

Prepared in cooperation with Alabama Association of Conservation Districts; Alabama Association of Resource Conservation and Development Councils; Alabama Department of Agriculture and Industries; Alabama Department of Conservation and Natural Resources—Division of Wildlife and Freshwater Fisheries; Alabama Department of Economic and Community Affairs—Office of Water Resources Division; Alabama Farmers Federation; Alabama Power; Choctawhatchee, Pea and Yellow Rivers Watershed Management Authority; Geological Survey of Alabama; and The University of Alabama—Water Policy and Law Institute

Low-Flow Frequency and Flow-Duration Characteristics of Selected Alabama Streams Through March 2014

Scientific Investigations Report 2017–5083

**U.S. Department of the Interior
U.S. Geological Survey**

Cover:

Front: Looking upstream from USGS streamgaging station 02399200 Little River near Blue Pond, Alabama, November 2016.
Photograph by Andrew Vanover., USGS.

Back: Pea River at Ariton, Alabama, June 2011. Photograph by Joseph Scott Wallace, USGS.

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By Toby D. Feaster and Kathryn G. Lee

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Conversion Factors

Inch/Pound to International System of Units

Multiply	By	To obtain
Length		
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
Area		
square mile (mi ²)	2.590	square kilometer (km ²)
Volume		
million gallons (Mgal)	3,785	cubic meter (m ³)
cubic foot (ft ³)	0.02832	cubic meter (m ³)
Flow rate		
cubic foot per second (ft ³ /s)	0.02832	cubic meter per second (m ³ /s)
cubic foot per second per square mile [(ft ³ /s)/mi ²]	0.01093	cubic meter per second per square kilometer [(m ³ /s)/km ²]
million gallons per day (Mgal/d)	0.04381	cubic meter per second (m ³ /s)

Temperature in degrees Fahrenheit (°F) may be converted to degrees Celsius (°C) as follows:

$$^{\circ}\text{C} = (^{\circ}\text{F} - 32) / 1.8.$$

Datum

Horizontal coordinate information is referenced to the North American Datum of 1927 (NAD 27) or 1983 (NAD 83).

Elevation, as used in this report, refers to distance above the vertical datum.

Abbreviations

CR	continuous record
CY	climate (or climatic) year
EPA	U.S. Environmental Protection Agency
HUC	hydrologic unit code
LPIII	log-Pearson Type III (mathematical technique)
MOVE.1	Maintenance of Variance Extension, Type 1 (method)
NWIS	National Water Information System
QAQC	quality assurance and quality control
SWSTAT	Surface-Water Statistics (program)
USGS	U.S. Geological Survey

Low-Flow Frequency and Flow-Duration Characteristics of Selected Streams in Alabama Through March 2014

By Toby D. Feaster and Kathryn G. Lee

Abstract

Low-flow statistics are needed by water-resource engineers, planners, and managers to protect and manage the water resources of Alabama. The accuracy of these statistics is influenced by such factors as length of record and specific hydrologic conditions measured in those records. As such, it is generally recommended that flow statistics be updated about every 10 years to provide improved and representative low-flow characteristics. The previous investigation of low-flow characteristics for Alabama included data through September 1990. Since that time, Alabama has experienced several historic droughts highlighting the need to update the low-flow characteristics at U.S. Geological Survey streamgaging stations. Consequently, this investigation was undertaken in cooperation with a number of State and local agencies to update low-flow frequency and flow-duration statistics at 210 continuous-record streamgaging stations in Alabama and 67 stations from basins that are shared with surrounding States. The flow characteristics were computed on the basis of available data through March 2014.

Introduction

Information about the low-flow characteristics of Alabama streams is vital for water-resource managers engaged in planning, management, and permitting decisions. Having up-to-date information helps inform decisions such as adequate water for consumptive use, water-quality standards, recreation, and aquatic habitat protection (Alabama Department of Environmental Management, 2012). As part of their responsibility to protect public health and aquatic ecosystems, Alabama State regulatory agencies need accurate and representative streamflow statistics to establish applicable water-quality and water-quantity criteria. Historically, low-flow statistics, such as the annual minimum 7-day average flow likely to occur once every 10 years, have been used by water-resource managers and planners as a threshold for applying the chronic aquatic life criteria for determining waste-load allocations for point sources, total maximum daily loads for streams, and the quantity of water that can safely be

withdrawn from a particular stream (Alabama Department of Environmental Management, 2012). Droughts that occurred in Alabama during the past few decades have heightened awareness of the need for up-to-date statistics for use in making critical water-resources decisions.

Because of the importance of these applications, it is critical to effectively measure and document base-flow records for use in updating low-flow frequency relations on a regular basis, preferably about every 10 years, and especially after periods of extreme low flow, which have occurred in the Southeast in recent years. Low-flow statistics in Alabama have not been updated on a statewide basis since 1990 (Atkins and Pearman, 1994).

Purpose and Scope

The purpose of this report is to present updated low-flow statistics at 210 continuous-record (CR) streamgaging stations in Alabama and 67 CR stations from surrounding States that share river basins with Alabama along with flow-duration statistics for daily mean flows (fig. 1; table 1, p. 28). The scope of the report includes both unregulated and regulated streams. Depending on the length of record available at each CR station, the report presents estimates of annual minimum 1- and 7-day average streamflow with recurrence intervals of 2, 5, 10, 20, and 50 years. In addition, daily mean flow durations for the 5-, 10-, 25-, 50-, 75-, 90-, and 95-percent probabilities of exceedance are presented for these stations.

Previous Studies

Previous reports by Pierce (1959, 1967), Hayes (1978), Bingham (1981), and Atkins and Pearman (1994) describe the low-flow frequency and flow-duration streamflow data for selected streamgaging stations in Alabama. Pierce (1959) presented low-flow frequency and flow-duration data for Alabama streams using data through 1956. Pierce (1967) provided 7-day low-flow statistics and flow-duration data for 208 continuous-record stations using data through September 30, 1963, and low-flow statistics were provided for 285 partial-record stations.

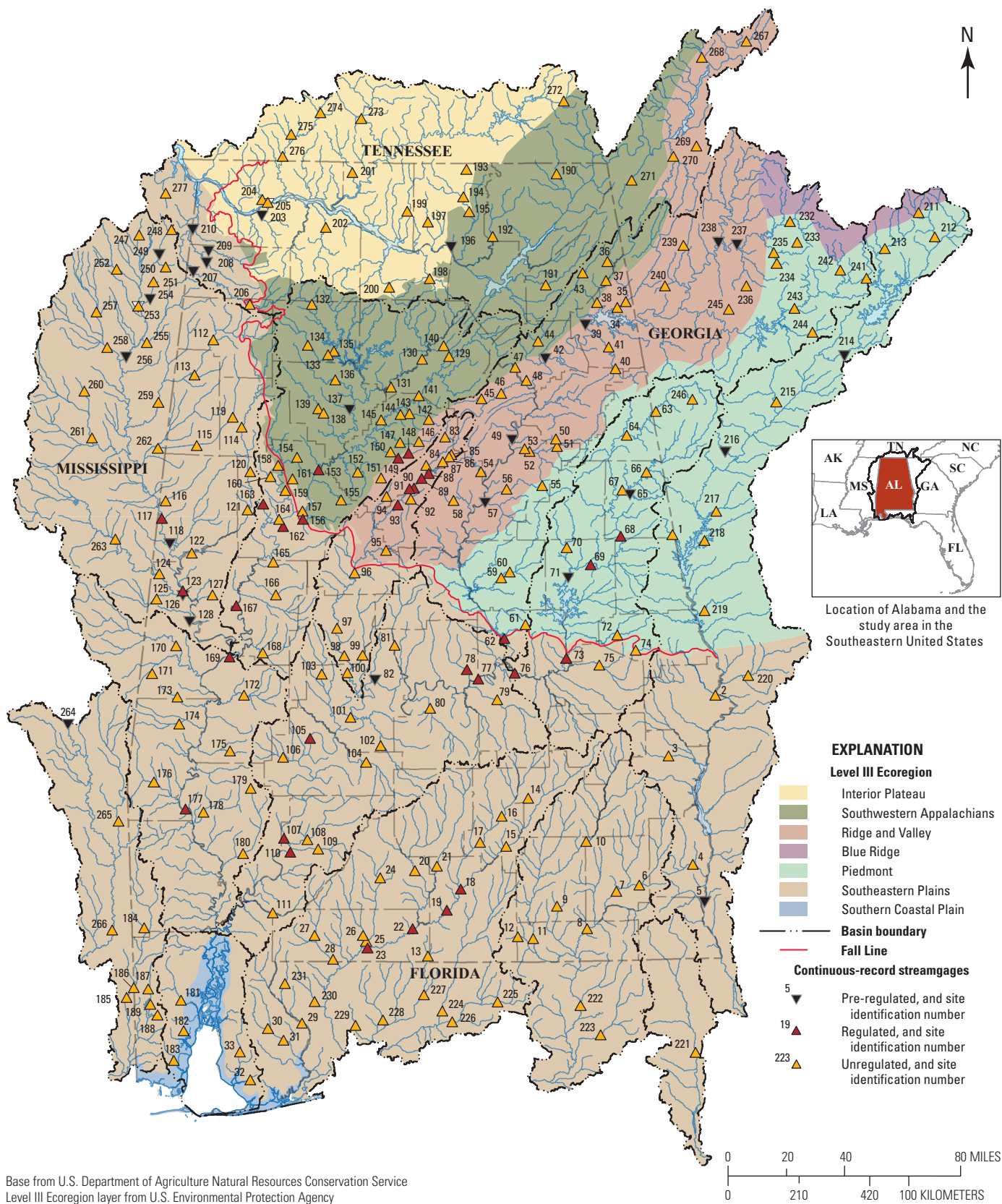


Figure 1. Location of U.S. Geological Survey continuous-record streamgages in Alabama and surrounding States included in this investigation. Pre-regulated sites are currently (2017) regulated but were analyzed for pre-regulation conditions.

Hayes (1978) presented 7-day low-flow statistics and flow-duration data for 527 locations on 341 Alabama streams. Low-flow characteristics for CR streamgaging stations with less than 10 years of record were estimated on the basis of correlations with CR stations having more than 10 years of record. Also, estimates at partial-record stations were made using correlation methods based on data from CR stations. On the basis of data published by Hayes (1978), Bingham (1981) developed regional low-flow equations to estimate the annual minimum 7-day average streamflow with 2- and 10-year recurrence intervals (7Q2 and 7Q10, respectively) at ungaged locations. The equations were based on geology, drainage area, and mean annual precipitation and were applicable statewide.

The most recent low-flow analysis was completed by Atkins and Pearman (1994) who computed low-flow frequency statistics for the 7Q2 and 7Q10 flows and daily flow-duration characteristics using data through September 30, 1990. In their report, 7Q2 and 7Q10 statistics were computed for 144 CR stations with 10 or more years of record, and correlation methods were used to estimate 7Q2 and 7Q10 values for 81 CR stations with less than 10 years of record. In addition, low-flow frequency estimates were made for 447 partial-record stations using correlation techniques.

Description of the Study Area

The State of Alabama encompasses 52,420 square miles (mi²) in the Southeastern United States (U.S. Geological Survey, 2016). The study area encompasses most of the State with the exception of coastal areas where low flows are tidally influenced. The major river basins in Alabama (fig. 2) are the Alabama, Black Warrior, Cahaba, Chattahoochee, Choctawhatchee, Coosa, Escatawpa, Lower Tombigbee, Mobile Bay, Perdido-Escambia, Tallapoosa, Tennessee, and Upper Tombigbee (table 2; Alabama Department of Environmental Management, 2014). For many of Alabama's major rivers, streamflow is regulated by reservoirs and (or) a system of locks and dams (Ruddy and Hitt, 1990; table 1).

Physical Setting

The State of Alabama lies within six U.S. Environmental Protection Agency (EPA) level III ecoregions—Piedmont, Southeastern Plains, Ridge and Valley, Southwestern Appalachians, Interior Plateau, and Southern Coastal Plain (fig. 2; U.S. Environmental Protection Agency, 2016). The ecoregions represent areas of general similarity in ecosystems and type, quality, and quantity of environmental resources, and they provide a spatial framework for research, assessment, management, and monitoring of ecosystems and ecosystem components. The ecoregions were determined from an

analysis of the spatial patterns and the composition of biotic and abiotic phenomena that include geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology (Omernik, 1987).

The Southwestern Appalachians ecoregion extends from Kentucky to Alabama and is composed of open, low mountains containing a mosaic of forest and woodland with some cropland and pasture. The eastern boundary of this ecoregion, along the more abrupt escarpment where it meets the Ridge and Valley ecoregion, is relatively smooth and only slightly notched by small, eastward-flowing streams. The Ridge and Valley is composed of roughly parallel ridges and valleys of various widths, heights, and geologic materials. The western boundary is shared with the Interior Plateau ecoregion, which extends from southern Indiana and Ohio to northern Alabama. Elevations in the Interior Plateau are lower than those in the Southwestern Appalachians to the east. Mississippian to Ordovician-age limestone, chert, sandstone, siltstone, and shale compose the landforms of open hills, irregular plains, and tablelands of the Interior Plateau (Omernik, 1987).

The Piedmont ecoregion, which extends from Alabama to New Jersey, is a transitional area between the mountainous ecoregions of the Appalachians to the northwest and the relatively flat coastal plain to the southeast. The Piedmont is a complex mosaic of metamorphic and igneous rocks of the Precambrian and Paleozoic age and contains moderately dissected irregular plains and some hills. The soils tend to be finer textured than those in the coastal plain. The Piedmont was once a largely cultivated region, but much of it has reverted to pine and hardwood woodlands, with increasing conversion to urban and suburban land cover (Omernik, 1987).

The Fall Line, which extends from Alabama to New Jersey, is a geologic feature that separates the higher elevation Interior Plateau, Southwestern Appalachians, Ridge and Valley, and Piedmont ecoregions from the lower elevation Southeastern Plains ecoregion (fig. 2). The Southeastern Plains ecoregion, which extends from Virginia to Louisiana and Tennessee, is composed of irregular plains made up of a mixture of cropland, pasture, woodland, and forest. The sands, silts, and clays of this ecoregion contrast geologically with the older rocks of the Piedmont ecoregion. Elevations and relief in the Southeastern Plains are greater than in the Southern Coastal Plain but generally are less than in much of the Piedmont. Streams in the Southeastern Plains have relatively low gradient and sandy bottoms. The Southern Coastal Plain ecoregion consists of mostly flat plains but is heterogeneous, containing barrier islands, coastal lagoons, marshes, and swampy lowlands along the Gulf and Atlantic coasts. Relative to the Southeastern Plains ecoregion, the Southern Coastal Plain ecoregion is lower in elevation, with less relief and wetter soils (Omernik, 1987).

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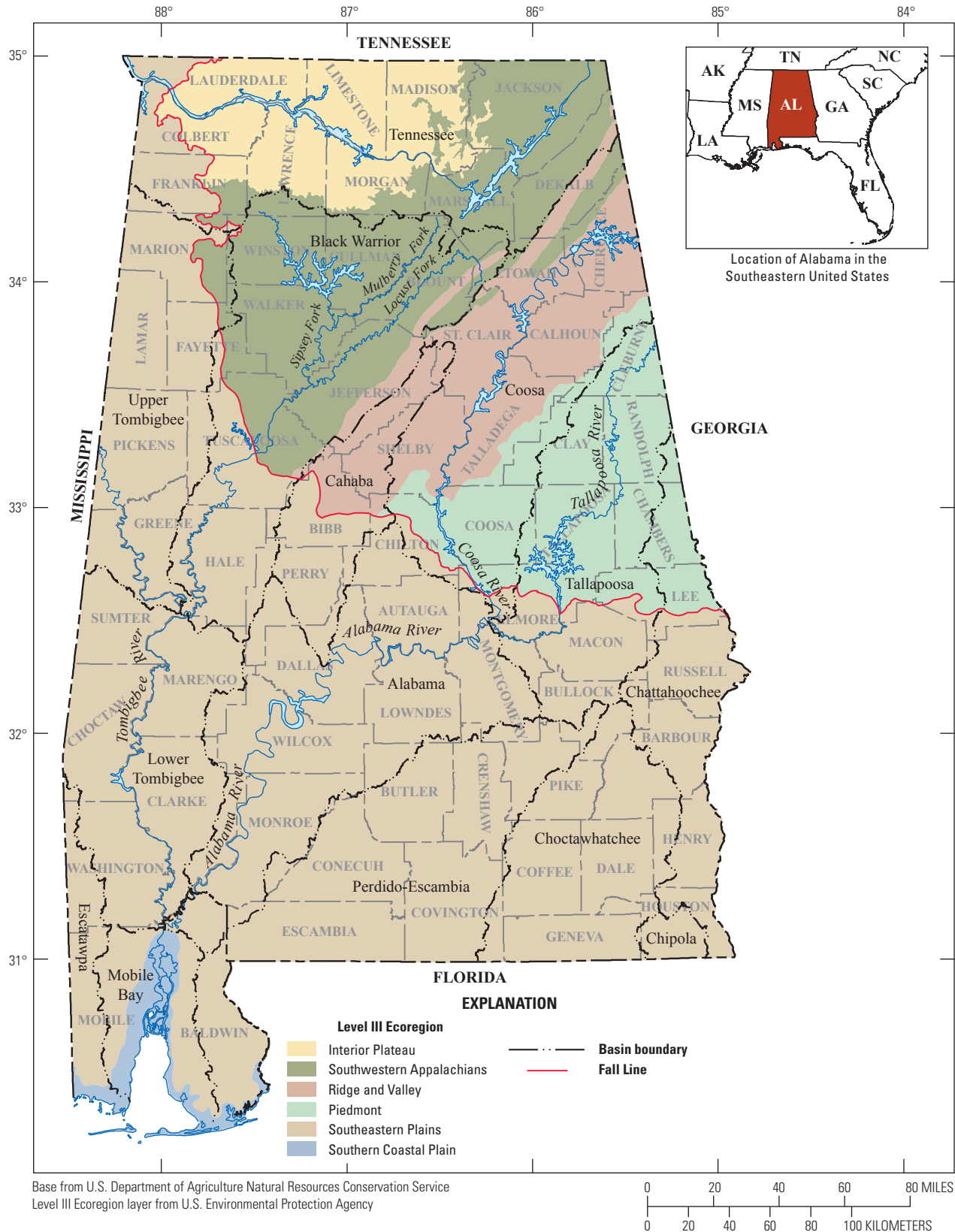


Figure 2. U.S. Environmental Protection Agency Level III ecoregions and major river basins in Alabama (U.S. Environmental Protection Agency, 2016).

Table 2. Major river basins in Alabama.

Major river basin	Drainage area (square miles)	Major tributaries	Level III ecoregions	Major land uses	Major population areas
Alabama	6,012	Coosa River, Tallapoosa River, Cahaba River	Southeastern Plains	Forest, agriculture, open land, urban	Montgomery
Black Warrior	6,274	Mulberry Fork, Locust Fork, Sipsey Fork	Southwestern Appalachians, Ridge and Valley, Southeastern Plains	Forest, agriculture, urban, open land	Metropolitan Birmingham, Tuscaloosa
Cahaba	1,822	Little Cahaba River, Buck Creek, Shades Creek, Shoal Creek	Ridge and Valley, Southeastern Plains	Forest, agriculture, urban	Metropolitan Birmingham
Chattahoochee	2,571	Uchee Creek, Cowikee Creek, Abbie Creek, Omussee Creek	Piedmont, Southeastern Plains	Forest, agriculture	Opelika, Phenix City
Choctawhatchee	3,121	Pea River	Southeastern Plains	Forest, agriculture, urban, open land	Dothan
Coosa	5,394	Chattooga River, Terapin Creek, Big Wills Creek, Choccolocco Creek	Ridge and Valley, Southeastern Plains	Forest, agriculture, open land, urban	Gadsden, Anniston
Escatawpa	1,010	Big Creek	Southeastern Plains	Forest, agriculture	Portion of Citronelle
Lower Tombigbee	4,041	Sucarnoochee River, Okatuppa Creek, Bassetts Creek	Southeastern Plains	Forest, agriculture, open land, urban	Demopolis, Jackson
Mobile Bay	1,840	Chickasaw Creek, Bayou Sara, Cedar Creek	Southeastern Plains, Southern Coastal Plain	Forest, agriculture, open land, urban	Mobile
Perdido-Escambia	5,332	Yellow River, Blackwater River, Conecuh River	Southeastern Plains	Forest, agriculture, open land, urban	Andalusia, Greenville
Tallapoosa	4,037	Little Tallapoosa River, Hillabee Creek, Sougahatchee Creek, Uphabee Creek	Piedmont, Southeastern Plains	Forest, agriculture, open land, urban	Auburn, Opelika
Tennessee	6,821	Bear Creek, Town Creek, Elk River, Flint River, Paint Rock River	Southeastern Plains, Interior Plateau, Southwestern Appalachians	Agriculture, forest, open land, urban	Huntsville, Decatur, Florence
Upper Tombigbee	3,652	Buttahatchee River, Sipsey River	Southeastern Plains, Southwestern Appalachians	Forest, agriculture, open land, urban	Fayette, Hamilton

Climate

The climate of Alabama is characterized by moderate seasonality and is somewhat subtropical near the coast. Summers are typically warm and humid with average high temperatures ranging from 80 to 88 degrees Fahrenheit (°F) (National Oceanic and Atmospheric Administration, 2016a). In the winter, temperatures for most of the State range from 38 to 50 °F during the evening. The average low winter temperatures range from 29 to 35 °F.

Precipitation amounts and patterns are affected by the Gulf of Mexico and the Appalachian Mountains. The principal sources of precipitation are the Gulf of Mexico and the subtropical Atlantic Ocean with a smaller influence from the Pacific Ocean (Paulson and others, 1991). The average statewide total annual precipitation for Alabama for the period 1895 to 2015 was 55.2 inches (fig. 3A; National Oceanic and Atmospheric Administration, 2016b). Regarding statewide average annual precipitation, the 10 driest and wettest years for the period 1895 to 2015 are listed in table 3 and depicted in figure 3B. The second and fourth driest years since 1895 occurred in 2007 and 2000, respectively, highlighting the historic drought periods that occurred since the previous statewide update of low-flow statistics, which included data through September 1990 (Atkins and Pearman, 1994).

A climate normal is defined as the arithmetic average of climatological variables, such as temperature and precipitation, over a 30-year interval and is useful for placing recent climate conditions into a historical context (National Oceanic and Atmospheric Administration, 2017). For the climate normal period 1981 to 2010 (reflecting precipitation from recent decades), statewide average annual precipitation was 55.7 inches as compared to the statewide average total precipitation of 55.2 inches for the long-term period from

1895 to 2015. Across the eight climate divisions, or regions, in Alabama (National Oceanic and Atmospheric Administration, 2016c), regional differences in average annual precipitation from 1895 to 2015 ranged from 52.8 inches in the Prairie region to 62.2 inches in the Gulf region. For the climate normal period 1981 to 2010, the average annual precipitation ranged from 53.3 inches in the Prairie region to 63.2 inches in the Gulf region (fig. 4). These comparisons show that the average annual precipitation for the period 1981 to 2010 was relatively consistent with the long-term average annual precipitation for the period 1895 to 2015 and, in most cases, was slightly higher.

Methods of Analysis for Determining Flow Statistics

Using daily mean streamflow data at USGS streamgages, low-flow statistics can be computed to estimate the magnitude and frequency of low-flow events. Low-flow frequency statistics, as defined in this report, are values of annual minimum daily mean streamflow averaged over designated periods (Riggs, 1972; Note: the use of “average” with respect to the low-flow statistics in this report refers to the arithmetic mean). For example, 7Q10 is one of the most commonly used low-flow statistics and is defined as the annual minimum 7-day average flow with a 10-year recurrence interval (as previously stated). In terms of probability of occurrence, there is a 1 in 10 chance (or 10-percent probability) that the annual minimum 7-day average streamflow in any single year will be equal to or less than the estimated 7Q10 value for a specific location (Riggs, 1968, 1972, 1985).

Table 3. The 10 driest and wettest years for the Alabama statewide average annual precipitation from 1895 to 2015.

Driest			Wettest		
Rank from driest	Year	Statewide average annual precipitation (inches)	Rank from wettest	Year	Statewide average annual precipitation (inches)
1	1954	35.39	1	1929	75.08
2	2007	37.87	2	1975	74.77
3	1904	40.60	3	2009	73.78
4	2000	42.50	4	1983	70.36
5	1931	43.84	5	1961	69.83
6	1968	45.22	6	1979	67.92
7	1914	45.33	7	1948	67.64
8	1921	45.44	8	1973	67.17
9	1930	45.80	9	1912	66.56
10	1981	45.80	10	1964	66.50

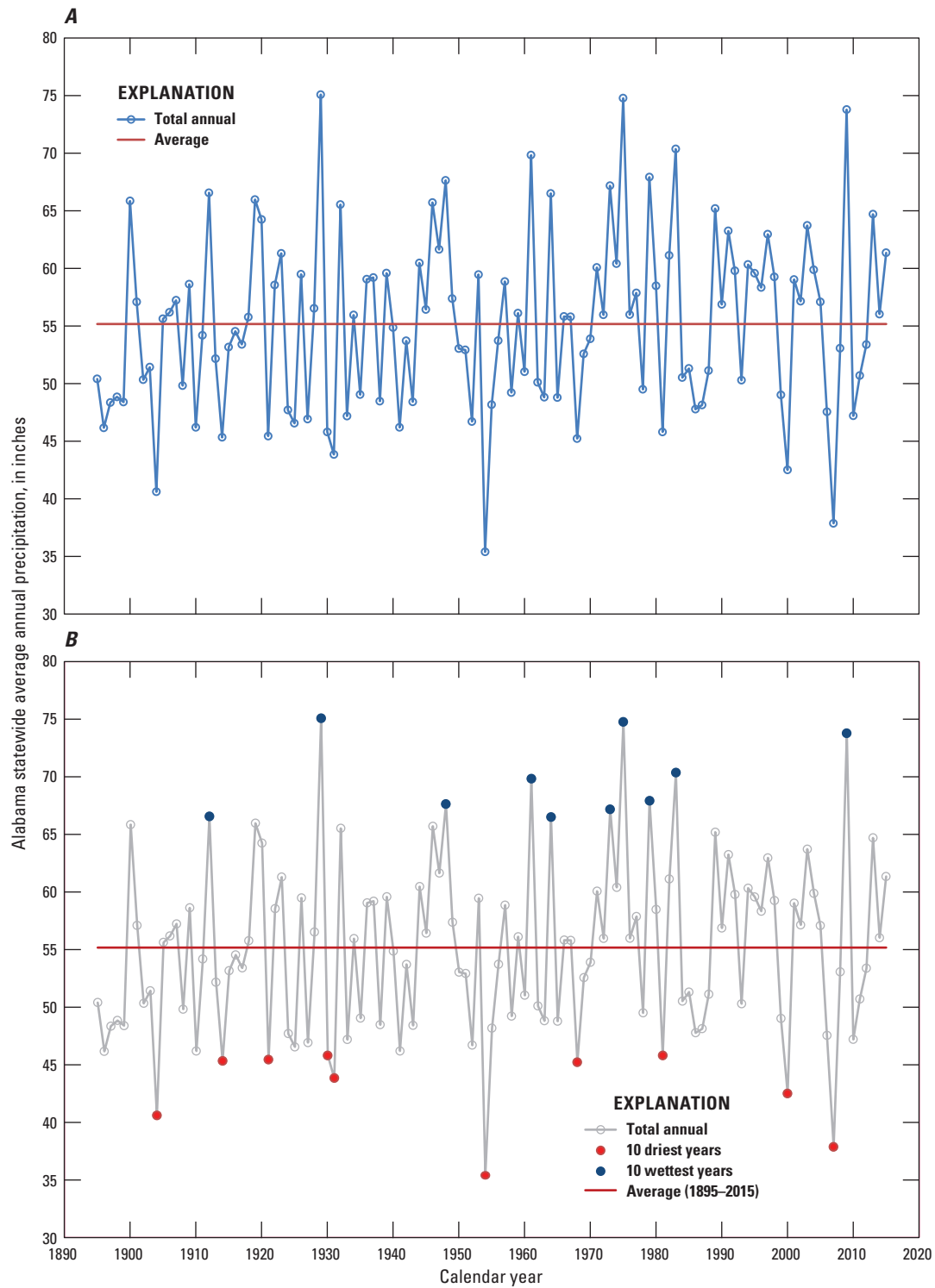


Figure 3. A, Alabama statewide average annual precipitation for the period 1895 to 2015 and B, the 10 driest and wettest years for the same period.

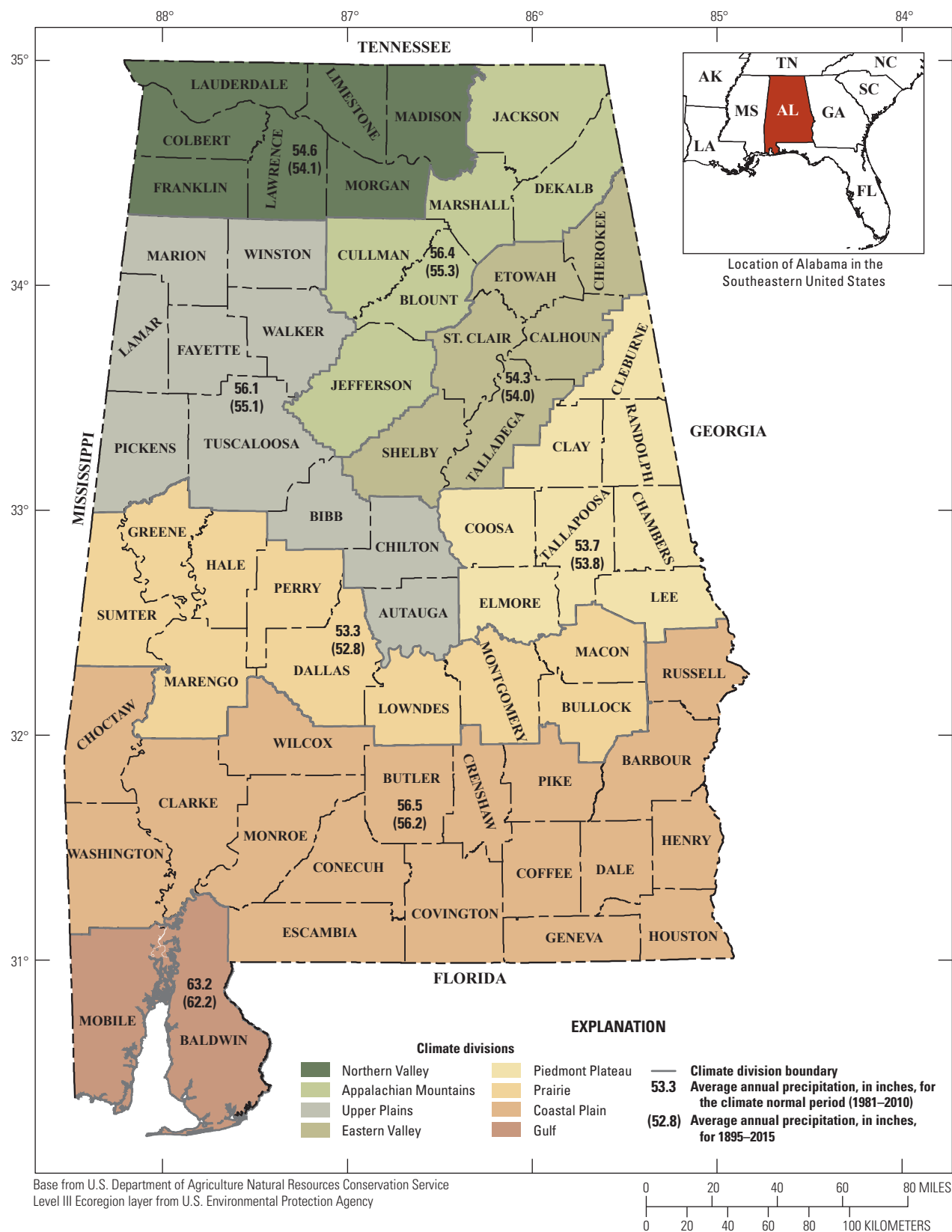


Figure 4. Average annual precipitation in Alabama, by climate division, for the period 1895 to 2015 and the climate normal period 1981 to 2010.

Flow-duration curves are cumulative frequency curves that show the percentage of time during which specified flows were equaled or exceeded during the period of record analyzed (Searcy, 1959). The flow-duration statistics included in this report were computed using daily mean flows at USGS streamgages. Flow-duration curves can be useful for understanding the broad range of flow characteristics of a gaged stream and can be useful for comparisons with other streams. The USGS WaterWatch website (<https://waterwatch.usgs.gov/>) uses flow-duration curves to provide a graphical display of current streamflow conditions at real-time streamgages compared to the long-term flow-duration statistics at a site of interest.

Daily mean streamflow data for this study were compiled from records available through March 31, 2014, which is the end of the 2013 climate year, and are available through web-based retrievals from the National Water Information System (NWIS; U.S. Geological Survey, 2017). The climate (or climatic) year is a continuous 12-month period that contains a complete annual cycle and is arbitrarily selected for the presentation or analysis of data relative to hydrologic or meteorological phenomena (Langbein and Iseri, 1960). The climate year typically is designated by the calendar year during which most of the selected 12 months occur. For this investigation, the climate year is the 12-month period April 1 through March 31, so the 2013 climate year is the period April 1, 2013, through March 31, 2014. In Alabama, minimum streamflows typically occur in the autumn months of September, October, and November and, therefore, use of the climate year, as selected, prevents the annual low-flow cycle from being artificially placed in separate years.

Quality Assurance and Quality Control

For the CR streamgaging stations included in this study, quality assurance and quality control (QAQC) analyses were completed for the annual minimum 7-day average streamflow estimates (Feaster and Guimaraes, 2009, 2012, 2014, 2016; Guimaraes and Feaster, 2010). The data at each station were reviewed for homogeneity, which implies relatively stable basin conditions during the period of record. Kendall's tau test was used to assess the homogeneity of the record at each station (Kendall, 1938; Helsel and Hirsch, 2002). Kendall's tau test provides an independent measure of the monotonic relation between the date and annual minimum 7-day average streamflow. The null hypothesis for this test was that there is no monotonic trend between the two variables as determined from the calculated probability value (p-value). The p-value estimates the probability of rejecting the null hypothesis if the hypothesis were true. In this study, a trend was considered to be statistically significant when the p-value was less than or equal to 0.05, meaning that there was less than a 5-percent chance of obtaining the sample result if the null hypothesis were true. If a trend (nonhomogeneity) was indicated, additional assessments were used to determine if the trend may have been caused by a

short-term condition. For example, if the station record began or ended under extreme conditions (excessively wet or dry), the test may indicate a trend, but excluding the extreme events may eliminate the trend. Trends at unregulated stations may result from changes in climate cycles, land use, groundwater pumping, or other influences that may affect groundwater levels. For stations downstream from a major source of regulation, such as a dam, the data were assessed for gross trends, which may indicate a long-term change in the pattern of regulation (William Kirby, U.S. Geological Survey, written commun., June 6, 2005). Additionally, some investigations have shown that substantial urbanization can lead to a reduction in low flows (U.S. Environmental Protection Agency, 2009). Final decisions to include or exclude data from a specific station analysis were made by using professional judgment based on the results of the QAQC analyses and other available information, such as comparisons with other long-term stations.

The QAQC analyses included the use of several computer programs developed to provide both visual and quantitative assessments (SAS Institute, Inc., 1989). The components of the QAQC reviews that were conducted for the CR stations are as follows:

- By climate year, a plot of the median daily mean flow ratios for the weekend (Saturday and Sunday) to the entire week (Sunday through Saturday), and the work week (Monday through Friday) to the entire week. These plots are especially useful for regulated streams and can show if the discharge patterns differ from week days to weekends, which can indicate variations in regulation patterns.
- As noted previously, Kendall's tau test is used to check for trends in the annual minimum 7-day average streamflow data over time.
- Plot of the annual minimum 7-day average streamflow against climate year, which is used along with the Kendall's tau results to assess potential trends.
- Plot of the relation of the ratio of the 10th percentile to the 50th percentile of the average 7-day flows ($7Q_{10\%}/7Q_{50\%}$) against climate year, which is useful for graphically assessing potential trends.
- Plot of the relation of the 50th percentile of the average 7-day flow against climate year. This plot is useful for assessing potential changes in the median average 7-day flow over time.
- Plot of the cumulative annual minimum 7-day average streamflow against climate year. This type of plot is known as a single-mass curve (Bohman and Patterson, 1993). A substantial change in the slope of this relation indicates a change in flow patterns.

- Single-mass curve plot of the relation of the cumulative $7Q_{10\%}/7Q_{50\%}$ against climate year. A substantial change in the slope of this relation indicates a change in flow patterns.
- Single-mass curve plot of the relation of the cumulative 50th percentile of the average 7-day flow against climate year. A substantial change in the slope of this relation indicates changes in the median average 7-day flow patterns.

Trend analyses, as described previously, were completed for all stations in the investigation using a p-value of 0.05 to determine significance (Kendall, 1938; Helsel and Hirsch, 2002). For the Kendall's tau trend analysis used in this study, the null hypothesis is that there is no trend in the annual minimum 7-day average flow data. Kendall's tau test is based on enumerating concordant (when both the x and y variables increase or decrease) and discordant (when x increases and y decreases or x decreases and y increases) pairs of x and y data (Kendall, 1938). Consequently, when stations have a substantial number of zero flows, causing ties in the pairs of x and y data, interpretation of the trend test can become tenuous at best. For the 277 streamgages analyzed in this investigation, only 12 had $7Q_{10}$ values of zero. Other site-specific findings from the QAQC analyses are noted in the Remarks column in table 1.

Results of Kendall's Tau Analyses for Unregulated Streamgaging Stations

For the annual minimum 7-day average flows at the unregulated streamgaging stations (or stations that are currently (2017) regulated but for which the frequency analysis was based on the unregulated period of record), 139 stations indicated no significant trend, 24 stations indicated a downward trend, and 17 stations indicated an upward trend (table 4, p. 66). Five of the 139 stations (sites 54, 68, 130, 136, and 202) that indicated no significant trend were analyzed for two different periods of record with both periods analyzed indicating no significant trend in the data. Of the 24 stations indicating a downtrend trend, 11 had record lengths less than 30 years. Of the 17 stations indicating an upward trend, 9 had record lengths less than 30 years. The record lengths of the 139 stations that indicated no statistically significant trend ranged from 10 to 85 years with an average of 28 years and a median of 23 years.

As noted previously, interpretations of trend analyses for relatively short records may only reflect a short-term condition and not be representative of an actual long-term change in the system. This is particularly true for relatively short-term records that begin or end in a historically low- or high-flow condition. If these periods include a short-term change and are not reflective of a shift in long-term climate conditions when viewed in terms of longer time frames, any apparent trend may just be part of a much longer term

oscillation (Lins and others, 2010). For example, USGS station 02374500, Murder Creek near Evergreen, AL, is one of the long-term, unregulated stations included in this study having a record length of 76 years. Although a linear regression curve, which was included to provide a visual representation of potential trends, shows a slight downward slope for the period of record from climate year (CY) 1938 to 2013, the Kendall's tau analysis indicated no statistically significant trend (table 4; fig. 5A); however, to show how period of record and hydrologic conditions measured in that record can influence the trend assessment, a trend analysis for various subsets of those data was made. For the 25-year period 1989 to 2013, the analysis indicated a downward trend (tau value of -0.35 with a p-value of 0.013; fig. 5B). An analysis of the 26-year period 1954 to 1979 indicated a statistically significant upward trend (tau value of 0.31 and p-value of less than 0.026; fig. 5C). Yet, a trend analysis of the complete period 1954 to 2013 indicated no significant trend (tau value of -0.096 and p-value of 0.28; fig. 5D). Again, these results emphasize the importance of long-term data-collection programs to accurately assess hydrologic trends.

Results of Kendall's Tau Analyses for Regulated Streamgaging Stations

Interpretations of trend analyses are more complicated for regulated streams. Streamflow at regulated stations also is influenced by changes in climate patterns or basin characteristics; however, those changes can be mitigated, enhanced, or even offset by changes in regulation patterns. Nonetheless, assessments of flow patterns are useful along with other assessments to help determine the appropriateness of a frequency analysis at a regulated station.

Of the 23 stations in which streamflow was influenced by regulated conditions and for which a trend analysis was completed, Kendall's tau results indicated no statistically significant trend at 17 stations, a downward trend at 5 stations, and an upward trend at 1 station (table 4). Regulated flow patterns were determined to be unsuitable for frequency analyses at an additional 7 stations, and, therefore, no trend analysis was completed (table 1). For those stations, exceedance percentiles of annual minimum 7-day average flows and duration of daily mean flows are provided (table 5, p. 78): 02411000, 02418500, 02420000, 02427500, 02429500, 02462500, and 02462951.

Diversions

Diversions from natural streamflow occur for a variety of reasons. Some diversions are the result of water-supply withdrawals, manufacturing processes, point-source discharges, and irrigation. Diversions by manufacturers are sometimes confined to short distances along rivers. Water may be removed from the river channel, passed through the manufacturing plant for use in processing, cooling, or dilution of wastes, and then returned

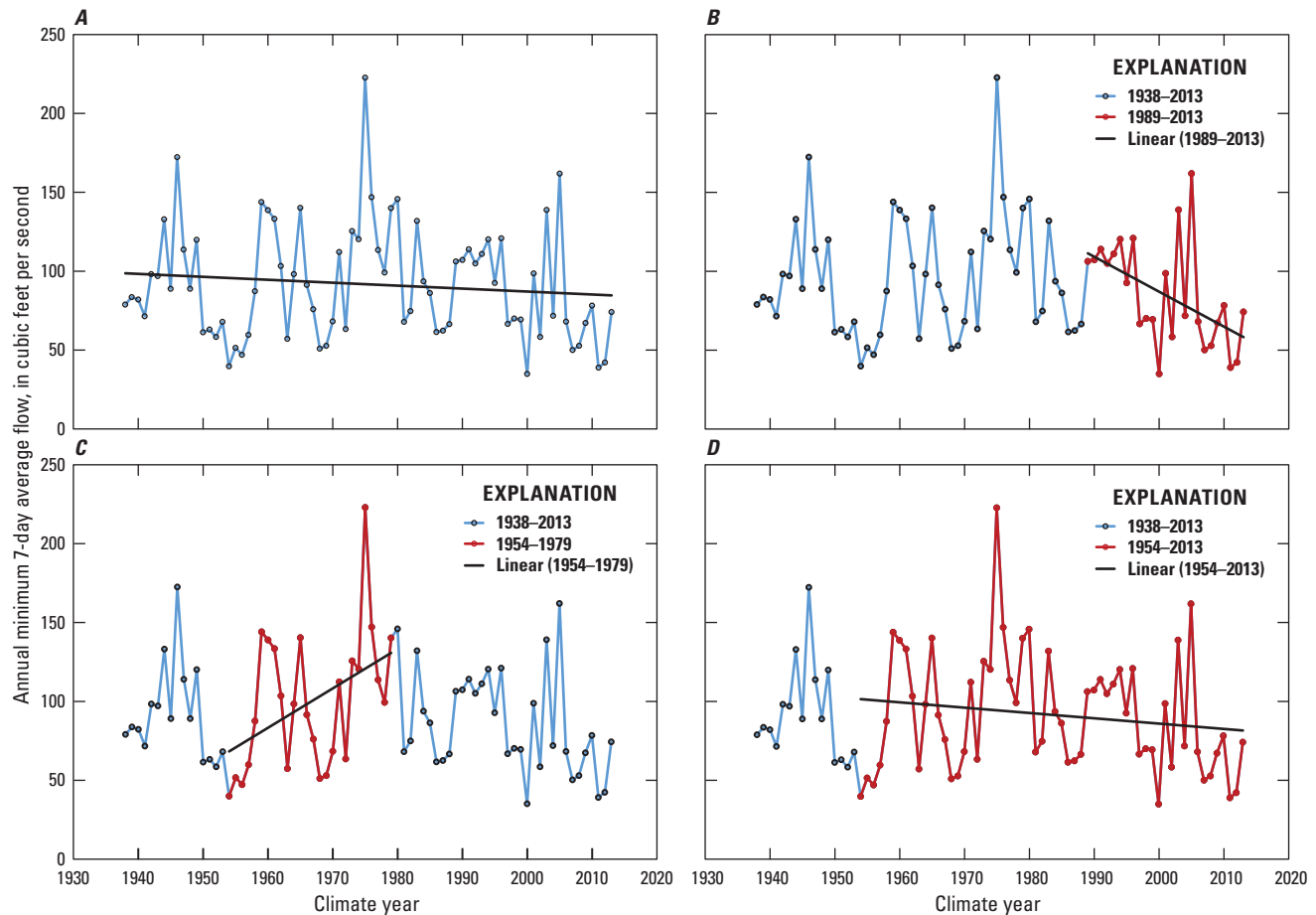


Figure 5. Various periods of record at U.S. Geological Survey station 02374500, Murder Creek near Evergreen, AL, for which a Kendall's tau trend test was computed for climate years *A*, 1938 to 2013, *B*, 1989 to 2013, *C*, 1954 to 1979, and *D*, 1954 to 2013.

to the river. Therefore, in some cases, consumptive losses from diversions by manufacturers may be negligible (Ries, 1994). As such, the effects of diversions to the streamflow regime of a river are variable and depend not only on where the diversions occur but also on the final outcome of the diverted water.

Ries (1994) noted that water diverted from a stream or adjacent aquifer for municipal supplies is returned to the basin as effluent from individual septic systems or from wastewater-treatment plants within the basin and generally causes little loss of water to the basin; however, such diversions may affect the temporal pattern of streamflow. Diversions from one basin to another reduce streamflow in the donor basin and increase streamflow in the receiving basin. Diversions between subbasins of a larger basin can substantially affect streamflow in the subbasins, but if consumptive losses are negligible, streamflow in the larger basin may be nearly unaffected. The various diversion scenarios described above indicate that an accurate accounting of all diversions in a basin is generally problematic; therefore, most USGS low-flow analyses are made on the flow data as measured at the station without adjustments for diversions.

For the stations included in this report, determining the extent of any such diversions as noted above was beyond the scope of this investigation. For stations that have operated in the last decade or so, such information may have been included in USGS annual water data reports (<https://wdr.water.usgs.gov/>). If available, that information is noted in the Remarks section of table 5. In some cases, the QAQC assessments may have indicated the possible influence from some type of anthropogenic diversion or other source and, if so, that also was noted in the Remarks section of table 5.

As an example of the influence of anthropogenic sources on streamflow, daily mean flow duration curves, standardized by drainage area, for four USGS streamgaging stations on the Cahaba River for the concurrent period July 27, 1996, to March 31, 2014, were compared (fig. 6): stations 02423425, Cahaba River near Cahaba Heights, AL; 02423496, Cahaba River near Hoover, AL; 02423500, Cahaba River near Acton, AL; and 02423555, Cahaba River near Helena, AL (fig. 1). The drainage areas for these stations are 201, 226, 230, and 335 mi², respectively. For high flows, the duration curves indicate that the daily mean flow per square mile is relatively

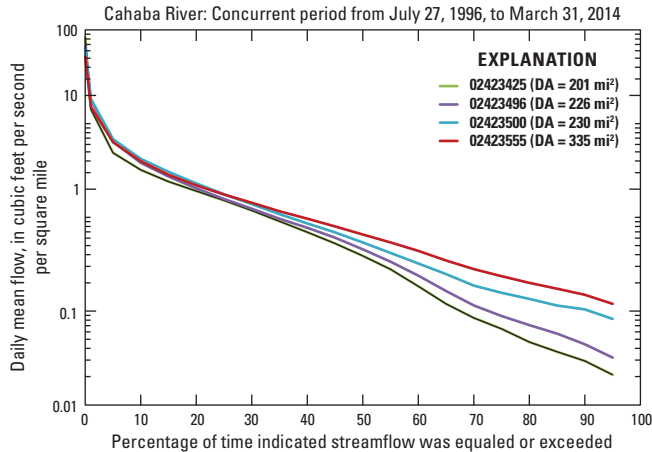


Figure 6. Comparison of daily mean flow duration curves, in cubic feet per second per square mile, for U.S. Geological Survey streamgaging stations 02423425, Cahaba River near Cahaba Heights, AL; 02423496, Cahaba River near Hoover, AL; 02423500, Cahaba River near Acton, AL; and 02423555, Cahaba River near Helena, AL. [DA, drainage area; mi², square mile]

similar. However, between the 30 and 40 percentile flows, the curves begin to diverge with the slopes for stations 02423500 and 02423555 decreasing, which indicates a source of flow that is not occurring at the upstream gages. The source is likely from wastewater-treatment flow being discharged into the stream downstream from station 02423496. It should also be noted that these four stations are downstream from Lake Purdy, which was completed in 1964 (Ruddy and Hitt, 1990) and which partially regulates the streamflow from Little Cahaba River (U.S. Geological Survey, 2014). In addition, the Birmingham Water Works Board diverts water upstream from station 02423425.

Analytical Approach for Low-Flow Frequency Statistics

The statistical analyses of streamflow data at CR stations in this study were generally based on three categories of stations: (1) long-term record stations on unregulated streams, (2) short-term record stations on unregulated streams, and (3) regulated stations. Typically, low-flow statistics are computed at CR stations if at least 10 years of record are available; however, computing the statistics from long-term records is preferred because they are likely to be more representative of a broader range of hydrologic conditions and are better suited for trend assessments and statistical estimates. The USGS typically considers 30 years of streamflow record to designate long-term streamgages (U.S. Geological Survey, 2013).

For stations with short-term records (those which have at least 10 years of record but less than about 30 years), the low-flow statistics can sometimes be improved by using record

extensions or augmentation methods based on correlations with nearby long-term gages (Hirsch, 1982). This approach is particularly beneficial if the streamflow data at the short-term record station were collected during an unusually dry, wet, or otherwise unrepresentative period. For this study, streams for which several USGS streamgages are located and include both long-term and short-term gages, assessments were made to determine if suitable correlations exist between the short- and long-term gages. If conditions warranted, the short-term gage record was augmented based on the correlation with the long-term gage.

Although they can be applied to regulated streams if regulated patterns have been determined to be relatively stable for the period being analyzed, the techniques described above for augmenting short-term records are best suited for flows in natural streams and, therefore, were not applied to regulated streams in this investigation. In addition, the low-flow statistics for regulated streams are only relevant for existing regulation patterns and would cease to be applicable if the future regulation patterns were substantially altered.

For this investigation, the annual minimum 1- and 7-day average flows with recurrence intervals of 2, 5, 10, 20, or 50 years were computed using the log-Pearson Type III mathematical technique (LPIII) (Riggs, 1972; Barnes, 1979). The analyses were implemented with Surface-Water Statistics (SWSTAT) version 5.0, a computer program developed by the USGS (Hutchison, 1975; Lumb and others, 1990; Flynn and others, 1995). The SWSTAT program incorporates standard USGS methods for computing low-flow frequency statistics as described by Riggs (1972). In addition to the stand-alone version of SWSTAT, a beta version of the SW Toolbox program also was used in the analysis (Paul Hummel, Aqua Terra Consultants, written commun., September 26, 2014). The SW Toolbox program incorporates the algorithms from SWSTAT into a more user-friendly computer package for computing such statistical analyses. Three basic steps are involved in computing low-flow frequency estimates for CR streamgaging stations using the LPIII method (Riggs, 1972):

1. The low-flow streamflow data for a station are retrieved, compiled, and quality assured including trend assessments.
2. The data are divided into climate years (April 1 to March 31) for the available period of record.
3. The data are then ranked and analyzed for frequency of occurrence.

