER BASIN
RESERVOIRS IN TENNESSEE RIVER BASIN--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, KY, and at mile 22.4. DRAINAGE AREA, 40,200 mi^2, approximately. PERIOD OF RECORD, July 1944 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--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. 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.

COOPERATION.--Records furnished by Tennessee Valley Authority.

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, 2,195,800 cfs-days Mar. 13; maximum elevation, 366.21 ft, Mar. 13; minimum midnight contents, 1,107,200 cfs-days , Feb. 13, minimum elevation , 353.85 ft, Feb. 13.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Content (cfs-days)	Change contents (cfs-days)
	*03609000 KENTUCKY LAKE		
Sept. 30...	356.82	1,279,300	-
Oct. 31...	356.60	1,273,000	-6,300
Nov. 30...	356.32	1,271,200	-1,800
Dec. 31...	354.74	1,176,400	-94,800
CAL YR 1996	-	-	+36,900
Jan. 31...	354.46	1,306,800	+130,400
Feb. 28...	354.68	1,170,200	-136,600
Mar. 31...	355.09	1,170,200	0
Apr. 30...	359.28	1,475,700	+305,500
May 31...	359.50	1,530,600	+54,900
June 30...	359.30	1,498,900	-31,700
July 31...	357.21	1,328,200	-170,700
Aug. 31...	356.58	1,247,900	-80,300
Sept. 30...	355.62	1,194,300	-53,600
WTR YR 1997	-	-	-85,000

* 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, with a total capacity of 1,300 cfs-days, none of which is controlled storage.

03517900 CALDERWOOD LAKE on Little Tennessee River at Calderwood, with a total capacity of 20,800 cfs-days of which 840 cfs-days is controlled storage.

03518200 CHILHOWEE LAKE on Little Tennessee River at Chilhowee Dam, with a total capacity of 24,800 cfs-days of which 3,400 cfs-days is controlled storage.

03562500 OCOEE NO. 3 LAKE on Ocoee River at Ocoee No. 3 Dam, 5.0 miles west of Ducktown, 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.

OBION RIVER BASIN

0702700 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 mi^2.

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.22 ft above sea level.

REMARKS.--Missing record Jan. 13-22. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.65 ft, from recorded range in stage, about Apr. 26, 1973; minimum, 9.59 ft, July 6, 7, 8, 1985.

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. Minimum stage at spillway, 9.30 ft, Nov. 20, 21, 1953 at a datum of 270.29 ft above sea level.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.05 ft, Mar. 5; minimum 11.75 ft, Aug. 29.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.00	12.68	12.71	12.56	12.33	12.44	12.95	12.81	12.89	12.80	12.72	12.76
2	12.70	12.68	12.69	12.48	12.34	12.43	12.99	12.93	12.97	12.73	12.63	12.68
3	12.78	12.63	12.70	12.43	12.35	12.39	13.05	12.97	13.00	12.68	12.61	12.65
4	12.75	12.63	12.68	12.41	12.37	12.39	13.07	13.02	13.04	12.68	12.57	12.62
5	12.66	12.60	12.62	12.43	12.39	12.41	13.03	12.92	12.99	12.69	12.58	12.66
6	12.61	12.58	12.59	12.45	12.42	12.44	12.96	12.85	12.93	12.77	12.60	12.69
7	12.59	12.56	12.57	12.85	12.41	12.55	12.96	12.84	12.90	12.79	12.65	12.69
8	12.60	12.53	12.56	12.89	12.74	12.82	12.84	12.71	12.81	12.76	12.61	12.68
9	12.60	12.48	12.53	13.04	12.84	12.97	12.80	12.73	12.76	12.74	12.54	12.63
10	12.54	12.46	12.50	13.15	13.04	13.10	12.74	12.57	12.68	12.65	12.51	12.57
11	12.54	12.46	12.49	13.17	13.10	13.13	12.66	12.54	12.60	12.63	12.56	12.59
12	12.48	12.42	12.45	13.16	13.08	13.11	12.81	12.65	12.74	12.62	12.55	12.58
13	12.45	12.40	12.43	13.09	13.03	13.06	12.84	12.78	12.82	----	----	----
14	12.43	12.41	12.42	13.09	13.01	13.05	12.85	12.82	12.84	----	----	----
15	12.43	12.41	12.42	13.06	12.94	12.99	12.94	12.80	12.83	----	----	----
16	12.41	12.37	12.39	12.95	12.82	12.88	13.09	12.84	12.94	----	----	----
17	12.39	12.33	12.36	12.85	12.76	12.80	13.14	12.96	13.03	----	----	----
18	12.56	12.33	12.41	12.83	12.77	12.80	13.08	13.00	13.04	----	----	----
19	12.46	12.39	12.41	12.77	12.69	12.73	13.07	12.96	13.02	----	----	----
20	12.41	12.37	12.39	12.70	12.63	12.67	13.03	12.96	12.99	----	----	----
21	12.45	12.36	12.39	12.71	12.58	12.62	12.96	12.89	12.93	----	----	----
22	12.43	12.34	12.41	12.71	12.61	12.65	12.89	12.81	12.84	----	----	----
23	12.41	12.27	12.34	12.63	12.56	12.59	12.83	12.73	12.79	12.81	12.75	12.79
24	12.45	12.36	12.42	12.60	12.56	12.58	12.95	12.67	12.87	12.84	12.80	12.82
25	12.45	12.43	12.45	12.81	12.56	12.68	12.98	12.91	12.95	12.89	12.81	12.84
26	12.44	12.37	12.41	12.80	12.64	12.73	13.01	12.94	12.96	12.86	12.81	12.83
27	12.41	12.35	12.38	12.78	12.69	12.73	13.01	12.97	13.00	13.03	12.74	12.81
28	12.40	12.34	12.36	12.78	12.72	12.75	12.97	12.86	12.93	13.04	12.76	12.91
29	12.37	12.21	12.33	12.80	12.78	12.79	12.94	12.89	12.92	12.89	12.80	12.84
30	12.30	12.15	12.24	12.81	12.74	12.78	12.94	12.85	12.89	12.81	12.76	12.79
31	12.39	12.28	12.33	----	----	----	12.86	12.79	12.83	12.77	12.69	12.73
MONTH	13.00	12.15	12.46	13.17	12.33	12.74	13.14	12.54	12.89	----	----	----

OBION RIVER BASIN

0702700 REELFOOT LAKE NEAR TIPTONVILLE, TN--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.77	12.73	12.75	13.34	13.00	13.11	12.95	12.89	12.91	12.54	12.46	12.51
2	12.80	12.72	12.75	13.75	13.32	13.51	12.90	12.86	12.88	12.62	12.41	12.51
3	12.86	12.73	12.78	13.84	13.69	13.78	12.86	12.84	12.85	12.78	12.55	12.68
4	12.98	12.86	12.91	13.89	13.83	13.87	12.96	12.78	12.83	12.84	12.74	12.79
5	13.07	12.94	13.01	14.05	13.87	13.96	13.39	12.95	13.20	12.82	12.67	12.77
6	13.06	13.02	13.03	14.00	13.95	13.97	13.66	13.39	13.50	12.76	12.72	12.74
7	13.11	13.00	13.04	13.95	13.87	13.91	13.76	13.60	13.69	12.73	12.63	12.68
8	13.15	12.98	13.03	13.89	13.85	13.87	13.83	13.66	13.71	12.63	12.56	12.60
9	13.00	12.92	12.95	13.99	13.71	13.81	13.83	13.62	13.70	12.67	12.51	12.59
10	12.92	12.88	12.90	13.99	13.80	13.84	13.69	13.52	13.59	12.61	12.56	12.58
11	12.88	12.85	12.87	13.80	13.74	13.77	13.52	13.40	13.47	12.58	12.50	12.54
12	12.95	12.84	12.88	13.76	13.64	13.70	13.55	13.45	13.50	12.61	12.50	12.54
13	12.99	12.85	12.91	13.67	13.51	13.59	13.52	13.43	13.46	12.53	12.46	12.50
14	12.92	12.87	12.89	13.63	13.45	13.55	13.43	13.34	13.39	12.50	12.43	12.47
15	12.90	12.88	12.89	13.57	13.39	13.47	13.34	13.22	13.28	12.53	12.35	12.47
16	12.92	12.84	12.88	13.40	13.24	13.32	13.22	13.10	13.17	12.52	12.42	12.45
17	12.92	12.87	12.89	13.24	13.12	13.17	13.16	12.99	13.06	12.42	12.34	12.38
18	12.88	12.74	12.84	13.18	13.01	13.08	12.99	12.78	12.90	12.39	12.28	12.35
19	12.86	12.83	12.84	13.24	13.07	13.14	12.83	12.72	12.77	12.47	12.30	12.35
20	12.83	12.70	12.78	13.07	13.03	13.05	12.77	12.58	12.66	12.50	12.40	12.45
21	12.88	12.58	12.74	13.07	13.00	13.04	12.77	12.57	12.61	12.51	12.40	12.45
22	12.90	12.78	12.86	13.22	13.02	13.10	12.66	12.56	12.61	12.46	12.38	12.41
23	12.91	12.88	12.89	13.09	13.02	13.05	12.69	12.52	12.62	12.40	12.36	12.38
24	12.95	12.87	12.91	13.06	12.87	12.98	12.65	12.61	12.63	12.40	12.31	12.36
25	12.97	12.85	12.89	13.07	12.87	12.96	12.66	12.59	12.63	12.38	12.34	12.37
26	12.86	12.68	12.80	13.02	12.99	13.00	12.67	12.58	12.61	12.65	12.36	12.46
27	12.94	12.75	12.85	13.00	12.94	12.98	12.68	12.57	12.63	12.91	12.62	12.80
28	13.01	12.90	12.95	12.99	12.85	12.91	12.72	12.54	12.59	12.97	12.86	12.91
29	----	-----	----	12.97	12.92	12.94	12.54	12.48	12.51	12.99	12.95	12.98
30	----	-----	----	13.07	12.90	12.97	12.54	12.27	12.43	12.98	12.92	12.96
31	----	-----	----	13.00	12.91	12.94	----	----	----	12.98	12.86	12.93
MONTH	13.15	12.58	12.88	14.05	12.85	13.37	13.83	12.27	13.01	12.99	12.28	12.58

OBION RIVER BASIN

0702700 REELFOOT LAKE NEAR TIPTONVILLE, TN--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.92	12.80	12.87	12.66	12.63	12.65	12.05	12.00	12.02	11.95	11.91	11.93
2	12.89	12.78	12.84	12.64	12.59	12.61	12.01	11.99	12.00	11.94	11.91	11.92
3	12.82	12.69	12.76	12.64	12.58	12.60	11.99	11.96	11.98	12.03	11.88	11.94
4	12.71	12.59	12.66	12.68	12.53	12.58	12.00	11.91	11.95	12.00	11.88	11.94
5	12.61	12.46	12.53	12.61	12.52	12.55	12.03	11.88	11.96	11.96	11.89	11.91
6	12.46	12.36	12.42	12.52	12.47	12.50	11.96	11.90	11.93	11.90	11.87	11.89
7	12.47	12.41	12.44	12.48	12.44	12.46	11.94	11.88	11.91	11.88	11.85	11.87
8	12.54	12.44	12.46	12.44	12.34	12.41	11.90	11.85	11.88	11.99	11.84	11.89
9	12.52	12.46	12.49	12.43	12.34	12.40	11.88	11.85	11.87	12.05	11.97	12.00
10	12.50	12.45	12.48	12.45	12.38	12.41	11.88	11.86	11.87	12.07	11.99	12.02
11	12.50	12.47	12.48	12.41	12.35	12.37	11.87	11.85	11.86	12.04	12.01	12.02
12	12.48	12.44	12.46	12.36	12.31	12.34	11.92	11.83	11.86	12.02	12.00	12.01
13	12.51	12.43	12.45	12.32	12.26	12.30	11.95	11.88	11.92	12.01	11.99	12.00
14	12.55	12.47	12.51	12.29	12.22	12.27	11.97	11.89	11.93	11.99	11.97	11.99
15	12.53	12.47	12.50	12.30	12.25	12.28	11.92	11.81	11.87	11.98	11.95	11.97
16	12.50	12.44	12.47	12.32	12.26	12.28	11.87	11.81	11.85	11.96	11.94	11.95
17	12.55	12.49	12.52	12.28	12.23	12.25	11.87	11.80	11.85	11.97	11.89	11.94
18	12.55	12.51	12.53	12.24	12.21	12.23	11.90	11.87	11.88	11.96	11.94	11.95
19	12.53	12.50	12.52	12.27	12.19	12.21	11.92	11.82	11.88	11.94	11.87	11.91
20	12.53	12.48	12.51	12.23	12.17	12.19	11.93	11.87	11.90	11.98	11.83	11.92
21	12.68	12.46	12.52	12.18	12.14	12.16	11.95	11.82	11.89	11.99	11.89	11.93
22	12.63	12.55	12.60	12.15	12.12	12.14	11.89	11.85	11.87	11.94	11.87	11.90
23	12.66	12.63	12.64	12.19	12.10	12.13	11.88	11.84	11.86	12.02	11.86	11.92
24	12.69	12.64	12.66	12.14	12.08	12.11	11.84	11.80	11.82	12.04	11.92	11.99
25	12.65	12.63	12.65	12.11	12.05	12.08	11.81	11.76	11.79	12.09	11.93	11.97
26	12.68	12.62	12.66	12.06	12.03	12.05	11.79	11.77	11.78	11.97	11.90	11.93
27	12.70	12.65	12.66	12.04	12.01	12.03	11.78	11.77	11.77	11.94	11.89	11.91
28	12.67	12.62	12.66	12.02	11.90	12.00	11.78	11.76	11.77	11.93	11.85	11.89
29	12.65	12.64	12.65	12.16	11.98	12.05	11.85	11.75	11.78	11.89	11.79	11.85
30	12.67	12.61	12.64	12.18	12.07	12.12	11.94	11.79	11.81	11.90	11.80	11.85
31	----	----	----	12.15	12.03	12.08	11.94	11.83	11.91	----	----	----
MONTH	12.92	12.36	12.57	12.68	11.90	12.29	12.05	11.75	11.88	12.09	11.79	11.94

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OBION RIVER BASIN

07028930 TURKEY CREEK AT MEDINA, TN

LOCATION.--Lat 35°48'26", long 88°48'07", Gibson County, Hydrologic Unit 08010204, at upstream side of bridge on Highway 152, at the sewage treatment plant at Medina.

DRAINAGE AREA.--4.75 mi^2.

PERIOD OF RECORD.--May 1996 to current year.

GAGE.--Data collection platform. Datum of gage is 370.00 ft above sea level.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,340 ft^3/s, Mar. 5, gage height, 11.44 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	91	9.9	1.1	.72	152	e.07	.57	e.80	6.7	.12	2.6
2	.09	2.4	2.7	1.1	.63	155	e.05	.30	e.70	.26	.11	1.9
3	e.03	.91	1.8	e.75	37	42	e1.0	2.4	e.50	.25	.12	1.1
4	e.00	1.1	1.3	e.70	168	4.9	e3.2	1.3	e.30	.18	e.08	e.14
5	e.00	.99	15	e20	14	294	45	.94	.43	.24	e.00	e.07
6	e.00	.91	5.1	e1.2	13	10	e3.4	.50	e.20	.23	e.00	e.00
7	e.00	29	1.9	.99	14	4.3	e1.8	.25	e.19	.21	e.00	e.00
8	e.00	1.5	.90	1.3	8.6	2.1	e1.2	.40	e.18	.17	e.07	e.00
9	e.00	.41	.41	2.4	2.8	11	e.90	.27	e.17	.18	.13	e.00
10	e.00	.31	.19	1.1	2.0	8.6	e.70	.15	16	.17	.13	e.00
11	e.00	.31	.17	.72	e1.0	e1.7	e.50	e.08	4.6	.17	.11	e.00
12	e.00	.32	21	2.8	e.50	e1.2	e.30	e.00	.96	.17	.12	e.00
13	e.00	e.56	.35	e1.0	e15	e2.0	e.09	e.00	2.0	.19	11	e.00
14	e.00	e10	.18	e.50	4.5	e8.9	e.00	e.00	2.4	3.4	.21	e.00
15	e.00	e2.0	.14	e41	e2.0	e1.8	e.00	e.00	1.3	9.0	.19	e.00
16	e.00	e6.0	86	2.4	e.75	e1.3	e.00	e.00	1.4	.19	.22	e.00
17	e.05	e25	18	.78	e.50	e.60	e.00	e.00	118	.14	.26	e.00
18	e.11	e1.0	2.9	.57	e.30	e73	e.00	e.00	8.0	e.05	.22	e.00
19	e.03	e.50	1.6	.63	e.15	56	e.00	e.10	.08	e.00	91	e.00
20	e.00	.31	1.2	.61	e.10	.95	e.00	.12	.00	e.00	72	e.00
21	e.14	.22	1.3	.64	e38	.47	e.00	.08	34	e.00	2.9	e.00
22	4.8	.19	1.2	3.3	3.9	.27	e.00	.07	e150	e.00	1.4	e.00
23	.42	.18	17	.97	2.4	.22	e.00	.29	e50	e.00	.74	e.00
24	.12	.17	27	23	e1.7	.18	e.00	.14	e3.0	e.00	.36	e13
25	.12	37	e2.3	1.8	e.90	2.8	e.00	.09	e1.0	e.00	e.11	.20
26	62	6.6	e56	1.0	e4.3	e3.0	e.50	.29	.61	e.00	e.00	.14
27	2.1	3.4	e25	19	18	e1.5	e4.0	3.6	.59	e.00	e.00	.13
28	43	2.9	e7.0	11	2.8	e.20	35	102	.58	e.06	e.00	e.12
29	2.0	3.3	e5.6	1.5	---	e.10	4.0	e4.0	.57	.11	e1.0	e.11
30	.74	142	e1.1	1.0	---	e.09	.70	e2.0	52	.12	1.3	e.10
31	2.1	---	1.2	.87	---	e.08	---	e1.2	---	.13	39	---
TOTAL	117.92	370.49	315.44	145.73	357.55	840.26	102.41	121.14	450.56	22.32	222.90	19.61
MEAN	3.80	12.3	10.2	4.70	12.8	27.1	3.41	3.91	15.0	.72	7.19	.65
MAX	62	142	86	41	168	294	45	102	150	9.0	91	13
MIN	.00	.17	.14	.50	.10	.08	.00	.00	.00	.00	.00	.00
CFSM	.80	2.60	2.14	.99	2.69	5.71	.72	.82	3.16	.15	1.51	.14
IN.	.92	2.90	2.47	1.14	2.80	6.58	.80	.95	3.53	.17	1.75	.15

e--Estimated

OBION RIVER BASIN

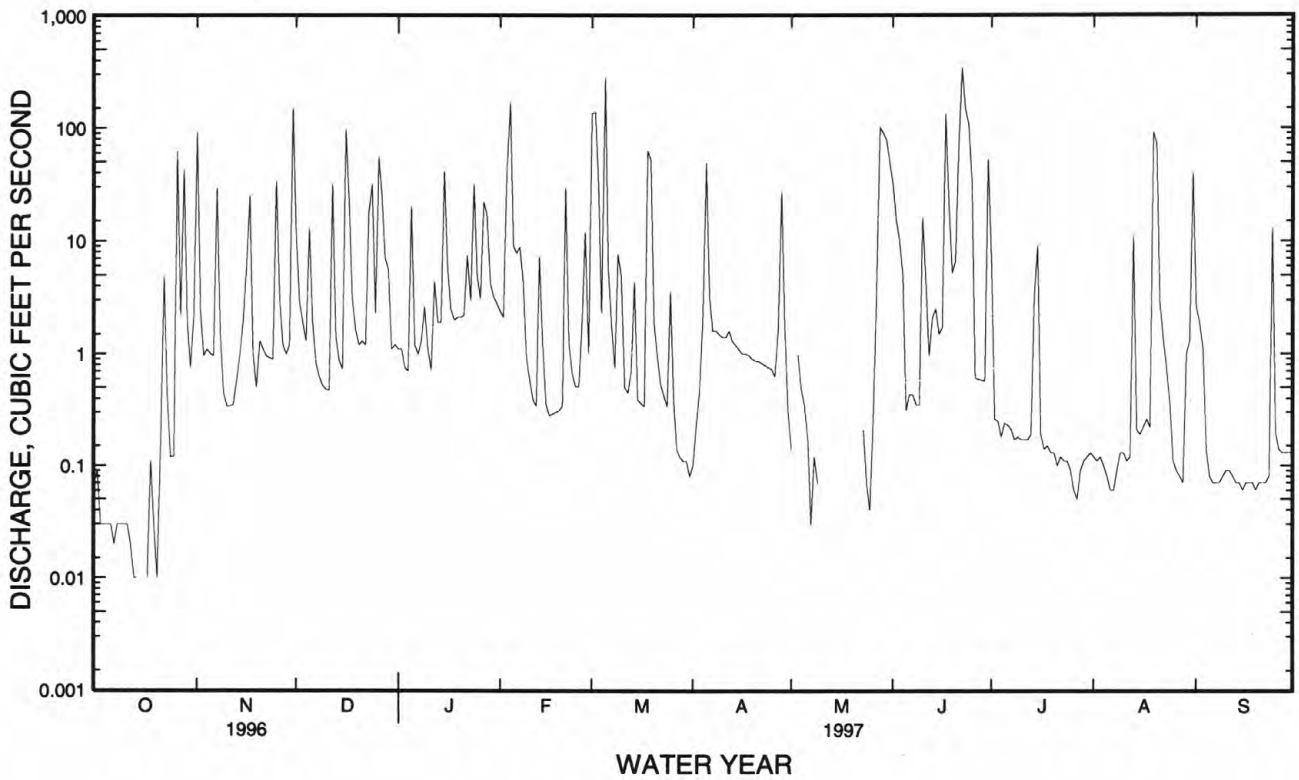
07028930 TURKEY CREEK AT MEDINA, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	3.80	12.3	10.2	4.70	12.8	27.1	3.41	2.37	14.5	2.09	3.60	2.03
MAX	3.80	12.3	10.2	4.70	12.8	27.1	3.41	3.91	15.0	3.47	7.19	3.40
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1996	1997	1996
MIN	3.80	12.3	10.2	4.70	12.8	27.1	3.41	.82	14.0	.72	.019	.65
(WY)	1997	1997	1997	1997	1997	1997	1997	1996	1996	1997	1996	1997

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	3086.33					
ANNUAL MEAN	8.46		8.46			
HIGHEST ANNUAL MEAN					8.46	1997
LOWEST ANNUAL MEAN					8.46	1997
HIGHEST DAILY MEAN	316	Jun 9	294	Mar 5	e430	Jun 9 1996
LOWEST DAILY MEAN	.00	May 5	a.00	Oct 4	b.00	May 5 1996
ANNUAL SEVEN-DAY MINIMUM	.00	May 17	.00	Oct 4	.00	May 17 1996
INSTANTANEOUS PEAK FLOW			1340	Mar 5	2440	Jun 9 1996
INSTANTANEOUS PEAK STAGE			11.44	Mar 5	14.83	Jun 9 1996
ANNUAL RUNOFF (CFSM)			1.78		1.78	
ANNUAL RUNOFF (INCHES)			24.17		24.19	
10 PERCENT EXCEEDS	17		18		15	
50 PERCENT EXCEEDS	.07		.57		.21	
90 PERCENT EXCEEDS	.00		.00		.00	

a Occurred many days
b No flow many days each year.
e Estimated



HATCHIE RIVER BASIN

07029500 HATCHIE RIVER AT BOLIVAR, TN

LOCATION.--Lat 35°16'31", long 88°58'36", Hardeman County, Hydrologic Unit 08010208, on left bank 25 ft upstream from bridge on State Highway 18, 250 ft upstream from Illinois Central Gulf Railroad bridge, 0.6 mi downstream from Spring Creek, 1.5 mi northeast of Bolivar, and at mile 135.1.

DRAINAGE AREA.--1,480 mi^2.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Data collection platform. Datum of gage is 323.49 ft above sea level.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 28	1230	9,000	15.51	Mar. 5	2000	*31,900	*18.99
Dec. 22	0330	9,460	15.63	June 4	0100	12,000	16.00
Jan. 30	0100	10,100	15.78	June 18	1830	11,300	15.85

Minimum discharge, 456 ft^3/s, Oct. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3250	6450	4030	5200	8570	5420	2700	3050	4950	5770	717	1100
2	2570	6530	4370	5190	7870	8870	2300	2880	7430	5970	652	1290
3	1790	6230	4650	5250	7740	15500	1910	2840	11100	6030	616	1260
4	1140	5750	4490	5330	8400	20200	1690	2480	11600	6010	598	1080
5	862	5020	4710	5680	8210	27100	1920	2100	10400	5950	585	876
6	750	4410	5170	5340	7940	30400	2860	1800	9300	5860	568	777
7	678	4040	5380	5150	7580	27200	3540	1520	8240	5560	545	722
8	621	4050	5150	4880	7840	21300	3700	1290	7260	5100	547	703
9	580	3800	4720	4730	250	16500	3760	1110	6260	4670	628	827
10	553	3810	4410	4430	7950	13200	3880	998	5800	4140	1170	951
11	535	3580	4040	3750	7240	10900	3910	925	8540	3380	2200	964
12	517	3310	4590	3650	6570	9210	3830	877	7730	2660	2790	867
13	499	3040	3920	3570	6150	8050	3390	829	8830	2180	301	779
14	485	2700	3280	3440	5890	7190	2720	792	9400	2170	3350	720
15	475	2220	2940	3840	5530	6300	2050	759	9960	2520	3670	683
16	465	1720	2900	4020	5140	5610	1610	727	9700	2680	3710	659
17	462	1470	5280	3600	4800	5030	1400	698	10000	2520	3710	640
18	496	2260	5610	3620	4550	4780	1280	674	10800	2110	3500	630
19	539	2580	4500	3570	4290	6990	1210	660	10700	1540	2780	617
20	592	2530	4750	3520	3980	6690	1180	768	9580	1130	2120	603
21	616	2330	7220	3430	3960	6410	1130	963	8590	933	1680	587
22	701	2140	9360	3420	3790	5810	1110	1170	8530	841	1440	575
23	883	1980	8650	3260	3520	5300	1260	962	8370	801	1210	568
24	1070	1830	8180	4150	3190	4940	1480	798	7780	751	997	1870
25	1110	1900	7070	4820	2860	4650	1600	736	6980	717	842	e3710
26	1290	2130	6790	5300	2590	4480	1500	761	6330	710	771	e3950
27	1860	2240	6600	5840	3160	4140	1380	1070	5810	694	729	e4200
28	6490	2210	6290	7720	3760	3800	690	1600	5470	665	699	e4250
29	5940	2030	5990	9580	---	3630	3190	2390	5080	710	676	e4200
30	6080	2590	5610	9920	---	3480	3160	3260	4910	776	654	e3800
31	6180	---	5350	9150	---	3100	---	4040	---	798	751	---
TOTAL	50079	96880	166000	154350	161320	306180	68340	45527	245430	86346	47915	44458
MEAN	1615	3229	5355	4979	5761	9877	2278	1469	8181	2785	1546	1482
MAX	6490	6530	9360	9920	8570	30400	3910	4040	11600	6030	3710	4250
MIN	462	1470	2900	3260	2590	3100	1110	660	491	665	545	568
CFSM	1.09	2.18	3.62	3.36	3.89	6.67	1.54	.99	5.53	1.88	1.04	1.00
IN.	1.26	2.44	4.17	3.88	4.05	7.70	1.72	1.14	6.17	2.17	1.20	1.12

e Estimated

HATCHIE RIVER BASIN

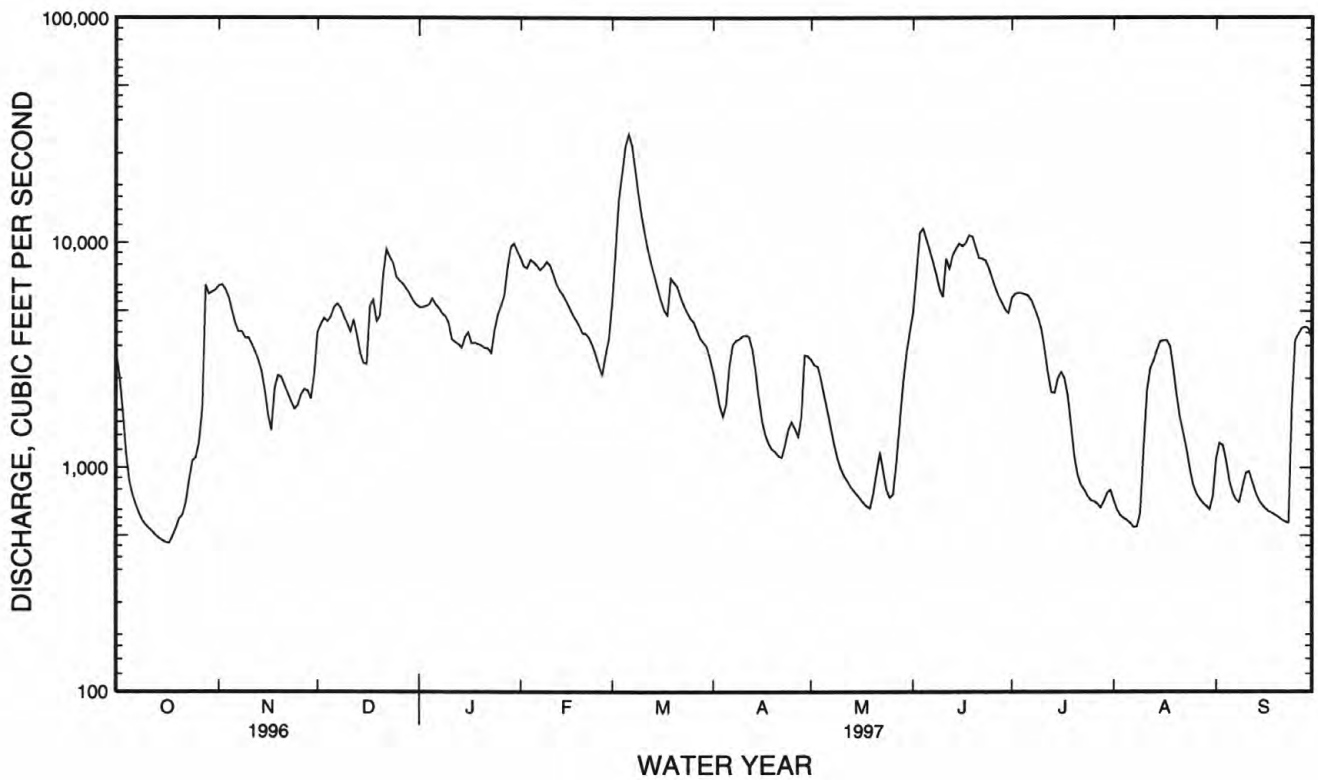
07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

MEAN	717	1701	3272	4485	4690	4612	3962	2684	1491	953	631	736
MAX	4447	7457	12490	13420	14060	12110	10960	13540	8181	5933	2678	4651
(WY)	1933	1958	1983	1974	1948	1973	1979	1991	1997	1932	1931	1979
MIN	150	233	422	555	829	1053	711	444	209	189	193	127
(WY)	1957	1957	1955	1955	1934	1941	1986	1942	1941	1943	1954	1956

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1929 - 1997	
ANNUAL TOTAL	952572		1472825			
ANNUAL MEAN	2603		4035		2483	
HIGHEST ANNUAL MEAN					5003	1973
LOWEST ANNUAL MEAN					971	1941
HIGHEST DAILY MEAN	9360	Dec 22	30400	Mar 6	59300	Mar 18 1973
LOWEST DAILY MEAN	297	Aug 25	462	Oct 17	80	Sep 1 1943
ANNUAL SEVEN-DAY MINIMUM	314	Aug 21	486	Oct 12	85	Aug 26 1943
INSTANTANEOUS PEAK FLOW			31900	Mar 5	a61600	Mar 18 1973
INSTANTANEOUS PEAK STAGE			18.99	Mar 5	21.66	Mar 18 1973
INSTANTANEOUS LOW FLOW			456	Oct 17	78	Sep 2 1943
ANNUAL RUNOFF (CFSM)	1.76		2.73		1.68	
ANNUAL RUNOFF (INCHES)	23.94		37.02		22.79	
10 PERCENT EXCEEDS	5370		8220		6070	
50 PERCENT EXCEEDS	2340		3430		1120	
90 PERCENT EXCEEDS	410		681		273	

a From rating curve extended above 34,000 ft^3/s



LOOSAHATCHIE RIVER BASIN

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 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of the gage is 246.43 ft above sea level.

REMARKS.--Records good. No estimated daily discharge. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 28	0800	6,270	16.82	Mar. 19	0650	7,440	17.46
Dec. 1	0210	11,100	20.43	Apr. 5	1720	6,740	16.75
Dec. 17	0020	8,060	18.07	Apr. 28	2050	6,630	16.63
Feb. 4	1020	9,550	19.41	Sept. 24	1245	8,980	18.91
Mar. 2	1900	*19,400	*23.43				

Minimum discharge, 85 ft^3/s, Oct. 16, 20, and 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	982	7390	247	299	5420	163	879	377	145	113	186
2	128	792	1470	227	264	15900	159	302	224	140	109	134
3	119	239	406	217	2180	12700	149	287	172	135	108	127
4	112	157	276	281	9130	2000	223	199	138	130	108	124
5	109	138	664	1750	4230	4840	3930	164	128	125	114	123
6	105	133	629	376	794	5300	2200	151	121	122	111	122
7	102	1290	321	209	564	1010	389	140	118	121	109	123
8	101	1350	225	179	1360	462	228	133	123	119	113	136
9	98	309	193	444	534	357	189	126	125	132	123	199
10	96	193	180	293	371	326	167	118	134	120	117	142
11	93	156	172	176	314	287	274	112	1370	116	112	132
12	92	136	3270	141	283	249	796	110	391	115	118	129
13	90	127	1050	126	1020	262	256	112	218	474	132	129
14	90	176	384	122	943	1210	188	106	169	287	153	128
15	89	202	275	828	424	352	169	102	147	209	625	129
16	87	145	2670	1430	325	228	157	98	153	149	195	130
17	88	307	5590	378	282	210	151	98	2560	127	153	131
18	137	779	1100	275	264	908	143	96	952	122	140	131
19	99	301	412	252	252	6370	142	97	257	120	135	131
20	87	194	285	249	263	1500	138	127	151	116	650	130
21	154	164	249	245	2580	438	135	102	126	114	231	129
22	345	140	236	421	854	298	141	92	142	115	156	129
23	524	124	268	429	399	233	161	89	122	144	144	348
24	154	116	3580	2320	326	206	138	91	104	117	138	6790
25	110	2330	813	815	301	387	130	95	98	113	135	3720
26	2070	837	752	411	322	716	129	96	790	111	132	592
27	931	279	1930	483	1430	279	1200	473	255	109	128	217
28	5740	199	667	3160	555	218	3440	210	193	109	126	160
29	3650	191	434	672	---	190	4040	163	183	390	124	140
30	494	8380	319	405	---	172	772	133	153	145	123	132
31	215	---	271	336	---	161	---	1490	---	119	176	---
TOTAL	16448	20866	36481	17897	30863	63189	20497	6591	10194	4710	5151	15073
MEAN	531	696	1177	577	1102	2038	683	213	340	152	166	502
MAX	5740	8380	7390	3160	9130	15900	4040	1490	2560	474	650	6790
MIN	87	116	172	122	252	161	129	89	98	109	108	122
CFSM	2.03	2.65	4.49	2.20	4.21	7.78	2.61	.81	1.30	.58	.63	1.92
IN.	2.34	2.96	5.18	2.54	4.38	8.97	2.91	.94	1.45	.67	.73	2.14

LOOSAHATCHIE RIVER BASIN

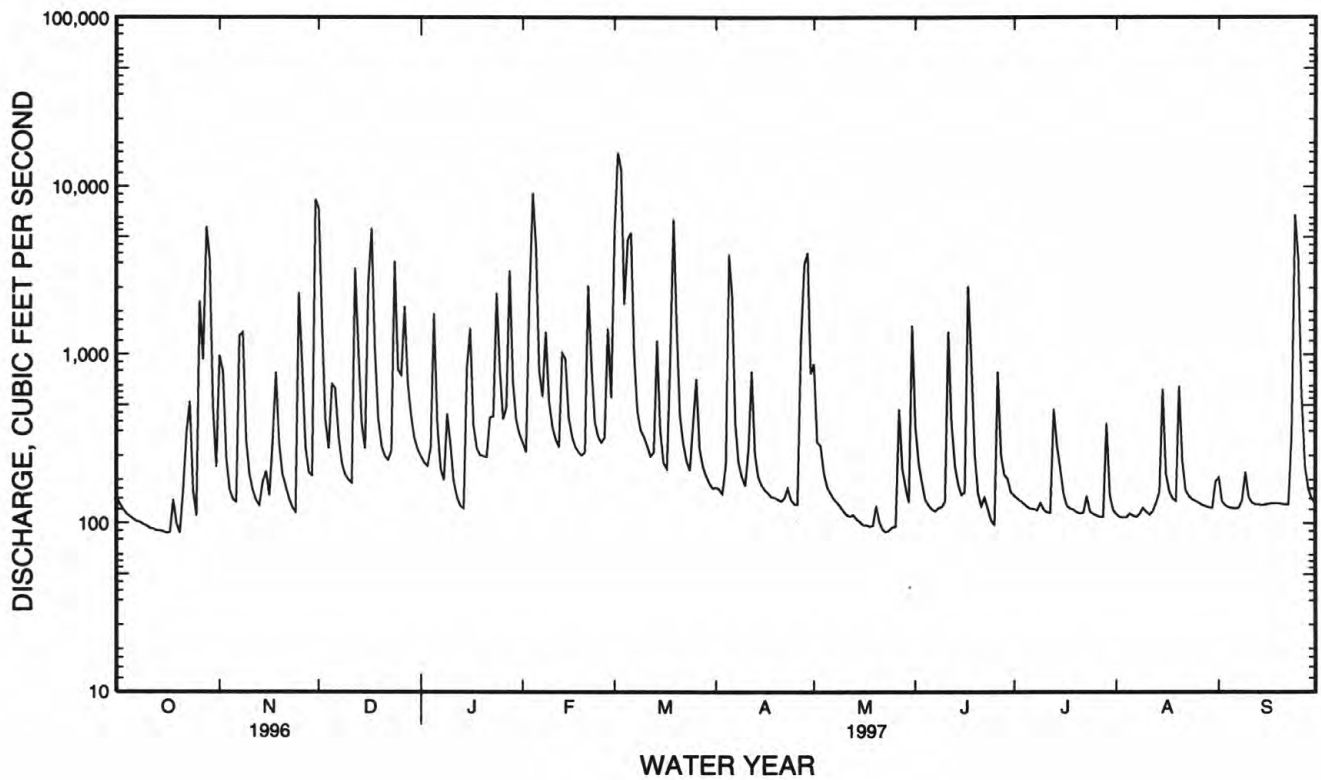
07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

MEAN	145	344	633	513	654	642	592	376	290	204	153	158
MAX	531	1344	1962	1479	2064	2038	2306	1497	1609	1155	521	502
(WY)	1997	1989	1988	1974	1990	1997	1991	1983	1974	1989	1974	1997
MIN	73.4	75.6	106	94.5	128	141	107	93.8	86.7	87.5	84.3	80.7
(WY)	1970	1972	1977	1981	1995	1986	1978	1988	1972	1970	1982	1982

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1970 - 1997	
ANNUAL TOTAL	168140		247960			
ANNUAL MEAN	459		679		390	
HIGHEST ANNUAL MEAN					769	1989
LOWEST ANNUAL MEAN					154	1986
HIGHEST DAILY MEAN	8380	Nov 30	15900	Mar 2	19900	Dec 26 1987
LOWEST DAILY MEAN	69	Sep 25	87	Oct 16	66	Apr 7 1974
ANNUAL SEVEN-DAY MINIMUM	75	Sep 9	90	Oct 11	68	Nov 5 1982
INSTANTANEOUS PEAK FLOW			19400	Mar 2	27400	Dec 25 1987
INSTANTANEOUS PEAK STAGE			23.43	Mar 2	25.27	Dec 25 1987
INSTANTANEOUS LOW FLOW			a85	Oct 16	66	Apr 6 1974
ANNUAL RUNOFF (CFSM)	1.75		2.59		1.49	
ANNUAL RUNOFF (INCHES)	23.87		35.21		20.25	
10 PERCENT EXCEEDS	1020		1430		629	
50 PERCENT EXCEEDS	167		189		119	
90 PERCENT EXCEEDS	95		110		85	

a Also occurred Oct 20, 21.



WOLF RIVER BASIN

07030392 WOLF RIVER AT LAGRANGE, TN

LOCATION.---Lat 35°01'57" long 89°14'48", Fayette County, Hydrologic Unit 08010210, on right bank upstream side of bridge on Yager Road, 0.95 mi south LaGrange, and at mile 72.6.

DRAINAGE AREA.--210 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 350 ft above sea level, from topographic map.