For CR streamgaging stations on regulated streams, low-flow characteristics also were assessed for long-term trends. If the assessment showed that the regulation patterns had been reasonably consistent and the LPIII distribution provided a reasonable fit of the data, low-flow statistics were computed for that period using similar techniques for the unregulated streamgaging stations (Riggs, 1972). In cases where regulation patterns were shown to be highly variable and (or) where the LPIII distribution did not reasonably represent the data (fig. 7),

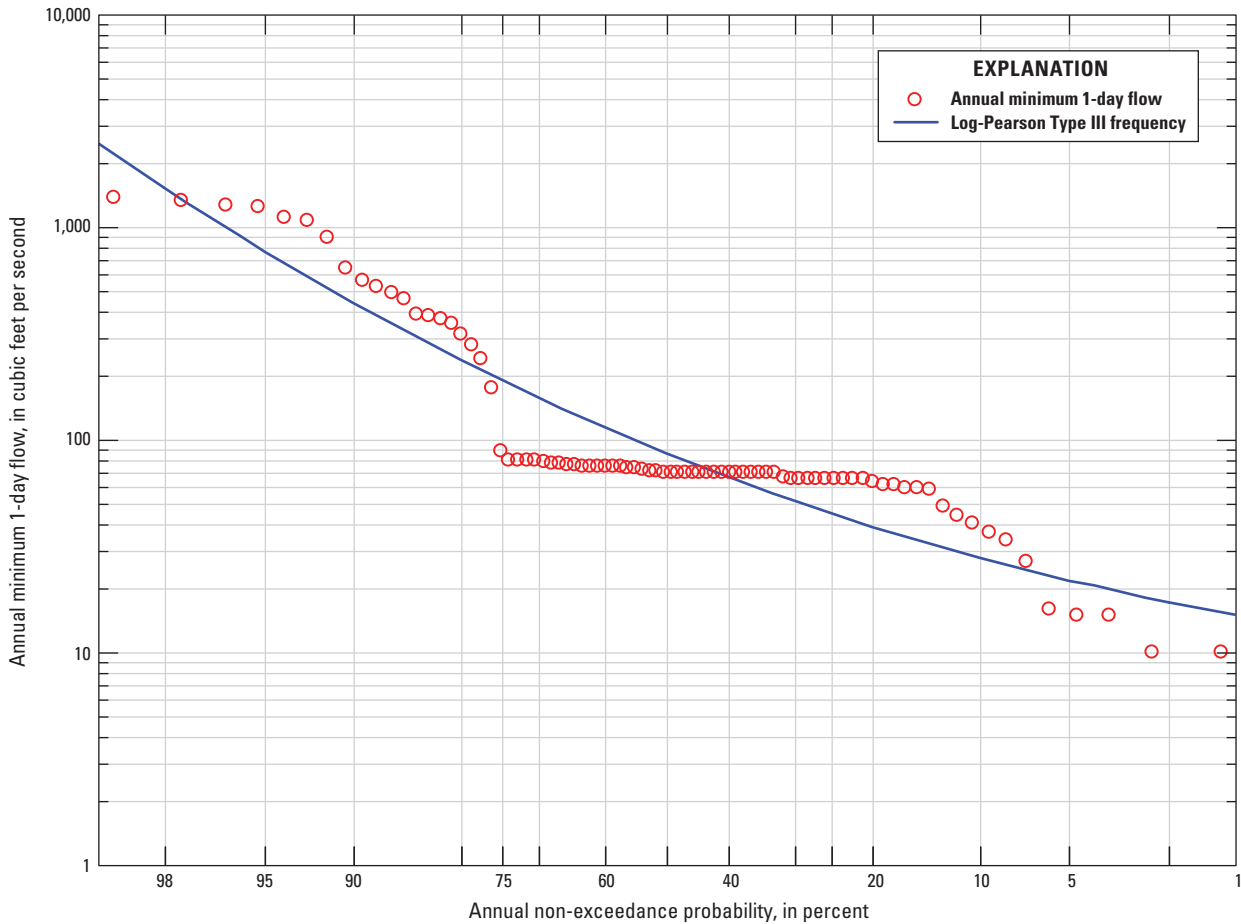


Figure 7. Example in which the log-Pearson Type III distribution does not adequately fit the annual minimum 1-day flows for regulated U.S. Geological Survey station 02418500, Tallapoosa River below Tallassee, Alabama.

tables of exceedance percentiles for consecutive 7-day average flows were generated in place of a frequency analysis for the stations (table 5). These exceedance percentiles should not be considered to be representative of a low-flow frequency but are merely a representation of recorded 7-day average flows. Nonetheless, the data are useful for assessing the flow conditions for the period of record.

Low-Flow Frequency Analysis

Low-flow frequency statistics at CR streamgaging stations can be computed by fitting a series of annual minimum N -day average streamflow to a known statistical distribution, where N ranges from 1 to 365. Low-flow frequency statistics for this study were computed by fitting a Pearson Type III distribution to the logarithms (base 10) of the annual minimum 1- and 7-day average streamflows, resulting in a LPIII distribution, and determining the flow estimates for the 2-, 5-, 10-, 20-, and 50-year recurrence intervals, depending on the length of record available at the station. Fitting the distribution required calculating the mean, standard deviation, and skew coefficient of the logarithms of the N -day streamflows. Estimates of the

N -day non-exceedance flows for a specified recurrence interval T were computed by using the following equation:

$$\log Q_T = \bar{X} + KS, \quad (1)$$

where

- Q_T is the N -day low flow, in cubic feet per second, and T is the recurrence interval, in years;
- \bar{X} is the mean of the logarithms of the annual minimum N -day average streamflow;
- K is a frequency factor that is a function of the coefficient of skew at a recurrence interval of T , remembering that the low-flow non-exceedance probability is $1/T$; and
- S is the standard deviation of the logarithms of the annual minimum N -day average streamflow.

Low-flow statistics typically are presented as a set of non-exceedance probabilities or, alternatively, recurrence intervals with the associated low-flow values. The non-exceedance probability is defined as the probability that a flow

at a given station will be equal to or less than the associated low-flow value once in a 1-year period and is expressed as a decimal fraction less than 1.0 or as a percentage less than 100. Recurrence interval is defined as the average interval of years (often referred to as the return period) during which flows at a given station will be equal to or less than the associated low-flow value once. For example, a low-flow value at a given station with a non-exceedance probability of 0.10 indicates that flows at that station have a 10-percent chance of being equal to or less than the low-flow value once in any given year. Recurrence interval and annual non-exceedance probability are the mathematical inverses of one another; therefore, a flow with a non-exceedance probability of 0.10 has a recurrence interval of 1 divided by 0.10 or 10 years. Recurrence intervals, regardless of length, always refer to an average period of time (or years) in which flows at a given station will be equal to or less than the associated low-flow value once. A 10-year recurrence interval does not imply that the low-flow value will have a non-exceedance every 10 years; it does indicate, however, that the average time between recurrences is equal to 10 years. Consequently, an observed interval between a non-exceedance of the 7Q10 may be as short as 1 year or may be considerably longer than 10 years.

The low-flow frequency curve is generated by application of equation 1 to a set of annual minimum N -day average flows for a range of specified return periods. Low-flow frequency statistics estimated for recurrence intervals extrapolated substantially outside the number of years of available record can be less reliable (Barnes, 1979). For this study, the following criteria were used to limit the extrapolation of the frequency curves based on the period of record at the station:

1. Low-flow frequency statistics with recurrence intervals of 2, 5, 10, and 20 years are provided for stations that have between 10 and 30 years of annual streamflow record; and
2. Low-flow frequency statistics with recurrence intervals of 2, 5, 10, 20, and 50 years are provided for stations with 30 or more years of annual streamflow record. No data were compiled for recurrence intervals greater than 50 years.

Low-flow statistics were computed for the annual minimum 1- and 7-day flows for recurrence intervals of 2, 5, 10, 20, and 50 years, depending on the length of streamflow record available and the criteria noted above. For each station, the frequency curves were reviewed to verify that the LPIII distribution adequately fit the data.

An example of the frequency curve generated using the LPIII curve-fitting procedure is illustrated in figure 8A. In figure 8B, the annual minimum 7-day average flows computed for USGS station 02374500 for CYs 1938 to 2013 are shown with the 7Q10 estimate from those data. The 7Q10 estimate is based on 76 years of record. Eight of the annual minimum 7-day average flows are about equal to or less than the 7Q10 value and account for about 10 percent of the 76 values. The exceedances do not occur at a regular interval of 10 years,

but on average, there was an exceedance about once every 10 years (eight exceedances in the 76-year record). The results of the low-flow frequency analyses are presented in table 5 (p. 78).

Conditional Probability Adjustment

Zero flows cannot be included in a LPIII distribution because they cannot be transformed logarithmically. When zero flows are part of the N -day flows at a streamgaging station, a conditional probability adjustment can be made in order to estimate the low-flow characteristics (Jennings and Benson, 1969; Tasker, 1987). Additional information on the procedures and guidelines for the conditional probability adjustment can be found in Bulletin 17B of the Hydrology Subcommittee of the Interagency Advisory Committee on Water Data (1982) and in the U.S. Geological Survey Surface Water Branch Technical Memorandum No. 70.07 (Carter, 1969).

To calculate the adjusted probability, a LPIII analysis is done using only the non-zero values. Then, the conditional probability adjustment is made using the following formula:

$$P_{adj} = \left(\frac{n}{N}\right)P_n + \frac{(N-n)}{N} \quad (2)$$

where

P_{adj}	is the adjusted non-exceedance probability;
P_n	is the non-exceedance probability for the non-zero values;
n	is the number of non-zero values; and
N	is the total number of values.

Using the adjusted probability, P_{adj} , an adjusted frequency factor, K^* , is obtained for use in equation 1 (Austin and others, 2011).

Record-Extension Technique

Streamflow statistics may be needed to estimate probabilities of occurrences for periods longer than the actual measured period of record. Consequently, short records that may have been collected during an unusually dry, wet, or otherwise unrepresentative period may not represent the more desirable wider range of potential hydrologic regimes. Under certain conditions, it is possible to extend or augment a short record by using a correlated station having a longer record. The extended record at the short-term record station will better reflect low-flow conditions over a longer period and provide better estimates of low-flow statistics at that station. The record extension can be accomplished as described next.

If a linear relation between the logarithms of the N -day flows at a short-term record station is determined to be significantly correlated to a concurrent set of the N -day flows at a long-term record station, or index station, a mathematical record-extension method known as the Maintenance of

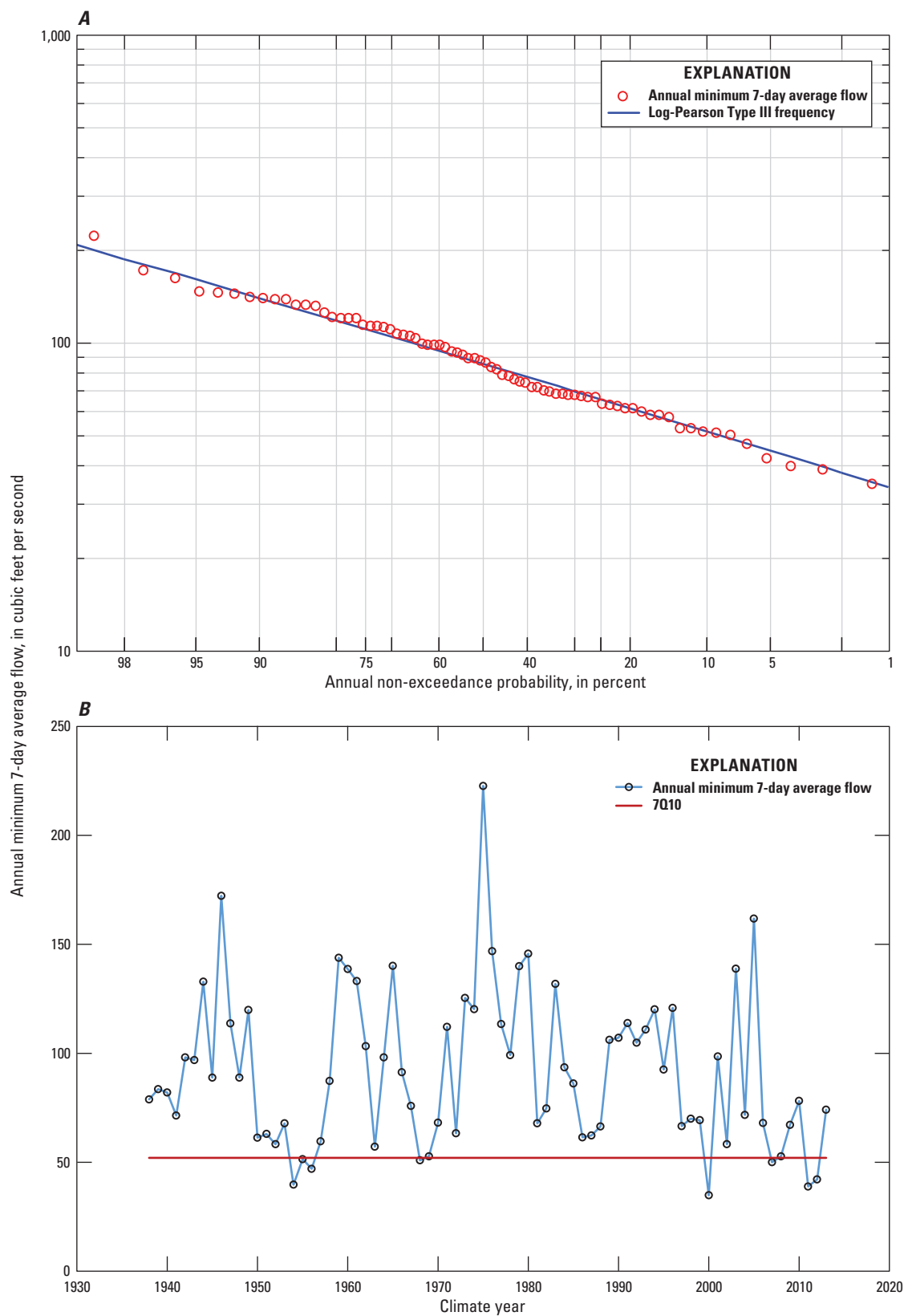


Figure 8. U.S. Geological Survey streamgaging station 02374500, Murder Creek near Evergreen, AL, A, low-flow frequency curve for the annual minimum 7-day average streamflow, and B, annual minimum 7-day average flows by climate year with the 7Q10 estimate computed from those flows.

Variance Extension, Type 1 (MOVE.1) method (Hirsch, 1982) can be used to extend the record at the short-term record station. The MOVE.1 formulation maintains the mean and the variance of the data at the short-term record station and, therefore, allows for the generation of a longer-term set of data that will possess the statistical characteristics of the actual measured data from the short-term record.

The MOVE.1 equation is

$$Y_i = \bar{Y} + \frac{S_y}{S_x}(X_i - \bar{X}), \quad (3)$$

where

- Y_i is the logarithm of the estimated N -day flow at the short-term record station;
- \bar{Y} is the mean of the logarithms of N -day flows for the concurrent period at the short-term record station;
- S_y is the standard deviation of the logarithms of N -day flows for the concurrent period at the short-term record station;
- S_x is the standard deviation of the logarithms of N -day flows for the concurrent period at the long-term record station or index station;
- X_i is the logarithm of the flow statistic or observed N -day flow at the long-term record station or index station; and
- \bar{X} is the mean of the logarithms of the N -day flows for the concurrent period at the long-term record station or index station.

For this study, the record augmentations were limited to short-record sites that were located on the same stream as the index station. For an index station to be considered, a minimum of 10 years of concurrent record relative to the short-term station and similar basin geology as the short-term station were necessary. Also, basin sizes were considered (Telis, 1991). The USGS does not have a standard minimum correlation coefficient between concurrent flows for the MOVE.1 technique; however, similar correlation studies have used values ranging from 0.70 to 0.80 (Hydrology Subcommittee of the Interagency Advisory Committee on Water Data, 1982; Stedinger and Thomas, 1985; Ries, 1994; Nielsen, 1999). In addition, if the record at the short-term record station or available index station includes zero flows, record extensions are not recommended because including such values in record-extension techniques has not been adequately tested (Julie Kiang, U.S. Geological Survey Office of Surface Water, written commun., January 26, 2010).

Six CR streamgaging stations met the criteria listed above, and the records were augmented using the MOVE.1 record-extension technique (table 6). Applying the MOVE.1 technique at these six stations allowed for the low-flow statistics at the short-record stations to be enhanced by an additional 48 to 67 years of record. Thus, the augmented low-flow statistics at the short-record stations will reflect a much broader range of hydrologic conditions. An example of the MOVE.1 augmentation for station 02361500, Choctawhatchee River near Bellwood, AL, using index station 02361000, Choctawhatchee River near Newton, AL, is shown in figure 9.

Flow-Duration Analysis

Flow-duration analyses estimate the percentage of time that a specified streamflow is equaled or exceeded during a given period (Searcy, 1959). Flow durations are estimated by sorting the daily mean flows for the period of record from the largest value to the smallest value and assigning each streamflow value a rank, from 1 to the largest value. The frequencies of exceedance are then computed using the Weibull formula for computing plotting position (Helsel and Hirsch, 2002):

$$P = 100 * [M / (n+1)], \quad (4)$$

where

- P is the probability that a given flow will be equaled or exceeded (percentage of time),
- M is the ranked position (dimensionless), and
- n is the number of events for the period of record (dimensionless).

Flow-duration curves are a cumulative frequency curve showing the percent of time that specified streamflows have been equaled or exceeded during a given period of record (Searcy, 1959). Yet, if the duration curve is based on a sufficiently long period of record, the statistics can be used as an indicator of probable future conditions. In order to compare flow durations at different stations or in different basins, flow-duration estimates can be normalized by drainage area to represent a streamflow per unit area. Again, it should be noted that the most useful comparisons are those based on similar lengths of record from similar hydrologic periods.

Flow durations for this report are estimated in tabular form for the 5-, 10-, 25-, 50-, 75-, 90-, and 95-percent exceedances (table 5). To be consistent with low-flow statistics, flow durations were computed on the basis of daily mean flows available through the 2013 climate year, which has an end date of March 31, 2014. An example of a flow-duration curve is shown in figure 10 for USGS station 02361000, Choctawhatchee River near Newton, AL, for the period December 1921 to September 1927 and June 1935 to March 2014.

Table 6. Streamgaging stations for which record was augmented using MOVE.1, index stations, additional climate years of record available at the index station, and correlation coefficients for the gaging stations where the record was augmented.

[USGS, U.S. Geological Survey; mi², square mile]

Streamgaging station where record was augmented					Index streamgaging stations					Number of additional climate years of record available at the index station	Correlation coefficient	
Site identification number (fig. 1)	USGS stream-gaging number	USGS streamgaging name	Drain-age area (mi ²)	Period of record	Site identification number (fig. 1)	USGS stream-gaging number	USGS streamgaging name	Drain-age area (mi ²)	Period of record		1-day	7-day
8	02361500	Choctawhatchee River near Bellwood, AL	1,280	December 1921 to October 1925, December 2000 to March 2014	7	02361000	Choctawhatchee River near Newton, AL	686	December 1921 to September 1927, June 1935 to March 2014	67	0.95	0.97
25	02374700	Murder Creek at State Highway 41 at Brewton, AL	435	March 1999 to March 2014	24	02374500	Murder Creek near Evergreen, AL	176	October 1937 to March 2014	61	0.93	0.93
63	02411930	Tallapoosa River below Tallapoosa, GA	272	December 1999 to November 2004, October 2005 to March 2014	64	02412000	Tallapoosa River near Heflin, AL	448	July 1952 to March 2014	49	0.97	0.97
119	02445500	Sipsey River at Fayette, AL	282	February 1939 to September 1959	121	02446500	Sipsey River near Elrod, AL	528	September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014	49	0.95	0.96
120	02446000	Sipsey River at Moores Bridge, AL	413	February 1939 to September 1951	121	02446500	Sipsey River near Elrod, AL	528	September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014	57	0.98	0.99
122	02447000	Sipsey River near Pleasant Ridge, AL	769	February 1939 to September 1959	121	02446500	Sipsey River near Elrod, AL	528	September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014	48	0.97	0.98

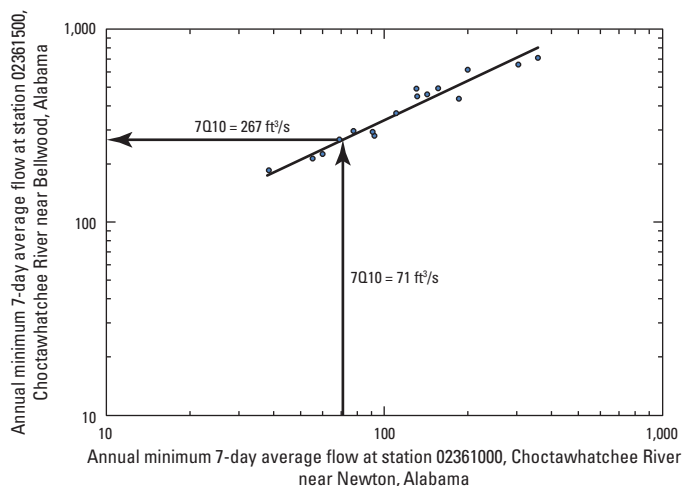


Figure 9. The MOVE.1 correlation of annual minimum 7-day average flow at U.S. Geological Survey streamgaging station 02361500, Choctawhatchee River near Bellwood, AL, with index station 02361000, Choctawhatchee River near Newton, AL. [ft³/s, cubic foot per second]

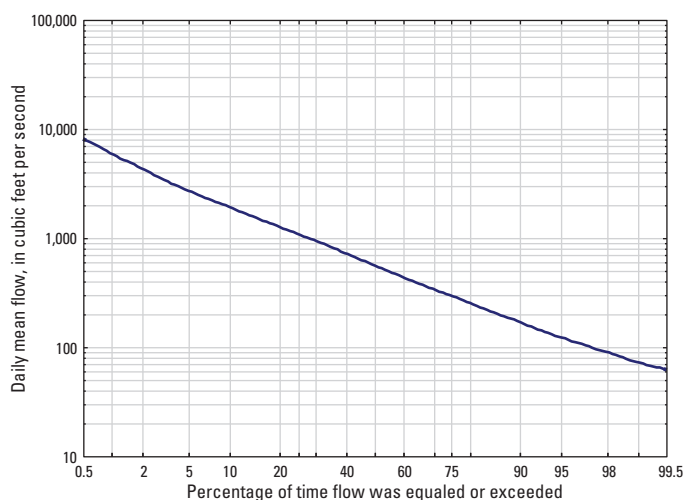


Figure 10. Flow-duration curve for U.S. Geological Survey streamgaging station 02361000, Choctawhatchee River near Newton, AL, for the period December 1921 to September 1927 and June 1935 to March 2014.

Considerations for Accuracy of Low-Flow Statistics

With respect to streamflow statistics, the period of collected record is considered to be a sample, or small portion of the population, which represents all possible measurements. Statistical results provide inferences about the characteristics of the population on the basis of samples from the population.

For example, statistical measures—such as mean, standard deviation, or skew coefficient—can be described in terms of the sample and then used to make inferences about the population from which the sample was obtained. Statistical values computed from the sample record are estimates of what the value would be if the entire population were known and used to compute the given value. Consequently, the accuracy of low-flow statistics at streamgaging stations is strongly influenced by the length of record (samples from the population) upon which the statistics are based and the hydrologic conditions during the period sampled (Barnes, 1979). The longer the period of record at a streamgaging station that covers a broad range of hydrologic conditions, the more accurate or reflective of long-term conditions the low-flow statistics will be.

Streamflow statistics for short-term records are more sensitive to extreme hydrologic events than those for long-term records. As a result, streamflow statistics, whether high or low, from one 10-year period may differ significantly from another 10-year period (Dalrymple, 1960). Thus, a long-term record is more desirable when computing streamflow statistics. To show the effect that record length and hydrologic conditions have on low-flow statistics, the 7Q10 for USGS station 02374500, Murder Creek near Evergreen, AL, was computed beginning with the first 10 years of record (April 1938–March 1948) and then updated on a 5-year basis through CY 2013. A plot of the annual minimum 7-day average streamflow by climate year for the period of record with the computed 7Q10 estimates indicates that the 7Q10 for the first 10 years of record, which represents a relatively wet period, was 73 cubic feet per second (ft³/s; fig. 11). By CY 1957 and as a result of the drought years in the 1950s, the 7Q10 decreased to 50 ft³/s. The 1970s tended to be a relatively wet period, and the 7Q10 continued to increase slightly until it peaked at 57 ft³/s in 1997. With the dry years that occurred between 2000 and 2013, the 7Q10 decreased slightly to 52 ft³/s by 2013. The reason the 7Q10 did not change substantially after CY 1957 but was so variable before that time was that the preceding period from CY 1938 to 1957 included a wide range of hydrologic conditions, such as the relatively wet period in the 1940s and the drought period in the 1950s (fig. 3). In this analysis, the percentage difference between the highest (73 ft³/s in CY 1947) and lowest (50 ft³/s in CY 1957) 7Q10 is 37 percent, with percentage difference computed as

$$\text{Percentage Difference} = \frac{|x_1 - x_2|}{\left(\frac{x_1 + x_2}{2}\right)} \times 100 \quad (5)$$

where

- x_1 is the highest 7Q10 estimate from the periods analyzed, and
- x_2 is the lowest 7Q10 estimate from the periods analyzed.

To further show the effect of how the 7Q10 can be influenced under varying hydrologic conditions and the substantial

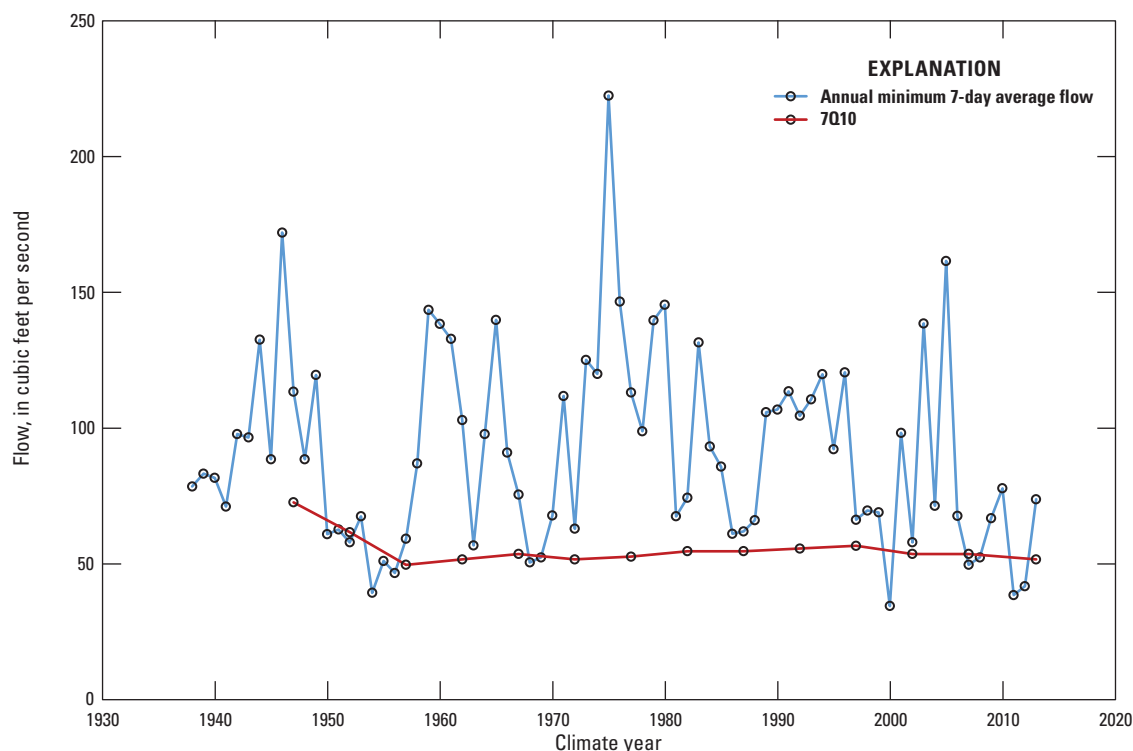


Figure 11. Annual minimum 7-day average streamflow and 7Q10 estimates at U.S. Geological Survey streamgaging station 02374500, Murder Creek near Evergreen, AL.

influence period of record can have on streamflow statistics, an additional analysis was done using seven different 10-year periods of record at USGS station 02374500. The comparison was made by computing the 7Q10 at station 02374500 for the following periods (fig. 12): CY 1938 to 1947, 1948 to 1957, 1958 to 1967, 1968 to 1977, 1978 to 1987, 1988 to 1997, and 1998 to 2007. For those seven periods, the lowest 7Q10 of 42 ft³/s was computed for the period CY 1998 to 2007. The highest 7Q10 of 73 ft³/s was computed for the periods CY 1938 to 1947 and CY 1988 to 1997. The percentage difference between the highest and lowest 7Q10 values was 54 percent. As noted in the previous paragraph, the 7Q10 for the complete period of record from CY 1938 to 2013 was 52 ft³/s. The percentage difference between the 10-year period with the highest 7Q10 value and the 7Q10 for the complete period of record was 34 percent. The percentage difference between the 10-year period with the lowest 7Q10 value and the 7Q10 for the complete period of record was 21 percent.

The previous examples highlight the influence that record length and hydrologic conditions measured in the record, which is related to the period of record measured, have on the low-flow frequency statistics. To provide perspective on these characteristics for the unregulated Alabama stations included in this investigation, the distribution of years of record included in the frequency analysis are shown in figure 13A, and the period of record with the beginning and ending years plotted by drainage area are shown in figure 13B.

Time-Sampling Errors

As previously discussed, low-flow frequency statistics only provide an estimate of the true (or population) flow characteristic of interest. Uncertainty (or error) in those estimates include a time-sampling error, based on the period of record available for the analysis, and a model error, based on the analytical method being used (Hardison, 1969). There also is uncertainty in the discharge measurements and the analytical methods used for computing the instantaneous values that are based on those measurements (Sauer and Turnipseed, 2010; Turnipseed and Sauer, 2010). Measurement errors are often assumed to be small compared to time-sampling errors; however, for low-flow estimates, that may not always be the case (Telis, 1991).

To provide an estimate of the standard error of the 1- and 7-day low-flow frequency estimates, a time-sampling error was computed for the estimates at each streamgaging station where the particular low-flow statistic was non-zero (table 5). The time-sampling error computations assume that the Pearson Type III distribution adequately fits the logarithms of the 1- and 7-day annual minimum average flows, the measurement error is small compared to the time-sampling error, and the annual low-flow estimates are a reasonable representation of the long-term estimates (Telis, 1991). Although each of these assumptions will not necessarily be valid at all streamgaging stations, the time-sampling errors are useful for general comparisons of accuracy between stations and can be useful for assessing regional variability in the streamflow data.

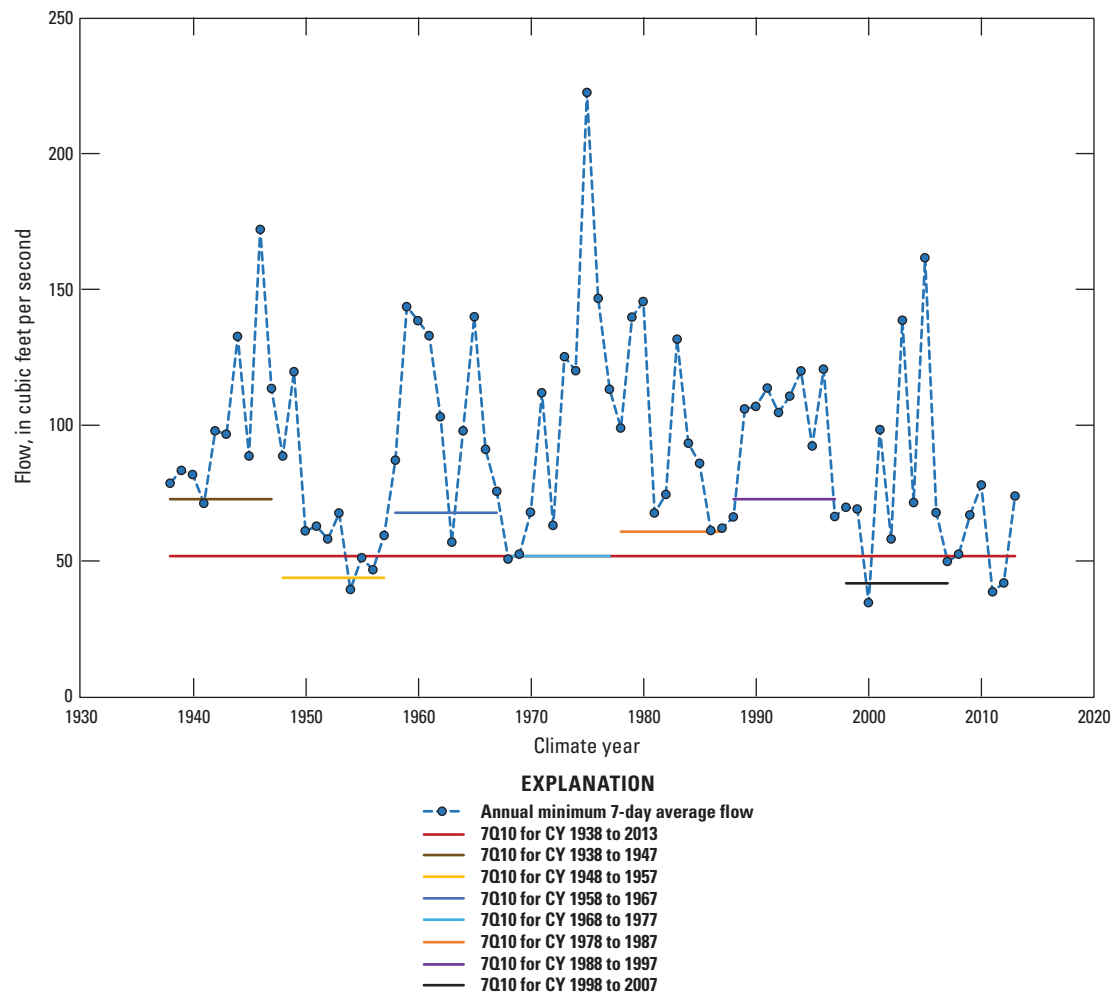


Figure 12. Annual minimum 7-day average streamflow and 7Q10 estimates at U.S. Geological Survey streamgaging station 02374500, Murder Creek near Evergreen, AL, for seven 10-year periods: climate years 1938 to 1947, 1948 to 1957, 1958 to 1967, 1968 to 1977, 1978 to 1987, 1988 to 1997, and 1998 to 2007.

The time-sampling error (SE) is a function of the standard deviation, years of record, and a frequency factor, which is based on the skew of the flow characteristic being used (Kite, 1985). The time-sampling error is defined as

$$SE = \frac{S}{\sqrt{N}} \delta \tag{6}$$

where:

- SE* is the time-sampling error in log units of a low-flow characteristic with a t-year recurrence interval for a continuous record streamgaging station;
- S* is the standard deviation of the logarithms of the annual minimum 1- or 7-day average flows at the station;
- N* is the number of years of record of the low-flow series; and

δ is a frequency factor that is a function of the skew of the annual minimum 1- or 7-day average flows at the station and the recurrence interval (Kite, 1985).

The time-sampling errors presented in this report were converted to percentage using the conversion equation

$$SE \text{ (percent)} = \left[10^{2.3(SE)^2} - 1 \right]^{0.5} (100). \tag{7}$$

Kite (1985) provided only δ frequency factors for positive skews from 0.0 to 2.0 for flood-flow exceedances. For low-flow non-exceedances, the δ frequency factors shown in Kite (1985) would be applicable to the equivalent negative skew. For example, for a skew value of 2.0, the δ frequency factor shown in Kite (1985) for the 2-year recurrence interval is 1.3913. For low-flow non-exceedances, the skew value for a δ frequency factor of 1.3913 is -2.0 . The low-flow non-exceedance

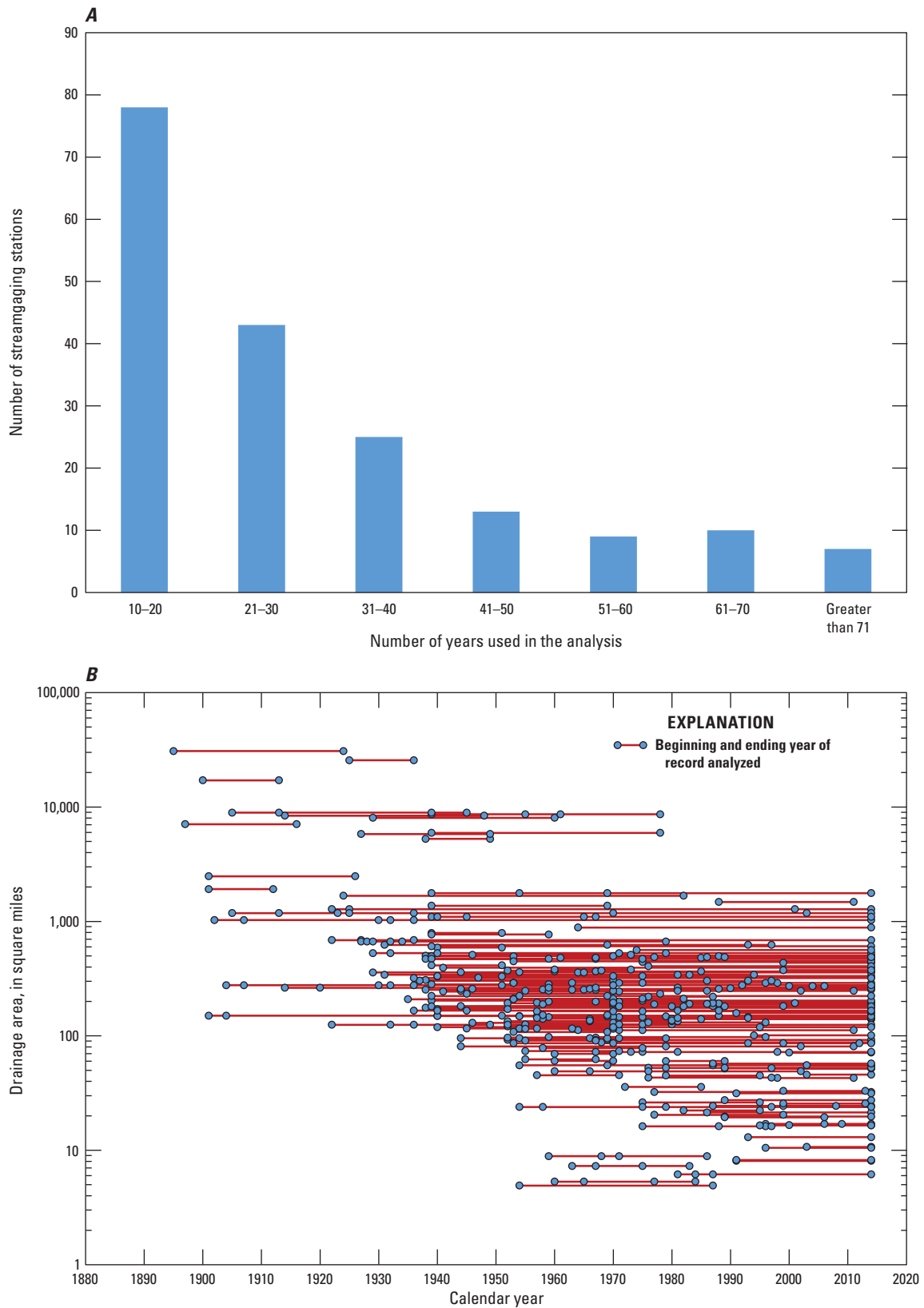


Figure 13. A, Distribution of years of record for the unregulated Alabama stations, and B, the period of record with the beginning and ending years shown by drainage area.

frequency factors for positive skews were not available in Kite (1985) but were obtained from training-class documents for USGS training class Statistical Approach to Surface-Water Hydrologic Analysis (SW-2011-TC), November 1999 (W.O. Thomas, Jr., Michael Baker International, written commun., 2015).

Comparison With Previously Published Low-Flow Statistics

As previously discussed, low-flow frequency statistics are influenced by length of record, hydrologic regime under which the record was collected, analytical techniques used, and other factors, such as urbanization and diversions. The last systematic update of low-flow statistics in Alabama included data through September 1990 (the 1989 climate year). Since that time, the State has experienced several historic dry periods with 2007 and 2000 having the second and fourth lowest average annual precipitation totals since 1895 (fig. 3B; table 3).

This investigation included 87 stations for which 7Q10 estimates were previously published by Atkins and Pearman (1994), including daily mean flows through CY 1989, and for which additional data were collected. Those previously published 7Q10 values were compared with the current values, and the percentage change was computed as follows:

$$\text{Percentage change} = [(\text{current 7Q10} - \text{previous 7Q10}) / \text{previous 7Q10}] \times 100. \tag{8}$$

The percentage change indicates the percentage of change from the previously published 7Q10 value (table 7, p. 362). The percentage changes ranged from –61 to 108 percent (table 8).

The similarity in the mean difference of –0.2 percent and the median difference of 0.0 indicates that the percentage change data represent a relatively normally distributed dataset. The negative differences for stations indicate that the 7Q10 values decreased, and the positive differences indicate that the 7Q10 values increased. Of the 87 stations, 42 had negative percentage differences, 38 had positive percentage differences, and 7 had a zero percentage difference. For the station with the largest percentage difference of 108 percent (station 02450000, Mulberry Fork near Garden City, AL), the QAQC reviews indicated an increase in the annual minimum 7-day average flows after the mid-1960s (fig. 14). It was concluded that the increase was likely due to anthropogenic activities upstream from the station. Consequently, the record was analyzed for two periods: (1) April 1929 to March 1964, and (2) April 1965 to March 2014 (table 5).

Table 8. Summary statistics for the percentage change from the annual minimum 7-day average streamflow presented in this report and those previously published in Atkins and Pearman (1994) for the U.S. Geological Survey streamgaging stations for which additional data were collected since the previous study.

Statistic	Percentage change
Minimum	–61
Mean	–0.2
Maximum	108
10th percentile	–23
25th percentile	–11
50th percentile (median)	0.0
75th percentile	7.6
90th percentile	27

Access to Updated Low-Flow Characteristics Through the StreamStats Application

StreamStats is an integrated web-based geographic information system that provides users with access to a variety of analytical tools that are useful for water-resources planning and management, and for engineering design applications, such as design of bridges (Ries and others, 2008). StreamStats allows users to easily obtain streamflow statistics, basin characteristics, and other information for user-selected sites on streams. StreamStats users can choose locations of interest from an interactive map and obtain information for these locations. If a USGS streamgage is selected, the user will be provided with a list of previously published information for the streamgage. The low-flow statistics for Alabama streams provided in table 5 of this report were added to the StreamStatsDB, which is a database accessible to users through the StreamStats application. Instructions for using StreamStats are provided through the links on the StreamStats website at <https://water.usgs.gov/osw/streamstats/index.html>. The website also provides links to (1) information about general limitations of the application, (2) other State applications, (3) user instructions, (4) definitions of terms, (5) answers to frequently asked questions, (6) downloadable presentations and other technical information about the application, (7) information that can be accessed only by USGS employees, and (8) contact information.

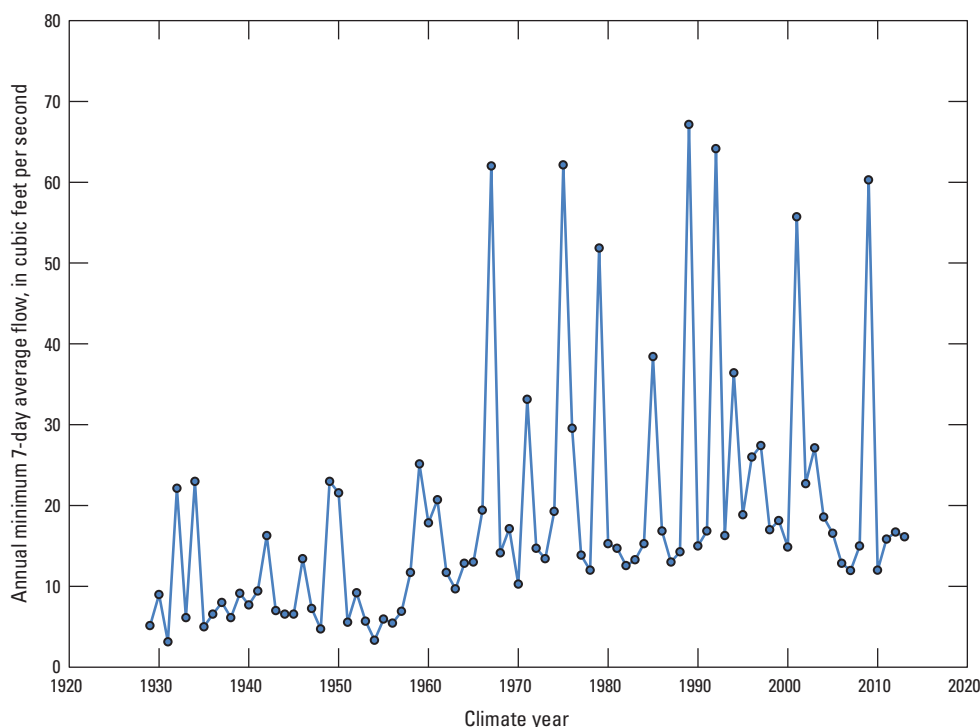


Figure 14. Annual minimum 7-day average flow at U.S. Geological Survey streamgaging station 02450000, Mulberry Fork near Garden City, AL.

Summary

Alabama water-resource managers need up-to-date low-flow statistics for planning, management, and permitting decisions to help ensure adequate water for consumptive use, water-quality standards, recreation, and aquatic habitat protection. Low-flow statistics for Alabama have not been systematically updated in more than 20 years, which includes a period in which 2 of the 10 driest years of total annual precipitation have occurred since 1895. As such, this report provides a timely update of low-flow frequency and daily duration characteristics for 210 continuous-record streamgaging stations in Alabama and 67 stations from basins adjoining the surrounding States of Florida, Georgia, Mississippi, and Tennessee. Of the 210 Alabama stations, 30 were analyzed for regulated conditions and 19 that are currently (2017) regulated were analyzed for pre-regulation conditions. The characteristics were computed using available data through March 2014. Depending on the length of record available, annual minimum 1- and 7-day average flows with recurrence intervals of 2, 5, 10, 20, and 50 years are provided in this report. Also, daily flow durations for the 5-, 10-, 25-, 50-, 75-, 90-, and 95-percent probabilities of exceedance are provided. The characteristics are provided for both unregulated and, where appropriate, regulated stations. It was determined that data for six regulated stations were not appropriate to compute the frequency statistics. For those stations, exceedance percentiles of annual minimum 7-day average flows are provided.

Kendall's tau test was used to determine statistical significance of trends in the annual minimum 7-day average flows. For the unregulated stations, including the stations that currently (2017) are regulated but were analyzed for pre-regulation conditions, 139 stations indicated no statistically significant trend, 24 indicated a downward trend, and 17 indicated an upward trend. When analyzing streamflow data for trends, long-term stations are preferable because the trend results from short-term stations can be influenced by short-term conditions. Of the 24 stations that had a downward trend, 11 had record lengths less than 30 years. Of the 17 stations with an upward trend, 9 had record lengths less than 30 years. The record lengths for the stations indicating no statistically significant trends ranged from 10 to 85 years with an average of 28 years and a median of 23 years. A review of total annual precipitation for Alabama from 1895 to 2015 indicated no substantial changes in the long-term precipitation patterns for the State, which is consistent with the finding that the majority of the USGS stations indicated no statistically significant trends in the annual minimum 7-day average flows.

To highlight the influence that period of record and hydrologic conditions measured in that record can have on low-flow statistics, two assessments were made using long-term data from USGS streamgaging station 02374500, Murder Creek near Evergreen, AL. The first assessment involved computing the 7Q10 for the first 10 years of record at the gage and then adding the following 5 years of record, recomputing the 7Q10, and then continuing the process for the complete period of record, which is April 1938 to March 2014.

The assessment showed that the 7Q10 varied from a high of 73 cubic feet per second (ft³/s) to a low of 50 ft³/s, which is a difference of 37 percent. The 7Q10 for the complete period of record was 52 ft³/s. The second assessment used data from the same station but the 7Q10 analysis was done for seven different periods that included 10 years of record, the minimum length of record typically required for such an analysis. The lowest 7Q10 value was 42 ft³/s for the period April 1998 to March 2008, and the highest 7Q10 value was 73 ft³/s for the period April 1938 to March 1948 and also for the period from April 1988 to March 1997. The difference in the lowest and highest 7Q10 values represents a difference of 54 percent. Consequently, the assessments show the importance that both length and period of record have on low-flow statistics and the reason it is desirable to have long-term records, which will tend to better reflect conditions that might be expected over a longer period of time.

This investigation included 87 Alabama stations for which 7Q10 estimates were previously published, including daily mean flows through climate year 1989, and for which additional data were collected. For those stations, a percentage change between the previous and current 7Q10 values was computed. The percentage change ranged from -61 to 108 percent with a mean difference of -0.2 percent and a median difference of 0.0. The closeness of the mean and median percentage change values indicates the data were relatively normally distributed suggesting no dominant pattern of increasing or decreasing 7Q10 estimates for the stations previously analyzed. Of the 87 stations, 42 had negative percentage differences, 38 had positive percentage differences, and 7 had a zero percentage difference.

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Tables 1, 4, 5, and 7

28 Low-Flow Frequency and Flow-Duration Characteristics of Selected Streams in Alabama Through March 2014

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
1	02339225	Wehadkee Creek below Rock Mills, AL	33°07'20"	85°14'57"	Randolph	Chattahoochee	03130002	60.2
2	02342500	Uchee Creek near Fort Mitchell, AL	32°19'00"	85°00'54"	Russell	Chattahoochee	03130003	322
3	02342933	South Fork Cowikee Creek near Batesville, AL	32°01'03"	85°17'45"	Barbour	Chattahoochee	03130003	112
4	02343300	Abbie Creek near Haleburg, AL	31°28'24"	85°09'45"	Henry	Chattahoochee	03130004	146
5	02343500	Chattahoochee River at Columbia, AL	31°17'01"	85°05'58"	Houston	Chattahoochee	03130004	8,040
6	02360500	East Fork Choctawhatchee River near Midland City, AL	31°22'23"	85°28'38"	Dale	Choctawhatchee	03140201	291
7	02361000	Choctawhatchee River near Newton, AL	31°20'34"	85°36'38"	Dale	Choctawhatchee	03140201	686
8	02361500	Choctawhatchee River near Bellwood, AL	31°09'33"	85°47'04"	Geneva	Choctawhatchee	03140201	1,280
9	02362240	Little Double Bridges Creek near Enterprise, AL	31°16'20"	85°57'30"	Coffee	Choctawhatchee	03140201	21.4
10	02363000	Pea River near Ariton, AL	31°35'41"	85°46'59"	Dale	Choctawhatchee	03140202	498
11	02364500	Pea River near Samson, AL	31°06'45"	86°05'58"	Geneva	Choctawhatchee	03140202	1,182
12	02364570	Panther Creek near Hacoda, AL	31°07'15"	86°11'13"	Geneva	Choctawhatchee	03140202	26.2
13	02369800	Blackwater River near Bradley, AL	31°01'39"	86°42'36"	Escambia	Blackwater	03140104	87.7
14	02371200	Indian Creek near Troy, AL	31°48'50"	86°07'15"	Pike	Conecuh	03140301	8.87
15	02371500	Conecuh River at Brantley, AL	31°34'24"	86°15'06"	Crenshaw	Conecuh	03140301	500
16	02372000	Patsaliga Creek at Lurverne, AL	31°43'27"	86°16'42"	Crenshaw	Conecuh	03140302	254
17	02372250	Patsaliga Creek near Brantley, AL	31°35'46"	86°24'20"	Crenshaw	Conecuh	03140302	442
18	02372422	Conecuh River below Point A Dam near River Falls, AL	31°21'40"	86°31'11"	Covington	Conecuh	03140301	1,273

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
1	October 1978 to January 1990	April 1979 to March 1989	10	Unregulated	
2	October 1946 to March 2014	April 1947 to March 2014	67	Unregulated	
3	October 1963 to September 1971, October 1974 to October 2011	April 1964 to March 1971, April 1975 to March 2011	43	Unregulated	
4	October 1958 to September 1971, October 1974 to August 1993	April 1959 to March 1971, April 1975 to March 1993	30	Unregulated	
5	July 1928 to September 1960	April 1929 to March 1960	31	¹ Unregulated	Since 1962, site in backwater from Columbia Lock and Dam.
6	June 1952 to September 1963	April 1953 to March 1963	10	Unregulated	
7	December 1921 to September 1927, June 1935 to March 2014	April 1922 to March 1927, April 1936 to March 2014	83	Unregulated	
8	December 1921 to October 1925, December 2000 to March 2014	April 1922 to March 1925, April 2001 to March 2014	16	Unregulated	Low-flow frequency estimates adjusted based on MOVE.1 correlation with station 02361000, Choctawhatchee River near Newton, AL.
9	August 1985 to March 2014	April 1986 to March 2014	28	Unregulated	
10	October 1938 to September 1970, October 1987 to March 2014	April 1939 to March 1970, April 1988 to March 2014	57	Unregulated	
11	September 1904 to August 1913, October 1922 to September 1925, October 1935 to September 1970, October 2002 to March 2014	April 1905 to March 1913, April 1923 to March 1925, April 1936 to March 1970, April 2003 March 2014	55	Unregulated	
12	October 1974 to September 1995	April 1975 to March 1995	20	Unregulated	
13	October 1967 to March 2014	April 1968 to March 2014	46	Unregulated	
14	October 1958 to September 1968, October 1970 to September 1986	April 1959 to March 1968, April 1971 to March 1986	24	Unregulated	
15	October 1937 to March 2014	April 1938 to March 2014	76	Unregulated	
16	October 1943 to September 1958	April 1944 to March 1958	14	Unregulated	
17	October 1974 to March 2014	April 1975 to March 2014	39	Unregulated	
18	June 1999 to March 2013	April 2000 to March 2013	13	Regulated	Regulated by Gantt Dam since 1924 and Point A Reservoir since 1925.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
19	02372500	Conecuh River near Andalusia, AL	31°15'19"	86°36'01"	Covington	Conecuh	03140301	1,344
20	02373000	Sepulga River near McKenzie, AL	31°27'13"	86°47'13"	Conecuh	Conecuh	03140303	470
21	02373500	Pigeon Creek near Thad, AL	31°28'36"	86°39'30"	Covington	Conecuh	03140303	307
22	02374000	Conecuh River near Brooklyn, AL	31°09'49"	86°48'00"	Escambia	Conecuh	03140304	2,495
23	02374250	Conecuh River at State Highway 41 near Brewton, AL	31°04'01"	87°03'42"	Escambia	Conecuh	03140304	2,661
24	02374500	Murder Creek near Evergreen, AL	31°25'06"	86°59'12"	Conecuh	Conecuh	03140304	176
25	02374700	Murder Creek at State Highway 41 near Brewton, AL	31°06'03"	87°04'08"	Escambia	Conecuh	03140304	435
26	02374745	Burnt Corn Creek at State Highway 41 near Brewton, AL	31°07'47"	87°05'14"	Escambia	Conecuh	03140304	182
27	02374950	Big Escambia Creek at Sardine Bridge near Stanley Crossroads, AL	31°07'46"	87°22'14"	Escambia	Conecuh	03140305	193
28	02375000	Big Escambia Creek at Flomaton, AL	31°00'38"	87°15'46"	Escambia	Conecuh	03140305	330
29	02376500	Perdido River at Barrineau Park, FL	30°41'25"	87°26'25"	Baldwin	Perdido	03140106	394
30	02377500	Styx River near Loxley, AL	30°39'50"	87°38'20"	Baldwin	Perdido	03140106	92.2
31	02377570	Styx River near Elsanor, AL	30°36'20"	87°32'50"	Baldwin	Perdido	03140106	192
32	02378300	Magnolia River at U.S. 98 near Foley, AL	30°24'23"	87°44'13"	Baldwin	Mobile	03160205	16.6
33	02378500	Fish River near Silver Hill, AL	30°32'43"	87°47'55"	Baldwin	Mobile	03160205	55.3
34	02398300	Chattooga River above Gaylesville, AL	34°17'25"	85°30'33"	Cherokee	Coosa	03150105	366
35	02398500	Chattooga River at Gaylesville, AL	34°15'47"	85°33'39"	Cherokee	Coosa	03150105	379
36	02398950	West Fork Little River at Desoto Park near Fort Payne, AL	34°29'30"	85°37'00"	DeKalb	Coosa	03150105	42.8
37	02399000	Little River near Jamestown, AL	34°23'51"	85°37'36"	Cherokee	Coosa	03150105	125

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
19	September 1904 to December 1919, October 1929 to September 1952, October 1965 to September 1968	April 1930 to March 1952, April 1966 to March 1968	24	Regulated	Regulated by Gantt Dam since 1924 and Point A Reservoir since 1925. Analysis is for regulation conditions only.
20	October 1937 to September 1967, October 1974 to March 2014	April 1938 to March 1967, April 1975 to March 2014	68	Unregulated	
21	October 1937 to September 1970	April 1938 to March 1970	32	Unregulated	
22	June 1935 to December 1957	April 1936 to March 1957	21	Regulated	Regulated by Gantt Dam since 1924 and Point A Reservoir since 1925.
23	April 1999 to March 2014	April 2000 to March 2014	14	Regulated	Regulated by Gantt Dam since 1924 and Point A Reservoir since 1925.
24	October 1937 to March 2014	April 1938 to March 2014	76	Unregulated	
25	March 1999 to March 2014	April 1999 to March 2014	15	Unregulated	Low-flow frequency estimates adjusted based on MOVE.1 correlation with station 02374500 Murder Creek near Evergreen, AL.
26	March 1999 to March 2014	April 1999 to March 2014	15	Unregulated	
27	May 2000 to March 2014	April 2001 to March 2014	13	Unregulated	
28	January 1939 to December 1951	April 1940 to March 1951	12	Unregulated	
29	June 1941 to March 2014	April 1941 to March 2014	72	Unregulated	
30	October 1951 to September 1969, October 1970 to September 1971	April 1952 to March 1969	17	Unregulated	
31	October 1987 to March 2014	April 1988 to March 2014	26	Unregulated	
32	July 1999 to March 2014	April 2000 to March 2014	14	Unregulated	
33	July 1953 to September 1969, October 1970 to September 1971, November 1986 to March 2014	April 1954 to March 1969, April 1987 to March 2014	42	Unregulated	
34	January 1959 to September 1967, October 1984 to March 2014	April 1960 to March 1967, April 1985 to March 2014	37	Unregulated	
35	June 1937 to September 1960	April 1937 to March 1960	22	Unregulated	
36	October 1997 to January 2012	April 1998 to March 2011	13	Unregulated	
37	February 1922 to March 1932, June 1935 to September 1949	April 1922 to March 1932, April 1936 to March 1949	23	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
38	02399200	Little River near Blue Rond, AL	34°17'20"	85°40'50"	Cherokee	Coosa	03150105	199
39	02399500	Coosa River at Leesburg, AL	34°10'36"	85°45'14"	Cherokee	Coosa	03150105	5,270
40	02400000	Terrapin Creek near Piedmont, AL	33°57'23"	85°34'38"	Calhoun	Coosa	03150105	116
41	02400100	Terrapin Creek at Ellisville, AL	34°03'54"	85°36'51"	Cherokee	Coosa	03150105	252
42	02400500	Coosa River at Gadsden, AL	34°00'37"	85°59'52"	Etowah	Coosa	03150106	5805
43	02400680	Big Wills Creek at State Highway 35 near Fort Payne, AL	34°26'17"	85°46'02"	DeKalb	Coosa	03150106	55.4
44	02401000	Big Wills Creek near Reece City, AL	34°05'53"	86°02'17"	Etowah	Coosa	03150106	182
45	02401370	Big Canoe Creek near Springville, AL	33°48'49"	86°22'54"	St. Clair	Coosa	03150106	45
46	02401390	Big Canoe Creek near Ashville, AL	33°50'23"	86°15'46"	St. Clair	Coosa	03150106	141
47	02401470	Little Canoe Creek near Steele, AL	33°58'09"	86°10'40"	Etowah	Coosa	03150106	22.3
48	02401500	Big Canoe Creek near Gadsden, AL	33°54'11"	86°06'36"	Etowah	Coosa	03150106	253
49	02402500	Coosa River at Riverside, AL	33°36'20"	86°11'57"	St. Clair	Coosa	03150106	7,069
50	02403500	Coldwater Spring near Anniston, AL	33°36'10"	85°55'33"	Calhoun	Coosa	03150106	Indeterminate
51	02404000	Choccolocco Creek near Jenifer, AL	33°34'14"	85°55'50"	Talladega	Coosa	03150106	277
52	02404400	Choccolocco Creek at Jackson Shoal near Lincoln, AL	33°32'54"	86°05'49"	Talladega	Coosa	03150106	481
53	02404500	Choccolocco Creek near Lincoln, AL	33°33'38"	86°07'35"	Talladega	Coosa	03150106	496

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
38	October 1958 to September 1967, October 1970 to March 2014	April 1959 to March 1967, April 1971 to March 2014	51	Unregulated	
39	October 1937 to September 1958	April 1938 to March 1949	11	¹ Unregulated	Since about December 1949, flow was regulated by Allatoona Lake and since about April 1961, by Weiss Lake.
40	October 1944 to September 1954, October 1956 to September 1963	April 1945 to March 1954, April 1957 to March 1963	15	Unregulated	
41	October 1962 to September 1967, October 1980 to March 2014	April 1963 to March 1967, April 1981 to March 2014	37	Unregulated	
42	October 1926 to September 1976	April 1927 to March 1949	22	¹ Unregulated	Since about December 1949, flow was regulated by Allatoona Lake and since about April 1961, by Weiss Lake.
43	October 2002 to March 2014	April 2003 to March 2014	11	Unregulated	
44	October 1943 to September 1970, October 1986 to March 2014	April 1944 to March 1970, April 1987 to March 2014	53	Unregulated	
45	October 1978 to May 1995	April 1979 to March 1995	16	Unregulated	
46	October 1965 to March 2014	April 1966 to March 2014	48	Unregulated	
47	April 1982 to May 1995	April 1982 to March 1995	13	Unregulated	
48	January 1938 to September 1965	April 1938 to March 1965	26	Unregulated	
49	October 1896 to September 1916	April 1897 to March 1916	19	¹ Unregulated	Since about December 1949, flow was regulated by Allatoona Lake and since about April 1961, by Weiss Lake.
50	April 1957 to September 1996	April 1957 to March 1996	39	Unregulated	Atkins and Pearman (1994) noted that flow about 20 ft ³ /s was diverted by the City of Anniston. No DA is provided in NWISWeb because this is a spring. Drainage area was not determined due to streamflow originating from a spring.
51	August 1903 to February 1908, October 1929 to March 1932, October 1935 to September 1970	April 1904 to March 1907, April 1930 to March 1932, April 1936 to March 1970	39	Unregulated	
52	October 1960 to September 1967, October 1984 to March 2014	April 1961 to March 1967, April 1985 to March 2014	35	Unregulated	Potential diversion upstream for municipal water supply for the City of Anniston.
53	October 1938 to September 1953	April 1939 to March 1953	14	Unregulated	Since about 1964, site is likely influenced by backwater from Logan Martin Lake.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
54	02405500	Kelly Creek near Vincent, AL	33°26'51"	86°23'13"	Shelby	Coosa	03150106	193
54	02405500	Kelly Creek near Vincent, AL	33°26'51"	86°23'13"	Shelby	Coosa	03150106	193
55	02405800	Talladega Creek above Talladega, AL	33°22'38"	86°01'22"	Talladega	Coosa	03150106	69.6
56	02406500	Talladega Creek at Alpine, AL	33°21'34"	86°14'03"	Talladega	Coosa	03150106	150
57	02407000	Coosa River at Childersburg, AL	33°17'30"	86°21'50"	Shelby	Coosa	03150107	8,392
58	02407500	Yellowleaf Creek near Wilsonville, AL	33°18'23"	86°33'04"	Shelby	Coosa	03150107	96.5
59	02408500	Hatchet Creek near Rockford, AL	32°56'42"	86°13'06"	Coosa	Coosa	03150107	233
60	02408540	Hatchet Creek below Rockford, AL	32°55'00"	86°16'13"	Coosa	Coosa	03150107	263
61	02410000	Paterson Creek near Central, AL	32°40'54"	86°07'40"	Elmore	Coosa	03150107	4.91
62	02411000	Coosa River at Jordan Dam near Wetumpka, AL	32°36'50"	86°15'18"	Elmore	Coosa	03150107	10,102
63	02411930	Tallapoosa River below Tallapoosa, GA	33°44'27"	85°20'11"	Haralson	Tallapoosa	03150108	272
64	02412000	Tallapoosa River near Heflin, AL	33°37'22"	85°30'48"	Cleburne	Tallapoosa	03150108	448

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
54	December 1951 to September 1970, October 1986 to March 2014	April 1952 to March 1970	18	Unregulated	The period from 1951 to 1970 is likely more representative of natural conditions than the record from 1986 forward.
54	December 1951 to September 1970, October 1986 to March 2014	April 1987 to March 2014	27	Unregulated	QAQC reviews indicated that the streamflow for the period from 1986 to 2014 is likely more influenced by anthropogenic sources than the earlier period from 1952 to 1970.
55	June 1959 to September 1970	April 1960 to March 1970	10	Unregulated	
56	August 1900 to December 1904, October 1939 to September 1951, October 1987 to March 2014	April 1901 to March 1904, April 1940 to March 1951, April 1988 to March 2014	40	Unregulated	
57	October 1913 to September 1978, June 2011 to September 2013	April 1914 to March 1948	35	¹ Unregulated	The period of record analyzed represents pre-regulated conditions. Since December 1949, flow was regulated by Allatoona Lake on Etowah River, since April 1961 by Weiss Lake on Coosa River, since July 1964 by Logan Martin Lake on Coosa River, and since 1966 by H. Neely Henry Lake on the Coosa River. QAQC reviews did not indicate a sufficient length of record with relatively stable regulation patterns to warrant frequency analysis for the regulated period.
58	January 1951 to September 1967	April 1952 to March 1967	16	Unregulated	
59	October 1944 to February 1979	April 1945 to March 1978	33	Unregulated	
60	October 1980 to March 2014	April 1981 to March 2014	33	Unregulated	
61	October 1953 to September 1987	April 1954 to March 1987	33	Unregulated	
62	October 1912 to September 1914, October 1925 to September 2013	April 1913 to March 1914, April 1926 to March 2013	88	Regulated	QAQC reviews did not indicate a sufficient number of years of record with stable regulation patterns to warrant a frequency analysis. Thus, only a plot of annual minimum 7-day average flows will be published.
63	December 1999 to November 2004, October 2005 to March 2014	April 2000 to March 2004, April 2006 to March 2014	12	Unregulated	MOVE.1 analysis using 02412000 as the index station.
64	July 1952 to March 2014	April 1953 to March 2014	61	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
65	02412500	Tallapoosa River near Ofelia, AL	33°19'34"	85°35'31"	Randolph	Tallapoosa	03150108	792
66	02413300	Little Tallapoosa River near Newell, AL	33°26'14"	85°23'57"	Randolph	Tallapoosa	03150108	406
67	02413500	Little Tallapoosa River near Wedowee, AL	33°20'57"	85°32'43"	Randolph	Tallapoosa	03150108	591
68	02414500	Tallapoosa River at Wadley, AL	33°07'00"	85°33'39"	Randolph	Tallapoosa	03150109	1,675
68	02414500	Tallapoosa River at Wadley, AL	33°07'00"	85°33'39"	Randolph	Tallapoosa	03150109	1,675
69	02414715	Tallapoosa River near New Site, AL	32°58'38"	85°44'23"	Tallapoosa	Tallapoosa	03150109	2,058
70	02415000	Hillabee Creek near Hackneyville, AL	33°03'55"	85°52'41"	Tallapoosa	Tallapoosa	03150109	190
71	02416000	Tallapoosa River at Sturdivant, AL	32°54'48"	85°52'16"	Tallapoosa	Tallapoosa	03150109	2,480
72	02418230	Sougahatchee Creek near Loachapoka, AL	32°37'36"	85°35'17"	Lee	Tallapoosa	03150110	71.3
73	02418500	Tallapoosa River below Tallassee, AL	32°30'45"	85°53'21"	Tallapoosa	Tallapoosa	03150110	3,328
74	02418760	Chewacla Creek at Chewacla State Park near Auburn, AL	32°32'53"	85°28'50"	Lee	Tallapoosa	03150110	45.8
75	02419000	Uphabee Creek near Tuskegee, AL	32°28'36"	85°41'42"	Macon	Tallapoosa	03150110	333
76	02419890	Tallapoosa River near Montgomery, AL	32°26'23"	86°11'44"	Montgomery	Tallapoosa	03150110	4,646

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
65	January 1939 to December 1951	April 1939 to March 1951	12	¹ Unregulated	Since 1983, in backwater from R.L. Harris Dam (Lake Wedowee).
66	October 1975 to March 2014	April 1976 to March 2014	38	Unregulated	
67	October 1939 to December 1951	April 1940 to March 1951	11	Unregulated	
68	October 1923 to March 2014	April 1924 to March 1982	58	¹ Unregulated	Regulated by R.L. Harris Dam since 1983.
68	October 1923 to March 2014	April 1983 to March 2014	31	Regulated	Regulated by R.L. Harris Dam since 1983.
69	November 1985 to March 2014	April 1986 to March 2014	28	Regulated	Regulated since about 1983 by R.L. Harris Dam.
70	July 1952 to September 1970, October 1985 to March 2014	April 1953 to March 1970, April 1986 to March 2014	45	Unregulated	
71	October 1900 to July 1926	April 1901 to March 1926	25	¹ Unregulated	Since 1926, site in backwater from Martin Dam.
72	November 1999 to March 2014	April 2000 to March 2014	14	Unregulated	Flow includes wastewater-treatment plant discharges from the City of Auburn.
73	October 1928 to September 2013	April 1929 to March 2013	84	Regulated	Records collected by Alabama Power Company, under general supervision of the U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Daily discharge computed on basis of powerplant records, flow over spillway, and measured leakage. Flow regulated by R.L. Harris Lake (1983), Lake Martin (1926), other hydroelectric plants, and small mill dams above station. Because of substantial influence from regulation, only exceedance percentiles of annual 7-day minimum flows and duration of daily flow are provided.
74	October 2002 to March 2014	April 2003 to March 2014	11	Unregulated	
75	October 1939 to September 1970, October 1974 to March 2014	April 1940 to March 1970, April 1975 to March 2014	69	Unregulated	
76	October 1995 to March 2014	April 1996 to March 2014	18	Regulated	Flow regulated by R.L. Harris Lake (1983), Lake Martin (1926), other hydroelectric plants, and small mill dams above station.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
77	02420000	Alabama River near Montgomery, AL	32°24'41"	86°24'30"	Montgomery	Alabama	03150201	15,087
78	02420500	Autauga Creek at Prattville, AL	32°27'30"	86°28'30"	Autauga	Alabama	03150201	116
79	02421000	Catoma Creek near Montgomery, AL	32°18'26"	86°17'58"	Montgomery	Alabama	03150201	290
80	02422000	Big Swamp Creek near Lowndesboro, AL	32°16'00"	86°41'40"	Lowndes	Alabama	03150201	244
81	02422500	Mulberry Creek at Jones, AL	32°34'58"	86°54'13"	Dallas	Alabama	03150201	203
82	02423000	Alabama River at Selma, AL	32°24'20"	87°01'07"	Dallas	Alabama	03150201	17,095
83	02423130	Cahaba River at Trussville, AL	33°37'20"	86°35'58"	Jefferson	Cahaba	03150202	19.7
84	02423380	Cahaba River near Mountain Brook, AL	33°28'54"	86°42'46"	Jefferson	Cahaba	03150202	140
85	02423397	Little Cahaba River below Leeds, AL	33°32'04"	86°33'45"	Jefferson	Cahaba	03150202	17
86	02423398	Little Cahaba River near Leeds, AL	33°31'27"	86°34'32"	Jefferson	Cahaba	03150202	19.4
87	02423400	Little Cahaba River near Jefferson Park, AL	33°29'59"	86°36'51"	Jefferson	Cahaba	03150202	24.4
88	02423414	Little Cahaba River at Cahaba Beach Road near Cahaba Heights, AL	33°26'23"	86°41'56"	Shelby	Cahaba	03150202	47

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
77	October 1927 to September 1990, October 2001 to March 2014	April 2002 to March 2014	12	Regulated	Regulated by dams on the Coosa and Tallapoosa Rivers since 1914 with most recent dams completed in the 1960s. The most relatively stable period of regulation based on QAQC reviews was used in the 7-day exceedances and daily duration analysis.
78	January 1939 to September 1959	April 1939 to March 1959	20	Regulated	Since about 1920, regulated by Prattville Lake.
79	July 1952 to September 1971, October 1974 to September 1996, October 1997 to March 2014	April 1953 to March 1971, April 1975 to March 1996, April 1998 to March 2014	55	Unregulated	
80	October 1940 to September 1971	April 1941 to March 1971	30	Unregulated	
81	October 1938 to September 1970, October 1974 to March 2014	April 1939 to March 1970, April 1975 to March 2014	70	Unregulated	
82	January 1900 to December 1913, October 1928 to September 1970	April 1900 to March 1913	13	¹ Unregulated	Flows regulated by reservoirs on the Etowah, Coosa, and Tallapoosa Rivers. Based on review of current streamgages on the Alabama River, current regulation does not likely reflect the period of regulated record available at station 02423000. Consequently, 1- and 7-day frequency statistics were computed for the unregulated period from April 1900 to March 1913, and daily duration statistics were computed for January 1900 to March 1913. Also, a plot of the annual minimum 7-day average flows for the complete period of record is provided.
83	October 1988 to March 2014	April 1989 to March 2014	25	Unregulated	
84	October 1980 to September 1981, June 1984 to March 2014	April 1985 to March 2014	29	Unregulated	
85	June 1995 to December 2006, October 2008 to March 2014	April 1996 to March 2006, April 2009 to March 2016	15	Unregulated	
86	October 1980 to September 1981, May 1988 to December 2006	April 1989 to March 2006	17	Unregulated	
87	July 1986 to February 2000, June 2007 to March 2014	April 1987 to March 1999, April 2008 to March 2014	18	Unregulated	
88	August 2003 to March 2014	April 2004 to March 2014	10	Regulated	Flow regulated on Little Cahaba River by Lake Purdy (1929).

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
89	02423425	Cahaba River near Cahaba Heights, AL	33°24'56"	86°44'23"	Shelby	Cahaba	03150202	201
90	02423496	Cahaba River near Hoover, AL	33°22'09"	86°47'03"	Jefferson	Cahaba	03150202	226
91	02423500	Cahaba River near Acton, AL	33°21'48"	86°48'47"	Jefferson	Cahaba	03150202	230
92	0242354750	Cahaba Valley Creek at Cross Creek Road at Pelham, AL	33°18'48"	86°48'23"	Shelby	Cahaba	03150202	25.6
93	02423555	Cahaba River near Helena, AL	33°17'04"	86°52'57"	Shelby	Cahaba	03150202	335
94	02423630	Shades Creek near Greenwood, AL	33°19'34"	86°56'59"	Jefferson	Cahaba	03150202	72.3
95	02423800	Little Cahaba River near Brierfield, AL	33°03'27"	86°57'10"	Bibb	Cahaba	03150202	147
96	02424000	Cahaba River at Centreville, AL	32°56'42"	87°08'21"	Bibb	Cahaba	03150202	1,027

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
89	August 1975 to September 1985, July 1996 to March 2014	April 1976 to March 1985, April 1997 to March 2014	26	Regulated	Flow regulated on Little Cahaba River by Lake Purdy (1929); flow diverted upstream by Birmingham Water Works.
90	May 1988 to March 2014	April 1989 to March 2014	25	Regulated	Flow regulated on Little Cahaba River by Lake Purdy (1929); flow diverted upstream by Birmingham Water Works.
91	October 1938 to September 1957, October 1983 to March 2014	April 1984 to March 2014	30	Regulated	Flow regulated on Little Cahaba River by Lake Purdy (1929); flow diverted upstream by Birmingham Water Works and also is influenced by releases from several wastewater-treatment plants. The period of analysis was from October 1983 to March 2014, which was the most recent period for which data reviews indicated relatively stable flow patterns.
92	October 1998 to September 2013	April 1999 to March 2013	14	Unregulated	
93	October 1995 to March 2014	April 1996 to March 2014	18	Regulated	Flow partly regulated by Lake Purdy (capacity, 15,300 acre-feet) on Little Cahaba River. An average flow of 70 ft ³ /s was diverted above station by Birmingham Water Works and was not included in records, except flows of about 5 ft ³ /s, which were returned to river above station. Flows also were influenced by releases from several upstream wastewater-treatment plants.
94	October 1964 to September 1965, October 1966 to September 1973, October 1974 to September 1981, October 1997 to March 2014	April 1967 to March 1973, April 1975 to March 1981, April 1998 to March 2014	28	Unregulated	
95	December 1957 to September 1970	April 1958 to March 1970	12	Unregulated	
96	August 1901 to February 1908, May 1929 to March 1932, May 1935 to March 2014	April 1902 to March 1907, April 1930 to March 1932, April 1936 to March 2014	85	Unregulated	An average flow of 82 ft ³ /s was diverted upstream from station by Birmingham Water Works Board and was not included in records. Flow partly regulated by Lake Purdy (1929) (capacity, 15,300 acre-feet) on Little Cahaba River and several wastewater-treatment plants. At this downstream location, Lake Purdy is not likely to influence the flows.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
97	02424500	Cahaba River at Sprott, AL	32°40'05"	87°14'30"	Perry	Cahaba	03150202	1,370
98	02424590	Cahaba River near Suttle, AL	32°31'45"	87°11'56"	Perry	Cahaba	03150202	1,480
99	02424940	Oakmulgee Creek near Augustin, AL	32°31'58"	87°05'24"	Dallas	Cahaba	03150202	220
100	02425000	Cahaba River near Marion Junction, AL	32°26'38"	87°10'49"	Dallas	Cahaba	03150202	1,766
101	02425200	Big Swamp Creek near Orrville, AL	32°13'17"	87°09'48"	Dallas	Alabama	03150203	35.8
102	02425500	Cedar Creek at Minter, AL	32°04'45"	86°59'02"	Dallas	Alabama	03150203	211
103	02426000	Boguechitto Creek near Browns, AL	32°26'18"	87°20'02"	Dallas	Alabama	03150203	95.4
104	02427250	Pine Barren Creek near Snow Hill, AL	31°59'46"	87°04'06"	Wilcox	Alabama	03150203	261
105	02427500	Alabama River near Millers Ferry, AL	32°06'52"	87°23'58"	Wilcox	Alabama	03150203	20,637
106	02427700	Turkey Creek at Kimbrough, AL	32°01'15"	87°33'30"	Wilcox	Alabama	03150203	97.5
107	02428400	Alabama River at Claiborne L&D near Monroeville, AL	31°36'54"	87°33'02"	Monroe	Alabama	03150204	21,473
108	02428500	Big Flat Creek near Fountain, AL	31°36'30"	87°24'45"	Monroe	Alabama	03150204	247

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
97	October 1938 to September 1969	April 1939 to March 1969	30	Unregulated	Flow partly regulated by Lake Purdy (1929) (capacity, 15,300 acre-feet) on Little Cahaba River. At this downstream location, Lake Purdy is not likely to influence the flows. Flow was diverted upstream from station by Birmingham Water Works Board and releases by several wastewater-treatment plants.
98	August 1987 to October 2011	April 1988 to March 2011	23	Unregulated	Flow partly regulated by Lake Purdy Reservoir (1929) (capacity, 15,300 acre-feet) on Little Cahaba River. At this downstream location, Lake Purdy is not likely to influence the flows. Flow is diverted upstream from station by Birmingham Water Works Board and releases by several wastewater-treatment plants.
99	May 1975 to May 1987	April 1976 to March 1987	11	Unregulated	
100	October 1938 to September 1954, October 1968 to March 2014	April 1939 to March 1954, April 1969 to March 2014	60	Unregulated	Flow partly regulated by Lake Purdy (1929) (capacity, 15,300 acre-feet) on Little Cahaba River. At this downstream location, Lake Purdy is not likely to influence the flows. Flow was diverted upstream from station by Birmingham Water Works Board and releases by several wastewater-treatment plants.
101	March 1972 to September 1985	April 1972 to March 1985	13	Unregulated	
102	July 1952 to September 1970, October 1974 to September 1982	April 1953 to March 1970, April 1975 to March 1982	24	Unregulated	
103	February 1944 to June 1954, October 1965 to September 1971	April 1944 to March 1954, April 1966 to March 1971	15	Unregulated	
104	October 1989 to March 2014	April 1990 to March 2014	24	Unregulated	
105	October 1937 to September 1954	October 1937 to September 1954	16	Regulated	Based on QAQC reviews, only the non-exceedances of 7-day minimum flows and daily durations were computed.
106	October 1958 to September 1996	April 1959 to March 1996	37	Unregulated	
107	October 1975 to March 2014	April 1976 to March 2014	38	Regulated	
108	October 1943 to September 1970	April 1944 to March 1970	26	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
109	02429000	Limestone Creek near Monroeville, AL	31°33'45"	87°21'06"	Monroe	Alabama	03150204	121
110	02429500	Alabama River at Claiborne, AL	31°32'48"	87°30'45"	Monroe	Alabama	03150204	21,967
111	02429595	Little River near Uriah, AL	31°14'31"	87°36'50"	Escambia	Alabama	03150204	95.2
112	02438000	Buttahatchee River below Hamilton, AL	34°06'22"	87°59'22"	Marion	Tombigbee	03160103	277
113	02439000	Buttahatchee River near Sulligent, AL	33°55'47"	88°06'07"	Lamar	Tombigbee	03160103	472
114	02442000	Luxapallila Creek near Fayette, AL	33°43'10"	87°52'14"	Fayette	Tombigbee	03160105	130
115	02442500	Luxapallila Creek at Millport, AL	33°34'30"	88°05'00"	Lamar	Tombigbee	03160105	247
116	02444000	Coal Fire Creek near Pickensville, AL	33°17'51"	88°15'56"	Pickens	Tombigbee	03160106	126
117	02444160	Tombigbee River at Bevill L&D near Pickensville, AL	33°12'38"	88°17'19"	Pickens	Tombigbee	03160106	5,750
118	02444500	Tombigbee River near Cochrane, AL	33°04'52"	88°14'16"	Pickens	Tombigbee	03160106	5,940
119	02445500	Sipsey River at Fayette, AL	33°40'10"	87°48'59"	Fayette	Tombigbee	03160107	282
120	02446000	Sipsey River at Moores Bridge, AL	33°26'54"	87°45'50"	Tuscaloosa	Tombigbee	03160107	413
121	02446500	Sipsey River near Elrod, AL	33°15'25"	87°46'35"	Tuscaloosa	Tombigbee	03160107	528
122	02447000	Sipsey River near Pleasant Ridge, AL	33°02'19"	88°06'21"	Greene	Tombigbee	03160107	769
123	02447025	Tombigbee River at Heflin L&D near Gainesville, AL	32°50'53"	88°09'22"	Greene	Tombigbee	03160106	7,230
124	02448500	Noxubee River near Geiger, AL	32°55'57"	88°17'52"	Sumter	Tombigbee	03160108	1,097
125	02448900	Bodka Creek near Geiger, AL	32°48'25"	88°18'43"	Sumter	Tombigbee	03160108	158
126	02449000	Tombigbee River at Gainsville, AL	32°49'30"	88°09'24"	Sumter	Tombigbee	03160106	8,632

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
109	January 1952 to September 1970	April 1952 to March 1970	18	Unregulated	
110	April 1930 to September 1975	April 1930 to March 1975	45	Regulated	Only non-exceedances of 7-day minimum flows and daily durations were computed because current regulation pattern likely does not reflect this period of record.
111	October 1968 to September 1979	April 1969 to March 1979	10	Unregulated	
112	October 1950 to September 1970, October 1991 to September 2014	April 1951 to March 1970, April 1992 to March 2014	42	Unregulated	
113	March 1939 to September 1959	April 1939 to March 1959	20	Unregulated	
114	May 1945 to September 1970	April 1946 to March 1970	24	Unregulated	
115	August 1954 to September 1959, December 1980 to September 1986, October 2001 to October 2011	April 1955 to March 1959, April 1981 to March 1986, April 2002 to March 2011	18	Unregulated	
116	October 1954 to September 1971, October 1974 to September 1980	April 1955 to March 1971, April 1975 to March 1980	21	Unregulated	
117	October 1980 to September 2009, October 2010 to March 2014	April 1985 to March 2009, April 2011 to March 2014	27	Regulated	Reflects diversions and regulation structures since 1985.
118	October 1938 to March 1978	April 1939 to March 1978	39	¹ Unregulated	
119	February 1939 to September 1959	April 1939 to March 1959	20	Unregulated	Low-flow frequency estimates were adjusted based on MOVE.1 correlation with station 02446500.
120	February 1939 to September 1951	April 1939 to March 1951	12	Unregulated	Low-flow frequency estimates were adjusted based on MOVE.1 correlation with station 02446500.
121	September 1928 to March 1932, October 1939 to September 1971, October 1978 to September 2014	April 1929 to March 1932, April 1940 to March 1971, April 1979 to March 2014	69	Unregulated	
122	February 1939 to September 1959	April 1939 to March 1959	20	Unregulated	Low-flow frequency estimates were adjusted based on MOVE.1 correlation with station 02446500.
123	March 1978 to March 2014	April 1985 to March 2014	29	Regulated	Reflects diversions and regulation structures since 1985.
124	March 1939 to September 1940, August 1944 to September 1965, October 1966 to March 2014.	April 1939 to March 1940, April 1945 to March 1965, April 1967 to March 2014	67	Unregulated	
125	October 1990 to March 2014	April 1991 to March 2014	23	Unregulated	
126	October 1938 to September 1955, October 1960 to September 1978	April 1939 to March 1955, April 1961 to March 1978	33	¹ Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
127	02449245	Brush Creek near Eutaw, AL	32°49'51"	87°58'56"	Greene	Tombigbee	03160106	43.2
128	02449500	Tombigbee River at Epes, AL	32°41'41"	88°06'53"	Sumter	Tombigbee	03160106	8,930
129	02449882	Blue Springs Creek near Blountsville, AL	34°04'47"	86°36'28"	Blount	Blackwarrior	03160109	13
130	02450000	Mulberry Fork near Garden City, AL	34°00'43"	86°44'12"	Blount	Blackwarrior	03160109	358
130	02450000	Mulberry Fork near Garden City, AL	34°00'43"	86°44'12"	Blount	Blackwarrior	03160109	358
131	02450180	Mulberry Fork near Arkadelphia, AL	33°52'19"	86°55'20"	Cullman	Blackwarrior	03160109	487
132	02450250	Sipsey Fork near Grayson, AL	34°17'07"	87°23'56"	Winston	Blackwarrior	03160110	92.1
133	02450500	Sipsey Fork near Falls City, AL	34°03'07"	87°16'01"	Winston	Blackwarrior	03160110	360
134	02450825	Clear Creek at New Hope Church near Poplar Springs, AL	34°04'52"	87°25'22"	Winston	Blackwarrior	03160110	101
135	02451000	Clear Creek at Falls City, AL	34°02'05"	87°18'00"	Winston	Blackwarrior	03160110	149
136	02453000	Blackwater Creek near Manchester, AL	33°54'30"	87°15'25"	Walker	Blackwarrior	03160109	181
136	02453000	Blackwater Creek near Manchester, AL	33°54'30"	87°15'25"	Walker	Blackwarrior	03160109	181
137	02453500	Mulberry Fork at Cordova, AL	33°45'27"	87°10'13"	Walker	Blackwarrior	03160109	1,916

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
127	June 1975 to September 1997	April 1976 to March 1997	21	Unregulated	
128	January 1901 to December 1901, January 1905 to August 1913, October 1938 to September 1945	April 1905 to March 1913, April 1939 to March 1945	14	¹ Unregulated	
129	October 1992 to March 2014	April 1993 to March 2014	21	Unregulated	
130	October 1928 to March 2014	April 1929 to March 1964	35	Unregulated	The flow patterns changed in the mid 1960s with increasing annual minimum 7-day average flows likely associated with anthropogenic changes in the watershed. This analysis is for October 1928 to March 1964, which likely represents a more natural condition than the flows after 1964.
130	October 1928 to March 2014	April 1965 to March 2014	49	Unregulated	The flow patterns changed in the mid 1960s with increasing annual minimum 7-day average flows likely associated with anthropogenic changes in the watershed. This analysis is for April 1965 to March 2014.
131	October 1976 to September 1986, October 1988 to March 2014	April 1977 to March 1986, April 1989 to March 2014	34	Unregulated	Based on findings from station 02450000, the low flows at this station are likely substantially influenced by anthropogenic influences.
132	October 1966 to March 2014	April 1967 to March 2014	47	Unregulated	
133	June 1943 to December 1954	April 1944 to March 1954	10	Unregulated	Since 1961, site in backwater from Lewis Smith Dam.
134	October 1980 to September 1981, October 1993 to March 2014	April 1994 to March 2014	20	Unregulated	
135	October 1939 to November 1954	April 1940 to March 1954	14	Unregulated	Since 1961, site in backwater from Lewis Smith Dam.
136	October 1938 to September 1971, October 1979 to September 1982, October 1988 to March 2014	April 1939 to March 1971	32	Unregulated	QAQC analysis indicated differences in flow patterns from the early to latter periods of record. The period of record analyzed likely represents more natural conditions than the period from 1988 to 2014.
136	October 1938 to September 1971, October 1979 to September 1982, October 1988 to March 2014	April 1980 to March 1982, April 1989 to March 2014	27	Unregulated	QAQC analysis indicated differences in flow patterns from the early to latter periods of record. The period of record analyzed likely includes anthropogenic influences.
137	June 1900 to December 1912	April 1901 to March 1912	11	¹ Unregulated	Since 1961, regulated by Lewis Smith Dam on the Sipsey Fork.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
138	02454000	Lost Creek near Oakman, AL	33°45'50"	87°21'30"	Walker	Blackwarrior	03160109	134
139	02454055	Lost Creek above Parrish, AL	33°44'30"	87°19'37"	Walker	Blackwarrior	03160109	143
140	02455000	Locust Fork near Cleveland, AL	34°01'28"	86°34'27"	Blount	Blackwarrior	03160111	303
141	02455500	Locust Fork at Trafford, AL	33°49'49"	86°45'21"	Jefferson	Blackwarrior	03160111	624
142	02455980	Turkey Creek at Sewage Plant near Pinson, AL	33°42'40"	86°41'46"	Jefferson	Blackwarrior	03160111	27.4
143	02456000	Turkey Creek at Morris, AL	33°44'25"	86°48'45"	Jefferson	Blackwarrior	03160111	80.9
144	02456330	Crooked Creek near Morris, AL	33°44'10"	86°52'00"	Jefferson	Blackwarrior	03160111	16.2
145	02456500	Locust Fork at Sayre, AL	33°42'35"	86°59'00"	Jefferson	Blackwarrior	03160111	885
146	02457000	Fivemile Creek at Ketona, AL	33°36'05"	86°45'20"	Jefferson	Blackwarrior	03160111	23.9
147	02457595	Fivemile Creek near Republic, AL	33°35'49"	86°52'05"	Jefferson	Blackwarrior	03160111	51.9
148	02458300	Village Creek at 24th Street at Birmingham, AL	33°32'33"	86°49'03"	Jefferson	Blackwarrior	03160111	26
149	02458450	Village Creek at Avenue West at Ensley, AL	33°31'03"	86°52'45"	Jefferson	Blackwarrior	03160111	33.5
150	02458600	Village Creek near Docena, AL	33°32'53"	86°55'33"	Jefferson	Blackwarrior	03160111	52.2
151	02461500	Valley Creek near Bessemer, AL	33°25'09"	86°58'58"	Jefferson	Blackwarrior	03160112	52.5
152	02462000	Valley Creek near Oak Grove, AL	33°26'50"	87°07'20"	Jefferson	Blackwarrior	03160112	148

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
138	October 1951 to September 1966, October 1979 to September 1981	April 1952 to March 1966, April 1980 to March 1981	15	Unregulated	
139	October 1992 to March 2014	April 1993 to March 2014	21	Unregulated	
140	December 1936 to September 1986, October 1992 to March 2014	April 1937 to March 1986, April 1993 to March 2014	70	Unregulated	
141	October 1930 to September 1969, October 1992 to September 1997	April 1931 to March 1969, April 1993 to March 1997	42	Unregulated	
142	July 1988 to March 2014	April 1989 to March 2014	25	Unregulated	
143	January 1944 to September 1979, March 2002 to October 2011	April 1944 to March 1979, April 2002 to March 2011	42	Unregulated	
144	November 1975 to September 1988, October 1996 to September 1997	November 1975 to September 1988, October 1996 to September 1997	12	Unregulated	
145	October 1928 to March 1932, October 1941 to March 2014	April 1964 to March 2014	50	Unregulated	Early part of record was excluded due to differences in flow patterns as indicated in the QAQC analyses.
146	October 1953 to September 1958, December 1974 to September 1979, May 1996 to March 2014	April 1954 to March 1958, April 1975 to March 1979, April 1997 to March 2014	25	Unregulated	
147	May 1988 to March 2014	April 1989 to March 2014	25	Unregulated	
148	June 1988 to December 2006, July 2008 to September 2013	April 1989 to March 2006, April 2009 to March 2013	21	Regulated	Low and medium stages may be influenced by upstream plants and mills.
149	July 1975 to September 1979, July 1988 to March 2014	April 1976 to March 1979, April 1989 to March 2014	28	Regulated	Low and medium stages may be influenced by upstream plants and mills.
150	June 1996 to March 2014	April 1997 to March 2014	17	Unregulated	QAQC reviews indicate that flow was affected by the dam at Bayview Lake, likely attributed to backwater issues. Duration curve comparison with stations 02458300 and 02458450 shows this station has substantially more flow per square mile at the low end.
151	May 1975 to September 1979, May 1988 to March 2014	April 1976 to March 1979, April 1989 to March 2014	28	Unregulated	Low flows likely were influenced by upstream discharges.
152	October 1953 to September 1958, October 1964 to September 1965, June 1978 to March 2014	April 1954 to March 1958, April 1979 to March 2014	39	Unregulated	Low streamflows were influenced by municipal sewage and industrial wastes with much of the discharge being water diverted from the Cahaba River and Blackborne Fork and from other sources.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
153	02462500	Black Warrior River at Bankhead L&D near Bessemer, AL	33°27'30"	87°21'15"	Tuscaloosa	Blackwarrior	03160112	3,981
154	02462600	Blue Creek near Oakman, AL	33°31'17"	87°29'07"	Tuscaloosa	Blackwarrior	03160112	5.32
155	02462800	Davis Creek below Abernant, AL	33°18'30"	87°13'10"	Tuscaloosa	Blackwarrior	03160112	45.3
156	02462951	Black Warrior River at Holt L&D near Holt, AL	33°15'11"	87°26'57"	Tuscaloosa	Blackwarrior	03160112	4,219
157	02463500	Hurricane Creek near Holt, AL	33°12'40"	87°26'51"	Tuscaloosa	Blackwarrior	03160112	108
158	02464000	North River near Samantha, AL	33°28'45"	87°35'50"	Tuscaloosa	Blackwarrior	03160112	223
159	02464146	Turkey Creek near Tuscaloosa, AL	33°24'48"	87°30'38"	Tuscaloosa	Blackwarrior	03160112	6.16
160	02464360	Binion Creek below Gin Creek near Samantha, AL	33°25'29"	87°38'33"	Tuscaloosa	Blackwarrior	03160112	57.2
161	02464500	North River (Site B) near Tuscaloosa, AL	33°21'14"	87°33'12"	Tuscaloosa	Blackwarrior	03160112	372
162	02465000	Black Warrior River at Oliver Lock and Dam at Northport, AL	33°12'33"	87°35'24"	Tuscaloosa	Blackwarrior	03160112	4,820
163	02465200	Lake Creek near Northport, AL	33°17'10"	87°41'00"	Tuscaloosa	Blackwarrior	03160113	3.71
164	02465292	Cribbs Mill Creek at WW Plant at Tuscaloosa, AL	33°10'29"	87°33'53"	Tuscaloosa	Blackwarrior	03160113	10.7
165	02465493	Elliotts Creek at Moundville, AL	32°59'50"	87°37'20"	Hale	Blackwarrior	03160113	32.3
166	02465500	Fivemile Creek near Greensboro, AL	32°49'57"	87°36'24"	Hale	Blackwarrior	03160113	73.6

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
153	October 1928 to September 1936, October 1976 to February 2014	October 1976 to February 2014	36	Regulated	Flow was regulated since 1961 by Lewis Smith Lake. Non-exceedances of 7-day minimum flows only for regulated period. Flow period included zero flows. Log-Pearson type III distribution does not adequately fit the data due to regulation. No frequency analysis was done. Only 7-day exceedances and daily durations were computed.
154	June 1959 to September 1965, October 1976 to September 1984	April 1960 to March 1965, April 1977 to March 1984	12	Unregulated	
155	October 1956 to September 1971	April 1957 to March 1971	14	Unregulated	
156	October 1976 to November 2000, August 2001 to September 2013	October 1976 to November 2000, August 2002 to September 2013	34	Regulated	Flow was regulated by Lewis Smith Lake and Bankhead Lock and Dam. Non-exceedances of 7-day minimum flows and daily durations only. Zero flows.
157	August 1952 to September 1969	April 1953 to March 1969	16	Unregulated	
158	December 1938 to September 1954, October 1968 to March 2014	April 1939 to March 1954, April 1969 to March 2014	60	Unregulated	
159	February 1981 to September 1984, October 1986 to March 2014	April 1981 to March 1984, April 1987 to March 2014	30	Unregulated	
160	October 1986 to March 2014	April 1987 to March 2014	27	Unregulated	
161	December 1951 to December 1968	April 1952 to March 1968	16	Unregulated	Since 1970, in backwater from Lake Tuscaloosa Dam.
162	January 1895 to December 1902, August 1928 to March 2014	April 1976 to March 2014	38	Regulated	Flow was regulated since 1914 by Bankhead Lock and Dam on Black Warrior River, since 1961 by Lewis Smith Lake on Sipsey Fork, and since 1969 by Holt Lock and Dam on Black Warrior River. Period of record analyzed was April 1976 to March 2014, which was the most recent period of relatively stable regulation.
163	November 1956 to September 1970	April 1957 to March 1970	13	Regulated	Downstream from Lake Lurleen.
164	July 2002 to March 2014	April 2003 to March 2014	11	Unregulated	
165	October 1976 to March 2014	April 1977 to March 2014	37	Unregulated	
166	October 1954 to September 1971	April 1955 to March 1971	16	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
167	02466030	Black Warrior River at Selden L&D near Eutaw, AL	32°46'40"	87°50'26"	Hale	Blackwarrior	03160113	5,810
168	02466500	Big Prairie Creek near Gallion, AL	32°32'28"	87°40'52"	Hale	Blackwarrior	03160113	171
169	02467000	Tombigbee River at Demopolis L&D near Coatopa, AL	32°31'10"	87°52'42"	Marengo	Tombigbee	03160201	15,385
170	02467500	Sucarnoochee River at Livingston, AL	32°34'25"	88°11'36"	Sumter	Tombigbee	03160202	607
171	02468000	Alamuchee Creek near Cuba, AL	32°26'00"	88°20'00"	Sumter	Tombigbee	03160202	62.3
172	02468500	Chickasaw Bogue near Linden, AL	32°19'45"	87°47'27"	Marengo	Tombigbee	03160201	257
173	02469000	Kinterbish Creek near York, AL	32°19'00"	88°11'00"	Sumter	Tombigbee	03160201	90.9
174	02469500	Tuckabum Creek near Butler, AL	32°11'00"	88°10'12"	Choctaw	Tombigbee	03160201	115
175	02469550	Horse Creek near Sweetwater, AL	32°02'57"	87°52'12"	Marengo	Tombigbee	03160201	60.4
176	02469700	Okatuppa Creek at Gilbertown, AL	31°53'27"	88°18'48"	Choctaw	Tombigbee	03160201	148
177	02469761	Tombigbee River at Coffeeville L&D near Coffeeville, AL	31°45'30"	88°07'45"	Choctaw	Tombigbee	03160203	18,417
178	02469800	Satilpa Creek near Coffeeville, AL	31°44'39"	88°01'21"	Clarke	Tombigbee	03160203	164
179	02470072	Bassett Creek at U.S. Highway 43 near Thomasville, AL	31°51'50"	87°44'50"	Clarke	Tombigbee	03160203	10.5
180	02470100	Bassett Creek at Walker Springs, AL	31°32'15"	87°47'24"	Clarke	Tombigbee	03160203	195
181	02471001	Chickasaw Creek near Kushla, AL	30°48'10"	88°08'36"	Mobile	Mobile	03160204	125
182	02471065	Montimar Creek at U.S. Highway 90 at Mobile, AL	30°38'59"	88°07'34"	Mobile	Mobile	03160205	7.28
183	02471078	Fowl River at Half-Mile Road near Laurendine, AL	30°30'02"	88°10'53"	Mobile	Mobile	03160205	16.5
184	02479431	Pond Creek near Deer Park, AL	31°09'39"	88°21'43"	Washington	Escatwapa	03170008	20.4

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
167	October 1976 to March 2014	April 1977 to March 2014	36	Regulated	
168	February 1940 to September 1952, October 1990 to September 1991	April 1940 to March 1952	12	Unregulated	
169	August 1928 to March 2014	April 1985 to March 2014	29	Regulated	Reflects diversions and regulation structures since 1985.
170	October 1938 to March 2014	April 1939 to March 2014	75	Unregulated	
171	August 1954 to September 1967	April 1955 to March 1967	12	Unregulated	
172	January 1944 to September 1946, October 1965 to September 1988	April 1944 to March 1946, April 1966 to March 1988	24	Unregulated	
173	August 1954 to September 1967	April 1955 to March 1967	12	Unregulated	
174	October 1954 to September 1970	April 1955 to March 1970	15	Unregulated	
175	October 1959 to September 1970	April 1960 to March 1970	10	Unregulated	
176	October 1956 to September 1969	April 1957 to March 1969	12	Unregulated	
177	October 1960 to March 2014	April 1985 to March 2014	28	Regulated	
178	October 1956 to September 1970, October 1974 to September 2014	April 1957 to March 1970, April 1975 to March 2014	52	Unregulated	
179	October 1995 to September 2014	April 1996 to March 2014	18	Unregulated	
180	October 1956 to September 1970	April 1957 to March 1970	13	Unregulated	
181	October 1951 to March 2014	April 1952 to March 2014	62	Unregulated	Data from October 1951 to September 1968 are from 02471000, Chickasaw Creek near Whistler, AL.
182	June 1962 to September 1967, October 1974 to September 1983	April 1963 to March 1967, April 1975 to March 1983	12	Unregulated	
183	March 1995 to March 2014	April 1995 to March 2014	19	Unregulated	
184	October 1976 to September 1999	April 1977 to March 1999	22	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
185	02479500	Escatawapa River near Wilmer, AL	30°51'44"	88°25'04"	Mobile	Escatawapa	03170008	511
186	02479560	Escatawapa River near Agricola, AL	30°48'42"	88°27'31"	George, MS	Escatawapa	03170008	562
187	02479945	Big Creek at County Road 63 near Wilmer, AL	30°51'21"	88°20'02"	Mobile	Escatawapa	03170008	31.48
188	02479980	Crooked Creek near Fairview, AL	30°46'48"	88°19'08"	Mobile	Escatawapa	03170008	8.08
189	02480002	Hamilton Creek at Snow Road near Semmes, AL	30°43'33"	88°16'35"	Mobile	Escatawapa	03170008	8.22
190	03572110	Crow Creek at Bass, AL	34°56'03"	85°55'03"	Jackson	Tennessee	06030001	131
191	03572900	Town Creek near Geraldine, AL	34°22'42"	85°59'25"	DeKalb	Tennessee	06030001	141
192	03574500	Paint Rock River near Woodville, AL	34°37'27"	86°18'23"	Jackson	Tennessee	06030002	320
193	0357479650	Hester Creek at Buddy Williamson Road near Plevna, AL	34°57'39"	86°27'49"	Madison	Tennessee	06030002	33
194	03575000	Flint River near Chase, AL	34°49'22"	86°28'59"	Madison	Tennessee	06030002	342
195	03575100	Flint River at Brownsboro, AL	34°44'57"	86°26'48"	Madison	Tennessee	06030002	375
196	03575500	Tennessee River at Whitesburg, AL	34°34'18"	86°33'29"	Madison	Tennessee	06030002	25,610
197	03575830	Indian Creek near Madison, AL	34°41'50"	86°42'00"	Madison	Tennessee	06030002	49
198	03576148	Cotaco Creek at Florette, AL	34°24'49"	86°41'16"	Morgan	Tennessee	06030002	136
199	03576250	Limestone Creek near Athens, AL	34°45'06"	86°49'24"	Limestone	Tennessee	06030002	119
200	03576500	Flint Creek near Falkville, AL	34°22'23"	86°56'01"	Morgan	Tennessee	06030002	86.3
201	03585300	Sugar Creek near Good Springs, AL	34°56'40"	87°09'20"	Limestone	Tennessee	06030004	152
202	03586500	Big Nance Creek at Coutland, AL	34°40'12"	87°19'02"	Lawrence	Tennessee	06030005	166

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
185	October 1945 to September 1973	April 1946 to March 1973	27	Unregulated	
186	October 1973 to March 2014	April 1974 to March 2014	40	Unregulated	
187	June 1990 to March 2014	April 1991 to March 2014	23	Unregulated	
188	June 1990 to March 2014	April 1991 to March 2014	23	Unregulated	
189	June 1990 to March 2014	April 1991 to March 2014	23	Unregulated	
190	May 1975 to October 1996	April 1976 to March 1996	20	Unregulated	
191	October 1957 to September 1980	April 1958 to March 1980	22	Unregulated	
192	January 1936 to September 2014	April 1936 to March 2014	78	Unregulated	
193	October 1998 to September 2013	April 1999 to March 2013	14	Unregulated	
194	May 1930 to September 1981, October 1982 to December 1994	April 1931 to March 1981, April 1983 to March 1994	61	Unregulated	
195	October 1998 to September 2014	April 1999 to March 2014	15	Unregulated	
196	October 1924 to September 2005	April 1925 to March 1936	11	¹ Unregulated	
197	October 1959 to September 1966, October 1975 to June 2002	April 1960 to March 1966, April 1976 to March 2002	32	Unregulated	
198	October 1965 to September 1980	April 1966 to March 1980	14	Unregulated	
199	October 1939 to September 1970, October 1994 to September 2014	April 1940 to March 1970, April 1995 to March 2014	49	Unregulated	
200	August 1952 to September 1970, October 1992 to September 1999, October 2011 to September 2014	April 1953 to March 1970, April 1993 to March 1999, April 2012 to March 2014	25	Unregulated	
201	October 1957 to September 1969	April 1958 to March 1969	11	Unregulated	
202	September 1935 to September 1940, April 1945 to September 1981, March 1988 to September 2014	April 1936 to March 1940, April 1945 to March 1981	40	Unregulated	Based on QAQC reviews, it appears that low-flow patterns after 1981 are different than the previous record, which is likely due to anthropogenic influences in the basin. Thus, the period being analyzed here likely represents more natural conditions. A separate analysis was done for the period after 1981.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
202	03586500	Big Nance Creek at Coutland, AL	34°40'12"	87°19'02"	Lawrence	Tennessee	06030005	166
203	03589500	Tennessee River at Florence, AL	34°47'13"	87°40'12"	Lauderdale	Tennessee	06030005	30,810
204	03590000	Cypress Creek near Florence, AL	34°48'28"	87°42'02"	Lauderdale	Tennessee	06030005	209
205	03590500	Tuscumbia Spring at Tuscumbia, AL	34°43'45"	87°42'15"	Colbert	Tennessee	06030005	Indeterminate
206	03591800	Bear Creek near Hackeburg, AL	34°17'01"	87°46'26"	Marion	Tennessee	06030006	143
207	03592000	Bear Creek near Red Bay, AL	34°26'38"	88°06'56"	Franklin	Tennessee	06030006	263
208	03592200	Cedar Creek near Pleasant Site, AL	34°32'56"	88°01'09"	Franklin	Tennessee	06030006	189
209	03592300	Little Bear Creek near Halltown, AL	34°29'19"	88°02'07"	Franklin	Tennessee	06030006	78.2
210	03592500	Bear Creek at Bishop, AL	34°39'21"	88°07'21"	Colbert	Tennessee	06030006	667
Stations from surrounding States								
211	02330450	Chattahoochee River at Helen, GA	34°42'03"	83°43'44"	White	Apalachicola	03130001	44.7
212	02331000	Chattahoochee River near Leaf, GA	34°34'37"	83°38'09"	Habersham	Apalachicola	03130001	150
213	02333500	Chestatee River near Dahlonega, GA	34°31'41"	83°56'23"	Lumpkin	Apalachicola	03130001	153
214	02335000	Chattahoochee River near Norcross, GA	33°59'50"	84°12'07"	Gwinnett	Apalachicola	03130001	1,170
215	02337000	Sweetwater Creek near Austell, GA	33°46'35"	84°36'56"	Douglas	Apalachicola	03130002	238
216	02337500	Snake Creek near Whitesburg, GA	33°31'46"	84°55'42"	Carroll	Apalachicola	03130002	35.5