REMARKS.--Records good, except for estimated daily discharges which are fair.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 7420 ft^3/s, Mar. 2, gage height 13.27; minimum discharge, 91 ft^3/s, Oct. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
1	346	456	937	321	374	1060	291	356	704	257	164	171
2	219	385	1140	290	321	3700	274	286	959	242	153	151
3	161	346	860	268	321	4430	258	296	851	216	145	139
4	140	329	476	260	837	2540	261	268	438	193	141	137
5	130	291	361	372	1350	1610	340	248	306	173	140	133
6	123	244	362	467	1310	2200	624	216	268	159	136	130
7	117	259	e300	e380	777	1620	640	193	273	152	133	130
8	111	523	e250	e350	720	973	494	180	295	149	142	150
9	110	562	e230	e315	711	659	325	176	268	203	188	237
10	108	629	e220	e290	607	547	271	171	327	431	250	197
11	104	412	e205	e280	436	490	254	168	917	283	280	174
12	101	283	e500	e270	353	448	268	162	1190	236	297	159
13	99	232	e520	e265	405	434	260	158	1280	235	338	145
14	97	209	e450	e260	631	462	251	156	865	449	488	136
15	97	204	e425	e500	672	460	239	152	442	333	300	133
16	96	196	e780	e650	495	455	227	147	546	261	219	131
17	97	204	e1000	e660	353	397	216	145	1300	210	189	129
18	120	260	e1250	e425	300	397	207	141	1730	185	167	128
19	124	265	1220	332	273	885	204	140	1690	171	156	127
20	116	264	621	279	261	897	198	164	1120	161	164	125
21	136	257	383	263	412	802	195	164	566	157	160	122
22	246	236	318	273	508	520	202	162	346	156	149	123
23	338	234	292	289	471	400	239	152	290	164	144	126
24	296	226	501	726	360	348	264	145	264	159	140	782
25	252	442	498	1100	282	330	263	184	236	150	138	1460
26	319	599	581	1170	264	435	235	224	217	148	136	1280
27	430	412	732	628	538	444	246	319	212	145	134	799
28	802	333	615	725	749	556	324	375	335	148	133	335
29	1130	276	606	870	---	452	378	374	310	156	131	229
30	1110	349	475	880	---	358	385	299	281	166	130	192
31	829	---	373	509	---	319	---	487	---	173	136	---
TOTAL	8504	9917	17481	14667	15091	29628	8833	6808	18826	6421	5721	8410
MEAN	274	331	564	473	539	956	294	220	628	207	185	280
MAX	1130	629	1250	1170	1350	4430	640	487	1730	449	488	1460
MIN	96	196	205	260	261	319	195	140	212	145	130	122
CFSM	1.31	1.57	2.69	2.25	2.57	4.55	1.40	1.05	2.99	.99	.88	1.33
IN.	1.51	1.76	3.10	2.60	2.67	5.25	1.56	1.21	3.33	1.14	1.01	1.49

e Estimated

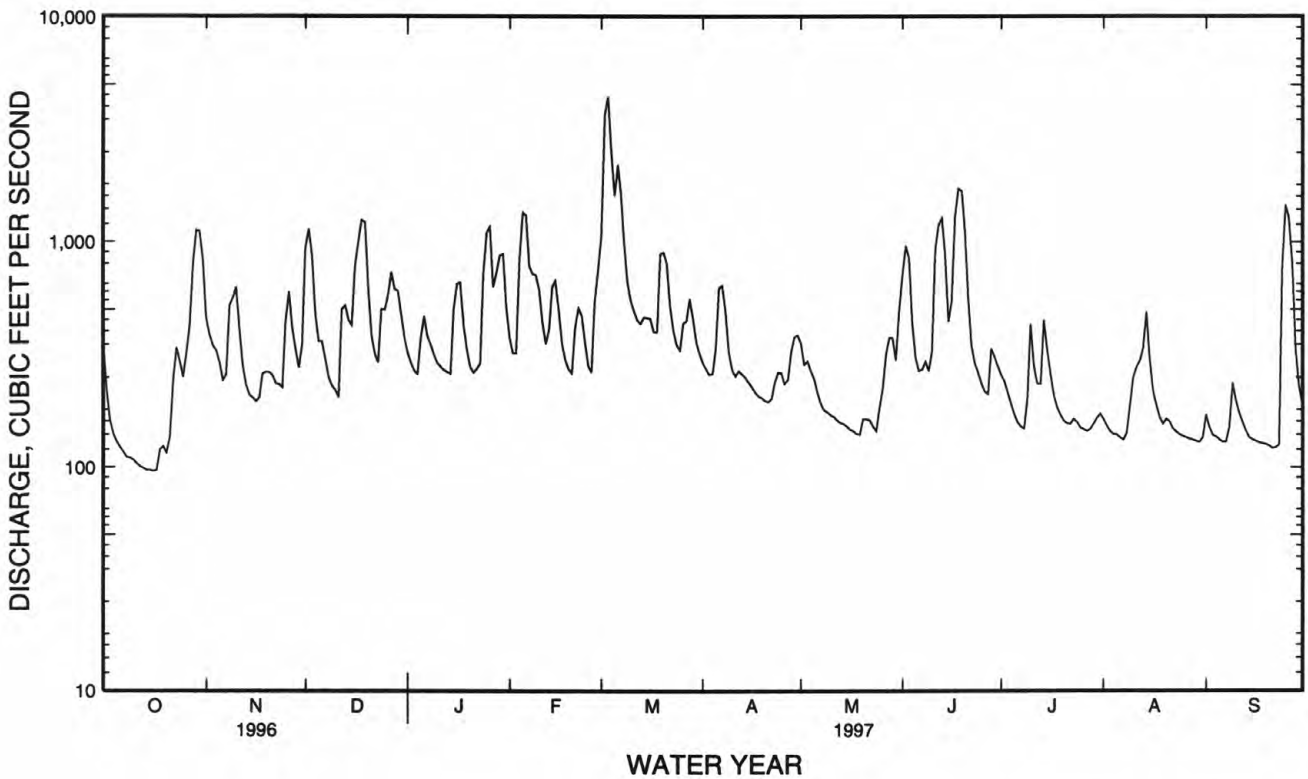
WOLF RIVER BASIN

07030392 WOLF RIVER AT LAGRANGE, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

MEAN	182	274	398	403	383	648	278	234	421	153	152	214
MAX	274	331	564	473	539	956	294	249	628	207	185	288
(WY)	1997	1997	1997	1997	1997	1997	1997	1996	1997	1997	1997	1996
MIN	89.5	217	232	333	233	341	261	220	213	98.9	119	73.5
(WY)	1996	1996	1996	1996	1996	1996	1996	1997	1996	1996	1996	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	100877		150307			
ANNUAL MEAN	276		412		317	
HIGHEST ANNUAL MEAN					412	1997
LOWEST ANNUAL MEAN					222	1996
HIGHEST DAILY MEAN	1250	Dec 18	4430	Mar 3	4430	Mar 3 1997
LOWEST DAILY MEAN	82	Sep 14	96	Oct 16	68	Sep 3 1995
ANNUAL SEVEN-DAY MINIMUM	86	Aug 19	99	Oct 11	70	Sep 2 1995
INSTANTANEOUS PEAK FLOW			7420	Mar 2	7420	Mar 2 1997
INSTANTANEOUS PEAK STAGE			13.27	Mar 2	13.27	Mar 2 1997
ANNUAL RUNOFF (CFSM)	1.31		1.96		1.51	
ANNUAL RUNOFF (INCHES)	17.87		26.63		20.51	
10 PERCENT EXCEEDS	575		843		612	
50 PERCENT EXCEEDS	212		280		212	
90 PERCENT EXCEEDS	93		136		88	



WOLF RIVER BASIN

07030392 WOLF RIVER AT LAGRANGE, TN--Continued

WATER-QUALITY DATA

PERIOD OF RECORD.--October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR SEPTEMBER 1996 TO OCTOBER 1997

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
OCT										
01...	1415	31	5.9	18.0	--	7.4	9	0	2.1	0.96
DEC										
17...	1115	34	6.8	5.5	44	9.8	9	0	2.0	0.89
JAN										
29...	0830	31	7.3	1.5	52	11.4	9	0	2.0	0.89
FEB										
21...	1130	32	6.0	14.5	13	9.4	10	1	2.3	1.0
25...	0945	35	6.9	10.5	15	10.0	10	0	2.2	0.99
MAR										
04...	1245	23	6.2	13.5	--	8.4	8	1	1.9	0.74
12...	0815	38	6.9	15.0	24	8.1	11	1	2.7	1.1
APR										
08...	1245	36	6.9	14.5	--	9.0	13	0	2.9	1.4
MAY										
13...	1945	40	6.1	18.0	6.2	10.2	13	0	2.9	1.3
JUN										
10...	0830	41	7.0	20.5	10	7.1	13	0	3.0	1.4
JUL										
15...	1100	38	6.0	23.5	22	6.2	13	0	3.1	1.2
AUG										
05...	0930	40	6.8	22.0	7.3	6.5	12	0	2.7	1.2
SEP										
11...	0930	47	5.7	19.5	14	7.7	12	0	2.7	1.2
25...	1100	40	5.8	20.0	37	5.8	9	2	2.2	0.86

DATE	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT										
01...	1.8	26	0.3	1.5	12	10	1.4	2.0	<0.10	8.7
DEC										
17...	1.4	20	0.2	2.5	12	12	2.1	1.8	<0.10	4.7
JAN										
29...	1.7	26	0.3	1.5	10	10	2.4	1.7	<0.10	5.0
FEB										
21...	2.0	28	0.3	1.1	11	9	2.0	1.9	<0.10	5.1
25...	2.1	30	0.3	0.83	14	12	1.9	2.0	<0.10	5.1
MAR										
04...	1.1	20	0.2	1.6	8	7	2.4	1.1	<0.10	5.1
12...	1.9	24	0.2	1.3	12	10	1.9	1.6	<0.10	5.8
APR										
08...	2.0	23	0.2	1.2	16	13	1.5	1.6	<0.10	5.6
MAY										
13...	2.5	28	0.3	0.88	19	16	0.80	2.0	<0.10	9.2
JUN										
10...	2.2	25	0.3	0.71	17	15	0.96	1.5	<0.10	9.7
JUL										
15...	1.9	22	0.2	1.4	19	16	1.4	1.8	<0.10	8.3
AUG										
05...	2.4	29	0.3	0.88	17	14	0.60	2.4	<0.10	11
SEP										
11...	2.5	28	0.3	1.4	18	14	0.79	2.3	<0.10	11
25...	1.2	16	0.2	3.4	9	7	2.8	1.9	<0.10	6.0

WOLF RIVER BASIN

07030392 WOLF RIVER AT LAGRANGE, TN--Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT										
01...	33	25	0.04	--	<0.010	0.080	0.020	<0.20	0.40	0.48
DEC										
17...	32	23	0.04	--	<0.010	0.180	0.020	0.20	0.60	0.78
JAN										
29...	30	21	0.04	0.140	0.020	0.160	<0.015	<0.20	0.40	0.56
FEB										
21...	29	22	0.04	--	<0.010	0.180	<0.015	<0.20	0.30	0.48
25...	32	23	0.04	0.120	0.020	0.140	<0.015	<0.20	<0.20	--
MAR										
04...	33	19	0.04	--	<0.010	0.120	<0.015	0.30	0.40	0.52
12...	27	24	0.04	--	<0.010	0.290	<0.015	<0.20	0.30	0.59
APR										
08...	30	25	0.04	--	<0.010	0.130	0.020	0.20	0.40	0.53
MAY										
13...	37	31	0.05	0.255	0.015	0.270	0.032	<0.20	0.27	0.55
JUN										
10...	36	29	0.05	--	<0.010	0.196	<0.015	<0.20	0.43	0.63
JUL										
15...	38	30	0.05	--	<0.010	0.166	0.030	<0.20	0.32	0.49
AUG										
05...	41	31	0.06	--	<0.010	0.336	0.034	<0.20	<0.20	--
SEP										
11...	38	32	0.05	--	<0.010	0.223	<0.015	<0.20	<0.20	--
25...	43	24	0.06	--	<0.010	0.145	<0.015	<0.20	0.51	0.65

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
01...	0.070	<0.010	<0.010	0.07	220	73	4.7	1.2	212	94
DEC										
17...	0.190	0.020	0.030	0.19	220	83	5.8	2.1	84	83
JAN										
29...	0.120	<0.010	<0.010	0.12	150	31	3.8	1.8	77	64
FEB										
21...	0.040	<0.010	<0.010	0.04	220	88	2.0	0.40	46	95
25...	<0.010	<0.010	0.020	--	340	60	2.5	0.70	30	88
MAR										
04...	0.110	0.030	0.010	0.11	390	18	5.0	1.4	52	89
12...	0.020	<0.010	<0.010	0.02	170	68	2.9	0.60	42	88
APR										
08...	0.070	<0.010	0.010	0.07	290	80	3.7	1.1	33	100
MAY										
13...	0.044	<0.010	<0.010	0.04	430	134	1.9	0.30	28	100
JUN										
10...	0.050	<0.010	<0.010	0.05	570	132	2.9	0.30	42	91
JUL										
15...	0.080	<0.010	0.014	0.08	410	223	3.7	1.3	--	--
AUG										
05...	0.020	<0.010	<0.010	0.02	170	98	1.6	0.40	19	100
SEP										
11...	0.045	<0.010	<0.010	0.04	480	96	2.0	0.40	--	--
25...	0.150	0.054	0.042	0.15	490	91	5.9	1.6	--	--

WOLF RIVER BASIN

07031650 WOLF RIVER AT GERMANTOWN, TN

LOCATION.--Lat 35°06'59", long 89°48'05", Shelby County, Hydrologic Unit 08010210, on left bank, 30 ft downstream of bridge on Germantown Road, 1.7 mi north of U.S. Hwy 72, 3.6 mi downstream of Grays Creek, 4.0 mi northeast of I-240 and U.S. Highway 72 interchange, and at mile 18.9.

DRAINAGE AREA.--699 mi^2.

PERIOD OF RECORD.--October 1969 to September 1986, October 1990 to current year. Prior to September 1977 published as "near Germantown".

GAGE.--Water-stage recorder. Datum of gage is 235.76 ft above sea level. Apr. 21, 1986, to Dec. 30, 1990, water-stage recorder at site 2.1 mi downstream at datum 9.94 ft lower.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data. National Weather Service rain gage and telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 28	0400	7,930	14.69	Mar. 3	1245	*20,700	*23.15
Nov. 30	1030	12,000	17.83	Sept. 24	1000	8,250	14.97
Feb. 4	0745	8,450	15.14				

Minimum discharge, 363 ft^3/s, Sept. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	3210	4650	e1400	1550	3350	793	1740	2490	966	410	489
2	999	2410	3460	e1130	1260	18300	702	1370	1960	828	407	519
3	844	1950	2510	e1000	2580	19900	640	1150	1440	737	401	433
4	734	1670	2030	e950	6290	13900	992	1090	1160	668	396	412
5	627	1290	2040	e1500	4330	11600	3760	958	1080	615	393	418
6	548	972	1740	e1400	4130	9950	2640	809	1050	587	383	387
7	498	1510	1500	e1140	3860	9460	2110	730	928	556	373	376
8	466	1670	1210	e1000	3510	6430	1370	669	772	561	410	1040
9	443	1660	993	1080	2910	4450	1120	626	682	570	476	1000
10	425	1360	864	1040	2450	3450	1040	595	954	1120	490	900
11	410	1100	803	909	1940	2630	1410	569	1890	997	474	710
12	399	946	1850	790	1580	2010	1500	546	2120	758	497	567
13	391	894	1760	720	1900	1680	948	530	1930	1150	516	503
14	385	855	1460	672	1810	1760	856	524	2020	736	764	465
15	381	770	1050	1110	1660	1460	784	520	2080	898	967	439
16	376	696	2520	1600	1500	1370	743	503	1890	782	877	420
17	394	783	3520	1390	1350	1320	709	491	3790	724	758	408
18	528	1070	3570	1060	1240	1430	681	485	3310	674	645	396
19	419	1080	3370	873	1120	4130	664	546	3720	604	558	389
20	413	1010	3230	829	1010	3710	647	976	3830	540	869	379
21	581	849	2650	803	2490	323	628	556	3250	492	552	372
22	906	733	2200	833	1880	2950	672	605	2650	575	516	366
23	951	668	1790	951	1630	2170	674	540	2190	565	464	857
24	887	628	2960	2280	1380	1550	676	554	1750	516	433	5590
25	814	1960	2140	2070	1180	1540	642	610	1110	472	413	3030
26	1770	1740	2380	2060	1130	1600	719	652	2050	446	403	3390
27	2000	1700	2640	2000	1670	1360	2000	1300	1420	455	396	3190
28	5280	1470	2440	2880	1680	1160	2740	1130	2150	440	388	2690
29	5330	1490	2090	2770	---	957	2350	987	1870	510	380	2220
30	4650	8340	1860	2420	---	892	2160	824	1240	441	374	1770
31	3760	---	e1620	1960	---	865	---	3020	---	430	461	---
TOTAL	37919	46484	68900	42620	61020	140564	37370	26205	58776	20413	15844	34125
MEAN	1223	1549	2223	1375	2179	4534	1246	845	1959	658	511	1138
MAX	5330	8340	4650	2880	6290	19900	3760	3020	3830	1150	967	5590
MIN	376	628	803	672	1010	865	628	485	682	430	373	366
CFSM	1.75	2.22	3.18	1.97	3.12	6.49	1.78	1.21	2.80	.94	.73	1.63
IN.	2.02	2.47	3.67	2.27	3.25	7.48	1.99	1.39	3.13	1.09	.84	1.82

e Estimated

WOLF RIVER BASIN

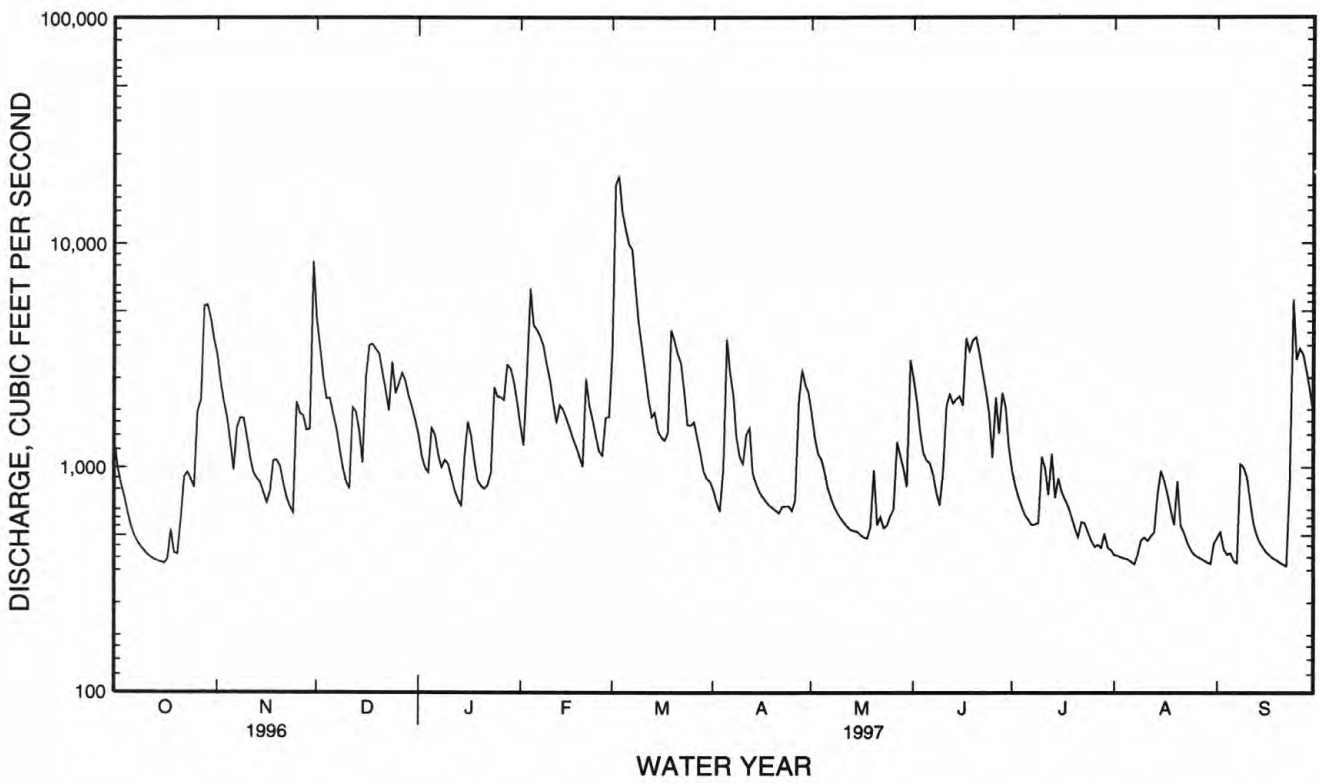
07031650 WOLF RIVER AT GERMANTOWN, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

MEAN	443	787	1572	1385	1313	1764	1615	1264	849	467	422	471
MAX	1223	1991	4939	3504	3256	4854	4805	4542	1986	985	776	1345
(WY)	1997	1980	1983	1974	1991	1980	1991	1991	1974	1994	1995	1979
MIN	213	239	439	372	532	569	448	364	271	258	240	244
(WY)	1970	1972	1981	1981	1995	1986	1986	1992	1972	1971	1986	1986

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1970 - 1997	
ANNUAL TOTAL	395374		590240			
ANNUAL MEAN	1080		1617		1028	
HIGHEST ANNUAL MEAN					1807	1991
LOWEST ANNUAL MEAN					497	1986
HIGHEST DAILY MEAN	8340	Nov 30	19900	Mar 3	30400	Mar 14 1975
LOWEST DAILY MEAN	307	Aug 25	366	Sep 22	196	Sep 15 1972
ANNUAL SEVEN-DAY MINIMUM	316	Aug 20	390	Sep 16	199	Sep 12 1972
INSTANTANEOUS PEAK FLOW			20700	Mar 3	33400	Mar 14 1975
INSTANTANEOUS PEAK STAGE			23.15	Mar 3	27.98	Mar 14 1975
INSTANTANEOUS LOW FLOW			a363	Sep 22	184	Oct 8 1987
ANNUAL RUNOFF (CFSM)	1.55		2.31		1.47	
ANNUAL RUNOFF (INCHES)	21.04		31.41		19.99	
10 PERCENT EXCEEDS	2200		3230		2190	
50 PERCENT EXCEEDS	722		1010		537	
90 PERCENT EXCEEDS	360		432		282	

a Also occurred Sept. 23.



WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN

LOCATION.--Lat 35°10'09", long 89°51'58", Shelby County, Hydrologic Unit 08010210, on Sycamore View Road approximately 0.4 miles northwest of Interstate 40.

DRAINAGE AREA.--30.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 229.00 ft above sea level.

REMARKS.--Records poor.

EXTREMES FOR CURRENT PERIOD.--April 1996 to September 1997: Maximum discharge, 24,400 ft^3/s, Mar. 2, 1997, gage height 16.84; minimum discharge, 0.01 ft^3/s, Aug. 24, 1996.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR APRIL 1996 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e15	2.2	101	e.13	38	1.4
2	---	---	---	---	---	---	e.64	1.2	46	e.50	16	37
3	---	---	---	---	---	---	e1.8	1.0	8.5	e.30	11	2.7
4	---	---	---	---	---	---	e5.2	1.9	12	e.74	11	11
5	---	---	---	---	---	---	e1.7	1.4	4.5	e1.4	4.4	12
6	---	---	---	---	---	---	e.97	32	17	e.45	2.4	.95
7	---	---	---	---	---	---	e.59	732	1050	e.23	1.5	.36
8	---	---	---	---	---	---	e.40	26	368	e9.9	1.9	.32
9	---	---	---	---	---	---	e.26	3.7	4570	e3.4	.46	2.6
10	---	---	---	---	---	---	e.19	2.0	62	e1.1	.42	.72
11	---	---	---	---	---	---	e.22	330	17	e.45	.16	.45
12	---	---	---	---	---	---	e1.0	14	4.4	e.20	e1.0	.35
13	---	---	---	---	--	---	e11	5.9	1.5	e.50	e.37	.20
14	---	---	---	---	---	---	e3.6	e16	.72	e11	e.19	.13
15	---	---	---	---	---	---	e2.0	e3.7	1.4	e3.1	e.25	2.7
16	---	---	---	---	---	---	3.7	e6.9	1.7	e.90	e.70	77
17	---	---	---	---	---	---	4.6	e2.8	2.0	e.35	e3.5	4.9
18	---	---	---	---	---	---	5.6	e1.2	32	e.13	e1.0	.51
19	---	---	---	---	---	---	23	e.70	e5.1	e.06	e.60	.32
20	---	---	---	---	---	---	112	e.54	e1.1	e.04	e.35	.73
21	---	---	---	---	---	---	16	e.36	e.79	e.32	e.20	85
22	---	---	---	---	---	---	61	e.26	e.45	e1.3	e.15	2.3
23	---	---	---	---	---	---	105	e.50	e.62	e6.2	.06	.35
24	---	---	---	---	---	---	16	e.37	e1.3	e3.0	.02	.19
25	---	---	---	---	---	---	10	e.30	e3.5	e21	1.1	.16
26	---	---	---	---	---	---	6.5	15	e2.2	e2.4	5.8	8.2
27	---	---	---	---	---	---	3.7	203	e1.2	e4.5	5.4	290
28	---	---	---	---	---	---	5.0	76	e.54	e15	1.4	63
29	---	---	---	---	---	---	45	22	e.27	e100	.46	3.1
30	---	---	---	---	---	---	5.2	3.2	e.18	288	.51	.74
31	---	---	---	---	---	---	2.6	---	825	.97	---	
TOTAL	---	---	---	---	---	---	466.87	1508.73	6316.97	1301.60	111.27	609.38
MEAN	---	---	---	---	---	---	15.6	48.7	211	42.0	3.59	20.3
MAX	---	---	---	---	---	---	112	732	4570	825	38	290
MIN	---	---	---	---	---	---	.19	.26	.18	.04	.02	.13
CFSM	---	---	---	---	---	---	.51	1.60	6.90	1.38	.12	.67
IN.	---	---	---	---	---	---	.57	1.84	7.70	1.59	.14	.74

e Estimated

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	e584	429	6.2	8.9	2160	2.2	35	21	13	2.3	5.3
2	1.0	e15	37	4.9	5.8	e10000	1.8	7.1	24	11	1.7	3.0
3	1.7	e6.2	16	4.5	557	e270	2.4	13	6.4	9.5	1.8	2.0
4	2.3	e7.1	8.9	76	1060	e31.5	171	4.5	3.3	14	3.0	.94
5	2.1	e6.4	156	62	52	e1890	2700	2.9	3.1	7.9	13	.38
6	1.7	e6.2	24	7.9	22	e6.42	37	3.6	3.3	5.6	4.3	.17
7	.86	312	11	4.6	167	e9.6	14	4.6	2.9	5.8	2.8	.21
8	3.6	13	8.2	14	112	e15.8	8.0	1.8	4.8	41	32	1310
9	1.6	5.8	7.0	34	16	24	5.3	3.5	5.3	16	34	34
10	.17	4.0	6.9	11	9.5	47	3.7	3.2	178	28	17	5.6
11	.10	2.9	6.7	e4.6	6.3	12	304	2.1	33	19	26	2.3
12	.08	1.4	326	e28	6.1	7.3	110	2.1	7.8	6.4	17	.95
13	.07	9.9	122	e12	300	460	10	1.3	3.5	1010	12	3.2
14	.17	16	268	e12	42	215	5.4	1.5	3.1	53	18	.87
15	.08	13	495	e263	19	16	4.5	1.7	2.9	381	26	.21
16	.07	8.6	838	115	15	9.0	3.8	1.7	33	19	4.5	.15
17	35	334	450	14	14	18	3.5	1.7	1600	10	2.5	2.0
18	184	80	6.5	9.7	14	227	2.5	1.8	35	7.3	1.7	2.9
19	6.0	26	8.3	8.8	17	799	2.5	262	13	6.8	3.5	.19
20	2.8	24	7.9	8.0	23	21	8.4	155	8.5	6.4	e462	.13
21	257	38	6.9	7.8	1010	11	2.6	13	5.1	2.8	e19	.14
22	289	30	6.9	17	37	8.1	31	7.6	3.0	228	2.6	.64
23	28	27	119	9.9	20	5.5	12	6.4	1.5	81	1.6	2900
24	7.9	32	8.6	239	16	4.0	3.7	97	1.2	4.0	.79	4410
25	5.6	377	10	19	12	231	2.8	55	4.8	1.6	.46	32
26	319	109	6.9	11	125	34	14	13	642	.95	.35	12
27	1250	55	22	97	308	32	627	400	278	38	1.6	5.1
28	1900	44	21	79	134	6.4	370	25	1480	15	.80	2.3
29	17	219	14	18	---	4.6	39	14	137	63	.49	1.3
30	7.3	6880	9.3	12	---	3.1	14	17	22	10	.59	.96
31	22	---	7.5	11	---	2.5	---	1030	---	3.8	38	---
TOTAL	4348.30	9286.5	3464.5	1220.9	4128.6	16580.82	4516.1	2188.1	4566.5	2118.85	751.38	8738.94
MEAN	140	310	112	39.4	147	535	151	70.6	152	68.4	24.2	291
MAX	1900	6880	838	263	1060	10000	2700	1030	1600	1010	462	4410
MIN	.07	1.4	6.5	4.5	5.8	2.5	1.8	1.3	1.2	.95	.35	.13
CFSM	4.60	10.1	3.66	1.29	4.83	17.5	4.94	2.31	4.99	2.24	.79	9.55
IN.	5.30	11.33	4.23	1.49	5.04	20.22	5.51	2.67	5.57	2.58	.92	10.66

e--Estimated

WOLF RIVER BASIN

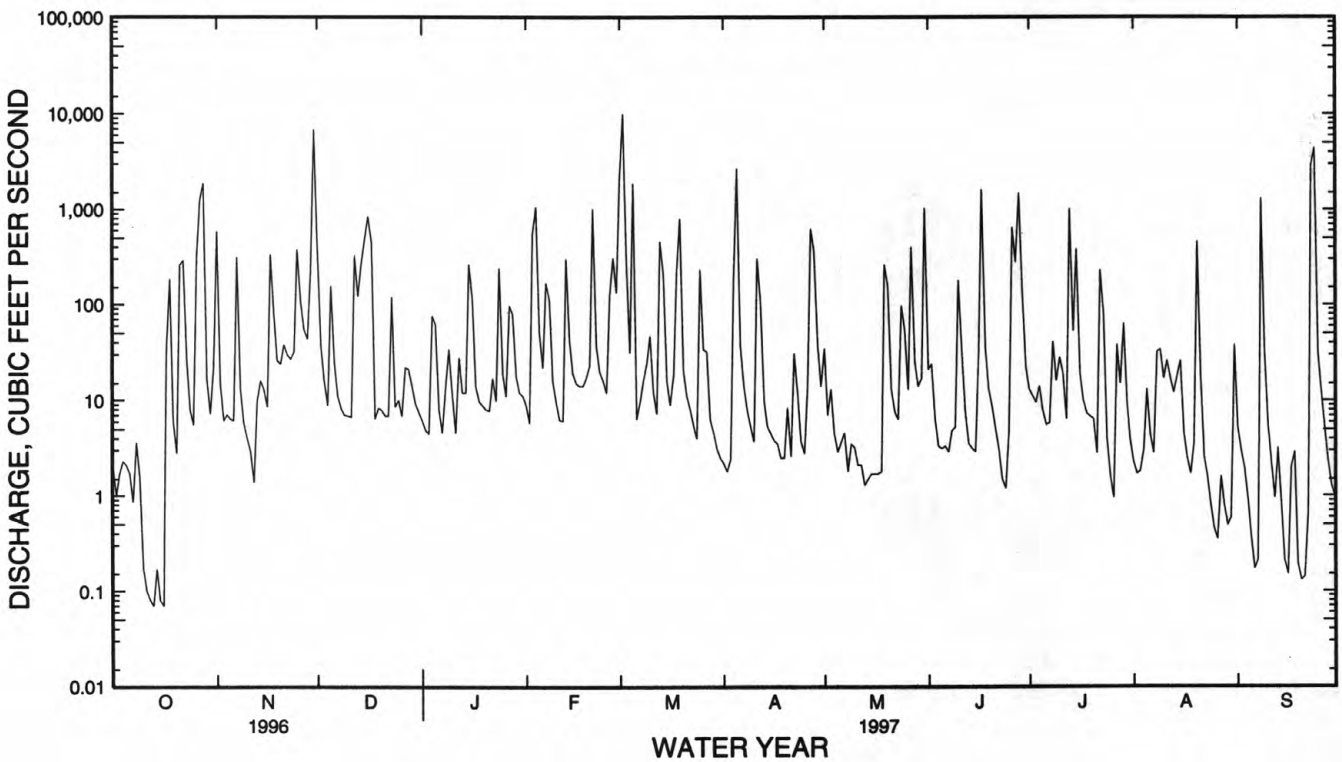
07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	140	310	112	39.4	147	535	83.0	59.6	181	55.2	13.9	156
MAX	140	310	112	39.4	147	535	151	70.6	211	68.3	24.2	291
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1996	1997	1997	1997
MIN	140	310	112	39.4	147	535	15.6	48.7	152	42.0	3.59	20.3
(WY)	1997	1997	1997	1997	1997	1997	1996	1996	1997	1996	1996	1996

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	61909.49			
ANNUAL MEAN	170		170	
HIGHEST ANNUAL MEAN			170	1997
LOWEST ANNUAL MEAN			170	1997
HIGHEST DAILY MEAN	10000	Mar 2	10000	Mar 2 1997
LOWEST DAILY MEAN	a.07	Oct 13	.02	Aug 24 1996
ANNUAL SEVEN-DAY MINIMUM	.11	Oct 10	.11	Oct 10 1996
INSTANTANEOUS PEAK FLOW	24400	Mar 2	24400	Mar 2 1997
INSTANTANEOUS PEAK STAGE	16.84	Mar 2	16.84	Mar 2 1997
ANNUAL RUNOFF (CFSM)	5.56		5.56	
ANNUAL RUNOFF (INCHES)	75.51		75.56	
10 PERCENT EXCEEDS	306		232	
50 PERCENT EXCEEDS	10		6.9	
90 PERCENT EXCEEDS	1.6		.45	

a Also occurred Oct. 16



WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT											
01...	1730	107	7.1	20.0	--	7.2	38	2	11	2.5	3.4
15...	1610	126	7.3	19.0	--	7.3	46	0	13	3.3	5.2
29...	1430	98	6.3	20.5	120	7.1	34	6	10	2.3	3.2
NOV											
13...	1445	110	6.5	8.5	--	7.6	44	10	13	2.8	3.1
25...	1245	80	7.3	11.0	--	10.1	25	3	7.2	1.7	2.4
29...	2000	103	6.9	8.0	--	10.8	56	8	17	3.3	5.2
DEC											
09...	1700	123	7.0	8.0	85	10.3	48	8	14	3.1	3.9
17...	0715	63	7.8	5.5	130	10.8	22	0	6.2	1.5	1.8
JAN											
15...	1930	112	7.1	2.0	420	14.0	28	7	8.1	2.0	8.7
29...	1130	97	7.7	2.5	150	12.7	34	7	9.7	2.3	4.7
FEB											
11...	1645	142	7.1	6.0	48	11.7	51	6	15	3.2	5.8
25...	1400	135	7.5	11.5	78	11.4	48	8	14	3.1	5.7
MAR											
04...	1630	100	6.6	12.5	130	8.8	37	6	11	2.3	3.3
05...	0930	45	9.0	16.5	1300	9.0	13	0	3.6	1.0	1.4
12...	1115	144	8.0	15.0	160	10.1	51	3	15	3.2	6.1
18...	1700	155	7.2	13.0	65	10.4	67	11	20	4.1	8.0
APR											
01...	0730	161	6.9	14.5	63	6.4	58	7	17	3.7	6.5
08...	1600	108	6.8	16.5	400	8.6	40	5	11	2.9	4.4
15...	1715	112	7.3	16.0	82	9.7	42	6	12	2.7	3.9
23...	1015	142	7.4	15.0	220	7.0	44	3	14	2.5	5.8
29...	0730	83	7.0	13.0	110	9.1	32	1	9.5	2.0	2.5
MAY											
07...	1345	132	7.8	21.0	120	9.1	49	3	15	3.0	4.9
14...	0730	164	7.8	18.0	41	9.8	62	0	19	3.8	6.9
27...	1100	82	7.2	19.5	500	7.4	26	3	7.2	1.9	2.7
JUN											
04...	0840	122	7.0	21.5	120	7.1	43	5	13	2.6	4.4
10...	1230	141	7.5	22.0	39	7.8	53	4	16	2.8	5.6
14...	0715	130	7.1	24.0	97	7.5	46	6	14	2.6	4.7
24...	0930	121	8.3	28.5	45	9.6	45	0	14	2.7	4.3
26...	1230	95	6.9	25.5	250	7.1	32	6	9.4	2.0	2.9
JUL											
09...	0840	132	6.3	25.5	320	3.3	47	4	14	2.9	5.3
15...	0815	70	6.8	24.5	360	6.7	24	0	7.0	1.7	2.4
22...	0720	129	7.3	28.0	100	3.4	42	2	12	2.7	5.8
AUG											
05...	1345	137	7.7	28.5	28	5.9	49	5	15	2.6	5.9
13...	1145	124	7.2	27.5	95	6.3	44	6	14	2.4	4.3
18...	1830	134	7.1	30.0	--	4.0	46	--	14	2.6	4.9
SEP											
10...	1700	91	6.6	24.5	260	4.9	27	4	7.5	2.0	2.7
24...	1120	51	7.1	21.0	250	2.4	17	4	4.6	1.3	1.4

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SODIUM PERCENT (00932)	SODIUM AD-SORP-ION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT											
01...	15	0.2	4.1	43	35	6.4	3.2	0.20	7.6	71	62
15...	18	0.3	3.0	59	48	6.2	3.7	0.50	8.8	80	74
29...	15	0.2	4.2	35	28	7.4	2.9	0.20	6.3	69	55
NOV											
13...	12	0.2	4.4	42	34	8.7	4.0	0.20	7.4	63	67
25...	15	0.2	3.8	27	24	5.3	2.5	0.10	5.3	62	45
29...	16	0.3	3.6	59	48	12	4.9	0.10	6.3	93	84
DEC											
09...	14	0.2	3.1	48	39	11	3.8	0.10	6.3	82	71
17...	14	0.2	2.6	29	24	5.5	1.4	<0.10	4.6	47	40
JAN											
15...	37	0.7	2.6	26	21	6.8	14	0.10	4.8	76	63
29...	22	0.4	2.7	32	27	8.5	5.0	0.10	6.0	66	58
FEB											
11...	19	0.4	2.4	54	44	14	4.4	0.10	7.5	89	82
25...	20	0.4	2.1	48	41	13	4.4	0.10	7.3	88	75
MAR											
04...	15	0.2	2.2	38	31	9.9	2.5	0.10	5.7	72	57
05...	17	0.2	1.1	16	13	2.7	0.90	0.10	2.3	28	22
12...	20	0.4	2.7	58	48	10	3.7	0.20	6.7	86	79
18...	20	0.4	2.5	68	56	20	7.6	0.20	7.7	115	106
APR											
01...	19	0.4	2.7	62	51	13	4.6	0.20	7.7	104	88
08...	18	0.3	2.4	42	34	10	3.1	0.14	6.6	72	63
15...	16	0.3	2.7	44	36	8.8	3.1	0.13	6.8	83	64
23...	21	0.4	2.2	51	42	12	4.7	0.16	4.1	87	74
29...	14	0.2	2.3	38	31	6.3	1.9	0.12	6.3	68	53
MAY											
07...	17	0.3	2.5	56	46	9.7	3.5	0.25	6.1	90	74
14...	19	0.4	2.7	77	63	11	4.9	0.28	7.2	108	94
27...	16	0.2	3.0	28	24	4.9	2.4	0.16	4.9	62	46
JUN											
04...	17	0.3	2.9	47	38	8.3	3.3	0.21	7.2	89	69
10...	18	0.3	3.1	59	49	9.5	4.4	0.18	6.7	99	78
14...	17	0.3	3.4	48	40	7.5	4.1	0.22	7.7	91	68
24...	16	0.3	3.2	58	46	7.4	3.6	0.18	7.9	83	72
26...	15	0.2	3.4	31	25	4.7	2.6	0.19	5.6	78	50
JUL											
09...	18	0.3	3.7	52	43	9.3	4.1	0.25	6.0	89	73
15...	15	0.2	3.3	34	28	5.2	2.2	0.16	5.2	59	47
22...	21	0.4	3.7	49	40	6.6	6.9	0.23	7.7	90	71
AUG											
05...	20	0.4	3.4	53	45	6.9	7.3	0.23	7.0	99	75
13...	16	0.3	3.0	47	38	7.4	3.9	0.19	6.6	81	67
18...	18	0.3	3.1	--	--	7.2	3.9	0.25	7.0	82	73
SEP											
10...	15	0.2	4.4	28	23	4.2	2.7	0.19	5.7	62	46
24...	13	0.1	2.6	16	13	4.0	1.1	0.12	3.9	42	27