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
202	September 1935 to September 1940, April 1945 to September 1981, March 1988 to September 2014	April 1988 to March 2014	26	Unregulated	Based on QAQC reviews, it appears that low-flow patterns after 1981 are different than the previous record, which is likely due to anthropogenic influences in the basin. The period of record used in this analysis represents current conditions in the basin reflecting anthropogenic influences.
203	October 1894 to November 2005	April 1895 to March 1924	29	¹ Unregulated	
204	June 1934 to September 1953. Monthly discharges for October 1933 to May 1934	April 1935 to March 1953	18	Unregulated	
205	December 1928 to March 1930, January 1956 to September 1965	April 1929 to March 1930, April 1956 to March 1965	11	Unregulated	No drainage area in NWISWeb because the site is a spring.
206	October 1956 to September 1979, October 1980 to September 1981	April 1957 to March 1981	22	Unregulated	
207	October 1913 to May 1920, October 1958 to September 1967, March 1969 to September 1981	April 1914 to March 1920, April 1959 to March 1967	14	¹ Unregulated	
208	October 1957 to September 1977	April 1958 to March 1977	19	¹ Unregulated	
209	October 1957 to September 1977	April 1958 to March 1975	17	¹ Unregulated	
210	October 1926 to May 1928, March 1929 to March 1932, October 1933 to September 1979	April 1927 to March 1928, April 1929 to March 1932, April 1934 to March 1979	49	¹ Unregulated	
Stations from surrounding States—Continued					
211	May 1981 to March 2014	April 1982 to March 2014	32	Unregulated	
212	February 1940 to September 1971, October 2008 to March 2014	April 1940 to March 1971, April 2009 to March 2014	36	Unregulated	Noted in Gotvald (2016) as potentially being influenced by upstream diversions.
213	July 1929 to January 1932, April 1940 to March 2014	April 1930 to March 1931, April 1940 to March 2014	75	Unregulated	
214	January 1903 to September 1946, October 1956 to March 2014	April 1903 to March 1946	43	¹ Unregulated	
215	May 1904 to December 1905, March 1937 to March 2014	April 1937 to March 2014	77	Unregulated	Noted in Gotvald (2016) as potentially being influenced by upstream diversions.
216	September 1954 to March 2014	April 1955 to March 2000	45	¹ Unregulated	Flow regulated by earthen dam (Snake Creek Reservoir) upstream from gage since 2001. Frequency and duration statistics represent pre-regulation period.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
217	02338660	New River at GA 100, near Corinth, GA	33°14'07"	84°59'16"	Heard	Apalachicola	03130002	127
218	02339000	Yellowjacket Creek near La Grange, GA	33°05'27"	85°03'40"	Troup	Apalachicola	03130002	182
219	02340500	Mountain Oak Creek near Hamilton, GA	32°44'28"	85°04'08"	Harris	Apalachicola	03130002	61.7
220	02341800	Upatoi Creek near Columbus, GA	32°24'48"	84°49'12"	Chattahoochee	Apalachicola	03130003	342
221	02359000	Chipola River near Altha, FL	30°32'02"	85°09'55"	Calhoun	Apalachicola (Chattahoochee)	03130012	781
222	02365500	Choctawhatchee River at Caryville, FL	30°46'32"	85°49'40"	Holmes	Choctawhatchee	03140203	3,499
223	02366000	Holmes Creek at Vernon, FL	30°37'36"	85°42'44"	Washington	Choctawhatchee	03140203	386
224	02368000	Yellow River at Milligan, FL	30°45'10"	86°37'45"	Okaloosa	Blackwater	03140103	624
225	02368500	Shoal River near Mossy Head, FL	30°47'45"	86°18'25"	Walton	Blackwater	03140103	123
226	02369000	02369000 Shoal River near Crestview, FL	30°41'50"	86°34'15"	Okaloosa	Blackwater	03140103	474
227	02370000	Blackwater River near Baker, FL	30°50'00"	86°44'05"	Okaloosa	Blackwater	03140104	205
228	02370500	Big Coldwater Creek near Milton, FL	30°42'30"	86°58'20"	Santa Rosa	Blackwater	03140104	237
229	02370700	Pond Creek near Milton, FL	30°40'50"	87°07'55"	Santa Rosa	Blackwater	03140104	58.7
230	02376000	Pine Barren Creek near Barth, FL	30°47'55"	87°22'05"	Escambia	Conecuh	03140305	75.3
231	02376300	Brushy Creek near Walnut Hill, FL	30°53'21"	87°32'24"	Escambia	Perdido	03140106	49
232	02380500	Coosawattee River near Ellijay, GA	34°40'30"	84°30'31"	Gilmer	Coosa-Tallapoosa	03150102	236
233	02381600	Fausett Creek near Talking Rock, GA	34°34'13"	84°28'08"	Gilmer	Coosa-Tallapoosa	03150102	9.99

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
217	October 1978 to March 2014	April 1979 to March 2014	35	Unregulated	Noted in Gotvald (2016) as potentially being influenced by upstream diversions.
218	January 1951 to March 1971	April 1951 to March 1971	20	Unregulated	Inundated by West Point Lake about 1974.
219	December 1943 to September 1971	December 1943 to September 1971	27	Unregulated	
220	April 1968 to March 2014	April 1968 to March 2014	46	Unregulated	
221	December 1912 to December 1913, October 1921 to September 1927, August 1929 to September 1931, March 1943 to March 2014	April 1922 to March 1927, April 1930 to March 1931, April 1943 to March 2014	77	Unregulated	
222	October 1929 to March 1995, October 1996 to March 2014	April 1930 to March 1994, April 2001 to March 2014	77	Unregulated	
223	April 1950 to May 1979, October 2005 to December 2013	April 1950 to March 1979, April 2006 to March 2013	36	Unregulated	
224	August 1938 to October 1993, August 1996 to March 2014	April 1939 to March 1993, April 1997 to March 2014	71	Unregulated	
225	March 1951 to October 1978, May 2000 to September 2002, October 2003 to March 2014	April 1951 to March 1978, April 2001 to March 2002, April 2004 to March 2014	38	Unregulated	
226	August 1938 to March 2014	April 1939 to March 2014	75	Unregulated	
227	April 1950 to November 1992, July 1996 to March 2014	April 1950 to March 1992, April 1997 to March 2014	59	Unregulated	
228	December 1938 to June 1979, February 1980 to April 1980, July 1980 to March 1992, October 1997 to August 1999, May 2000 to February 2014	April 1939 to March 1979, April 1981 to March 1992, April 1998 to March 1999, April 2001 to March 2013	63	Unregulated	
229	January 1958 to October 1978, April 1979 to July 1979, November 1999 to January 2003, March 2003 to September 2006	April 1958 to March 1978, April 2000 to March 2002, April 2003 to March 2006	25	Unregulated	
230	October 1952 to September 1994	April 1953 to March 1994	41	Unregulated	
231	February 1958 to November 1991	February 1958 to November 1991	33	Unregulated	
232	October 1938 to December 1949, June 1963 to March 2014	April 1939 to March 1949, April 1964 to March 2014	60	Unregulated	Noted in Gotvald (2016) as potentially being influenced by upstream diversions.
233	October 1974 to March 2014	April 1975 to March 2014	39	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
234	02382000	Scarecorn Creek at Hinton, GA	34°28'04"	84°35'30"	Pickens	Coosa-Tallapoosa	03150102	21.3
235	02382200	Talking Rock Creek near Hinton, GA	34°31'22"	84°36'40"	Pickens	Coosa-Tallapoosa	03150102	119
236	02383000	Rock Creek near Fairmont, GA	34°21'32"	84°46'46"	Bartow	Coosa-Tallapoosa	03150102	6.17
237	02383500	Coosawattee River near Pine Chapel, GA	34°33'51"	84°49'59"	Gordon	Coosa-Tallapoosa	03150102	831
238	02387500	Oostanaula River near Resaca, GA	34°34'38"	84°56'31"	Gordon	Coosa-Tallapoosa	03150103	1,602
239	02388000	West Armuchee Creek near Subligna, GA	34°34'04"	85°09'16"	Chattooga	Coosa-Tallapoosa	03150103	36.4
240	02388300	Heath Creek near Rome, GA	34°21'57"	85°16'17"	Floyd	Coosa-Tallapoosa	03150103	14.7
241	02389000	Etowah River near Dawsonville, GA	34°22'57"	84°03'21"	Dawson	Coosa-Tallapoosa	03150104	107
242	02390000	Amicalola Creek near Dawsonville, GA	34°25'32"	84°12'43"	Dawson	Coosa-Tallapoosa	03150104	89
243	02392000	Etowah River at Canton, GA	34°14'23"	84°29'41"	Cherokee	Coosa-Tallapoosa	03150104	613
244	02392500	Little River near Roswell, GA	34°07'09"	84°23'18"	Fulton	Coosa-Tallapoosa	03150104	60
245	02395120	Two Run Creek near Kingston, GA	34°14'34"	84°53'23"	Bartow	Coosa-Tallapoosa	03150104	33.1
246	02411800	Little River near Buchanan, GA	33°47'51"	85°07'03"	Haralson	Coosa-Tallapoosa	03150108	20.2
247	02429900	Big Brown Creek near Booneville, MS	34°37'29"	88°26'42"	Prentiss	Tombigbee	03160101	27.1
248	02429980	Pollard Mill Branch at Paden, MS	34°39'14"	88°14'56"	Tishomingo	Tombigbee	03160101	2.01
249	02430000	Mackeys Creek near Dennis, MS	34°31'34"	88°19'22"	Tishomingo	Tombigbee	03160101	66.9
250	02430085	Red Bud Creek near Moores Mill, MS	34°28'00"	88°17'01"	Tishomingo	Tombigbee	03160101	15.7
251	02430615	Mud Creek near Fairview, MS	34°23'33"	88°21'18"	Itawamba	Tombigbee	03160101	11.1
252	02430680	Twentymile Creek near Guntown, MS	34°27'10"	88°34'38"	Lee	Tombigbee	03160101	131

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
234	April 1939 to December 1942, May 1959 to September 1974, August 1986 to April 1991	April 1939 to March 1942, April 1960 to March 1974, April 1981 to March 1991	21	Unregulated	
235	November 1973 to March 2014	April 1974 to March 2014	40	Unregulated	
236	October 1951 to September 1974	April 1952 to March 1974	22	Unregulated	
237	November 1938 to March 2014	April 1939 to March 1973	34	¹ Unregulated	Pre-regulation period (currently regulated by Carters Lake and re-regulation dam).
238	November 1892 to March 2014	April 1893 to March 1973	80	¹ Unregulated	Pre-regulation period (currently regulated by Carters Lake and re-regulation dam).
239	April 1939 to June 1940, May 1960 to September 1981	April 1939 to March 1940, April 1961 to March 1981	21	Unregulated	
240	May 1968 to September 1989	April 1969 to March 1989	20	Unregulated	
241	March 1940 to September 1976	April 1940 to March 1976	36	Unregulated	
242	April 1939 to May 1952, September 2005 to March 2014	April 1939 to March 1952, April 2006 to March 2014	21	Unregulated	
243	October 1896 to September 1905, October 1936 to March 2014	April 1897 to March 1905, April 1937 to March 2014	85	Unregulated	Noted in Gotvard (2016) as potentially being influenced by upstream diversions.
244	January 1947 to September 1976	April 1947 to March 1976	29	Unregulated	Noted in Gotvard (2016) as potentially being influenced by upstream diversions.
245	May 1980 to March 2014	April 1981 to March 2014	33	Unregulated	
246	June 1959 to September 1985	April 1960 to March 1985	25	Unregulated	
247	June 1973 to September 2003	April 1974 to March 2003	29	Unregulated	
248	October 1972 to May 2004	April 1973 to March 2004	31	Unregulated	
249	October 1937 to October 1979	April 1938 to March 1973	35	¹ Unregulated	Site regulated by Tennessee-Tombigbee Waterway since 1975 but some documents note construction began about 1973.
250	June 1975 to March 2014	April 1976 to March 2014	38	Unregulated	
251	June 1975 to December 2011	April 1976 to March 2011	35	Unregulated	
252	October 1982 to March 2014	April 1983 to March 2014	31	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
253	02430880	Cummings Creek near Fulton, MS	34°18'16"	88°22'16"	Itawamba	Tombigbee	03160101	19.1
254	02431000	Tombigbee River near Fulton, MS	34°15'54"	88°26'43"	Itawamba	Tombigbee	03160101	612
255	02433000	Bull Mountain Creek near Smithville, MS	34°05'18"	88°23'26"	Itawamba	Tombigbee	03160101	336
256	02433500	Tombigbee River at Bigbee, MS	34°00'41"	88°30'49"	Monroe	Tombigbee	03160101	1,226
257	02435020	Town Creek at Eason Boulevard at Tupelo, MS	34°14'08"	88°41'45"	Lee	Tombigbee	03160102	233
258	02436500	Town Creek near Nettleton, MS	34°03'33"	88°37'41"	Monroe	Tombigbee	03160102	620
259	02439400	Buttahatchee River near Aberdeen, MS	33°47'24"	88°18'55"	Monroe	Tombigbee	03160103	798
260	02440000	Chuquatonchee Creek near Egypt, MS	33°50'24"	88°45'43"	Chickasaw	Tombigbee	03160104	167
261	02440500	Chuquatonchee Creek near West Point, MS	33°36'26"	88°42'33"	Clay	Tombigbee	03160104	505
262	02443000	Luxapallila River at Steens, MS	33°33'37"	88°18'55"	Lowndes	Tombigbee	03160105	309
263	02448000	Noxubee River at Macon, MS	33°06'07"	88°33'42"	Noxubee	Tombigbee	03160108	768
264	02477000	Chickasawhay River at Enterprise, MS	32°10'33"	88°49'11"	Clarke	Pascagoula	03170002	918
265	02477990	Buckatunna Creek near Denham, MS	31°41'39"	88°31'09"	Wayne	Pascagoula	03170002	492

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
253	July 1975 to March 2014	April 1976 to March 2014	38	Unregulated	
254	October 1928 to March 2014	April 1929 to March 1984	55	¹ Unregulated	Since about 1985, flows influenced by upstream diversions and regulation.
255	October 1940 to September 1984	April 1941 to March 1984	43	Unregulated	
256	October 1944 to September 1946, October 1947 to September 1954, October 1963 to September 1998, October 2001 to March 2014.	April 1945 to March 1946, April 1948 to March 1954, April 1964 to March 1984.	27	¹ Unregulated	Since about 1985, flows influenced by upstream diversions and regulation.
257	October 1970 to September 2003	April 1971 to March 2003	32	Unregulated	
258	October 1939 to September 1988, June 1989 to March 2014	April 1940 to March 1988, April 1990 to March 2014	71	Unregulated	
259	July 1966 to March 2014	April 1967 to March 2014	47	Unregulated	
260	October 1951 to September 1973	April 1952 to March 1973	21	Unregulated	
261	October 1943 to September 1946, October 1947 to September 1973, April 1996 to September 2004	April 1944 to March 1946, April 1948 to March 1973, April 1997 to March 2004	34	Unregulated	
262	October 1943 to September 1947, October 1949 to October 1977, November 1987 to August 1989	April 1944 to March 1947, April 1950 to March 1977	30	Unregulated	
263	August 1928 to September 1932, September 1938 to September 1989, October 1990 to March 2014	April 1929 to March 1932, April 1939 to March 1989, April 1991 to March 2014	76	Unregulated	Telis (1991) indicates that approximately 22 percent of the basin has been regulated by Bluff Lake since 1950. QAQC reviews of Google Earth and USGS NWISWeb maps indicate that estimate may be high. Bluff Lake is on a tributary to Noxubee River, is far up in the basin, and is, therefore, not likely to substantially influence flows at this gage.
264	August 1938 to March 2014	April 1939 to March 1968	29	¹ Unregulated	Okatibbee Lake was completed about November 1968. Although the drainage area at the outlet of the lake is only 153 mi ² , the QAQC review indicates it may have influenced the low flows. Thus, only the pre-regulation period was analyzed. Included in Telis (1991).
265	January 1972 to September 2013	April 1972 to March 2013	41	Unregulated	

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	USGS station number	Station name	Latitude	Longitude	County	Basin	Hydrologic Unit Code	Drainage area (mi ²)
266	02478500	Chickasawhay River at Leakesville, MS	31°08'55"	88°32'53"	Greene	Pascagoula	03170003	2690
267	03543500	Sewee Creek near Decatur, TN	35°34'53"	84°44'53"	Meigs	Middle Tennessee-Hiwassee	06020001	117
268	03544500	Richland Creek near Dayton, TN	35°30'17"	85°01'20"	Rhea	Middle Tennessee-Hiwassee	06020001	50.2
269	03566420	Wolftever Creek near Ooltewah, TN	35°03'43"	85°03'59"	Hamilton	Middle Tennessee-Hiwassee	06020001	18.8
270	03567500	South Chickamauga Creek near Chickamauga, TN	35°00'51"	85°12'24"	Hamilton	Middle Tennessee-Hiwassee	06020001	428
271	03568933	Lookout Creek near New England, GA	34°53'51"	85°27'47"	Dade	Middle Tennessee-Hiwassee	06020001	149
272	03578000	Elk River near Pelham, TN	35°17'48"	85°52'11"	Grundy	Middle Tennessee-Hiwassee	06030003	65.6
273	03584000	Richland Creek near Pulaski, TN	35°12'51"	87°06'05"	Giles	Middle Tennessee-Elk	06030004	366
274	03588000	Shoal Creek at Lawrenceburg, TN	35°14'40"	87°21'02"	Lawrence	Middle Tennessee-Elk	06030005	55.4
275	03588400	Chisholm Creek at Westpoint, TN	35°08'04"	87°31'45"	Lawrence	Middle Tennessee-Elk	06030005	43
276	03588500	Shoal Creek at Iron City, TN	35°01'27"	87°34'45"	Lawrence	Middle Tennessee-Elk	06030005	348
277	03592718	Little Yellow Creek near Burnsville, MS	34°50'08"	88°17'17"	Tishomingo	Tennessee	06030005	24.7

¹Site is currently (2017) regulated, but low-flow frequency statistics were based on pre-regulation data.

Table 1. U.S. Geological Survey continuous-record streamgaging stations in Alabama and surrounding States included in this investigation.—Continued

[USGS, U.S. Geological Survey; °, degrees; ', minutes; ", seconds; ft³/s, cubic foot per second; DA, drainage area; NWISWeb, National Water Information System database; mi², square mile; QAQC, quality assurance, quality control]

Site index number (fig. 1)	Period of record available	Period of record analyzed	Number of climate years used in analysis	Flow condition for period analyzed	Remarks
266	September 1938 to March 2014	April 1939 to March 2014	75	Unregulated	
267	June 1934 to November 1994, April 2012 to March 2014	April 1935 to March 1994, April 2012 to March 2014	61	Unregulated	
268	July 1927 to September 1931, July 1934 to September 1955, July 1979 to December 1981	April 1928 to March 1931, April 1935 to March 1955, April 1980 to March 1981	24	Unregulated	
269	February 1964 to September 1989	April 1964 to March 1989	25	Unregulated	
270	October 1928 to September 1978, October 1980 to September 1994, May 2012 to March 2014	April 1929 to March 1978, April 1981 to March 1994, April 2013 to March 2014	63	Unregulated	
271	August 1979 to March 2014	April 1980 to March 2014	34	Unregulated	Noted in Gotvald (2016) as potentially being influenced by upstream diversions.
272	December 1951 to December 1987, November 2000 to March 2014	April 1952 to March 1987, April 2001 to March 2014	48	Unregulated	
273	May 1934 to October 1975	April 1935 to March 1975	40	Unregulated	
274	July 1932 to March 1934, March 1967 to November 1991	April 1933 to March 1934, April 1967 to March 1991	25	Unregulated	
275	August 1962 to December 1987	April 1963 to March 1987	24	Unregulated	
276	July 1925 to September 1994, October 2000 to March 2014	April 1951 to March 1994, April 2001 to March 2014	56	Unregulated	From U.S. Geological Survey (2014), "Prior to January 1951, diurnal fluctuation at low flow caused by powerplant near Lawrenceburg."
277	May 1973 to March 2013	April 1974 to March 2012	38	Unregulated	

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
1	02339225	Wehadkee Creek below Rock Mills, AL	Unregulated	60.2	April 1979 to March 1989	10	−0.200	0.47	Not significant
2	02342500	Uchee Creek near Fort Mitchell, AL	Unregulated	322	April 1947 to March 2014	67	−0.220	0.01	Downward
3	02342933	South Fork Cowikee Creek near Batesville, AL	Unregulated	112	April 1964 to March 1971, April 1975 to March 2011	43	−0.020	0.06	Not significant
4	02343300	Abbie Creek near Haleburg, AL	Unregulated	146	April 1959 to March 1971, April 1975 to March 1993	30	−0.290	0.02	Downward
5	02343500	Chattahoochee River at Columbia, AL	Unregulated	8,040	April 1929 to March 1960	31	−0.049	0.71	Not significant
6	02360500	East Fork Choctawhatchee River near Midland City, AL	Unregulated	291	April 1953 to March 1963	10	0.690	0.01	Upward
7	02361000	Choctawhatchee River near Newton, AL	Unregulated	686	April 1922 to March 1927, April 1936 to March 2014	83	−0.270	0.00	Downward
8	02361500	Choctawhatchee River near Bellwood, AL	Unregulated	1,280	April 1922 to March 1925, April 2001 to March 2014	16	−0.320	0.09	Not significant
9	02362240	Little Double Bridges Creek near Enterprise, AL	Unregulated	21.4	April 1986 to March 2014	28	0.032	0.83	Not significant
10	02363000	Pea River near Arifton, AL	Unregulated	498	April 1939 to March 1970, April 1988 to March 2014	57	−0.270	0.00	Downward
11	02364500	Pea River near Samson, AL	Unregulated	1,182	April 1905 to March 1913, April 1923 to March 1925, April 1936 to March 1970, April 2003 March 2014	55	−0.300	0.00	Downward
12	02364570	Panther Creek near Hacoda, AL	Unregulated	26.2	April 1975 to March 1995	20	−0.160	0.35	Not significant
13	02369800	Blackwater River near Bradley, AL	Unregulated	87.7	April 1968 to March 2014	46	−0.160	0.12	Not significant
14	02371200	Indian Creek near Troy, AL	Unregulated	8.87	April 1959 to March 1968, April 1971 to March 1986	24	−0.250	0.09	Not significant
15	02371500	Conecuh River at Brantley, AL	Unregulated	500	April 1938 to March 2014	76	−0.320	<0.0001	Downward
16	02372000	Patsaliga Creek at Lurverne, AL	Unregulated	254	April 1944 to March 1958	14	−0.520	0.01	Downward
17	02372250	Patsaliga Creek near Brantley, AL	Unregulated	442	April 1975 to March 2014	39	−0.290	0.01	Downward
18	02372422	Conecuh River below Point A Dam near River Falls, AL	Regulated	1,273	April 2000 to March 2013	13	−0.180	0.39	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
19	02372500	Conecuh River near Andalusia, AL	Regulated	1,344	April 1930 to March 1952, April 1966 to March 1968	24	0.120	0.43	Not significant
20	02373000	Sepulga River near McKenzie, AL	Unregulated	470	April 1938 to March 1967, April 1975 to March 2014	68	-0.120	0.16	Not significant
21	02373500	Pigeon Creek near Thad, AL	Unregulated	307	April 1938 to March 1970	32	-0.250	0.04	Downward
22	02374000	Conecuh River near Brooklyn, AL	Regulated	2,495	April 1936 to March 1957	21	-0.340	0.03	Downward
23	02374250	Conecuh River at State Highway 41 near Brewton, AL	Regulated	2,661	April 2000 to March 2014	14	-0.033	0.87	Not significant
24	02374500	Murder Creek near Evergreen, AL	Unregulated	176	April 1938 to March 2014	76	-0.078	0.32	Not significant
25	02374700	Murder Creek at State Highway 41 near Brewton, AL	Unregulated	435	April 1999 to March 2014	15	-0.260	0.18	Not significant
26	02374745	Burnt Corn Creek at State Highway 41 near Brewton, AL	Unregulated	182	April 1999 to March 2014	15	-0.240	0.22	Not significant
27	02374950	Big Escambia Creek at Sardine Bridge near Stanley Crossroads, AL	Unregulated	193	April 2001 to March 2014	13	-0.260	0.22	Not significant
28	02375000	Big Escambia Creek at Flomaton, AL	Unregulated	330	April 1940 to March 1951	12	0.360	0.10	Not significant
29	02376500	Perdido River at Barrineau Park, FL	Unregulated	394	April 1941 to March 2014	72	-0.150	0.07	Not significant
30	02377500	Styx River near Loxley, AL	Unregulated	92.2	April 1952 to March 1969	17	-0.022	0.90	Not significant
31	02377570	Styx River near Elsanor, AL	Unregulated	192	April 1988 to March 2014	26	-0.300	0.03	Downward
32	02378300	Magnolia River at U.S. 98 near Foley, AL	Unregulated	16.6	April 2000 to March 2014	14	0.420	0.04	Upward
33	02378500	Fish River near Silver Hill, AL	Unregulated	55.3	April 1954 to March 1969, April 1987 to March 2014	42	-0.170	0.11	Not significant
34	02398300	Chattooga River above Gaylesville, AL	Unregulated	366	April 1960 to March 1967, April 1985 to March 2014	37	-0.080	0.49	Not significant
35	02398500	Chattooga River at Gaylesville, AL	Unregulated	379	April 1937 to March 1960	22	0.220	0.15	Not significant
36	02398950	West Fork Little River at Desoto Park near Fort Payne, AL	Unregulated	42.8	April 1998 to March 2011	13	-0.077	0.71	Not significant
37	02399000	Little River near Jamestown, AL	Unregulated	125	April 1922 to March 1932, April 1936 to March 1949	23	0.230	0.12	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
38	02399200	Little River near Blue Rond, AL	Unregulated	199	April 1959 to March 1967, April 1971 to March 2014	51	−0.023	0.81	Not significant
39	02399500	Coosa River at Leesburg, AL	¹ Unregulated	5,270	April 1938 to March 1949	11	0.130	0.59	Not significant
40	02400000	Terrapin Creek near Piedmont, AL	Unregulated	116	April 1945 to March 1954, April 1957 to March 1963	15	−0.120	0.52	Not significant
41	02400100	Terrapin Creek at Ellisville, AL	Unregulated	252	April 1963 to March 1967, April 1981 to March 2014	37	−0.210	0.07	Not significant
42	02400500	Coosa River at Gadsden, AL	¹ Unregulated	5805	April 1927 to March 1949	22	−0.087	0.57	Not significant
43	02400680	Big Wills Creek at State Highway 35 near Fort Payne, AL	Unregulated	55.4	April 2003 to March 2014	11	−0.220	0.35	Not significant
44	02401000	Big Wills Creek near Reece City, AL	Unregulated	182	April 1944 to March 1970, April 1987 to March 2014	53	0.075	0.43	Not significant
45	02401370	Big Canoe Creek near Springville, AL	Unregulated	45	April 1979 to March 1995	16	0.050	0.79	Not significant
46	02401390	Big Canoe Creek near Ashville, AL	Unregulated	141	April 1966 to March 2014	48	−0.016	0.87	Not significant
47	02401470	Little Canoe Creek near Steele, AL	Unregulated	22.3	April 1982 to March 1995	13	0.051	0.81	Not significant
48	02401500	Big Canoe Creek near Gadsden, AL	Unregulated	253	April 1938 to March 1965	26	0.099	0.48	Not significant
49	02402500	Coosa River at Riverside, AL	¹ Unregulated	7,069	April 1897 to March 1916	19	−0.064	0.70	Not significant
50	02403500	Coldwater Spring near Anniston, AL	Unregulated	Indeterminate	April 1957 to March 1996	39	−0.020	0.86	Not significant
51	02404000	Choccolocco Creek near Jenifer, AL	Unregulated	277	April 1904 to March 1907, April 1930 to March 1932, and April 1936 to March 1970	39	0.240	0.03	Upward
52	02404400	Choccolocco Creek at Jackson Shoal near Lincoln, AL	Unregulated	481	April 1961 to March 1967, April 1985 to March 2014	35	−0.082	0.49	Not significant
53	02404500	Choccolocco Creek near Lincoln, AL	Unregulated	496	April 1939 to March 1953	14	0.160	0.41	Not significant
54	02405500	Kelly Creek near Vincent, AL	Unregulated	193	April 1952 to March 1970	18	0.290	0.09	Not significant
54	02405500	Kelly Creek near Vincent, AL	Unregulated	193	April 1987 to March 2014	27	0.220	0.11	Not significant
55	02405800	Talladega Creek above Talladega, AL	Unregulated	69.6	April 1960 to March 1970	10	0.330	0.18	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
56	02406500	Talladega Creek at Alpine, AL	Unregulated	150	April 1901 to March 1904, April 1940 to March 1951, April 1988 to March 2014	40	−0.160	0.16	Not significant
57	02407000	Coosa River at Childersburg, AL	Unregulated	8,392	April 1914 to March 1948	35	−0.270	0.02	Downward
58	02407500	Yellowleaf Creek near Wilsonville, AL	Unregulated	96.5	April 1952 to March 1967	16	0.300	0.10	Not significant
59	02408500	Hatchet Creek near Rockford, AL	Unregulated	233	April 1945 to March 1978	33	0.200	0.10	Not significant
60	02408540	Hatchet Creek below Rockford, AL	Unregulated	263	April 1981 to March 2014	33	−0.190	0.12	Not significant
61	02410000	Paterson Creek near Central, AL	Unregulated	4.91	April 1954 to March 1987	33	0.160	0.19	Not significant
62	02411000	Coosa River at Jordan Dam near Wetumpka, AL	Regulated	10,102	—	—	—	—	—
63	02411930	Tallapoosa River below Tallapoosa, GA	Unregulated	272	April 2000 to March 2004, April 2006 to March 2014	12	−0.120	0.58	Not significant
64	02412000	Tallapoosa River near Heflin, AL	Unregulated	448	April 1953 to March 2014	61	0.140	0.25	Not significant
65	02412500	Tallapoosa River near Ofelia, AL	Unregulated	792	April 1939 to March 1951	12	0.120	0.58	Not significant
66	02413300	Little Tallapoosa River near Newell, AL	Unregulated	406	April 1976 to March 2014	38	−0.230	0.04	Downward
67	02413500	Little Tallapoosa River near Wedowee, AL	Unregulated	591	April 1940 to March 1951	11	0.310	0.19	Not significant
68	02414500	Tallapoosa River at Wadley, AL	Unregulated	1,675	April 1924 to March 1982	58	0.160	0.08	Not significant
68	02414500	Tallapoosa River at Wadley, AL	Regulated	1,675	April 1983 to March 2014	31	0.095	0.45	Not significant
69	02414715	Tallapoosa River near New Site, AL	Regulated	2,058	April 1986 to March 2014	28	−0.026	0.84	Not significant
70	02415000	Hillabee Creek near Hackneyville, AL	Unregulated	190	April 1953 to March 1970, April 1986 to March 2014	45	−0.140	0.17	Not significant
71	02416000	Tallapoosa River at Sturdivant, AL	Unregulated	2,480	April 1901 to March 1926	25	−0.270	0.06	Not significant
72	02418230	Sougahatchee Creek near Loachapoka, AL	Unregulated	71.3	April 2000 to March 2014	14	−0.240	0.23	Not significant
73	02418500	Tallapoosa River below Tallassee, AL	Regulated	3,328	—	—	—	—	—
74	02418760	Chewacla Creek at Chewacla State Park near Auburn, AL	Unregulated	45.8	April 2003 to March 2014	11	−0.420	0.07	Not significant
75	02419000	Uphapee Creek near Tuskegee, AL	Unregulated	333	April 1940 to March 1970, April 1975 to March 2014	69	0.072	0.38	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
76	02419890	Tallapoosa River near Montgomery, AL	Regulated	4,646	April 1996 to March 2014	18	−0.370	0.03	Downward
77	02420000	Alabama River near Montgomery, AL	Regulated	15,087	—	—	—	—	—
78	02420500	Autauga Creek at Prattville, AL	Regulated	116	April 1939 to March 1959	20	−0.450	0.01	Downward
79	02421000	Catoma Creek near Montgomery, AL	Unregulated	290	April 1953 to March 1971, April 1975 to March 1996, April 1998 to March 2014	55	0.200	0.04	Upward
80	02422000	Big Swamp Creek near Lowndesboro, AL	Unregulated	244	April 1941 to March 1971	30	−0.049	0.71	Not significant
81	02422500	Mulberry Creek at Jones, AL	Unregulated	203	April 1939 to March 1970, April 1975 to March 2014	70	−0.210	0.01	Downward
82	02423000	Alabama River at Selma, AL	Unregulated	17,095	April 1900 to March 1913	13	−0.130	0.54	Not significant
83	02423130	Cahaba River at Trussville, AL	Unregulated	19.7	April 1989 to March 2014	25	−0.220	0.13	Not significant
84	02423380	Cahaba River near Mountain Brook, AL	Unregulated	140	April 1985 to March 2014	29	−0.003	0.98	Not significant
85	02423397	Little Cahaba River below Leeds, AL	Unregulated	17	April 1996 to March 2006, April 2009 to March 2016	15	−0.220	0.26	Not significant
86	02423398	Little Cahaba River near Leeds, AL	Unregulated	19.4	April 1989 to March 2006	17	0.029	0.87	Not significant
87	02423400	Little Cahaba River near Jefferson Park, AL	Unregulated	24.4	April 1987 to March 1999, April 2008 to March 2014	18	0.150	0.38	Not significant
88	02423414	Little Cahaba River at Cahaba Beach Road near Cahaba Heights, AL	Regulated	47	April 2004 to March 2014	10	0.470	0.06	Not significant
89	02423425	Cahaba River near Cahaba Heights, AL	Regulated	201	April 1976 to March 1985, April 1997 to March 2014	26	0.220	0.12	Not significant
90	02423496	Cahaba River near Hoover, AL	Regulated	226	April 1989 to March 2014	25	0.230	0.10	Not significant
91	02423500	Cahaba River near Acton, AL	Regulated	230	April 1984 to March 2014	30	0.400	0.002	Upward
92	0242354750	Cahaba Valley Creek at Cross Creek Road at Pelham, AL	Unregulated	25.6	April 1999 to March 2013	14	0.190	0.35	Not significant
93	02423555	Cahaba River near Helena, AL	Regulated	335	April 1996 to March 2014	18	−0.059	0.73	Not significant
94	02423630	Shades Creek near Greenwood, AL	Unregulated	72.3	April 1967 to March 1973, April 1975 to March 1981, April 1998 to March 2014	28	−0.510	0.0001	Downward

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
95	02423800	Little Cahaba River near Brierfield, AL	Unregulated	147	April 1958 to March 1970	12	0.091	0.68	Not significant
96	02424000	Cahaba River at Centreville, AL	Unregulated	1,027	April 1902 to March 1907, April 1930 to March 1932, April 1936 to March 2014	85	0.070	0.34	Not significant
97	02424500	Cahaba River at Sprott, AL	Unregulated	1,370	April 1939 to March 1969	30	-0.270	0.03	Downward
98	02424590	Cahaba River near Suttle, AL	Unregulated	1,480	April 1988 to March 2011	23	-0.099	0.51	Not significant
99	02424940	Oakmulgee Creek near Augustin, AL	Unregulated	220	April 1976 to March 1987	11	-0.240	0.31	Not significant
100	02425000	Cahaba River near Marion Junction, AL	Unregulated	1,766	April 1939 to March 1954, April 1969 to March 2014	60	-0.130	0.13	Not significant
101	02425200	Big Swamp Creek near Orrville, AL	Unregulated	35.8	April 1972 to March 1985	13	-0.150	0.46	Not significant
102	02425500	Cedar Creek at Minter, AL	Unregulated	211	April 1953 to March 1970, April 1975 to March 1982	24	0.260	0.07	Not significant
103	02426000	Boguechitto Creek near Browns, AL	Unregulated	95.4	April 1944 to March 1954, April 1966 to March 1971	15	-0.450	0.02	Downward
104	02427250	Pine Barren Creek near Snow Hill, AL	Unregulated	261	April 1990 to March 2014	24	-0.250	0.09	Not significant
105	02427500	Alabama River near Millers Ferry, AL	Regulated	20,637	—	—	—	—	—
106	02427700	Turkey Creek at Kimbrough, AL	Unregulated	97.5	April 1959 to March 1996	37	-0.075	0.51	Not significant
107	02428400	Alabama River at Claiborne L&D near Monroeville, AL	Regulated	21,473	April 1976 to March 2014	38	-0.280	0.01	Downward
108	02428500	Big Flat Creek near Fountain, AL	Unregulated	247	April 1944 to March 1970	26	-0.170	0.22	Not significant
109	02429000	Limestone Creek near Monroeville, AL	Unregulated	121	April 1952 to March 1970	18	0.079	0.65	Not significant
110	02429500	Alabama River at Claiborne, AL	Regulated	21,967	—	—	—	—	—
111	02429595	Little River near Uriah, AL	Unregulated	95.2	April 1969 to March 1979	10	0.470	0.06	Not significant
112	02438000	Buttahatchee River below Hamilton, AL	Unregulated	277	April 1951 to March 1970, April 1992 to March 2014	42	0.290	0.01	Upward
113	02439000	Buttahatchee River near Sulligent, AL	Unregulated	472	April 1939 to March 1959	20	-0.210	0.19	Not significant
114	02442000	Luxapallila Creek near Fayette, AL	Unregulated	130	April 1946 to March 1970	24	-0.030	0.86	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
115	02442500	Luxapallila Creek at Millport, AL	Unregulated	247	April 1955 to March 1959, April 1981 to March 1986, April 2002 to March 2011	18	0.300	0.08	Not significant
116	02444000	Coal Fire Creek near Pickensville, AL	Unregulated	126	April 1955 to March 1971, April 1975 to March 1980	21	0.440	0.01	Upward
117	02444160	Tombigbee River at Bevill L&D near Pickensville, AL	Regulated	5,750	April 1985 to March 2009, April 2011 to March 2014	27	−0.031	0.82	Not significant
118	02444500	Tombigbee River near Cochrane, AL	¹ Unregulated	5,940	April 1939 to March 1978	39	0.390	0.00	Upward
119	02445500	Sipsey River at Fayette, AL	Unregulated	282	April 1939 to March 1959	20	−0.280	0.08	Not significant
120	02446000	Sipsey River at Moores Bridge, AL	Unregulated	413	April 1939 to March 1951	12	0.230	0.30	Not significant
121	02446500	Sipsey River near Elrod, AL	Unregulated	528	April 1929 to March 1932, April 1940 to March 1971, April 1979 to March 2014	69	0.240	0.00	Upward
122	02447000	Sipsey River near Pleasant Ridge, AL	Unregulated	769	April 1939 to March 1959	20	−0.370	0.02	Downward
123	02447025	Tombigbee River at Heflin L&D near Gainesville, AL	Regulated	7,230	April 1985 to March 2014	29	−0.094	0.48	Not significant
124	02448500	Noxubee River near Geiger, AL	Unregulated	1,097	April 1939 to March 1940, April 1945 to March 1965, April 1967 to March 2014	68	0.180	0.03	Upward
125	02448900	Bodka Creek near Geiger, AL	Unregulated	158	April 1991 to March 2014	23	0.000	1.00	Not significant
126	02449000	Tombigbee River at Gainsville, AL	¹ Unregulated	8,632	April 1939 to March 1955, April 1961 to March 1978	33	0.460	0.00	Upward
127	02449245	Brush Creek near Eutaw, AL	Unregulated	43.2	April 1976 to March 1997	21	−0.070	0.67	Not significant
128	02449500	Tombigbee River at Epes, AL	¹ Unregulated	8,930	April 1905 to March 1913, April 1939 to March 1945	14	−0.270	0.19	Not significant
129	02449882	Blue Springs Creek near Blountsville, AL	Unregulated	13	April 1993 to March 2014	21	−0.270	0.09	Not significant
130	02450000	Mulberry Fork near Garden City, AL	Unregulated	358	April 1929 to March 1964	35	0.150	0.20	Not significant
130	02450000	Mulberry Fork near Garden City, AL	Unregulated	358	April 1965 to March 2014	49	0.031	0.76	Not significant
131	02450180	Mulberry Fork near Arkadelphia, AL	Unregulated	487	April 1977 to March 1986, April 1989 to March 2014	34	0.038	0.76	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
132	02450250	Sipsey Fork near Grayson, AL	Unregulated	92.1	April 1967 to March 2014	47	−0.034	0.73	Not significant
133	02450500	Sipsey Fork near Falls City, AL	Unregulated	360	April 1944 to March 1954	10	−0.290	0.24	Not significant
134	02450825	Clear Creek at New Hope Church near Poplar Springs, AL	Unregulated	101	April 1994 to March 2014	20	−0.100	0.54	Not significant
135	02451000	Clear Creek at Falls City, AL	Unregulated	149	April 1940 to March 1954	14	0.033	0.87	Not significant
136	02453000	Blackwater Creek near Manchester, AL	Unregulated	181	April 1939 to March 1971	32	−0.010	0.94	Not significant
136	02453000	Blackwater Creek near Manchester, AL	Unregulated	181	April 1980 to March 1982, April 1989 to March 2014	27	0.140	0.11	Not significant
137	02453500	Mulberry Fork at Cordova, AL	Unregulated	1,916	April 1901 to March 1912	11	−0.055	0.82	Not significant
138	02454000	Lost Creek near Oakman, AL	Unregulated	134	April 1952 to March 1966, April 1980 to March 1981	15	0.110	0.55	Not significant
139	02454055	Lost Creek above Parrish, AL	Unregulated	143	April 1993 to March 2014	21	0.057	0.72	Not significant
140	02455000	Locust Fork near Cleveland, AL	Unregulated	303	April 1937 to March 1986, April 1993 to March 2014	70	0.072	0.38	Not significant
141	02455500	Locust Fork at Trafford, AL	Unregulated	624	April 1931 to March 1969, April 1993 to March 1997	42	0.110	0.32	Not significant
142	02455980	Turkey Creek at Sewage Plant near Pinson, AL	Unregulated	27.4	April 1989 to March 2014	25	−0.180	0.21	Not significant
143	02456000	Turkey Creek at Morris, AL	Unregulated	80.9	April 1944 to March 1979, April 2002 to March 2011	42	0.460	<0.0001	Not significant
144	02456330	Crooked Creek near Morris, AL	Unregulated	16.2	November 1975 to September 1988, October 1996 to September 1997	12	−0.450	0.04	Downward
145	02456500	Locust Fork at Sayre, AL	Unregulated	885	April 1964 to March 2014	50	−0.021	0.83	Not significant
146	02457000	Fivemile Creek at Ketona, AL	Unregulated	23.9	April 1954 to March 1958, April 1975 to March 1979, April 1997 to March 2014	25	−0.020	0.89	Not significant
147	02457595	Fivemile Creek near Republic, AL	Unregulated	51.9	April 1989 to March 2014	25	0.034	0.82	Not significant
148	02458300	Village Creek at 24th Street at Birmingham, AL	Regulated	26	April 1989 to March 2006, April 2009 to March 2013	21	0.260	0.10	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
149	02458450	Village Creek at Avenue West at Ensley, AL	Regulated	33.5	April 1976 to March 1979, April 1989 to March 2014	28	−0.220	0.10	Not significant
150	02458600	Village Creek near Docena, AL	Unregulated	52.2	April 1997 to March 2014	17	−0.350	0.05	Not significant
151	02461500	Valley Creek near Bessemer, AL	Unregulated	52.5	April 1976 to March 1979, April 1989 to March 2014	28	0.021	0.87	Not significant
152	02462000	Valley Creek near Oak Grove, AL	Unregulated	148	April 1954 to March 1958, April 1979 to March 2014	39	0.001	0.99	Not significant
153	02462500	Black Warrior River at Bankhead L&D near Bessemer, AL	Regulated	3,981	—	—	—	—	—
154	02462600	Blue Creek near Oakman, AL	Unregulated	5.32	April 1960 to March 1965, April 1977 to March 1984	12	0.530	0.03	Upward
155	02462800	Davis Creek below Abernant, AL	Unregulated	45.3	April 1957 to March 1971	14	−0.120	0.55	Not significant
156	02462951	Black Warrior River at Holt L&D near Holt, AL	Regulated	4,219	—	—	—	—	—
157	02463500	Hurricane Creek near Holt, AL	Unregulated	108	April 1953 to March 1969	16	0.380	0.04	Upward
158	02464000	North River near Samantha, AL	Unregulated	223	April 1939 to March 1954, April 1969 to March 2014	60	−0.025	0.78	Not significant
159	02464146	Turkey Creek near Tuscaloosa, AL	Unregulated	6.16	April 1981 to March 1984, April 1987 to March 2014	30	0.021	0.87	Not significant
160	02464360	Binion Creek below Gin Creek near Samantha, AL	Unregulated	57.2	April 1987 to March 2014	27	−0.170	0.21	Not significant
161	02464500	North River (Site B) near Tuscaloosa, AL	Unregulated	372	April 1952 to March 1968	16	0.430	0.02	Upward
162	02465000	Black Warrior River at Oliver Lock and Dam at Northport, AL	Regulated	4,820	April 1976 to March 2014	38	−0.330	0.00	Downward
163	02465200	Lake Creek near Northport, AL	Regulated	3.71	April 1957 to March 1970	13	−0.039	0.85	Not significant
164	02465292	Cribbs Mill Creek at WW Plant at Tuscaloosa, AL	Unregulated	10.7	April 2003 to March 2014	11	0.270	0.24	Not significant
165	02465493	Elliotts Creek at Moundville, AL	Unregulated	32.3	April 1977 to March 2014	37	−0.220	0.05	Not significant
166	02465500	Fivemile Creek near Greensboro, AL	Unregulated	73.6	April 1955 to March 1971	16	0.220	0.24	Not significant

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
167	02466030	Black Warrior River at Selden L&D near Eutaw, AL	Regulated	5,810	April 1977 to March 2014	36	−0.096	0.40	Not significant
168	02466500	Big Prairie Creek near Gallion, AL	Unregulated	171	April 1940 to March 1952	12	0.180	0.41	Not significant
169	02467000	Tombigbee River at Demopolis L&D near Coatopa, AL	Regulated	15,385	April 1985 to March 2014	29	−0.130	0.34	Not significant
170	02467500	Sucarnoochee River at Livingston, AL	Unregulated	607	April 1939 to March 2014	75	0.020	0.76	Not significant
171	02468000	Alamuchee Creek near Cuba, AL	Unregulated	62.3	April 1955 to March 1967	12	0.240	0.27	Not significant
172	02468500	Chickasaw Bogue near Linden, AL	Unregulated	257	April 1944 to March 1946, April 1966 to March 1988	24	0.150	0.30	Not significant
173	02469000	Kinterbish Creek near York, AL	Unregulated	90.9	April 1955 to March 1967	12	0.360	0.10	Not significant
174	02469500	Tuckabum Creek near Butler, AL	Unregulated	115	April 1955 to March 1970	15	0.020	0.92	Not significant
175	02469550	Horse Creek near Sweetwater, AL	Unregulated	60.4	April 1960 to March 1970	10	−0.470	0.06	Not significant
176	02469700	Okatuppa Creek at Gilbertown, AL	Unregulated	148	April 1957 to March 1969	12	−0.270	0.22	Not significant
177	02469761	Tombigbee River at Coffeeville L&D near Coffeeville, AL	Regulated	18,417	April 1985 to March 2014	28	−0.044	0.74	Not significant
178	02469800	Satilpa Creek near Coffeeville, AL	Unregulated	164	April 1957 to March 1970, April 1975 to March 2014	52	−0.140	0.14	Not significant
179	02470072	Bassett Creek at U.S. Highway 43 near Thomasville, AL	Unregulated	10.5	April 1996 to March 2014	18	0.050	0.76	Not significant
180	02470100	Bassett Creek at Walker Springs, AL	Unregulated	195	April 1957 to March 1970	13	−0.560	0.01	Downward
181	02471001	Chickasaw Creek near Kushla, AL	Unregulated	125	April 1952 to March 2014	62	−0.110	0.20	Not significant
182	02471065	Montlimar Creek at U.S. Highway 90 at Mobile, AL	Unregulated	7.28	April 1963 to March 1967, April 1975 to March 1983	12	0.520	0.02	Upward
183	02471078	Fowl River at Half-Mile Road near Laurendine, AL	Unregulated	16.5	April 1995 to March 2014	19	−0.350	0.04	Downward
184	02479431	Pond Creek near Deer Park, AL	Unregulated	20.4	April 1977 to March 1999	22	−0.091	0.55	Not significant
185	02479500	Escatawapa River near Wilmer, AL	Unregulated	511	April 1946 to March 1973	27	−0.190	0.18	Not significant
186	02479560	Escatawapa River near Agricola, AL	Unregulated	562	April 1974 to March 2014	40	−0.300	0.01	Downward

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
187	02479945	Big Creek at County Road 63 near Wilmer, AL	Unregulated	31.48	April 1991 to March 2014	23	−0.150	0.33	Not significant
188	02479980	Crooked Creek near Fairview, AL	Unregulated	8.08	April 1991 to March 2014	23	−0.260	0.08	Not significant
189	02480002	Hamilton Creek at Snow Road near Semmes, AL	Unregulated	8.22	April 1991 to March 2014	23	−0.330	0.03	Downward
190	03572110	Crow Creek at Bass, AL	Unregulated	131	April 1976 to March 1996	20	0.040	0.80	Not significant
191	03572900	Town Creek near Geraldine, AL	Unregulated	141	April 1958 to March 1980	22	0.160	0.28	Not significant
192	03574500	Paint Rock River near Woodville, AL	Unregulated	320	April 1936 to March 2014	78	0.090	0.26	Not significant
193	0357479650	Hester Creek at Buddy Williamson Road near Plevna, AL	Unregulated	33	April 1999 to March 2013	14	−0.540	0.01	Downward
194	03575000	Flint River near Chase, AL	Unregulated	342	April 1931 to March 1981, April 1983 to March 1994	61	0.150	0.09	Not significant
195	03575100	Flint River at Brownsboro, AL	Unregulated	375	April 1999 to March 2014	15	−0.030	0.88	Not significant
196	03575500	Tennessee River at Whitesburg, AL	¹ Unregulated	25,610	April 1925 to March 1936	11	0.020	0.94	Not significant
197	03575830	Indian Creek near Madison, AL	Unregulated	49	April 1960 to March 1966, April 1976 to March 2002	32	−0.110	0.39	Not significant
198	03576148	Cotaco Creek at Florette, AL	Unregulated	136	April 1966 to March 1980	14	−0.010	0.96	Not significant
199	03576250	Limestone Creek near Athens, AL	Unregulated	119	April 1940 to March 1970, April 1995 to March 2014	49	0.080	0.44	Not significant
200	03576500	Flint Creek near Falkville, AL	Unregulated	86.3	April 1953 to March 1970, April 1993 to March 1999, April 2012 to March 2014	25	0.340	0.02	Upward
201	03585300	Sugar Creek near Good Springs, AL	Unregulated	152	April 1958 to March 1969.	11	0.160	0.48	Not significant
202	03586500	Big Nance Creek at Coutland, AL	Unregulated	166	April 1936 to March 1940, April 1945 to March 1981	40	0.200	0.07	Not significant
202	03586500	Big Nance Creek at Coutland, AL	Unregulated	166	April 1988 to March 2014	26	−0.160	0.27	Not significant
203	03589500	Tennessee River at Florence, AL	¹ Unregulated	30,810	April 1895 to March 1924	29	−0.090	0.48	Not significant
204	03590000	Cypress Creek near Florence, AL	Unregulated	209	April 1935 to March 1953	18	0.370	0.03	Upward

Table 4. Results of Kendall's tau statistical test for detection of monotonic trends in the annual minimum 7-day average flow for 210 continuous-record streamgages in Alabama.—Continued

[mi², square mile; —, no trend analysis was done for this station; <, less than]

Site index number (fig. 1)	USGS station number	Station name	Regulation status	Drainage area (mi ²)	Period of record analyzed	Number of climate years used in analysis	Kendall's tau	P-value	Trend direction
205	03590500	Tuscumbia Spring at Tuscumbia, AL	Unregulated	Indeterminate	April 1929 to March 1930, April 1956 to March 1965	11	−0.450	0.05	Downward
206	03591800	Bear Creek near Hackeburg, AL	Unregulated	143	April 1957 to March 1981	22	0.250	0.11	Not significant
207	03592000	Bear Creek near Red Bay, AL	¹ Unregulated	263	April 1914 to March 1920, April 1959 to March 1967	14	0.030	0.87	Not significant
208	03592200	Cedar Creek near Pleasant Site, AL	Unregulated	189	April 1958 to March 1977	19	0.190	0.25	Not significant
209	03592300	Little Bear Creek near Halltown, AL	¹ Unregulated	78.2	April 1958 to March 1975	17	0.290	0.09	Not significant
210	03592500	Bear Creek at Bishop, AL	¹ Unregulated	667	April 1927 to March 1928, April 1929 to March 1932, April 1934 to March 1979	49	0.230	0.02	Upward

¹Site is currently (2017) regulated, but low-flow frequency statistics were based on pre-regulation data.