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT											
01...	0.10	0.380	0.040	0.420	0.130	0.60	1.4	1.8	0.490	0.110	0.130
15...	0.11	0.110	0.020	0.130	0.050	0.30	0.70	0.83	0.240	0.020	0.020
29...	0.09	0.230	0.020	0.250	0.060	0.50	1.1	1.3	0.430	0.120	0.120
NOV											
13...	0.09	0.340	0.040	0.380	0.060	0.50	1.2	1.6	0.530	0.190	0.180
25...	0.08	0.350	0.030	0.380	0.310	0.90	1.5	1.9	0.800	0.250	0.260
29...	0.13	0.370	0.030	0.400	0.170	0.60	1.3	1.7	0.610	0.090	0.100
DEC											
09...	0.11	0.390	0.040	0.430	0.120	0.40	0.90	1.3	0.380	0.080	0.080
17...	0.06	0.360	0.010	0.370	0.070	0.30	0.90	1.3	0.440	0.130	0.130
JAN											
15...	0.10	0.550	0.020	0.570	0.280	0.80	1.3	1.9	0.620	0.170	0.140
29...	0.09	0.600	0.050	0.650	0.060	0.40	1.0	1.6	0.320	0.060	0.080
FEB											
11...	0.12	0.500	0.020	0.520	0.070	0.30	0.60	1.1	0.190	0.040	0.040
25...	0.12	0.380	0.030	0.410	0.030	0.40	0.70	1.1	0.140	0.020	0.040
MAR											
04...	0.10	--	<0.010	0.290	0.070	0.40	1.2	1.5	0.380	0.050	0.060
05...	0.04	--	<0.010	0.180	0.070	0.40	1.0	1.2	0.620	0.040	0.050
12...	0.12	0.470	0.020	0.490	0.160	0.60	1.9	2.4	0.540	0.030	0.050
18...	0.16	0.420	0.020	0.440	0.190	0.60	1.0	1.4	0.200	0.050	0.050
APR											
01...	0.14	0.270	0.020	0.290	0.110	0.50	1.3	1.6	0.290	0.040	0.030
08...	0.10	0.270	0.020	0.290	0.040	0.40	1.4	1.7	0.770	0.020	<0.010
15...	0.11	0.390	0.030	0.420	0.040	0.50	1.1	1.5	0.290	0.070	0.060
23...	0.12	0.872	0.043	0.915	0.265	0.99	1.9	2.8	0.387	0.118	0.068
29...	0.09	0.583	0.034	0.617	0.170	0.76	1.3	1.9	0.441	0.110	0.114
MAY											
07...	0.12	0.414	0.015	0.429	<0.015	0.27	1.1	1.5	0.368	0.041	0.027
14...	0.15	0.038	0.015	0.053	0.017	0.33	1.5	1.6	0.188	<0.010	<0.010
27...	0.08	0.730	0.040	0.770	0.478	0.95	2.0	2.8	0.956	0.127	0.140
JUN											
04...	0.12	0.647	0.071	0.718	0.094	0.66	1.2	1.9	0.463	0.067	0.079
10...	0.13	0.075	0.015	0.090	<0.015	0.35	1.2	1.3	0.204	0.019	0.022
14...	0.12	--	<0.010	0.062	<0.015	<0.20	1.4	1.5	0.319	<0.010	0.013
24...	0.11	--	<0.010	<0.050	<0.015	0.38	1.1	1.1	0.165	<0.010	0.018
26...	0.11	0.541	0.042	0.583	0.381	0.94	2.2	2.8	0.879	0.177	0.182
JUL											
09...	0.12	0.354	0.025	0.379	0.027	0.85	1.6	1.9	0.609	0.097	0.083
15...	0.08	0.413	0.030	0.443	0.201	0.97	1.9	2.3	0.830	0.160	0.159
22...	0.12	0.227	0.028	0.255	0.070	0.53	1.2	1.5	0.342	0.040	0.042
AUG											
05...	0.13	0.081	0.014	0.095	0.032	0.52	1.2	1.3	0.162	0.024	0.027
13...	0.11	0.374	0.053	0.427	0.105	0.62	1.3	1.7	0.328	0.070	0.065
18...	0.11	0.399	0.092	0.491	0.204	0.74	1.4	1.9	0.493	0.040	0.063
SEP											
10...	0.08	0.390	0.033	0.423	0.256	0.63	1.4	1.8	0.529	0.137	0.136

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS ORGANIC TOTAL (MG/L AS P) (00670)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)
OCT											
01...	0.49	10	12	--	6.1	4.9	<0.002	<0.002	0.045	<0.002	<0.002
15...	0.24	6.0	110	--	5.2	0.30	--	--	--	--	--
29...	0.43	140	86	--	6.9	3.9	--	--	--	--	--
NOV											
13...	0.53	100	54	--	7.0	3.2	--	--	--	--	--
25...	0.80	83	120	--	8.8	5.8	<0.002	<0.002	0.061	<0.002	<0.002
29...	0.61	13	150	12	--	--	--	--	--	--	--
DEC											
09...	0.38	33	160	--	5.7	--	<0.002	<0.002	0.083	<0.002	<0.002
17...	0.44	55	77	--	5.9	4.1	<0.002	<0.002	0.055	<0.002	<0.002
JAN											
15...	0.62	190	93	--	5.8	5.7	<0.002	<0.002	0.071	<0.002	<0.002
29...	0.32	62	98	--	6.1	3.7	--	--	--	--	--
FEB											
11...	0.19	63	190	--	4.2	1.9	<0.002	<0.002	1.20	<0.002	<0.002
25...	0.14	43	120	--	4.8	2.5	<0.002	<0.002	2.11	<0.002	<0.002
MAR											
04...	0.38	77	96	--	4.6	3.9	--	--	--	--	--
05...	0.62	84	58	--	3.6	14	--	--	--	--	--
12...	0.54	16	110	--	5.1	7.4	--	--	--	--	--
18...	0.20	34	200	--	5.0	1.3	--	--	--	--	--
APR											
01...	0.29	31	130	--	7.4	2.0	--	--	--	--	--
08...	0.77	36	72	--	5.1	--	<0.002	0.006	0.900	<0.002	<0.002
15...	0.29	68	64	--	6.2	3.6	0.005	0.012	3.37	<0.002	<0.002
23...	0.39	23	120	--	7.9	3.6	0.017	0.043	0.707	<0.002	<0.002
29...	0.44	160	60	--	8.1	1.3	<0.002	<0.002	2.51	<0.002	<0.002
MAY											
07...	0.37	8.3	162	5.0	3.0	E0.003	0.012	1.20	<0.002	<0.002	0.035
14...	0.19	12	255	5.6	2.0	--	--	--	--	--	--
27...	0.96	50	128	9.6	5.9	0.007	<0.002	0.778	<0.002	<0.002	0.075
JUN											
04...	0.46	30	59	5.9	3.0	<0.002	<0.002	0.366	<0.002	<0.002	0.043
10...	0.20	26	191	7.6	3.2	<0.002	<0.002	0.260	<0.002	<0.002	0.026
14...	0.32	40	15	6.7	2.0	<0.002	<0.002	0.283	<0.002	<0.002	0.029
24...	0.17	45	7.8	6.6	>4.6	<0.002	<0.002	0.304	<0.002	<0.002	0.017
26...	0.88	50	74	7.4	4.9	0.011	<0.002	0.229	<0.002	<0.002	0.078
JUL											
09...	0.61	14	68	6.4	4.2	<0.002	<0.002	0.132	<0.002	<0.002	0.103
15...	0.83	67	77	8.4	6.6	<0.002	<0.002	0.083	<0.002	<0.002	0.045
22...	0.34	12	52	9.6	--	<0.002	<0.002	0.123	<0.002	<0.002	0.251
AUG											
05...	0.16	9.3	50	6.5	1.9	<0.002	<0.002	0.059	<0.002	<0.002	0.032
13...	0.33	13	85	5.8	3.2	<0.002	<0.002	0.022	<0.002	<0.002	0.025
18...	0.49	10	96	--	0.80	<0.002	<0.002	0.039	<0.002	<0.002	0.036
SEP											
10...	0.53	47	6.6	5.8	3.3	--	--	--	--	--	--
24...	--	110	101	6.2	3.3	<0.002	<0.002	0.033	<0.030	<0.002	0.083

E--Estimated

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CYANA-CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04041)	ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	METRI-MALA-THION, DIS-SOLVED (UG/L) (39532)	BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
OCT											
01...	0.017	<0.004	E0.004	0.084	<0.001	<0.003	<0.004	0.012	<0.004	0.047	<0.006
NOV											
25...	0.026	<0.004	E0.004	0.039	<0.001	<0.003	<0.004	<0.005	<0.004	0.023	<0.006
DEC											
09...	0.067	<0.004	E0.008	0.016	<0.001	<0.003	<0.004	<0.005	<0.004	0.017	<0.006
17...	0.020	<0.004	E0.003	<0.012	<0.001	<0.003	<0.004	<0.005	<0.004	0.014	<0.006
JAN											
15...	0.026	<0.004	<0.002	0.035	<0.001	<0.003	<0.004	<0.005	<0.004	0.018	<0.006
FEB											
11...	0.026	<0.004	E0.014	0.021	<0.001	<0.003	<0.004	<0.010	<0.010	0.100	<0.006
25...	0.149	<0.004	E0.033	0.066	<0.001	<0.003	<0.004	<0.005	0.009	0.292	<0.006
APR											
08...	0.020	<0.004	E0.052	0.069	<0.001	<0.003	<0.004	<0.005	0.020	1.03	<0.006
15...	0.049	<0.004	E0.141	0.152	<0.001	<0.003	<0.004	0.011	0.011	2.42	<0.006
23...	0.055	<0.004	E0.101	0.375	<0.001	<0.003	<0.004	0.073	0.188	2.00	E0.006
29...	0.064	<0.004	E0.283	0.316	<0.001	<0.003	<0.004	<0.005	0.033	2.18	<0.006
MAY											
07...	<0.004	E0.106	0.112	<0.001	<0.003	<0.004	<0.005	0.048	1.56	<0.006	<0.004
27...	<0.004	E0.190	0.351	<0.001	<0.003	<0.004	0.043	<0.004	1.24	<0.006	<0.004
JUN											
04...	<0.004	E0.086	0.195	<0.001	<0.003	<0.004	5.60	<0.004	0.558	<0.006	<0.004
10...	<0.004	E0.040	0.124	<0.001	<0.003	<0.004	0.379	<0.070	0.501	<0.006	<0.004
14...	<0.004	E0.045	0.484	<0.001	<0.003	<0.004	0.009	<0.030	0.642	<0.006	<0.004
24...	<0.004	E0.067	0.156	<0.001	<0.003	<0.004	<0.005	<0.004	0.293	<0.006	<0.004
26...	<0.004	E0.031	0.328	<0.001	<0.003	<0.004	0.084	0.106	1.08	<0.006	<0.004
JUL											
09...	0.023	E0.019	1.05	<0.001	<0.003	<0.004	0.029	<0.004	0.963	<0.006	<0.004
15...	0.020	E0.011	0.390	<0.001	<0.003	<0.004	0.071	0.045	0.427	<0.006	<0.004
22...	0.014	E0.018	0.262	<0.001	<0.003	<0.004	<0.005	<0.004	0.227	<0.006	<0.004
AUG											
05...	<0.010	E0.015	0.127	<0.001	<0.003	<0.004	0.037	<0.050	0.235	<0.006	<0.004
13...	<0.004	E0.005	0.208	<0.001	<0.003	<0.004	0.141	<0.060	0.153	<0.006	<0.004
18...	<0.004	E0.004	0.071	<0.001	<0.003	<0.004	0.249	<0.030	0.276	<0.006	<0.004
SEP											
24...	<0.004	<0.002	0.104	<0.001	<0.003	<0.004	0.012	<0.004	0.028	<0.006	<0.004

E--Estimated

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT											
01...	<0.004	<0.007	0.054	4.85	<0.002	E0.036	<0.020	<0.002	<0.003	<0.017	<0.004
NOV											
25...	<0.004	<0.007	<0.018	7.49	<0.002	<0.050	<0.003	<0.002	<0.003	<0.017	<0.004
DEC											
09...	<0.004	<0.007	0.049	4.98	<0.002	E0.047	<0.003	<0.002	<0.003	<0.017	<0.004
17...	<0.004	<0.007	<0.018	4.38	<0.002	<0.020	<0.003	<0.002	<0.003	<0.017	<0.004
JAN											
15...	<0.004	<0.007	<0.018	3.32	<0.002	<0.030	<0.003	<0.002	<0.003	<0.017	<0.004
FEB											
11...	<0.004	<0.007	<0.018	8.24	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
25...	<0.004	<0.007	<0.018	9.03	<0.002	E0.019	<0.003	<0.002	<0.003	<0.017	<0.004
APR											
08...	<0.004	<0.007	<0.060	2.44	<0.002	E0.081	<0.003	<0.002	<0.003	<0.017	<0.004
15...	<0.004	<0.007	0.022	3.06	E0.006	E0.050	E0.016	E0.001	<0.003	<0.017	<0.004
23...	<0.004	<0.007	<0.018	3.16	0.007	E0.204	<0.003	E0.002	<0.003	<0.017	<0.004
29...	<0.004	<0.007	0.069	1.76	0.006	E0.099	<0.003	<0.002	<0.003	<0.017	<0.004
MAY											
07...	<0.007	0.028	0.875	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
27...	<0.007	0.353	1.10	0.008	E0.249	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
JUN											
04...	<0.007	0.155	0.624	<0.002	E0.102	<0.003	E0.001	<0.003	<0.017	<0.004	<0.003
10...	<0.007	0.144	0.482	<0.002	E0.021	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
14...	<0.007	0.114	0.754	<0.002	E0.059	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
24...	<0.007	0.026	0.712	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
26...	<0.007	<0.018	1.46	<0.002	E0.128	<0.003	E0.002	<0.003	<0.017	<0.004	<0.003
JUL											
09...	<0.007	0.049	0.382	<0.002	E0.359	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
15...	<0.007	0.097	0.306	<0.002	E0.165	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
22...	<0.007	0.039	0.356	<0.002	E0.019	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
AUG											
05...	<0.007	0.046	0.710	<0.002	E0.016	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
13...	<0.007	E0.016	0.240	<0.002	E0.041	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
18...	<0.007	<0.018	0.182	<0.002	E0.081	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003
SEP											
24...	<0.007	<0.018	2.65	<0.002	<0.030	<0.003	<0.002	<0.003	<0.017	<0.004	<0.003

E--Estimated

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
OCT											
01...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
NOV											
25...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
DEC											
09...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.010	<0.005	<0.002
17...	<0.003	0.013	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JAN											
15...	<0.003	0.008	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB											
11...	<0.003	0.005	<0.002	<0.001	<0.006	<0.004	<0.040	<0.004	<0.010	<0.005	<0.002
25...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	0.092	<0.005	<0.002
APR											
08...	<0.003	<0.002	<0.002	--	<0.006	<0.004	<0.003	<0.004	0.105	<0.005	<0.002
15...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	E0.219	<0.005	<0.002
23...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	0.293	<0.005	<0.002
29...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	0.232	<0.005	<0.002
MAY											
07...	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	0.096	<0.005	<0.002	<0.003
27...	<0.002	<0.002	<0.001	<0.006	0.096	<0.003	<0.004	0.287	<0.005	<0.002	<0.003
JUN											
04...	<0.002	<0.002	<0.001	<0.006	0.052	<0.003	<0.004	0.137	<0.005	<0.002	<0.003
10...	<0.002	<0.002	<0.001	<0.006	0.013	<0.003	<0.004	0.089	<0.005	<0.002	<0.003
14...	<0.002	<0.002	<0.001	<0.006	0.007	<0.003	<0.004	0.082	<0.005	<0.002	0.009
24...	<0.002	<0.002	<0.001	<0.006	0.007	<0.003	<0.004	0.029	<0.005	<0.002	<0.003
26...	<0.002	<0.002	<0.001	0.050	0.061	<0.003	<0.004	0.101	<0.005	<0.002	<0.003
JUL											
09...	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	0.372	<0.005	<0.002	<0.003
15...	<0.002	<0.002	E0.043	0.061	0.038	<0.003	<0.004	0.090	<0.005	<0.002	<0.003
22...	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	0.046	<0.005	<0.002	<0.003
AUG											
05...	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	0.047	<0.005	<0.002	<0.003
13...	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002	<0.003
18...	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002	<0.003
SEP											
24...	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.020	<0.005	<0.002	<0.003

E--Estimated

WOLF RIVER BASIN

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1197

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
01...	<0.003	<0.004	<0.013	0.019	<0.007	<0.013	<0.001	<0.002	<0.002	141	91
NOV											
25...	0.063	<0.004	<0.013	E0.010	<0.007	<0.013	<0.001	<0.002	<0.002	390	95
DEC											
09...	0.131	<0.004	<0.013	0.028	<0.007	<0.013	<0.001	<0.002	<0.002	80	95
17...	0.091	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	168	97
JAN											
15...	0.081	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	1320	100
FEB											
11...	0.043	<0.004	<0.013	0.026	<0.007	<0.013	<0.001	<0.002	<0.002	82	96
25...	0.036	<0.004	<0.013	0.017	<0.007	<0.013	<0.001	<0.002	<0.002	77	98
APR											
08...	0.011	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	361	99
15...	0.014	<0.004	<0.013	E0.018	<0.007	<0.013	<0.001	E0.006	<0.002	78	95
23...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	0.037	<0.002	--	--
29...	0.018	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	0.010	<0.002	144	96

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY										
07...	<0.004	<0.013	0.011	<0.007	<0.013	<0.001	E0.003	0.009	273	89
27...	0.018	<0.013	<0.010	<0.007	<0.013	<0.001	0.019	0.009	1230	100
JUN										
04...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	E0.004	<0.002	167	100
10...	0.055	<0.013	0.014	<0.007	<0.013	<0.001	E0.003	<0.002	72	98
14...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	E0.003	<0.002	97	99
24...	<0.004	<0.013	0.021	<0.007	<0.013	<0.001	<0.002	<0.002	55	100
26...	0.042	<0.013	<0.010	<0.007	<0.013	<0.001	0.005	<0.002	455	98
JUL										
09...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	473	99
15...	0.009	<0.013	<0.010	<0.007	<0.013	<0.001	0.008	<0.002	--	--
22...	<0.004	<0.013	0.011	<0.007	<0.013	<0.001	<0.002	<0.002	99	96
AUG										
05...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	70	80
13...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	--	--
18...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	--	--
SEP										
24...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	--	--

E--Estimated

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NONCONNAH CREEK BASIN
07032200 NONCONNAH CREEK NEAR GERMANTOWN, TN

LOCATION.--Lat 35°02'59", long 89°49'08", Shelby County, Hydrologic Unit 08010211, on right bank, 100 ft upstream from bridge on Winchester Road, 2.6 mi south of Germantown, and at mile 17.3.

DRAINAGE AREA.--68.2 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, 1959-1964 and 1969; October 1969 to May 1985, October 1985 to January 1995, June 1996 to current year.

REVISED RECORDS.--WRD TN-74-1: Drainage area, WRD TN-87-1 (P).

GAGE.--Water-stage recorder. Datum of gage is 262.92 ft above sea level, (from levels by National Rersources Conservation Service).

REMARKS.--Records good except for estimated daily discharges which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 3,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 2	0530	*10,900	*22.52	May 31	0900	7,620	19.81
Mar. 5	1500	4,090	15.71				

Minimum daily discharge, 0.75 ft^3/s, Sept. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.0	e400	e100	e15	27	1740	10	216	479	21	5.1	8.0
2	e.98	e60	e40	e13	20	5270	9.2	40	155	12	4.8	3.5
3	e.88	e16	e20	e11	619	880	8.9	70	58	9.1	5.4	2.8
4	e30	e8.0	e15	e90	1940	250	373	15	28	7.5	3.0	2.5
5	e20	e4.0	e350	e150	406	1670	1490	8.8	18	5.1	2.6	2.2
6	e10	e80	e130	e24	135	550	415	6.6	13	4.7	3.2	1.8
7	e1.5	e450	e110	e16	295	172	114	4.9	11	4.6	1.4	1.0
8	e1.2	e54	e100	e12	522	84	48	3.9	14	9.7	31	118
9	e1.1	e4.5	e25	e100	173	63	31	6.2	8.7	7.6	44	36
10	e1.0	e3.1	e70	e94	70	72	23	4.8	269	147	11	8.2
11	e.98	e2.5	e200	e40	36	38	216	2.7	1080	19	3.9	3.4
12	e.96	e2.0	e450	e14	26	25	184	2.3	245	219	4.3	2.9
13	e.94	e9.0	e265	e10	428	31	57	5.9	63	90	3.8	3.4
14	e.92	e30	e200	10	266	61	29	3.0	68	35	7.6	2.2
15	e.90	e78	e300	450	81	23	20	1.8	19	385	5.8	.87
16	e450	e150	e890	400	35	16	18	.93	146	65	3.0	3.4
17	e100	e700	e780	91	21	38	16	1.1	1850	13	2.9	1.8
18	e30	e205	e40	32	17	126	15	1.1	472	7.9	1.1	.75
19	e2.4	e40	e25	22	16	1070	14	51	76	6.0	2.3	2.6
20	e2.5	e23	e22	21	16	208	14	47	16	3.6	164	3.7
21	e260	e20	e20	21	912	72	13	9.7	39	5.9	10	3.0
22	e30	e18.0	e110	139	221	31	42	4.9	79	144	5.9	2.7
23	e7.0	e17.0	e400	142	60	20	25	3.0	35	132	4.0	309
24	e5.2	e105	e100	1150	29	15	12	50	10	12	4.4	1590
25	e4.4	e450	e12	277	20	180	12	164	6.2	9.0	3.3	375
26	e35.	e290	e15	86	65	265	41	86	316	5.0	3.7	46
27	e500	e210	e40	209	418	66	817	491	451	4.6	9.6	19
28		e10.	e170	e50	944	184	32	698	127	582	4.5	11 11
29	e4.8	e500	e31	185	---	19	310	17	637	303	4.2	7.3
30	e3.9	e1390	e24	70	---	17	103	158	79	19	2.1	6.4
31	e50	---	e18	39	---	12	---	3500	---	6.7	19	---
TOTAL	1568.56	5489.10	5177.0	4877.3	7058	13116	5178.1	5103.63	7322.9	1717.5	387.4	2578.42
MEAN	50.6	183	167	157	252	423	173	165	244	55.4	12.5	85.9
MAX	500	1390	890	1150	1940	5270	1490	3500	1850	385	164	1590
MIN	.88	2.0	12	10	16	12	8.9	.93	6.2	3.6	1.1	.75
CFSM	.74	2.68	2.45	2.31	3.70	6.20	2.53	2.41	3.58	.81	.18	1.26
IN.	.86	2.99	2.82	2.66	3.85	7.15	2.82	2.78	3.99	.94	.21	1.41

e--Estimated

NONCONNAH CREEK BASIN

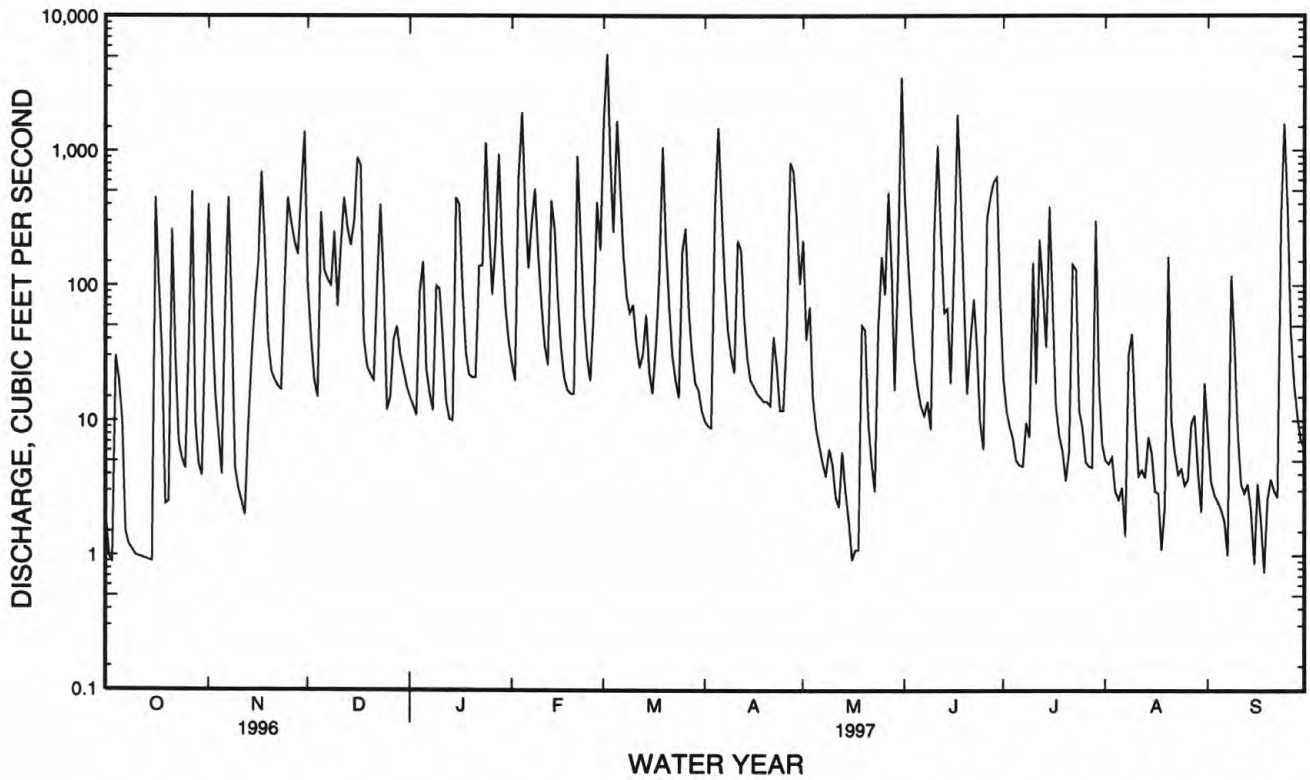
07032200 NONCONNAH CREEK NEAR GERMANTOWN, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

MEAN	15.5	102	180	156	189	211	190	116	69.4	43.8	15.3	25.6
MAX	69.4	323	616	531	604	659	834	407	300	354	77.4	164
(WY)	1990	1989	1983	1974	1989	1980	1991	1979	1974	1989	1978	1977
MIN	.000	.21	2.24	.41	14.6	15.2	9.44	3.74	3.09	.70	.37	.087
(WY)	1970	1972	1977	1986	1978	1986	1978	1988	1988	1976	1980	1984

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1970 - 1997	
ANNUAL TOTAL	59573.91			
ANNUAL MEAN	163		110	
HIGHEST ANNUAL MEAN			215	1979
LOWEST ANNUAL MEAN			22.4	1986
HIGHEST DAILY MEAN	5270	Mar 2	5900	Jul 2 1989
LOWEST DAILY MEAN	.75	Sep 18	a.00	Oct 1 1969
ANNUAL SEVEN-DAY MINIMUM	.97	Oct 9	.00	Oct 1 1969
INSTANTANEOUS PEAK FLOW	10900	Mar 2	13100	Jul 2 1989
INSTANTANEOUS PEAK STAGE	22.52	Mar 2	27.11	Mar 12 1975
INSTANTANEOUS LOW FLOW			.00	Oct 1 1969
ANNUAL RUNOFF (CFSM)	2.39		1.61	
ANNUAL RUNOFF (INCHES)	32.49		21.94	
10 PERCENT EXCEEDS	437		202	
50 PERCENT EXCEEDS	25		5.3	
90 PERCENT EXCEEDS	2.7		.14	

a No flow many days most years.



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 hydrologic studies reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device that 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.

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN					
New River at New River, TN (03408500)	Lat 36°23'08", long 84°33'17", Scott County, Hydrologic Unit 05130104, on left bank, 1,000 ft downstream of U.S. Highway 27, 700 ft downstream of Phillips Creek, in New River, and at mile 8.6. Datum of gage is 1,092.67 ft above sea level, Drainage area is 382 mi^2.	1934-91†, 1992-93 1995-97	12- 1-96	28.01	36,200	5-27-73 12-3-91 3-24-93 1-15-95 6-9-96	37.91 25.90 28.65 18.67 17.30	63,700 31,200a 37,700a 16,900a 14,700a
Whiteoak Creek at Sunbright, TN (03409000)	Lat 36°14'38", long 84°40'14", Morgan County, Hydrologic Unit 05130104, at bridge on U.S. Highway 27 in Sunbright. Datum of gage is 1,294.05 ft above sea level. Drainage area is 13.5 mi^2.	1934, 1955-82, 1985-97	6- 1-97	8.56	-	5-27-73	17.24b	5,560
Clear Fork near Robbins, TN (03409500)	Lat 36°23'18", long 84°37'49", Scott County, Hydrologic Unit 05130104, on right bank 300 ft downstream from county road bridge, 3.3 mi northwest of Robbins, and at mile 3.7. Datum of gage is 1,081.46 ft, Sandy Hook datum. Drainage area is 272 mi^2.	1930-71†, 1975-91†, 1992-97	12- 1-96	17.32	29,200	5-27-73 12-3-91 3-24-93 2-11-94 3-8-95 11-7-95	18.92 15.49 12.64 16.30 11.53 10.45	35,700 22,600a 14,100a 25,400a 11,400a 9,190a
East Fork Obey River near Jamestown, TN (03414500)	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. Datum of gage is 680.30 ft, Sandy Hook Datum. Drainage area is 202 mi^2 includes 6.0 mi^2 without surface drainage.	1942-91†, 1992-97	11-30-96	29.11	39,800	5-27-73	30.46	44,800

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Wolf River near Byrdstown, TN (03416000)	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 mi 26.2. Datum of gage is 707.54 ft, Sandy Hook Datum. Drainage area is 106 mi^2.	1942-91†, 1992-97	3- 3-97	9.90	10,100	9- 2-82	17.14	23,500
Roaring River above Gainesboro, TN (03418070)	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 mi 9.1. Datum of gage is 520.56 ft, above sea level. Drainage area is 210 mi^2, includes 34 mi^2 without surface drainage.	1974-91†, 1992-97	3- 3-97	18.96	13,900	3-12-75	21.83	22,400
Doe Creek at Gainesboro, TN (03418201)	Lat 36°21'23", long 85°39'20", Jackson County, Hydrologic Unit 05130106, at bridge on Highway 56, at Gainesboro. Datum of gage is 519.37 ft above sea level. Drainage area is 5.72 mi^2.	1978-97	3- 3-97	5.40	-	8-31-82	7.28	-
Cane Creek near Spencer, TN (03419200)	Lat 35°44'36", long 85°23'33", Van Buren County, Hydrologic Unit 05130108, at bridge on State Highway 30, 4.0 mi east of Spencer. Drainage area is 134 mi^2.	1997	3- 3-97	8.03	-	3-3-97	8.03	-
Charles Creek near McMinnville, TN (03421200)	Lat 35°43'00", long 85°46'05", Warren County, Hydrologic Unit 05130107, at bridge on county road at Faulkner Springs, 2.7 mi north of McMinnville. Drainage area is 31.1 mi^2.	1955-97	12- 1-96	10.21	4,080	6-22-89	17.03	24,800
Mulherrin Creek near Gordonsville, TN (03424900)	Lat 36°11'28", long 85°57'11", Smith County, Hydrologic Unit 05130108, at bridge on State Highway 53, 1.3 mi upstream from mouth, 1.5 mi northwest of Gordonsville. Drainage area is 26.9 mi^2.	1982, 1986-97	3- 3-97	18.99	-	2-14-89	23.85	-
Peyton Creek at Monoville, TN (03425045)	Lat 36°18'37", long 85°59'21", Smith County, Hydrologic Unit 05130201, at county road bridge 0.9, mi northwest of Monoville. Datum of gage is 459.39 ft above sea level. Drainage area is 44.7 mi^2.	1986-97	3- 3-97	35.95c	-	3- 6-89	40.41	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Second Creek near Walnut Grove, TN (03425365)	Lat 36°24'01", long 86°12'48", Trousdale County, Hydrologic Unit 05130201, at culvert on State Highways 10 and 25, 2.6 mi west of Hartsville. Drainage area is 3.47 mi^2.	1986-97	3- 3-97	24.67	-	9-23-89	29.24	-
Station Camp Creek at Cottontown, TN (03425637)	Lat 36°27'06", long 86°32'16", Sumner County, Hydrologic Unit 05130201, at State Highway 25 bridge in Cottontown.	1995-97	3- 3-97	15.35	-	11-27-94	14.73	-
East Fork Stones River at Woodbury, TN (03426800)	Lat 35°49'41", long 86°04'36", Cannon County, Hydrologic Unit 05130203, at bridge on U.S. Highway 70S at Woodbury. Datum of gage is 676.23 ft above sea level. Drainage area is 39.1 mi^2.	1962-89† 1990-97	12- 1-96	11.60	3,480	3-15-73	16.75	13,200
Brawleys Fork below Bradyville, TN (03426874)	Lat 35°44'44", long 86°10'14", Cannon County, Hydrologic Unit 05130203, at bridge on Bradyville Pike, 0.5 mi northwest of Bradyville. Drainage area is 15.4 mi^2.	1983-97	6-13-97	25.64	2,290	10- 1-89	27.94	2,850
Reed Creek near Bradyville, TN (034269424)	Lat 35°44'44", long 86°12'31", Rutherford County, Hydrologic Unit 05130203, at bridge on Bradyville Pike, 2.4 mi northwest of Bradyville. Drainage area is 3.52 mi^2.	1983-97	3- 3-97	3.14	-	4-20-95	5.86	-
East Fork Stones River near Lascassas, TN (03427500)	Lat 35°55'06", long 86°20'02", Rutherford County, Hydrologic Unit 05130203, on left bank 50 ft upstream from highway bridge, 2.5 mi southwest of Lascassas, 3.7 mi downstream of Bradley Creek, 6.0 mi northeast of the courthouse in Murfreesboro, and at mi 15.4. Datum of gage is 507.88 ft, Sandy Hook Datum. Drainage area is 262 mi^2.	1950-58†, 1963-91†, 1992-97	12- 1-96	27.01	15,600	3-13-75	39.48	41,200
Bushman Creek at Pitts Lane Ford near Compton, TN (03427690)	Lat 35°53'08", long 86°20'47", Rutherford County, Hydrologic Unit 05130203, on right bank 75 ft upstream of bridge on De Jarnett Lane, 0.1 mi west of intersection of De Jarnett Lane and State Highway 96, 1.6 mi southwest of Compton. Datum of gage is 569.74 ft above sea level. Drainage area is 9.67 mi^2.	1989-92†, 1993-97	3- 3-97	5.87	1,350	7-21-96	7.24	2,020

See footnotes at the end of the table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Lytle Creek at Sanbyrne Drive at Murfreesboro, TN (03428043)	Lat 35°49'38", long 86°23'28", Rutherford County, Hydrologic Unit 05130203, at bridge on Sanbyrne Drive, 1 mi south of intersection of Highways 41 and 231 in Murfreesboro. Datum of gage is 591.91 ft above sea level. Drainage area is 17.6 mi^2.	1978-90, 1991-92†, 1993-97	6- 1-97	1.00	-	9- 4-86	2.55	-
Unnamed Sink near Almaville, TN (03428270)	Lat 35°51'21", Long 86°32'21" Rutherford Count, Hydrologic Unit 05130203, on left downstream wingwall of culvert on Shored Road, 2.4 miles southeast of Almaville. Datum of gage is sea level.	1994-97	3- 3-97	604.96	-	3-27-94	607.36	-
West Fork Stones River near Smyrna, TN (03428500)	Lat 35°56'25", long 86°27'54", Rutherford County, Hydrologic Unit 05130203, near left 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 mi 6.4. Datum of gage is 500 ft, above sea level. Drainage area is 237 mi^2, includes 43 mi^2 without surface drainage.	1965-91†, 1992-97	3- 3-97	12.97	13,200	3-13-75	19.18	63,800
Unnamed Sink on I-840 at Leanna, TN (03428513)	Lat 35°56'13", long 86°26'14", Rutherford County, Hydrologic Unit 05130203, 100 ft above culvert on I-840, 0.4 mile southwest of Leanna. Datum of gage is sea level.	1994-97	3- 3-97	532.28	-	6-26-94	532.37	-
Unnamed Sink at Leanna, TN (03428515)	Lat 35°56'19", long 86°26'49", Rutherford County, Hydrologic Unit 05130203, 100 ft south of intersection of E. Buckeye Bottom Road and Sulphur Springs Road 0.9 mi west of Leanna. Datum of gage is sea level.	1994-97	3- 3-97	513.01	-	3- 3-97	513.01	-
McCrory Creek at Ironwood Drive at Donelson, TN (03430118)	Lat 36°09'07", long 86°39'02", Davidson County, Hydrologic Unit 05130203, at bridge under Ironwood Drive, 1.3 mi southeast of intersection of U.S. Highway 70 (Lebanon Road) and Donelson Pike in Donelson. Datum of gage is 430.63 ft above sea level. Drainage area is 7.31 mi^2.	1977-97d	3- 3-97	7.45	1,580	5- 6-84	9.87	2,850

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
		CUMBERLAND RIVER BASIN--Continued						
Mill Creek at Nolensville, TN (03430400)	Lat 35°57'32", long 86°40'31", Williamson County, Hydrologic Unit 05130202, at bridge on Sunset Road, 0.6 mi northwest of Nolensville. Datum of gage is 586.18 ft above sea level. Drainage area is 12.0 mi^2.	1965-97	3-3-97	8.26	6,720	5-7-84	9.82	11,400
Mill Creek near Antioch, TN (03431000)	Lat 36°04'54", long 86°40'50", Davidson County, Hydrologic Unit 05130202, at bridge on Franklin-Limestone Road, 1.6 miles north of Antioch, Date of gage is 472.93 ft above sea level. Drainage area is 64.0 mi^2.	1954-61†, 1962-63, 1964-75†, 1976-92, 1993-96†	3-3-97	15.80	8,410	5-4-79	23.78	30,100
Sevenmile Creek at Blackman Road, near Nashville, TN (03431040)	Lat 36°04'21", long 86°44'00", Davidson County, Hydrologic Unit 05130202, at bridge on Blackman Road, 7.0 mi southeast of State capitol in Nashville. Datum of gage is 499.08 ft above sea level. Drainage area is 12.2 mi^2.	1965-97	3-3-97	6.13	-	9-13-79	9.58	-
Mill Creek tributary at Glenrose Avenue, at Woodbine, TN (03431062)	Lat 36°07'02", long 86°43'37", Davidson County, Hydrologic Unit 05130202, at culvert under Glenrose Avenue, 1.1 mi northeast of intersection of Nolensville Road and Thompson Lane in Woodbine, and 750 ft upstream from mouth. Datum of gage is 443.52 ft above sea level. Drainage area is 1.17 mi^2.	1977-97d	6-14-97	5.11	333	5-6-84	9.12	833
West Fork Browns Creek at General Bates Drive, at Nashville, TN (03431120)	Lat 36°06'29", long 86°47'07", Davidson County, Hydrologic Unit 05130202, at bridge on General Bates Drive, 4.0 mi south of State capitol in Nashville. Datum of gage is 499.94 ft above sea level. Drainage area is 3.30 mi^2.	1965-97	6-14-97	5.44	1,000	3-29-75	7.00	2,110
East Fork Browns Creek at Baird-Ward Printing Company, at Nashville, TN (03431240)	Lat 36°06'33", long 86°46'00", Davidson County, Hydrologic Unit 05130202, at bridge on access road to Baird-Ward Printing Co., Plant No. 1, 500 ft west of 100-Oaks Shopping Center, and 4.0 mi southeast of State capitol in Nashville. Datum of gage is 497.91 ft above sea level. Drainage area is 1.58 mi^2.	1965-97	5-26-97	4.67	502	5-3-93	5.37	690

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Browns Creek at Factory Street, at Nashville, TN (03431340)	Lat 36°08'26", long 86°45'31", Davidson County, Hydrologic Unit 05130202, at bridge on Factory Street, 800 ft downstream from Louisville and Nashville Railroad bridge, and 2.3 mi southeast of State capitol in Nashville. Datum of gage is 420.66 ft above sea level. Drainage area is 13.2 mi^2.	1965-97	6-14-97	7.75	2,490	9-13-79	10.89	7,800
Pages Branch at Avondale, TN (03431490)	Lat 36°12'22", long 86°46'24", Davidson County, Hydrologic Unit 05130202, at culvert under Trinity Lane, 900 ft east of intersection of Interstate 65 and Trinity Lane at Avondale, 0.9 mi upstream from mouth. Drainage area is 2.01 mi^2.	1977-97d	10-27-96	5.82	-	12- 3-78	6.20	-
Earthman Fork at Whites Creek, TN (03431550)	Lat 36°15'55", long 86°49'51", Davidson County, Hydrologic Unit 05130202, at bridge on Whites Creek Pike in town of Whites Creek, 1,800 ft upstream from mouth. Drainage area is 6.29 mi^2.	1965-97	6-14-97	7.63	1,560	5- 3-93	9.43	2,510
Ewing Creek at Richmond Hill Drive at Parkwood, TN (03431573)	Lat 36°13'50", long 86°46'28", Davidson County, Hydrologic Unit 05130202, at bridge on Richmond Hill Drive, 1.0 mi southeast of Parkwood. Datum of gage is sea level. Drainage area is 2.17 mi^2.	1976-97	6-30-97	495.69	-	6- 9-86	497.32	-
Ewing Creek at Brick Church Pike at Parkwood, TN (03431575)	Lat 36°13'58", long 86°46'54", Davidson County, Hydrologic Unit 05130202, at bridge on Brick Church Pike, 0.4 mi upstream from North Fork, 0.8 mi south of Parkwood. Datum of gage is sea level. Drainage area is 3.02 mi^2.	1976-97	6-30-97	477.50	-	6- 9-86	478.15	-
Ewing Creek at Gwynwood Drive near Jordonia, TN (03431578)	Lat 36°13'58", long 86°47'32" Davidson County, Hydrologic Unit 05130202, at bridge on county road, 0.3 mi downstream from North Fork, 3.4 mi northeast of Bordeaux, 4.5 mi northeast of Jordonia, and at mi 2.1. Datum of gage is sea level. Drainage area is 9.98 mi^2.	1976-97	6-30-97	462.21	-	6- 9-86	463.10	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Ewing Creek below Knight Road, near Bordeaux, TN (03431581)	Lat 36°13'55", long 86°48'14", Davidson County, Hydrologic Unit 05130202, at downstream side of bridge on Knight Road, 3.0 mi northeast of Bordeaux. Datum of gage is sea level. Drainage area is 13.3 mi^2.	1976-97	6-30-97	448.81	-	6- 9-86	449.80	-
Sugartree Creek at YMCA Access Road, at Green Hills, TN (03431677)	Lat 36°06'13", long 86°49'12", Davidson County, Hydrologic Unit 05130202, at bridge on YMCA Access Road, 0.5 mi southwest of Hillsboro High School, at Green Hills. Datum of gage is sea level. Drainage area is 1.51 mi^2.	1976-97	6-30-97	542.61	-	9-13-79	545.23	-
Sugartree Creek at Abbott Martin Road, at Green Hills, TN (03431679)	Lat 36°06'23", long 86°49'17", Davidson County, Hydrologic Unit 05130202, at bridge on Abbott Martin Road, at intersection of Bedford Avenue and Abbott Martin Road, at Green Hills. Datum of gage is sea level. Drainage area is 2.19 mi^2.	1976-97	6-30-97	529.81	-	11-27-94	531.54	-
Sycamore Creek near Ashland City, TN (03431800)	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, 4.4 mi upstream from Spring Creek, and at mi 8.6. Elevation of gage is 400 ft above sea level, from topograhic map. Drainage area is 97.2 mi^2.	1961-87†, 1988-91†, 1992-97	3- 3-97	13.45	18,200	2-21-89	13.50	18,500
Harpeth River Tributary at Franklin, TN (034323531)	Lat 35°55'20", long 86°50'36", Williamson County, Hydrologic Unit 05130204, on downstream side of highway bridge at Mack Hatcher Parkway approximately 0.5 mi north from intersection of Hwy 96 and Mack Hatcher. Drainage area is 0.91 mi^2.	1996-97	7-28-97	5.00	197	7-28-97	5.00	197
Murfrees Fork above Burwood, TN (03432470)	Lat 35°48'58", long 86°57'20", Williamson County, Hydrologic Unit 05130204, at county road bridge, just downstream from Cayce Branch, 1.6 mi east of Burwood. Drainage area is 7.43 mi^2.	1986-97	3- 3-97	21.30	-	4-86	26.85	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis-charge (ft^3/s)	Date	Gage height (ft)	Dis-charge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Little Harpeth River at Granny White Pike, at Brentwood, TN (03432925)	Lat 36°01'30", long 86°49'09", Williamson County, Hydrologic Unit 05130204, at bridge on Granny White Pike, 2.0 mi southwest of Brentwood. Datum of gage is 618.29 ft above sea level. Drainage area is 22.0 mi^2.	1978-97	3- 3-97	12.81	3,510	5- 4-79	17.55	9,260
Jones Creek near Burns, TN (03434590)	Lat 36°06'15", long 87°19'05", Dickson County, Hydrologic Unit 05130204, at bridge on Rock Church Road, 3.5 mi north of Burns and at mi 21.9. Drainage area is 13.3 mi^2.	1984-97	3- 3-97	9.11	3,030	5- 6-84	9.87	3,750
Bartons Creek near Cumberland Furnace, TN (034350021)	Lat 36°15'02", long 87°20'00" Dickson County, Hydrologic Unit 05130205, at bridge on Stayton road, 1.9 mi south-east of Cumberland Furnace. Drainage area is 22.3 mi^2.	1984-97	3- 3-97	14.39	-	5-27-91	14.93	-
Louise Creek near Grays Chapel, TN (034350035)	Lat 36°21'52", long 87°20'30", Montgomery County, Hydrologic Unit 05130206, at bridge on old State Highway 48, 2.8 mi south of Liverworth. Drainage area is 12.7 mi^2.	1995-97	3- 3-97	10.96	-	3- 3-97	10.96	-
Honey Run Creek near Cross Plains, TN (034351105)	Lat 36°31'52", long 87°40'10" Robertson County, Hydrologic Unit 05130206, at county road bridge, 1.2 mi north-northwest of Calistia. Drainage area is 17.0 mi^2.	1995-97	3- 3-97	16.25	-	3-3-97	16.25	-
Honey Run Creek below Cross Plains, TN (034351113)	Lat 36°32'31", long 86°42'14", Robertson County, Hydrologic Unit 05130206, at Empson Bridge on county road, 0.4 mi above mouth of Empson branch, 0.6 mi southwest of Cross Plains. Drainage area is 20.0 mi^2.	1986-97	3- 3-97	22.73	-	2- 3-90	23.11	-
Beaver Dam Creek above Springfield (03435739)	Lat 36°31'40", long 86°49'29" Robertson County, Hydrologic Unit 05130206, at county road bridge, 3.6 miles north-east of Springfield, and at mile 1.6. Drainage area is 12.9 mi^2.	1995-97	3- 3-97	14.75	-	3- 3-97	14.75	-

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Sulphur Fork Red River above Springfield, TN (03435770)	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. Datum of gage is 538.17 ft above sea level. Drainage area is 65.6 mi^2.	1975-88†, 1988-97	3- 3-97	14.52	12,100	3- 3-97	14.52	12,100
Spring Creek tributary near Cedar Hill, TN (03435930)	Lat 36°32'08", long 86°59'26", Robertson County, Hydrologic Unit 05130206, at culvert on Kinney Road, 1.2 mi southeast of Cedar Hill. Drainage area is 1.40 mi^2.	1986-97	1-23-97	21.46	-	5-17-90	22.23	-
Sulphur Fork Red River above Port Royal, TN (03436082)	Lat 36°32'23", long 87°06'51", Robertson County, Hydrologic Unit 05130206, 1.7 miles southeast of Port Royal. Drainage area is 214 mi^2.	1995-97	3- 3-97	42.06	-	3- 3-97	42.06	-
Red River at Port Royal, TN (03436100)	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 mi 25.5. Datum of gage is 376.25 ft above sea level. Drainage area is 935 mi^2, includes 437 mi^2 without surface drainage.	1961-91†, 1992-97	3- 3-97	41.46	39,500	3-13-75	48.26	60,300
Passenger Creek near Sango, TN (03436130)	Lat 36°32'07", long 87°11'50" Montgomery County, Hydrologic Unit 05130206 at county road bridge 2.0 mi northeast of Sango. Datum of gage is sea level. Drainage area is 20.5 mi^2.	1995-97	3- 3-97	405.76	-	3-3-97	405.76	-
Cummings Creek near Dotsonville, TN (03436505)	Lat 36°29'18", long 87°28'06", Montgomery County, Hydrologic Unit 05130205, at bridge on Dotsonville Road, 1.1 mi northeast of Dotsonville. Drainage area is 2.65 mi^2.	1984-97	2- 4-97	8.47	-	12-25-87	9.45	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Yellow Creek at Ellis Mills, TN (03436690)	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. Elevation of gage is 417 ft above sea level, from topographic map. Drainage area is 103 mi^2.	1980-91†, 1992-97	3-2-97	14.71	7,840	5-6-84	18.47	14,400
Yellow Creek near Shiloh, TN (03436700)	Lat 36°20'55", long 87°32'20", Montgomery County, Hydrologic Unit 05130205, at bridge on State Highway 13, 2.6 mi west of Shiloh, 3.0 mi downstream from Leatherwood Creek, 9.0 mi east of Erin. Datum of gage is 390.13 ft above sea level. Drainage area is 124 mi^2.	1957-80†, 1982-97	3-2-97	14.65	8,950	5-6-84	17.75	16,200
			TENNESSEE RIVER BASIN					
Caney Creek near Cosby, TN (03461230)	Lat 35°47'03", long 83°12'11", Cocke County, Hydrologic Unit 06010106, at culvert under State Highway 32, 3.3 mi southeast of Cosby. Drainage area is 1.62 mi^2.	1967-97	3-3-97	3.81	61	1-26-96	6.45	275
Cherokee Creek near Embreeville, TN (03465607)	Lat 36°12'24", long 82°29'23", Washington County, Hydrologic Unit 06010108, at culvert on county road, 0.5 mi southeast of Mayday, 1.4 mi northwest of Kansas City, and at mi 1.3. Drainage area is 22.9 mi^2.	1984-97	3-3-97	14.10	-	5-7-84	18.37	-
Clear Fork near Fairview, TN (03465780)	Lat 36°19'33", long 82°33'47", Washington County, Hydrologic Unit 06010108, at culvert on State Highway 81, 2.0 mi southwest of Sulfur Springs, and at mi 3.8. Drainage area is 10.5 mi^2.	1983-97	7-1-97	5.42	-	5-29-96	7.46	-
Lick Creek near Albany, TN (03466890)	Lat 36°14'54", long 82°55'34", Greene County, Hydrologic Unit 06010108, at State Highway 70 bridge, 0.3 mi downstream from Puncheon Camp Creek, 1.0 mi northwest of Albany, and at mi 33.7. Drainage area is 172 mi^2.	1984-97	7-1-97	14.76	5,280	3-27-94	17.41	10,800

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Bent Creek at Taylor Gap, TN (03467480)	Lat 36°14'08", long 83°06'41", Hamblen County, Hydrologic Unit 06010108, at bridge on county road (Mountain Valley Road), 2.1 mi southwest of Bulls Gap, 5.0 mi southeast of Russellville. Drainage area is 2.18 mi^2.	1986-97	7- 1-97	13.33	1,730	3-27-94	15.56	2,550
Carter Branch near White Pine, TN (03467992)	Lat 36°07'05", long 83°18'55", Jefferson County, Hydrologic Unit 06010108, at bridge on county road, 1.6 mi northeast of Kimbrough Crossroad, 1.8 mi northwest of White Pine. Drainage area is 4.25 mi^2.	1986-97	4-29-97	9.14	-	4-29-97	9.14	-
Cedar Creek near Valley Home, TN (03467993)	Lat 36°08'03", long 83°18'47", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 1.7 mi southeast of Valley Home, 1.9 mi southeast of Witt, 2.2 mi northwest of White Pine. Drainage area is 2.01 mi^2.	1986-97	4-29-97	13.38	210	4-29-97	13.38	210
Sinking Fork at White Pine, TN (03467998)	Lat 36°07'21", long 83°17'44", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 0.9 mi northwest of White Pine, 2.7 mi northeast of Kimbrough Crossroad. Drainage area is 6.38 mi^2.	1986-97	7- 1-97	7.20	1,560	7-1-97	7.20	1,560
Dumplin Creek at Mt. Hareb, TN (03470215)	Lat 36°04'59", long 83°25'51", Jefferson County, Hydrologic Unit 06010107, at culvert on county road, 0.8 mi southeast of Mt. Hareb, 4.3 mi southeast of Jefferson City, 4.6 mi north of Dandridge. Drainage area is 3.65 mi^2.	1986-97	7- 1-97	10.61	155	5-28-90	10.92	211
Indian Creek at Childress, TN (03476960)	Lat 36°25'38", long 82°15'54", Sullivan County, Hydrologic Unit 06010102, at bridge on U.S. Highway 19, 3.3 mi south of Bluff City, and at mi 4.6. Drainage area is 6.79 mi^2.	1983-97	3- 3-97	7.89	-	5- 7-84	10.73	-
Evans Creek near Blountville, TN (03478615)	Lat 36°31'19", long 82°18'12", Sullivan County, Hydrologic Unit 06010102, at State Highway 37 bridge, 1.5 mi southeast of Blountville. Datum of gage is 1500.00 ft above sea level. Drainage area is 2.50 mi^2.	1983-97	3- 3-97	10.18	46	5-25-96	12.68	98

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis-charge (ft^3/s)	Date	Gage height (ft)	Dis-charge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Reedy Creek at Orebank, TN (03487550)	Lat 36°33'42", long 82°27'36", Sullivan County, Hydrologic Unit 06010102, 80 ft upstream from culvert, 0.3 mi north of Orebank, 1.0 mi upstream from Gaines Branch, and at mi 9.8. Drainage area is 36.3 mi^2.	1963-89†, 1990-97	3- 3-97	7.96	1,140	10- 2-77	11.61	4,940 f
Forgey Creek at Zion Hill, TN (03490522)	Lat 36°29'12", long 82°53'08", Hawkins County, Hydrologic Unit 06010104, at culvert on county road (Carter Valley Road), 0.9 mi north of Zion Hill, 7.8 mi northeast of Rogersville. Drainage area is 0.86 mi^2.	1986-97	1997	<17.93	-	7- 7-89	21.03	-
Robertson Creek near Persia, TN (03491540)	Lat 36°20'24", long 83°02'27", Hawkins County, Hydrologic Unit 06010104, at bridge on State Highway 113, 0.25 mi below Mooney Branch, and at mi 3.0. Drainage area is 14.6 mi^2.	1986-97	3- 3-97	11.68	902	2-18-86	10.36	591 a
						1-19-87	11.83	940 a
						2-4-88	10.62	648 f
						9-16-89	12.16	1,030 f
						5-29-90	11.13	766 f
						12-23-90	11.53	864 f
						12-2-91	10.86	703 f
						8-13-93	12.50	1,120 f
						3-27-94	12.50	1, 120 f
						3-8-95	11.96	974 f
						1-27-96	11.54	867 f
Dry Land Creek tributary near New Market, TN (03494714)	Lat 36°03'33", long 83°34'13", Jefferson County, Hydrologic Unit 06010104, at culvert on county road (Rocky Valley Road), 3.0 mi south of New Market, 3.3 mi northwest of Piedmont. Drainage area is 0.20 mi^2.	1986-97	7- 1-97	12.82	-	6-27-94	12.86	-
Little Ellejoy Creek at Prospect, TN (03498010)	Lat 35°48'23", long 83°47'57" Blount County, Hydrologic Unit 06010201, at bridge on county road, 0.4 mi south of Prospect, at mile 1.93. Datum of gage is 920 ft above sea level. Drainage area is 5.48 mi.	1995-97	6-27-97	6.28	-	5-19-95	6.98a	-
						7-16-96	6.43a	-
Flat Creek at Luttrell, TN (03494990)	Lat 36°11'45", long 83°44'44", Union County, Hydrologic Unit 06010104, at bridge on State Highway 61, 0.3 mi southwest of Luttrell, 3.5 mi northwest of Blaine. Drainage area is 22.4 mi^2.	1986-97	7- 1-97	13.85	-	7-1-97	13.85	-
Baker Creek tributary near Binfield, TN (03519610)	Lat 35°41'56", long 84°02'46", Blount County, Hydrologic Unit 06010204, at culvert under county road, 1.5 mi east of Binfield. Drainage area is 2.10 mi^2.	1966-77, 1979-97	6-14-97	4.65	210	6-23-81	8.29	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Baker Creek near Greenback, TN (03519640)	Lat 35°40'21", long 84°06'28", Blount County, Hydrologic Unit 06010204, at county road bridge, 1.0 mi upstream from Little Baker Creek, 3.4 mi east of Greenback, and at mi 15.0. Datum of gage is 845.01 ft above sea level. Drainage area is 16.0 mi^2.	1965-75†, 1976-97	6-14-97	7.71	977	5-30-74	9.70	2,900
Big War Creek at Luther, TN (03527800)	Lat 36°27'18", long 83°14'29", Hancock County, Hydrologic Unit 06010205, at bridge on county road, 0.4 mi south of Luther 0.8 mi northwest of Yount Town, 6.0 mi southwest of Sneedville. Drainage area is 22.3 mi^2.	1986-97	3- 3-97	8.28	1,870	6- 4-91	8.95	2,450
Crooked Creek near Maynardville, TN (03528390)	Lat 36°15'56", long 83°50'25", Union County, Hydrologic Unit 06010205, at culvert on State Highway 170, 2.5 mi northwest of Maynardville, 5.5 mi northeast of Paulette. Drainage area is 2.23 mi^2.	1986-97	7- 1-97	5.10	-	12-23-90	5.57	-
Coal Creek at Lake City, TN (03534000)	Lat 36°13'14", long 84°09'27" Anderson County, Hydrologic Unit 06010207, at bridge on U.S. Highway 25-W, at Lake City. Datum of Gage is 842.76 ft above sea level. Drainage area is 24.5 mi^2.	1932-34†, 1955-97	3- 3-97	9.57	6,690	4- 5-77	10.57	7,950d
Willow Fork near Halls Crossroads, TN (03535180)	Lat 36°05'59", long 83°54'27", Knox County, Hydrologic Unit 06010207, at culvert under Quarry Road, 1.7 mi northeast of Halls Crossroads. Datum of gage is 1,027.82 ft above sea level. Drainage area is 3.23 mi^2.	1967-97	7- 1-97	7.64	724	3-16-73	8.08	878
Coker Creek near Ironsburg, TN (03555900)	Lat 35°13'05", long 84°20'28", Monroe County, Hydrologic Unit 06020002, at bridge on State Highway 68, 4.2 mi southwest of Coker Creek. Drainage area is 22.4 mi^2.	1983-93h 1997	3- 3-97	11.72	-	3- 8-95	11.93	-
Wolftever Creek near Ooltewah, TN (03566420)	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 mi 16.1. Drainage area is 18.8 mi^2.	1964-89†, 1992-97	3- 3-97	6.30	1,090	3-16-73	9.75	7,300

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
		TENNESSEE RIVER BASIN--Continued						
North Chickamauga Creek at Greens Mill, near Hixson, TN (03566599)	Lat 35°10'30", long 85°13'40", Hamilton County, Hydrologic Unit 06020001, at bridge on Boy Scout Road, 2.3 mi north of Hixson. Drainage area is 99.5 mi^2.	1925,1944, 1953-56, 1980-97	12-1-96	30.42	-	10- 5-95	36.19	-
Stringers Branch at Leawood Drive, at Red Bank, TN (03569168)	Lat 35°07'00", long 85°17'28", Hamilton County, Hydrologic Unit 06020001, at bridge on Leawood Drive at Red Bank. Drainage area is 1.54 mi^2.	1980-97	3- 3-97	23.09	-	8-11-96	28.24	-
Little Sequatchie River at Sequatchie, TN (03571500)	Lat 35°07'47", long 85°35'10", Marion County, Hydrologic Unit 06020004, at Highway 27 bridge, 1.0 mi northeast of Sequatchie. Drainage area is 116 mi^2.	1925,1929, 1930, 1932-34†, 1944, 1951-54, 1965,1979-97	11-30-96	10.17	4,600	12-22-90	11.78	10,600
Standifer Branch at Jasper, TN (03571730)	Lat 35°04'22", long 85°36'56", Marion County, Hydrologic Unit 06020004, at bridge on U.S. Highways 41, 64, and 72, 0.6 mi east of courthouse, 0.8 mi above Town Creek, at Jasper. Drainage area is 15.3 mi^2.	1982-97	12-29-96	17.00	-	12-22-90	19.59	-
Battle Creek near Monteagle, TN (03571800)	Lat 35°08'03", long 85°46'15", Marion County, Hydrologic Unit 06030001, at bridge on former U.S. Highways 41 and 64, 9.2 mi southeast of Monteagle. Datum of gage is 621.51 ft above sea level. Drainage area is 50.4 mi^2.	1955-97	12-29-96	7.27	2,880	3-12-63	12.20	10,200
Richland Creek near Cornersville, TN (03583300)	Lat 35°19'10", long 86°52'20", Marshall County, Hydrologic Unit 06030004, at bridge on U.S. Highway 31-A, 3.4 mi southwest of Cornersville. Datum of gage is 754.28 ft above sea level. Drainage area is 47.5 mi^2.	1962-68†, 1969-97	12-29-96	15.58	9,820	7-11-89	16.58	11,400
Indian Creek near Olivehill, TN (03594153)	Lat 35°16'33", long 88°01'12", Hardin County, Hydrologic Unit 06040001, on State Highway 64, 14 mi east of Savannah. Datum of gage is 440.00 ft above sea level. Drainage area is 158 mi^2.	1997	3- 2-97	15.96	-	3-2-97	15.96	-
Owl Creek at Lexington, TN (035944242)	Lat 35°38'26", long 88°22'13", Henderson County, Hydrologic Unit 06040001, on State Highway 20, 1.37 mi east of Lexington, and at mi 1.3. Datum of gage is 400.00 ft above sea level, prior to March 15, 1990 unknown. Drainage area is 2.50 mi^2.	1984-97	3- 2-97	26.64	-	3-2-97	26.64	-

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Wartrace Creek above Bell Buckle, TN (03597300)	Lat 35°37'45", long 86°21'22", Bedford County, Hydrologic Unit 06040002, at culvert under county road, 2.7 mi north of Bell Buckle. Drainage area is 4.99 mi^2.	1966-97	5-31-97	4.77	374	3-15-73	12.64	3,220
Fountain Creek near Culleoka, TN (03599430)	Lat 35°28'18", long 86°57'23", Maury County, Hydrologic Unit 0604002, on upstream side of bridge on State Highway 50-A, 1.6 mi southeast of Culleoka. 2.7 mi upstream from Globe Creek, and 9.7 mi west of courthouse in Lewisburg. Drainage area is 26.9 mi^2.	1966-68†, 1997	3- 3-97	10.18	3,710	5-13-67	14.16	9,280
West Piney River at Hwy 70 near Dickson, TN (03602170)	Lat 36°05'21", long 87°28'12", Dickson County, Hydrologic Unit 06040003, at U.S. Highway 70 bridge, 4.0 mi west of Dickson. Drainage area is 2.16 mi^2.	1984-97	3- 3-97	25.84	713	5- 6-84	28.17	1,230
Piney River at Vernon, TN (03602500)	Lat 35°52'16", long 87°30'05", Hickman County, Hydrologic Unit 06040003, on right downstream side of 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 is 193 mi^2.	1925-93†, 1997	3- 3-97	17.15	19,000	5-27-91	24.42	49,400
Coon Creek above Chop Hollow, near Hohenwald, TN (03604090)	Lat 35°35'19", long 87°41'09", Perry County, Hydrologic Unit 06040004, at bridge on State Highway 20, 9.0 mi northwest of Hohenwald. Drainage area is 6.02 mi^2.	1967-97	3- 3-97	4.73	811	12- 9-72	6.80	3,150
Blue Creek near New Hope, TN (03604580)	Lat 36°03'52", long 87°38'58", Humphreys County, Hydrologic Unit 06040003, at county road bridge, 1.8 mi northwest of New Hope, 3.1 mi southeast of McEwen, and at mi 3.9. Drainage area is 13.2 mi^2.	1984-97	3- 3-97	18.28	-	6-13-89	18.82	-
Trace Creek above Denver, TN (03605555)	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 northeast of New Johnsonville. Datum of gage is 377.05 ft above sea level. Drainage area is 31.9 mi^2.	1963-88†, 1989-97	3- 3-97	10.48	5,620	5- 6-84	13.61	11,700

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis-charge (ft^3/s)	Date	Gage height (ft)	Dis-charge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Cane Creek at Stewart, TN (03605880)	Lat 36°19'09", long 87°50'21", Houston County, Hydrologic Unit 06040005, at bridge on county road, 200 ft north of intersection of county road and State Highway 147, and at mi 7.0. Drainage area is 4.12 mi^2.	1984-97	2- 4-97	19.62	-	2- 4-97	19.62	-
			OBION RIVER BASIN					
Neil Ditch near Henry, TN (07024225)	Lat 36°10'19", long 88°23'33", Henry County, Hydrologic Unit 08010203, located on county road, 2.7 mi southeast of Henry, 1.6 mi north of Henry-Carroll county line. Drainage area is 4.07 mi^2.	1984-97	3- 2-97	13.13	-	12-21-90	14.48	-
Little Reedy Creek near Huntingdon, TN (07024370)	Lat 35°55'44", long 88°29'50", Carroll County, Hydrologic Unit 08010203, located on U.S. Highway 70, 0.6 mi southwest of Leach, 5.6 mi northeast of Cedar Grove. Drainage area is 0.91 mi^2.	1984-97	3- 2-97	16.88	-	3-2-97	16.88	-
South Fork Obion River near Greenfield, TN (07024500)	Lat 36°07'05", long 88°48'39", Weakley County, Hydrologic unit 08010203, located on U.S. Highway 45E, 2.5 mi south of Greenfield. Datum of gage is 300.36 above sea level. Drainage area is 383 mi^2.	1929-89†, 1990-93, 1997	6-22-97	12.94	3,620	1-22-37	17.82	25,600
Spring Creek near Greenfield, TN (07024760)	Lat 36°11'24", long 88°45'53", Weakley County, Hydrologic Unit 08010203, on State Highway 54, 3.2 mi northeast of Greenfield. Datum of gage is 300.00 above sea level. Drainage area is 93.4 mi^2.	1997	3- 2-97	28.03	-	3-2-97	28.03	-
North Fork Obion River near Martin, TN (07025400)	Lat 36°24'20", long 88°51'20", Weakley County, Hydrologic Unit 08010203, located on U.S. Highway 45E, 4.0 mi north of Martin. Datum of gage is 303.46 above sea level. Drainage area 372 mi^2.	1939-67i, 1997	3- 2-97	22.98	27,000	11-19-57	23.05	30,300
North Fork Obion River near Union City, TN (07025500)	Lat 36°23'59", long 88°59'43", Obion County, Hydrologic Unit 08010202, at bridge on State Highway 22, 3.9 miles southeast of Union City. Datum of gage is 285.80 above sea level. Drainage area is 480 mi^2.	1929-66†, 1967-71†, 1989-93†, 1994-97	3- 2-97	22.20	20,550	1-22-37	23.08	49,200

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			OBION RIVER BASIN--Continued					
North Fork Forked Deer River at U.S. Highway 45W Bypass at Trenton, TN (07028505)	Lat 35°58'58", long 88°55'49", Gibson County, Hydrologic Unit 08010204, at bridge on U.S. Highway 45W Bypass, 0.25 mi north of intersection of U.S. Highway 45W Bypass and State Highways 77 and 104 in Trenton. Datum of gage is 306.85 ft above sea level. Drainage area is 73.9 mi^2.	1987-97	3- 2-97	9.44	-	12-21-90	12.00	-
Lewis Creek near Dyersburg, TN (07029090)	Lat 36°03'14", long 89°21'42", Dyer County, Hydrologic Unit 08010204, at bridge on U.S. Highway 51 (Business Route), 2.1 mi northeast of square in Dyersburg. Datum of gage is 276.52 ft above sea level. Drainage area is 25.5 mi^2	1955-78, 1980-83, 1985-97	3- 2-97	19.10	4,900	3- 9-64	19.31	5,450
Hatchie River at Sunnyhill, TN (07029900)	Lat 35°31'23", long 89°15'12", Haywood County, Hydrologic Unit 08010208, at bridge on State Highway 76, 0.6 mi south of Sunnyhill, 4.9 mi south of Brownsville. Datum of gage is 250 ft above sea level from topographic map. Drainage area is 1,858 mi^2.	1997	3- 5-97	34.21	-	3-5-97	34.21	-
Cane Creek at Ripley, TN (07030100)	Lat 35°45'25", long 89°33'05", Lauderdale County, Hydrologic Unit 08010208, at bridge on State Highway 19, 1.3 mi upstream from Hyde Creek, 1.5 mi northwest of Ripley. Datum of gage is 295.93 ft above sea level. Drainage area is 33.9 mi^2.	1957-62†, 1963-70†, 1986-88†, 1989-97	3- 2-97	21.93	5,501	7- 1-89	23.16	6,360

† Operated as a continuous-record gaging station.
a Not previously published.
b A gage height of 17.45 ft occurred on 3-23-29.
c Backwater from Cumberland River.
d Operated as a flood hydrograph station.
e A peak discharge of 8,000 ft^3/s occurred on 3-23-29, from reports of Tennessee Valley Authority.
f A peak discharge of 11,000 ft^3/s occurred on 5-30-27, from reports of Tennessee Valley Authority.
g Revised.
h Datum of gage prior to 1995 water year unknown due to bridge replacement.
i Data provided by U.S. Army Corps of Engineers.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 1997

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		TENNESSEE RIVER BASIN				
03598151 Duck River	Tennessee River	Lat 35°32'09", long 86°32'06", Bedford County, Hydrologic Unit 0604002, at Anchor Mill.	531		8-25-97*	181
					9-16-97*	171
					9-22-97*	168
					10-6-97*	207
03598300 Duck River	Tennessee River	Lat 35°35'33", long 86°41'48", Marshall County, Hydrologic Unit 06040002, at U.S. Highway 31A bridge, 2.1 mi. south of Chapel Hill, and at mile 186.5.	761	1949 1972	8-25-97*	199
03599110 Big Rock Creek	Duck River to Tennessee River	Lat 35°31'52", long 86°46'07",, Marshall County, Hydrologic Unit 06040002, below dam near Verona.	52.4	1949	8-25-97*	6.0
					9-16-97*	1.7
					9-22-97*	1.0
					10-6-97*	10.9
03599250 Duck River	Tennessee River	Lat 35°35'10", long 86°47'11", Marshall County, Hydrologic Unit 06040002, at Milltown, 2.1 mi southwest of Caney Springs, and at mile 179.1	916	1949 1972	8-25-97*	199
					9-16-97*	180
					9-22-97*	160
					10-6-97*	234
03599408 Duck River	Tennessee River	Lat 35°37'04", long 86°51'58", Maury County, Hydrologic Unit 06040002, at Carpenters Bridge, 2.7 mi southwest of Pottsville, and at mile 164.6	1,016	1949 1954 1972	8-25-97*	220
					9-16-97*	197
					9-22-97*	163
					10-6-97*	242
03599425 Duck River	Tennessee River	Lat 35°34'21", long 86°55'20", Maury County, Hydrologic Unit 06040002, at Howard Bridge, 2.3 mi. northeast of Hill, and at mile 150.4.	1,056	1923-25 1949 1972	8-25-97*	207
					9-16-97*	174
					9-22-97*	171
					10-6-97*	255
					10-7-97*	247
03599455 Fountain Creek	Duck River to Tennessee River	Lat 35°33'51", long 86°57'35", Maury County, Hydrologic Unit 06040002, upstream from mouth, 2.2 mi northeast of Glendale.	103	1944 1949 1953-54 1972	8-25-97*	7.3
					9-16-97*	2.5
					9-22-97*	1.7
					10-6-97*	9.4
03599470 Duck River	Tennessee River	Lat 35°36'14", long 87°00'08", Maury County, Hydrologic Unit 06040003, at bridge on Iron Bridge Road, 1.8 mi east of Columbia, and at mile 136.5.	1,181	1972	8-25-97*	220
					9-16-97*	165
					9-22-97*	154
					10-6-97*	210
03600085 Carters Creek	Duck River to Tennessee River	Lat 35°43'39", long 86°59'19", Maury County, Hydrologic Unit 06040003, at bridge on Petty Lane, 0.8 mi north of Carters Creek, and at mile 4.7.	16.6	1986-97	11-26-96	38.8
					2-10-97	22.5
					6-3-97	58.5
					9-24-97	33.8

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		TENNESSEE RIVER BASIN--Continued				
03600086 Carters Creek Tributary	Carters Creek to Duck River to Tennessee River	Lat 35°43'34", long 86°59'19", Maury County, Hydrologic Unit 06040003, at culvert on Carters Creek Road, 0.7 mi north of Carters Creek.	2.94	1986-97	11-26-96	6.1
					2-19-97	4.1
					6-3-97	10.4
					9-24-97	7.6
03600250 Duck River	Tennessee River	Lat 38°38'47", long 87°02'46", Maury County, Hydrologic Unit 06040003, 1.9 mi northwest of Columbia.	1,326		8-25-97*	210
					9-16-97*	171
					9-22-97*	152
					10-6-97*	277
		OBION RIVER BASIN				
07024225 Neil Ditch	Guins Creek to Crooked Creek to South Fork Obion River	Lat 36°10'19", long 89°55'00" Henry County, Hydrologic Unit 08010203, located on County road, 2.7 mi southeast of Henry, 1.6 north of Henry-Carroll county line.	4.07	1996	06-17-97	48.1

DISCHARGE AT PARTIAL RECORD STATIONS AND MISCELLANEOUS SITES

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. Measurements made in the 1997 water year are given in the following table.

Discharge measurement of springs during water year 1997

Site number and name	Location	Tributary to	Date	Discharge (gpm)	Discharge (ft^3/sec)
		ANDERSON COUNTY			
03528420 Nelson Spring	Lat 36°14'43", long 84°00'50", Hydrologic Unit 06010205, at Mill Creek.	Mill Creek to Clinch River to Tennessee River	8-25-97	130	0.32
03535088 Unnamed Spring No. 3	Lat 35°59'42", long 84°13'11, Hydrologic Unit 06010207, at University of Tennessee Arboretum at Oak Ridge.	Scarboro Creek to Clinch River to Tennessee River	8-26-97	18	0.04
03538175 Shetterly Spring	Lat 36°05'31", long 84°12'04", Hydrologic Unit 06010207, 2.4 mi north northeast of Dossett.	Unnamed tributary to Brushy Fork Poplar Creek to Poplar Creek to Clinch River to Tennessee River	8-26-97	323	0.72
		BEDFORD COUNTY			
0352331086183701 Sons Spring	Lat 35°23'31", long 86°18'37", Hydrologic Unit 06040002, 1.1 mi northeast of Raus.	Anderton Branch to Thompson Creek to Duck River	10-7-96 11-4-96 12-3-96 1- 6 -97	9.9 4.4 8.5 13.5	.022 .010 .019 .03
		BLOUNT COUNTY			
03498993 Pearson Spring	Lat 35°43'18", long 83°59'06", Hydrologic Unit 06010201, 1.5 mi south of Maryville.	Pistol Creek to Little River to Tennessee River	9-18-97	346	0.77
		CLAIBORNE COUNTY			
03531810 Mason Spring	Lat 36°29'21", long 83°32'23", Hydrologic Unit 06010206, 0.6 mi northeast of Murphy Mill.	Russell Creek to Powell River to Clinch River to Tennessee River	9-16-97	615	1.37

DISCHARGE AT PARTIAL RECORD STATIONS AND MISCELLANEOUS SITES

Springs--Continued

Site number and name	Location	Tributary to	Date	Discharge (gpm)	Discharge (ft^3/sec)
		GRAINGER COUNTY			
03494520 Mitchell Spring	Lat 36°13'17", long 83°30'14", Hydrologic Unit 06010104, 4 mi south of Rutledge.	Unnamed tributary to Buffalo Creek to Holston River to Tennessee River	9-2-97	36	0.08
		GREENE COUNTY			
03466242 Seaton Spring	Lat 36°08'11", long 82°38'36", Hydrologic Unit 06010108, 0.2 mi east of Pleasant Hill.	Cannon Branch to Horse Creek to Nolichucky River to French Broad River to Tennessee River	8-20-97	373	0.83
03466820 Morelock Spring	Lat 36°16'01", long 82°44'33", Hydrologic Unit 06010108, 0.9 mi northeast of Walkertown, 1.8 mi south of Union Temple.	Unnamed tributary to Newmansville Creek to Union Temple Creek to Lick Creek to Nolichucky River to French Broad River to Tennessee River	8-21-97	45	0.10
		HAMBLEN COUNTY			
03491910 Dodson Spring	Lat 36°15'58", long 83°13'26", Hydrologic Unit 06010104, 1.2 mi west northwest of Russellville.	Cedar Creek to Holston River to Tennessee River	8-27-97	283	0.62
		JEFFERSON COUNTY			
360153083235900 Riley Spring	Lat 36°01'53", long 83°23'59", Hydrologic Unit 06010107, 1.1 mi northeast of Dandridge.	Unnamed tributary to Rimmer Creek to French Broad River to Tennessee River	8-19-97	76	0.17
		KNOX COUNTY			
035351825 Hunter Spring	Lat 36°05'22", long 83°55'12", Hydrologic Unit 06010207, 0.7 mi north northeast of intersection of U.S. 441 and Tennessee State Route 33.	Mill Branch to Willow Fork to Beaver Creek to Clinch River to Tennessee River	8-25-97	36	0.08

DISCHARGE AT PARTIAL RECORD STATIONS AND MISCELLANEOUS SITES

Springs--Continued

Site number and name	Location	Tributary to	Date	Discharge (gpm)	Discharge (ft^3/sec)
		MAURY COUNTY			
0359945265 Unnamed Spring	Lat 35°31'29", long 85°55"01", Hydrologic Unit 06040002, 0.5 mi southwest of Tema.	Silver Creek to Fountain Creek to Duck River to Tennessee River	7- 8 -97	.068	30.5
03599446 Smith Spring	Lat 35°28'50", long 85°56'12", Hydrologic Unit 0604002, 2.6 mi east of Culleoka.	Unnamed Trib to Fountain Creek to Duck River to Tennnessee River	7- 8 -97	.303	136
035994253 Unnamed Spring	Lat 35°33'09", long 86°56'04" Hydrologic Unit 06040002, 0.8 mi northeast of Hill.	Unnamed Trib to Duck River to Tennessee River	7 - 8 -97	6.9	.015
		ROANE COUNTY			
03520230 Barnard Spring	Lat 35°47'14", long 84°34'37", Hydrologic Unit 06010201, 0.7 mi south southwest of. Fairview.	Unnamed tributary to Riley Creek to Tennessee River	9-17-97	31	0.07
		SEVIER COUNTY			
03470100 Bailey Spring	Lat 35°56'40", long 83°36'55", Hydrologic Unit 06010107, 1.5 mi west southwest of Kodak.	Unnamed tributary to French Broad River to Tennessee River	9-15-97	521	1.16
		WASHINGTON COUNTY			
03465770 Chalybeate Spring	Lat 36°20'39", long 82°33'06", Hydrologic Unit 06010108, 0.6 mi southeast of Sulphur Springs.	Unnamed tributary to Clear Fork to Big Limeston Creek to Nolichucky River to French Broad River to Tennessee River.	8-20-97	144	0.33

TENNESSEE RIVER BASIN

Maury County, TN special study

A series of low-flow discharge measurements were made July 8, 1997, in the vicinity of Culleoka-Glendale, TN (Maury county), to define areas of potential ground-water supplies, low-flow hydrology and quality of water. The measurements were made during a period of constant base flow.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured discharge (ft3/2 sec.)	Water temp. (C°)	Specific cond. (us/ cm)
		TENNESSEE RIVER BASIN				
035994256 Unnamed Tributary	Duck River to Tennessee River	Lat 35°33'15", long 86°56'03", Maury County, Hydrologic Unit 0604002, 0.4 mi north of Davidson Cemetery.	0.24	.052	18.8	430
035994289 Fountain Creek	Duck River to Tennessee River	Lat 35°28'17", long 86°58'10", Maury County, Hydrologic Unit 0604002, 0.1 mi south-west of alternate State Route 50.	15.99	14.9	20.7	365
035994297 South Fork	Fountain Creek to Duck River to Tennessee River	Lat 35°28'16", long 86°58'12", Maury County, Hydrologic Unit 06040002, 0.2 mi south-west of alternate State Route 50.	10.17	10.6	21.0	333
03599430 Fountain Creek	Duck River to Tennessee River	Lat 35°28'18", long 86°57'22" Maury County, Hydrologic Unit 06040002, 0.5 mi south-east of Shaw Cemetery on alternate State Route 50.	27.0	25.7	21.0	350
03599439 Globe Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°28'10", long 86°56'01", Maury County, Hydrologic Unit 06040002, 0.2 mi north-east of Holt Cemetery.	25.97	17.5	21.0	393
03599442 Sheepneck Creek	Bear Creek to Globe Creek to Fountain Creek to Duck River to Tennessee River	Lat 35°27'55", long 86°56'04", Maury County, Hydrologic Unit 06040002, 0.1 mi north-east of Holt Cemetery.	2.61	1.88	22.0	291
03599444 Bear Creek	Globe Creek to Fountain Creek to Duck River to Tennessee River	Lat 35°28'09", long 86°56'02", Maury County, Hydrologic Unit 06040002, 0.2 mi south-east of Holt Cemetery off alternate State Route 50.	7.87	5.96	21.0	355
035994468 Fountain Creek	Duck River to Tennessee River	Lat 35°30'05", long 86°56'51", Maury County, Hydrologic Unit 06040002, 0.1 mi south of Scribner Mill Bridge.	64.51	43.1	20.4	367
035994475 Long Tom Branch	Fountain Creek to Duck River to Tennessee River	Lat 35°30'07", long 86°56'52" Maury County, Hydrologic Unit 06040002, 0.1 mi south of Scribner Mill Bridge.	2.96	2.12	19.3	407
03599449 Bush Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°29'59", long 86°56'29", Maury County, Hydrologic Unit 06040002, 0.1 mi north-east of Bethany Church.	4.38	1.48	19.5	422