Table 5. Low-flow statistics for continuous-record streamgaging stations of selected streams in Alabama and surrounding States.

[lat, latitude; long, longitude; ft, foot; mi, mile; mi², square mile; ft³, cubic foot; USGS, U.S. Geological Survey; ft³/s, cubic foot per second; water year, the 12-month period from October 1 through September 30 and designated by the year in which the period ends]

Notes: The station low-flow statistics are presented in the following pages in numerical order by station number. See figure 1 for location of the streamgaging stations.

STATION NAME AND NUMBER—02339225 Wehadkee Creek below Rock Mills, AL

LOCATION.—Lat 33°07'20", long 85°14'57" referenced to North American Datum of 1927, Randolph County, AL, Hydrologic Unit 03130002, on county road, 0.7 mi downstream from Little Wehadkee Creek, 2.1 mi upstream from Guss Creek, and 3.5 mi southeast of Rock Mills.

DRAINAGE AREA.—60.2 mi².

PERIOD OF RECORD.—October 1978 to January 1990.

PERIOD OF ANALYSIS.—April 1979 to March 1989.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—10

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	9.0	10	27	27
5	4.6	5.2	34	34
10	3.1	3.4	46	46
20	2.1	2.3	67	68

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	275	166	91	48	27	15	9.6

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STATION NAME AND NUMBER—02342500 Uchee Creek near Fort Mitchell, AL

LOCATION.--Lat 32°19'00", long 85°00'54" referenced to North American Datum of 1927, Russell County, AL, Hydrologic Unit 03130003, at bridge on State Highway 165, 2 mi south of Fort Mitchell, 4.8 mi downstream of Little Uchee Creek, and 5.3 mi upstream of mouth.

DRAINAGE AREA.—322 mi².

PERIOD OF RECORD.—October 1946 to March 2014.

PERIOD OF ANALYSIS.—April 1947 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—67

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	16	17	12	11
5	7.7	8.0	15	14
10	4.8	5.0	20	19
20	3.1	3.2	28	27
50	1.8	1.9	43	40

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,470	921	443	167	53	23	14

STATION NAME AND NUMBER—02342933 South Fork Cowikee Creek near Batesville, AL

LOCATION.—Lat 32°01'03", long 85°17'45" referenced to North American Datum of 1927, Barbour County, AL, Hydrologic Unit 03130003, on left bank at downstream side of bridge on county road, 0.1 mi downstream of Bear Creek, 1.2 mi northeast of Batesville, 11.2 mi northwest of Eufaula, and 13.0 mi upstream of mouth.

DRAINAGE AREA.—112 mi².

PERIOD OF RECORD.—October 1963 to September 1971, October 1974 to October 2011.

PERIOD OF ANALYSIS.—April 1964 to March 1971, April 1975 to March 2011.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—43

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.9	2.4	19	18
5	0.73	0.95	22	20
10	0.42	0.57	28	25
20	0.26	0.37	36	32
50	0.15	0.23	49	43

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	429	222	94	34	10	3.5	2.0

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STATION NAME AND NUMBER—02343300 Abbie Creek near Haleburg, AL

LOCATION.—Lat 31°28'24", long 85°09'45" referenced to North American Datum of 1927, Henry County, AL, Hydrologic Unit 03130004, on State Highway 95, 1.2 mi upstream from Peterman Creek, 4.5 mi northwest of Haleburg, 7.8 mi upstream from mouth, and 9 mi southeast of Abbeville.

DRAINAGE AREA.—146 mi².

PERIOD OF RECORD.—October 1958 to September 1971, October 1974 to August 1993.

PERIOD OF ANALYSIS.—April 1959 to March 1971, April 1975 to March 1993.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—30

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	37	41	10	10
5	24	27	12	11
10	18	21	15	13
20	15	17	20	16
50	11	14	27	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	565	401	236	129	74	50	39

STATION NAME AND NUMBER—02343500 Chattahoochee River at Columbia, AL

LOCATION.—Lat 31°17'01", long 85°05'58" referenced to North American Datum of 1927, Houston County, AL, Hydrologic Unit 03130004, at State Highway 52, half a mile upstream from Omussee Creek and half a mile east of Columbia.

DRAINAGE AREA.—8,040 mi².

PERIOD OF RECORD.—July 1928 to September 1960.

PERIOD OF ANALYSIS.—April 1929 to March 1960.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—31

REMARKS.—Since 1962, site in backwater from Columbia Lock and Dam. Results represent pre-regulation conditions.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2,540	2,870	7	7
5	1,890	2,070	8	8
10	1,610	1,730	10	11
20	1,390	1,480	12	14
50	1,180	1,230	16	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	29,400	19,800	11,800	7,320	4,610	3,180	2,570

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STATION NAME AND NUMBER—02360500 East Fork Choctawhatchee River near Midland City, AL

LOCATION.—Lat 31°22'23", long 85°28'38" referenced to North American Datum of 1927, Dale County, AL, Hydrologic Unit 03140201, 4 mi upstream from West Fork Choctawhatchee River and 4 mi north of Midland City.

DRAINAGE AREA.—291 mi².

PERIOD OF RECORD.—June 1952 to September 1963.

PERIOD OF ANALYSIS.—April 1953 to March 1963.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—10

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	54	59	14	15
5	38	40	17	18
10	31	32	23	24
20	25	27	30	32

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	905	656	406	193	107	71	54

STATION NAME AND NUMBER—02361000 Choctawhatchee River near Newton, AL

LOCATION.—Lat 31°20'34", long 85°36'38" referenced to North American Datum of 1927, Dale County, AL, Hydrologic Unit 03140201, on left bank at downstream side of bridge on State Highway 123, 100 ft upstream of abandoned mill dam, 1,800 ft upstream of Hurricane Creek, 0.8 mi north of Newton, 1 mi downstream of Atlantic Coast Line Railroad bridge, and at mile 133.0.

DRAINAGE AREA.—686 mi².

PERIOD OF RECORD.—December 1921 to September 1927, June 1935 to March 2014.

PERIOD OF ANALYSIS.—April 1922 to March 1927, April 1936 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—83

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	127	144	6	6
5	80	91	7	7
10	63	71	9	8
20	51	58	11	10
50	41	46	14	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,710	1,920	1,090	562	297	170	123

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STATION NAME AND NUMBER—02361500 Choctawhatchee River near Bellwood, AL

LOCATION.—Lat 31°09'33", long 85°47'04" referenced to North American Datum of 1927, Geneva County, AL, Hydrologic Unit 03140201, at bridge on County Road 45, 0.1 mi downstream of Wilkerson Creek, 1 mi southeast of Bellwood, 4.0 mi downstream of Claybank Creek, and at river mile 109.3.

DRAINAGE AREA.—1,280 mi².

PERIOD OF RECORD.—December 1921 to October 1925, December 2000 to March 2014.

PERIOD OF ANALYSIS.—April 1922 to March 1925, April 2001 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—16

REMARKS.—Frequency statistics were computed based on a MOVE.1 correlation with station 02361000 Choctawhatchee River near Newton, AL, which has a period of record from December 1921 to September 1927, June 1935 to March 2014.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	393	432	11	11
5	291	316	13	12
10	249	267	16	15
20	217	233	20	18
50	189	199	27	24

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	4,670	3,320	1,830	1,040	595	373	300

STATION NAME AND NUMBER—02362240 Little Double Bridges Creek near Enterprise, AL

LOCATION.—Lat 31°16'20", long 85°57'30" referenced to North American Datum of 1927, Coffee County, AL, Hydrologic Unit 03140201, near right bank on downstream side of bridge on County Road 18, 8.4 mi southwest of Enterprise.

DRAINAGE AREA.—21.4 mi².

PERIOD OF RECORD.—August 1985 to March 2014.

PERIOD OF ANALYSIS.—April 1986 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—28

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.9	7.0	13	13
5	3.4	4.1	16	16
10	2.4	2.9	22	22
20	1.8	2.2	30	30

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	89	57	34	21	13	8.3	6.1

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STATION NAME AND NUMBER—02363000 Pea River near Ariton, AL

LOCATION.—Lat 31°35'41", long 85°46'59" referenced to North American Datum of 1927, Dale County, AL, Hydrologic Unit 03140202, in SW¼ sec. 7, T. 7 N., R. 23 E., Dale County, on left bank at downstream side of abandoned bridge and about 20 feet upstream of bridge on U.S. Highway 231, 2.2 miles downstream of Bryors Mill Creek, 2.8 miles downstream of Atlantic Coastline Railroad bridge, 3.5 miles west of Ariton, and at mile 92.5.

DRAINAGE AREA.—498 mi².

PERIOD OF RECORD.—October 1938 to September 1970, October 1987 to March 2014.

PERIOD OF ANALYSIS.—April 1939 to March 1970, April 1988 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—57

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	27	31	11	11
5	14	16	13	13
10	9.5	11	16	16
20	6.9	7.9	21	20
50	4.7	5.4	28	27

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,970	1,350	701	281	98	39	23

STATION NAME AND NUMBER—02364500 Pea River near Samson, AL

LOCATION.—Lat 31°06'45", long 86°05'58" referenced to North American Datum of 1927, Geneva County, AL, Hydrologic Unit 03140202, at Alabama Highway 52 bridge, 500 ft downstream of Boyenton Creek, 6.5 mi upstream of Flat Creek, and 3 mi north of Samson.

DRAINAGE AREA.—1,182 mi².

PERIOD OF RECORD.—September 1904 to August 1913, October 1922 to September 1925, October 1935 to September 1970, October 2002 to March 2014.

PERIOD OF ANALYSIS.—April 1905 to March 1913, April 1923 to March 1925, April 1936 to March 1970, April 2003 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—55

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	200	240	9	8
5	119	146	10	10
10	88	109	13	13
20	68	85	17	16
50	50	64	23	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	5,410	3,680	1,970	967	476	272	190

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STATION NAME AND NUMBER—02364570 Panther Creek near Hacoda, AL

LOCATION.—Lat 31°07'15", long 86°11'13" referenced to North American Datum of 1927, Geneva County, AL, Hydrologic Unit 03140202, 5 mi northwest of Hacoda.

DRAINAGE AREA.—26.2 mi².

PERIOD OF RECORD.—October 1974 to September 1995.

PERIOD OF ANALYSIS.—April 1975 to March 1995.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.8	2.1	13	14
5	1.1	1.3	15	16
10	0.86	0.98	19	19
20	0.69	0.78	24	24

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	150	91	48	19	6.7	3.0	2.1

STATION NAME AND NUMBER—02369800 Blackwater River near Bradley, AL

LOCATION.—Lat 31°01'39", long 86°42'36" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03140104, in Conecuh National Forest, near left bank on downstream side of bridge on county road, and 1 mi east of Bradley.

DRAINAGE AREA.—87.7 mi².

PERIOD OF RECORD.—October 1967 to March 2014.

PERIOD OF ANALYSIS.—April 1968 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—46

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	32	34	5	5
5	25	26	5	5
10	22	23	6	6
20	19	21	8	7
50	17	19	10	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	393	268	148	81	50	36	30

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STATION NAME AND NUMBER—02371200 Indian Creek near Troy, AL

LOCATION.—Lat 31°48'50", long 86°07'15" referenced to North American Datum of 1927, Pike County, AL, Hydrologic Unit 03140301, on U.S. Highway 29, 3.5 mi upstream from mouth, and 9 mi west of Troy.

DRAINAGE AREA.—8.87 mi².

PERIOD OF RECORD.—October 1958 to September 1968, October 1970 to September 1986.

PERIOD OF ANALYSIS.—April 1959 to March 1968, April 1971 to March 1986.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.3	1.5	19	18
5	0.64	0.74	23	22
10	0.42	0.50	30	27
20	0.28	0.35	40	35

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	39	25	14	7.1	3.4	1.6	0.94

STATION NAME AND NUMBER—02371500 Conecuh River at Brantley, AL

LOCATION.—Lat 31°34'24", long 86°15'06" referenced to North American Datum of 1927, Crenshaw County, AL, Hydrologic Unit 03140301, on left bank 10 ft upstream of bridge on U.S. Highway 331 and State Highway 52, 0.5 mi downstream of Moody Mill Creek, 0.8 mi southeast of Brantley, and at river mile 112.3.

DRAINAGE AREA.—500 mi².

PERIOD OF RECORD.—October 1937 to March 2014.

PERIOD OF ANALYSIS.—April 1938 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—76

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	51	55	7	7
5	32	34	7	7
10	25	27	8	9
20	21	22	10	10
50	17	18	13	13

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,100	1,450	784	317	125	64	44

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STATION NAME AND NUMBER—02372000 Patsaliga Creek at Luverne, AL

LOCATION.—Lat 31°43'27", long 86°16'42" referenced to North American Datum of 1927, Crenshaw County, AL, Hydrologic Unit 03140302, on U.S. Highway 331, 1 mi northwest of Luverne, and 3 mi downstream from Pond Creek.

DRAINAGE AREA.—254 mi².

PERIOD OF RECORD.—October 1943 to September 1958.

PERIOD OF ANALYSIS.—April 1944 to March 1958.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	22	25	26	26
5	10	12	29	28
10	7.0	8.0	34	34
20	5.0	5.8	42	43

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,220	819	414	170	66	32	20

STATION NAME AND NUMBER—02372250 Patsaliga Creek near Brantley, AL

LOCATION.—Lat 31°35'46", long 86°24'20" referenced to North American Datum of 1927, Crenshaw County, AL, Hydrologic Unit 03140302, near left bank on downstream side of bridge on State Highway 106, 3.0 mi north of Leon, and 10.9 mi northwest of Brantley.

DRAINAGE AREA.—442 mi².

PERIOD OF RECORD.—October 1974 to March 2014.

PERIOD OF ANALYSIS.—April 1975 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—39

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	46	49	12	12
5	25	27	13	13
10	19	20	16	15
20	14	16	20	18
50	11	12	26	24

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,980	1,320	668	283	111	53	38

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STATION NAME AND NUMBER—02372422 Conecuh River below Point A Dam near River Falls, AL

LOCATION.—Lat 31°21'40", long 86°31'11" referenced to North American Datum of 1927, Covington County, AL, Hydrologic Unit 03140301, on right bank wingwall of Point A Dam, 1.65 miles upstream of U.S. Highway 84 bridge, 1.4 miles northeast of River Falls, 4 miles northwest of Andalusia, and at river mile 79.50.

DRAINAGE AREA.—1,273 mi².

PERIOD OF RECORD.—June 1999 to March 2013.

PERIOD OF ANALYSIS.—April 2000 to March 2013.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—Regulated by Gantt Dam since 1924 and Point A Reservoir since 1925.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	54	89	20	27
5	32	43	20	28
10	24	30	23	31
20	20	23	28	38

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	5,030	3,100	1,530	692	240	80	54

STATION NAME AND NUMBER—02372500 Conecuh River near Andalusia, AL

LOCATION.—Lat 31°15'19", long 86°36'01" referenced to North American Datum of 1927, Covington County, AL, Hydrologic Unit 03140301, on county road, 0.5 mi upstream from Simmons Mill Creek, and 7.5 mi southwest of Andalusia..

DRAINAGE AREA.—1,344 mi².

PERIOD OF RECORD.—September 1904 to December 1919, October 1929 to September 1952, October 1965 to September 1968.

PERIOD OF ANALYSIS.—April 1930 to March 1952, April 1966 to March 1968.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—Regulated by Gantt Dam since 1924 and Point A Reservoir since 1925. Only the data from the regulated period were included in the analysis.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	110	240	11	12
5	74	156	11	12
10	60	127	13	12
20	51	109	15	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	6,040	4,160	2,280	1,130	579	305	212

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STATION NAME AND NUMBER—02373000 Sepulga River near McKenzie, AL

LOCATION.—Lat 31°27'13", long 86°47'13" referenced to North American Datum of 1927, Conecuh County, AL, Hydrologic Unit 03140303, on left bank 100 ft downstream of bridge on U.S. Highway 31, 0.38 mi upstream of Old Town Creek, 2.5 mi upstream of Piney Woods Creek, 5.5 mi downstream of Persimmon Creek, and 7 mi southwest of McKenzie.

DRAINAGE AREA.—470 mi².

PERIOD OF RECORD.—October 1937 to September 1967, October 1974 to March 2014.

PERIOD OF ANALYSIS.—April 1938 to March 1967, April 1975 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—68

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	23	26	10	10
5	12	13	12	11
10	8.2	9.4	15	14
20	5.9	6.9	19	18
50	4.0	4.8	26	24

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,620	1,660	630	207	75	35	23

STATION NAME AND NUMBER—02373500 Pigeon Creek near Thad, AL

LOCATION.—Lat 31°28'36", long 86°39'30" referenced to North American Datum of 1927, Covington County, AL, Hydrologic Unit 03140303, downstream from State Highway 55, 2 mi southeast of Thad, 5.5 mi southeast of McKenzie.

DRAINAGE AREA.—307 mi².

PERIOD OF RECORD.—October 1937 to September 1970.

PERIOD OF ANALYSIS.—April 1938 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—32

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	37	41	11	10
5	22	26	13	12
10	16	20	18	15
20	13	16	23	19
50	9.1	12	33	26

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,490	967	477	195	84	50	38

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STATION NAME AND NUMBER—02374000 Conecuh River near Brooklyn, AL

LOCATION.—Lat 31°09'49", long 86°48'00" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03140304, on U.S. Highway 29, 3 mi downstream from Sepulga River, and 7 mi southwest of Brooklyn.

DRAINAGE AREA.—2,495 mi².

PERIOD OF RECORD.—June 1935 to December 1957.

PERIOD OF ANALYSIS.—April 1936 to March 1957.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—Regulated by Gantt Lake since 1924 and by Point A Reservoir since 1925.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	360	515	11	13
5	248	321	11	15
10	205	249	13	18
20	176	202	16	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	11,800	8,020	4,180	1,990	982	575	440

STATION NAME AND NUMBER—02374250 Conecuh River at State Highway 41 near Brewton, AL

LOCATION.—Lat 31°04'01", long 87°03'42" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03140304, 100 feet downstream of State Highway 41 bridge, 1.0 mile south of East Brewton, 2.7 miles upstream of Murder Creek, at river mile 10.1.

DRAINAGE AREA.—2,661 mi².

PERIOD OF RECORD.—April 1999 to March 2014.

PERIOD OF ANALYSIS.—April 2000 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—Regulated by Gantt Lake since 1924 and by Point A Reservoir since 1925.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	449	489	17	17
5	286	304	16	17
10	231	242	17	19
20	196	202	21	23

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	9,950	6,920	3,460	1,720	797	446	365

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STATION NAME AND NUMBER—02374500 Murder Creek near Evergreen, AL

LOCATION.—Lat 31°25'06", long 86°59'12" referenced to North American Datum of 1927, Conecuh County, AL, Hydrologic Unit 03140304, on left bank 30 feet upstream of U.S. Highway 31 bridge, 1 mi upstream of Louisville & Nashville Railroad bridge, and 2.5 mi southwest of Evergreen, and at river mile 35.6.

DRAINAGE AREA.—176 mi².

PERIOD OF RECORD.—October 1937 to March 2014.

PERIOD OF ANALYSIS.—April 1938 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—76

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	81	85	5	5
5	58	61	5	5
10	49	52	6	6
20	42	45	8	8
50	36	38	10	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	736	508	310	190	123	86	70

STATION NAME AND NUMBER—02374700 Murder Creek at Brewton, AL

LOCATION.—Lat 31°06'03", long 87°04'08" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03140304, near right bank at bridge on U.S. Highway 29 and State Highway 41, 0.5 mi upstream of Burnt Corn Creek, 3.6 mi upstream of Conecuh River and at river mile 3.6.

DRAINAGE AREA.—435 mi².

PERIOD OF RECORD.—March 1999 to March 2014.

PERIOD OF ANALYSIS.—April 1999 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—15

REMARKS.—Low-flow frequency estimates adjusted based on MOVE.1 correlation with station 02374500 Murder Creek near Evergreen, AL, using the period of record from October 1937 to March 2014.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	178	185	11	11
5	132	139	9	10
10	114	121	10	10
20	99	107	12	12
50	87	92	17	17

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,890	1,200	634	359	206	147	127

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STATION NAME AND NUMBER—02374745 Burnt Corn Creek at State Highway 41 near Brewton, AL

LOCATION.—Lat 31°07'47", long 87°05'14" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03140304, near right bank at bridge on State Highway 41, 1.8 mi northwest of Brewton, 3.2 mi upstream of Murder Creek, and at river mile 3.2.

DRAINAGE AREA.—182 mi².

PERIOD OF RECORD.—March 1999 to March 2014.

PERIOD OF ANALYSIS.—April 1999 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—15

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	25	27	17	17
5	15	17	17	17
10	12	13	19	19
20	9.8	11	23	23

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	853	573	277	133	60	31	23

STATION NAME AND NUMBER—02374950 Big Escambia Creek at Sardine Bridge near Stanley Crossroads, AL

LOCATION.—Lat 31°07'46", long 87°22'14" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03140305, on upstream side of Sardine Bridge on County Road 27, 2 mi west of Stanley Crossroads, 13 mi northwest of Flomaton.

DRAINAGE AREA.—193 mi².

PERIOD OF RECORD.—May 2000 to March 2014.

PERIOD OF ANALYSIS.—April 2001 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	71	74	12	12
5	52	54	12	12
10	44	46	13	13
20	39	41	16	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	804	536	296	173	101	73	59

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STATION NAME AND NUMBER—02375000 Big Escambia Creek at Flomaton, AL

LOCATION.—Lat 31°00'38", long 87°15'46" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03140305, on U.S. Highway 31 at north edge of Flomaton, 1.5 mi upstream from Alabama-Florida stateline, and 4 mi upstream from mouth.

DRAINAGE AREA.—330 mi².

PERIOD OF RECORD.—June 1939 to December 1951.

PERIOD OF ANALYSIS.—April 1939 to March 1951.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	232	240	7	6
5	192	200	8	8
10	171	180	11	10
20	154	164	15	13

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,920	1,210	663	417	305	248	222

STATION NAME AND NUMBER—02376500 Perdido River at Barrineau Park, FL

LOCATION.—Lat 30°41'25", long 87°26'25" referenced to North American Datum of 1927, Baldwin County, AL, Hydrologic Unit 03140106, on right bank 25 ft downstream of bridge on county road, 1,000 ft downstream of Alligator Creek, 0.5 mi southwest of Barrineau Park, and at mile 28.0.

DRAINAGE AREA.—394 mi².

PERIOD OF RECORD.—June 1941 to March 2014.

PERIOD OF ANALYSIS.—April 1942 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—72

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	267	277	3	3
5	223	231	3	3
10	202	209	4	4
20	187	193	4	4
50	171	176	6	6

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,100	1,410	800	497	356	284	251

108 Low-Flow Frequency and Flow-Duration Characteristics of Selected Streams in Alabama Through March 2014

STATION NAME AND NUMBER—02377500 Styx River near Loxley, AL

LOCATION.—Lat 30°39'50", long 87°38'20" referenced to North American Datum of 1927, Baldwin County, AL, Hydrologic Unit 03140106, on county road, 2 mi upstream from Hollinger Creek, and 7 mi northeast of Loxley.

DRAINAGE AREA.—92.2 mi².

PERIOD OF RECORD.—October 1951 to September 1969, October 1970 to September 1971.

PERIOD OF ANALYSIS.—April 1952 to March 1969.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—17

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	27	30	12	12
5	19	21	11	10
10	17	18	11	11
20	15	16	14	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	538	371	188	90	53	35	28

STATION NAME AND NUMBER—02377570 Styx River near Elsanor, AL

LOCATION.—Lat 30°36'20", long 87°32'50" referenced to North American Datum of 1927, Baldwin County, AL, Hydrologic Unit 03140106, near left bank on downstream side of bridge on County Road 87, 0.2 mi downstream of Cowpen Creek, 5 mi northeast of Elsanor, and 11.4 mi upstream of mouth.

DRAINAGE AREA.—192 mi².

PERIOD OF RECORD.—October 1987 to March 2014.

PERIOD OF ANALYSIS.—April 1988 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—26

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	113	117	5	5
5	91	95	6	6
10	82	85	7	7
20	75	78	8	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,220	796	422	247	164	122	104

110 Low-Flow Frequency and Flow-Duration Characteristics of Selected Streams in Alabama Through March 2014

STATION NAME AND NUMBER—02378300 Magnolia River at U.S. Highway 98 near Foley, AL

LOCATION.—Lat 30°24'23", long 87°44'13" referenced to North American Datum of 1927, Baldwin County, AL, Hydrologic Unit 03160205, at bridge on U.S. Highway 98, 3 mi west of Foley.

DRAINAGE AREA.—16.6 mi².

PERIOD OF RECORD.—July 1999 to March 2014.

PERIOD OF ANALYSIS.—April 2000 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	14	7	7
5	11	11	9	8
10	9.5	10	11	10
20	8.5	9.3	14	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	95	50	29	21	17	13	12

STATION NAME AND NUMBER—02378500 Fish River near Silver Hill, AL

LOCATION.—Lat 30°32'43", long 87°47'55" referenced to North American Datum of 1927, Baldwin County, AL, Hydrologic Unit 03160205, near mid-channel on upstream side of bridge on State Highway 104, 0.2 mi downstream of Caney Branch, 0.5 mi upstream of Perone Branch, 2.8 mi west of Silver Hill, and 12 mi upstream of mouth.

DRAINAGE AREA.—55.3 mi².

PERIOD OF RECORD.—July 1953 to September 1969, October 1970 to September 1971, November 1986 to March 2014.

PERIOD OF ANALYSIS.—April 1954 to March 1969, April 1987 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—42

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	52	54	4	4
5	43	44	4	4
10	38	39	5	5
20	35	36	7	7
50	31	32	9	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	244	168	107	79	63	51	46

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STATION NAME AND NUMBER—02398300 Chattooga River above Gaylesville, AL

LOCATION.—Lat 34°17'25", long 85°30'33" referenced to North American Datum of 1927, Cherokee County, AL, Hydrologic Unit 03150105, on left bank 10 ft upstream from bridge on county road, 600 ft downstream from Mills Creek, 3.5 mi northeast of Gaylesville, and 20.1 mi upstream from mouth.

DRAINAGE AREA.—366 mi².

PERIOD OF RECORD.—January 1959 to September 1967, October 1984 to March 2014.

PERIOD OF ANALYSIS.—April 1959 to March 1967, April 1985 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—37

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	122	127	5	4
5	98	103	5	5
10	87	92	6	6
20	78	84	8	7
50	70	76	11	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,930	1,250	667	328	183	134	112

STATION NAME AND NUMBER—02398500 Chattooga River at Gaylesville, AL

LOCATION.—Lat 34°15'47", long 85°33'39" referenced to North American Datum of 1927, Cherokee County, AL, Hydrologic Unit 03150105, on State Highway 35, 0.2 mi southwest of Gaylesville, and 9 mi upstream from Little River.

DRAINAGE AREA.—379 mi².

PERIOD OF RECORD.—June 1937 to September 1960.

PERIOD OF ANALYSIS.—April 1938 to March 1960.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—22

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	109	121	7	7
5	89	99	5	5
10	82	91	6	6
20	77	85	7	7

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,090	1,340	662	306	181	131	112

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STATION NAME AND NUMBER—02398950 West Fork Little River at Desoto Park near Fort Payne, AL

LOCATION.—Lat 34°29'30", long 85°37'00" referenced to North American Datum of 1927, DeKalb County, AL, Hydrologic Unit 03150105, on right bank just off DeSoto Parkway near Park Headquarters, 8 mi northeast of Fort Payne.

DRAINAGE AREA.—42.8 mi².

PERIOD OF RECORD.—October 1997 to January 2012.

PERIOD OF ANALYSIS.—April 1998 to March 2011.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.13	0.18	35	38
5	0.05	0.06	44	48
10	0.03	0.03	59	65
20	0.02	0.02	83	94

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	257	171	92	35	3.1	0.45	0.20

STATION NAME AND NUMBER—02399000 Little River near Jamestown, AL

LOCATION.--Lat 34°23'51", long 85°37'36" referenced to North American Datum of 1927, Cherokee County, AL, Hydrologic Unit 03150105, at site of former highway bridge, 0.2 mi upstream from Yellow Creek, 0.3 mi upstream from present highway bridge, and 2.5 west of Jamestown.

DRAINAGE AREA.—125 mi².

PERIOD OF RECORD.—February 1922 to March 1932, June 1935 to September 1949.

PERIOD OF ANALYSIS.—April 1922 to March 1932, April 1936 to March 1949.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—23

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.42	0.54	20	24
5	0.17	0.22	19	19
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,060	655	296	74	7.9	1.4	0.5

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STATION NAME AND NUMBER—02399200 Little River near Blue Pond, AL

LOCATION.--Lat 34°17'20", long 85°40'50" referenced to North American Datum of 1927, Cherokee County, AL, Hydrologic Unit 03150105, on right bank at Canyon Mouth Park, 0.9 mi upstream from State Highway 176, 2.5 mi upstream from Wolf Creek, 4.2 mi northeast of Blue Pond, and 7.5 miles upstream from mouth.

DRAINAGE AREA.—199 mi².

PERIOD OF RECORD.—October 1958 to September 1967, October 1970 to March 2014.

PERIOD OF ANALYSIS.—April 1959 to March 1967, April 1971 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—51

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.9	2.3	17	17
5	0.73	0.90	18	18
10	0.45	0.56	21	21
20	0.31	0.38	25	25
50	0.20	0.25	33	33

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,810	1,130	522	165	22	5.4	2.7

STATION NAME AND NUMBER—02399500 Coosa River at Leesburg, AL

LOCATION.--Lat 34°10'36", long 85°45'14" referenced to North American Datum of 1927, Cherokee County, AL, Hydrologic Unit 03150105, on U.S. Highway 411, 1 mi east of Leesburg, 4 mi downstream from Yellow Creek, and at mile 226.1.

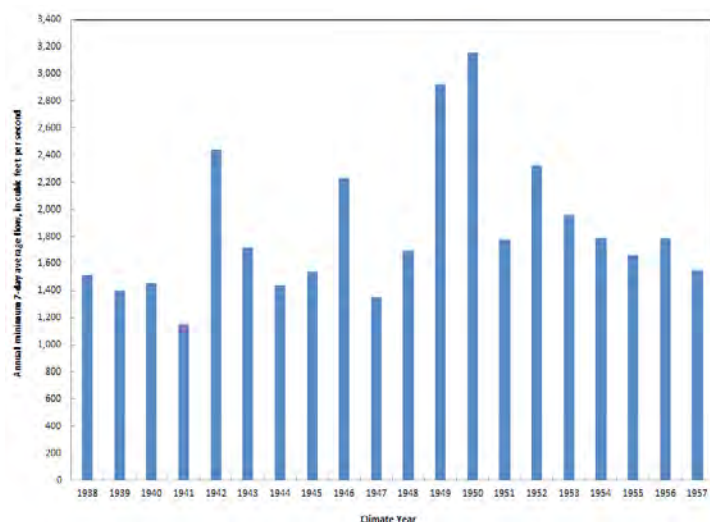
DRAINAGE AREA.—5,270 mi².

PERIOD OF RECORD.—October 1937 to September 1958.

PERIOD OF ANALYSIS.—April 1938 to March 1949.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—Since about December 1949, flow regulated by Allatoona Reservoir and since about April 1961, by Weiss Reservoir. The regulated period of record was not of sufficient length to warrant low-flow frequency analyses. Consequently, low-flow characteristics were estimated for pre-regulated conditions only. However, a plot of the annual minimum 7-day average flows for the complete period of record is provided.



Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1,510	1,540	6	8
5	1,310	1,320	6	6
10	1,220	1,240	6	6
20	1,170	1,190	7	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	28,300	18,500	9,300	4,760	2,890	2,000	1,680

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STATION NAME AND NUMBER—02400000 Terrapin Creek near Piedmont, AL

LOCATION.--Lat 33°57'23", long 85°34'38" referenced to North American Datum of 1927, Calhoun County, AL, Hydrologic Unit 03150105, on U.S. Highway 278 and State Highway 74, 0.5 mi upstream from Ladiga Creek, and 3 mi northeast of Piedmont.

DRAINAGE AREA.—116 mi².

PERIOD OF RECORD.—October 1944 to September 1954, October 1956 to September 1963.

PERIOD OF ANALYSIS.—April 1945 to March 1954, April 1957 to March 1963.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—15

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	6.6	7.6	14	15
5	4.3	4.9	16	17
10	3.4	3.8	20	20
20	2.8	3.1	25	25

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	514	311	158	66	28	14	9.8

STATION NAME AND NUMBER—02400100 Terrapin Creek at Ellisville, AL

LOCATION.--Lat 34°03'54", long 85°36'51" referenced to North American Datum of 1927, Cherokee County, AL, Hydrologic Unit 03150105, on right bank 40 ft downstream from bridge on State Highway 9, 0.2 mi southwest of Ellisville, and 6.7 miles upstream from mouth.

DRAINAGE AREA.—252 mi².

PERIOD OF RECORD.—October 1962 to September 1967, October 1980 to March 2014.

PERIOD OF ANALYSIS.—April 1963 to March 1967, April 1981 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—37

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	83	86	5	5
5	64	66	6	6
10	55	57	8	8
20	48	51	10	10
50	42	44	14	13

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,280	792	386	201	119	86	72

STATION NAME AND NUMBER—02400500 Coosa River at Gadsden, AL

LOCATION.—Lat 34°00'37", long 85°59'52" referenced to North American Datum of 1927, Etowah County, AL, Hydrologic Unit 03150106, on Forrest Avenue in Gadsden, 1.5 mi upstream from Big Wills Creek, and at mile 174.8.

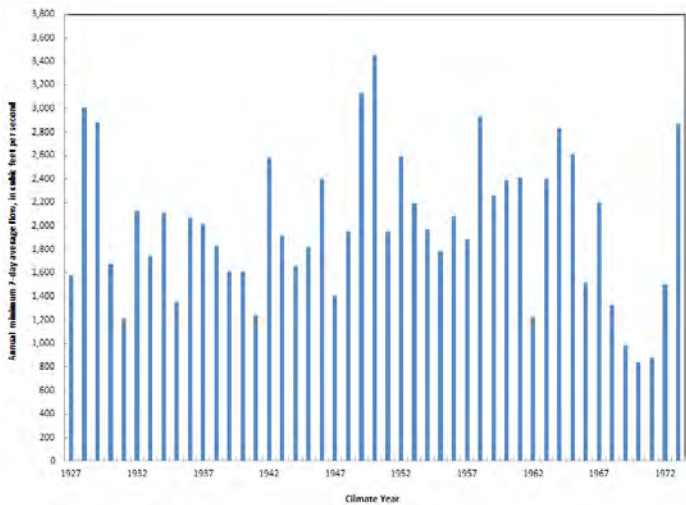
DRAINAGE AREA.—5,805 mi².

PERIOD OF RECORD.—October 1926 to September 1976.

PERIOD OF ANALYSIS.—April 1927 to March 1949.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—22

REMARKS.—Since about December 1949, flow regulated by Allatoona Lake and since about April 1961, by Weiss Lake. The period of record for which regulation patterns appeared to be relatively stable was not of sufficient length to warrant low-flow frequency analyses. Consequently, low-flow characteristics were estimated for pre-regulated conditions only. However, a plot of the annual minimum 7-day average flows for the complete period of record is provided.



Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1,770	1,830	6	6
5	1,460	1,500	6	6
10	1,330	1,360	6	6
20	1,240	1,250	7	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	34,500	21,700	10,300	5,060	3,020	2,160	1,850

STATION NAME AND NUMBER—02400680 Big Wills Creek at State Highway 35 near Fort Payne, AL

LOCATION.—Lat 34°26'17", long 85°46'02" referenced to North American Datum of 1927, DeKalb County, AL, Hydrologic Unit 03150106, on downstream side of State Highway 35 bridge, about 2 miles west of Fort Payne.

DRAINAGE AREA.—55.4 mi².

PERIOD OF RECORD.—October 2002 to March 2014.

PERIOD OF ANALYSIS.—April 2003 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	10	11	10	10
5	8.1	8.6	8	8
10	7.5	7.8	8	8
20	7.0	7.3	11	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	235	153	83	41	18	12	9.9

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STATION NAME AND NUMBER—02401000 Big Wills Creek near Reece City, AL

LOCATION.—Lat 34°05'53", long 86°02'17" referenced to North American Datum of 1927, Etowah County, AL, Hydrologic Unit 03150106, near right bank on upstream side of bridge on county road, 1 mi upstream from Fisher Creek, 1.8 mi northwest of Reece City, and at mile 25.0.

DRAINAGE AREA.—182 mi².

PERIOD OF RECORD.—October 1943 to September 1970, October 1986 to March 2014.

PERIOD OF ANALYSIS.—April 1944 to March 1970, April 1987 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—53

REMARKS.—Prior to October 1986 published as Big Wills Creek “near Crudup”.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	49	51	5	4
5	38	39	5	5
10	32	34	7	6
20	28	30	9	8
50	24	26	13	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	935	601	331	156	80	54	46

STATION NAME AND NUMBER—02401370 Big Canoe Creek near Springville, AL

LOCATION.—Lat 33°48'49", long 86°22'54" referenced to North American Datum of 1927, St. Clair County, AL, Hydrologic Unit 03150106, on U.S. Highway 11, 1 mi west of Caldwell, 4 mi northwest of Springville, and 37.0 mi upstream from mouth.

DRAINAGE AREA.—45.0 mi².

PERIOD OF RECORD.—October 1978 to May 1995.

PERIOD OF ANALYSIS.—April 1979 to March 1995.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—16

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.1	7.5	7	7
5	5.7	6.1	7	7
10	5.2	5.5	8	7
20	4.8	5.2	10	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	285	175	84	33	12	8.0	7.1

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STATION NAME AND NUMBER—02401390 Big Canoe Creek at Ashville, AL

LOCATION.—Lat 33°50'23", long 86°15'46" referenced to North American Datum of 1927, St. Clair County, AL, Hydrologic Unit 03150106, on downstream side of bridge on U.S. Highway 231, 0.5 mi west-northwest of Ashville, 1.7 mi downstream from Muckleroy Creek, and 22.3 mi upstream from mouth.

DRAINAGE AREA.—141 mi².

PERIOD OF RECORD.—October 1965 to March 2014.

PERIOD OF ANALYSIS.—April 1966 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—48

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	18	19	5	5
5	13	14	6	6
10	11	12	8	8
20	9.5	10	10	10
50	7.9	8.5	14	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	970	550	256	97	35	21	17

STATION NAME AND NUMBER—02401470 Little Canoe Creek near Steele, AL

LOCATION.—Lat 33°58'09", long 86°10'40" referenced to North American Datum of 1927, Etowah County, AL, Hydrologic Unit 03150106, on U.S. Highway 11, 2.3 mi north of Steele, 7.2 mi upstream from mouth.

DRAINAGE AREA.—22.3 mi².

PERIOD OF RECORD.—April 1982 to May 1995.

PERIOD OF ANALYSIS.—April 1982 to March 1995.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.4	2.8	15	15
5	1.6	1.9	17	17
10	1.2	1.5	21	21
20	1.0	1.2	26	27

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	115	72	35	13	6.1	3.3	2.6

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STATION NAME AND NUMBER—02401500 Big Canoe Creek near Gadsden, AL

LOCATION.—Lat 33°54'11", long 86°06'36" referenced to North American Datum of 1927, Etowah County, AL, Hydrologic Unit 03150106, on U.S. Highway 411, 400 ft downstream from Rock Creek, 5 mi upstream from mouth, and 10 mi southwest of Gadsden.

DRAINAGE AREA.—253 mi².

PERIOD OF RECORD.—January 1938 to September 1965.

PERIOD OF ANALYSIS.—April 1938 to March 1965.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—26

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	19	20	8	8
5	14	15	9	8
10	11	13	10	10
20	10	11	13	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,950	1,060	431	122	43	24	19

STATION NAME AND NUMBER—02402500 Coosa River at Riverside, AL

LOCATION.—Lat 33°36'20", long 86°11'57" referenced to North American Datum of 1927, St. Clair County, AL, Hydrologic Unit 03150106, 1 mi upstream from Blue Eye Creek, 4 mi downstream from dam at Lock 4, and 7 mi upstream from Choccolocco Creek.

DRAINAGE AREA.—7,069 mi².

PERIOD OF RECORD.—October 1896 to September 1916.

PERIOD OF ANALYSIS.—April 1897 to March 1916.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—19

REMARKS.—Since about December 1949, flow regulated by Allatoona Lake and since about April 1961, by Weiss Lake. The period of record analyzed represents pre-regulated conditions.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2,350	2,480	8	8
5	1,810	1,880	8	9
10	1,570	1,610	10	11
20	1,400	1,420	13	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	42,200	28,800	13,800	7,060	3,890	2,720	2,260

STATION NAME AND NUMBER—02403500 Coldwater Spring near Anniston, AL

LOCATION.—Lat 33°36'10", long 85°55'33" referenced to North American Datum of 1927, Calhoun County, AL, Hydrologic Unit 03150106, in pool of Coldwater Spring, 200 ft upstream from Coldwater Creek, 2 mi upstream from Choccolocco Creek, and 7 mi southwest of Anniston.

DRAINAGE AREA.—Indeterminate

PERIOD OF RECORD.—April 1957 to September 1996.

PERIOD OF ANALYSIS.—April 1957 to March 1996.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—39

REMARKS.—Atkins and Pearman (1994) noted that flows include about 20 ft³/s diverted by city of Anniston for water supply. Drainage area not determined due to streamflow originating from a spring.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	40	41	2	2
5	36	37	3	3
10	34	35	4	3
20	32	33	5	5
50	29	31	8	7

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	59	56	52	48	43	39	36

STATION NAME AND NUMBER—02404000 Choccolocco Creek near Jenifer, AL

LOCATION.—Lat 33°34'14", long 85°55'50" referenced to North American Datum of 1927, Talladega County, AL, Hydrologic Unit 03150106, 0.8 mi upstream from Salt Creek, and 1.5 mi north of Jenifer.

DRAINAGE AREA.—277 mi².

PERIOD OF RECORD.—August 1903 to February 1908, October 1929 to March 1932, and October 1935 to September 1970.

PERIOD OF ANALYSIS.—April 1904 to March 1907, April 1930 to March 1932, and April 1936 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—39

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	88	90	6	5
5	67	70	7	6
10	56	61	9	7
20	48	55	13	9
50	40	48	18	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,260	758	411	214	128	96	86

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STATION NAME AND NUMBER—02404400 Choccolocco Creek at Jackson Shoal near Lincoln, AL

LOCATION.—Lat 33°32'54", long 86°05'49" referenced to North American Datum of 1927, Talladega County, AL, Hydrologic Unit 03150106, on left bank at foot of Jackson Shoals, 50 ft upstream from Alabama Power Company Jackson Shoals transformer station, 900 ft upstream from highway bridge, 1.8 mi downstream from Eastaboga Creek, and 4.5 mi southeast of Lincoln.

DRAINAGE AREA.—481 mi².

PERIOD OF RECORD.—October 1960 to September 1967, October 1984 to March 2014.

PERIOD OF ANALYSIS.—April 1961 to March 1967, April 1985 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—35

REMARKS.—Potential diversion upstream for municipal water supply for city of Anniston.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	171	177	5	5
5	132	136	7	7
10	113	117	8	8
20	99	102	11	11
50	84	88	15	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,210	1,450	792	410	243	175	149

STATION NAME AND NUMBER—02404500 Choccolocco Creek near Lincoln, AL

LOCATION.—Lat 33°33'38", long 86°07'35" referenced to North American Datum of 1927, Talladega County, AL, Hydrologic Unit 03150106, on State Highway 77, 4 mi south of Lincoln, 6 mi upstream from mouth, and 8 mi north of Talladega.

DRAINAGE AREA.—496 mi².

PERIOD OF RECORD.—October 1938 to September 1953.

PERIOD OF ANALYSIS.—April 1939 to March 1953.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	173	177	3	3
5	159	163	3	3
10	153	156	3	4
20	148	150	4	4

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,200	1,380	741	374	241	193	180

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STATION NAME AND NUMBER—02405500 Kelly Creek near Vincent, AL

LOCATION.—Lat 33°26'51", long 86°23'13" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150106, on downstream side of left pier of bridge on U.S. Highway 231, 1.5 mi downstream of Little Creek, 4.2 mi north of Vincent, and 5 mi upstream of mouth.

DRAINAGE AREA.—193 mi².

PERIOD OF RECORD.—December 1951 to September 1970, October 1986 to March 2014.

PERIOD OF ANALYSIS.—April 1952 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—This period of record analyzed likely represents a more natural condition than the period from October 1986 to March 2014.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.7	4.1	13	14
5	2.4	2.6	13	14
10	2.0	2.1	14	16
20	1.7	1.8	17	19

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,230	784	327	79	16	5.9	3.7

STATION NAME AND NUMBER—02405500 Kelly Creek near Vincent, AL

LOCATION.—Lat 33°26'51", long 86°23'13" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150106, on downstream side of left pier of bridge on U.S. Highway 231, 1.5 mi downstream of Little Creek, 4.2 mi north of Vincent, and 5 mi upstream of mouth.

DRAINAGE AREA.—193 mi².

PERIOD OF RECORD.—December 1951 to September 1970, October 1986 to March 2014.

PERIOD OF ANALYSIS.—April 1987 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—27

REMARKS.—QAQC reviews indicated that the streamflow record included for this period of analysis is likely influenced by anthropogenic sources.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.4	6.1	17	17
5	2.7	3.0	20	20
10	1.8	2.0	25	25
20	1.3	1.5	32	32

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,260	764	355	111	22	8.2	4.8

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STATION NAME AND NUMBER—02405800 Talladega Creek above Talladega, AL

LOCATION.—Lat 33°22'38", long 86°01'22" referenced to North American Datum of 1927, Talladega County, AL, Hydrologic Unit 03150106, right bank 300 ft upstream from Mump Creek, 0.5 mi upstream from bridge on State Highway 77, and 6 mi southeast of Talladega.

DRAINAGE AREA.—69.6 mi².

PERIOD OF RECORD.—June 1959 to September 1970.

PERIOD OF ANALYSIS.—April 1960 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—10

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	14	14	13
5	9.3	10	14	13
10	8.0	9.0	15	15
20	7.0	7.9	18	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	302	200	114	55	28	18	14

STATION NAME AND NUMBER—02406500 Talladega Creek at Alpine, AL

LOCATION.—Lat 33°21'34", long 86°14'03" referenced to North American Datum of 1927, Talladega County, AL, Hydrologic Unit 03150106, at bridge on County Road 207, 1 mi north of Alpine, 9 mi southwest of Talladega, and 11.0 mi upstream of mouth.

DRAINAGE AREA.—150 mi².

PERIOD OF RECORD.—August 1900 to December 1904, October 1939 to September 1951, October 1987 to March 2014.

PERIOD OF ANALYSIS.—April 1901 to March 1904, April 1940 to March 1951, April 1988 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—40

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	61	63	5	5
5	48	49	6	6
10	42	43	7	7
20	37	38	8	9
50	33	33	11	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	612	441	263	141	88	64	51

STATION NAME AND NUMBER—02407000 Coosa River at Childersburg, AL

LOCATION.—Lat 33°17'30", long 86°21'50" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150107, near right bank on downstream side of Central of Georgia Railway bridge, 700 ft upstream of bridge on State Highway 38, 0.5 mi downstream of Tallassee hatchee Creek, 1 mi northwest of Childersburg, and at mile 86.3.

DRAINAGE AREA.—8,392 mi².

PERIOD OF RECORD.—October 1913 to September 1978, June 2011 to September 2013.

PERIOD OF ANALYSIS.—April 1914 to March 1948.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—35

REMARKS.—The period of record analyzed represents pre-regulated conditions. Since December 1949 flow regulated by Allatoona Lake on Etowah River, since April 1961 by Weiss Lake on Coosa River, since July 1964 by Logan-Martin Lake on Coosa River, and since 1966 by H. Neely Henry Lake on the Coosa River. QAQC reviews did not indicate a sufficient length of record with relatively stable regulation patterns to warrant frequency analysis for the regulated period.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2,660	2,760	5	5
5	2,120	2,190	6	6
10	1,860	1,910	7	8
20	1,660	1,690	10	10
50	1,450	1,470	13	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	50,900	34,400	15,400	7,560	4,440	3,110	2,690

STATION NAME AND NUMBER—02407500 Yellowleaf Creek near Wilsonville, AL

LOCATION.—Lat 33°18'23", long 86°33'04" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150107, on county road, 3.5 mi south of U.S. Highway 280, 4 mi upstream from Muddy Prong, and 6 mi northwest of Wilsonville.

DRAINAGE AREA.—96.5 mi².

PERIOD OF RECORD.—June 1951 to September 1967.

PERIOD OF ANALYSIS.—April 1952 to March 1967.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—16

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.33	0.46	31	46
5	0.04	0.06	36	62
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	632	378	160	31	4.0	1.1	0.5

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STATION NAME AND NUMBER—02408500 Hatchet Creek near Rockford, AL

LOCATION.—Lat 32°56'42", long 86°13'06" referenced to North American Datum of 1927, Coosa County, AL, Hydrologic Unit 03150107, on county road, 1 mi downstream from U.S. Highway 231, 1.5 mi downstream from Socapatoy Creek, and 4 mi north of Rockford.

DRAINAGE AREA.—233 mi².

PERIOD OF RECORD.—October 1944 to February 1979.

PERIOD OF ANALYSIS.—April 1945 to March 1978.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—33

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	45	51	10	11
5	28	31	12	13
10	21	23	16	17
20	16	18	21	23
50	12	13	29	32

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,110	748	436	217	109	68	50

STATION NAME AND NUMBER—02408540 Hatchet Creek below Rockford, AL

LOCATION.—Lat 32°55'00", long 86°16'13" referenced to North American Datum of 1927, Coosa County, AL, Hydrologic Unit 03150107, on downstream side of pier near right bank of bridge on County Road 18, 2.1 mi downstream of Jack Creek, and 4 mi northwest of Rockford.

DRAINAGE AREA.—263 mi².

PERIOD OF RECORD.—October 1980 to March 2014.

PERIOD OF ANALYSIS.—April 1981 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—33

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	35	39	19	19
5	15	17	24	23
10	8.6	9.9	32	32
20	5.3	6.1	45	45
50	2.9	3.4	68	69

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,220	801	435	208	94	48	31

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STATION NAME AND NUMBER—02410000 Paterson Creek near Central, AL

LOCATION.—Lat 32°40'54", long 86°07'40" referenced to North American Datum of 1927, Elmore County, AL, Hydrologic Unit 03150107, on county road, 2 mi west of Central, and 11 mi northeast of Wetumpka.

DRAINAGE AREA.—4.91 mi².

PERIOD OF RECORD.—October 1953 to September 1987.

PERIOD OF ANALYSIS.—April 1954 to March 1987.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—33

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.54	0.66	24	22
5	0.18	0.24	30	28
10	0.09	0.13	40	37
20	0.05	0.08	56	51
50	0.02	0.04	86	78

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	20	13	7.6	3.9	1.9	1.0	0.63

STATION NAME AND NUMBER—02411000 Coosa River at Jordan Dam near Wetumpka, AL

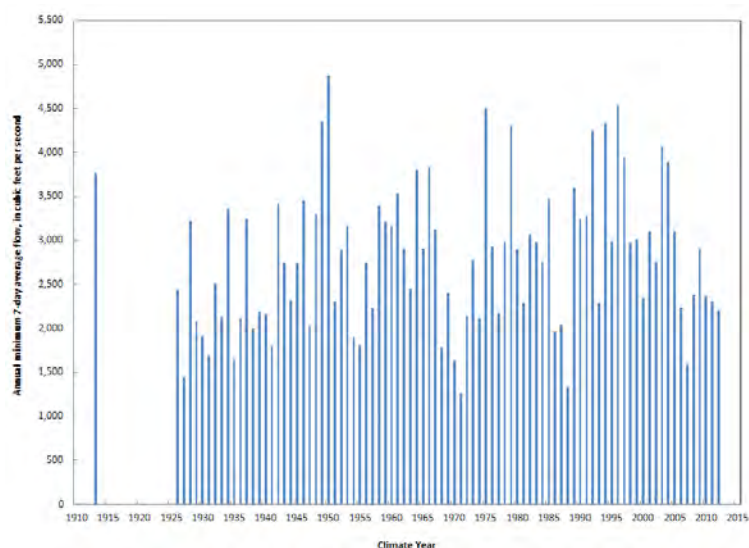
LOCATION.—Lat 32°36'50", long 86°15'18" referenced to North American Datum of 1927, Elmore County, AL, Hydrologic Unit 03150107, on right bank 0.5 mi downstream of Jordan Dam, 4 mi upstream of Corn Creek, 5.5 mi northwest of Wetumpka, and at river mile 18.6.

DRAINAGE AREA.—10,102 mi².

PERIOD OF RECORD.—October 1912 to September 1914, October 1925 to November 1925, February 1926 to September 2013.

PERIOD OF ANALYSIS. —April 1975 to March 2013.

REMARKS.—Because of the various patterns of regulation, only a plot of the annual minimum 7-day average flows are being provided. On the Coosa River, flow has been regulated since 1914 by Lay Dam, since 1923 by Mitchell Dam, since 1929 by Jordan Dam, since 1961 by Weiss Dam, since 1964 by Logan-Martin Dam, since 1966 by H. Neely Henry Dam, and since 1967 by Walter Bouldin Dam. Since 1949, flow regulated by Allatoona Lake on Etowah River and since 1974, flow regulated by Carter Lake on the Coosawattee River. The QAQC reviews indicated that the regulation patterns were not suitable for a frequency analysis. Thus, only the 7-day exceedance percentiles and daily durations for climate year 1975 forward, which is the period for which all major dams and reservoirs were in place, were computed.