TENNESSEE RIVER BASIN

Maury county special study--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured discharge (ft3/2 sec.)	Water temp. (C°)	Specific cond. (us/ cm)
		TENNESSEE RIVER BASIN--Continued				
03599450 Fountain Creek	Duck River to Tennessee River	Lat 35°31'05", long 86°56'30" Maury County, Hydrologic Unit 06040002, 0.9 mi south of State Route 50, at Seavy Heights Road.	77.0	56.4	21.2	370
035994512 Fountain Creek	Duck River to Tennessee River	Lat 35°31'51, long 86°57'13", Maury County, Hydrologic Unit 06040002, 2.1 mi south-east of Glendale.	78.74	57.4	21.9	367
035994514 Fountain Creek	Duck River to Tennessee River	Lat 35°32'06", long 86°57'51", Maury County, Hydrologic Unit 06040002, 1.5 mi south-east of Glendale.	81.01	51.6	22.4	365
035994516 Fountain Creek	Duck River to Tennessee River	Lat 35°32'21", long 86°57'41", Maury County, Hydrologic Unit 06040002, 1.5 mi east of Glendale.	81.15	66.0	22.4	368
035994518 Fountain Creek	Duck River to Tennessee River	Lat 35°32'32", long 86°57'56", Maury County, Hydrologic Unit, 06040002, 1.2 mi east of Glendale.	81.65	61.8	20.5	367
03599452 Fountain Creek	Duck River to Tennessee River	Lat 35°32'40", long 86°57'55", Maury County, Hydrologic Unit 06040002, 1.3 mi north-east of Glendale.	81.71	70.4	20.9	368
035994521 Fountain Creek	Duck River to Tennessee River	Lat 35°32'50", long 86°57'52", Maury County, Hydrologic Unit 06040002, 1.4 mi north-east of Glendale.	81.74	63.5	21.7	366
035994522 Hurricane Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°32'49", long 86°57'55", Maury County, Hydrologic Unit 06040002, 1.3 mi north-east of Glendale.	7.82	2.83	24.7	444
035994524 Silver Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°33'37", long, 86°57'38", Maury County, Hydrologic Unit 06040002, 1.0 mi north-west of Hill.	90.42	66.1	22.0	373
035994526 Silver Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°30'26", long 86°53'33", Maury County, Hydrologic Unit 06040002, 0.3 mi south-west of Bryant Station	7.59	2.32	20.0	372
0359945263 Silver Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°31'24", long 86°55'00", Maury County, Hydrologic Unit 06040002, 0.5 southwest of Mt. Tema.	11.08	3.45	20.9	419

TENNESSEE RIVER BASIN

Maury county special study--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured discharge (ft3/2 sec.)	Water temp. (C°)	Specific cond. (us/ cm)
		TENNESSEE RIVER BASIN--Continued				
0359945267 Silver Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°31'48", long 86°55'40', Maury County, Hydrologic Unit 060400020. 0.6 mi east of Hopewell Church on State Route 50.	11.85	2.79	22.4	428
03599453 Silver Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°34'52", long, 86°56'54", Maury County, Hydrologic Unit 060400020, at Bryant Road 0.1 mi southwest of Hill.	14.07	3.16	23.1	414
035994545 Silver Creek	Fountain Creek to Duck River to Tennessee River	Lat 35°33'38", long 86°57'37", Maury County, Hydrologic Unit 060400020, 1.1 mi north-west of Hill.	15.04	2.84	27.0	369
03599455 Fountain Creek	Duck River to Tennessee River	Lat 35°33'51", long 86°57'55", Maury County, Hydrologic Unit 06040002, 1.4 mi north-west of Hill.	105.66	72.6	20.7	369
035994557 Unnamed Tributary	Duck River to Tennessee River	Lat 35°33'40", long 86°58'39", Maury County, Hydrologic Unit 06040002, 0.6 mi east of Harris Cemetery.	0.28	0	-	-
0359945572 Unnamed Tributary	Duck River to Tennessee River	Lat 35°33'57", long 86°58'22" Maury County, Hydrologic Unit 06040002, 0.4 mi north-west of Harris Cemetery.	.69	0	-	-

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Miscellaneous synoptic sampling sites are short-term sites at which water-quality data are collected during a selected seasonal or hydrologic period. These data are used to assess the spatial distribution of water-quality conditions as a result of factors, such as land use, for the period and conditions sampled. The sites shown on the following pages are synoptic sampling sites for the National Water-Quality Assessment (NAWQA) Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN

03470100 BAILEY SPRING NEAR KODAK, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
SEP 15...	1200	1.2	398	7.1	15.0	6.1	K3	63	200	10	45	22

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
SEP 15...	3.8	4	0.1	1.6	0	233	191	3.1	7.5	0.10	0.029	9.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)
SEP 15...	224	213	0.30	<0.010	1.53	<0.015	<0.20	<0.010	0.010	<3.0	<1.0	488

DATE	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)
SEP 15...	24	0.20	E0.080	<0.088	<0.134	<0.104	<0.182	1.32	<0.038	<0.032	<0.028	<0.120

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03470100 BAILEY SPRING NEAR KODAK, TN--Continued

DATE	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)
SEP 15...	<0.030	<0.148	E0.030	<0.382	E0.006	<0.092	<0.066	<0.044	<0.032	<0.064	<0.132	<0.048

DATE	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)
SEP 15...	<0.068	<0.032	<0.054	E0.006	<0.096	<0.134	<0.092	<0.112	<0.038	E0.006	<0.002	<0.002

DATE	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
SEP 15...	E0.003	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
SEP 15...	E0.002	<0.006	<0.004	<0.007	E0.002	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003

DATE	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
SEP 15...	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03470100 BAILEY SPRING NEAR KODAK, TN--Continued

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
SEP 15...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

362528083353001 BALL CREEK SPRING NEAR TAZEWELL, TN

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
SEP 03...	1200	382	6.7	14.0	735	1.6	7.7	78	660	>800	190	2

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
SEP 03...	42	20	2.9	3	0.1	1.3	0	228	187	4.5	5.2	<0.10

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
SEP 03...	0.029	7.5	219	205	0.30	<0.010	2.05	<0.015	<0.20	0.026	0.025	<3.0

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
SEP 03...	<1.0	164	18	0.40	E0.030	<0.088	<0.134	<0.104	<0.182	0.368	<0.038	<0.032

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

362528083353001 BALL CREEK SPRING NEAR TAZEWELL, TN--Continued

DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)
SEP 03...	<0.028	<0.120	<0.030	<0.148	<0.254	<0.382	0.284	<0.092	<0.066	<0.044	E0.010	<0.064

DATE	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
SEP 03...	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	E0.005

DATE	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)
SEP 03...	E0.003	<0.002	0.007	<0.002	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004

DATE	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
SEP 03...	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	E0.005	<0.005	<0.002	<0.003	<0.003	<0.002

DATE	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
SEP 03...	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

362528083353001 BALL CREEK SPRING NEAR TAZEWELL, TN--Continued

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
SEP 03...	<0.005	<0.002	<0.003	<0.004	<0.013	E0.004	<0.007	<0.013	<0.001	<0.002	<0.002

03520230 BARNARD SPRING NEAR BACON GAP, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
SEP 17...	1200	0.07	236	7.0	14.5	747	5.6	56	K4	220	130	4

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
SEP 17...	30	13	0.82	1	0.0	0.59	0	149	122	1.8	1.4	<0.10

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
SEP 17...	0.017	7.3	123	129	0.17	<0.010	0.388	<0.015	<0.20	<0.010	<0.010	<3.0

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
SEP 17...	<1.0	123	19	0.30	<0.048	<0.088	<0.134	<0.104	<0.182	E0.010	E0.010	<0.032

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03520230 BARNARD SPRING NEAR BACON GAP, TN--Continued

DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)
SEP 17...	<0.028	<0.120	<0.030	<0.148	E0.030	<0.382	<0.038	<0.092	<0.066	<0.044	<0.032	<0.064

DATE	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
SEP 17...	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	E0.009

DATE	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)
SEP 17...	<0.002	<0.002	<0.001	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004

DATE	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
SEP 17...	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002

DATE	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
SEP 17...	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03520230 BARNARD SPRING NEAR BACON GAP, TN--Continued

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
SEP											
17...	<0.005	<0.002	<0.003	<0.004	<0.013	0.070	<0.007	<0.013	<0.001	<0.002	<0.002

03465770 CHALYBEATE SPRING NEAR SULPHUR SPRINGS, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
AUG												
20...	1300	0.33	435	7.1	14.5	723	5.8	60	88	K1400	220	5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
AUG												
20...	66	14	2.0	2	0.1	2.8	0	264	216	4.1	4.6	<0.18

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
AUG												
20...	0.022	9.8	244	243	0.33	<0.010	2.17	<0.015	1.5	<0.010	<0.010	<3.0

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
AUG												
20...	<1.0	581	142	0.50	<0.048	<0.088	<0.134	<0.104	<0.182	E0.030	<0.038	<0.032

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03465770 CHALYBEATE SPRING NEAR SULPHUR SPRINGS, TN--Continued

DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)
AUG 20...	<0.028	<0.120	<0.030	<0.148	E0.060	<0.382	<0.38	<0.092	<0.066	<0.044	<0.032	<0.064

DATE	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
AUG 20...	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	<0.042

DATE	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)
AUG 20...	<0.002	<0.002	0.063	<0.002	<0.002	<0.004	<0.004	E0.018	<0.002	<0.001	<0.003	<0.004

DATE	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
AUG 20...	<0.005	<0.004	<0.021	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002

DATE	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 20...	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03465770 CHALYBEATE SPRING NEAR SULPHUR SPRINGS, TN--Continued

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 20...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

03491910 DODSON SPRING NEAR RUSSELLVILLE, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)
AUG 27...	1300	0.62	454	7.0	14.5	737	0.91	5.6	57	K16	270

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
AUG 27...	240	17	62	21	2.3	2	0.1	1.8	0	273	224

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
AUG 27...	5.4	4.2	0.11	0.025	9.5	263	249	0.36	1.98	0.012	1.99

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
AUG 27...	<0.015	<0.20	<0.010	<0.010	<3.0	<1.0	718	29	0.20	E0.010	<0.088

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03491910 DODSON SPRING NEAR RUSSELLVILLE, TN--Continued

DATE	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)
AUG 27...	<0.134	<0.104	<0.182	E0.040	<0.038	<0.032	<0.028	<0.120	<0.030	<0.148	<0.254

DATE	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)
AUG 27...	<0.382	E0.010	<0.092	E0.050	E0.060	0.205	<0.064	<0.132	<0.048	<0.068	<0.032

DATE	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)
AUG 27...	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	0.509	<0.042	<0.002	<0.002	E0.002

DATE	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
AUG 27...	<0.002	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
AUG 27...	<0.002	<0.006	<0.004	<0.007	E0.004	E0.002	<0.002	<0.003	<0.003	<0.002	<0.003

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03491910 DODSON SPRING NEAR RUSSELLVILLE, TN--Continued

DATE	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 27...	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 27...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

035351825 HUNTER SPRING NEAR HALLS CROSSROAD, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
AUG 25...	1300	0.08	501	6.7	15.5	743	1.5	15	52	K1900	260	21

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
AUG 25...	98	3.5	5.3	4	0.1	0.86	0	290	238	13	8.9	<0.10

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
AUG 25...	0.020	6.4	296	286	0.40	<0.010	1.84	<0.015	<0.20	0.024	0.022	<3.0

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

035351825 HUNTER SPRING NEAR HALLS CROSSROAD, TN--Continued

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
AUG 25...	1.1	386	23	0.90	<0.048	<0.088	<0.134	<0.104	<0.182	0.265	<0.038	<0.032

DATE	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	ETHYLBENZENE TOTAL (UG/L) (34371)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)
AUG 25...	<0.028	<0.120	<0.030	<0.148	E0.040	<0.382	E0.020	<0.092	<0.066	<0.044	<0.032	<0.064

DATE	ETHANE, 1,1,2,2 TETRACHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DICHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DICHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DICHLORO-WATER UNFLTRD REC (UG/L) (34571)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
AUG 25...	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	<0.042

DATE	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DISSOLVED (UG/L) (39341)
AUG 25...	<0.002	<0.002	0.007	<0.002	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004

DATE	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PROPCHLOR, WATER, DISS, REC (UG/L) (04024)	PROMETON, WATER, DISS, REC (UG/L) (04037)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
AUG 25...	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	<0.023	<0.005	<0.002	<0.003	<0.003	<0.002

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

035351825 HUNTER SPRING NEAR HALLS CROSSROAD, TN--Continued

DATE	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 25...	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.100	<0.006	<0.004	<0.003	<0.004	<0.004

DATE	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PROPARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBUTHIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TERBACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TERBUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIALLATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIOBENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 25...	<0.005	<0.002	<0.003	<0.004	<0.013	0.125	<0.007	<0.013	<0.001	<0.002	<0.002

03486187 JONES SPRING NEAR COLLEGE PARK

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLIFORM, TOTAL, IMMED (COLS. PER 100 ML) (31501)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
AUG 21...	1400	0.20	418	7.1	14.0	5.6	K1	1600	210	1	72	6.8

DATE	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
AUG 21...	3.8	4	0.1	1.5	0	253	207	6.3	7.0	0.12	0.019	9.3

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03486187 JONES SPRING NEAR COLLEGE PARK--Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)
AUG 21...	244	237	0.33	<0.010	1.35	<0.015	<0.20	<0.010	<0.010	<3.0	<1.0	491

DATE	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)
AUG 21...	24	0.20	<0.048	<0.088	<0.134	<0.104	<0.182	E0.020	<0.038	<0.032	<0.028	<0.120

DATE	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)
AUG 21...	<0.030	<0.148	E0.060	<0.382	0.038	<0.092	<0.066	<0.044	E0.008	<0.064	<0.132	<0.048

DATE	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)
AUG 21...	<0.068	<0.032	<0.054	0.050	<0.096	<0.134	<0.092	<0.112	<0.038	<0.042	<0.002	<0.002

DATE	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
AUG 21...	0.021	<0.002	<0.002	<0.004	<0.004	E0.008	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03486187 JONES SPRING NEAR COLLEGE PARK--Continued

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
AUG 21...	<0.002	<0.006	<0.004	<0.007	E0.006	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003

DATE	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 21...	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 21...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.034	<0.007	<0.013	<0.001	<0.002	<0.002

03531810 MASON SPRING NEAR TAZEWELL, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
SEP 16...	1200	1.4	295	7.1	13.5	738	8.8	88	K3	35	160	5

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03531810 MASON SPRING NEAR TAZEWELL, TN

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
SEP 16...	32	18	0.96	1	0.0	1.1	0	183	150	1.7	1.8	<0.10

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
SEP 16...	0.028	8.3	168	161	0.23	<0.010	1.55	<0.015	<0.20	<0.010	<0.010	<3.0

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
SEP 16...	<1.0	125	189	0.90	0.048	<0.088	<0.134	<0.104	<0.182	E0.050	<0.038	<0.032

DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)
SEP 16...	<0.028	<0.120	<0.030	<0.148	<0.254	<0.382	0.038	<0.092	<0.066	<0.044	<0.032	<0.064

DATE	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
SEP 16...	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	E0.030	<0.134	<0.092	<0.112	<0.038	E0.006

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03531810 MASON SPRING NEAR TAZEWELL, TN

DATE	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)
SEP 16...	<0.002	<0.002	0.007	<0.002	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004

DATE	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
SEP 16...	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002

DATE	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
SEP 16...	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
SEP 16...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03494520 MITCHELL SPRING NEAR TALBOTT, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
SEP 02...	1300	0.08	395	6.9	14.0	737	0.34	8.3	83	110	200	210

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
SEP 02..	0	43	26	0.88	1	0.0	1.8	0	261	214	1.7	2.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
SEP 02...	<0.10	0.019	10	228	221	0.31	<0.010	1.71	<0.015	<0.20	<0.010	<0.010

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLOR-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)
SEP 02...	<3.0	<1.0	1206	33	0.30	<0.048	<0.088	<0.134	<0.104	<0.182	<0.052	<0.038

DATE	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)
SEP 02...	<0.032	<0.028	<0.120	<0.030	<0.148	E0.060	<0.382	<0.038	<0.092	<0.066	<0.044	<0.032

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03494520 MITCHELL SPRING NEAR TALBOTT, TN--Continued

DATE	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRACHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DICHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DICHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DICHLORO-WATER UNFLTRD REC (UG/L) (34571)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)
SEP 02...	<0.064	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038

DATE	STYRENE TOTAL (UG/L) (77128)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)
SEP 02...	E0.006	<0.002	<0.002	<0.001	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003

DATE	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PROPCHLOR, WATER, DISS, REC (UG/L) (04024)	PROMETON, WATER, DISS, REC (UG/L) (04037)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
SEP 02...	<0.004	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003

DATE	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)
SEP 02...	<0.002	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004

DATE	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PROPARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBUTHIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TERBACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TERBUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIALLATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIOBENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
SEP 02...	<0.004	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03466820 MORELOCK SPRING NEAR NEWMANSVILLE, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)
AUG 21...	1300	0.10	430	6.8	14.0	717	1.0	4.3	45	K6	63

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
AUG 21...	220	12	71	10	0.90	1	0.0	1.7	0	254	208

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
AUG 21...	3.9	3.8	0.23	0.022	10	244	236	0.33	1.99	0.014	2.01

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS . (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)
AUG 21...	<0.015	<0.20	0.015	<0.010	<3.0	<1.0	819	29	0.30	<0.048	<0.088

DATE	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)
AUG 21...	<0.134	<0.104	<0.182	<0.052	<0.038	<0.032	<0.028	<0.120	<0.030	<0.148	<0.254

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03466820 MORELOCK SPRING NEAR NEWMANSVILLE, TN--Continued

DATE	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)
AUG 21...	<0.382	<0.038	<0.092	<0.066	<0.044	<0.032	<0.064	<0.132	<0.048	<0.068	<0.032

DATE	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)
AUG 21...	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	<0.042	<0.002	<0.002	<0.001

DATE	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
AUG 21...	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
AUG 21...	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003

DATE	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 21...	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03466820 MORELOCK SPRING NEAR NEWMANSVILLE, TN--Continued

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 21...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

03528420 NELSON SPRING AT MILL CREEK ROAD AT MILL CREEK

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)
AUG 25...	1200	0.32	242	7.0	14.0	735	0.61	7.9	80	K13	K230

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
AUG 25...	120	0	26	14	0.57	1	0.10	0.94	0	160	131

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
AUG 25...	2.1	1.0	<0.10	0.010	8.3	137	135	0.19	<0.010	0.511	<0.015

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03528420 NELSON SPRING AT MILL CREEK ROAD AT MILL CREEK--Continued

DATE	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)
AUG 25...	<0.20	<0.010	<0.010	3.9	<1.0	482	294	0.10	<0.048	<0.088

DATE	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	ETHYLBENZENE TOTAL (UG/L) (34371)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)
AUG 25...	<0.134	<0.104	<0.182	<0.052	<0.038	<0.032	<0.028	<0.120	<0.030	<0.148	<0.254

DATE	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRACHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DICHLOROWATER UNFLTRD REC (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHENE TOTAL (UG/L) (34546)
AUG 25...	<0.382	<0.038	<0.092	<0.066	<0.044	<0.032	<0.064	<0.132	<0.048	<0.068	<0.032

DATE	BENZENE 1,3-DICHLOROWATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DICHLOROWATER UNFLTRD REC (UG/L) (34571)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
AUG 25...	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	<0.042

03498993 PEARSON SPRING AT MARYVILLE, TN

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
SEP 18...	1300	0.77	371	7.1	14.5	744	5.1	51	K7	130	200	8

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03498993 PEARSON SPRING AT MARYVILLE, TN--Continued

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
SEP 18...	49	18	2.6	3	0.1	1.3	0	229	188	2.1	3.1	<0.10

DATE	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
SEP 18...	0.036	8.7	199	203	0.27	<0.010	1.32	<0.015	<0.20	<0.010	<0.010	<3.0

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
SEP 18...	<1.0	569	25	0.20	0.048	<0.088	<0.134	<0.104	<0.182	0.219	<0.038	<0.032

DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)
SEP 18...	<0.028	<0.120	<0.030	<0.148	<0.254	<0.382	E0.070	<0.092	<0.066	<0.044	E0.080	<0.064

DATE	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
SEP 18...	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	E0.009	<0.042

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03498993 PEARSON SPRING AT MARYVILLE, TN--Continued

DATE	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)
SEP 18...	<0.002	<0.002	E0.002	<0.002	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004

DATE	MALA-THION, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
SEP 18...	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002

DATE	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
SEP 18...	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
SEP 18...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

360153083235900 RILEY SPRING NEAR DANDRIDGE, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL./ 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
AUG 19...	1200	0.17	410	6.8	15.0	740	2.4	8.1	83	K11	37	210

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
AUG 19..	0	58	16	1.1	1	0.0	1.9	0	264	216	6.0	2.6

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
AUG 19...	0.16	0.024	9.7	240	230	0.33	<0.010	1.10	<0.015	<0.20	<0.010	0.015

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLOR-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)
AUG 19...	<3.0	<1.0	0.30	<0.048	<0.088	<0.134	<0.104	<0.182	E0.010	<0.038

DATE	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)
AUG 19...	E0.010	<0.028	<0.120	<0.030	<0.148	E0.090	<0.382	<0.038	<0.092	<0.066	<0.044	<0.032

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

360153083235900 RILEY SPRING NEAR DANDRIDGE, TN--Continued

DATE	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRACHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DICHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DICHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DICHLORO-WATER UNFLTRD REC (UG/L) (34571)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)
AUG 19...	<0.064	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	E0.040	<0.134	<0.092	<0.112	<0.038

DATE	STYRENE TOTAL (UG/L) (77128)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)
AUG 19...	<0.042	<0.002	<0.002	0.004	<0.002	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003

DATE	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PROPCHLOR, WATER, DISS, REC (UG/L) (04024)	PROMETON, WATER, DISS, REC (UG/L) (04037)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
AUG 19...	<0.004	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003

DATE	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)
AUG 19...	<0.002	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004

DATE	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PROPARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBUTHIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TERBACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TERBUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIALLATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIOBENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 19...	<0.004	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03466242 SEATON SPRING AT PLEASANT HILL, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
AUG 20...	1300	0.83	163	7.3	12.5	0.36	6.4	<1	K12	81	0	29

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)
AUG 20...	2.5	0.82	2	0.0	1.2	0	100	82	2.4	0.80	<0.10	<0.010

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
AUG 20...	6.9	108	94	0.15	<0.010	0.486	<0.015	<0.20	<0.010	<0.010	<3.0	<1.0

DATE	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)
AUG 20...	160	39	0.30	<0.048	<0.088	<0.134	<0.104	<0.182	<0.052	<0.038	<0.032	<0.028

DATE	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)
AUG 20...	<0.120	<0.030	<0.148	E0.070	<0.382	<0.038	<0.092	<0.066	<0.044	<0.032	<0.064	<0.132

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03466242 SEATON SPRING AT PLEASANT HILL, TN--Continued

DATE	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)
AUG 20...	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	<0.042	<0.002

DATE	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)
AUG 20...	<0.002	<0.001	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005

DATE	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
AUG 20...	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003

DATE	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 20...	<0.017	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 20...	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03538175 SHETTERLY SPRING NEAR CLINTON, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
AUG 26...	1200	0.72	304	6.9	14.0	742	0.34	8.5	84	K3	K510	160

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
AUG 26..	4	34	19	0.83	1	0.0	0.61	0	194	159	1.1	1.2

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
AUG 26...	<0.10	0.025	8.2	175	162	0.24	0.424	0.010	0.434	<0.015	<0.20	<0.010

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLOR-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	
AUG 26...	<0.010	<3.0	<1.0	0.70	<0.048	<0.088	<0.134	<0.104	<0.182	0.118	<0.038	

DATE	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)
AUG 26...	<0.032	<0.028	<0.120	<0.030	<0.148	<0.254	<0.382	E0.005	<0.092	<0.066	<0.044	<0.032

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TENNESSEE RIVER BASIN--Continued

03538175 SHETTERLY SPRING NEAR CLINTON, TN--Continued

DATE	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRACHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-DICHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DICHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DICHLORO-WATER UNFLTRD REC (UG/L) (34571)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)
AUG 26...	<0.064	<0.132	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038

DATE	STYRENE TOTAL (UG/L) (77128)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DISSOLVED (UG/L) (34253)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON, DISSOLVED (UG/L) (39572)	DIELDRIN DISSOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)
AUG 26...	E0.004	<0.002	<0.002	0.001	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003

DATE	LINDANE DISSOLVED (UG/L) (39341)	MALATHION, DISSOLVED (UG/L) (39532)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PROPCHLOR, WATER, DISS, REC (UG/L) (04024)	PROMETON, WATER, DISS, REC (UG/L) (04037)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
AUG 26...	<0.004	<0.005	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003

DATE	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)
AUG 26...	<0.002	<0.003	<0.017	<0.004	<0.003	<0.002	<0.002	<0.100	<0.006	<0.004	<0.003	<0.004

DATE	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PROPARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBUTHIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TERBACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TERBUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIALLATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIOBENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 26...	<0.004	<0.005	<0.002	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002

E--Estimated

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03535088 UNNAMED SPRING NO. 3 TO SCARBORO CREEK NEAR OAK RIDGE, TN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
AUG 26...	1200	0.04	277	7.0	14.0	8.5	K19	120	150	1	32	16

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
AUG 26...	0.41	1	0.0	0.97	0	177	145	1.0	0.66	<0.10	0.014	8.6

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L ASN) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
AUG 26...	170	147	0.23	<0.080	0.011	0.091	<0.015	<0.020	<0.010	<0.010	<3.0	<1.0

DATE	RADON 222 TOTAL (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	CARBON ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)
AUG 26...	317	25	0.10	<0.048	<0.088	<0.134	<0.104	<0.182	0.052	<0.038	<0.032	<0.028

DATE	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)
AUG 26...	<0.120	<0.030	<0.148	<0.254	<0.382	<0.038	<0.092	<0.066	<0.044	<0.032	<0.064	<0.132

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
TENNESSEE RIVER BASIN--Continued

03535088 UNNAMED SPRING NO. 3 TO SCARBORO CREEK NEAR OAK RIDGE, TN--Continued

DATE	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)
AUG 26...	<0.048	<0.068	<0.032	<0.054	<0.050	<0.096	<0.134	<0.092	<0.112	<0.038	<0.042	<0.002

DATE	ACETRO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	BUTYL-ATE, WATER DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)
AUG 26...	<0.002	<0.001	<0.002	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005

DATE	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
AUG 26...	<0.004	<0.002	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003

DATE	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 26...	<0.017	<0.004	<0.003	<0.002	<0.002	<0.040	<0.006	<0.004	<0.003	<0.004	<0.004

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
AUG 26...	<0.005	<0.002	<0.003	<0.004	<0.013	0.539	<0.007	<0.013	<0.001	<0.002	<0.002

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
GREEN RIVER BASIN									
03312255 - SALT LICK CREEK AT RED BOILING SPRINGS, TN									
OCT					MAY				
01...	1302	7.6	203	19.0	28...	0848	12	160	16.0
NOV					JUL				
18...	1134	32	150	12.0	10...	1233	9.6	186	21.5
JAN					AUG				
06...	1313	25	135	10.0	18...	1255	19	179	24.0
MAR					SEP				
03...	1010	615	70	11.0	16...	1225	4.1	216	22.0
04...	0906	124	98	10.5					
APR									
09...	1048	16	134	10.5					
CUMBERLAND RIVER BASIN									
03408500 - NEW RIVER AT NEW RIVER, TN									
APR					JUL				
09...	1110	327	210	12.5	18...	1715	72	305	26.5
03409500 - CLEAR FORK NEAR ROBBINS, TN									
APR					JUL				
09...	1505	198	48	11.5	18...	1300	37	84	23.0
03414500 - EAST FORK OBEY RIVER NEAR JAMESTOWN, TN									
MAR					AUG				
24...	1715	454	124	12.0	27...	1250	16	401	21.0
MAY									
23...	1005	82	197	14.5					
03416000 - WOLF RIVER NEAR BYRDSTOWN, TN									
NOV					MAY				
19...	1057	283	198	11.5	27...	1405	85	273	18.0
MAR					AUG				
05...	1300	2040	151	12.0	27...	1018	12	365	23.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				CUMBERLAND RIVER BASIN--Continued					
				03418070 - ROARING RIVER ABOVE GAINESBORO, TN					
NOV					MAY				
18...	1511	276	259	11.5	23...	1338	3.7	244	20.0
MAR									
04...	1343	2550	170	13.0					
				03421000 - COLLINS RIVER NEAR MCMINNVILLE, TN					
OCT					MAY				
04...	0807	621	181	16.5	22...	0954	582	226	16.0
NOV					JUL				
20...	1251	1470	161	12.0	09...	0943	524	222	20.0
MAR					AUG				
06...	1655	8200	170	12.0	26...	0910	143	302	21.0
APR					SEP				
14...	1020	624	215	12.0	19...	0926	128	326	22.0
				03424730 - SMITH FORK AT TEMPERANCE HALL, TN					
OCT					MAY				
03...	1240	513	386	18.5	22...	1345	86	307	20.0
NOV					JUL				
20...	0910	493	402	12.5	10...	0920	64	316	24.0
JAN					AUG				
07...	0928	520	386	9.0	18...	0945	30	308	27.0
FEB					SEP				
24...	1042	342	361	9.0	17...	1013	20	260	23.0
				03425000 - CUMBERLAND RIVER AT CARTHAGE, TN					
DEC					MAR				
10...	1130	27200	210	10.0	06...	1415	72300	395	13.0
FEB					AUG				
27...	1000	25100	196	9.0	28...	1310	11300	189	22.0
				03426385 - MANSKER CREEK ABOVE GOODLETTSVILLE, TN					
OCT					APR				
02...	1110	22	429	19.0	15...	1252	14	322	14.5
NOV					MAY				
18...	1015	128	338	12.5	23...	1215	7.6	395	16.0
JAN					JUL				
10...	0907	44	425	4.0	07...	1400	15	398	23.0
MAR					SEP				
10...	1230	76	329	13.5	15...	1245	1.7	331	24.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
CUMBERLAND RIVER BASIN--Continued									
03426470 - DRY CREEK NEAR EDENWOLD, TN									
NOV 05...	1050	7.9	536	15.0	MAY 23...	1045	1.1	541	16.0
DEC 17...	1215	245	327	10.5	JUL 07...	1119	3.8	453	21.0
JAN 09...	1239	13	585	8.0	AUG 19...	0849	1.2	577	22.0
FEB 24...	1336	4.2	485	12.0	SEP 15...	1415	0.24	545	23.0
APR 15...	0925	2.6	490	10.0					
03427500 - EAST FORK STONES RIVER NEAR LASCASSAS, TN									
NOV 22...	1215	741	391	12.0	MAY 13...	1330	120	344	17.5
FEB 21...	1135	360	352	14.0	AUG 08...	1125	21	313	24.5
03428500 - WEST FORK STONES RIVER NEAR SMYRNA, TN									
NOV 22...	1630	635	483	12.0	MAY 13...	1530	120	464	18.0
FEB 20...	1600	324	442	14.0	AUG 01...	1100	63	455	24.5
03430147 - STONERS CREEK NEAR HERMITAGE, TN									
OCT 04...	0920	2.7	552	15.0	MAY 22...	1250	8.4	453	16.0
NOV 20...	0900	41	478	11.5	JUL 11...	0948	5.1	462	21.5
JAN 09...	1120	40	457	7.5	AUG 28...	0925	0.86	523	23.0
MAR 10...	1112	46	379	13.0	SEP 19...	1100	0.48	512	21.0
APR 14...	1430	7.8	421	15.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				CUMBERLAND RIVER BASIN--Continued					
				03430550 - MILL CREEK NEAR NOLENSVILLE, TN					
OCT					APR				
01...	1010	10	533	21.5	02...	1500	39	438	14.0
NOV					MAY				
22...	1135	53	524	9.0	15...	1340	5.0	455	18.5
JAN					JUL				
14...	1200	43	536	0.5	15...	1405	5.9	487	26.0
FEB					AUG				
18...	1120	56	494	7.0	07...	1235	1.7	539	23.5
MAR					SEP				
03...	0810	1770	268	12.0	17...	0905	0.61	501	24.0
				03431000 - MILL CREEK NEAR ANTIOCH, TN					
OCT					MAY				
03...	1005	12	540	19.5	15...	1050	9.9	468	18.0
NOV					AUG				
22...	0930	76	536	10.0	08...	1420	2.3	475	25.0
26...	1220	129	489	10.5					
MAR									
10...	1025	162	443	14.0					
				03431060 - MILL CREEK AT THOMPSON LANE, NEAR WOODBINE, TN					
NOV					MAY				
26...	1230	138	509	10.5	12...	1520	16	477	19.0
JAN					JUL				
14...	1535	80	546	2.5	03...	1245	83	506	26.0
MAR					AUG				
03...	1015	10900	165	12.0	07...	1510	6.4	509	25.0
19...	0930	1340	257	12.5	SEP				
21...	1015	293	463	13.0	18...	1600	2.1	486	25.5
APR									
21...	1050	70	420	15.0					
				03431300 - BROWNS CREEK AT STATE FAIRGROUNDS AT NASHVILLE, TN					
OCT					MAY				
03...	1340	3.7	617	19.0	22...	0815	7.2	544	15.0
NOV					JUN				
18...	1410	34	545	15.0	24...	0930	12	531	20.5
JAN					AUG				
08...	0830	12	577	7.5	14...	1120	9.7	582	23.0
MAR					SEP				
07...	1000	91	506	13.0	19...	1205	0.61	440	25.0
APR									
09...	1000	6.6	517	11.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				CUMBERLAND RIVER BASIN--Continued					
				03431500 - CUMBERLAND RIVER AT NASHVILLE, TN					
DEC 04...	1130	47800	241	11.0	MAR 05...	1000	99800	215	12.5
JAN 30...	1045	48700	241	7.0	APR 07...	0940	45100	190	12.0
				03431599 - WHITES CREEK NEAR BORDEAUX, TN					
OCT 02...	0840	41	468	27.5	MAY 21...	1230	18	424	20.0
NOV 18...	1245	299	388	13.0	JUN 24...	1330	49	425	24.0
JAN 08...	1100	66	438	5.0	AUG 13...	1420	24	467	26.5
MAR 07...	1240	267	330	12.5	SEP 15...	1015	2.9	491	20.5
APR 08...	1600	34	379	16.0					
				03431700 - RICHLAND CREEK AT CHARLOTTE AVENUE AT NASHVILLE, TN					
OCT 01...	1225	22	634	22.0	MAY 22...	1145	13	519	16.5
NOV 19...	0945	68	627	13.5	JUN 24...	1145	36	511	21.5
JAN 10...	0930	30	585	6.5	AUG 14...	1015	21	469	23.5
MAR 10...	0930	68	515	13.0	SEP 15...	0845	2.1	515	20.0
APR 09...	1500	13	474	15.5					
				03431800 - SYCAMORE CREEK NEAR ASHLAND CITY, TN					
NOV 19...	1530	258	214	11.5	MAY 16...	1350	60	282	18.0
FEB 26...	1430	171	243	10.0	AUG 12...	1415	35	287	25.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				CUMBERLAND RIVER BASIN--Continued					
				03432350 - HARPETH RIVER AT FRANKLIN, TN					
OCT					MAY				
10...	1045	12	475	15.0	09...	1140	69	406	18.5
NOV					JUN				
14...	1430	152	437	8.5	25...	0856	178	384	22.5
JAN					JUL				
13...	1430	293	428	2.5	17...	1100	28	416	25.0
FEB					AUG				
21...	1130	267	365	14.0	06...	1230	19	419	24.5
MAR					20...	1100	16	390	24.0
03...	1530	10700	121	12.0	21...	1115	7.1	385	23.5
25...	1140	260	350	14.0	25...	1630	2.4	388	25.0
APR					SEP				
16...	1000	61	392	13.0	05...	0931	1.5	416	20.0
				034323531 - HARPETH RIVER TRIBUTARY AT MACK HATCHER PARKWAY, TN					
MAR					MAR				
05...	0910	62	282	13.5	05...	1030	71	235	13.5
05...	0925	64	280	13.5	05...	1045	111	142	14.0
05...	0940	72	271	13.5	05...	1115	128	166	14.0
05...	1000	70	312	13.5	05...	1145	149	165	14.0
				03432400 - HARPETH RIVER BELOW FRANKLIN, TN					
OCT					JUN				
10...	1310	24	545	16.0	25...	1215	210	410	22.5
NOV					JUL				
14...	1150	188	463	9.0	17...	1105	46	449	24.0
FEB					AUG				
21...	1400	315	374	14.5	06...	1450	30	480	24.5
MAR					26...	0820	12	564	21.5
25...	1335	292	370	15.0	SEP				
APR					05...	1110	9.4	567	20.0
16...	1245	100	430	13.5					
MAY									
09...	1330	85	433	19.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				CUMBERLAND RIVER BASIN--Continued					
				03433500 - HARPETH RIVER AT BELLEVUE, TN					
OCT 08...	1040	94	471	17.0	MAY 16...	1120	108	412	17.5
NOV 20...	1200	832	407	12.0	JUN 25...	1230	484	383	23.0
DEC 17...	1400	10500	135	9.0	AUG 13...	1215	235	409	24.5
FEB 27...	1530	1550	336	13.5	SEP 02...	0800	24	453	25.0
APR 09...	1215	333	371	14.0					
				03434500 - HARPETH RIVER NEAR KINGSTON SPRINGS, TN					
OCT 07...	1500	248	374	18.5	APR 14...	0900	498	311	10.0
NOV 19...	1330	2020	343	12.0	MAY 08...	1330	335	256	19.0
DEC 17...	1120	24500	125	8.5	JUN 25...	0900	920	340	23.5
FEB 27...	0945	1140	318	12.0	AUG 13...	0900	623	302	23.5
				03435305 - RED RIVER BELOW HIGHWAY 161 NEAR BARREN PLAIN, TN					
OCT 04...	1315	629	414	15.5	APR 08...	1430	730	170	14.5
NOV 12...	1200	818	398	9.0	MAY 20...	1415	1160	275	19.5
JAN 06...	1100	1260	346	11.5	JUN 23...	1300	805	363	20.0
FEB 26...	1200	741	371	11.0	AUG 12...	1100	155	406	23.0
				03436100 - RED RIVER AT PORT ROYAL, TN					
NOV 12...	1530	1470	355	9.0	MAY 20...	1145	981	372	20.0
FEB 25...	1800	1360	367	11.5	AUG 11...	1800	397	409	24.5
MAR 04...	1025	27100	136	11.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				CUMBERLAND RIVER BASIN--Continued					
				03436690 - YELLOW CREEK AT ELLIS MILLS, TN					
NOV 13...	1200	97	281	10.5	MAY 19...	1745	95	186	20.0
FEB 25...	1300	158	236	11.5	AUG 11...	1515	49	272	25.5
				TENNESSEE RIVER BASIN					
				03466228 - SINKING CREEK AT AFTON, TN					
APR 03...	1400	26	414	14.5	SEP 10...	0925	6.0	436	18.0
				03491000 - BIG CREEK NEAR ROGERSVILLE, TN					
APR 04...	1200	57	304	13.0	SEP 09...	1300	4.5	393	20.0
MAY 28...	1600	35	268	16.5					
				03491544 - CROCKETT CREEK BELOW ROGERSVILLE, TN					
MAR 03...	1530	90	250	13.0	MAY 28...	1308	2.3	462	15.5
APR 02...	1500	4.7	399	17.0	JUL 07...	1230	2.2	479	20.0
				03497300 - LITTLE RIVER ABOVE TOWNSEND, TN					
APR 07...	1315	415	13	12.0	JUL 29...	1220	102	21	21.5
JUN 03...	1045	500	15	14.0					
				03498500 - LITTLE RIVER NEAR MARYVILLE, TN					
APR 30...	1250	2010	60	10.0	JUN 16...	1500	1500	73	17.0
MAY 14...	0830	430	109	14.0	AUG 11...	1400	146	143	22.5