EXCEEDANCE PERCENTILES OF ANNUAL MINIMUM 7-DAY AVERAGE FLOWS									
Annual minimum 7-day average flow exceeded for indicated percentiles (cubic feet per second)									
Percentile	10	20	30	40	50	60	70	80	90
Flow	4,300	3,900	3,260	3,030	2,980	2,840	2,360	2,280	2,030

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	52,500	37,700	19,000	9,520	5,160	2,950	2,010

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STATION NAME AND NUMBER—02411930 Tallapoosa River below Tallapoosa, GA

LOCATION.—Lat 33°44'27", long 85°20'11" referenced to North American Datum of 1927, Haralson County, GA, Hydrologic Unit 03150108, at bridge on U.S. Highway 78, 0.4 mi upstream from Walker Creek, and 2.7 mi west of Tallapoosa, Georgia, and at mile 216.5.

DRAINAGE AREA.—272 mi².

PERIOD OF RECORD.—December 1999 to November 2004, October 2005 to March 2014.

PERIOD OF ANALYSIS.—April 2000 to March 2004, April 2006 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—Frequency statistics were computed based on a MOVE.1 correlation with station 02412000, Tallapoosa River near Heflin, AL, which has a period of record from July 1952 to March 2014.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	38	44	43	41
5	15	18	44	43
10	8.3	10	51	50
20	4.6	6.2	63	62
50	2.5	3.1	87	86

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	836	578	353	165	64	20	12

STATION NAME AND NUMBER—02412000 Tallapoosa River near Heflin, AL

LOCATION.—Lat 33°37'22", long 85°30'48" referenced to North American Datum of 1927, Cleburne County, AL, Hydrologic Unit 03150108, on right bank 5 ft downstream from County Road 18 bridge, 2.2 mi upstream from Cane Creek, 4 mi southeast of Heflin, and at mile 186.8.

DRAINAGE AREA.—448 mi².

PERIOD OF RECORD.—July 1952 to March 2014.

PERIOD OF ANALYSIS.—April 1953 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—61

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	76	83	13	13
5	33	37	17	17
10	20	22	22	23
20	12	14	32	32
50	7.0	7.5	48	49

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,860	1,210	728	387	189	94	56

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STATION NAME AND NUMBER—02412500 Tallapoosa River near Ofelia, AL

LOCATION.—Lat 33°19'34", long 85°35'31" referenced to North American Datum of 1927, Randolph County, AL, Hydrologic Unit 03150108, 1 mi northeast of Ofelia, 1.5 mi upstream from Little Tallapoosa River, and 9 mi east of Lineville.

DRAINAGE AREA.—792 mi².

PERIOD OF RECORD.—January 1939 to December 1951.

PERIOD OF ANALYSIS.—April 1939 to March 1951.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—Frequency statistics represent pre-regulation period.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	180	211	17	15
5	114	144	22	20
10	85	110	30	27
20	64	86	45	40

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,590	2,220	1,240	689	400	267	218

STATION NAME AND NUMBER—02413300 Little Tallapoosa River near Newell, AL

LOCATION.—Lat 33°26'14", long 85°23'57" referenced to North American Datum of 1927, Randolph County, AL, Hydrologic Unit 03150108, near right bank on downstream side of bridge on County Highway 82, 1.0 mi upstream of Cut Nose Creek, and 2.0 mi east of Newell.

DRAINAGE AREA.—406 mi².

PERIOD OF RECORD.—October 1975 to March 2014.

PERIOD OF ANALYSIS.—April 1976 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—38

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	61	70	18	18
5	25	29	24	24
10	14	17	32	32
20	8.5	9.8	46	46
50	4.4	5.1	74	75

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,900	1,220	640	337	158	76	49

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STATION NAME AND NUMBER—02413500 Little Tallapoosa River near Wedowee, AL

LOCATION.—Lat 33°20'57", long 85°32'43" referenced to North American Datum of 1927, Randolph County, AL, Hydrologic Unit 03150108, 4.5 mi northwest of Wedowee and 5.5 mi upstream from mouth.

DRAINAGE AREA.—591 mi².

PERIOD OF RECORD.—October 1939 to December 1951.

PERIOD OF ANALYSIS.—April 1940 to March 1951.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	149	168	17	15
5	97	114	22	20
10	73	88	30	27
20	55	69	45	40

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,510	1,660	960	532	308	210	169

STATION NAME AND NUMBER—02414500 Tallapoosa River at Wadley, AL (Pre-regulation)

LOCATION.—Lat 33°07'00", long 85°33'39" referenced to North American Datum of 1927, Randolph County, AL, Hydrologic Unit 03150109, on left bank 50 ft upstream of bridge on State Highway 22, 1 mi downstream of Beaver Dam Creek, and at mile 125.3.

DRAINAGE AREA.—1,675 mi².

PERIOD OF RECORD.—October 1923 to March 2014.

PERIOD OF ANALYSIS.—April 1924 to March 1982.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—58

REMARKS.—The complete period of record at this station is from October 1923 to March 2014; however, results below represent the unregulated period from October 1923 to March 1982. According to the U.S. Army Corps of Engineers, filling of the reservoir (R.L. Harris Dam) began in October 1982 (accessed on June 9, 2014, at http://www.sam.usace.army.mil/Portals/46/docs/planning_environmental/act/docs/New/ACT%20Master%20Manual_March%2013.pdf).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	342	387	9	9
5	200	228	11	11
10	142	162	15	15
20	104	119	21	21
50	71	81	31	32

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	7,820	5,060	2,930	1,610	870	528	387

STATION NAME AND NUMBER—02414500 Tallapoosa River at Wadley, AL (Regulated)

LOCATION.—Lat 33°07'00", long 85°33'39" referenced to North American Datum of 1927, Randolph County, AL, Hydrologic Unit 03150109, on left bank 50 ft upstream of bridge on State Highway 22, 1 mi downstream of Beaver Dam Creek, and at mile 125.3.

DRAINAGE AREA.—1,675 mi².

PERIOD OF RECORD.—October 1923 to March 2014.

PERIOD OF ANALYSIS.—April 1983 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—31

REMARKS.—The complete period of record at this station is from October 1923 to March 2014; however, results below represent the regulated period from April 1983 to March 2014. According to the U.S. Army Corps of Engineers, filling of the reservoir (R.L. Harris Dam) began in October 1982 and the pool reached the minimum power guide curve in December 1982 (accessed on June 9, 2014, at http://www.sam.usace.army.mil/Portals/46/docs/planning_environmental/act/docs/New/ACT%20Master%20Manual_March%2013.pdf). Frequency analysis results for the annual minimum 1-day flows were not included due to a trend in the data and the log-Pearson Type III distribution not providing a satisfactory fit to the data.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	--	230	--	10
5	--	157	--	9
10	--	130	--	10
20	--	113	--	12
50	--	97	--	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	8,080	5,350	3,130	1,600	459	222	170

STATION NAME AND NUMBER—02414715 Tallapoosa River near New Site, AL

LOCATION.—Lat 32°58'38", long 85°44'23" referenced to North American Datum of 1927, Tallapoosa County, AL, Hydrologic Unit 03150109, on right bank 100 ft downstream of bridge on State Highway 49, 1 mi upstream of Emuckfaw Creek, 5 mi south of New Site, and at river mile 95.9.

DRAINAGE AREA.—2,058 mi².

PERIOD OF RECORD.—November 1985 to March 2014.

PERIOD OF ANALYSIS.—April 1986 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—28

REMARKS.—Since about 1983, regulated by R.L. Harris Dam.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	224	354	10	12
5	151	221	10	12
10	124	176	11	13
20	106	147	13	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	9,150	6,350	3,790	2,110	800	336	260

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STATION NAME AND NUMBER—02415000 Hillabee Creek near Hackneyville, AL

LOCATION.—Lat 33°03'55", long 85°52'41" referenced to North American Datum of 1927, Tallapoosa County, AL, Hydrologic Unit 03150109, on left bank, about 800 ft. downstream of county road bridge, 1 mi downstream of Enitachopco Creek, 4 mi upstream of Hackney Creek, and 3 mi east of Hackneyville.

DRAINAGE AREA.—190 mi².

PERIOD OF RECORD.—July 1952 to September 1970, October 1985 to March 2014.

PERIOD OF ANALYSIS.—April 1953 to March 1970, April 1986 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—44

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	26	30	15	15
5	12	14	18	18
10	7.4	8.5	24	24
20	4.8	5.5	34	34
50	2.8	3.2	50	50

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	895	594	328	167	76	38	23

STATION NAME AND NUMBER—02416000 Tallapoosa River at Sturdivant, AL

LOCATION.—Lat 32°54'48", long 85°52'16" referenced to North American Datum of 1927, Tallapoosa County, AL, Hydrologic Unit 03150109, 5 mi downstream from Hillabee Creek and 5 mi southeast of Alexander City.

DRAINAGE AREA.—2,480 mi².

PERIOD OF RECORD.—October 1900 to July 1926.

PERIOD OF ANALYSIS.—April 1901 to March 1926.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—Since 1926, site in backwater from Martin Dam. Results represent pre-regulation conditions.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	567	640	15	15
5	320	363	19	19
10	222	250	25	26
20	158	176	36	37

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	12,100	7,540	4,400	2,520	1,400	855	640

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STATION NAME AND NUMBER—02418230 Sougahatchee Creek near Loachapoka, AL

LOCATION.—Lat 32°37'36", long 85°35'17" referenced to North American Datum of 1927, Lee County, AL, Hydrologic Unit 03150110, on downstream side of bridge on County Road 188, 1 mi upstream of Loblocklee Creek, and 2 mi north of Loachapoka.

DRAINAGE AREA.—71.3 mi².

PERIOD OF RECORD.—November 1999 to March 2014.

PERIOD OF ANALYSIS.—April 2000 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—Flow includes wastewater treatment plant discharges from City of Auburn.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	8.7	10	18	17
5	5.6	6.4	15	15
10	4.6	5.2	16	16
20	4.0	4.5	20	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	263	153	75	39	19	11	8.7

STATION NAME AND NUMBER—02418500 Tallapoosa River below Tallassee, AL

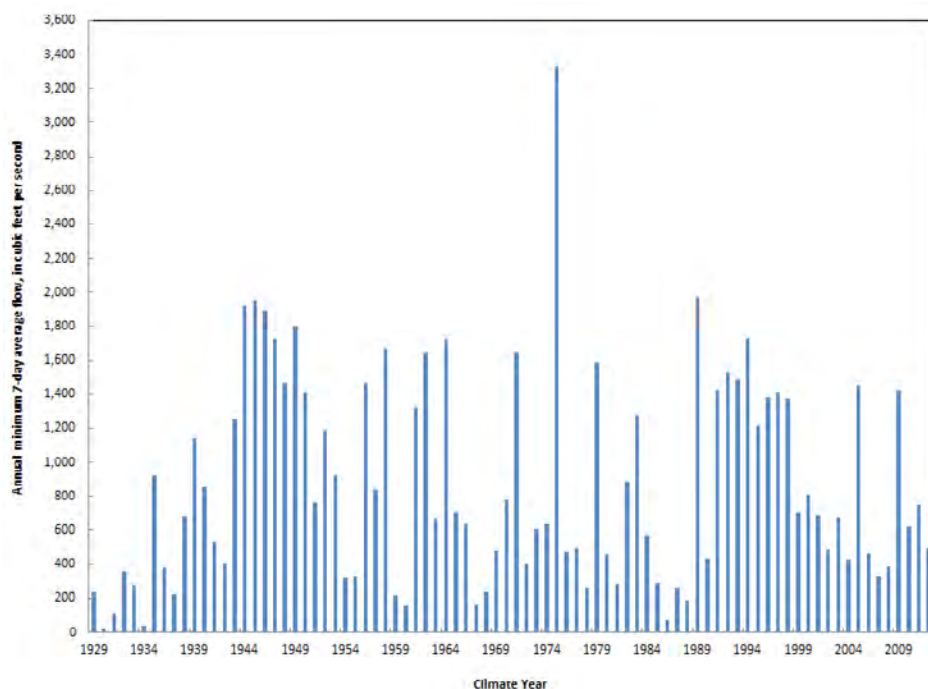
LOCATION.—Lat 32°30'45", long 85°53'21" referenced to North American Datum of 1927, Tallapoosa County, AL, Hydrologic Unit 03150110, on left bank, 1.5 mi downstream of Benjamin Fitzpatrick Highway bridge and Thurlow Dam at Tallassee, 3.5 mi upstream of Up-hapee Creek, and at river mile 48.1.

DRAINAGE AREA.—3,328 mi².

PERIOD OF RECORD.—October 1928 to September 2013.

PERIOD OF ANALYSIS.—April 1929 to March 2013.

REMARKS.—Records collected by Alabama Power Company, under general supervision of U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project. Daily discharge computed on basis of powerplant records, flow over spillway, and measured leakage. Flow regulated by R.L. Harris Lake (1983), Lake Martin (1926), other hydroelectric plants, and small mill dams above station. Because of substantial influence from regulation, only exceedance percentiles of annual 7-day minimum flows and duration of daily flow are being provided.



EXCEEDANCE PERCENTILES OF ANNUAL MINIMUM 7-DAY AVERAGE FLOWS

Annual minimum 7-day average flow exceeded for indicated percentiles (cubic feet per second)

Percentile	10	20	30	40	50	60	70	80	90
Flow	1,720	1,460	1,300	924	640	531	433	318	219

DURATION OF DAILY FLOW

Flow equaled or exceeded for indicated percentage of time
(cubic feet per second)

Percentage	5	10	25	50	75	90	95
Flow	10,700	9,260	6,160	3,840	1,640	501	80

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STATION NAME AND NUMBER—02418760 Chewacla Creek at Chewacla State Park near Auburn, AL

LOCATION.—Lat 32°32'53", long 85°28'50" referenced to North American Datum of 1927, Lee County, AL, Hydrologic Unit 03150110, at abandoned bridge in Chewacla State Park, 0.2 mi downstream of Moores Mill Creek, downstream of Lake Ogletree, and 4 mi south of Auburn.

DRAINAGE AREA.—45.8 mi².

PERIOD OF RECORD.—October 2002 to March 2014.

PERIOD OF ANALYSIS.—April 2003 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—Downstream of Lake Ogletree.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.3	3.4	55	42
5	0.35	1.2	59	52
10	0.18	0.62	71	70
20	0.10	0.35	91	100

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	179	100	47	19	9.0	3.9	2.3

STATION NAME AND NUMBER—02419000 Uphapee Creek near Tuskegee, AL

LOCATION.—Lat 32°28'36", long 85°41'42" referenced to North American Datum of 1927, Macon County, AL, Hydrologic Unit 03150110, on left bank at downstream side of bridge on State Highway 81, 1 mi upstream of Red Creek, 1.2 mi upstream of Western Railway of Alabama bridge, and 4 mi north of Tuskegee.

DRAINAGE AREA.—333 mi².

PERIOD OF RECORD.—October 1939 to September 1970, October 1974 to March 2014.

PERIOD OF ANALYSIS.—April 1940 to March 1970, April 1975 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—69

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	16	18	11	10
5	8.0	9.4	14	13
10	5.0	6.2	19	17
20	3.3	4.3	28	23
50	1.9	2.7	43	34

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,530	905	400	144	47	23	16

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STATION NAME AND NUMBER—02419890 Tallapoosa River near Montgomery, AL

LOCATION.—Lat 32°26'23", long 86°11'44" referenced to North American Datum of 1927, Montgomery County, AL, Hydrologic Unit 03150110, on left bank at the Clarence T. Perry (City of Montgomery) water purification plant, 2.5 mi upstream of U.S. Highway 231 bridge, 4 mi northeast of Montgomery, and at river mile 12.8.

DRAINAGE AREA.—4,646 mi².

PERIOD OF RECORD.—October 1995 to March 2014.

PERIOD OF ANALYSIS.—April 1996 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—Daily discharges can be affected by backwater from the Alabama River. Flow is regulated by Harris Reservoir, Lake Martin, and other hydroelectric plants above station including Yates and Thurlow Dams.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	922	1,220	14	13
5	577	776	18	16
10	429	592	24	22
20	326	464	34	29

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	19,600	14,400	6,580	3,070	1,730	1,240	865

STATION NAME AND NUMBER—02420000 Alabama River near Montgomery, AL

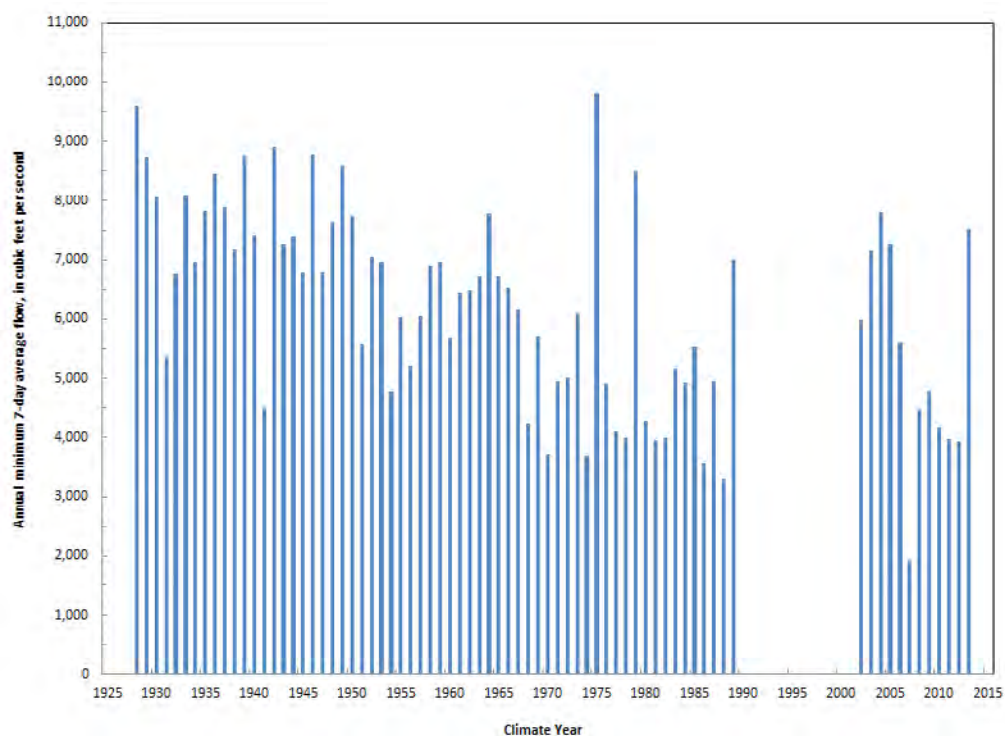
LOCATION.—Lat 32°24'41", long 86°24'30" referenced to North American Datum of 1927, Montgomery County, AL, Hydrologic Unit 03150201, on pier near midstream of bridge on U.S. Highway 31, 4 mi upstream of Autauga Creek, 6 mi northwest of Montgomery, and at river mile 287.6.

DRAINAGE AREA.—15,087 mi².

PERIOD OF RECORD.—October 1927 to September 1990, October 2001 to March 2014.

PERIOD OF ANALYSIS. —April 2002 to March 2014.

REMARKS.—Flows regulated by reservoirs on the Etowah, Coosa, and Tallapoosa Rivers. Reviews indicate various patterns of regulation for the complete period of record. Thus, the exceedance percentiles and duration of daily flow data were computed using the most recent period of relatively stable regulation.



EXCEEDANCE PERCENTILES OF ANNUAL MINIMUM 7-DAY AVERAGE FLOWS

Annual minimum 7-day average flow exceeded for indicated percentiles (cubic feet per second)

Percentile	10	20	30	40	50	60	70	80	90
Flow	7,710	7,360	7,170	5,900	5,190	4,540	4,160	3,950	2,520

DURATION OF DAILY FLOW

Flow equaled or exceeded for indicated percentage of time
(cubic feet per second)

Percentage	5	10	25	50	75	90	95
Flow	64,600	49,300	26,900	12,500	6,650	4,720	4,030

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STATION NAME AND NUMBER—02420500 Autauga Creek at Prattville, AL

LOCATION.—Lat 32°27'30", long 86°28'30" referenced to North American Datum of 1927, Autauga County, AL, Hydrologic Unit 03150201, 25 ft upstream from Bridge Street in Prattville, 500 ft downstream from dam, and 5 mi upstream from mouth.

DRAINAGE AREA.—116 mi².

PERIOD OF RECORD.—January 1939 to September 1959.

PERIOD OF ANALYSIS.—April 1939 to March 1959.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—Since about 1920, flows regulated by Prattville Lake.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	62	72	8	8
5	47	55	9	9
10	40	47	11	11
20	35	41	13	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	410	320	216	145	101	76	63

STATION NAME AND NUMBER—02421000 Catoma Creek near Montgomery, AL

LOCATION. —Lat 32°18'26", long 86°17'58" referenced to North American Datum of 1927, Montgomery County, AL, Hydrologic Unit 03150201, on right bank on downstream side of bridge on old U.S. Highway 331, 5 mi south of Montgomery, and at mile 16.1.

DRAINAGE AREA.—290 mi².

PERIOD OF RECORD.—July 1952 to September 1971, October 1974 to September 1996, October 1997 to March 2014.

PERIOD OF ANALYSIS.—April 1953 to March 1971, April 1975 to March 1996, April 1998 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—55

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.52	0.79	21	20
5	0.09	0.21	26	25
10	0.00	0.07	--	32
20	0.00	0.00	--	--
50	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,740	826	174	40	7.2	1.7	0.68

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STATION NAME AND NUMBER—02422000 Big Swamp Creek near Lowndesboro, AL

LOCATION.—Lat 32°16'00", long 86°41'40" referenced to North American Datum of 1927, Lowndes County, AL, Hydrologic Unit 03150201, on U.S. Highway 80, 1 mi downstream from Panther Creek, 5 mi west of Lowndesboro, and 12 upstream from mouth.

DRAINAGE AREA.—244 mi².

PERIOD OF RECORD.—October 1940 to September 1971.

PERIOD OF ANALYSIS.—April 1941 to March 1971.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—30

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.11	0.19	26	24
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--
50	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,370	768	154	20	2.0	0.4	0.1

STATION NAME AND NUMBER—02422500 Mulberry Creek at Jones, AL

LOCATION.—Lat 32°34'58", long 86°54'13" referenced to North American Datum of 1927, Dallas County, AL, Hydrologic Unit 03150201, on right bank 75 ft downstream of highway bridge, 0.4 mi west of Jones, 6 mi upstream of Buck Creek, and 11 mi upstream of mouth.

DRAINAGE AREA.—203 mi².

PERIOD OF RECORD.—October 1938 to September 1970, October 1974 to March 2014.

PERIOD OF ANALYSIS.—April 1939 to March 1970, April 1975 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—70

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	57	60	5	4
5	42	45	5	5
10	35	38	7	7
20	30	32	9	9
50	25	27	12	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	891	586	316	160	94	68	56

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STATION NAME AND NUMBER—02423000 Alabama River at Selma, AL

LOCATION.—Lat 32°24'20", long 87°01'07" referenced to North American Datum of 1927, Dallas County, AL, Hydrologic Unit 03150201, at first pier from right bank of Edmund Pettus Bridge on U.S. Highway 80 in Selma, 1 mi upstream from Valley Creek, and at river mile 214.8.

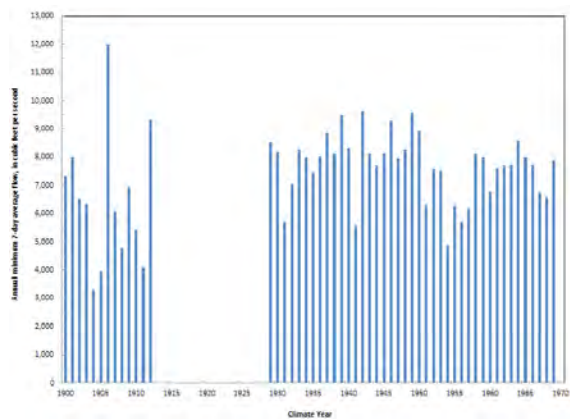
DRAINAGE AREA.—17,095 mi².

PERIOD OF RECORD.—January 1900 to December 1913, October 1928 to September 1970.

PERIOD OF ANALYSIS. — April 1900 to March 1913.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—Flows regulated by reservoirs on the Etowah, Coosa, and Tallapoosa Rivers. Based on review of current streamgages on the Alabama River, current regulation does not likely reflect the period of regulated record available at 02423000. Consequently, 1- and 7-day frequency statistics were computed for the unregulated period from April 1900 to March 1913 and daily duration statistics were computed for January 1900 to March 1913. Also, a plot of the annual minimum 7-day average flows for the complete period of record is provided.



Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5,940	6,070	11	11
5	4,390	4,490	12	12
10	3,750	3,840	14	14
20	3,290	3,380	17	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	89,300	63,400	32,600	17,500	9,600	6,950	5,940

STATION NAME AND NUMBER—02423130 Cahaba River at Trussville, AL

LOCATION.—Lat 33°37'20", long 86°35'58" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, at center of walk bridge 300 ft upstream of U.S. Highway 11 bridge, 0.5 mi east of Trussville, 8.6 mi upstream from Big Black Creek, and at mile 182.3.

DRAINAGE AREA.—19.7 mi².

PERIOD OF RECORD.—October 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.04	0.10	54	60
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	123	69	29	11	2.9	0.29	0.04

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STATION NAME AND NUMBER—02423380 Cahaba River near Mountain Brook, AL

LOCATION.—Lat 33°28'54", long 86°42'46" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, on downstream side bridge on county road, 0.1 mi upstream from Fuller Creek, 3.5 mi east of Mountain Brook, 5.4 mi upstream from Little Cahaba River, and at mi 153.6.

DRAINAGE AREA.—140 mi².

PERIOD OF RECORD.—October 1980 to September 1981, June 1984 to March 2014.

PERIOD OF ANALYSIS.—April 1985 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—29

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	8.2	9.7	13	13
5	4.8	5.8	14	13
10	3.6	4.5	17	15
20	2.8	3.6	20	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	875	512	242	98	31	14	10

STATION NAME AND NUMBER—02423397 Little Cahaba River below Leeds, AL

LOCATION.—Lat 33°32'04", long 86°33'45" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, on left bank, 0.1 mi downstream of Dry Branch, 0.5 mi southwest of Leeds, and 13.8 mi upstream from mouth.

DRAINAGE AREA.—17.0 mi².

PERIOD OF RECORD.—June 1995 to December 2006, October 2008 to March 2014.

PERIOD OF ANALYSIS.—April 1996 to March 2006, April 2009 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—15

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.2	6.1	7	7
5	4.2	4.9	9	8
10	3.7	4.3	11	11
20	3.3	3.8	14	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	104	66	35	18	10	7.1	6.0

STATION NAME AND NUMBER—02423398 Little Cahaba River near Leeds, AL

LOCATION.—Lat 33°31'27", long 86°34'32" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, on left bank on downstream side bridge on county road, 1.2 mi downstream from Dry Branch, 2.0 mi southwest of Leeds, and 12.8 mi upstream from mouth.

DRAINAGE AREA.—19.4 mi².

PERIOD OF RECORD.—October 1980 to September 1981, May 1988 to December 2006.

PERIOD OF ANALYSIS.—April 1989 to March 2006.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—17

REMARKS.—Potential influence from waste water treatment plant discharges.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.1	7.9	6	5
5	5.8	6.6	8	7
10	5.1	5.9	10	9
20	4.6	5.4	14	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	116	72	37	20	12	8.5	7.4

STATION NAME AND NUMBER—02423400 Little Cahaba River near Jefferson Park, AL

LOCATION.—Lat 33°29'59", long 86°36'51" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, on left upstream side of bridge on county road, 0.5 mi west of Highway 119, 0.7 mi upstream of Lake Purdy, 3.3 mi southwest of Jefferson Park, and 5.1 mi southeast of Leeds.

DRAINAGE AREA.—24.4 mi².

PERIOD OF RECORD.—July 1986 to February 2000, June 2007 to March 2014.

PERIOD OF ANALYSIS.—April 1987 to March 1999, April 2008 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.1	7.8	10	8
5	5.1	5.8	13	10
10	4.1	4.9	17	13
20	3.4	4.2	24	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	139	88	46	25	13	8.6	7.0

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STATION NAME AND NUMBER—02423414 Little Cahaba River at Cahaba Beach Road near Cahaba Heights, AL

LOCATION.—Lat 33°26'23", long 86°41'56" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150202, on right bank, 1.3 mi from mouth, 1.5 mi southeast of Cahaba Heights, and 3.9 mi southwest of Lake Purdy dam.

DRAINAGE AREA.—47.0 mi².

PERIOD OF RECORD.—August 2003 to March 2014.

PERIOD OF ANALYSIS.—April 2004 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—10

REMARKS.—Since about 1929, flow regulated on Little Cahaba River by Lake Purdy.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	4.0	7.2	21	24
5	2.3	4.0	25	26
10	1.7	2.9	32	32
20	1.3	2.3	41	41

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	255	165	88	59	40	16	8.9

STATION NAME AND NUMBER—02423425 Cahaba River near Cahaba Heights, AL

LOCATION.—Lat 33°24'56", long 86°44'23" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150202, on left bank 700 ft upstream from bridge on county road, 2.5 mi upstream from Little Shades Creek, 3.0 mi south of Cahaba Heights, 3.4 mi downstream from Little Cahaba River, and at river mile 144.9.

DRAINAGE AREA.—201 mi².

PERIOD OF RECORD.—August 1975 to September 1985, July 1996 to March 2014.

PERIOD OF ANALYSIS.—April 1976 to March 1985, April 1997 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—26

REMARKS.—An average of 82 ft³/s is diverted above station by Birmingham Water Works Board, and is not included in records. Since about 1929, flow partly regulated by Lake Purdy (capacity, 15,300 acre-ft) on Little Cahaba River.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.6	4.0	23	26
5	1.2	1.7	34	38
10	0.66	0.89	42	47
20	0.36	0.46	67	75

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,080	681	301	76	12	4.8	3.3

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STATION NAME AND NUMBER—02423496 Cahaba River near Hoover, AL

LOCATION.—Lat 33°22'09", long 86°47'03" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, upstream of Cahaba River Sewage Treatment Plant, 1.1 mi upstream from U.S. Highway 31, 2.1 mi upstream from station 02423500, and at mile 138.9.

DRAINAGE AREA.—226 mi².

PERIOD OF RECORD.—May 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—Since about 1929, flow partly regulated by Lake Purdy on Little Cahaba River. Flow diverted upstream by Birmingham Water Works.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.9	6.7	12	13
5	3.6	4.0	15	16
10	2.7	3.0	20	20
20	2.1	2.3	27	27

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,470	852	349	101	18	9.1	6.1

STATION NAME AND NUMBER—02423500 Cahaba River near Acton, AL

LOCATION.—Lat 33°21'48", long 86°48'47" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, on right bank at downstream side of highway bridge (Bains Bridge), 0.5 mi upstream from Patton Creek, 1 mi downstream from U.S. Highway 31, 1 mi northwest of Acton, 16 mi south of Birmingham, and at mile 136.8.

DRAINAGE AREA.—230 mi².

PERIOD OF RECORD.—October 1938 to September 1957, October 1983 to March 2014.

PERIOD OF ANALYSIS.—April 1984 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—30

REMARKS.—Flow is diverted above station by Birmingham Water Works Board, and is not included in record except about 15 ft³/s, which is returned to river above station, and also is influenced by releases from several wastewater treatment plants along the river. Flow partly regulated by Lake Purdy (capacity, 15,300 acre-ft) on Little Cahaba River. The period of analysis includes the most recent period of record for which data reviews indicated relatively stable flow patterns.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	16	18	12	11
5	10	11	17	15
10	7.2	8.2	22	20
20	5.2	6.0	33	30
50	3.4	4.1	56	49

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,490	892	370	109	30	19	15

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STATION NAME AND NUMBER—0242354750 Cahaba Valley Creek at Cross Creek Road at Pelham, AL

LOCATION.—Lat 33°18'48", long 86°48'23" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150202, on upstream side of Cross Creek Road at Pelham.

DRAINAGE AREA.—25.6 mi².

PERIOD OF RECORD.—October 1998 to September 2013.

PERIOD OF ANALYSIS.—April 1999 to March 2013.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	6.0	6.8	11	10
5	4.4	4.9	13	13
10	3.6	4.1	16	16
20	3.1	3.5	21	21

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	143	90	44	21	11	7.3	5.9

STATION NAME AND NUMBER—02423555 Cahaba River near Helena, AL

LOCATION.—Lat 33°17'04", long 86°52'57" referenced to North American Datum of 1927, Shelby County, AL, Hydrologic Unit 03150202, on right bank at downstream side of bridge, 0.9 mi above Trigger Creek, 3 mi west of Helena, and at mile 127.1.

DRAINAGE AREA.—335 mi².

PERIOD OF RECORD.—October 1995 to March 2014.

PERIOD OF ANALYSIS.—April 1996 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—Since about 1929, flow partly regulated by Lake Purdy on Little Cahaba River. An average of 70 ft³/s is diverted above station by Birmingham Water Works Company and is not included in records, except about 5 ft³/s, which is returned to river above station. Flows also are influenced by releases from several upstream wastewater treatment plants.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	39	43	7	7
5	31	34	9	8
10	26	30	13	11
20	23	26	18	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,160	1,340	597	226	80	51	40

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STATION NAME AND NUMBER—02423630 Shades Creek near Greenwood, AL

LOCATION.—Lat 33°19'34", long 86°56'59" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03150202, near left bank on downstream side of bridge on county road, 1.4 mi southwest of Greenwood, 5.5 mi south of Bessemer, and at mile 20.8.

DRAINAGE AREA.—72.3 mi².

PERIOD OF RECORD.—October 1964 to September 1965, October 1966 to September 1973, October 1974 to September 1981, October 1997 to March 2014.

PERIOD OF ANALYSIS.—April 1967 to March 1973, April 1975 to March 1981, April 1998 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—28

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	8.9	10	22	20
5	3.6	4.3	28	26
10	2.1	2.5	37	35
20	1.2	1.5	54	51

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	518	296	122	50	25	12	7.3

STATION NAME AND NUMBER—02423800 Little Cahaba River near Brierfield, AL

LOCATION.—Lat 33°03'27", long 86°57'10" referenced to North American Datum of 1927, Bibb County, AL, Hydrologic Unit 03150202, on county road 33, 1.8 mi downstream from Mahan Creek, and 3 mi northwest of Brierfield.

DRAINAGE AREA.—147 mi².

PERIOD OF RECORD.—December 1957 to September 1970.

PERIOD OF ANALYSIS.—April 1958 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	49	51	6	5
5	43	45	4	5
10	41	43	5	5
20	40	41	6	6

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	535	352	192	106	71	57	51

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STATION NAME AND NUMBER—02424000 Cahaba River at Centreville, AL

LOCATION.—Lat 32°56'42", long 87°08'21" referenced to North American Datum of 1927, Bibb County, AL, Hydrologic Unit 03150202, on left bank 60 ft downstream from U.S. Highway 82 bridge, 0.2 mi west of Centreville, 2.5 mi upstream from Sandy Creek, and at mile 81.2.

DRAINAGE AREA.—1,027 mi².

PERIOD OF RECORD.—August 1901 to February 1908, May 1929 to March 1932, May 1935 to March 2014.

PERIOD OF ANALYSIS.—April 1902 to March 1907, April 1930 to March 1932, April 1936 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—85

REMARKS.—Since about 1929, flow partly regulated by Lake Purdy (capacity, 15,300 acre-ft) on Little Cahaba River; however, that regulation likely does not substantial influence flows at this location. An average of 82 ft³/s is diverted upstream from station by Birmingham Water Works Board, and is not included in records. Flow is diverted upstream from station by Birmingham Water Works Board and releases by several wastewater treatment plants.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	206	215	4	4
5	158	167	4	4
10	137	145	5	5
20	121	129	6	6
50	105	112	9	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	5,350	3,250	1,600	708	349	235	199

STATION NAME AND NUMBER—02424500 Cahaba River at Sprott, AL

LOCATION.--Lat 32°40'05", long 87°14'30" referenced to North American Datum of 1927, Perry County, AL, Hydrologic Unit 03150202, on State Highway 14 and 183, 0.5 mi upstream from Goose Creek, 1 mi west of Sprott, 5.5 mi northeast of Marion, and at mile 47.6.

DRAINAGE AREA.—1,370 mi².

PERIOD OF RECORD.—October 1938 to September 1969.

PERIOD OF ANALYSIS.—April 1939 to March 1969.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—30

REMARKS.—Flow is diverted upstream from station by Birmingham Water Works Board and releases by several wastewater treatment plants.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	307	317	4	4
5	256	266	5	4
10	234	243	5	5
20	217	226	6	6
50	201	209	8	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	7,080	4,260	2,070	916	492	350	311

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STATION NAME AND NUMBER—02424590 Cahaba River near Suttle, AL

LOCATION.--Lat 32°31'45", long 87°11'56" referenced to North American Datum of 1927, Perry County, AL, Hydrologic Unit 03150202, at bridge on County Road 6, 1.2 mi west of Suttle, 11 mi southeast of Marion, and 31.0 mi upstream of mouth.

DRAINAGE AREA.—1,480 mi².

PERIOD OF RECORD.—August 1987 to October 2011.

PERIOD OF ANALYSIS.—April 1988 to March 2011.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—23

REMARKS.—Flow is diverted upstream from station by Birmingham Water Works Board and releases by several wastewater treatment plants.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	379	399	6	7
5	296	309	7	8
10	258	267	9	10
20	229	235	12	13

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	7,840	4,670	2,330	1,170	619	409	325

STATION NAME AND NUMBER—02424940 Oakmulgee Creek near Augustin, AL

LOCATION.--Lat 32°31'58", long 87°05'24" referenced to North American Datum of 1927, Dallas County, AL, Hydrologic Unit 03150202, on State Highway 219, 2 mi north of Augustin.

DRAINAGE AREA.—220 mi².

PERIOD OF RECORD.—May 1975 to May 1987.

PERIOD OF ANALYSIS.—April 1976 to March 1987.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	27	29	14	14
5	19	20	18	17
10	15	16	23	22
20	12	13	32	29

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,040	699	352	158	69	40	31

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STATION NAME AND NUMBER—02425000 Cahaba River near Marion Junction, AL

LOCATION.--Lat 32°26'38", long 87°10'49" referenced to North American Datum of 1927, Dallas County, AL, Hydrologic Unit 03150202, on upstream side of upstream bridge on U.S. Highway 80, 3.8 mi downstream of Oakmulgee Creek, 3.5 mi east of Marion Junction, and 21.4 mi upstream of mouth.

DRAINAGE AREA.—1,766 mi².

PERIOD OF RECORD.—October 1938 to September 1954, October 1968 to March 2014.

PERIOD OF ANALYSIS.—April 1939 to March 1954, April 1969 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—60

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	422	440	4	4
5	332	344	4	4
10	292	303	5	5
20	263	272	6	6
50	234	241	8	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	10,200	6,300	3,020	1,390	721	494	399

STATION NAME AND NUMBER—02425200 Big Swamp Creek near Orrville, AL

LOCATION.--Lat 32°13'17", long 87°09'48" referenced to North American Datum of 1927, Dallas County, AL, Hydrologic Unit 03150203, 20 ft upstream from county road, 3 mi upstream from mouth, and 9.8 mi southeast of Orrville.

DRAINAGE AREA.—35.8 mi².

PERIOD OF RECORD.—March 1972 to September 1985.

PERIOD OF ANALYSIS.—April 1972 to March 1985.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.7	1.9	35	31
5	0.80	0.92	63	46
10	0.43	0.54	66	57
20	0.22	0.31	111	94

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	209	117	42	9.8	3.2	1.7	1.3

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STATION NAME AND NUMBER—02425500 Cedar Creek at Minter, AL

LOCATION.--Lat 32°04'45", long 86°59'02" referenced to North American Datum of 1927, Dallas County, AL, Hydrologic Unit 03150203, on county road, 0.2 mi downstream from Snake Creek, 0.5 mi east of Minter, and 4 mi upstream from Dry Cedar Creek.

DRAINAGE AREA.—211 mi².

PERIOD OF RECORD.—July 1952 to September 1970, October 1974 to September 1982.

PERIOD OF ANALYSIS.—April 1953 to March 1970, April 1975 to March 1982.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	6.5	7.2	32	26
5	2.0	2.6	42	32
10	0.90	1.4	59	43
20	0.43	0.83	91	61

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	980	460	172	57	22	9.9	5.7

STATION NAME AND NUMBER—02426000 Boguechitto Creek near Browns, AL

LOCATION.--Lat 32°26'18", long 87°20'02" referenced to North American Datum of 1927, Dallas County, AL, Hydrologic Unit 03150203, on U.S. Highway 80, 0.3 mi upstream from Southern Railway bridge, 2 mi east of Browns, and 2.5 mi downstream from Washington Creek.

DRAINAGE AREA.—95.4 mi².

PERIOD OF RECORD.—February 1944 to June 1954, October 1965 to September 1971.

PERIOD OF ANALYSIS.—April 1944 to March 1954, April 1966 to March 1971.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.15	0.27	55	49
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	598	290	95	31	8.1	1.5	0.2

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STATION NAME AND NUMBER—02427250 Pine Barren Creek near Snow Hill, AL

LOCATION.--Lat 31°59'46", long 87°04'06" referenced to North American Datum of 1927, Wilcox County, AL, Hydrologic Unit 03150203, at bridge on State Highway 21, 4 mi west of Snow Hill.

DRAINAGE AREA.—261 mi².

PERIOD OF RECORD.—October 1989 to March 2014.

PERIOD OF ANALYSIS.—April 1990 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	26	28	10	10
5	18	19	12	12
10	14	15	15	15
20	11	12	20	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,330	632	258	110	52	31	24

STATION NAME AND NUMBER—02427500 Alabama River near Millers Ferry, AL

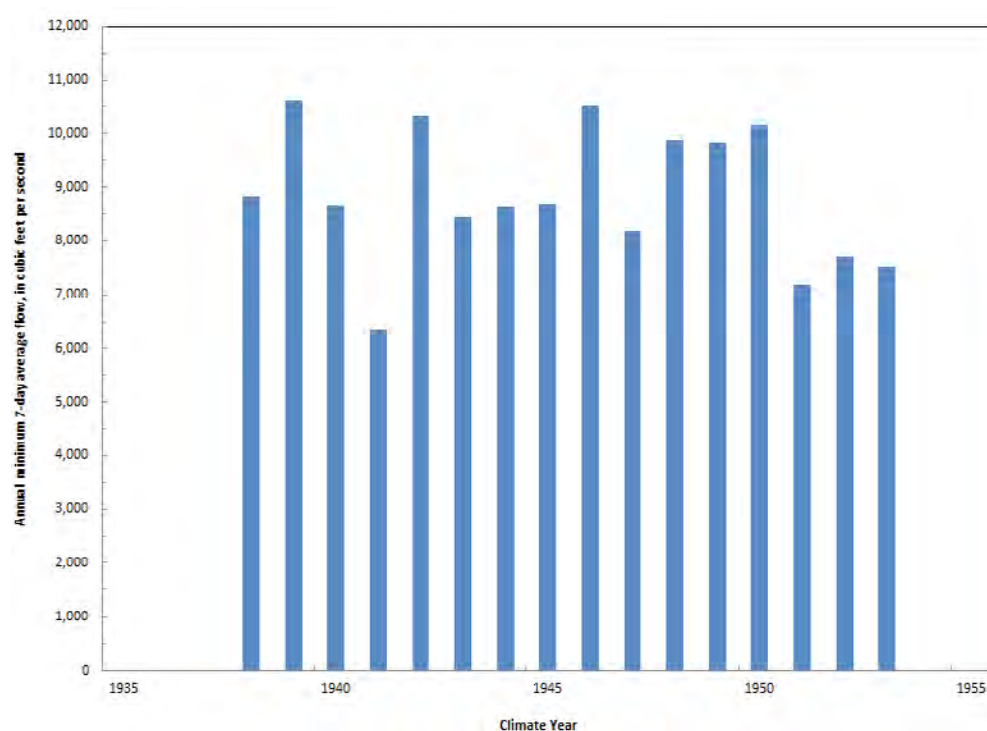
LOCATION.--Lat 32°06'52", long 87°23'58" referenced to North American Datum of 1927, Wilcox County, AL, Hydrologic Unit 03150203, on State Highway 28, just downstream from Praire Creek, and 2.25 mi northwest of Millers Ferry.

DRAINAGE AREA.—20,637 mi².

PERIOD OF RECORD.—October 1937 to September 1954.

PERIOD OF ANALYSIS.—October 1937 to September 1954.

REMARKS.—Flows regulated by reservoirs on the Etowah, Coosa, and Tallapoosa Rivers. Based on review of current streamgages on the Alabama River, current regulation patterns do not likely reflect the period of regulated record available at 02427500.



EXCEEDANCE PERCENTILES OF ANNUAL MINIMUM 7-DAY AVERAGE FLOWS									
Annual minimum 7-day average flow exceeded for indicated percentiles (cubic feet per second)									
Percentile	10	20	30	40	50	60	70	80	90
Flow	10,600	10,300	9,890	9,030	8,670	8,600	8,210	7,600	6,930

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	97,600	69,700	34,600	18,400	12,100	9,570	8,520

STATION NAME AND NUMBER—02427700 Turkey Creek at Kimbrough, AL

LOCATION.—Lat 32°01'15", long 87°33'30" referenced to North American Datum of 1927, Wilcox County, AL, Hydrologic Unit 03150203, on county road, 0.6 mi downstream from State Highway 5, 1 mi south of Kimbrough, 2 mi upstream from mouth, and 6 mi upstream from Alabama River.

DRAINAGE AREA.—97.5 mi².

PERIOD OF RECORD.—October 1958 to September 1996.

PERIOD OF ANALYSIS.—April 1959 to March 1996.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—37

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.0	2.4	20	18
5	0.75	1.0	26	22
10	0.40	0.62	36	29
20	0.23	0.38	52	41
50	0.11	0.21	85	62

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	530	262	103	33	9.3	4.3	2.7

STATION NAME AND NUMBER—02428400 Alabama River at Clairborne Lock and Dam near Monroeville, AL

LOCATION.—Lat 31°36'54", long 87°33'02" referenced to North American Datum of 1927, Monroe County, AL, Hydrologic Unit 03150204, at control house and downstream end of lock, 3.5 miles upstream of Flat Creek, 3.8 miles downstream of Silver Creek, 15 miles northwest of Monroeville, and at river mile 81.9.

DRAINAGE AREA.—21,473 mi².

PERIOD OF RECORD.—October 1975 to March 2014.

PERIOD OF ANALYSIS.—April 1976 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—38

REMARKS.—Flows regulated by reservoirs on the Etowah, Coosa, Tallapoosa and Alabama Rivers.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5,530	6,430	7	5
5	3,930	4,940	9	6
10	3,150	4,230	12	8
20	2,560	3,690	18	11
50	1,980	3,140	27	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	104,000	81,200	39,000	16,900	9,010	6,520	5,530

STATION NAME AND NUMBER—02428500 Big Flat Creek near Fountain, AL

LOCATION.—Lat 31°36'30", long 87°24'45" referenced to North American Datum of 1927, Monroe County, AL, Hydrologic Unit 03150204, on State Highway 41, 1 mi northwest of Fountain, 2 mi upstream from Bradley Mill Creek, 8 mi upstream from mouth, and 8 mi northwest of Monroeville.

DRAINAGE AREA.—247 mi².

PERIOD OF RECORD.—October 1943 to September 1970.

PERIOD OF ANALYSIS.—April 1944 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—26

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	6.0	7.0	25	23
5	2.2	2.7	31	29
10	1.2	1.5	42	39
20	0.67	0.90	60	54

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,300	665	228	64	22	8.6	5.5

STATION NAME AND NUMBER—02429000 Limestone Creek near Monroeville, AL

LOCATION.—Lat 31°33'45", long 87°21'06" referenced to North American Datum of 1927, Monroe County, AL, Hydrologic Unit 03150204, on State Highway 41, 3 mi northwest of Monroeville, and 10 mi upstream from mouth.

DRAINAGE AREA.—121 mi².

PERIOD OF RECORD.—January 1952 to September 1970.

PERIOD OF ANALYSIS.—April 1952 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	22	24	12	12
5	15	16	14	14
10	12	13	17	17
20	9.7	11	21	21

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	443	286	154	77	42	27	20

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STATION NAME AND NUMBER—02429500 Alabama River at Clairborne, AL

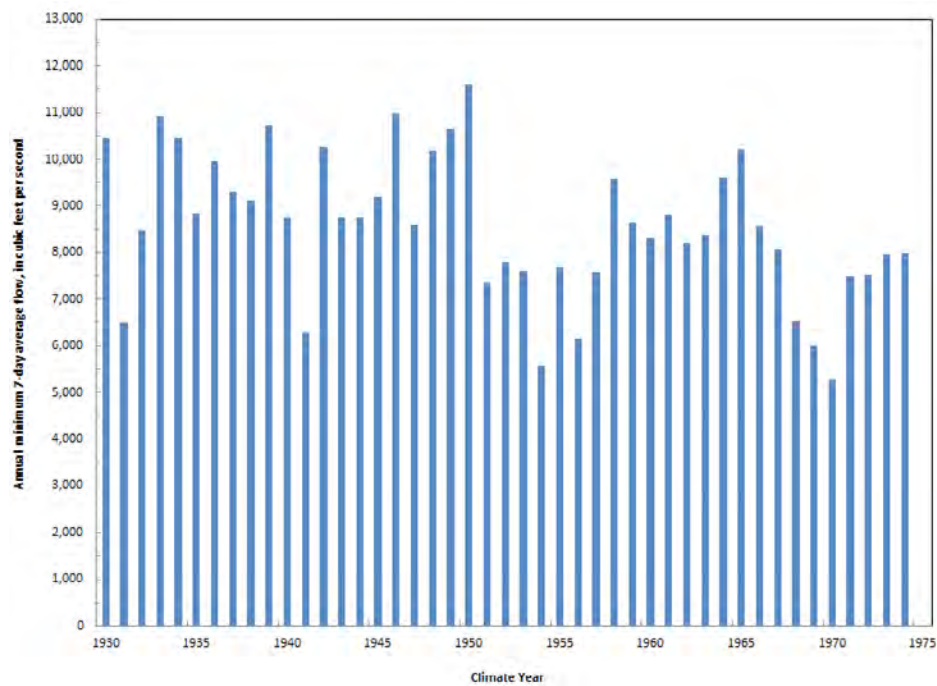
LOCATION.--Lat 31°32'48", long 87°30'45" referenced to North American Datum of 1927, Monroe County, AL, Hydrologic Unit 03150204, on U.S. Highway 84 at Clairborne, 0.5 mi downstream from Limestone Creek, 12 mi west of Monroeville, and at river mile 76.1.

DRAINAGE AREA.—21,967 mi².

PERIOD OF RECORD.—April 1930 to September 1975.

PERIOD OF ANALYSIS.— April 1930 to September 1975.

REMARKS.—Flows regulated by reservoirs on the Etowah, Coosa, Tallapoosa and Alabama Rivers. Based on review of current streamgages on the Alabama River, current regulation patterns do not likely reflect the period of regulated record available at 02429500.



EXCEEDANCE PERCENTILES OF ANNUAL MINIMUM 7-DAY AVERAGE FLOWS									
Annual minimum 7-day average flow exceeded for indicated percentiles (cubic feet per second)									
Percentile	10	20	30	40	50	60	70	80	90
Flow	10,700	10,200	9,350	8,780	8,610	8,250	7,770	7,490	6,220

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	102,000	77,500	38,400	19,100	12,500	9,700	8,450

STATION NAME AND NUMBER—02429595 Little River near Uriah, AL

LOCATION.—Lat 31°14'31", long 87°36'50" referenced to North American Datum of 1927, Escambia County, AL, Hydrologic Unit 03150204, on county road, 7 mi northwest of McCullough.

DRAINAGE AREA.—99.2 mi².

PERIOD OF RECORD.—October 1968 to September 1979.

PERIOD OF ANALYSIS.—April 1969 to March 1979.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—10

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	62	64	9	9
5	51	54	9	7
10	46	50	10	7
20	42	48	12	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	445	320	196	132	90	70	64

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STATION NAME AND NUMBER—02438000 Buttahatchee River below Hamilton, AL

LOCATION.—Lat 34°06'22", long 87°59'22" referenced to North American Datum of 1927, Marion County, AL, Hydrologic Unit 03160103, near right bank on downstream side of bridge on Military Street, 0.5 mi downstream from Woods Creek, 2 mi south of Hamilton, and at mile 82.6.

DRAINAGE AREA.—277 mi².

PERIOD OF RECORD.—October 1950 to September 1970, October 1991 to March 2014.

PERIOD OF ANALYSIS.—April 1951 to March 1970, April 1992 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—42

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	50	54	7	7
5	35	38	8	9
10	28	30	11	11
20	25	25	14	14
50	19	20	19	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,750	1,110	532	227	106	66	49

STATION NAME AND NUMBER—02439000 Buttahatchee River near Sulligent, AL

LOCATION.—Lat 33°55'47", long 88°06'07" referenced to North American Datum of 1927, Lamar County, AL, Hydrologic Unit 03160103, on State Highway 17, 1 mi upstream from Bogue Creek, 1.5 mi northwest of Sulligent, and 2 mi downstream from Beaver Creek.

DRAINAGE AREA.—472 mi².

PERIOD OF RECORD.—March 1939 to September 1959.

PERIOD OF ANALYSIS.—April 1939 to March 1959.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	74	78	9	9
5	53	56	10	10
10	44	48	13	12
20	38	41	16	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,610	1,620	828	316	146	94	76

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STATION NAME AND NUMBER—02442000 Luxapallila Creek near Fayette, AL

LOCATION.—Lat 33°43'10", long 87°52'14" referenced to North American Datum of 1927, Fayette County, AL, Hydrologic Unit 03160105, on State Highway 18 and 2 mi northwest of Fayette.

DRAINAGE AREA.—130 mi².

PERIOD OF RECORD.—May 1945 to September 1970.

PERIOD OF ANALYSIS.—April 1946 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	41	44	5	5
5	34	37	6	6
10	30	33	8	8
20	27	30	10	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	610	382	196	100	64	51	44

STATION NAME AND NUMBER—02442500 Luxapallila Creek at Millport, AL

LOCATION.—Lat 33°34'30", long 88°05'00" referenced to North American Datum of 1927, Lamar County, AL, Hydrologic Unit 03160105, near left bank on downstream side of bridge on State Highway 17, 0.20 mi downstream from Driver Creek, 1.0 mi north of Millport, and at mile 31.6.

DRAINAGE AREA.—247 mi².

PERIOD OF RECORD.—August 1954 to September 1959, December 1980 to September 1986, and October 2001 to October 2011.

PERIOD OF ANALYSIS.—April 1955 to March 1959, April 1981 to March 1986, and April 2002 to March 2011.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	69	74	8	8
5	53	56	9	10
10	45	48	12	12
20	40	42	15	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,240	730	388	199	109	76	64

STATION NAME AND NUMBER—02444000 Coal Fire Creek near Pickensville, AL

LOCATION.—Lat 33°17'51", long 88°15'56" referenced to North American Datum of 1927, Pickens County, AL, Hydrologic Unit 03160106, on State Highway 14, 4.5 mi north of Pickensville, and at mile 4.5.

DRAINAGE AREA.—126 mi².

PERIOD OF RECORD.—October 1954 to September 1971, October 1974 to September 1980

PERIOD OF ANALYSIS.—April 1955 to March 1971, April 1975 to March 1980.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	14	15	12
5	7.6	8.7	19	15
10	5.4	6.7	26	20
20	3.9	5.2	38	27

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	625	416	197	78	32	19	14

STATION NAME AND NUMBER—02444160 Tombigbee River at Bevill Lock and Dam near Pickensville, AL

LOCATION.—Lat 33°12'38", long 88°17'19" referenced to North American Datum of 1927, Pickens County, AL, Hydrologic Unit 03160106, near left bank at dam, 2 mi southwest of Pickensville, 10 mi northwest of Aliceville, and at river mile 287.7.

DRAINAGE AREA.—5,750 mi².

PERIOD OF RECORD.—October 1980 to September 2009, October 2010 to March 2014.

PERIOD OF ANALYSIS.—April 1985 to March 2009, April 2011 to March 2014

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—27

REMARKS.—Period of record analyzed includes all current regulation structures. Records since January 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway. Regulated by Jamie Whitten Lock and Dam (1983), G.V. Montgomery Lock and Dam (1984), John Ranking Lock and Dam (1984), Fulton Lock and Dam (1981), Glover Wilkins Lock and Dam (1981), Amory Lock and Dam (1979), Aberdeen Lock and Dam (1981), John C. Stennis Lock and Dam (1978), and Tom Bevill Lock and Dam (1978).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	518	736	5	7
5	418	555	6	7
10	368	482	8	8
20	330	431	10	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	34,300	21,700	9,300	3,810	1,610	791	674

STATION NAME AND NUMBER—02444500 Tombigbee River near Cochrane, AL

LOCATION.-- Lat 33°04'52", long 88°14'16" referenced to North American Datum of 1927, Pickens County, AL, Hydrologic Unit 03160106, on State Highway 17, 1.2 mi northeast of Cochrane, 2.2 mi downstream from Boguechitto Creek, 7 mi southwest of Aliceville, and at mile 271.4.

DRAINAGE AREA.—5,940 mi².

PERIOD OF RECORD.—October 1938 to March 1978.

PERIOD OF ANALYSIS.—April 1939 to March 1978.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—39

REMARKS.—Period of record is for pre-regulation conditions. Currently regulated by Jamie Whitten Lock and Dam (1983), G.V. Montgomery Lock and Dam (1984), John Ranking Lock and Dam (1984), Fulton Lock and Dam (1981), Glover Wilkins Lock and Dam (1981), Amory Lock and Dam (1979), Aberdeen Lock and Dam (1981), John C. Stennis Lock and Dam (1978), and Tom Beville Lock and Dam (1978). Since January 16, 1985, streamflows include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	607	634	7	7
5	418	435	9	9
10	338	353	11	11
20	281	295	15	14
50	225	239	20	19

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	35,000	25,000	10,500	3,320	1,300	735	565

STATION NAME AND NUMBER—02445500 Siskey River at Fayette, AL

LOCATION.-- Lat 33°40'10", long 87°48'59" referenced to North American Datum of 1927, Fayette County, AL, Hydrologic Unit 03160107, 1 mi southeast of Fayette, and 1.5 mi downstream from Southern Railway bridge.

DRAINAGE AREA.—282 mi².

PERIOD OF RECORD.—February 1939 to September 1959.

PERIOD OF ANALYSIS.—April 1939 to March 1959.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—Frequency statistics were computed based on a MOVE.1 correlation with station 02446500 Siskey River near Elrod, AL, which has a period of record from September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014, which represents 69 climatic years.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	27	30	14	13
5	18	20	16	15
10	14	16	19	18
20	11	13	24	22
50	8.7	10	31	29

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,700	1,070	453	131	55	30	22

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STATION NAME AND NUMBER—02446000 Sipsey River at Moores Bridge, AL

LOCATION.—Lat 33°26'54", long 87°45'50" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160107, 1 mi east of Moores Bridge, and 6 mi downstream from Bear Creek.

DRAINAGE AREA.—413 mi².

PERIOD OF RECORD.—February 1939 to September 1951.

PERIOD OF ANALYSIS.—April 1939 to March 1951.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—Frequency statistics were computed based on a MOVE.1 correlation with station 02446500 Sipsey River near Elrod, AL, which has a period of record from September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014, which represents 69 climatic years.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	46	48	11	12
5	30	31	11	11
10	24	25	11	11
20	19	20	14	14
50	15	16	18	19

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,410	1,720	847	250	105	61	50

STATION NAME AND NUMBER—02446500 Sispey River near Elrod, AL

LOCATION.—Lat 33°15'25", long 87°46'35" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160107, on left bank at downstream side of bridge on State Highway 140, 0.2 mi upstream from Gulf, Mobile & Ohio Railroad bridge, 1.0 mi east of Elrod, 2.0 mi downstream from Box Creek, and at mile 50.7.

DRAINAGE AREA.—528 mi².

PERIOD OF RECORD.—September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014.

PERIOD OF ANALYSIS.—April 1929 to March 1932, April 1940 to March 1971, April 1979 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—69

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	59	63	6	7
5	38	40	8	7
10	30	32	10	9
20	24	26	12	12
50	19	20	16	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,900	1,980	1,010	388	146	78	58

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STATION NAME AND NUMBER—02447000 Sipsey River near Pleasant Ridge, AL

LOCATION.—Lat 33°02'19", long 88°06'21" referenced to North American Datum of 1927, Greene County, AL, Hydrologic Unit 03160107, on State Highway 40, 450 ft downstream from Hughes Creek, 2.5 mi northwest of Pleasant Ridge, 6 mi upstream from mouth, and 6 mi south of Aliceville.

DRAINAGE AREA.—769 mi².

PERIOD OF RECORD.—February 1939 to September 1959.

PERIOD OF ANALYSIS.—April 1939 to March 1959.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—Frequency statistics were computed based on a MOVE.1 correlation with station 02446500 Sipsey River near Elrod, AL, which has a period of record from September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014, which represents 69 climatic years.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	78	82	15	15
5	48	51	18	17
10	37	40	23	21
20	29	32	29	27
50	22	24	41	37

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,840	2,740	1,500	480	166	87	62

STATION NAME AND NUMBER—02447025 Tombigbee River at Heflin Lock and Dam near Gainesville, AL

LOCATION.—Lat 32°50'53", long 88°09'22" referenced to North American Datum of 1927, Greene County, AL, Hydrologic Unit 03160106, in N½ sec. 36, T.22 N., R.2 W., on left bank end of dam, 1.0 mile downstream from Turkey Paw Branch, 1.8 miles north of Gainesville, 2.4 mi upstream from Noxubee River, and at river mile 238.6.

DRAINAGE AREA.—7,230 mi².

PERIOD OF RECORD.—March 1978 to March 2014.

PERIOD OF ANALYSIS.—April 1985 to March 2014

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—29

REMARKS.—Period of record analyzed includes all current regulation structures. Records since January 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway. Regulated by Jamie Whitten Lock and Dam (1983), G.V. Montgomery Lock and Dam (1984), John Ranking Lock and Dam (1984), Fulton Lock and Dam (1981), Glover Wilkins Lock and Dam (1981), Amory Lock and Dam (1979), Aberdeen Lock and Dam (1981), John C. Stennis Lock and Dam (1978), and Tom Beville Lock and Dam (1978).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	391	664	7	9
5	285	455	9	10
10	237	372	11	12
20	201	315	15	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	35,000	25,000	10,500	3,320	1,300	735	565

STATION NAME AND NUMBER—02448500 Noxubee River near Geiger, AL

LOCATION.—Lat 32°55'57", long 88°17'52" referenced to North American Datum of 1927, Sumter County, AL, Hydrologic Unit 03160108, near right bank on downstream side of bridge on State Highway 17, 0.1 mi upstream from Woodward Creek, 2.1 mi upstream from St.Louis-San Francisco Railroad bridge, 5 mi north of Geiger, and at mile 16.9.

DRAINAGE AREA.—1,097 mi².

PERIOD OF RECORD.—March 1939 to September 1940, August 1944 to September 1965, October 1966 to March 2014.

PERIOD OF ANALYSIS.—April 1939 to March 1940, April 1945 to March 1965, April 1967 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—67

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	65	69	5	6
5	45	48	6	6
10	37	39	8	8
20	31	33	10	10
50	25	27	14	13

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	7,460	4,910	1,510	359	130	78	63

STATION NAME AND NUMBER—02448900 Bodka Creek near Geiger, AL

LOCATION.—Lat 32°48'25", long 88°18'43" referenced to North American Datum of 1927, Sumter County, AL, Hydrologic Unit 03160108, at right bank on downstream side of State Highway 17, 1.6 mi downstream from Tifallili Creek, 4.2 mi north of Geiger, and 9.2 mi upstream from mouth.

DRAINAGE AREA.—158 mi².

PERIOD OF RECORD.—October 1990 to March 2014.

PERIOD OF ANALYSIS.—April 1991 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—23

REMARKS.—Zero flows

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.01	0.05	33	52
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,050	418	93	14	1.6	0.21	0.02

STATION NAME AND NUMBER—02449000 Tombigbee River at Gainseville, AL

LOCATION.—Lat 32°49'30", long 88°09'24" referenced to North American Datum of 1927, Sumter County, AL, Hydrologic Unit 03160106, on State Highway 39 at Gainesville, 2 mi downstream from Noxubee River, and at mile 234.4.

DRAINAGE AREA.—8,632 mi².

PERIOD OF RECORD.—October 1938 to September 1955, October 1960 to March 1978.

PERIOD OF ANALYSIS.—April 1939 to March 1955, April 1961 to March 1978.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—33

REMARKS.—Period of record is for pre-regulation conditions. Currently regulated by Jamie Whitten Lock and Dam (1983), G.V. Montgomery Lock and Dam (1984), John Ranking Lock and Dam (1984), Fulton Lock and Dam (1981), Glover Wilkins Lock and Dam (1981), Amory Lock and Dam (1979), Aberdeen Lock and Dam (1981), John C. Stennis Lock and Dam (1978), Tom Beville Lock and Dam (1978), and Howell Heflin Lock and Dam (1977). Since January 16, 1985, streamflows include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	925	985	9	9
5	619	646	11	11
10	488	504	14	14
20	395	405	18	19
50	306	311	26	27

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	49,800	36,300	14,800	4,620	1,870	1,080	800

STATION NAME AND NUMBER—02449245 Brush Creek near Eutaw, AL

LOCATION.—Lat 32°49'51", long 87°58'56" referenced to North American Datum of 1927, Greene County, AL, Hydrologic Unit 03160106, on county highway, 1.3 mi downstream from Pippan Creek, 2.2 mi upstream from Dry Creek, 5.5 mi west of Eutaw, and 7.2 mi upstream from mouth.

DRAINAGE AREA.—43.2 mi².

PERIOD OF RECORD.—June 1975 to September 1997.

PERIOD OF ANALYSIS.—April 1976 to March 1997.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.18	0.24	29	29
5	0.06	0.08	33	32
10	0.04	0.05	41	39
20	0.02	0.03	53	50

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	241	124	47	13	2.2	0.56	0.24

STATION NAME AND NUMBER—02449500 Tombigbee River at Epes, AL

LOCATION.—Lat 32°41'41", long 88°06'53" referenced to North American Datum of 1927, Sumter County, AL, Hydrologic Unit 03160106, on U.S. Highway 11, 0.5 mi northeast of Epes, and 0.6 mi downstream from Jones and Factory Creeks.

DRAINAGE AREA.—8,930 mi².

PERIOD OF RECORD.—January 1901 to December 1901, January 1905 and August 1913, October 1938 to September 1945.

PERIOD OF ANALYSIS.—April 1905 to March 1913, April 1939 to March 1945.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—Period of record is for pre-regulation conditions. Currently regulated by Jamie Whitten Lock and Dam (1983), G.V. Montgomery Lock and Dam (1984), John Ranking Lock and Dam (1984), Fulton Lock and Dam (1981), Glover Wilkins Lock and Dam (1981), Amory Lock and Dam (1979), Aberdeen Lock and Dam (1981), John C. Stennis Lock and Dam (1978), Tom Beville Lock and Dam (1978), and Howell Heflin Lock and Dam (1977). Since January 16, 1985, streamflows include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	679	700	10	11
5	541	559	7	7
10	493	512	8	8
20	461	482	11	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	39,600	31,300	13,100	4,010	1,620	921	770

STATION NAME AND NUMBER—02449882 Blue Springs Creek near Blountsville, AL

LOCATION.—Lat 34°04'47", long 86°36'28" referenced to North American Datum of 1927, Blount County, AL, Hydrologic Unit 03160109, on left bank 300 feet above sewage treatment plant outfall, 1 mi southwest of Blountsville.

DRAINAGE AREA.—13.0 mi².

PERIOD OF RECORD.—October 1992 to March 2014.

PERIOD OF ANALYSIS.—April 1993 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.45	0.56	26	27
5	0.10	0.18	33	34
10	0.00	0.08	--	46
20	0.00	0.01	--	66

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	57	36	18	6.6	1.9	0.73	0.41

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STATION NAME AND NUMBER—02450000 Mulberry Fork near Garden City, AL

LOCATION.—Lat 33°00'43", long 86°44'12" referenced to North American Datum of 1927, Blount County, AL, Hydrologic Unit 03160109, on downstream side of bridge on county road, 0.7 mi east of Garden City 1.6 mi upstream of Louisville & Nashville Railroad bridge, 3.7 mi downstream from Mud Creek.

DRAINAGE AREA.—358 mi².

PERIOD OF RECORD.—October 1928 to March 2014.

PERIOD OF ANALYSIS.—April 1929 to March 1964.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSES.—35

REMARKS.—The QAQC analysis indicated differences in low-flow patterns between the earlier and latter periods of record. Thus, a separate frequency and duration analysis was done for the two periods. This period likely includes more natural conditions.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.6	8.5	10	11
5	5.0	5.4	9	10
10	4.1	4.4	10	11
20	3.5	3.7	12	13
50	3.0	3.1	16	17

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,430	1,520	700	201	44	13	9

STATION NAME AND NUMBER—02450000 Mulberry Fork near Garden City, AL

LOCATION.—Lat 33°00'43", long 86°44'12" referenced to North American Datum of 1927, Blount County, AL, Hydrologic Unit 03160109, on downstream side of bridge on county road, 0.7 mi east of Garden City 1.6 mi upstream of Louisville & Nashville Railroad bridge, 3.7 mi downstream from Mud Creek.

DRAINAGE AREA.—358 mi².

PERIOD OF RECORD.—October 1928 to March 2014.

PERIOD OF ANALYSIS.—April 1965 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSES.—49

REMARKS.—The QAQC analysis indicated differences in low-flow patterns between the earlier and latter periods of record. Thus, a separate frequency and duration analysis was done for the two periods. This period likely includes anthropogenic influences.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	16	19	8	9
5	12	13	6	6
10	10	11	6	7
20	9.4	10	9	10
50	8.7	9.6	13	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,600	1,650	747	254	61	24	18

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STATION NAME AND NUMBER—02450180 Mulberry Fork near Arkadelphia, AL

LOCATION.—Lat 33°52'20", long 86°55'24" referenced to North American Datum of 1927, Cullman County, AL, Hydrologic Unit 03160109, on the upstream side of bridge, 4.1 mi south of Arkadelphia, and at mile 58.6.

DRAINAGE AREA.—487 mi².

PERIOD OF RECORD.—October 1976 to September 1986, October 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1977 to March 1986, April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—34

REMARKS.—Likely influence from anthropogenic sources based on analysis from station 02450000.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	20	23	10	11
5	14	16	8	8
10	12	13	8	9
20	11	12	11	12
50	9.7	11	15	17

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,180	2,000	953	344	78	29	22

STATION NAME AND NUMBER—02450250 Sipsey Fork near Grayson, AL

LOCATION.—Lat 34°17'07", long 87°23'56" referenced to North American Datum of 1927, Winston County, AL, Hydrologic Unit 03160110, Bankhead National Forest, at downstream side of bridge on Cranal Road, 0.5 mi downstream from Borden Creek, 4.5 mi west of Grayson, 14 mi northeast of Haleyville, and 64.1 miles upstream from mouth.

DRAINAGE AREA.—92.1 mi².

PERIOD OF RECORD.—October 1966 to March 2014.

PERIOD OF ANALYSIS.—April 1967 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—47

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.5	3.9	10	10
5	2.0	2.3	12	11
10	1.4	1.7	15	14
20	1.1	1.3	20	17
50	0.77	1.0	27	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	633	366	151	51	13	5.9	3.9

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STATION NAME AND NUMBER—02450500 Sipsey Fork near Falls City, AL

LOCATION.—Lat 34°03'07", long 87°16'01" referenced to North American Datum of 1927, Winston County, AL, Hydrologic Unit 03160110, 1.2 mi downstream from Brushy Creek, 1.8 mi north of Falls City, and 2.2 mi upstream from Clear Creek.

DRAINAGE AREA.—360 mi².

PERIOD OF RECORD.—June 1943 to December 1954.

PERIOD OF ANALYSIS.—April 1944 to March 1954.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—10

REMARKS.—Since 1961, site in backwater from Lewis Smith Dam.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	19	21	22	23
5	12	13	20	20
10	9.4	10	21	21
20	8.0	8.7	25	26

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,320	1,440	571	142	47	23	17

STATION NAME AND NUMBER—02450825 Clear Creek at New Hope Church near Poplar Springs, AL

LOCATION.—Lat 34°04'52", long 87°25'22" referenced to North American Datum of 1927, Winston County, AL, Hydrologic Unit 03160110, on upstream side of bridge on county road at New Hope Church, 4.5 mi northeast of Poplar Spring, and 6.1 mi southeast of Double Springs.

DRAINAGE AREA.—101 mi².

PERIOD OF RECORD.—October 1980 to September 1981, October 1993 to March 2014.

PERIOD OF ANALYSIS.—April 1994 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	19	21	12	12
5	13	14	13	13
10	10	11	16	16
20	8.4	9.3	20	19

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	581	401	210	101	48	27	20

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STATION NAME AND NUMBER—02451000 Clear Creek at Falls City, AL

LOCATION.—Lat 34°02'05", long 87°18'00" referenced to North American Datum of 1927, Winston County, AL, Hydrologic Unit 03160110, 15 ft downstream from highway bridge, 0.2 mi upstream from Clear Creek Falls, 0.5 mi south of Falls City, and 2 mi upstream from mouth.

DRAINAGE AREA.—149 mi².

PERIOD OF RECORD.—October 1939 to November 1954.

PERIOD OF ANALYSIS.—April 1940 to March 1954.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—Since 1961, site in backwater from Lewis Smith Dam.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	21	23	12	11
5	15	17	10	10
10	14	15	10	10
20	12	14	13	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	881	525	250	96	44	27	23

STATION NAME AND NUMBER—02453000 Blackwater Creek near Manchester, AL

LOCATION.—Lat 33°54'30", long 87°15'25" referenced to North American Datum of 1927, Walker County, AL, Hydrologic Unit 03160109, on right bank 100 ft downstream from State Highway 257, 0.2 mi downstream from small unnamed tributary, 2 mi east of Manchester, and 5.5 mi north of Jasper.

DRAINAGE AREA.—181 mi².

PERIOD OF RECORD.—October 1938 to September 1971, October 1979 to September 1982, October 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1939 to March 1971.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—32

REMARKS.—The QAQC analysis indicated differences in low-flow patterns between the earlier and latter periods of record. Thus, a separate frequency and duration analysis was done for the two periods. This period likely represents a more natural condition.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.8	9.8	13	13
5	4.3	5.4	15	16
10	3.1	3.8	19	20
20	2.3	2.8	23	27
50	1.7	2.0	31	37

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,300	788	313	90	30	14	9.5

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STATION NAME AND NUMBER—02453000 Blackwater Creek near Manchester, AL

LOCATION.—Lat 33°54'30", long 87°15'25" referenced to North American Datum of 1927, Walker County, AL, Hydrologic Unit 03160109, on right bank 100 ft downstream from State Highway 257, 0.2 mi downstream from small unnamed tributary, 2 mi east of Manchester, and 5.5 mi north of Jasper.

DRAINAGE AREA.—181 mi².

PERIOD OF RECORD.—October 1938 to September 1971, October 1979 to September 1982, October 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1980 to March 1982, April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—27

REMARKS.—The QAQC analysis indicated differences in low-flow patterns between the earlier and latter periods of record. Thus, a separate frequency and duration analysis was done for the two periods. This period likely includes anthropogenic influences.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	12	15	19	17
5	5.6	7.2	24	20
10	3.4	4.9	32	25
20	2.2	3.5	44	33

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,420	864	383	152	50	21	13

STATION NAME AND NUMBER—02453500 Mulberry Fork at Cordova, AL

LOCATION.—Lat 33°45'27", long 87°10'13" referenced to North American Datum of 1927, Walker County, AL, Hydrologic Unit 03160109, just downstream from Cane Creek, 1 mi east of Cordova, and 12 mi downstream from Sipsey Fork.

DRAINAGE AREA.—1,916 mi².

PERIOD OF RECORD.—June 1900 to December 1912, November 2009 to September 2013.

PERIOD OF ANALYSIS.—April 1901 to March 1912.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—Since 1960, flow affected by Lewis Smith Lake and Bankhead Lock and Dam on Black Warrior River. Duration of daily flow analysis represents data from June 1900 to December 1912.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	74	87	23	21
5	41	50	26	24
10	29	37	33	31
20	22	28	43	40

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	14,500	8,550	3,290	1,110	384	155	100

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STATION NAME AND NUMBER—02454000 Lost Creek near Oakman, AL

LOCATION.—Lat 33°45'50", long 87°21'30" referenced to North American Datum of 1927, Walker County, AL, Hydrologic Unit 03160109, on State Highway 69, 0.2 mi upstream from Wolf Branch, 0.8 mi downstream from Pumpkin Creek, 4.0 mi northeast of Oakman, 6.5 mi southwest of Jasper, and at mile 24.8.

DRAINAGE AREA.—134 mi².

PERIOD OF RECORD.—October 1951 to September 1966, October 1979 to September 1981.

PERIOD OF ANALYSIS.—April 1952 to March 1966, April 1980 to March 1981.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—15

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.36	0.59	40	39
5	0.09	0.16	37	42
10	0.00	0.06	--	50
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	845	477	194	38	8.0	2.3	1.0

STATION NAME AND NUMBER—02454055 Lost Creek above Parrish, AL

LOCATION.—Lat 33°44'30", long 87°19'37" referenced to North American Datum of 1927, Walker County, AL, Hydrologic Unit 03160109, on downstream side of bridge on Browns Bridge Road, 1 mi north of County Road 20 (East), 3 mi northwest of Parrish, 3.4 mi west of Oakman, and 16.8 mi above mouth.

DRAINAGE AREA.—143 mi².

PERIOD OF RECORD.—October 1992 to March 2014.

PERIOD OF ANALYSIS.—April 1993 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	15	17	16
5	7.0	8.5	20	19
10	4.9	6.1	26	25
20	3.6	4.5	34	33

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	977	576	281	111	39	18	12

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STATION NAME AND NUMBER—02455000 Locust Fork near Cleveland, AL

LOCATION.—Lat 34°01'28", long 86°34'27" referenced to North American Datum of 1927, Blount County, AL, Hydrologic Unit 03160111, on left bank 200 ft upstream from bridge on U.S. Highway 231, 2.5 mi downstream from Graves Creek, 3 mi north of Cleveland, and at mile 98.6.

DRAINAGE AREA.—303 mi².

PERIOD OF RECORD.—December 1936 to September 1986, October 1992 to March 2014.

PERIOD OF ANALYSIS.—April 1937 to March 1986, April 1993 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—70

REMARKS.—Possible flow influences from anthropogenic sources.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	11	12	8	8
5	6.5	7.2	8	8
10	5.1	5.6	9	9
20	4.1	4.6	11	11
50	3.3	3.7	15	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,000	1,260	583	190	42	17	12

STATION NAME AND NUMBER—02455500 Locust Fork at Trafford, AL

LOCATION.—Lat 33°49'49", long 86°45'21" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, 0.8 mi northwest of Trafford, 1.5 mi east of Coaldale, 2.8 mi upstream from Gurley Creek, and at mile 67.4.

DRAINAGE AREA.—624 mi².

PERIOD OF RECORD.—October 1930 to September 1969, October 1992 to September 1997.

PERIOD OF ANALYSIS.—April 1931 to March 1969, April 1993 to March 1997.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—42

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	24	28	8	8
5	16	19	9	9
10	13	15	10	10
20	11	13	13	12
50	8.8	11	16	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,790	2,390	1,090	324	99	41	30

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STATION NAME AND NUMBER—02455980 Turkey Creek at Sewage Plant near Pinson, AL

LOCATION.—Lat 33°42'40", long 86°41'46" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, on left bank, 400 ft upstream from Turkey Creek Wastewater Treatment Plant effluent, 1.8 mi northwest of Pinson, and 7 mi south-east of Morris.

DRAINAGE AREA.—27.4 mi².

PERIOD OF RECORD.—July 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	12	13	6	7
5	9.4	10	8	8
10	8.1	8.5	10	11
20	7.0	7.3	14	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	134	83	47	30	19	14	11

STATION NAME AND NUMBER—02456000 Turkey Creek at Morris, AL

LOCATION.—Lat 33°44'25", long 86°48'45" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, on downstream side of pier of bridge on county road (former U.S. Highway 31), at Morris, 0.8 mi downstream from Cunningham Creek, at mile 4.0.

DRAINAGE AREA.—80.9 mi².

PERIOD OF RECORD.—January 1944 to September 1979, March 2002 to October 2011.

PERIOD OF ANALYSIS.—April 1944 to March 1979, April 2002 to March 2011.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—42

REMARKS.—QAQC assessments indicate that the latter record (from around the early 1970s) is likely influenced to some unknown degree by upstream wastewater treatment plant discharges.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	15	5	5
5	10	11	5	5
10	9.3	10	6	5
20	8.4	9.4	7	6
50	7.6	8.6	9	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	451	270	132	55	25	17	14

STATION NAME AND NUMBER—02456330 Crooked Creek near Morris, AL

LOCATION.—Lat 33°44'10", long 86°52'00" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, 100 ft downstream from county road, 2 mi southwest of Sardis, 3.2 mi west-southwest of Morris, and 3.6 mi above mouth.

DRAINAGE AREA.—16.2 mi².

PERIOD OF RECORD.—November 1975 to September 1988, October 1996 to September 1997.

PERIOD OF ANALYSIS.—April 1976 to March 1988.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.15	0.19	27	25
5	0.08	0.10	27	25
10	0.06	0.07	30	28
20	0.04	0.06	37	33

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	98	54	24	6.5	0.92	0.31	0.17

STATION NAME AND NUMBER—02456500 Locust Fork at Sayre, AL

LOCATION.—Lat 33°42'35", long 86°59'00" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, on left bank 150 ft upstream from bridge on county road at Sayre, 1.5 mi downstream from Camp Creek, and at mile 33.9.

DRAINAGE AREA.—885 mi².

PERIOD OF RECORD.—October 1928 to March 1932, October 1941 to March 2014.

PERIOD OF ANALYSIS.—April 1964 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—50

REMARKS.—From QAQC assessments, analysis period established based on most recent period of relatively similar flow patterns (possible influence from upstream anthropogenic sources).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	63	70	7	7
5	43	47	8	8
10	35	38	9	9
20	29	32	12	12
50	24	26	15	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	5,560	3,500	1,650	610	188	92	69

STATION NAME AND NUMBER—02457000 Fivemile Creek at Ketona, AL

LOCATION.—Lat 33°36'05", long 86°45'20" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, near center of stream on downstream side of foot bridge at Ketona, 0.6 mi downstream from Barton Branch, 0.9 mi downstream from Tarrant Spring Branch, 2 mi north of Tarrant City, and at mile 35.2.

DRAINAGE AREA.—23.9 mi².

PERIOD OF RECORD.—October 1953 to September 1958, December 1974 to September 1979, May 1996 to March 2014.

PERIOD OF ANALYSIS.—April 1954 to March 1958, April 1975 to March 1979, April 1997 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.3	7.7	7	7
5	5.5	5.8	9	9
10	4.6	4.8	12	12
20	3.9	4.1	16	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	114	65	34	19	11	8.0	6.8

STATION NAME AND NUMBER—02457595 Fivemile Creek near Republic, AL

LOCATION.—Lat 33°35'49", long 86°52'05" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, on left bank 1,000 ft upstream from Fivemile Creek Wastewater Treatment Plant, 1.1 mi downstream from Coalburg Road bridge, 1.2 mi southeast of Republic, and at mile 24.8.

DRAINAGE AREA.—51.9 mi².

PERIOD OF RECORD.—May 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	18	20	4	4
5	15	17	4	4
10	14	15	5	5
20	13	14	6	6

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	282	163	83	47	29	22	19

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STATION NAME AND NUMBER—02458300 Village Creek at 24th Street at Birmingham, AL

LOCATION.—Lat 33°32'33", long 86°49'03" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, on right upstream wingwall of 24th Street bridge in Birmingham, and at mile 33.0.

DRAINAGE AREA.—26.0 mi².

PERIOD OF RECORD.—June 1988 to December 2006, July 2008 to September 2013.

PERIOD OF ANALYSIS.—April 1989 to March 2006, April 2009 to March 2013.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—Low and medium stages may be influenced by upstream plants and mills.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	9.0	9.8	5	6
5	7.9	8.8	3	3
10	7.6	8.6	4	5
20	7.3	8.4	6	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	201	109	43	24	16	12	11

STATION NAME AND NUMBER—02458450 Village Creek at Ave. W at Ensley, AL

LOCATION.—Lat 33°31'03", long 86°52'45" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, near left bank on downstream side of Ave. W bridge over Village Creek, 5.7 mi upstream of Bay View Lake, 0.55 mi north of Interstate 59 in Ensley, and at mile 28.7.

DRAINAGE AREA.—33.5 mi².

PERIOD OF RECORD.—July 1975 to September 1979, July 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1976 to March 1979, April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—28

REMARKS.—Low and medium stages may be influenced by upstream plants and mills.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	15	18	6	6
5	12	14	7	6
10	10	12	9	8
20	9.0	11	12	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	265	146	62	38	26	20	17

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STATION NAME AND NUMBER—02458600 Village Creek near Docena, AL

LOCATION.—Lat 33°32'53", long 86°55'33" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160111, near right bank on downstream side of bridge on Minor Parkway, 0.5 mi south of Docena, and at mile 23.0.

DRAINAGE AREA.—52.2 mi².

PERIOD OF RECORD.—June 1996 to March 2014.

PERIOD OF ANALYSIS.—April 1997 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—17

REMARKS.—QAQC reviews indicate that flow affected by dam at Bayview Lake, which is likely backwater issues. Duration curve comparison with stations 02458300 and 02458450 show this station has more flow per square mile for lower flows.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	45	52	10	9
5	32	38	12	11
10	27	32	15	15
20	23	27	18	19

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	450	286	148	99	74	55	45

STATION NAME AND NUMBER—02461500 Valley Creek near Bessemer, AL

LOCATION.—Lat 33°25'09", long 86°58'58" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160112, near left bank on downstream side of 19th Street bridge, 1.0 mi downstream from Opossum Creek, 2.0 mi west of Bessemer, and at mile 41.38.

DRAINAGE AREA.—52.5 mi².

PERIOD OF RECORD.—May 1975 to September 1979, May 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1976 to March 1979, April 1989 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—28

REMARKS.—Low streamflows likely influenced by municipal sewage and industrial wastes with much of the discharge being water diverted from the Cahaba River and Blackborne Fork and from other sources.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	31	37	5	5
5	27	32	4	3
10	25	30	4	4
20	24	29	5	5

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	379	223	114	73	51	40	35

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STATION NAME AND NUMBER—02462000 Valley Creek near Oak Grove, AL

LOCATION.—Lat 33°26'50", long 87°07'20" referenced to North American Datum of 1927, Jefferson County, AL, Hydrologic Unit 03160112, near center of span on downstream side of highway bridge, 1,000 ft downstream from Raccoon Branch, 1.5 mi east of Oak Grove, 10.5 mi west of Bessemer, and 18.2 mi upstream from mouth.

DRAINAGE AREA.—148 mi².

PERIOD OF RECORD.—October 1953 to September 1958, October 1964 to September 1965, June 1978 to March 2014.

PERIOD OF ANALYSIS.—April 1954 to March 1958, April 1979 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—39

REMARKS.— Low streamflows likely influenced by municipal sewage and industrial wastes with much of the discharge being water diverted from the Cahaba River and Blackborne Fork and from other sources.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	72	79	5	4
5	56	65	6	5
10	48	58	8	6
20	42	52	12	8
50	35	46	17	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	885	594	330	183	116	89	79

STATION NAME AND NUMBER—02462500 Black Warrior River at Bankhead Lock and Dam near Bessemer, AL

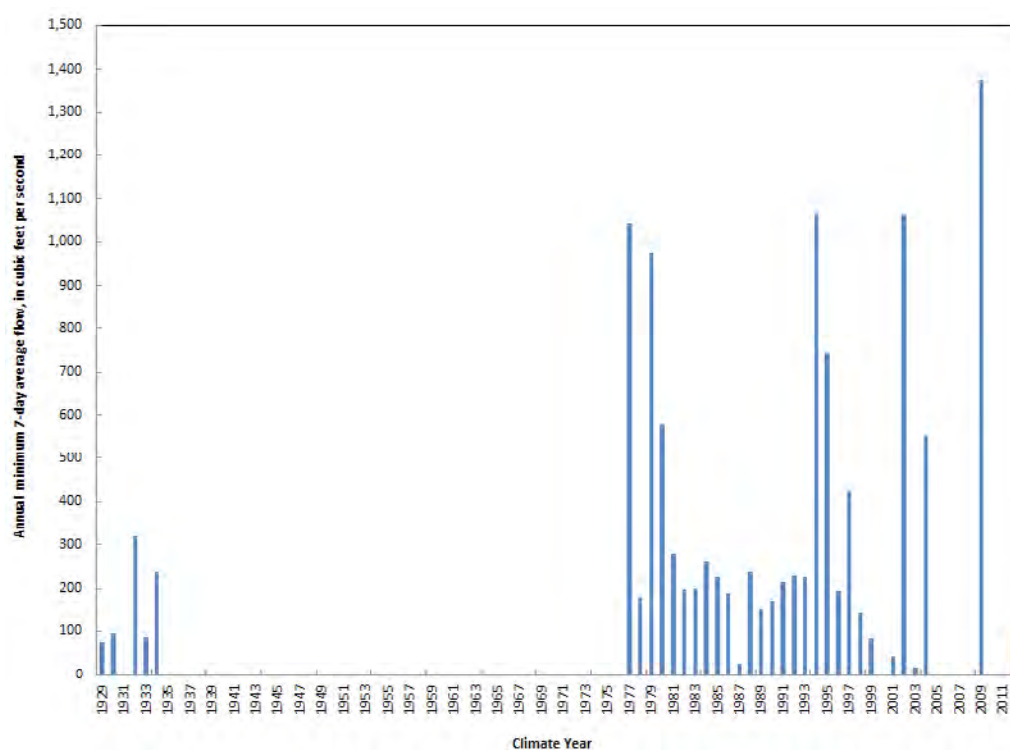
LOCATION.—Lat 33°27'30", long 87°21'15" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, at abandoned lock wall 300 ft above dam, 1.9 mi downstream from Big Yellow Creek, 23 mi northwest of Bessemer, and at mile 153.6.

DRAINAGE AREA.—3,981 mi².

PERIOD OF RECORD.—October 1928 to September 1936, October 1976 to February 2014.

PERIOD OF ANALYSIS.—April 1977 to March 2012 (flow duration October 1976 to February 2014).

REMARKS.—Flows regulated since 1961 by Lewis Smith Lake. Regulation patterns were such that the data were not adequately represented by the log Pearson Type III distribution. Therefore, no frequency analysis was done.



EXCEEDANCE PERCENTILES OF ANNUAL MINIMUM 7-DAY AVERAGE FLOWS

Annual minimum 7-day average flow exceeded for indicated percentiles (cubic feet per second)

Percentile	10	20	30	40	50	60	70	80	90
Flow	1,050	568	259	226	196	167	86	6.5	0

DURATION OF DAILY FLOW

Flow equaled or exceeded for indicated percentage of time
(cubic feet per second)

Percentage	5	10	25	50	75	90	95
Flow	23,300	14,600	8,300	3,200	1,380	240	0

STATION NAME AND NUMBER—02462600 Blue Creek near Oakman, AL

LOCATION.—Lat 33°31'17", long 87°29'07" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on State Highway 69, 1.5 mi southwest of Wiley, 2 mi upstream from McDuff Spring Branch, 12.6 mi upstream from mouth, and 14 mi southwest of Oakman.

DRAINAGE AREA.—5.32 mi².

PERIOD OF RECORD.—June 1959 to September 1965, October 1976 to September 1984.

PERIOD OF ANALYSIS.—April 1960 to March 1965, April 1977 to March 1984.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.00	0.00	--	--
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	41	22	8.6	1.6	0.22	0.02	0.00

STATION NAME AND NUMBER—02462800 Davis Creek below Abernant, AL

LOCATION.—Lat 33°18'30", long 87°13'10" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on county road, 0.2 mi downstream from Lye Branch, 0.6 mi downstream from Texas Creek, 2 mi northwest of Abernant, and 2.8 mi downstream from Rockcastle Creek.

DRAINAGE AREA.—45.3 mi².

PERIOD OF RECORD.—October 1956 to September 1971.

PERIOD OF ANALYSIS.—April 1957 to March 1971.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.64	0.90	22	29
5	0.33	0.38	21	36
10	0.21	0.23	23	48
20	0.00	0.14	--	68

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	255	149	63	18	4.8	2.1	1.1

STATION NAME AND NUMBER—02462951 Black Warrior River at Holt Lock and Dam near Holt, AL

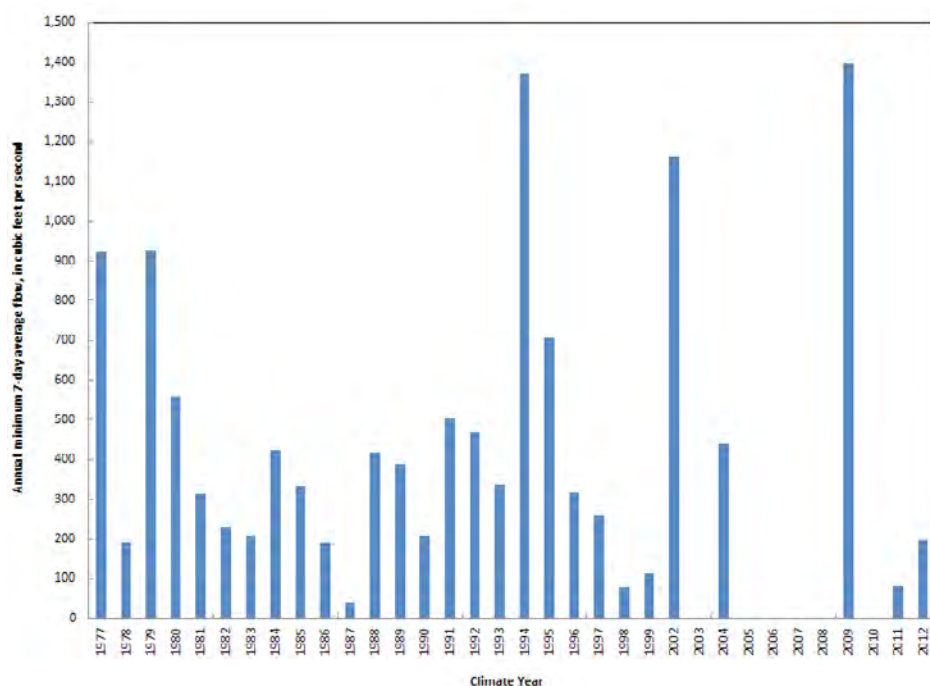
LOCATION.—Lat 33°15'11", long 87°26'57" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on left bank 50 ft upstream from lock and dam, 0.1 mi downstream from Jim Mack Branch, 0.7 mi upstream from Hurricane Creek, 2.0 mi northeast of Holt, 3.2 mi upstream from North River, and at mile 135.1.

DRAINAGE AREA.—4,219 mi².

PERIOD OF RECORD.—October 1976 to November 2000, August 2001 to September 2013.

PERIOD OF ANALYSIS.—April 1977 to March 2000, April 2002 to March 2013.

REMARKS.—Flows regulated by Lewis Smith Lake (1961) and Bankhead Lock and Dam (1975). QAQC reviews indicated that regulation patterns were such that a frequency analysis of the annual 1- and 7-day average minimum flows was not warranted.



EXCEEDANCE PERCENTILES OF ANNUAL MINIMUM 7-DAY AVERAGE FLOWS

Annual minimum 7-day average flow exceeded for indicated percentiles (cubic feet per second)

Percentile	10	20	30	40	50	60	70	80	90
Flow	1,050	559	431	336	286	207	154	41	0

DURATION OF DAILY FLOW

Flow equaled or exceeded for indicated percentage of time
(cubic feet per second)

Percentage	5	10	25	50	75	90	95
Flow	28,600	17,300	8,890	3,440	1,550	300	0

STATION NAME AND NUMBER—02463500 Hurricane Creek near Holt, AL

LOCATION.—Lat 33°12'40", long 87°26'51" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on State Highway 116, 0.5 mi downstream from Cottondale Creek, 2.8 mi southeast of Holt, and at mile 7.1.

DRAINAGE AREA.—108 mi².

PERIOD OF RECORD.—August 1952 to September 1969.

PERIOD OF ANALYSIS.—April 1953 to March 1969.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—16

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.4	6.1	15	15
5	3.4	3.8	17	17
10	2.6	3.0	21	20
20	2.1	2.4	27	25

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	510	312	146	48	18	9.3	6.8

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STATION NAME AND NUMBER—02464000 North River near Samantha, AL

LOCATION.—Lat 33°28'45", long 87°35'50" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on upstream side of bridge on county road, 1.2 mi upstream of Cripple Creek, 4 mi north of Samantha, and at mile 36.9.

DRAINAGE AREA.—223 mi².

PERIOD OF RECORD.—December 1938 to September 1954, October 1968 to March 2014.

PERIOD OF ANALYSIS.—April 1939 to March 1954, April 1969 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—60

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.9	7.1	14	13
5	2.5	3.1	17	16
10	1.5	1.9	22	21
20	0.93	1.2	30	28
50	0.53	0.74	43	40

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,540	868	357	117	29	10	5.7

STATION NAME AND NUMBER—02464146 Turkey Creek near Tuscaloosa, AL

LOCATION.—Lat 33°24'48", long 87°30'38" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on left bank 1,400 ft downstream from State Highway 69, 1.1 mi upstream from Long Creek, 4.7 mi upstream from mouth, 5.5 mi east of Samantha, and 14 mi north of Tuscaloosa.

DRAINAGE AREA.—6.16 mi².

PERIOD OF RECORD.—February 1981 to September 1984, October 1986 to March 2014.

PERIOD OF ANALYSIS.—April 1981 to March 1984, April 1987 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—30

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.2	1.3	9	9
5	0.83	0.91	11	10
10	0.66	0.74	14	12
20	0.54	0.62	17	15
50	0.43	0.51	23	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	33	20	10	4.9	2.5	1.5	1.2

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STATION NAME AND NUMBER—02464360 Binion Creek below Gin Creek near Samantha, AL

LOCATION.—Lat 33°25'29", long 87°38'33" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, at county road 30 ft downstream from Gin Creek, 1.0 mi downstream from Wolf Creek, and 2.2 mi west of Samantha.

DRAINAGE AREA.—57.2 mi².

PERIOD OF RECORD.—October 1986 to March 2014.

PERIOD OF ANALYSIS.—April 1987 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—27

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	14	15	8	8
5	9.8	11	10	10
10	8.0	8.6	13	13
20	6.7	7.2	17	17

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	283	166	85	47	28	17	13

STATION NAME AND NUMBER—02464500 North River (Site B) near Tuscaloosa, AL

LOCATION.—Lat 33°21'14", long 87°33'12" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on State Highway 69, 1,000 ft upstream from Tierce Creek and 10 mi north of Tuscaloosa.

DRAINAGE AREA.—372 mi².

PERIOD OF RECORD.—December 1951 to December 1968.

PERIOD OF ANALYSIS.—April 1952 to March 1968.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—16

REMARKS.—Since 1970, site in backwater from Lake Tuscaloosa.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	20	23	11	11
5	14	16	13	13
10	11	13	17	17
20	9.5	11	22	23

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,020	1,210	520	167	65	35	25

STATION NAME AND NUMBER—02465000 Black Warrior River at Oliver Lock and Dam at Northport, AL

LOCATION.—Lat 33°12'33", long 87°35'24" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160112, on upstream guidewall of "new" Oliver Lock and Dam, 0.5 mi upstream from Mill Creek, 0.9 mi downstream from Illinois Central Gulf Railroad bridge, 1.7 mi downstream from Two Mile Creek, 5.9 mi downstream from North River, and at mile 125.9.

DRAINAGE AREA.—4,820 mi².

PERIOD OF RECORD.—January 1895 to December 1902, August 1928 to March 2014.

PERIOD OF ANALYSIS.—April 1976 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—38

REMARKS.—Flow regulated since 1914 by Bankhead Lock and Dam on Black Warrior River (with upgrades in 1975), since 1961 by Lewis Smith Lake on Sipsey Fork, and since 1969 by Holt Lock and Dam on Black Warrior River. Lake Tuscaloosa on the North River was completed around 1971. Period of record analyzed was April 1976 to March 2014, which was the most recent period of relatively stable regulation.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	149	429	12	13
5	81	223	16	15
10	55	156	21	19
20	39	115	30	24
50	25	81	45	32

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	27,900	18,500	10,400	4,160	1,900	527	277

STATION NAME AND NUMBER—02465200 Lake Creek near Northport, AL

LOCATION.—Lat 33°17'10", long 87°41'00" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160113, 300 ft downstream from dam, and 9 mi northwest of Northport.

DRAINAGE AREA.—3.71 mi².

PERIOD OF RECORD.—November 1956 to September 1970.

PERIOD OF ANALYSIS.—April 1957 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—Since 1954, regulated by Lake Lurleen.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.1	1.3	22	20
5	0.50	0.66	28	27
10	0.21	0.28	39	37
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	19	13	8.1	5.0	3.2	2.0	1.4

STATION NAME AND NUMBER—02465292 Cribbs Mill Creek at Wastewater Plant at Tuscaloosa, AL

LOCATION.—Lat 33°10'29", long 87°33'53" referenced to North American Datum of 1927, Tuscaloosa County, AL, Hydrologic Unit 03160113, on right bank, at Hillard R. Fletcher Sewage Treatment Plant, 0.1 mi downstream of Kauloosa Avenue, 2 mi south of Tuscaloosa, at mile 2.5.

DRAINAGE AREA.—10.7 mi².

PERIOD OF RECORD.—July 2002 to March 2014.

PERIOD OF ANALYSIS.—April 2003 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.3	5.8	9	9
5	4.3	4.5	10	10
10	3.8	4.0	12	13
20	3.4	3.5	15	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	72	38	17	11	7.7	6.4	5.5

STATION NAME AND NUMBER—02465493 Elliotts Creek at Moundville, AL

LOCATION.—Lat 32°59'50", long 87°37'20" referenced to North American Datum of 1927, Hale County, AL, Hydrologic Unit 03160113, on downstream side of bridge on State Highway 69 at Moundville, 2.5 mi upstream from Southern Railway bridge, and 6.6 mi upstream from mouth.

DRAINAGE AREA.—32.3 mi².

PERIOD OF RECORD.—October 1976 to March 2014.

PERIOD OF ANALYSIS.—April 1977 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—37

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	12	13	6	5
5	9.2	9.7	7	6
10	7.8	8.4	9	8
20	6.7	7.4	12	10
50	5.6	6.4	17	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	106	72	43	27	18	14	12

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STATION NAME AND NUMBER—02465500 Fivemile Creek near Greensboro, AL

LOCATION.—Lat 32°49'57", long 87°36'24" referenced to North American Datum of 1927, Hale County, AL, Hydrologic Unit 03160113, on State Highway 69, 8.5 mi north of Greensboro, and 12 mi upstream from mouth.

DRAINAGE AREA.—73.6 mi².

PERIOD OF RECORD.—October 1954 to September 1971.

PERIOD OF ANALYSIS.—April 1955 to March 1971.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—16

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.4	3.1	18	16
5	1.4	2.0	22	22
10	0.95	1.4	30	29
20	0.69	1.0	43	44

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	240	159	72	25	9.2	5.0	3.8

STATION NAME AND NUMBER—02466030 Black Warrior River at Selden Lock and Dam near Eutaw, AL

LOCATION.—Lat 32°46'40", long 87°50'26" referenced to North American Datum of 1927, Hale County, AL, Hydrologic Unit 03160113, in SE¼ sec. 24, T.21 N., R.2 E., on left bank at Armistead I. Selden Lock and Dam, 1.2 mi upstream of White Creek, 5.0 mi southeast of Eutaw, and at river mile 49.6.

DRAINAGE AREA.—5,810 mi².

PERIOD OF RECORD.—October 1976 to March 2014.

PERIOD OF ANALYSIS.—April 1977 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—36

REMARKS.—Flow regulated by Lewis Smith Lake, Bankhead Lock and Dam, Holt Lock and Dam, and Oliver Lock and Dam.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	783	967	6	8
5	582	687	8	8
10	483	580	10	9
20	408	507	14	10
50	331	438	21	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	33,500	22,900	11,900	5,100	2,330	1,060	887

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STATION NAME AND NUMBER—02466500 Big Prairie Creek near Gallion, AL

LOCATION.—Lat 32°32'28", long 87°40'52" referenced to North American Datum of 1927, Hale County, AL, Hydrologic Unit 03160113, at State Highway 69, 4 mi upstream from Little Prairie Creek, and 4 mi northwest of Gallion.

DRAINAGE AREA.—171 mi².

PERIOD OF RECORD.—February 1940 to September 1952, October 1990 to September 1991.

PERIOD OF ANALYSIS.—April 1940 to March 1952.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	4.4	4.8	17	20
5	2.5	2.8	19	24
10	1.5	2.0	24	32
20	0.00	1.5	--	43

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,150	520	107	36	11	5.8	4.0

STATION NAME AND NUMBER—02467000 Tombigbee River at Demopolis Lock and Dam near Coatopa, AL

LOCATION.—Lat 32°31'10", long 87°52'42" referenced to North American Datum of 1927, Marengo County, AL, Hydrologic Unit 03160201, on left bank 100 ft upstream from lock and dam, 0.5 mi downstream from Foscue Creek, 2.5 mi west of Demopolis, 3.5 mi upstream from Hall Creek, 13 mi east of Coatopa, and at mile 171.2.

DRAINAGE AREA.—15,385 mi².

PERIOD OF RECORD.—August 1928 to March 2014.

PERIOD OF ANALYSIS.—April 1985 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—29

REMARKS.—Period of record analyzed includes all current regulation structures. Records since January 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway. Regulated by Jamie Whitten Lock and Dam (1983), G.V. Montgomery Lock and Dam (1984), John Ranking Lock and Dam (1984), Fulton Lock and Dam (1981), Glover Wilkins Lock and Dam (1981), Amory Lock and Dam (1979), Aberdeen Lock and Dam (1981), John C. Stennis Lock and Dam (1978), Tom Beville Lock and Dam (1978), Howell Heflin Lock and Dam (1977), and Demopolis Lock and Dam (1955).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1,410	1,930	8	9
5	1,010	1,320	8	10
10	859	1,080	10	12
20	750	909	12	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	92,000	63,100	30,500	11,900	4,560	2,540	1,860

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STATION NAME AND NUMBER—02467500 Sucarnoochee River at Livingston, AL

LOCATION.—Lat 32°34'25", long 88°11'36" referenced to North American Datum of 1927, Sumter County, AL, Hydrologic Unit 03160202, on downstream side of downstream guard rail of new bridge on U.S. Highway 11, 550 ft upstream from Southern Railway bridge, 0.8 mi southwest of Livingston, and 9 mi upstream from Alamuchee Creek.