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
TENNESSEE RIVER BASIN--Continued									
03498850 - LITTLE RIVER NEAR ALCOA, TN									
AUG 11...	1100	164	176	22.0					
03538235 - EAST FORK POPLAR CREEK AT BEAR CREEK ROAD AT OAK RIDGE, TN									
MAR 05...	1345	14	343	13.5	JUL 02...	1005	9.9	326	22.5
APR 01...	1120	11	325	15.0	AUG 05...	0945	15	339	23.0
MAY 05...	1130	12	328	17.0	SEP 02...	1215	10	327	23.5
JUN 02...	1015	15	322	19.0	18...	1035	9.9	330	22.0
03538270 - BEAR CREEK AT STATE HWY 95 NEAR OAK RIDGE, TN									
MAR 05...	1130	23	202	12.0	JUL 02...	1330	4.0	319	18.0
MAY 05...	1215	14	216	11.5	AUG 05...	1330	1.6	376	18.0
JUN 02...	1420	18	216	16.5					
03540500 - EMORY RIVER AT OAKDALE, TN									
MAR 31...	1115	1290	64	11.0					
0356300 - OCOEE RIVER AT EMF, TN									
FEB 26...	1121	1010	44	8.5	SEP 12...	1055	1000	55	20.5
0356600 - HIWASSEE RIVER AT CHARLESTON, TN									
APR 15...	1200	4100	57	14.0	SEP 19...	1145	3170	56	19.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
TENNESSEE RIVER BASIN--Continued									
035661285 - NORTH MOUSE CREEK NEAR ROCKY MT. HOLLOW NEAR ATHENS, TN									
FEB					JUL				
26...	1530	112	267	12.0	23...	1230	45	319	20.5
APR					SEP				
17...	1400	66	289	13.5	12...	1410	26	341	19.5
JUN									
03...	1415	124	264	16.5					
03593500 - TENNESSEE RIVER AT SAVANNAH, TN									
FEB					APR				
12...	1155	70800	157	8.0	29...	1121	47900	159	17.5
MAR					JUN				
12...	1300	178000	157	--	25...	1900	96900	141	25.5
13...	0930	176000	141	15.0	AUG				
					25...	1515	56600	156	28.5
03596000 - DUCK RIVER BELOW MANCHESTER, TN									
SEP									
02...	1345	30	144	25.0					
03597210 - GARRISON FORK ABOVE L&N RAILROAD AT WARTRACE, TN									
OCT					MAY				
09...	1350	38	371	16.5	08...	1600	110	268	18.5
NOV					JUL				
15...	1230	70	362	9.5	02...	1500	141	310	23.5
FEB					AUG				
06...	1230	227	290	8.5	05...	1020	15	292	24.5
20...	1250	99	263	13.0	26...	1330	11	276	22.5
APR					SEP				
02...	1205	92	257	13.5	17...	0909	5.3	279	22.0
03597590 - WARTRACE CREEK BELOW COUNTY ROAD AT WARTRACE, TN									
OCT					MAY				
09...	1215	16	438	15.5	08...	1400	27	372	18.5
NOV					JUL				
15...	1020	34	443	8.5	02...	1235	48	358	22.5
JAN					AUG				
08...	1510	55	422	6.5	05...	1410	1.0	325	24.5
FEB					26...	1205	0.34	326	21.0
20...	0950	29	406	11.5	SEP				
APR					02...	1125	0.07	287	23.5
02...	1000	21	381	11.5	17...	1052	0.01	389	20.5

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				TENNESSEE RIVER BASIN--Continued					
				03598000 - DUCK RIVER NEAR SHELBYVILLE, TN					
OCT					APR				
08...	1355	276	326	17.5	01...	1650	386	270	15.5
NOV					28...	1700	316	272	15.0
13...	1050	969	218	11.5	JUL				
JAN					23...	0820	195	189	27.0
08...	1210	1820	190	8.5	AUG				
FEB					25...	1305	194	166	23.0
19...	1730	583	242	10.5	SEP				
					16...	0815	171	162	21.5
					22...	1055	186	159	22.5
				03598151 - DUCK RIVER AT ANCHOR MILL					
AUG					SEP				
25...	1450	181	170	24.5	16...	1318	171	160	23.5
					22...	1415	168	161	23.5
				03598300 - DUCK RIVER AT WILHOITE MILLS					
AUG									
25...	1025	199	196	23.0					
				03599000 - BIG ROCK CREEK AT LEWISBURG, TN					
OCT					APR				
07...	1630	11	420	21.5	01...	0915	27	362	11.5
NOV					MAY				
12...	1445	27	408	10.5	07...	1305	26	366	18.5
JAN					JUL				
06...	1520	90	355	11.5	14...	1140	20	303	24.5
FEB					AUG				
19...	1345	27	352	14.5	04...	1355	1.7	355	31.0
				03599250 - DUCK RIVER AT MILLTOWN					
AUG					SEP				
25...	1145	199	255	25.0	16...	1220	180	181	24.0
					22...	1230	160	186	25.0
				03599455 - FOUNTAIN CREEK AT MOUTH NEAR FOUNTAIN HEIGHTS, TN					
AUG					SEP				
25...	1320	7.3	354	23.0	16...	1100	2.5	355	21.0
					22...	1420	1.7	364	23.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
				TENNESSEE RIVER BASIN--Continued					
				03599408 - DUCK RIVER AT CARPENDERS BRIDGE NEAR POTTSVILLE					
AUG					SEP				
25...	1415	220	240	25.0	16...	1030	197	187	23.0
					22...	1000	163	190	23.0
				03599425 - DUCK RIVER AT HOWARD BRIDGE NEAR UNION GROVE, TN					
AUG					SEP				
25...	1000	207	242	23.5	16...	0840	174	198	22.5
					22...	1130	171	193	23.0
				03599470 - DUCK RIVER AT IRON BRIDGE ROAD NEAR COLUMBIA,TN					
AUG					SEP				
25...	1600	205	247	25.0	16...	1445	165	197	24.0
					22...	0900	154	201	24.0
				03599500 - DUCK RIVER AT COLUMBIA, TN					
OCT					MAY				
08...	1020	592	324	18.0	12...	1155	726	262	19.0
NOV					JUL				
13...	1600	1570	355	10.0	07...	1500	869	490	25.0
JAN					AUG				
07...	1125	5260	267	11.0	25...	1234	194	243	26.0
FEB					SEP				
19...	1045	1640	357	10.0	16...	1005	159	215	23.0
					SEP				
					22...	1110	145	207	23.5
				03600250 - DUCK RIVER BELOW COLUMBIA, TN					
AUG					SEP				
25...	0950	210	294	24.0	16...	0815	171	219	23.0
					22...	0938	152	206	22.5

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
TENNESSEE RIVER BASIN--Continued									
03602219 - PINEY RIVER AT CEDAR HILL, TN									
OCT 03...	0935	47	290	17.0	APR 02...	1420	82	207	15.5
NOV 14...	1200	74	258	10.0	MAY 19...	1010	32	265	17.0
JAN 09...	1600	119	211	8.0	JUL 11...	1110	54	238	19.0
FEB 24...	1045	74	223	8.0	AUG 11...	0945	26	274	19.5
03604000 - BUFFALO RIVER NEAR FLAT WOODS, TN									
OCT 02...	1645	417	104	19.5	APR 07...	1300	909	75	16.5
NOV 14...	0900	595	95	9.5	MAY 19...	1230	468	85	20.5
JAN 09...	1200	1290	80	7.0	JUL 14...	1110	506	92	24.5
FEB 24...	1300	710	81	10.0	AUG 11...	1215	419	93	23.0
03605078 - CYPRESS CREEK AT CAMDEN, TN									
OCT 04...	1020	11	173	16.0	MAY 01...	0850	63	88	15.0
FEB 13...	1410	186	101	3.5	JUN 18...	1000	149	128	23.0
APR 01...	1255	24	83	13.0	SEP 03...	1120	6.2	135	25.0
OBION RIVER BASIN									
07028930 - TURKEY CREEK AT MEDINA, TN									
JUN 17...	1050	52	66	21.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DISC CHARGE, INSTAN-TANEOUS (FT3/S) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM (00095)	TEMPER-ATURE WATER (DEG C) (00010)
HATCHIE RIVER BASIN									
07029500 - HATCHIE RIVER AT BOLIVAR, TN									
OCT					APR				
01...	0915	3400	59	18.5	03...	1330	1920	54	17.5
DEC					JUN				
03...	1355	4720	42	9.5	20...	1535	9320	65	22.0
JAN					SEP				
30...	1135	10700	38	3.5	02...	1430	1330	45	24.5
FEB									
27...	0935	3290	60	12.0					
LOOSAHATCHIE RIVER BASIN									
07030240 - LOOSAHATCHIE RIVER NEAR ARLINGTON, TN									
OCT					APR				
08...	1000	107	59	16.0	03...	1200	149	131	19.0
JAN					AUG				
08...	1045	169	75	7.5	13...	1110	139	64	23.0
FEB									
05...	0955	4500	70	9.5					
05...	1215	3550	41	9.5					
05...	1445	2900	45	9.5					
WOLF RIVER BASIN									
07031650 - WOLF RIVER AT GERMANTOWN, TN									
OCT					MAR				
02...	1345	978	39	19.0	02...	1515	18800	30	16.5
NOV					APR				
04...	1230	1660	46	10.5	02...	1515	719	48	19.0
FEB					JUL				
21...	1540	2800	48	13.5	29...	0930	525	74	27.0
NONCONNAH CREEK BASIN									
07032200 - NONCONNAH CREEK NEAR GERMANTOWN, TN									
OCT					MAR				
08...	1445	1.1	110	18.0	02...	1630	3100	135	15.0
JAN					APR				
13...	1200	12	105	1.5	08...	1125	47	153	15.5

GROUND-WATER LEVELS

DAVIDSON COUNTY

360835086441100. Local number, Dv:L-10.

LOCATION.--Lat 36°08'35", long 86°44'11", Hydrologic Unit 05130202, 220 ft south of Elm Hill Pike, 0.3 mi west of Louisville and Nashville Railroad crossing, 0.4 mi east of Fesslers Lane in Nashville.
Owner: U.S. Geological Survey.

AQUIFER.--Carters and Lebanon Limestones of middle Ordovician age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 262 ft, cased to 40 ft, open end.

INSTRUMENTATION.--Data logger -- 60-minute logging interval.

DATUM.--Elevation of land-surface datum is 515 ft above sea level, from topographic map. Measuring point: Top of casing 2.5 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--June 1985 to current year.

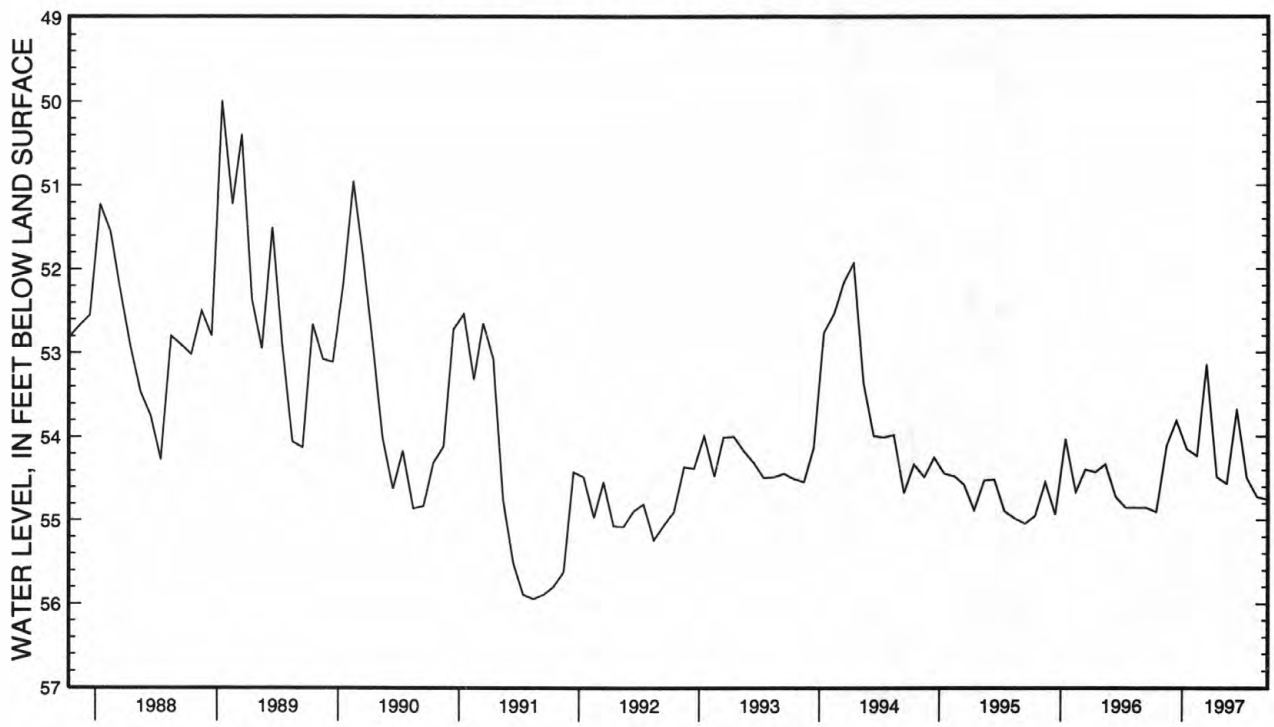
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.52 ft below land-surface datum, Feb. 21, 1989; lowest water level 55.94 ft below land-surface datum, Aug. 5, 6, 7, 8, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.47	53.97	52.45	53.77	51.57	45.54	54.04	54.27	53.54	53.86	54.47	54.74
10	54.83	52.25	53.69	53.49	53.21	47.87	54.20	54.35	53.19	54.17	54.27	54.73
15	54.90	53.53	53.54	54.15	53.37	51.27	54.38	54.57	45.83	54.29	54.23	54.74
20	54.73	52.29	49.73	54.13	54.06	47.63	54.49	53.12	51.45	54.49	54.47	54.75
25	54.65	53.95	51.63	50.31	54.24	52.37	54.41	54.27	52.53	54.47	54.62	48.15
EOM	54.32	54.11	53.52	51.87	53.63	53.28	53.78	53.47	53.22	54.22	54.73	54.29

WTR YR 1997 HIGHEST 39.63 MAR 3, 1967 LOWEST 54.91 OCT 18, 1996

LOWEST MONTHLY WATER LEVEL



GROUND-WATER LEVELS

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 -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 670.3 ft above sea level. Measuring point: Top of instrument shelf, 1.50 ft above land-surface datum.

REMARKS.--Records good. 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].

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

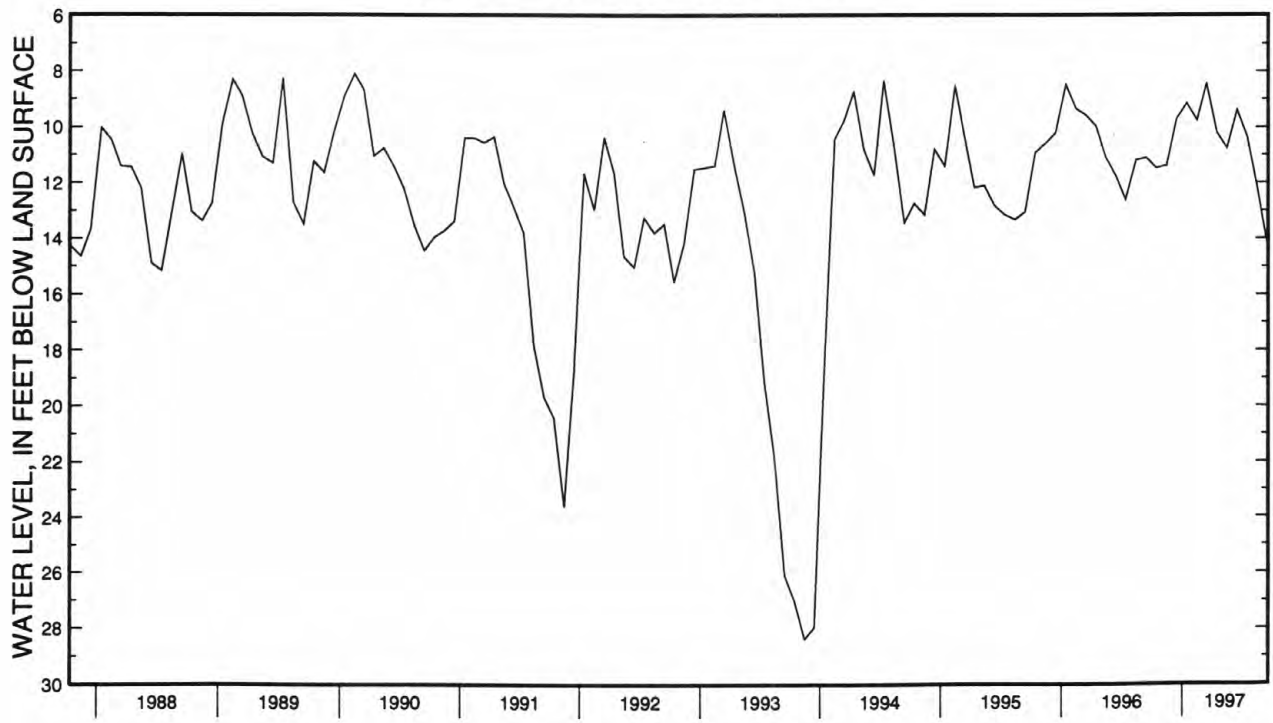
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.89 ft below land-surface datum, Mar. 28, 1994; lowest recorded, 28.59 ft below land-surface datum, Nov. 13, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.99	11.04	8.69	9.02	8.41	5.54	9.01	7.36	9.34	8.92	10.67	12.89
10	10.00	10.15	9.25	7.70	8.92	7.41	9.44	8.85	8.30	9.89	9.71	13.04
15	10.62	11.11	8.75	8.63	9.03	7.75	9.82	9.93	7.70	10.22	10.71	13.51
20	10.71	10.87	9.45	8.66	10.02	6.62	10.09	10.58	8.08	10.31	11.09	14.41
25	11.47	10.96	9.46	6.79	8.74	8.30	10.43	10.73	6.75	10.10	11.63	12.73
EOM	11.59	10.35	9.17	6.71	7.42	7.71	9.24	10.09	8.39	10.28	12.24	11.66

WTR YR 1997 HIGHEST 4.08 MAR 3, 1997 LOWEST 14.53 SEP 24, 1997

LOWEST MONTHLY WATER LEVEL



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 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 -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 735 ft above sea level, from topographic map. Measuring point: Instrument shelf, 5.66 ft above land-surface datum.

REMARKS.--Records good. Missing record April 21-23. Well previously published as "at Savannah Valley". Water level affected 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.

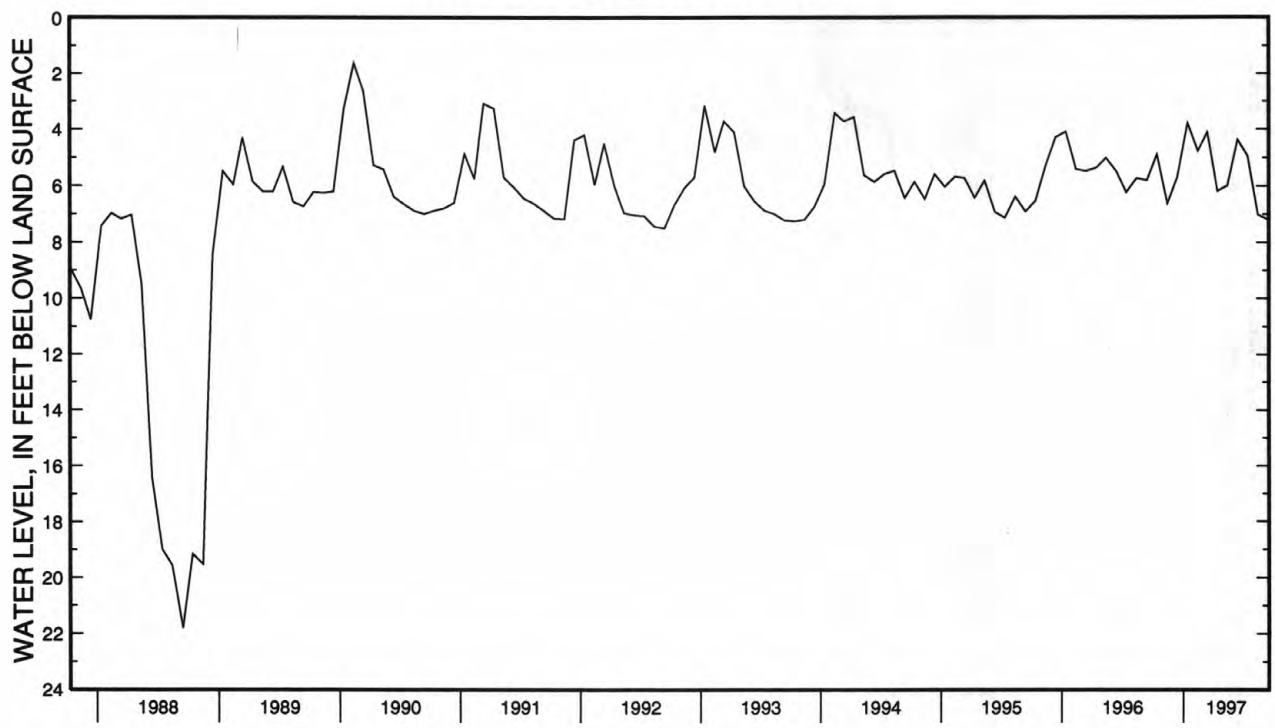
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.33 ft above land-surface datum, Feb. 11, 1994; lowest, 22.45 ft below land-surface datum, Sept. 3, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.66	6.63	.72	2.47	1.76	-1.08	5.54	.26	3.58	4.83	5.01	6.92
10	4.81	5.92	1.92	.06	3.52	.75	5.80	2.85	3.52	4.95	5.12	6.81
15	4.89	6.10	3.12	2.01	4.23	2.61	5.95	4.67	3.01	5.07	5.71	7.08
20	4.92	5.46	4.63	2.83	5.09	1.71	6.41	6.01	2.64	5.01	5.96	6.94
25	4.89	5.19	5.67	.79	1.82	2.77	5.97	5.83	4.55	4.81	6.64	6.12
EOM	4.94	3.78	1.70	.35	1.71	4.48	2.22	5.14	4.68	4.74	7.13	5.42

WTR YR 1997 HIGHEST -2.26 FEB 28, 1997 LOWEST 7.47 SEP 24, 1997

LOWEST MONTHLY WATER LEVEL



GROUND-WATER LEVELS

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.--Data logger and data collection platform -- 60-minute logging interval.

DATUM.--Elevation of land-surface datum is 470 ft above sea level, from topographic map. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--February 1962 to current year.

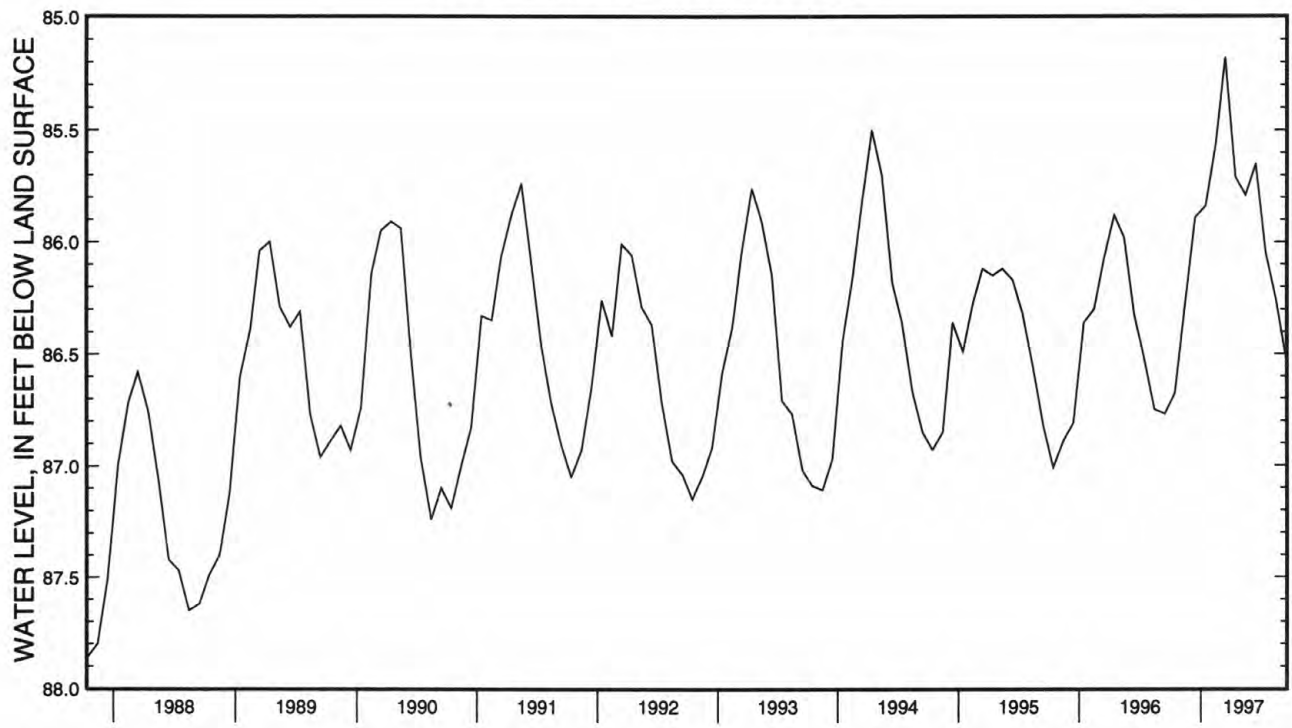
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.09 below land-surface datum, Apr. 21, 22, 23, 1994; lowest, 90.20 ft below land-surface datum, Nov. 25, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	86.61	86.23	85.78	85.68	85.40	84.94	85.21	85.61	85.60	85.61	86.11	86.31
10	86.69	86.21	85.85	85.71	85.39	84.74	85.45	85.65	85.67	85.72	86.17	86.31
15	86.67	86.20	85.88	85.73	85.45	84.73	85.54	85.75	85.45	85.83	86.05	86.45
20	86.62	86.01	85.69	85.68	85.45	84.47	85.55	85.77	85.35	85.95	86.13	86.51
25	86.60	86.08	85.74	85.57	85.55	84.84	85.74	85.76	85.33	86.03	86.25	86.24
EOM	86.40	85.91	85.66	85.38	85.37	85.17	85.45	85.65	85.48	86.03	86.23	86.40

WTR YR 1997 HIGHEST 84.40 MAR 21, 1997 LOWEST 86.71 OCT 11, 1996

LOWEST MONTHLY WATER LEVEL



GROUND-WATER LEVELS

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 off Crutcher Lake Rd, at Fort Pillow State Park.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Memphis 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 -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 437.05 ft above sea level. Measuring point: Top of casing, 2.80 ft above land-surface datum.

REMARKS.--Missing record Nov. 14 to Jan. 8, Mar. 3-30, and June 18-26. Records poor.

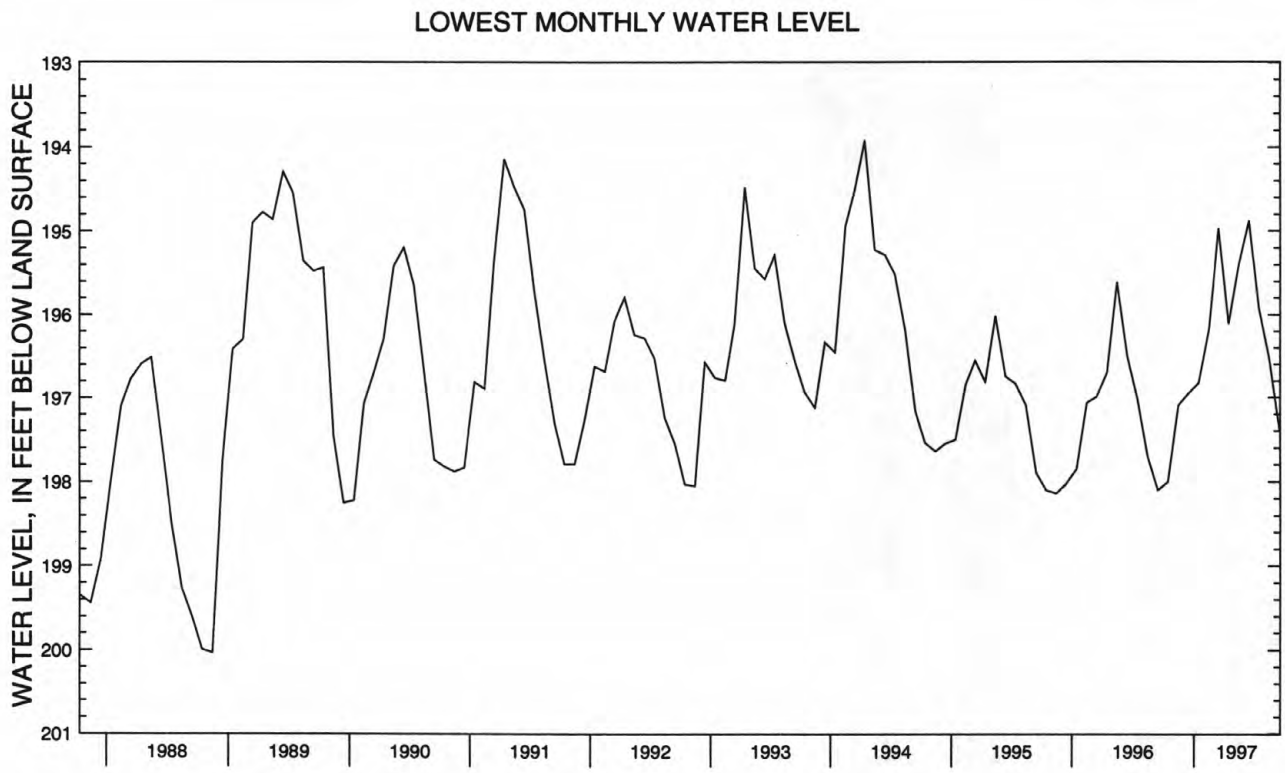
PERIOD OF RECORD.--April 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 187.76 ft below land-surface datum, Apr. 7, 1975; lowest, 200.05 ft below land-surface datum, Nov. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	197.95	196.92	---	---	195.23	---	195.25	195.09	194.27	194.95	196.04	196.83
10	197.78	196.77	---	196.56	195.31	---	196.09	194.77	194.12	195.13	196.22	196.93
15	197.95	---	---	196.80	195.61	---	196.12	195.02	194.21	195.33	196.26	197.15
20	197.90	---	---	196.70	196.01	---	195.54	195.25	---	195.57	196.34	197.31
25	197.75	---	---	196.67	196.20	---	195.44	195.35	---	195.77	196.36	197.21
EOM	197.27	---	---	196.16	195.45	---	195.16	195.19	194.62	195.94	196.56	197.30

WTR YR 1997 HIGHEST 193.29 MAR 31, 1997 LOWEST 198.00 OCT 01, 02, 03, 1996



GROUND-WATER LEVELS

LINCOLN COUNTY

350034086422800. Local number, Li:G-1.

LOCATION.--Lat 35°00'34", long 86°42'28", Hydrologic Unit 06030002, on west side of Pepper Road at Taft well field, 0.8 mi south of State Highway 110, at Taft.
Owner: Lincoln Count Board of Public Utilities.

AQUIFER.--Fort Payne Formation of early Mississippian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 106.5 ft, cased to 106.5 ft, slotted from 53 to 87 ft.

INSTRUMENTATION.--Water-level recorder April 18 to Sept. 30, 1992, Oct. 1, 1995 to Sept. 30.

DATUM.--Altitude of land-surface datum is 904.00. Measuring point: Top of casing 2.10 ft above land-surface datum.

REMARKS.--Records poor. Missing record Dec. 11 to Jan. 5, Jan. 14-16, 18-20, 25, Apr. 4, 8-10, 13-16. Water levels affected by pumpage from Taft Well field for municipal water supply.

PERIOD OF RECORD.--April 1992 to Sept. 1992, Oct. 1, 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.23 ft below land-surface datum, Apr. 8, 1996; lowest, 56.53 ft below land-surface datum, Sept. 7, 8, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.29	55.56	55.40	---	---	---	42.38	43.14	45.16	43.08	35.83	37.55
10	55.85	56.02	54.81	52.07	---	---	---	43.53	43.92	40.78	34.58	35.07
15	56.00	56.24	---	---	---	---	---	43.90	43.87	40.27	38.79	35.96
20	55.77	56.09	---	---	---	---	42.09	44.14	43.01	37.91	37.23	37.61
25	55.96	56.14	---	---	---	---	42.62	44.98	43.70	40.58	37.57	39.49
EOM	54.11	55.54	---	---	---	---	41.79	45.44	45.52	38.37	36.07	39.39

WTR YR 1997 HIGHEST 33.09 AUG 20, 1997 LOWEST 56.31 NOV 22, 1996

GROUND-WATER LEVELS

MADISON COUNTY

354223088380200. Local number, Md:N-1.

LOCATION.--Lat 35°42'23", long 88°38'02", Hydrologic Unit 08010205, 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.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 562.70 ft above sea level. Measuring point: Top of casing, 2.80 ft above land-surface datum.

REMARKS.--Missing record Dec. 4-29 and Jan. 30 to Feb. 3. Records good

PERIOD OF RECORD.--June 1949 to current year. Analog record June 1949 to February 1971, periodic tape measurements or monthly maximum-minimum recorder March 1971 to April 1986.

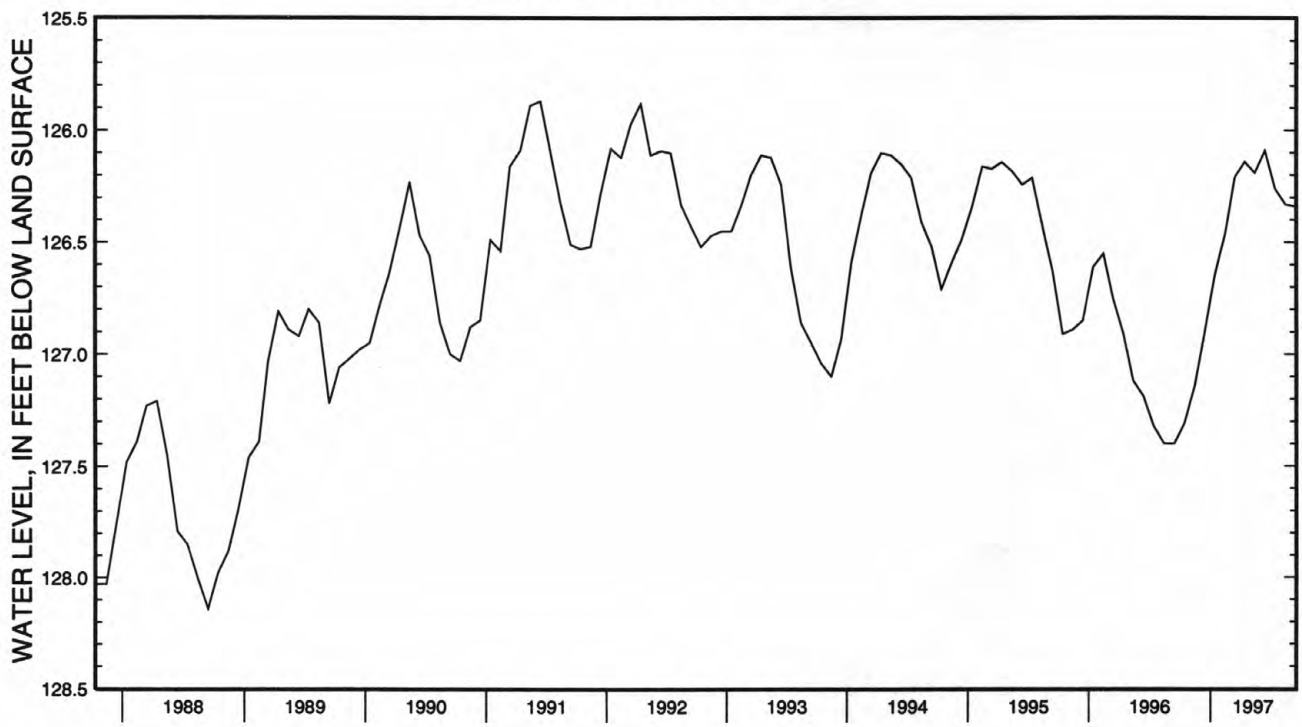
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 124.50 ft below land-surface datum, Mar. 10, 1952; lowest recorded, 129.13 ft below land-surface datum, Nov. 15, 1963; highest water level measured, 124.98 ft below land-surface datum, Apr. 8, 1980; lowest measured, 131.17 ft below land-surface datum, June 20, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	127.30	127.12	---	126.43	126.45	126.12	126.00	126.10	126.09	126.05	126.29	126.26
10	127.31	127.10	---	126.40	126.43	126.13	126.11	126.15	126.11	126.10	126.26	126.16
15	127.32	127.10	---	126.45	126.42	126.21	126.09	126.17	126.04	126.12	126.15	126.27
20	127.32	126.90	---	126.49	126.40	126.01	126.00	126.15	125.99	126.15	126.12	126.32
25	127.23	126.90	---	126.48	126.44	126.06	126.11	126.13	125.98	126.16	126.19	126.13
EOM	127.13	126.80	126.67	---	126.30	126.12	125.92	126.13	126.01	126.27	126.20	126.22

WTR YR 1997 HIGHEST 125.86 APR 28, 1997 LOWEST 127.32 OCT 15-21, 1996

LOWEST MONTHLY WATER LEVEL



GROUND-WATER LEVELS

MORGAN COUNTY

360543084343101. Local number, Mg:F-5.

LOCATION.--Lat 36°05'43", long 84°34'31", Hydrologic Unit 06010208, 1.0 mi southeast of Wartburg.
Owner: Plateau Utility District.

AQUIFER.--Sandstone of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 394 ft, cased to 20 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 1,265 ft above sea level, from topographic map. Measuring point: Floor of recorder shelter, 2.38 ft above land-surface datum.

REMARKS.--Missing record Nov. 7-17, Jan. 31 - Feb. 25, Apr. 3, 4, Aug. 5, 6. Highest water level readings may be influenced for short periods by surface inflow. Records fair. Negative values indicate water levels above land-surface.

PERIOD OF RECORD.--November 1984 to current year.

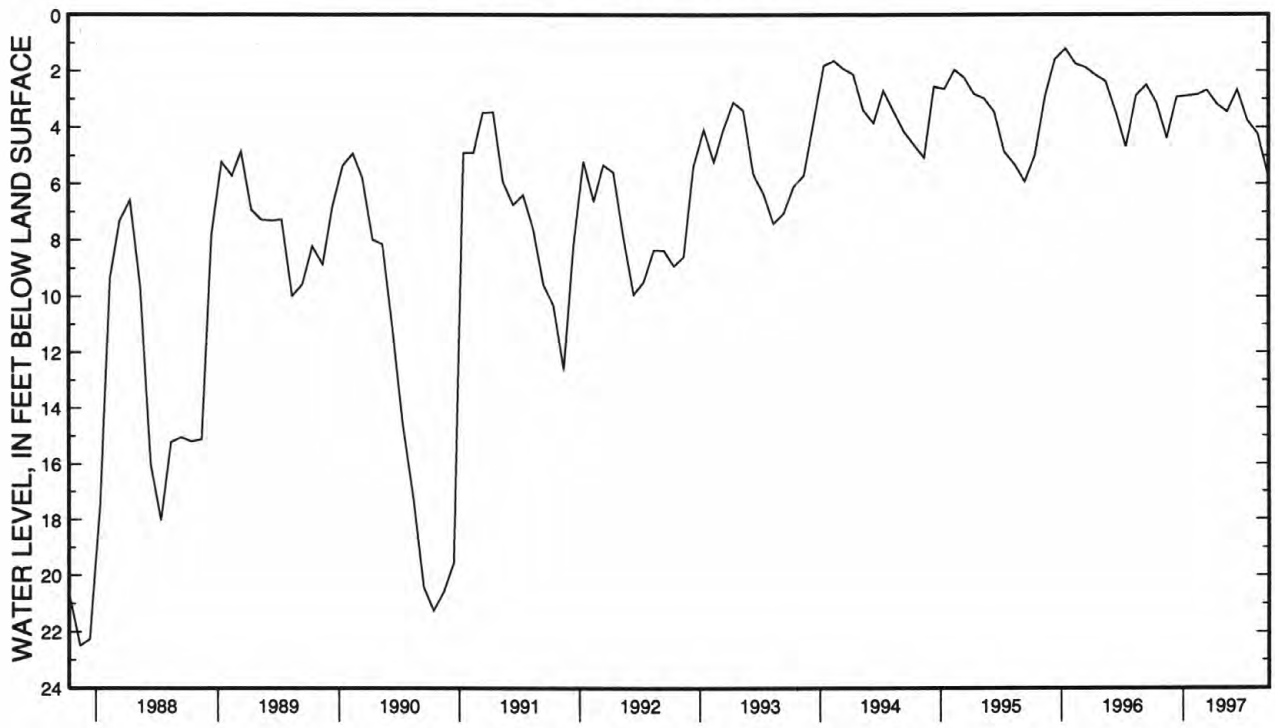
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.82 ft above land-surface datum, Dec. 1, 1996; lowest recorded, 22.75 ft below land-surface datum, Nov. 18, 1987, but may have been lower during period of missing record Oct. 21 to Nov. 18, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.50	4.61	2.53	2.64	---	2.09	2.95	2.89	2.47	2.80	---	4.59
10	2.08	---	2.68	2.09	---	2.62	3.15	3.11	2.34	3.07	3.79	4.80
15	2.34	---	2.89	2.85	---	2.53	3.16	3.30	1.91	3.45	3.91	5.16
20	2.28	2.30	2.88	2.88	---	2.01	3.20	3.38	2.61	3.72	3.77	5.52
25	2.09	2.58	2.79	2.11	---	2.66	2.86	3.46	2.70	2.88	3.99	4.53
EOM	4.20	2.59	1.80	---	1.94	2.70	2.88	2.19	2.78	3.34	4.30	4.68

WTR YR 1997 HIGHEST -0.82 DEC 1, 1996 LOWEST 5.71 SEP 23, 1997

LOWEST MONTHLY WATER LEVEL



GROUND-WATER LEVELS

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, at Silver Point. Owner: Tennessee Department of Transportation.

AQUIFER.--Fort Payne Formation of early Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 175 ft, cased to 60 ft, open end.

INSTRUMENTATION.--Data collection platform -- 60-minute logging interval.

DATUM.--Elevation of land-surface datum is 1,030 ft above sea level, from topographic map. Measuring point: Top of instrument shelf, 2.96 ft above land surface datum.

REMARKS.--Records good.

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

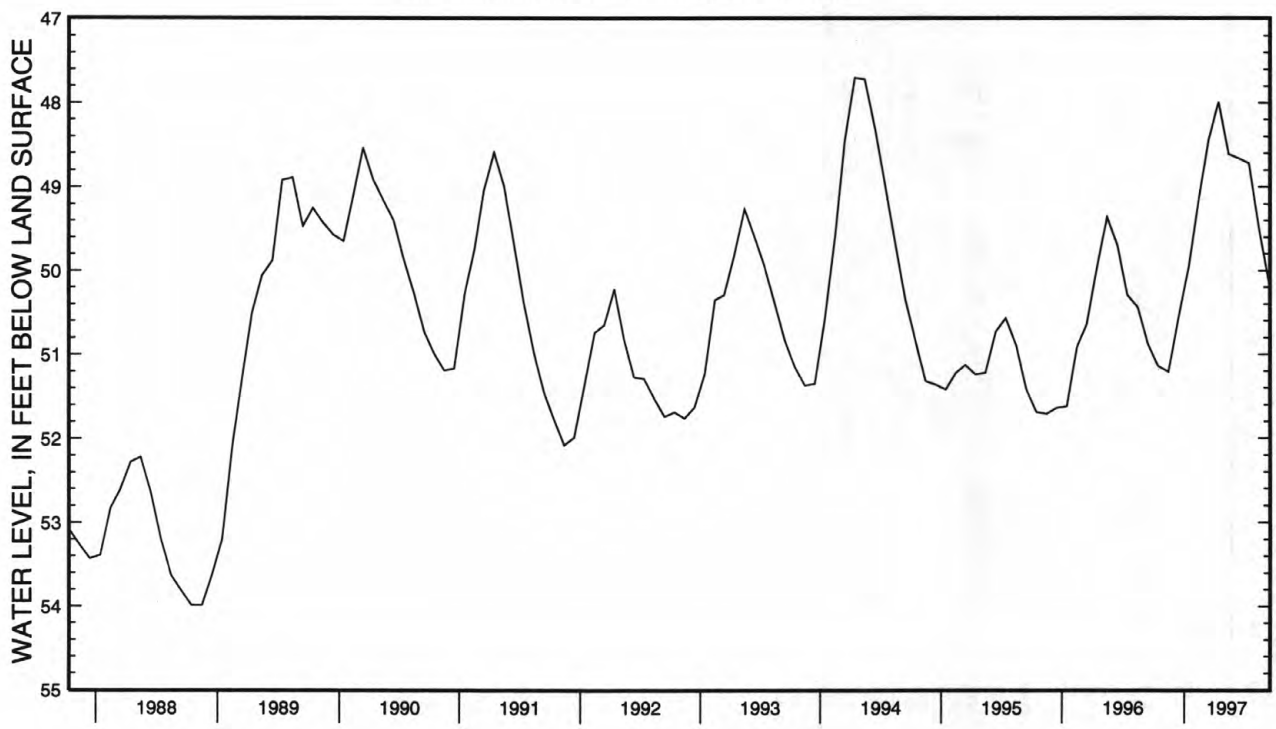
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.50 ft below land-surface datum, Apr. 25, 1994; lowest, 54.04 ft below land-surface datum, Oct. 28, Nov. 10, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.96	51.20	50.41	49.96	49.17	48.33	47.34	48.16	48.66	48.23	48.87	49.67
10	51.00	51.20	50.26	49.92	48.93	47.95	47.59	48.21	48.67	48.19	49.02	49.77
15	50.97	51.16	50.20	49.63	48.93	47.93	47.71	48.29	48.47	48.25	49.14	49.89
20	51.02	50.97	50.23	49.62	48.70	47.52	47.73	48.38	48.28	48.36	49.27	50.02
25	51.14	50.84	50.20	49.61	48.69	47.46	48.03	48.40	48.23	48.52	49.41	50.06
EOM	51.20	50.67	50.03	49.13	48.63	47.54	47.97	48.54	48.16	48.75	49.57	50.21

WTR YR 1997 HIGHEST 47.14 MAR 28, 1997 LOWEST 51.26 NOV 12, 1996

LOWEST MONTHLY WATER LEVEL



GROUND-WATER LEVELS

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 of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water-table well in phyllite, sandstone, diameter 6 in., depth 220 ft, cased to 27 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface is 2,150 ft above sea level, from topographic map. Measuring point: Floor of recorder shelter 1.5 ft above land-surface datum.

REMARKS.--Highest water level readings may be influenced for short periods by surface inflow. Missing record, Dec. 10 - Jan. 2, May 4, 5. Records good.

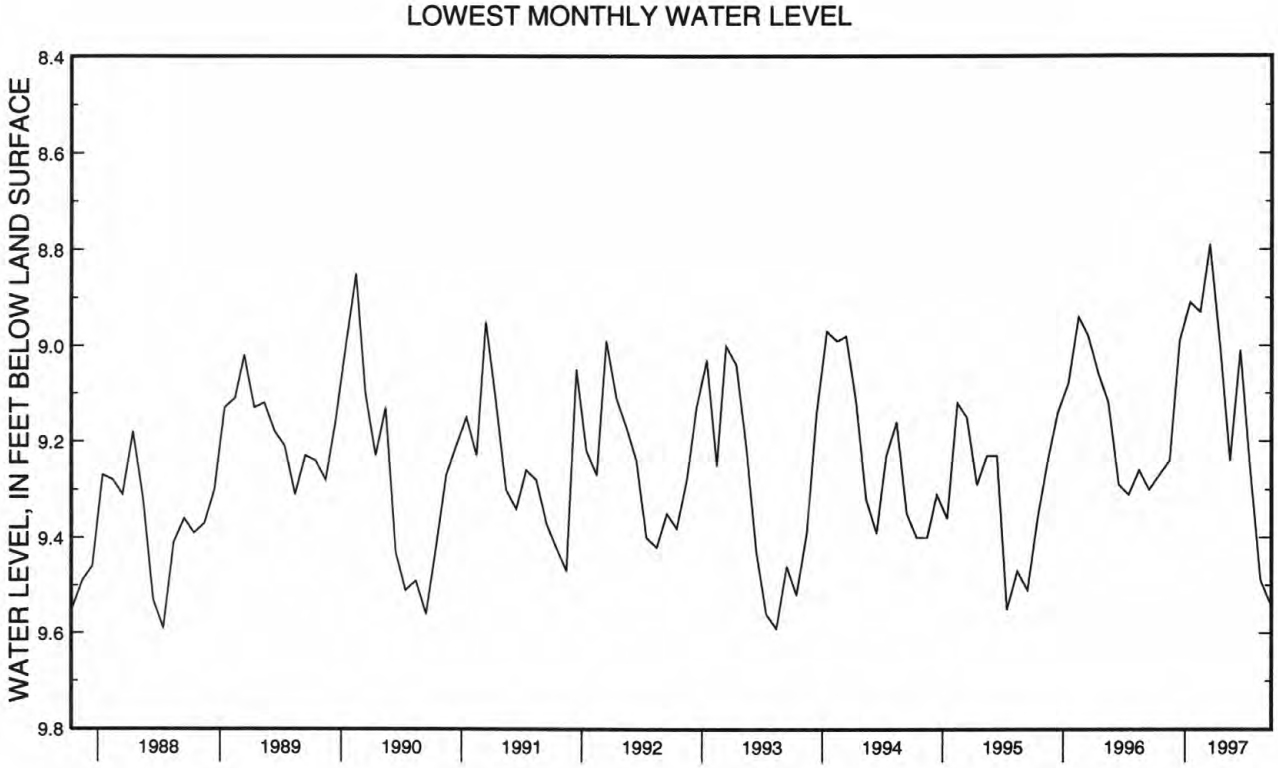
PERIOD OF RECORD.--May 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.48 ft below land-surface datum, Mar. 27, 1994; 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 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.92	9.20	8.92	8.76	8.64	7.99	8.82	---	8.74	8.87	9.31	9.48
10	9.14	8.57	---	8.55	8.69	8.57	8.85	8.87	8.96	8.87	9.35	9.51
15	9.25	8.85	---	8.87	8.82	8.28	8.92	9.06	7.94	9.06	9.40	9.52
20	9.25	8.68	---	8.85	8.93	8.10	8.99	9.15	8.79	9.05	9.42	9.54
25	9.25	8.77	---	8.48	8.83	8.81	8.54	9.24	8.89	9.14	9.45	8.78
EOM	9.24	8.74	---	8.54	8.54	8.25	8.10	8.88	8.54	9.27	9.50	9.22

WTR YR 1997 HIGHEST 5.78 MAR 3, 1997 LOWEST 9.54 SEP 17 - 21, 1997



Sv:E-2.97

SHELBY COUNTY

350735089593300. Local number, Sh:P-76.

LOCATION.--Lat 35°07'35", long 89°59'33", Hydrologic Unit 08010210, at Central Avenue and Tanglewood Street, at Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 12 in., depth 488 ft, cased to 428 ft, screened 428 to 488 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 286.70 ft above sea level. Measuring point: Top of casing, 1.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for municipal and industrial water supply in the Memphis area. Partial record Oct. 1, missing record Oct. 18 to Jan. 2 due to float sticking. Missing record July 5 to Sept. 30 due to well leaking.

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

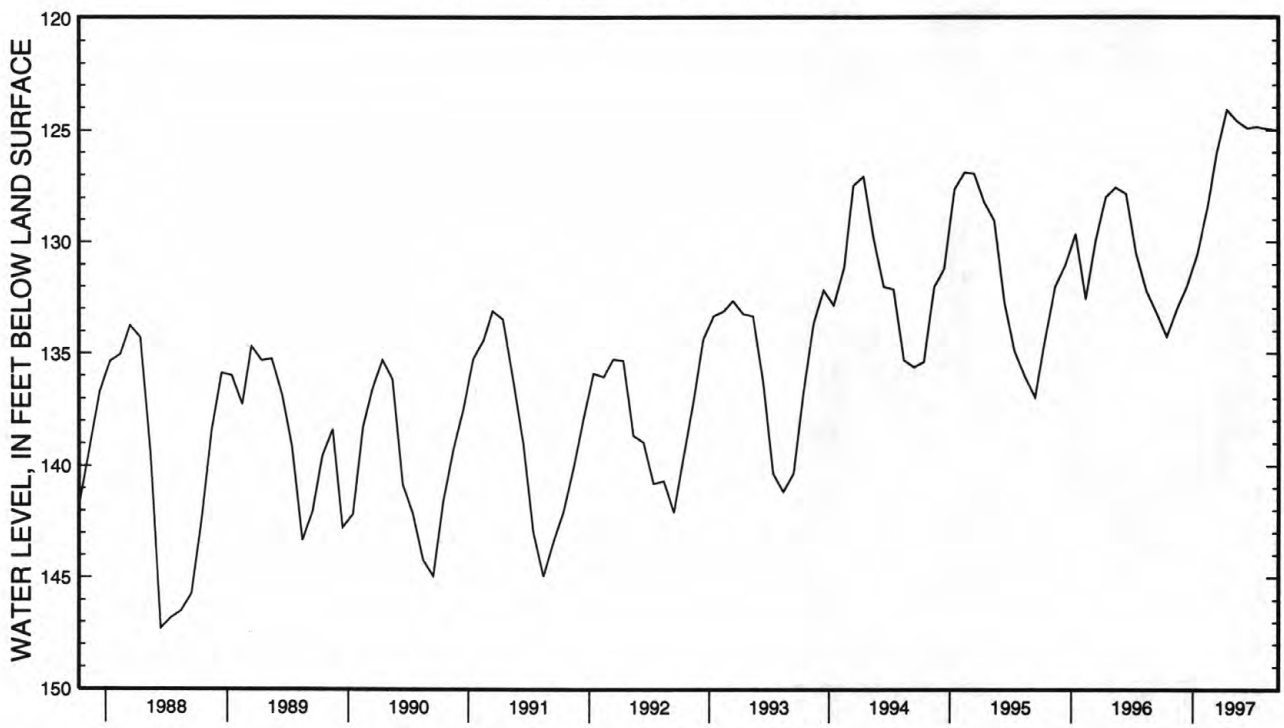
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.65 ft below land-surface datum, Apr. 3, 1933; lowest, 147.31 ft below land-surface datum, June 30, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	133.56	---	---	128.29	127.91	125.61	122.82	122.18	123.92	---	---	---
10	131.26	---	---	128.54	127.29	125.83	123.66	123.07	123.63	---	---	---
15	131.33	---	---	129.62	126.54	124.68	123.94	122.61	124.01	---	---	---
20	---	---	---	128.93	126.44	123.52	123.93	124.62	124.80	---	---	---
EOM	---	---	---	128.60	126.20	122.25	122.45	124.39	124.46	---	---	---

WTR YR 1997 HIGHEST 121.63 MAY 07, 1997 LOWEST 134.29 OCT 01, 1996

LOWEST MONTHLY WATER LEVEL



GROUND-WATER LEVELS

SHELBY COUNTY-Continued

350857089591401. Local number, Sh: P-99.

LOCATION.--Lat 35°08'57", long 89°59'14", Hydrologic Unit 08010210, access road off North Parkway, 0.2 mi south of North Parkway, in Overton Park.
Owner: USGS and Memphis Park Commission.

AQUIFER.--Fluvial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 59 ft, cased to 53 ft, screened 53 to 59 ft.

INSTRUMENTATION.--Water level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 271.06 ft above sea level. Measuring point: Top of casing, 2.50 ft above land-surface datum.

REMARKS.--Water levels affected by climatic changes. Missing record May 13 to June 1, recorder vandalized. Records good.

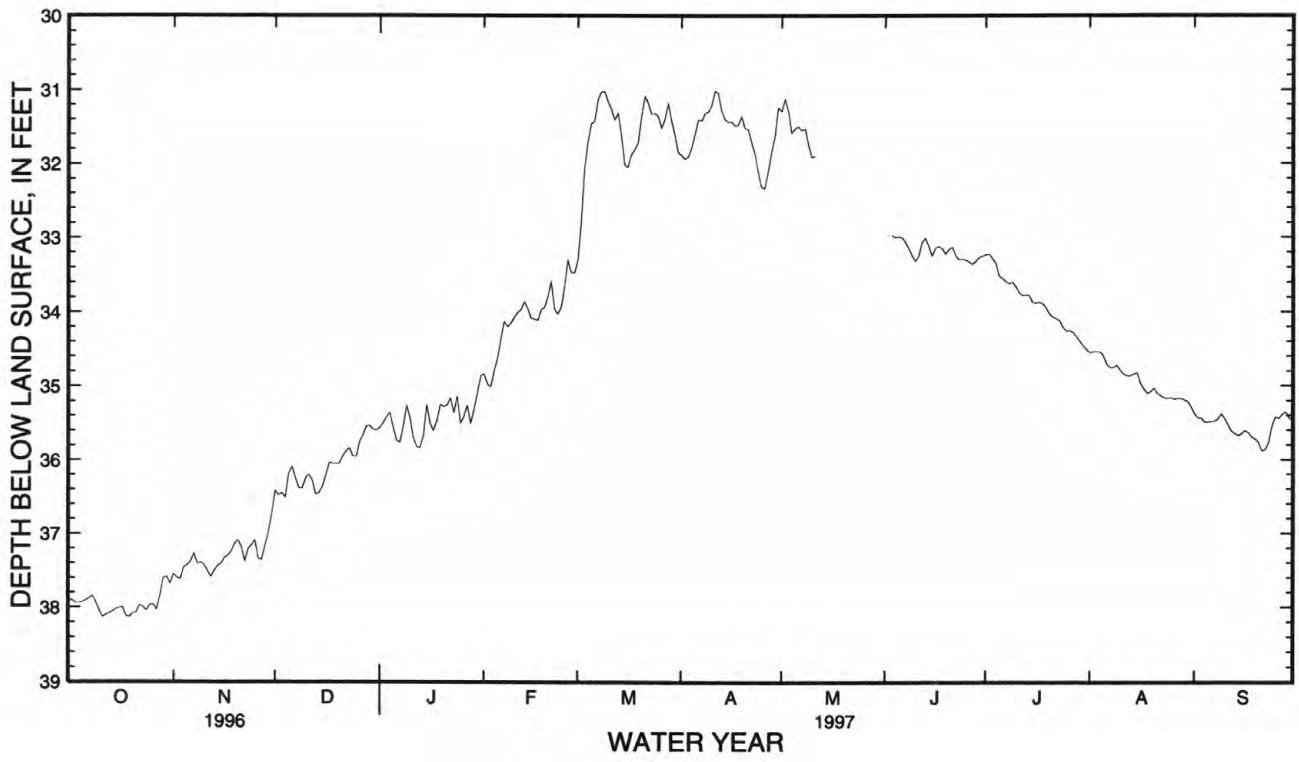
PERIOD OF RECORD.--July 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.27 ft below land-surface datum, April 30, 1991; lowest 42.58 ft below land-surface datum, November 15, 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.95	37.45	36.35	35.67	34.75	31.54	31.69	31.59	33.00	33.55	34.65	35.51
10	38.10	37.46	36.32	35.64	34.09	31.20	31.28	31.96	33.33	33.70	34.82	35.47
15	38.04	37.44	36.37	35.50	34.12	32.08	31.48	---	33.29	33.89	34.86	35.67
20	38.08	37.11	36.05	35.29	33.91	31.58	31.56	---	33.19	34.06	35.05	35.85
25	38.02	37.21	36.01	35.57	33.85	31.49	32.41	---	33.33	34.27	35.17	35.45
EOM	37.73	36.83	35.60	34.99	33.54	31.89	31.43	---	33.27	34.52	35.32	35.51

WTR YR 1997 HIGHEST 30.92 APR 11, 1997 LOWEST 38.18 OCT 18, 1996



GROUND-WATER LEVELS

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.--Memphis 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 -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 330.40 ft above sea level. Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for municipal and industrial water supply in the Memphis area. Records good.

PERIOD OF RECORD.--October 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 74.08 ft below land-surface datum, December 27, 1940; lowest 110.80 ft below land-surface datum, September 13, 1996.

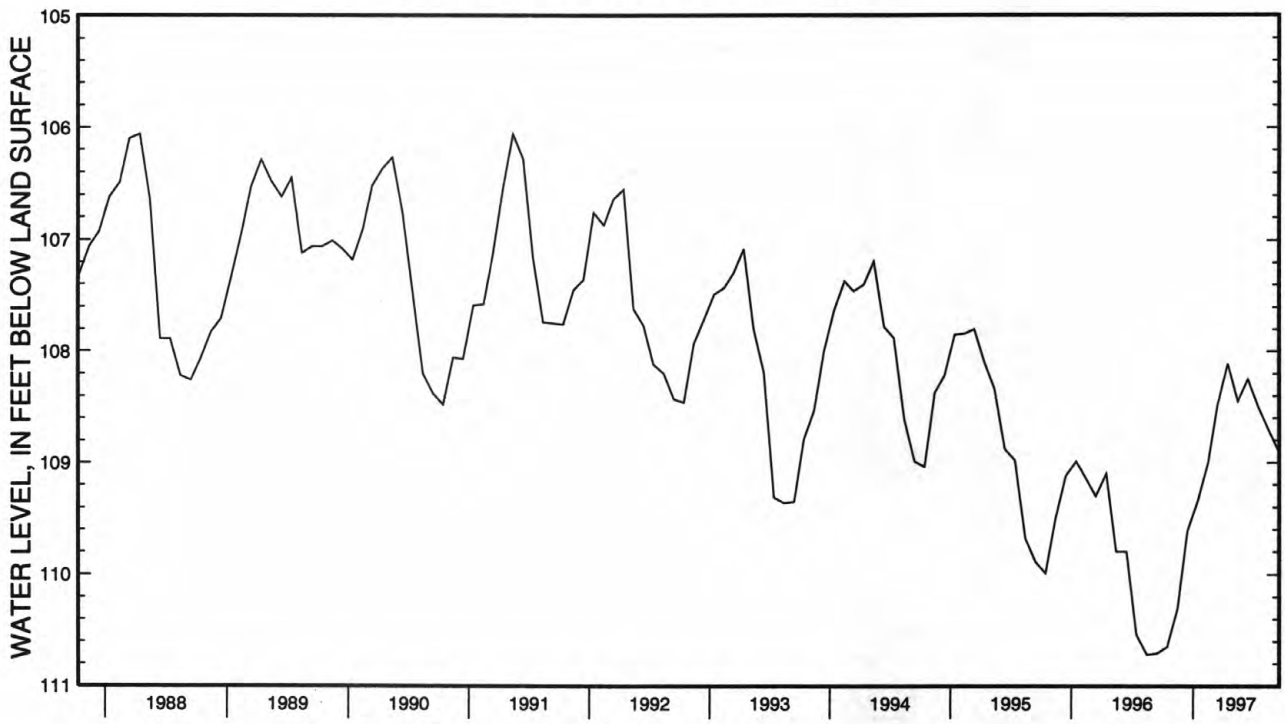
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	110.40	110.10	109.56	108.93	109.04	108.40	107.73	108.07	108.00	108.25	108.60	108.77
10	110.50	110.00	109.42	108.88	108.88	108.25	108.04	108.16	108.25	108.34	108.53	108.47
15	110.40	109.90	109.40	109.14	108.75	108.35	107.93	108.02	108.10	108.29	108.39	108.72
20	110.40	109.50	109.40	108.93	108.55	108.06	107.58	108.23	108.04	108.32	108.56	108.85
25	110.40	109.50	109.33	109.00	108.73	108.00	107.98	108.17	108.29	108.35	108.66	108.46
EOM	110.30	109.31	109.11	108.86	108.32	108.08	107.82	108.02	107.88	108.53	108.66	108.54

WTR YR 1997 HIGHEST 107.50 APR 21, 1997 LOWEST 110.70 OCT 13, 1996

LOWEST MONTHLY WATER LEVEL



PERIODIC MEASUREMENTS OF 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.--Fort Pillow 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.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 317.50 ft above sea level. 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, 88.95 ft below land-surface datum, Nov. 29, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	88.16	OCT 30	87.92	NOV 25	87.71	JAN 02	88.25	JAN 29	87.52	FEB 26	87.10
MAR 31	87.03	APR 29	86.74	JUN 03	86.90	JUL 02	87.08	AUG 01	87.63	AUG 28	87.91
SEP 29	88.38										

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.--Memphis 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.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 317.20 ft above sea level. 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, 39.10 ft below land-surface datum, March 31, 1997; lowest measured, 41.75 ft below land-surface datum, Oct. 4, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	40.52	OCT 30	40.39	NOV 25	40.11	JAN 02	40.05	JAN 29	39.84	FEB 26	39.26
MAR 31	39.10	APR 29	38.80	JUN 03	38.86	JUL 02	38.86	AUG 01	39.19	AUG 28	39.22
SEP 29	39.30										

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

SHELBY COUNTY

350514089553700. Local number, Sh:K-75.

LOCATION.--Lat 35°05'14", long 89°55'37", Hydrologic Unit 08010211, at Willowview Avenue and Getwell Road, at 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.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 260 ft above sea level, from topographic map. 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 September 1994 water-level recorder, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.28 ft below land-surface datum, Apr. 2, 1950; lowest, 52.03 ft below land-surface datum, Jan. 13, 1988; highest water level measured, 47.03 ft below land surface-datum, June 30, 1997; lowest measured, 49.08 ft below land-surface datum, Jan. 2, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	48.86	OCT 30	49.01	NOV 25	48.84	JAN 02	49.08	JAN 30	48.56	FEB 27	48.64
APR 02	48.15	MAY 01	48.50	JUN 02	47.36	JUN 30	47.03	JUL 31	46.80	AUG 29	46.68
SEP 30	46.63										

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, at Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Memphis 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.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 228.70 ft above sea level. Measuring point: Top of casing, 4.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for municipal and industrial water supply in the Memphis area.

PERIOD OF RECORD.--September 1940 to current year. Analog record September 1940 to January 1992, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.65 ft below land-surface datum, Sept. 3, 1940; lowest, 68.82 ft below land-surface datum, Aug. 24, 1988; highest water level measured, 50.16 ft below land-surface datum, Mar. 29, 1994; lowest measured, 63.03 ft below land-surface datum, Sept. 25, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	62.52	OCT 31	61.47	NOV 26	60.37	JAN 03	58.91	JAN 30	59.55	FEB 26	57.29
MAR 31	51.75	APR 29	53.84	JUN 03	54.57	JUN 30	53.10	JUL 30	57.80	AUG 28	58.30
SEP 30	59.16										

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

SHELBY COUNTY--Continued

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.--Fort Pillow 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.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 264.20 ft above sea level. Measuring point: Top of casing, 0.60 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for municipal and industrial water supply at Millington and 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, 84.67 ft below land-surface datum, Sept. 30, 1997.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	82.45	OCT 31	81.83	NOV 26	82.03	JAN 03	80.52	JAN 30	80.84	FEB 26	80.57
MAR 31	79.14	APR 29	80.12	JUN 03	80.70	JUN 30	81.02	JUL 30	82.7O	AUG 28	83.83
SEP 30	84.67										

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.--Memphis 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.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 268.76 ft above sea level. Measuring point: Top of casing, 1.60 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for municipal and industrial water supply at Millington and Memphis.

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, 63.74 ft below land-surface datum, Sept. 1, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	60.75	OCT 31	60.52	NOV 26	60.08	JAN 03	59.22	JAN 30	59.02	FEB 26	58.04
MAR 31	55.05	APR 29	55.44	JUN 03	55.90	JUN 30	55.13	JUL 30	56.90	AUG 28	57.64
SEP 30	58.14										

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

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.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 712 ft above sea level, from topographic map. 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 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	91.19	NOV 14	91.51	JAN 13	91.74	FEB 21	91.00
APR 3	91.34	JUL 17	90.97				

CRITTENDEN COUNTY, AR

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.--Memphis 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.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 211 ft above sea level, from topographic map. Measuring point: Inside top of shelter base plate, 3.30 ft above land-surface datum.

REMARKS.--Well affected by pumpage in the Memphis, Tennessee area. Records good.

PERIOD OF RECORD.--May 1983 to current year. Analog record from May 1983 to October 1995, periodic measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.28 ft below land-surface datum, May 30, 31, 1983; lowest, 31.71 ft below land-surface datum, Sept. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	26.51	OCT 31	26.08	NOV 26	25.60	JAN 03	24.08	JAN 30	23.33	FEB 27	22.50
APR 01	18.60	MAY 02	19.76	JUN 02	20.12	JUL 01	20.64	JUL 31	23.24	AUG 29	24.99
SEP 30	26.30										

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

350446090013500 - SH:J-154 MLGW-ALLEN

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
SEP 25...	1245	17.5	1028	80020	140	6.2	49	48	11

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)
SEP 25...	4.9	8.5	0.5	28	1.0	3.3	2.2	<0.10	12

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)
SEP 25...	66	<3.0	750	13	<10	<1	<1.0	50	<6

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	DEPTH OF WELL, TOTAL (FEET) (72008)
SEP 25...	<5	<4	<1	77	83	0.10	370.00

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

350642089555000 - SH:K-142 MLGW 99 SHEAHAN WELL FIELD

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
SEP 26...	1230	17.5	1028	80020	111	6.1	33	34	7.7

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)
SEP 26...	3.5	9.5	0.7	38	0.63	4.5	5.6	<0.10	14

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)
SEP 26...	22	<3	110	11	<10	<1	<1.0	21	<6

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	ELEV. OF LAND SURFACE DATUM (FT.) ABOVE NGVD) (72000)
SEP 26...	<5	<4	<1	69	72	0.09	278

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

350218089511701 - SH:L-36

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
SEP 25...	1400	18.5	1028	80020	89	6.3	30	36	9.0	3.2	3.3

DATE	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)
SEP 25...	0.2	16	0.41	1.3	2.4	<0.10	9.5	13	<3	120	3.7	<10

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)
SEP 25...	<1	<1.0	16	<6	<5	<4	<1	54	54	0.07

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

350507089482401 - SH:L-90-GERMANTOWN 7

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)
SEP 24...	1100	17.5	1028	80020	82	6.1	24	<0.015	<0.010

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS DISSOLVED (MG/L AS P (00666	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
SEP 24...	<0.139	<0.010	<0.010	23	5.4	2.2	7.7	0.7

DATE	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)
SEP 24...	42	0.55	4.9	2.3	<0.10	12	20	<3	6.6	<1.3	<10

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	DIBROMOMETHANE WATER WHOLE RECOVER (UG/L) (30217)	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)
SEP 24...	<1	<1.0	16	<6	<5	<4	<1	<0.2	<0.2	<0.2	<0.2

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

350507089482401 - SH:L-90-GERMANTOWN 7--Continued

DATE	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)
SEP 24...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2

DATE	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	BENZENE O-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)
SEP 24...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.20

DATE	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
SEP 24...		<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	53	55

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	STYRENE TOTAL (UG/L) (77128)	1,1-DI CHLORO-PRO-PENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI CHLORO-PRO-PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L) (77173)	PSEUDO-CUMENE WATER UNFLTRD REC (UG/L) (77222)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)
SEP 24...	0.07	360	304.00	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20

350507089482401 - SH:L-90-GERMANTOWN 7--Continued

DATE	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO-WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L) (77353)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L) (77562)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L) (77613)
SEP 04...	<0.20	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20

DATE	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL ETHER TERT-BUTYL WAT UNF REC (UG/L) (78032)	XYLENE WATER UNFLTRD REC (UG/L) (81551)	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	ETHANE 12DICL SURROG S2090 UNFLTRD REC PERCENT (99832)	TOLUENE D8 SURROG S2090 UNFLTRD REC PERCENT (99833)	BENZENE 14BRFL-SURROG S2090 UNFLTRD REC PERCENT (99834)
SEP 04...	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0	100	99	93

350449089480501 - SH:L-92-GERMANTOWN 9

DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	ALKA-LINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
SEP 24...	1545	17.5	1028	80020	65	6.0	21	<0.015	<0.010

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	HARD-NESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
SEP 24...	<0.010	<0.010	17	4.1	1.6	6.4	0.7

350449089480501 - SH:L-92-GERMANTOWN 9--Continued

DATE	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SiO_2) (00955)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)
SEP 24...	44	0.44	3.2	1.7	<0.10	12	14	<3	4.9	<1	<10

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	DI BROMOMETHANE WATER WHOLE RECOVER (UG/L) (30217)	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)
SEP 24...	<1	<1.0	12	<6	<5	<4	<1	<0.2	<0.2	<0.2	<0.2

DATE	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	ETHYLBENZENE TOTAL (UG/L) (34371)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)	METHYLENE CHLORIDE TOTAL (UG/L) (34423)
SEP 24...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2

DATE	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRACHLOROWAT UNF REC (UG/L) (34516)	BENZENE O-CHLOROWATER UNFLTRD REC (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHENE TOTAL (UG/L) (34546)	BENZENE 1,2,4-TRICHLOROWAT UNF REC (UG/L) (34551)
SEP 24...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.20

350449089480501 - SH:L-92-GERMANTOWN 9--Continued

DATE	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
SEP 24...	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	46	46

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	STYRENE TOTAL (UG/L) (77128)	1,1-DI CHLORO-PRO-PENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI CHLORO-PRO-PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L) (77173)	BENZENE 124-TRI METHYL UNFLT RECOVER (UG/L) (77222)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)
SEP 24...	0.06	380	309.00	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20

DATE	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO-WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L) (77353)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L) (77562)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L) (77613)
SEP 24...	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20

DATE	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL ETHER TERT-BUTYL WAT UNF REC (UG/L) (78032)	XYLENE WATER UNFLTRD REC (UG/L) (81551)	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	ETHANE 12DICL SURROG S2090 UNFLTRD REC PERCENT (99832)	TOLUENE D8 SURROG S2090 UNFLTRD REC PERCENT (99833)	BENZENE 14BRFL-SURROG S2090 UNFLTRD REC PERCENT (99834)
SEP 24...	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0	97	100	93

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

350917090012000 - SH:O-231 MLGW-MALLORY

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
SEP 26...	1115	17.5	1028	80020	141	6.1	49	53	12

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)
SEP 26...	5.7	8.2	0.5	25	0.75	2.1	2.8	<0.10	14

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)
SEP 26...	57	<3	880	12	<10	<1	<1.0	50	<6

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	DEPTH OF WELL, TOTAL (FEET) (72008)
SEP 05...	<5	<4	<1	83	86	0.11	518.0

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

351420089570900 - SH:P-131

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
SEP 26...	0930	18.0	1028	80020	126	6.1	43	43	10

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)
SEP 26...	4.2	7.8	0.5	28	1.0	2.5	3.7	<0.10	10

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)
SEP 26...	56	3.7	870	14	<10	<1	<1.0	53	<6

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
SEP 26...	<5	<4	<1	71	74	0.10	247

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

351109089512901 - SH:Q-40

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
SEP 24...	1435	17.5	1028	80020	119	6.1	37	39	8.9	4.0	7.9

DATE	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)
SEP 24...	0.6	30	0.79	4.6	6.8	<0.10	12	54	5.2	1200	18	<10

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)
SEP 24...	<1	<1.0	37	<6	<5	<4	<1	66	72	0.09

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

SHELBY COUNTY

350835089434100 - SH:R-29

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	ALKALINITY WAT WH TOT IT FIELD MG/L AS $CACO_3$ (00419)	HARDNESS TOTAL (MG/L AS $CACO_3$) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
SEP 24...	1330	18.5	1028	80020	50	5.9	17	15	3.8

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO_2) (00955)
SEP 24...	1.4	3.9	0.4	35	0.41	1.8	1.3	<0.10	9.8

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	COBALT, DISSOLVED (UG/L AS CO) (01035)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)
SEP 24...	8	<3	19	2	<10	<1	<1.0	8.7	<6

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
SEP 24...	<5	<4	<1	35	36	0.05	315

CHEMICAL QUALITY OF PRECIPITATION

00441400 HATCHIE NATIONAL WILDLIFE REFUGE RAIN GAGE AT HILLVILLE, TN

(NATIONAL TRENDS NETWORK)

LOCATION.--Lat 35°28'08", long 89°10'14", Haywood County, Hydrologic Unit 08010208, 0.9 mi north of Hillville, 12 mi southeast of Brownsville.

PERIOD OF RECORD.--October 1984 to current year.

INSTRUMENTATION.--An automatic wet-dry precipitation collector is used to collect 7-day accumulations. The collector is equipped with a precipitation sensor which activates a motor to operate the sample bucket cover. The sample bucket remains uncovered for the duration of each precipitation event and covered during dry periods. Dryfall samples are not collected. A standard 8.0-inch recording rain gage is used to obtain on-site precipitation records.

REMARKS.--These data are part of the data for this site verified by the National Atmospheric Deposition Program/National Trends Network (NADP/NTN) Coordinator. Additional data are available from the NADP/NTN Coordinator, Natural Resource Ecology Laboratory, Fort Collins, Co. 80523. Finalized, quality assured data from all 200 NADP/NTN sites are available on-line via the internet at http://btdqs.usgs.gov/acidrain

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Tennessee have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Red Boiling Spring at Red Boiling Springs (d)	03312250	USGS		1986
Crabapple Branch near La Follette (d)	03403718	USGS	1.07	1981-84
Indian Fork above Braytown (d)	03407804	USGS	4.32	1975-78
Green Branch near Hembree (d)	03407874	USGS	1.38	1976-78
Smoky Creek above Hembree (361240084245800) (d)	034078745	USGS	8.07	1982-83
Bills Branch near Hembree (d)	03407875	USGS	.67	1975-83
Shack Creek at Hembree (361341084253900) (d)	034078755	USGS	5.08	1982-84
Smoky Creek near Hembree (d)	03407876	USGS	17.2	1977-84
Bowling Branch above Smoky Junction (d)	03407877	USGS	2.19	1976-81
Anderson Branch near Montgomery (d)	03407881	USGS	.69	1976-80
Lowe Branch near Montgomery (d)	03407882	USGS	.92	1975-80
New River at Cordell (d)	03407908	USGS	198	10/75-77, 5/77-12/87
New River near New River (d)	03408000	USGS	314	1923-35
Long Branch near Grimsley (d)	03408600	USGS	1.11	1976-81
Crooked Creek tributary near Allardt (d)	03408810	USGS	.25	1976-79
Crooked Creek near Allardt (d)	03408815	USGS	3.62	1976-81
White Oak Creek at Sunbright (d)	03409000*	USGS	13.5	1932-33
White Oak Creek at Rugby (d)	03409400	USGS	98.0	1980-82
East Branch Bear Creek near Oneida (d)	03409700	USGS		1994-95
East Branch Bear Creek Tributary near Oneida (d)	03409710	FUSGS		1994-95
Pine Creek tributary at Oneida (d)	03410000	USGS	1.21	1932-33
South Fork Cumberland River at Leatherwood Ford (d)	03410210	USGS	806	1983-87
West Fork Obey River near Alpine (d)	03415000	USGS	115	1943-71, 1980-81
Obey River near Byrdstown (d)	03415500	USGS	445	1919-43
Obey River below Dale Hollow Dam (d)	03417000	USGS	936	1939-42, 1945-58
Roaring River near Hilham (d)	03418000	USGS	78.7	1932-75
Roaring River near Gainesboro (d)	03418188	USGS	276	1975
Caney Fork at Clifty (d)	03418500	USGS	111	1931-49
Bee Creek at Herbert (d)	03419000	USGS	101	1931-37
Calfkiller River at Sparta (d)	03419500	USGS	157	1932-41
Calfkiller River below Sparta (d)	03420000	USGS	175	1940-71
Collins River at Beersheba Springs (d)	03420185	USGS	157	1994-95
Collins River near Tarlton (d)	03420200	USGS	174	1994-95
Barren Fork near Trousdale (d)	03420500	USGS	126	1932-57
Collins River near Rowland (d)	03421500	USGS	755	1916-24
Falling Water River near Cookeville (d)	03423000	USGS	67.0	1932-56
Falling Water River below Burgess Falls Dam (d)	03423152	USGS	124	1990-93
Taylor Creek near Cassville (d)	03423400	USGS	34.2	1989-93
Caney Fork below Center Hill Dam, near Lancaster (d)	03424500	USGS	2,183	1923-58
Spring Creek near Lebanon (d)	03425500	USGS	35.3	1955-61
Town Creek at Maple Street at Gallatin (d)	03425646	USGS	4.74	1984
Drakes Creek above Hendersonville (d)	03426000	USGS	19.2	1955-61
Cumberland River at Dam 3, near Old Hickory (d)	03426210	USGS	11,688	1931-42, 1947-53
East Fork Stones River at Woodbury (d)	03426800*	USGS	39.1	1932-33, 1950, 1954, 1962-89
Bradley Creek at Lascassas (d)	03427000	USGS	37.0	1955-61
Bushman Creek at Pitts Lane Ford near Compton (d)	03427690	USGS	9.67	1989-92
West Fork Stones River near Murfreesboro (d)	03428000	USGS	128	1932-69
Lytle Creek at Sanbyrn Drive at Murfreesboro (d)	03428043	USGS	17.6	1990-92

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Fox Camp Spring at Mankinville (d)	03428047	USGS		1978-80
West Fork Stones River at Manson Pike, at Murfreesboro (d)	03428070	USGS	165	1973-81
Stones River near Smyrna (d)	03429000	USGS	571	1925-67
Stewart Creek near Smyrna (Smyrna Airport) (d)	03429500	USGS	69.7	1953-58
Stones River below J. Percy Priest Dam (d)	03430100	USGS	892	1939-67
Collins Creek at Bell Road, near Antioch (d)	03430800	USGS	3.61	1976-77
Mill Creek near Antioch (d)	03431000	USGS	64.0	1954-61, 1964-75
Browns Creek at State Fairgrounds, at Nashville (d)	03431300	USGS	11.8	1964-75
Cumberland River at Nashville (d)	03431500	USGS	12,856	1893-54
Cummings Branch at Lickton (d)	03431517	USGS	2.40	1976-90
Whites Creek at Tucker Road, near Bordeaux (d)	03431600	USGS	51.6	1965-75
Richland Creek at Charlotte Ave, at Nashville (d)	03431700	USGS	24.3	1964-90
West Harpeth River near Leipers Fork (d)	03432500	USGS	66.9	1955-61
Red River near Portland (d)	03435030	USGS	15.1	1967-75
Red River near Adams (d)	03435500	USGS	706	1920-69
Sulphur Fork Red River near Adams (d)	03436000	USGS	186	1938-91
Piney River at Ft. Campbell, KY-TN (d)	03436420	USGS	50.2	1993-96
Little West Fork near Ft. Campbell, KY-TN (d)	03436426	USGS	128	1993-96
Cumberland River at Clarksville (lock C) (d)	03436500	USGS	15,897	1925-44
Yellow Creek near Shiloh (d)	03436700*	USGS	124	1958-80
Cumberland River at Dover (gaging station) (d)	03437000	USGS	16,437	1938-65
French Broad River near Newport (d)	03455000	TVA	1,858	1900 1901 1902-05, 1907 1920-94
Pigeon River at Hartford (d)	03461000	USGS	547	1925-48
Cosby Creek above Cosby (d)	03461200	USGS	10.1	1967-87
Pigeon River at Newport (d)	03461500	USGS	666	1900-29, 1945-46, 1948-82,
		TVA		1982-83
North Indian Creek near Unicoi (d)	03465000	USGS	15.9	1944-57
Muddy Fork near Leesburg (d)	03465830	USGS	13.5	1994-95
Jockey Creek near Mount Bethel Church near Limestone (d)	03466098	USGS	18.5	1994-95
Nolichucky River below Nolichucky Dam (d) (e)	03466500	USGS	1,184	1902-09, 1919-26, 1946-73
Lick Creek near Holland Mill (d)	03466825	USGS	53.0	1994-95
Lick Creek at Mohawk (d)	03467000	USGS	220	1946-71
Nolichucky River near Morristown (d)	03467500	USGS	1,679	1921-57
Long Creek near White Pine (d)	03468050	TVA	30.8	1964-81
French Broad River below Douglas Dam (d)	03469000	USGS	4,543	1919-74
Millican Creek near Douglas Dam (d)	03469010	TVA	4.22	1942-62
Roaring Fork Creek at Hwy 441, at Gatlinburg (d)	03469282	TVA	7.23	1977-82
Dudley Creek at Gatlinburg (d)	03469390	TVA	8.84	1977-82
West Prong Little Pigeon River near Pigeon Forge (d)	03469500	USGS	76.2	1946-49
		TVA		1967-69
Little Pigeon River at Sevierville (d)	03470000	USGS	353	1921-82
South Fork Holston River below South Holston Dam (d)	03476500	USGS	703	1951-74
South Fork Holston River at Bluff City (d)	03477000	USGS	813	1900-53
Beaver Creek at Bristol (d)	03478500	USGS	44.8	1932-34
Beaver Creek at Buffalo School, near Bluff City (d)	03478620	TVA	108	1934-38
Watauga River at North Carolina-Tennessee State Line (d)	03479500	USGS	152	1943-55

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Watauga River at Stump Knob (d)	03480000	USGS	171	1928-31, 1934-45
Roan Creek near Neva (d)	03482000	USGS	102	1942-55
Roan Creek at Butler (d)	03482500	USGS	166	1901-02, 1934-48
Watauga River at Butler (d)	03483000	USGS	427	1900-02, 1921-48
Watauga River below Wilbur Dam (d)	03484000	USGS	471	1903-09, 1948-82
Watauga River at Siam (d)	03484110	TVA	480	1946
Doe River at Old Hopson School (d)	03484490	TVA	59.3	1967-69
Doe River at Blevins (d)	03484500	USGS	60.8	1912-15
Laurel Fork above Braemar (d)	03484900	TVA	23.0	1945-51
Laurel Fork above Hampton (d)	03484910	TVA	25.3	1948-52
Doe River at Elizabethton (d)	03485500	USGS	137	1912-16, 1921-82
Watauga River at Elizabethton (d)	03486000	USGS	692	1926-49, 1953-82
Buffalo Creek at Milligan College (d)	03486200	TVA	28.1	1965-81
Brush Creek at Johnson City (Tennessee Street) (d)	03486490	TVA	6.78	1969-73
Brush Creek at Johnson City (Elm Street) (d)	03486495	TVA	9.58	1969-72
Brush Creek at Johnson City (d)	03486500	USGS	10.3	1932-34
Fall Creek near Fort Patrick Henry Dam (d)	03486900	TVA	13.1	1953-56
South Fork Holston River at Kingsport (d)	03487500	USGS	1,935	1926-77
South Fork Holston River at Kingsport (auxiliary channel) (d)	03487501	USGS	1.0	1953-77
Reedy Creek at Orebank (d)	03487550*	USGS	36.3	1963-89
South Fork Holston River near Ridgefields Bridge, at Kingsport (d)	03487640	TVA	2,047	1968-69
Holston River at Surgoinsville (d)	03490500	USGS	2,874	1941-88
Beech Creek at Kepler (d)	03491300	USGS	47.0	1965-87
Holston River near Rogersville (d)	03491500	USGS	3,035	1901-42
Poor Valley Creek near Mooresburg (near Spruce Pine School) (d)	03491800	USGS	32.3	1958-61
Poor Valley Creek near Mooresburg (d)	03491820	TVA	43.3	1959-60
Holston River near Morristown (d)	03492000	USGS	3,244	1937-42
Mossy Spring near Jefferson City (d)	03492500	USGS		1950-59
Mossy Creek at Jefferson City (d)	03493000	USGS	30.8	1932-34
Holston River near Jefferson City (d)	03494000	USGS	3,429	1937-74
Mill Spring near Jefferson City (d)	03494500	TVA		1941-48
		USGS		1951-59
Holston River near Knoxville (d)	03495500	USGS	3,747	1930-76, 1978-93
First Creek at Mineral Springs Avenue, at Knoxville (d)	03496000	USGS	15.7	1945-63
First Creek above Powers Avenue, at Knoxville (d)	03496200	USGS	17.2	1964-70
First Creek at Fifth Avenue, at Knoxville (d)	03496500	USGS	21.1	1932-34, 1945-59
Tennessee River at Knoxville (Gay Street Bridge) (d)	03497000	USGS	8,934	1900-82
Fourth Creek at Knoxville (d)	03497110	TVA	9.65	1942-43
Little River at Walland (d)	03497500	USGS	175	1925-31
Little River near Walland (d)	03498000	USGS	192	1931-52
Pistol Creek at Maryville (d)	03499000	USGS	13.5	1932-33
Little River below Rockford Dam, at Rockford (d)	03499100	TVA	346	1940-44
Little River near Rockford (d)	03499110	TVA	352	1936-37
Ten Mile Creek near Ebenezer (d)	03499200	TVA	13.2	1941-45
Muddy Creek near Fort Loudon Dam (d)	03499600	TVA	10.7	1941-59
Little Tennessee River at Calderwood (d)	03518000	USGS	1,862	1912-19, 1921-57
Little Tennessee River below Chilhowee Dam (d)	03518300	USGS	1,987	1958-79

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
North Fork Citico Creek near Tellico Plains (d)	03518400	TVA	7.04	1960-71
Tellico River at Tellico Plains (d)	03518500	USGS	118	1925-82
Little Tennessee River at McGhee (d)	03519500	USGS	2,443	1905-69
Baker Creek near Greenback (d)	03519640*	USGS	16.0	1966-75
Tennessee River at Loudon (d)	03520000	USGS	12,220	1923-55
Sweetwater Creek below Sweetwater (d)	03520045	TVA	26.4	1970-81
Sweetwater Creek near Sweetwater (d)	03520050	TVA	28.2	1964-70
Big Sycamore Creek near Sneedville (d)	03528100	TVA	5.49	1935-45
Big Barren Creek near New Tazewell (d)	03528300	TVA	22.5	1935-45
White Creek near Sharps Chapel (d)	03528400	TVA	2.68	1935-72
Powell River near Arthur (d)	03532000	USGS	685	1920-82
Davis Creek near Speedwell (d)	03532100	TVA	31.2	1936-37
Big Creek near La Follette (d)	03532220	TVA	26.2	1936-38
Clinch River below Norris Dam (d)	03533000	USGS	2,913	1904-74
Clear Creek near Norris (d)	03533100	TVA	2.83	1934-38
Coal Creek at Lake City (d)	03534000*	USGS	24.5	1932-34
Buffalo Creek at Norris (d)	03534500	USGS	9.92	1947-51
Bullrun Creek near Halls Crossroads (d)	03535000	USGS	68.5	1957-86
Scarboro Creek Tributary near Haw Ridge near Oak Ridge (d)	03535102	USGS	0.41	1989-91
Scarboro Creek Tributary near Oak Ridge (d)	03535103	USGS	0.41	1989-91
Whiteoak Creek near Melton Hill (d)	03536320	USGS	1.31	1987-95
Whiteoak Creek near Wheat (d)	03536380	USGS	2.10	1986-95
Northwest Tributary near Oak Ridge (d)	03536440	USGS	0.67	1987-95
First Creek near Oak Ridge (d)	03536450	USGS	0.33	1987-96
Whiteoak Creek at ORNL, near Oak Ridge (d)	03536500	USGS	2.08	1950-55
Whiteoak Creek below Melton Valley Drive near Oak Ridge (d)	03536550	USGS	3.28	1987-96
Whiteoak Creek below ORNL, near Oak Ridge (d)	03537000	USGS	3.62	1950-53, 1955-64
Melton Branch tributary (East Seven) near Oak Ridge (d)	03537050	USGS	.24	1987-91, 1992-93
Melton Branch near Melton Hill, near Oak Ridge (d)	03537100	USGS	0.52	1985-95
Melton Branch tributary (Center Seven) near Oak Ridge (d)	03537200	USGS	.07	1987-91, 1992-93
Melton Branch tributary (West Seven) near Oak Ridge (d)	03537300	USGS	.15	1987-89, 1992-93
Melton Branch near Oak Ridge (d)	03537500	USGS	1.48	1955-64
Whiteoak Creek at Whiteoak Dam, near Oak Ridge (d)	03538000	USGS	6.01	1953-55, 1960-64
Clinch River near Oak Ridge (d)	03538150	USGS	3,385	1937-64, 1968
Poplar Creek near Oak Ridge (d)	03538225	USGS	82.5	1960-89
East Fork Poplar Creek at Y-12 at Oak Ridge (d)	03538231	USGS	0.81	1992-96
East Fork Poplar Creek near Oak Ridge (d)	03538250	USGS	19.5	1960-88
Bear Creek at Bear Creek Road near Oak Ridge (d)	03538256	USGS	0.42	1993-96
Bear Creek at County Line near Oak Roidge (d)	03538260	USGS	1.57	1993-96
Bear Creek tributary above Bear Creek Road near Wheat (d)	035382672	USGS	.30	1986-91
Bear Creek near Wheat (d)	035382673	USGS	3.20	1986-91
Bear Creek tributary near Wheat (d)	035382677	USGS	.14	1986-89, 1992-93
Bear Creek tributary at Hwy 95 near Wheat (d)	03538272	USGS	.14	1986-89
Bear Creek at Pine Ridge near Wheat (d)	03538273	USGS	5.0	1986-91
Bear Creek near Oak Ridge (d)	03538275	USGS	7.15	1960-64
Emory River near Wartburg (d)	03538500	USGS	83.2	1934-57, 1966-68

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Obed River at Crossville (d)	03538600	USGS	12.0	1950-51, 1955-85, 1991-95
Daddys Creek near Grassy Cove (d)	03539000	USGS	51.2	1925-30
Daddys Creek near Crab Orchard (d)	03539500	USGS	93.5	1931-58
Daddys Creek near Hebbertsburg (d)	03539600	USGS	139	1957-68
Clear Creek near Lancing (d)	03539750	USGS	153	1966-68
Obed River near Lancing (d)	03539800	USGS	518	1956-68, 1973-88
Crooked Fork near Wartburg (d)	03539860	USGS	50.3	1966-68
Emory River at Deermont (d)	03540000	USGS	704	1920-28
Crab Orchard Creek near Deermont (d)	03540100	USGS	33.7	1966-68
Bitter Creek near Oakdale (d)	03541300	USGS	12.6	1967-75
Kingston Creek at Kingston (d)	03541400	TVA	.74	1940-41
Whites Creek near Glen Alice (d)	03541500	USGS	108	1934-55
Whites Creek at Glen Alice (d)	03542000	USGS	120	1931-34
Piney River at Spring City (d)	03542500	USGS	95.9	1927-31
Sewee Creek near Decatur (d)	03543500	USGS	117	1934-94
Tennessee River at Breedenton (d)	03544000	USGS	17,440	1934-40
Richland Creek near Dayton (d)	03544500	USGS	50.2	1927-31, 1934-55, 1979-82
Turtletown Creek at Turtletown (d)	03556000	USGS	26.9	1934-71
Hiwassee River near McFarland (d)	03556500	USGS	1,136	1943-81
Hiwassee River near Reliance (d)	03557000	USGS	1,233	1900-14, 1918-48
Ocoee River at Copperhill (d)	03559500	USGS	352	1903-14, 1943-70
North Potato Creek tributary, Copper Basin area 6, near Ducktown (d)	03560700	TVA	.01	1940-51
Burra-burra Creek tributary, Copper Basin area 5, near Ducktown (d)	03560800	TVA	.02	1940-51
North Potato Creek near Ducktown (d)	03561000	USGS	13.0	1934-70
North Potato Creek tributary No. 2, Copper Basin area 1-W, near Ducktown (d)	03561200	TVA	.01	1942-52
North Potato Creek tributary No. 3, Copper Basin area 1-E, near Ducktown (d)	03561300	TVA	.01	1942-52
Ocoee River at McHarg (d)	03561500	USGS	447	1917-43
Walkertown Branch tributary, Copper Basin area 4, near Ducktown (d)	03561700	TVA	.01	1940-45
Ocoee River tributary, Copper Basin area 3, near Ducktown (d)	03561800	TVA	.01	1940-51
Brush Creek near Ducktown (d)	03562000	USGS	14.4	1934-42
Hiwassee River above Charleston (d)	03565000	USGS	2,001	1954-76
Chestuee Creek above Englewood (d)	03565040	TVA	14.8	1944-57
Little Chestuee Creek below Wilson Station (d)	03565080	TVA	8.54	1947-57
Chestuee Creek at Zion Hill (d)	03565120	TVA	37.8	1944-62
Middle Creek below Hwy 39 near Englewood (d)	03565160	TVA	32.7	1944-62
Chestuee Creek near Athens (d)	03565200	TVA	77.9	1944-54
Chestuee Creek at Dentville (d)	03565250	USGS	114	1944-62
South Chestuee Creek near Benton (d)	03565300	USGS	31.8	1957-86
Oostanaula Creek near Sanford (d)	03565500	USGS	57.0	1954-89
Oostanaula Creek near Calhoun (d)	03565700	TVA	67.0	1940-44
Wolftever Creek near Ooltewah (d)	03566420*	USGS	18.8	1964-89
Long Savannah Creek near Snow Hill (d)	03566450	TVA	28.3	1939-44
North Chickamauga Creek at Upper Mill, near Hixson (d)	03566600	TVA	99.5	1937-43
North Chickamauga Creek near Hixson (d)	03566630	TVA	114	1937-43

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
South Chickamauga Creek near Chickamauga (d)	03567500	TVA	428	1928-78, 1980-94
South Chickamauga Creek near McCarty (d)	03567600	TVA	458	1937-45
Sequatchie River near College Station (d)	03570650	USGS	154	1966-68
Sequatchie River near Whitwell (d)	03571000	TVA	402	1920-94
Little Sequatchie River at Sequatchie (d)	03571500*	USGS	116	1932-34
Tennessee River at South Pittsburg (d)	03571850	USGS	22,640	1930-87
Elk River near Pelham (d)	03578000	USGS	65.6	1952-88
Bradley Creek Tributary at AEDC near Manchedster	03578455	USGS		1993-96
Bradley Creek near Prairie Plains (d)	03578500	USGS	41.3	1952-60
Brumalow Creek at AEDC near Manchester (d)	03578600	USGS		1993-96
Rowland Creek at AEDC near Manchester (d)	03578970	USGS		1994-96
Elk River near Estill Springs (d)	03579100	USGS	275	1921-81
Rock Creek at Tullahoma (d)	03579620	USGS	12.3	1991-96
Boiling Fork Creek south of Cowan (d)	03580000	USGS	20.2	1932
Boiling Fork Creek above Winchester (d)	03580300	USGS	55.9	1962-70
Boiling Fork Creek at Winchester (d)	03580500	USGS	77.1	1932-34
Elk River below Tims Ford Dam (d)	03580750	USGS	534	1966-76
Jack Daniel Spring at Lynchburg (d)	03580990	USGS		1970-78
East Fork Mulberry Creek below Jack Daniel Distillery at Lynchburg (d)	03580995	USGS	23.4	1987-94
East Fork Mulberry Creek at Lynchburg (d)	03581000	USGS	23.1	1932
East Fork Mulberry Creek near Lynchburg (d)	03581100	TVA	29.5	1967-69
East Fork Mulberry Creek near Mulberry (d)	03581200	TVA	49.4	1967-69
West Fork Mulberry Creek near Booneville at Mt. Herman (d)	03581400	TVA	17.4	1967-69
West Fork Mulberry Creek at Mulberry (d)	03581500	USGS	41.2	1954-62, 1966-68
Elk River above Fayetteville (d)	03582000	USGS	827	1934-82
Union Branch below Belleville (d)	03582140	USGS	2.37	1977
Elk River near Fayetteville (d)	03582500	USGS	897	1926-34
Bradshaw Creek at Frankewing (d)	03583000	USGS	36.5	1955-61, 1966-68
Richland Creek near Cornersville (d)	03583300*	USGS	47.5	1961-68
Factory Creek (head of Big Creek) near Campbellsville (d)	03583330	USGS	38.2	1966-68
Yokley Creek near Campbellsville (d)	03583360	USGS	20.2	1966-68
Weakley Creek near Bodenham (d)	03583500	USGS	24.4	1955-61, 1966-68
Richland Creek near Pulaski (d)	03584000	USGS	366	1934-75
Elk River at Prospect (d)	03584600	USGS	1805	1904-08, 1919-94
Shoal Creek at Lawrenceburg (d)	03588000	USGS	55.4	1932-34, 1967-91
Chisholm Creek at Westpoint (d)	03588400	USGS	43.0	1962-88
Shoal Creek at Iron City (d)	03588500	USGS	348	1925-94
Snake Creek near Adamsville (d)	03593300	TVA	49.4	1940-59
Holland Creek near Lowryville (d)	03593700	TVA	14.9	1965-78
Horse Creek near Savannah (d)	03594000	USGS	114	1929-34
Turkey Creek near Savannah (d)	03594040	TVA	53.7	1940-59
White Oak Creek near Milledgeville (d)	03594058	TVA	46.1	1940-59
White Oak Creek at Milledgeville (d)	03594110	TVA	49.2	1961-65
Middleton Creek near Milledgeville (d)	03594120	TVA	45.5	1940-59
Indian Creek near Cerro Gordo (d)	03594160	TVA	201	1940-59
Banjo Branch near Waynesboro (d)	03594164	USGS	2.14	1988-89
Beech River near Lexington (d)	03594415	TVA	15.9	1953-63
Wolf Creek at Graper Springs (d)	03594420	TVA	11.7	1953-55
Pine Tree Branch near Lexington (d)	03594425	TVA	.14	1941-78

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Harmon Creek near Lexington (d)	03594430	TVA	6.87	1953-73
Piney Creek at Hwy 104 near Lexington (d)	03594435	TVA	19.2	1953-55, 1957-73
Cane Creek near Shady Hill (d)	03594437	TVA	20.7	1966-73
Haley Creek near Chesterfield (d)	03594441	TVA	8.30	1953-55
Beech River near Chesterfield (old channel before channelization) (d)	03594445	TVA	11.5	1940-54, 1960-65
Browns Creek near Chesterfield (d)	03594450	TVA	202	1953-63
Cane Creek near Shady Hill (d)	03594455	TVA	16.8	1953-64
Cane Creek near Chesterfield (old channel before channelization) (d)	03594460	TVA	222	1940-54
Beech River near Darden (old channel before channelization) (d)	03594465	TVA	165	1954-60
Flat Creek near Middleburg (d)	03594470	TVA	13.8	1953-55
Big Creek near Darden (d)	03594475	TVA	10.6	1953-55, 1966-73
Turkey Creek near Decaturville (d)	03594480	TVA	8.40	1953-63
Turkey Creek at Middleburg Road, near Decaturville (d)	03594482	TVA	11.5	1964-73
Rushing Creek near Decaturville (d)	03594485	TVA	17.0	1953-55
Tennessee River at Perryville (d)	03594500	USGS	34,550	1931-32
Duck River near Manchester (d)	03595000	USGS	55.2	1932-34
Little Duck River at Manchester (d)	03595500	USGS	40.4	1932-34
Duck River below Manchester (d)	03596000	USGS	107	1934-88
Duck River at Normandy (d)	03596500	USGS	208	1920-31, 1972-75
Garrison Fork at Fairfield (d)	03597000	USGS	66.3	1953-58, 1966-68
Wartrace Creek at Bell Buckle (d)	03597500	USGS	16.3	1953-61, 1966-75
Wartrace Creek at Wartrace (d)	03597600	USGS	36.4	1966-68
Fall Creek near Deason (d)	03598173	USGS	16.4	1994-95
Fall Creek near Halls Mill (d)	03598179	USGS	39.0	1994-95
North Fork Creek near Poplins Crossroad (d)	03598250	USGS	71.9	1994-95
Big Rock Creek at Lewisburg (d)	03599000	USGS	24.9	1953-61, 1966-68
Fountain Creek near Culleoka (d)	03599430	USGS	26.9	1966-68
Fountain Creek near Fountain Heights (d)	03599450	USGS	74.0	1966-68
Rutherford Creek near Carters Creek (d)	03600000	USGS	68.8	1953-58
Rutherford Creek (No. 4) near Columbia (d)	03600100	TVA	112	1948-53
Rutherford Creek (No. 3) near Columbia (d)	03600200	TVA	116	1948-49
Little Bigby Creek at Experiment Lane at Columbia (d)	03600258	USGS	42.6	1990-92
Big Bigby Creek at Sandy Hook (d)	03600500	USGS	17.5	1953-87, 1988-89
Big Bigby Creek near Mount Pleasant (d)	03601000	USGS	25.8	1953-57
Big Bigby Creek at Cross Bridges (d)	03601500	USGS	112	1938-39
Duck River at Centerville (d)	03602000	USGS	2,048	1919-55
Piney River at Vernon (d)	03602500	USGS	193	1925-93
Duck River above Hurricane Mills (d)	03603000	USGS	2,557	1925-94
Hurricane Creek at Hurricane Mills (d)	03603500	USGS	75.1	1932-33
Coon Creek near Hohenwald (d)	03604100	USGS	10.0	1967-74
Buffalo River below Lobelville (d)	03604400	USGS	702	1927-89, 1989-94
Buffalo River near Lobelville (d)	03604500	USGS	707	1987-89
Blue Creek at State Hwy 13 near Waverly (d)	03604600	TVA	24.8	1964-71
Birdsong Creek near Holladay (d)	03604800	TVA	44.9	1940-68
Trace Creek at Waverly (d)	03605500	USGS	20.1	1932-33
Cotton Creek near Camden (d)	03606400	TVA	.43	1941-45

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Big Sandy River at Big Sandy (d)	03607000	USGS	379	1935-44
Clifty Creek at Clifty Creek Road near Paris (d)	03607198	USGS	8.06	1994-95
Holly Fork Creek at Nobles (d)	03607225	USGS	26.8	1994-95
Beaverdam Creek at Sulphur Well Road near Nobles (d)	03607232	USGS	6.69	1994-95
Tennessee River near Buchanan (d)	03607500	USGS	39,730	1930-43
Crooked Creek at Highway 22 near Huntingdon (d)	07024200	USGS	89.8	1994-95
Beaver Creek at Huntingdon (d)	07024300*	USGS	55.5	1946, 1948, 1952-54, 1958-88
Beaver Creek at Hwy 22 Bypass near Huntingdon (d)	07024305	USGS	58.6	1994-96
South Fork Obion River near Greenfield (d)	07024500*	USGS	383	1929-89
Rutherford Fork Obion River near Bradford (d)	07025000	USGS	201	1929-57
North Fork Obion River near Union City (d)	07025500	USGS	480	1929-71, 1989-93
Obion River at U.S. Highway 51 near Obion (d)	07026040	USGS	1,875	1929-1958, 1966-1995
North Reelfoot Creek at State Hwy 22 near Clayton (d)	07026370	USGS	56.3	1980-83, 1984-89
South Reelfoot Creek near Clayton (d)	07026400	USGS	36.6	1984-89
Reelfoot Creek near Samburg (d)	07026500	USGS	110	1951-73
Reelfoot Lake near Phillippy (e)	07026690	USGS	240	1984-88
Indian Creek near Samburg (d)	07026795	USGS	8.01	1982-86
South Fork Forked Deer River at Jackson (d)	07027500	USGS	495	1929-73, 1988-91
South Fork Forked Deer River at Chestnut Bluff (d)	07028000	USGS	1,003	1929-57
North Fork Forked Deer River at Trenton (d)	07028500	USGS	73.5	1950-71
Middle Fork Forked Deer River near Alamo (d)	07029000	USGS	369	1929-73
Hatchie River near Stanton (d)	07030000	USGS	1,975	1929-58
Cane Creek at Three Point (d)	07030137	USGS	79.8	1985-87
Kelly Branch near Clopton (d)	07030245	USGS	7.79	1975-76
Beaver Creek near Arlington (d)	07030250	USGS	148	1994-95
Loosahatchie River tributary at New Allen Road at Memphis (d)	07030295	USGS	1.26	1977-83
Wolf River at Rossville (d)	07030500	USGS	503	1929-72
Marys Creek at Pisgah Road, near Fisherville (d)	07031500	USGS	13.6	1955-57
Fletcher Creek near Cordova (d)	07031680	USGS	1.45	1974-83
Fletcher Creek at Whitten Road at Memphis (d)	07031683	USGS	21.4	1978-82
Unnamed tributary at Charles Bryan Road, near Cordova (d)	07031685	USGS	3.18	1975-77
Lick Creek at Dickinson Street, at Memphis (d)	07031777	USGS	2.96	1975-83
Nonconnah Creek near Germantown (d)	07032200	USGS	68.2	1969-1985, 1985-1995
Johns Creek tributary at Holmes Road, near Memphis (d)	07032222	USGS	5.83	1975-85
Johns Creek at Raines Road, at Memphis (d)	07032224	USGS	19.4	1975-82, 1985
Black Bayou at Southern Avenue, at Memphis (d)	07032241	USGS	.59	1975-83
Cane Creek at East Person Avenue, at Memphis (d)	07032248	USGS	4.98	1975-85
Cypress Creek at Neely Road, at Memphis (d)	07032260	USGS	3.18	1975-85

DISCONTINUED SURFACE-WATER QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1991 water year. Water-quality data (daily or periodic samples with collection frequency not less than quarterly) were collected and published for the period of record shown for each station. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Chief at the address given on the back of the title page of this report.

[Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority.
Type of record: (B) biological, (C) chemical, (S) sediment, (T) temperature.]

Station name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record (water years)
Crabapple Branch near La Follette	03403718	USGS	1.07	C,T	1981-84
Indian Fork above Braytown	03407804	USGS	4.32	C	1975-81
New River at Stainville	03407850	USGS	66.0	C,S	1975-77, 1979-81
Green Branch near Hembree	03407874	USGS	1.38	C,S	1975-81
Smoky Creek above Hembree (361240084245800)	034078745	USGS	8.07	S	1982-83
Bills Branch near Hembree	03407875	USGS	.67	C,S	1975-83
		USGS		C,S,T	1980-83
Shack Creek at Hembree (361341084253900)	034078755	USGS	5.08	C,S,T	1982-84
Smoky Creek at Hembree	03407876	USGS	17.2	S	1978-84
		USGS		C,T	1980-84
Bowling Branch above Smoky Junction	03407877	USGS	2.19	C,S	1975-83
Smoky Creek at Smoky Junction	03407879	USGS	32.8	C,S	1975-77, 1979-81
Anderson Branch near Montgomery	03407881	USGS	.69	C	1975-81
Lowe Branch near Montgomery	03407882	USGS	.92	C	1975-81
New River at Cordell	03407908	USGS	198	C,S	1976-77, 1979-82
New River at New River	03408500	USGS	382	C,T	1977-86
		USGS		C,S	1965-67, 1975-77, 1979-81
Clear Fork near Robbins	03409500	USGS	272	T	1982-86
		USGS		C	1982, 1984-86
		USGS		C,S	1964-65, 1976-77, 1979-82, 1984
South Fork Cumberland River at Leatherwood Ford	03410210	USGS	806	C,S,T	1986
		USGS		C,S	1979-80, 1984-85
Roaring River near Hilham	03418000	USGS	78.7	T	1969-71
Roaring River above Gainesboro	03418070	USGS	210	C,S	1980-83
Collins River near McMinnville	03421000	USGS	640	C,S	1964-67,1979-82
Cumberland River at Carthage	03425000	USGS	10,690	C,T	1975-81
East Fork Stones River near Lascassas	03427500	USGS	262	C,T	1975-1990
West Fork Stones River near Murfreesboro	03428000	USGS	128	C	1964-68
West Fork Stones River at Manson Pike, at Murfreesboro	03428070	USGS	165	C,T	1973-82
West Fork Stones River near Smyrna	03428500	USGS	237	T	1974-1990
Richland Creek at Charlotte Avenue, at Nashville	03431700	USGS	24.3	C,S	1901, 1979-83
Harpeth River near Kingston Springs	03434500	USGS	681	C,S	1979-83
Sulphur Fork Red River near Greenbrier	03435637	USGS	34.9	T	1976-78
Sulphur Fork Red River above Beaverdam Creek, near Springfield	03435700	USGS	49.1	T	1975-77
Sulphur Fork Red River above Springfield	03435770	USGS	65.6	C,S	1976-83
Sulphur Fork Red River near Adams	03436000	USGS	186	C,S	1964, 1979-83
Red River at Port Royal	03436100	USGS	935	C,S	1979-83
Boiling Springs at Ft. Campbell, KY-TN	03436421	USGS		C,T	1994-96
Yellow Creek near Shiloh	03436700	USGS	124	C,S	1964-65, 1979-81
French Broad River below Hot Springs, NC	03454757	USGS	1,712	C	1970-73
French Broad River near Newport	03455000	TVA	1,858	C	1946-47, 1960-61, 1969-70, 1974-75, 1979-80
Muddy Fork near Leesburg	03465830	USGS	13.5	C,S,T	1993-95
Nolichucky River at Embreeville	03465500	USGS	805	C,S	1979-82

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority.
Type of record: (B) biological, (C) chemical, (S) sediment, (T) temperature.]

Station name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record
Jockey Creek near Mount Bethel Church near Limestone	03466098	USGS	18.5	C,S,T	1993-95
Nolichucky River below Nolichucky Dam	03466500	TVA	1,184	C	1974-79
		TVA		T	1962
Lick Creek near Holland Mill	03466825	USGS	53.0	C,S,T	1993-95
French Broad River at Douglas Dam (tailwater)	03468510	TVA	4,541	C	1975-80
Little Pigeon River at Sevierville	03470000	TVA	353	C	1967-68, 1970
		TVA		T	1969-74
		USGS		C,S	1979-82
French Broad River near Knoxville	03470500	USGS	5,101	C,T	1975-82
		USGS		B,C,S,T	1975-86
South Fork Holston River at South Holston Dam	03476010	TVA	703	C	1975-80
Watauga River at Stump Knob	03480000	TVA	171	T	1962
Elk River at Elk Mills	03481450	TVA	74.0	C	1975-76
Roan Creek near Doeville	03482100	TVA	110	T	1962, 1971-74
		TVA		C	1975-76
Watauga River below Watauga Dam	03483950	TVA	468	C	1973, 1975-80
Doe River at Hampton	03484800	TVA	100	T	1968-73
Doe River at Elizabethton	03485500	TVA	137	C	1967-68, 1971
		TVA		T	1954-63
		USGS		C,S	1979-82
South Fork Holston River at Boone Dam (tailwater)	03486810	TVA	1,840	C	1975-78
South Fork Holston River at Ft. Patrick Henry Dam	03487010	TVA	1,903	C	1975-80
Reedy Creek at Orebank	03487550	TVA	36.3	T	1964-66
		TVA		C	1964-67
		USGS		C,S	1979-82
Holston River near Church Hill	03490350	TVA	2,819	C	1974-78
Holston River at Surgoinsville	03490500	USGS	2,874	T	1975-82
		TVA		C	1974-80
Big Creek near Rogersville	03491000	USGS	47.3	T	1972-75, 1977-79
Beech Creek at Kepler	03491300	TVA	47.0	T	1966-68
Holston River near Rogersville	03491500	TVA	3,035	T	1966-75
Holston River at Cherokee Dam (tailwater)	03493510	TVA	3,428	C	1975-80
Holston River near Knoxville	03495500	USGS	3,747	C,B,S	1977-93
First Creek above Powers Avenue, at Knoxville	03496200	USGS	17.2	T	1969-71
Tennessee River below Knoxville	03497100	TVA	8,963	T	1970-80
Little River above Townsend	03497300	USGS	106	T	1964-82
		USGS		C	1982
Little River near Maryville	03498500	TVA	269	C	1967-68
		USGS		C,S	1979-82
Tennessee River at Fort Loudon Dam (tailwater)	03499510	TVA	9,550	C	1975-80
Little Tennessee River at Calderwood Dam	03518210	TVA	1,977	C	1977-80
Little Tennessee River below Chilhowee Dam	03518300	TVA	1,987	T	1964-78
Tellico River at Tellico Plains	03518500	TVA	118	T	1964-78
		TVA		C	1969-70, 1973-76
		USGS		C,S	1979-82
Little Tennessee River at McGhee	03519500	TVA	2,443	T	1963
Little Tennessee River near Centersville	03519740	TVA		T	1976-79
Clinch River above Tazewell	03528000	TVA	1,474	T	1962-66, 1971-75
		TVA		C	1971-80
Powell River near Arthur	03532000	TVA	685	C,S	1965, 1969-72, 1974-82
		TVA		T	1963-66, 1971-75

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority.
Type of record: (B) biological, (C) chemical, (S) sediment, (T) temperature.]

Station name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record (water years)
Ollis Creek at Ivydell	03532190	TVA	13.3	C	1974-78
Clinch River below Norris Dam	03533000	TVA	2,913	C	1968-70, 1972-80
Clinch River at Coal Creek	03533500	TVA	2,921	T	1976-79
Clinch River near Clinton	03534100	TVA	2,980	C	1971-74, 1977
Clinch River at Edgemoor	03534900	TVA	3,089	C	1969-78
Bullrun Creek near Halls Crossroads	03535000	USGS	68.5	T	1967-74
Clinch River near Eaton Crossroads	03535915	TVA	3,346	T	1963-79
Poplar Creek near Oak Ridge	03538225	USGS	82.5	C,S	1961-65, 1979-81
		USGS		T	1962-65
East Fork Poplar Creek near Oak Ridge	03538250	USGS	19.5	T	1962-68
Bear Creek near Oak Ridge	03538275	USGS	7.15	T	1962-63
Emory River near Wartburg	03538500	TVA	83.2	C	1965-68, 1975-76
Obed River near Lancing	03539800	TVA	518	T	1965-66
		TVA		C	1965-68
Crooked Fork near Wartburg	03539860	TVA	50.3	C	1965-68
		USGS		C,S	1979-81
Crab Orchard Creek near Deermont	03540100	TVA	33.7	C	1966-68
		TVA		T	1967-68
		USGS		C,S	1979-81
Emory River at Oakdale	03540500	TVA	764	C,S	1965-67, 1974-81
Tennessee River at Watts Bar Dam (tailwater)	03543005	USGS	17,310	B,C,S,T	1975-86
		USGS		T,C	1976-81
Richland Creek near Dayton	03544500	TVA	50.2	C	1966-67
		USGS		C,S	1979-82
Hiwassee River near Wetmore	03557050	TVA	1,233	C	1973-74, 1976
Hiwassee River at Patty	03557400	TVA	1,358	T	1976-78
Hiwassee River near Benton	03557405	TVA	1,362	C	1978-80
Ocoee River at Parksville	03564500	TVA	595	C	1971-72, 1976-80
Oostanaula Creek near Sweetwater	03565428	USGS		C,S,T	1993-95
Oostanaula Creek below Johnson Branch near Athens	03565430	USGS		C,S,T	1993-95
Oostanaula Creek near Sanford	03565500	USGS	57.0	C,S	1979-82
Tennessee River at Sequoyah Nuclear Plant	03566404	TVA	20,630	C	1975-78
Tennessee River near Harrison Bay State Park	03566405	TVA	20,650	C	1969-73
Tennessee River at Chickamauga Dam (tailwater)	03566510	TVA	20,790	C	1975-80
Tennessee River at Nickajack Dam (tailwater gage)	03570525	TVA	21,849	C	1975-78
Sequatchie River near Dunlap	03570835	TVA	292	C	1975-78
Sequatchie River near Whitwell	03571000	TVA	402	T	1962-71
		TVA		C	1965, 1970, 1974-75
		USGS		C,S	1979-82
Sequatchie River at Whitwell Waterworks near Whitwell	03571200	TVA	410	C	1975-79
Tennessee River at South Pittsburg	03571850	USGS	22,640	T	1975-82
		USGS		C	1975-79, 1981
		USGS		B,C,S,T	1974-86
Bradley Creek Tributary at AEDC near Manchester	03578455	USGS		T	1993-95
Brumalow Creek at AEDC near Manchester	03578600	USGS		T	1993-95
Rowland Creek at AEDC near Manchester	03578970	USGS		T	1993-95
Elk River near Estill Springs	03579100	TVA	275	C	1974-78
		TVA		T	1971-77
Boiling Fork Creek near Decherd	03580110	TVA	37.7	T	1975-77
Elk River below Tims Ford Dam	03580750	TVA	534	T	1971-79
		TVA		C	1966-67, 1973 1975-80

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority.
Type of record: (B) biological, (C) chemical, (S) sediment, (T) temperature.]

Station name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record (water years)
Elk River above Fayetteville	03582000	TVA	827	C	1974, 1977-80
		USGS		T	1961-64
Elk River at Fayetteville	03582400	TVA	895	T	1976-78
Cane Creek near Fayetteville	03582600	TVA	106	T	1969-73
Richland Creek near Pulaski	03584000	TVA	366	T	1965-73
Elk River near Prospect	03584500	TVA	1,784	T	1961-64
Shoal Creek at Iron City	03588500	TVA	348	C,S	1974-80
		USGS		C,S	1980-83
Tennessee River at Pickwick Landing Dam	03593005	USGS	32,820	C,T	1976-82
Beech River near Chesterfield	03594439	TVA	121	C	1969-71, 1976
Duck River below Manchester	03596000	TVA	107	C	1967-68, 1970-71
		TVA		T	1976-80
		USGS		C,S	1975, 1979-83
Duck River at Normandy	03596500	TVA	208	T	1969-75
Duck River at Shelbyville Waterworks	03597850	TVA	425	C	1975-80
Duck River near Shelbyville	03598000	TVA	481	T	1961-64, 1976-78
Duck River near Columbia	03599460	TVA	1,176	T	1974-82
Duck River at Columbia Waterworks	03599482	TVA	1,195	C	1975-80
Piney River at Vernon	03602500	TVA	193	T	1964-67
Duck River above Hurricane Mills	03603000	TVA	2,557	C	1966-67, 1974-80
		TVA		T	1961-64
Buffalo River near Flat Woods	03604000	TVA	447	T	1964-68
Buffalo River near Lobelville	03604500	TVA	707	T	1961-64
		TVA		C	1967-68, 1973-76
Trace Creek above Denver	03605555	USGS	31.9	C	1979-83
Big Sandy River at Bruceton	03606500	TVA	205	T	1971-78
		TVA		C	1968, 1970-72
		USGS		C,S	1976, 1979-83
North Reelfoot Creek at Clayton	07026360	USGS	54.7	C,S	1982-84
North Reelfoot Creek at State Hwy 22 near Clayton	07026370	USGS	56.3	C,S	1983-89
Obion River at Hwy 51 near Obion	07026040	USGS	1,875	C,S,T	1975-95
South Reelfoot Creek near Clayton	07026400	USGS	38.6	C,S	1984-89
Bayou Du Chien near Walnut Log	07026695	USGS	27.8	C,T	1986-88
Indian Creek near Samburg	07026795	USGS	8.01	C,S	1982-84
Reelfoot Lake Spillway near Tiptonville	07027002	USGS	240	C,T	1975-76, 1986-88
Mosses Creek near Pocahontas	07029410	USGS	47.6	C,S	1961, 1963, 1977-78
Hatchie River near Lacy	07029425	USGS	1,033	C,S	1977-78
Big Muddy Creek at Stanton	07030010	USGS	84.4	C,S	1977-78
Cane Creek at Ripley	07030100	USGS	33.9	S	1985-87
Cane Creek at Three Point	07030137	USGS	79.8	S	1985-87
Loosahatchie River near Arlington	07030240	USGS	262	C,S	1979-82
Wolf River at Rossville	07030500	USGS	503	C	1961, 1963-68
Nonconnah Creek near Germantown	07032200	USGS	68.2	C,S	1979-82

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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

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