DRAINAGE AREA.—607 mi².

PERIOD OF RECORD.—October 1938 to March 2014.

PERIOD OF ANALYSIS.—April 1939 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—75

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	102	107	4	4
5	76	79	5	5
10	66	69	5	5
20	58	61	6	6
50	51	53	8	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,260	2,160	788	340	171	118	99

STATION NAME AND NUMBER—02468000 Alamuchee Creek near Cuba, AL

LOCATION.—Lat 32°26'00", long 88°20'00" referenced to North American Datum of 1927, Sumter County, AL, Hydrologic Unit 03160202, on U.S. Highway 80, 2.5 mi northeast of Cuba, and 4 mi upstream from Toomsaba Creek.

DRAINAGE AREA.—62.3 mi².

PERIOD OF RECORD.—August 1954 to September 1967.

PERIOD OF ANALYSIS.—April 1955 to March 1967.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	4.8	5.2	15	14
5	3.2	3.5	18	17
10	2.5	2.7	23	23
20	2.0	2.2	31	30

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	246	124	51	18	9.3	5.8	4.0

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STATION NAME AND NUMBER—02468500 Chickasaw Bogue near Linden, AL

LOCATION.—Lat 32°19'45", long 87°47'27" referenced to North American Datum of 1927, Marengo County, AL, Hydrologic Unit 03160201, on U.S. Highway 43, 1.5 mi north of Linden, 2 mi downstream from Atkin Creek, and 11 mi upstream from mouth.

DRAINAGE AREA.—257 mi².

PERIOD OF RECORD.—January 1944 to September 1946, October 1965 to September 1988.

PERIOD OF ANALYSIS.—April 1944 to March 1946, April 1966 to March 1988.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.9	2.0	18	17
5	0.95	1.1	20	17
10	0.66	0.81	24	19
20	0.49	0.64	30	23

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,720	600	153	34	6.6	2.9	1.8

STATION NAME AND NUMBER—02469000 Kinterbish Creek near York, AL

LOCATION.—Lat 32°19'00", long 88°10'00" referenced to North American Datum of 1927, Sumter County, AL, Hydrologic Unit 03160201, on State Highway 17, 0.8 mi north of Choctaw-Sumter Countyline, 5.5 mi downstream from Little Kinterbish Creek, and 14 mi southeast of York.

DRAINAGE AREA.—90.9 mi².

PERIOD OF RECORD.—August 1954 to September 1967.

PERIOD OF ANALYSIS.—April 1955 to March 1967.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	9.9	11	24	23
5	5.1	5.7	29	29
10	3.5	3.9	39	38
20	2.5	2.8	53	52

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	336	198	88	37	19	11	6.9

STATION NAME AND NUMBER—02469500 Tuckabum Creek near Butler, AL

LOCATION.—Lat 32°11'00", long 88°10'12" referenced to North American Datum of 1927, Choctaw County, AL, Hydrologic Unit 03160201, 150 ft upstream from bridge on State Highway 17, 2.5 mi upstream from Yantley Creek, 4 mi downstream from Boguelichitto Creek, and 7 mi northeast of Butler.

DRAINAGE AREA.—115 mi².

PERIOD OF RECORD.—October 1954 to September 1970.

PERIOD OF ANALYSIS.—April 1955 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—15

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.2	5.7	43	38
5	1.9	2.2	81	56
10	0.84	1.1	84	71
20	0.36	0.55	147	123

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	426	236	97	29	12	6.0	3.8

STATION NAME AND NUMBER—02469550 Horse Creek near Sweetwater, AL

LOCATION.—Lat 32°02'57", long 87°52'12" referenced to North American Datum of 1927, Marengo County, AL, Hydrologic Unit 03160201, on county road 25, 0.5 mi downstream from Mill Creek, 0.8 mi south of Exmoor, 1.2 mi north of Hoboken, and 3.5 mi south of Sweetwater.

DRAINAGE AREA.—60.4 mi².

PERIOD OF RECORD.—October 1959 to September 1970.

PERIOD OF ANALYSIS.—April 1960 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—10

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.4	1.8	41	61
5	0.35	0.46	53	83
10	0.00	0.19	--	126
20	0.00	0.08	--	246

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	275	132	54	20	6.3	3.0	1.8

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STATION NAME AND NUMBER—02469700 Okatuppa Creek at Gilbertown, AL

LOCATION.—Lat 31°53'27", long 88°18'48" referenced to North American Datum of 1927, Choctaw County, AL, Hydrologic Unit 03160201, on Highway 17, 0.8 mi northeast of Gilbertown, and 1.5 mi upstream from Boguelossa Creek.

DRAINAGE AREA.—148 mi².

PERIOD OF RECORD.—October 1956 to September 1969.

PERIOD OF ANALYSIS.—April 1957 to March 1969.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.9	9.1	38	38
5	2.9	3.3	50	49
10	1.5	1.8	70	69
20	0.84	0.98	110	106

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	650	400	190	71	25	10	6.7

STATION NAME AND NUMBER—02469761 Tombigbee River at Coffeeville Lock and Dam near Coffeeville, AL

LOCATION.—Lat 31°45'30", long 88°07'45" referenced to North American Datum of 1927, Choctaw County, AL, Hydrologic Unit 03160203, near right bank at Coffeeville Lock and Dam, 2 mi west of Coffeeville, 4 mi downstream of Turkey Creek, and at river mile 74.7.

DRAINAGE AREA.—18,417 mi².

PERIOD OF RECORD.—October 1960 to March 2014.

PERIOD OF ANALYSIS.—April 1985 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—28

REMARKS.—QAQC reviews indicate periods for which no flows were released for one or two days during drought periods (such as 1999). Consequently, applying the log-Pearson Type III distribution to the 1-day flows was determined to be questionable and therefore, frequency statistics are being provided for the 7-day flows only. Period of record analyzed includes all current regulation structures. Records since January 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway. Some regulation by Jamie Whitten Lock and Dam (1983), G.V. Montgomery Lock and Dam (1984), John Ranking Lock and Dam (1984), Fulton Lock and Dam (1981), Glover Wilkins Lock and Dam (1981), Amory Lock and Dam (1979), Aberdeen Lock and Dam (1981), John C. Stennis Lock and Dam (1978), Tom Bevill Lock and Dam (1978), Howell Heflin Lock and Dam (1977), and Demopolis Lock and Dam (1955). In addition, some regulation by Smith Lake on Sipsey Fork and several locks and dams on Black Warrior River (Bankhead Lock and Dam (1914), Holt Lock and Dam (1968), Oliver Lock and Dam (1940) and Selden Lock and Dam (1958)).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	---	2,370	---	9
5	---	1,620	---	10
10	---	1,340	---	11
20	---	1,150	---	13

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	104,000	73,200	35,900	14,700	5,620	2,990	2,110

STATION NAME AND NUMBER—02469800 Satilpa Creek near Coffeeville, AL

LOCATION.—Lat 31°44'39", long 88°01'21" referenced to North American Datum of 1927, Clarke County, AL, Hydrologic Unit 03160203, near left bank on downstream side of bridge on State Highway 12, 0.2 mi upstream of unnamed tributary, 3 mi downstream of Harris Creek, and 3.8 mi east of Coffeeville.

DRAINAGE AREA.—164 mi².

PERIOD OF RECORD.—October 1956 to September 1970, October 1974 to March 2014.

PERIOD OF ANALYSIS.—April 1957 to March 1970, April 1975 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—52

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	11	12	8	8
5	7.1	7.6	9	9
10	5.6	5.9	10	11
20	4.6	4.8	13	14
50	3.6	3.8	17	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	826	464	219	86	30	15	11

STATION NAME AND NUMBER—02470072 Bassett Creek at U.S. Highway 43 near Thomasville, AL

LOCATION.—Lat 31°51'50", long 87°44'50" referenced to North American Datum of 1927, Clarke County, AL, Hydrologic Unit 03160203, on downstream side of bridge on U.S. Highway 43, 3 mi south of Thomasville.

DRAINAGE AREA.—10.5 mi².

PERIOD OF RECORD.—October 1995 to March 2014.

PERIOD OF ANALYSIS.—April 1996 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.04	0.07	27	27
5	0.01	0.02	23	27
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	53	26	9.5	3.2	0.60	0.13	0.06

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STATION NAME AND NUMBER—02470100 Bassett Creek at Walker Springs, AL

LOCATION.—Lat 31°32'15", long 87°47'24" referenced to North American Datum of 1927, Clarke County, AL, Hydrologic Unit 03160203, on county road, 1,000 ft southeast of Walker Springs, and 2.8 mi upstream from Rabbit Creek.

DRAINAGE AREA.—195 mi².

PERIOD OF RECORD.—October 1956 to September 1970.

PERIOD OF ANALYSIS.—April 1957 to March 1970.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—13

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	27	29	14	15
5	20	21	11	12
10	18	18	11	12
20	16	16	15	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	840	551	297	138	62	36	29

STATION NAME AND NUMBER—02471001 Chickasaw Creek near Kushla, AL

LOCATION.—Lat 30°48'10", long 88°08'36" referenced to North American Datum of 1927, Mobile County, AL, Hydrologic Unit 03160204, on left bank at downstream side of downstream (eastbound) highway bridge, 0.7 mi upstream of Seabury Creek, 1.4 mi southeast of Kushla, 7 mi northwest of Mobile, and at mile 12.2.

DRAINAGE AREA.—125 mi².

PERIOD OF RECORD.—October 1951 to March 2014.

PERIOD OF ANALYSIS.—April 1952 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—62

REMARKS.—Prior to October 1968, published as 02471000, Chickasaw Creek near Whistler, AL.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	53	57	6	6
5	36	39	7	7
10	29	32	9	9
20	24	27	11	11
50	20	21	15	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	800	531	293	161	97	65	50

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STATION NAME AND NUMBER—02471065 Montilmar Creek at U.S. Highway 90 at Mobile, AL

LOCATION.--Lat 30°38'59", long 88°07'34" referenced to North American Datum of 1927, Mobile County, AL, Hydrologic Unit 03160205, on U.S. Highway 90, 0.1 mi west intersection of Interstate Highway 65 in Mobile.

DRAINAGE AREA.—7.28 mi².

PERIOD OF RECORD.—June 1962 to September 1967, October 1974 to September 1983.

PERIOD OF ANALYSIS.—April 1963 to March 1967, April 1975 to March 1983.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	9.9	11	13	12
5	7.2	8.0	18	15
10	5.7	6.5	24	20
20	4.5	5.3	35	30

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	60	35	21	17	13	9.2	7.2

STATION NAME AND NUMBER—02471078 Fowl River at Half Mile Road near Laurendine, AL

LOCATION.—Lat 30°30'02", long 88°10'53" referenced to North American Datum of 1927, Mobile County, AL, Hydrologic Unit 03160205, at bridge on Half Mile Road about 1 mi west of Laurendine.

DRAINAGE AREA.—16.5 mi².

PERIOD OF RECORD.—March 1995 to March 2014.

PERIOD OF ANALYSIS.—April 1995 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—12

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	16	16	6	6
5	13	13	7	6
10	11	12	8	7
20	10	11	10	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	78	50	33	25	20	16	14

STATION NAME AND NUMBER—02479431 Pond Creek near Deer Park, AL

LOCATION.--Lat 31°09'39", long 88°21'43" referenced to North American Datum of 1927, Washington County, AL, Hydrologic Unit 03170008, on county road, 1.3 mi upstream from mouth, and 5 mi southwest of Deer Park.

DRAINAGE AREA.—20.4 mi².

PERIOD OF RECORD.—October 1976 to September 1999.

PERIOD OF ANALYSIS.—April 1977 to March 1999.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—22

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.27	0.34	18	18
5	0.14	0.18	18	17
10	0.10	0.14	20	19
20	0.08	0.11	24	23

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	142	88	40	14	3.2	0.82	0.44

STATION NAME AND NUMBER—02479500 Escatawpa River near Wilmer, AL

LOCATION.--Lat 30°51'44", long 88°25'04" referenced to North American Datum of 1927, Mobile County, AL, Hydrologic Unit 03170008, on U.S. Highway 98, 0.5 mi upstream from Rocky Creek, and 4 mi northwest of Wilmer.

DRAINAGE AREA.—511 mi².

PERIOD OF RECORD.—October 1945 to September 1973.

PERIOD OF ANALYSIS.—April 1946 to March 1973.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—27

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	91	100	9	9
5	64	69	10	10
10	53	57	11	12
20	46	48	14	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,320	2,130	1,020	452	193	120	93

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STATION NAME AND NUMBER—02479560 Escatawpa River near Agricola, AL

LOCATION.--Lat 30°48'42", long 88°27'31" referenced to North American Datum of 1927, George County, MS, Hydrologic Unit 03170008, near left bank on downstream side of bridge on County Road 612, 2.5 mi west of Alabama-Mississippi State line, 3.7 mi east of Agricola, MS, 4.8 mi downstream of old gage at Escatawpa River near Wilmer, AL, and 6.7 mi west of Wilmer.

DRAINAGE AREA.—562 mi².

PERIOD OF RECORD.—October 1973 to March 2014.

PERIOD OF ANALYSIS.—April 1974 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—40

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	129	134	6	7
5	97	101	6	6
10	85	89	6	6
20	76	82	8	8
50	68	75	10	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,860	2,550	1,260	565	271	165	131

STATION NAME AND NUMBER—02479945 Big Creek at County Road 63 near Wilmer, AL

LOCATION.--Lat 30°51'21", long 88°20'02" referenced to North American Datum of 1927, Mobile County, AL, Hydrologic Unit 03170008, on downstream side of bridge at County Road 63, about 2.9 mi northeast of Wilmer, and 3.2 mi north of U.S. Highway 98.

DRAINAGE AREA.—31.5 mi².

PERIOD OF RECORD.—June 1990 to March 2014.

PERIOD OF ANALYSIS.—April 1991 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—23

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	15	16	9	9
5	11	12	11	10
10	8.9	9.6	13	13
20	7.5	8.1	17	17

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	180	118	59	36	23	16	13

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STATION NAME AND NUMBER—02479980 Crooked Creek near Fairview, AL

LOCATION.--Lat 30°46'48", long 88°19'08" referenced to North American Datum of 1927, Mobile County, AL, Hydrologic Unit 03170008, on right bank 1 mi southwest of Fairview, and 4 mi southeast of Wilmer.

DRAINAGE AREA.—8.08 mi².

PERIOD OF RECORD.—June 1990 to March 2014.

PERIOD OF ANALYSIS.—April 1991 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—23

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	6.7	7.1	6	5
5	5.4	5.8	7	6
10	4.8	5.1	9	8
20	4.3	4.6	11	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	39	23	15	11	8.6	6.9	6.0

STATION NAME AND NUMBER—02480002 Hamilton Creek at Snow Road near Semmes, AL

LOCATION.--Lat 30°43'33", long 88°16'35" referenced to North American Datum of 1927, Mobile County, AL, Hydrologic Unit 03170008, on right bank about 60 feet downstream of bridge on Snow Road, 1.0 mi north of Tanner Williams Road, and 4 mi south of Semmes.

DRAINAGE AREA.—8.22 mi².

PERIOD OF RECORD.—June 1990 to March 2014.

PERIOD OF ANALYSIS.—April 1991 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—23

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	9.8	10	4	4
5	8.3	8.7	5	5
10	7.6	7.9	6	6
20	7.1	7.3	7	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	44	29	20	16	12	11	9.8

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STATION NAME AND NUMBER—03572110 Crow Creek at Bass, AL

LOCATION.—Lat 34°56'03", long 85°55'03" referenced to North American Datum of 1927, Jackson County, AL, Hydrologic Unit 06030001, on downstream side of bridge on Alabama Highway 117, 1,500 ft northwest of Bass, 1 mi upstream from Bennett Cove Creek, 3.7 mi south of Ala-Tenn State line, river mile 15.8.

DRAINAGE AREA.—131 mi².

PERIOD OF RECORD.—May 1975 to October 1996.

PERIOD OF ANALYSIS.—April 1976 to March 1996.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	4.9	5.8	17	17
5	2.9	3.4	15	15
10	2.3	2.7	15	16
20	2.0	2.2	19	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,090	621	286	107	25	8.8	5.5

STATION NAME AND NUMBER—03572900 Town Creek near Geraldine, AL

LOCATION.—Lat 34°22'42", long 85°59'25" referenced to North American Datum of 1927, DeKalb County, AL, Hydrologic Unit 06030001, on State Highway 75, 0.3 mi downstream from Reedy Creek, 2 mi north-northeast of Geraldine, and at mile 20.4.

DRAINAGE AREA.—141 mi².

PERIOD OF RECORD.—October 1957 to September 1980.

PERIOD OF ANALYSIS.—April 1958 to March 1980.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—22

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.49	0.82	36	38
5	0.10	0.15	33	41
10	0.00	0.03	--	49
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	992	635	331	120	17	3.0	1.0

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STATION NAME AND NUMBER—03574500 Paint Rock River near Woodville, AL

LOCATION.—Lat 34°37'27", long 86°18'23" referenced to North American Datum of 1927, Jackson County, AL, Hydrologic Unit 06030002, NW ¼ sec. 10, T.5S., R.3E., on downstream side of bridge on U.S. Highway 72, 1,000 ft downstream from Southern Railway bridge, 2 mi west of Woodville, 4.1 mi upstream from Little Paint Creek, and at mile 26.6.

DRAINAGE AREA.—320 mi².

PERIOD OF RECORD.—January 1936 to March 2014.

PERIOD OF ANALYSIS.—April 1936 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—78

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	15	8	8
5	7.6	8.3	9	9
10	5.5	6.1	12	12
20	4.1	4.6	16	15
50	2.9	3.3	22	21

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,860	1,600	660	217	49	21	13

STATION NAME AND NUMBER—0357479650 Hester Creek near Plevna, AL

LOCATION.—Lat 34°57'39", long 86°27'49" referenced to North American Datum of 1927, Madison County, AL, Hydrologic Unit 06030002, on right bank on Buddy Williamson Road, 2.7 mi east of Plevna, 3.8 mi northwest of New Market, and 2 mi south of Alabama-Tennessee State line.

DRAINAGE AREA.—33.0 mi².

PERIOD OF RECORD.—October 1998 to September 2013.

PERIOD OF ANALYSIS.—April 1999 to March 2013.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.2	2.4	12	11
5	1.6	1.8	12	11
10	1.3	1.6	13	12
20	1.2	1.4	16	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	116	59	26	10	4.6	3.0	2.4

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STATION NAME AND NUMBER—03575000 Flint River near Chase, AL

LOCATION.—Lat 34°49'22", long 86°28'59" referenced to North American Datum of 1927, Madison County, AL, Hydrologic Unit 06030002, on Winchester Road, 400 ft downstream from Brier Fork, 4.3 mi northeast of Chase, and at mile 36.2

DRAINAGE AREA.—342 mi².

PERIOD OF RECORD.—May 1930 to September 1981, October 1982 to December 1994.

PERIOD OF ANALYSIS.—April 1931 to March 1981, April 1983 to March 1994.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—61

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	82	85	2	2
5	70	74	3	3
10	64	69	4	3
20	60	64	5	4
50	54	60	6	5

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,840	1,110	542	239	126	95	84

STATION NAME AND NUMBER—03575100 Flint River at Brownsboro, AL

LOCATION.—Lat 34°44'57", long 86°26'48" referenced to North American Datum of 1927, Madison County, AL, Hydrologic Unit 06030002, on right bank on Brownsboro Road, 0.3 mi north of U.S. Highway 72, 10 mi east of Huntsville, at Brownsboro, and river mile 27.6.

DRAINAGE AREA.—375 mi².

PERIOD OF RECORD.—October 1998 to March 2014.

PERIOD OF ANALYSIS.—April 1999 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—15

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	83	87	9	9
5	67	70	7	7
10	61	64	7	7
20	57	60	10	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,910	1,200	631	281	136	95	85

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STATION NAME AND NUMBER—03575500 Tennessee River at Whitesburg, AL

LOCATION.—Lat 34°34'18", long 86°33'29" referenced to North American Datum of 1927, Madison County, AL, Hydrologic Unit 06030002, at Whitesburg, on right bank 2,500 ft upstream from Aldridge Creek, 3,000 ft upstream from Clement C. Clay Bridge on U.S. Highway 231, 11.0 mi south of Huntsville, 15.1 mi downstream from Guntersville Dam, and at mile 333.9.

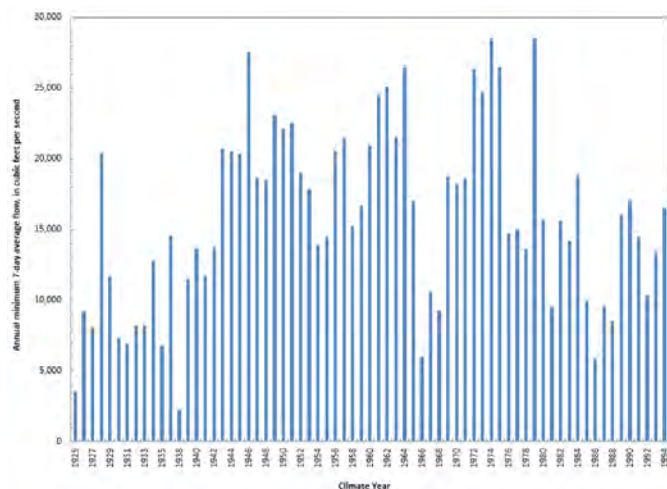
DRAINAGE AREA.—26,610 mi².

PERIOD OF RECORD.—October 1924 to September 1995, October 2002 to September 2003, October 2004 to September 2005.

PERIOD OF ANALYSIS.—April 1925 to March 1936.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—Since 1936, flow regulated by increasing number of reservoirs above stations. Due to uncertainty in changing regulation patterns over time, the low-flow frequency statistics are providing for the pre-regulation period only.



Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7,930	8,570	14	14
5	5,590	5,920	14	16
10	4,690	4,880	16	18
20	4,080	4,170	20	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	130,000	92,500	55,000	30,700	17,200	9,880	8,350

STATION NAME AND NUMBER—03575830 Indian Creek near Madison, AL

LOCATION.—Lat 34°41'50", long 86°42'00" referenced to North American Datum of 1927, Madison County, AL, Hydrologic Unit 06030002, on downstream side of bridge on State Highway 20, 0.3 mi downstream from Southern Railroad bridge, 2.8 mi east of Madison, and 5.8 mi upstream from mouth.

DRAINAGE AREA.—49.0 mi².

PERIOD OF RECORD.—October 1959 to September 1966, October 1975 to June 2002.

PERIOD OF ANALYSIS.—April 1960 to March 1966, April 1976 to March 2002.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—32

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.7	4.2	11	11
5	2.2	2.6	14	14
10	1.6	1.9	19	18
20	1.2	1.4	26	25
50	0.84	1.0	38	37

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	250	147	71	26	8.6	5.0	3.8

STATION NAME AND NUMBER—03576148 Cotaco Creek at Florette, AL

LOCATION.—Lat 34°24'49", long 86°41'16" referenced to North American Datum of 1927, Morgan County, AL, Hydrologic Unit 06030002, on county road, 0.9 mi east of Florette, 1 mi upstream from Sixmile Creek, and 3.1 mi upstream from Wheeler Lake boundary.

DRAINAGE AREA.—136 mi².

PERIOD OF RECORD.—October 1965 to September 1980.

PERIOD OF ANALYSIS.—April 1966 to March 1980.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.4	1.7	35	34
5	0.50	0.65	40	38
10	0.28	0.38	51	46
20	0.18	0.25	67	58

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,130	715	304	96	15	3.4	1.7

STATION NAME AND NUMBER—03576250 Limestone Creek near Athens, AL

LOCATION.—Lat 34°45'06", long 86°49'24" referenced to North American Datum of 1927, Limestone County, AL, Hydrologic Unit 06030002, on downstream side of U.S. Highway 72 bridge, 9 mi east of Athens, 12 mi west of Huntsville, and at mile 17.0.

DRAINAGE AREA.—119 mi².

PERIOD OF RECORD.—October 1939 to September 1970, October 1994 to March 2014.

PERIOD OF ANALYSIS.—April 1940 to March 1970, April 1995 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—49

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	14	15	5	5
5	11	12	5	5
10	9.6	10	6	6
20	8.7	9.3	7	7
50	7.7	8.3	9	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	674	414	200	73	29	18	15

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STATION NAME AND NUMBER—03576500 Flint Creek near Falkville, AL

LOCATION.—Lat 34°22'23", long 86°56'01" referenced to North American Datum of 1927, Morgan County, AL, Hydrologic Unit 06030002, near left bank on downstream side of bridge on county road 55, 1.2 mi downstream from Robinson Creek, 1.5 mi west of Falkville, and 2.8 mi upstream from Cedar Creek.

DRAINAGE AREA.—86.3 mi².

PERIOD OF RECORD.—August 1952 to September 1970, October 1992 to September 1999, October 2011 to March 2014.

PERIOD OF ANALYSIS.—April 1953 to March 1970, April 1993 to March 1999, April 2012 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.12	0.18	34	43
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	602	370	150	42	7.3	1.0	0.3

STATION NAME AND NUMBER—03585300 Sugar Creek near Good Springs, AL

LOCATION.—Lat 34°56'40", long 87°09'20" referenced to North American Datum of 1927, Limestone County, AL, Hydrologic Unit 06030004, on State Highway 99, 0.2 mi downstream from Bridgeforth Branch, 2.2 mi east of Good Springs, 2.4 mi upstream from Dobbins Branch, and at mile 8.1.

DRAINAGE AREA.—152 mi².

PERIOD OF RECORD.—October 1957 to September 1969.

PERIOD OF ANALYSIS.—April 1958 to March 1969.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	26	28	11	11
5	23	25	5	6
10	22	24	12	13
20	22	24	18	19

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	897	537	250	106	57	41	34

STATION NAME AND NUMBER—03586500 Big Nance Creek at Courtland, AL

LOCATION.—Lat 34°40'12", long 87°19'02" referenced to North American Datum of 1927, Lawrence County, AL, Hydrologic Unit 06030005, near right bank on downstream side of bridge on County Road 25 at Courtland, and at mile 12.9.

DRAINAGE AREA.—166 mi².

PERIOD OF RECORD.—September 1935 to September 1940, April 1945 to September 1981, March 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1936 to March 1940, April 1945 to March 1981.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—40

REMARKS.—Based on QAQC reviews, it appears that low-flow patterns after 1981 are different, which is likely due to anthropogenic influences in the basin. Thus, the period being analyzed here likely represents more natural conditions. A separate analysis will be done for the period after 1981.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.1	2.6	17	17
5	0.98	1.2	17	17
10	0.67	0.81	19	19
20	0.49	0.60	22	22
50	0.35	0.43	30	29

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,200	599	225	65	14	4.5	2.3

STATION NAME AND NUMBER—03586500 Big Nance Creek at Courtland, AL

LOCATION.—Lat 34°40'12", long 87°19'02" referenced to North American Datum of 1927, Lawrence County, AL, Hydrologic Unit 06030005, near right bank on downstream side of bridge on County Road 25 at Courtland, and at mile 12.9.

DRAINAGE AREA.—166 mi².

PERIOD OF RECORD.—September 1935 to September 1940, April 1945 to September 1981, March 1988 to March 2014.

PERIOD OF ANALYSIS.—April 1988 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—26

REMARKS.—Based on QAQC reviews, it appears that low-flow patterns after 1981 are different, which is likely due to anthropogenic influences in the basin. The period of record used in this analysis represents current conditions in the basin reflecting anthropogenic influences.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.7	4.3	25	25
5	1.3	1.6	29	29
10	0.76	0.89	37	36
20	0.47	0.56	47	46

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,240	651	262	86	28	5.6	2.6

STATION NAME AND NUMBER—03589500 Tennessee River at Florence, AL

LOCATION.—Lat 34°47'13", long 87°40'12" referenced to North American Datum of 1927, Lauderdale County, AL, Hydrologic Unit 06030005, on right bank at lower end of Patton Island, 137 ft upstream from Southern Railway bridge, 700 ft upstream from O'Neal Bridge on U.S. Highway 72, 1.1 mi south of Florence Post Office, 1.7 mi upstream from Cypress Creek, 2.7 mi downstream from Wilson Dam, and at mile 256.7.

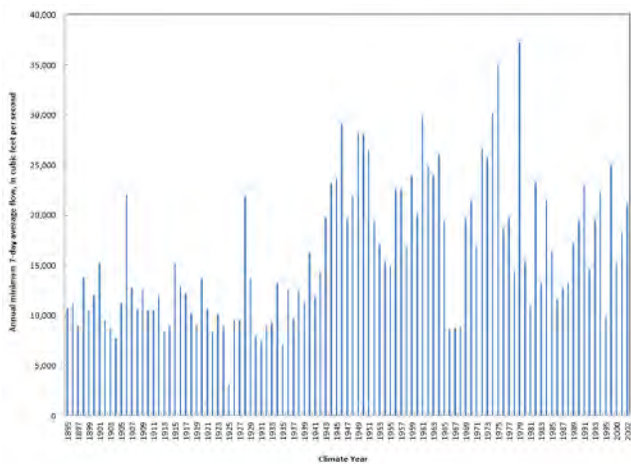
DRAINAGE AREA.—30,810 mi², approximately.

PERIOD OF RECORD.—October 1894 to September 1997, October 1999 to September 2003, October 2004 to November 2005.

PERIOD OF ANALYSIS.—April 1895 to March 1924.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—29

REMARKS.—Regulated by Wilson Lake since 1924 and by increasing number of other reservoirs since 1936. Due to uncertainty in changing regulation patterns over time, the low-flow frequency statistics are providing for the pre-regulation period only.



Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	10,400	10,700	5	5
5	8,930	9,210	4	3
10	8,370	8,650	4	4
20	7,990	8,280	5	5

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	169,000	121,000	64,500	36,000	18,600	12,600	11,000

STATION NAME AND NUMBER—03590000 Cypress Creek near Florence, AL

LOCATION.—Lat 34°48'28", long 87°42'02" referenced to North American Datum of 1927, Lauderdale County, AL, Hydrologic Unit 06030005, on State Highway 2, 2 mi west of Florence, 4 mi downstream from Cox Creek, and 4 mi upstream from mouth.

DRAINAGE AREA.—209 mi².

PERIOD OF RECORD.—June 1934 to September 1953.

PERIOD OF ANALYSIS.—April 1935 to March 1953.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—18

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	60	63	7	7
5	52	55	4	4
10	49	52	6	6
20	48	51	9	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,120	750	420	186	94	70	64

STATION NAME AND NUMBER—03590500 Tuscumbia Spring at Tuscumbia, AL

LOCATION.—Lat 34°43'45", long 87°42'15" referenced to North American Datum of 1927, Colbert County, AL, Hydrologic Unit 06030005, on south end of Main Street in Tuscumbia, and 0.1 mil upstream from mouth.

DRAINAGE AREA.—Spring (indeterminate)

PERIOD OF RECORD.—December 1928 to March 1930, January 1956 to September 1965.

PERIOD OF ANALYSIS.—April 1929 to March 1930, April 1956 to March 1965.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—11

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	14	15	13	12
5	11	11	11	12
10	9.2	9.9	12	13
20	8.4	8.9	14	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	121	112	93	66	31	21	17

STATION NAME AND NUMBER—03591800 Bear Creek near Hackleburg, AL

LOCATION.—Lat 34°17'01", long 87°46'26" referenced to North American Datum of 1927, Marion County, AL, Hydrologic Unit 06030006, on State Highway 172, 2 mi upstream from Bluff Creek, 3.5 mi east of Hackleburg, and at mile 104.8.

DRAINAGE AREA.—143

PERIOD OF RECORD.—October 1956 to September 1979, October 1980 to September 1981.

PERIOD OF ANALYSIS.—April 1957 to March 1978.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—Since 1978, regulated by Upper Bear Creek Reservoir. Frequency statistics are for pre-regulation period.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	11	12	9	9
5	8.1	9.1	8	9
10	7.1	7.8	9	10
20	6.4	6.9	11	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	977	595	269	108	37	19	14

STATION NAME AND NUMBER—03592000 Bear Creek near Red Bay, AL

LOCATION.—Lat 34°26'38", long 88°06'56" referenced to North American Datum of 1927, Franklin County, AL, Hydrologic Unit 06030006, on State Highway 24, 1.8 mi east of Red Bay, and at mile 61.9.

DRAINAGE AREA.—263

PERIOD OF RECORD.—October 1913 to May 1920, October 1958 to September 1967, March 1969 to September 1981.

PERIOD OF ANALYSIS.—April 1914 to March 1920, April 1959 to March 1967.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—14

REMARKS.—Flow regulated since March 1969 by Bear Creek Reservoir and since 1978 by Upper Bear Creek Reservoir. Frequency statistics are for pre-regulation period.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	30	34	14	11
5	20	24	17	12
10	15	21	23	15
20	12	18	32	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,710	1,010	468	198	82	49	39

STATION NAME AND NUMBER—03592200 Cedar Creek near Pleasant Site, AL

LOCATION.—Lat 34°32'56", long 88°01'09" referenced to North American Datum of 1927, Franklin County, AL, Hydrologic Unit 06030006, 2.6 mi east of Pleasant Site, 4.3 mi upstream from Little Bear Creek, and at mile 19.1.

DRAINAGE AREA.—189

PERIOD OF RECORD.—October 1957 to September 1977.

PERIOD OF ANALYSIS.—April 1958 to March 1977.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—19

REMARKS.—Flow regulated since 1979 by Cedar Creek Dam. These frequency statistics represent pre-regulation conditions.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	8.8	11	16	13
5	5.0	7.4	19	11
10	3.6	6.3	25	11
20	2.7	5.6	33	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,260	777	342	122	39	18	13

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STATION NAME AND NUMBER—03592300 Little Bear Creek near Halltown, AL

LOCATION.—Lat 34°29'19", long 88°02'07" referenced to North American Datum of 1927, Franklin County, AL, Hydrologic Unit 06030006, 2.7 mi northeast of Halltown, and at mile 4.3.

DRAINAGE AREA.—78.2

PERIOD OF RECORD.—October 1957 to September 1977.

PERIOD OF ANALYSIS.—April 1958 to March 1975.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—17

REMARKS.—Flow regulated since 1975 by Little Bear Creek Dam. Frequency statistics are for pre-regulation period.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	7.3	8.9	13	10
5	4.8	6.7	14	9
10	3.9	5.9	16	9
20	3.3	5.4	19	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	513	321	155	59	23	14	11

STATION NAME AND NUMBER—03592500 Bear Creek at Bishop, AL

LOCATION.—Lat 34°39'21", long 88°07'021" referenced to North American Datum of 1927, Colbert County, AL, Hydrologic Unit 06030006, 0.5 mi downstream from Cedar Creek, 0.8 mi southwest of Bishop, and at mile 27.3.

DRAINAGE AREA.—667

PERIOD OF RECORD.—October 1926 to May 1928, March 1929 to March 1932, October 1933 to September 1979.

PERIOD OF ANALYSIS.—April 1927 to March 1928, April 1929 to March 1932, April 1934 to March 1979.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—49

REMARKS.—Flow regulated since March 1969 by Bear Creek Reservoir, regulated since 1975 by Little Bear Creek Dam, and since 1978 by Upper Bear Creek Reservoir, and since 1979 by Cedar Creek Dam. However, the QAQC analyses indicate that those upstream reservoirs did not substantially alter the low-flow patterns. Therefore, the complete period of record was used in the analyses.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	58	65	9	9
5	35	40	10	10
10	26	30	13	13
20	21	24	17	17
50	15	18	23	23

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	4,240	2,790	1,270	472	167	86	64

Low-flow statistics for the following stations are from USGS continuous-record streamgaging stations from basins adjoining Alabama in Florida, Georgia, Mississippi, and Tennessee.

STATION NAME AND NUMBER—02330450 Chattahoochee River at Helen, GA

LOCATION.--Lat 34°42'03", long 83°43'44" referenced to North American Datum of 1983, White County, GA, Hydrologic Unit 03130001, on downstream side of bridge on GA 17 and 75 at Helen, and 1.1 miles downstream from Smith Creek.

DRAINAGE AREA.—44.7 mi².

PERIOD OF RECORD.—May 1981 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1982 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—32

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	38	40	8	8
5	27	28	9	9
10	22	24	10	10
20	19	20	12	12
50	16	17	16	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	304	239	163	101	62	41	33

STATION NAME AND NUMBER—02331000 Chattahoochee River near Leaf, GA

LOCATION.--Lat 34°34'37", long 83°38'09" referenced to North American Datum of 1927, Habersham County, GA, Hydrologic Unit 03130001, 700 feet upstream from bridge on GA 115, 3 miles from confluence with Soque River and 1.5 miles east of Leaf, GA.

DRAINAGE AREA.—150 mi².

PERIOD OF RECORD.—February 1940 to September 1971, October 2008 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1940 to March 1971, April 2009 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—36

REMARKS.—Potentially influenced from upstream diversions (Gotvald, 2016).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	124	132	6	6
5	97	102	5	6
10	86	91	6	6
20	79	83	7	7
50	73	76	9	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	895	691	482	322	211	148	122

STATION NAME AND NUMBER—02333500 Chestatee River near Dahlonega, GA

LOCATION.--Lat 34°31'41", long 83°56'23" referenced to North American Datum of 1983, Lumpkin County, GA, Hydrologic Unit 03130001, on left bank 250 feet upstream from Bearden Bridge on GA 52, 2.0 miles downstream from Ballplay Creek, 2.5 miles east of Dahlonega, and 3.5 miles upstream from Yahoola Creek.

DRAINAGE AREA.—153 mi².

PERIOD OF RECORD.—July 1929 to January 1932, April 1940 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1930 to March 1931, April 1940 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—75

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	104	110	5	5
5	71	76	7	7
10	57	61	9	8
20	47	50	11	11
50	37	40	16	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	843	632	422	269	170	116	95

STATION NAME AND NUMBER—02335000 Chattahoochee River near Norcross, GA

LOCATION.--Lat 33°59'50", long 84°12'07" referenced to North American Datum of 1983, Gwinnett County, GA, Hydrologic Unit 03130001, on downstream side of right bank pier of bridge on GA 141, 1.5 miles upstream from Johns Creek, 4.5 miles north of Norcross, 6.5 miles downstream from Suwanee Creek, 18.0 miles downstream from Buford Dam, and at mile 330.8.

DRAINAGE AREA.—1,170 mi².

PERIOD OF RECORD.—January 1903 to September 1946, October 1956 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1903 to March 1946.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—43

REMARKS.—The low-flow and duration analyses are based on the period of record prior to regulation by Lake Lanier.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	739	795	8	6
5	497	570	11	8
10	380	464	14	11
20	294	384	21	15
50	213	305	33	21

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	5,670	4,020	2,550	1,680	1,140	860	725

STATION NAME AND NUMBER—02337000 Sweetwater Creek near Austell, GA

LOCATION.--Lat 33°46'35.4", long 84°36'56.2" referenced to North American Datum of 1927, Douglas County, GA, Hydrologic Unit 03130002, on right bank 100.0 feet upstream from bridge on Interstate 20, 400.0 feet upstream from Blair Bridge, 3.0 miles southeast of Austell, and 5.5 miles upstream from mouth.

DRAINAGE AREA.—238 mi².

PERIOD OF RECORD.—May 1904 to December 1905, March 1937 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1937 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—77

REMARKS.—Potentially influenced from upstream diversions (Gotvald, 2016).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	34	39	13	13
5	14	16	17	16
10	7.6	9.4	23	22
20	4.3	5.6	33	31
50	2.2	3.0	52	48

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,080	672	356	194	99	54	34

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STATION NAME AND NUMBER—02337500 Snake Creek near Whitesburg, GA

LOCATION.--Lat 33°31'46", long 84°55'42" referenced to North American Datum of 1927, Carroll County, GA, Hydrologic Unit 03130002, on left bank, on downstream side of former bridge pier, 50.0 feet upstream from county highway bridge, at Banning Mills, 1.6 miles north of US 27 (ALT), 3.0 miles northwest of Whitesburg, 4.0 miles downstream from Little Snake Creek, and 7.0 miles upstream from mouth.

DRAINAGE AREA.—35.5 mi².

PERIOD OF RECORD.—September 1954 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1955 to March 2000.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—45

REMARKS.—Flow regulated by earthen dam (Snake Creek Reservoir) upstream of gage since 2001. Frequency and duration statistics represent pre-regulation period.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	16	16	11	10
5	9.5	10	15	13
10	6.5	7.3	20	18
20	4.5	5.2	30	26
50	2.8	3.4	51	44

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	122	92	62	39	25	17	13

STATION NAME AND NUMBER—02338660 New River at GA 100, near Corinth, GA

LOCATION.--Lat 33°14'07", long 84°59'16" referenced to North American Datum of 1927, Heard County, GA, Hydrologic Unit 03130002, at the bridge on Georgia Highway 100, 8.1 mi upstream from confluence with Chattahoochee River, 1.7 mi downstream from confluence with Caney Creek, 3.9 mi downstream from confluence with Mountain Creek, and 2.5 mi west of Corinth.

DRAINAGE AREA.—127 mi².

PERIOD OF RECORD.—October 1978 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1979 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—35

REMARKS.— Potentially influenced from upstream diversions (Gotvald, 2016).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.7	6.9	29	26
5	1.4	2.0	37	33
10	0.63	0.95	49	43
20	0.30	0.49	69	60
50	0.12	0.22	109	90

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	445	287	148	76	32	9.8	4.7

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STATION NAME AND NUMBER—02339000 Yellowjacket Creek near La Grange, GA

LOCATION.--Lat 33°05'27", long 85°03'40" referenced to North American Datum of 1927, Troup County, GA, Hydrologic Unit 03130002, at downstream end of right bank pier of bridge on State Highway 219, 1.2 mi downstream from Beech Creek, 2 mi upstream from Jackson Creek, 4.2 mi northwest of La Grange.

DRAINAGE AREA.—182 mi².

PERIOD OF RECORD.—January 1951 to March 1971.

PERIOD OF FREQUENCY ANALYSIS.—April 1951 to March 1971.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—Station was inundated by West Point Lake around 1974.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	29	33	17	16
5	16	19	22	21
10	11	13	29	28
20	7.7	9.3	42	41

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	656	416	237	127	72	44	33

STATION NAME AND NUMBER—02340500 Mountain Oak Creek near Hamilton, GA

LOCATION.--Lat 32°44'28", long 85°04'08" referenced to North American Datum of 1927, Harris County, GA, Hydrologic Unit 03130002, on right bank 300 ft upstream from bridge on State Highway 103, 5 mi upstream from mouth, and 11 mi west of Hamilton.

DRAINAGE AREA.—61.7 mi².

PERIOD OF RECORD.—December 1943 to September 1971.

PERIOD OF FREQUENCY ANALYSIS.—April 1944 to March 1971.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—27

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	15	11	10
5	8.6	9.7	13	13
10	6.6	7.5	16	16
20	5.3	6.0	21	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	214	138	83	48	28	19	15

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STATION NAME AND NUMBER—02341800 Upatoi Creek near Columbus, GA

LOCATION.--Lat 32°24'48", long 84°49'12" referenced to North American Datum of 1927, Chattahoochee County, GA, Hydrologic Unit 03130003, at downstream side of pier near left end of bridge on Red Arrow Road at Fort Benning, 2.0 miles downstream from Randall Creek, 2.0 miles upstream from Ochillee Creek, 8.0 miles southeast of Columbus, and 12.0 miles upstream from mouth.

DRAINAGE AREA.—342 mi².

PERIOD OF RECORD.—April 1968 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1968 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—46

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	107	113	5	5
5	81	87	6	5
10	71	76	7	6
20	63	67	8	8
50	55	59	11	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,210	828	458	255	161	119	102

STATION NAME AND NUMBER—02359000 Chipola River near Altha, FL

LOCATION.—Lat 30°32'02", long 85°09'55" referenced to North American Datum of 1927, in NW ¼ sec.32, T.2 N., R.9 W., Calhoun County, FL, Hydrologic Unit 03130012, on right downstream side wingwall of bridge on county Road 274, 0.9 mi downstream from Holliman Branch, 3.5 mi southwest of Altha, and 54 mi upstream from mouth.

DRAINAGE AREA.—781 mi².

PERIOD OF RECORD.—December 1912 to December 1913, October 1921 to September 1927, August 1929 to September 1931, March 1943 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1922 to March 1927, April 1930 to March 1931, April 1943 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—77

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	578	607	4	4
5	442	465	4	4
10	381	400	6	6
20	335	352	7	7
50	288	303	9	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,490	2,730	1,810	1,080	761	575	478

STATION NAME AND NUMBER—02365500 Choctawhatchee River at Caryville, FL

LOCATION.--Lat 30°46'32", long 85°49'40" referenced to North American Datum of 1927, Holmes County, FL, Hydrologic Unit 03140203, near right bank on downstream side of bridge on U.S. Highway 90, 300 ft downstream from Louisville and Nashville Railroad bridge, 0.8 mi west of Caryville, 1.8 mi downstream from Wrights Creek, and 64 mi upstream from mouth.

DRAINAGE AREA.—3,499 mi².

PERIOD OF RECORD.—October 1929 to March 1995, October 1996 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1930 to March 1994, April 2001 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—77

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1,160	1,220	4	4
5	866	904	5	5
10	747	777	5	5
20	662	687	6	6
50	579	599	8	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	15,900	11,300	6,310	3,500	2,000	1,340	1,100

STATION NAME AND NUMBER—02366000 Holmes Creek at Vernon, FL

LOCATION.--Lat 30°37'36", long 85°42'44" referenced to North American Datum of 1927, Washington County, FL, Hydrologic Unit 03140203, in the center of the new bridge on upstream side on State Highway 79 at Vernon, 0.2 mi downstream from Pippin Mill Creek and 25 mi upstream from mouth.

DRAINAGE AREA.—386 mi².

PERIOD OF RECORD.—April 1950 to May 1979, October 2005 to December 2013.

PERIOD OF FREQUENCY ANALYSIS.—April 1950 to March 1979, April 2006 to March 2013.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—36

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	302	307	2	2
5	272	275	2	2
10	257	260	3	3
20	246	249	3	3
50	234	237	4	4

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,790	1,230	670	411	337	293	278

STATION NAME AND NUMBER—02368000 Yellow River at Milligan, FL

LOCATION.—Lat 30°45'10", long 86°37'45" referenced to North American Datum of 1927, in SE ¼ sec.15, T.3 N., R.24 W., Okaloosa County, FL, Hydrologic Unit 03140103, near center on downstream side of bridge on U.S. Highway 90, 0.5 mi east of Milligan, 0.5 mi upstream from Trammel Creek, 6.7 mi upstream from Shoal River, and 40 mi upstream from mouth.

DRAINAGE AREA.—624 mi².

PERIOD OF RECORD.—August 1938 to October 1993, August 1996 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1993, April 1997 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—71

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	261	274	5	5
5	192	201	5	5
10	164	171	6	6
20	143	150	7	7
50	123	129	10	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,100	2,200	1,360	735	438	302	251

STATION NAME AND NUMBER—02368500 Shoal River near Mossy Head, FL

LOCATION.—Lat 30°47'45", long 86°18'25" referenced to North American Datum of 1927, in SW ¼ sec.36, T.4 N., R.21 W., Walton County, FL, Hydrologic Unit 03140103, near center span on downstream side of bridge on County Road 1087, about 200 ft downstream from Machine Branch, 3.9 mi north of Mossy Head, and 34 mi upstream from mouth.

DRAINAGE AREA.—123 mi².

PERIOD OF RECORD.—March 1951 to October 1978, May 2000 to September 2002, October 2003 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1951 to March 1978, April 2001 to March 2002, April 2004 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—38

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	67	70	7	7
5	47	50	9	8
10	38	40	11	11
20	32	34	15	14
50	25	27	21	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	630	425	250	152	99	69	56

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STATION NAME AND NUMBER—02369000 Shoal River near Crestview, FL

LOCATION.—Lat 30°41'50", long 86°34'15" referenced to North American Datum of 1927, in SW ¼ sec.5, T.2 N., R.23 W., Okaloosa County, FL, Hydrologic Unit 03140103, near center of bridge on downstream side of southbound lane on State Highway 85, 3.5 mi downstream from Titi Creek, 4.2 mi south of Crestview, and 7 mi upstream from mouth.

DRAINAGE AREA.—474 mi².

PERIOD OF RECORD.—August 1938 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—75

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	382	401	4	4
5	295	310	4	4
10	256	269	5	5
20	226	238	7	7
50	196	207	9	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,730	1,990	1,220	806	552	407	349

STATION NAME AND NUMBER—02370000 Blackwater River near Baker, FL

LOCATION.—Lat 30°50'00", long 86°44'05" referenced to North American Datum of 1927, in SW ¼ sec.22, T.4 N., R.25 W., Okaloosa County, FL, Hydrologic Unit 03140104, near left bank on downstream side of bridge on State Highway 4, 0.3 mi downstream from Red Wash Branch, 3.8 mi northwest of Baker, and 35 mi upstream from mouth.

DRAINAGE AREA.—205 mi².

PERIOD OF RECORD.—April 1950 to November 1992, July 1996 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1950 to March 1992, April 1997 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—59

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	85	89	4	4
5	70	72	4	4
10	63	65	4	4
20	59	60	5	5
50	54	56	6	6

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,010	662	360	199	126	93	79

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STATION NAME AND NUMBER—02370500 Big Coldwater Creek near Milton, FL

LOCATION.—Lat 30°42'30", long 86°58'20" referenced to North American Datum of 1927, in SW ¼ sec.5, T.2 N., R.27 W., Santa Rosa County, FL, Hydrologic Unit 03140104, near center channel on downstream side of bridge on State Highway 191, 3 mi upstream from mouth, and 6.5 mi northeast of Milton.

DRAINAGE AREA.—237 mi².

PERIOD OF RECORD.—December 1938 to June 1979, February 1980 to April 1980, July 1980 to March 1992, October 1997 to August 1999, May 2000 to February 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1979, April 1981 to March 1992, April 1998 to March 1999, April 2001 to March 2013.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—63

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	258	264	3	3
5	213	220	3	3
10	192	199	4	4
20	175	183	5	5
50	158	166	7	7

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,250	889	573	404	310	253	225

STATION NAME AND NUMBER—02370700 Pond Creek near Milton, FL

LOCATION.—Lat 30°40'50", long 87°07'55" referenced to North American Datum of 1927, Santa Rosa County, FL, Hydrologic Unit 03140104, near center of span on upstream side of bridge on State Highway 191, 0.6 mi downstream from Reader Creek, 6.4 mi northwest of Milton, and 10 mi upstream from mouth.

DRAINAGE AREA.—58.7 mi².

PERIOD OF RECORD.—January 1958 to October 1978, April 1979 to July 1979, November 1999 to January 2003, March 2003 to September 2006.

PERIOD OF FREQUENCY ANALYSIS.—April 1958 to March 1978, April 2000 to March 2002, April 2003 to March 2006.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	44	45	6	6
5	35	36	6	7
10	31	32	8	8
20	28	28	10	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	150	115	83	64	49	37	32

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STATION NAME AND NUMBER—02376000 Pine Barren Creek near Barth, FL

LOCATION.--Lat 30°47'55", long 87°22'05" referenced to North American Datum of 1927, Escambia County, FL, Hydrologic Unit 03140305, near right bank 10 ft downstream from Wiggins Bridge on private road, 0.3 mi upstream from Blue Water Creek, 4.0 mi northwest of Barth, and 7.3 mi upstream from mouth.

DRAINAGE AREA.—75.3 mi².

PERIOD OF RECORD.—October 1952 to September 1994.

PERIOD OF FREQUENCY ANALYSIS.—April 1953 to March 1994.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—41

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	78	80	3	3
5	67	69	3	3
10	62	64	4	4
20	58	59	5	5
50	53	55	7	7

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	359	237	150	112	92	78	71

STATION NAME AND NUMBER—02376300 Brushy Creek near Walnut Hill, FL

LOCATION.--Lat 30°53'21", long 87°32'24" referenced to North American Datum of 1927, Escambia County, FL, Hydrologic Unit 03140106, near right bank on downstream side of county road bridge, 1,000 ft downstream from Rocky Creek, 2.0 mi west of Walnut Hill, and 7.9 mi upstream from mouth.

DRAINAGE AREA.—49 mi².

PERIOD OF RECORD.—February 1958 to November 1991.

PERIOD OF FREQUENCY ANALYSIS.— April 1958 to March 1991.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—33

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	50	51	3	3
5	44	46	3	3
10	42	43	3	3
20	40	41	4	4
50	38	39	5	5

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	274	162	98	72	59	52	49

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STATION NAME AND NUMBER—02380500 Coosawattee River near Ellijay, GA

LOCATION.--Lat 34°40'30", long 84°30'31" referenced to North American Datum of 1927, Gilmer County, GA, Hydrologic Unit 03150102, on right bank, 0.5 mi downstream from GA Route 5, 2.2 mi downstream from confluence of Cartecay and Ellijay Rivers, 6.9 mi upstream from confluence with Mountaintown Creek, and 2.0 mi southwest of Ellijay.

DRAINAGE AREA.—236 mi².

PERIOD OF RECORD.—October 1938 to December 1949, June 1963 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1949, April 1964 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—60

REMARKS.—Potentially influenced by upstream diversions (Gotvald, 2016).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	154	162	5	5
5	110	116	7	7
10	89	95	9	9
20	74	79	12	12
50	59	63	17	17

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,170	892	601	380	239	167	134

STATION NAME AND NUMBER—02381600 Fausett Creek near Talking Rock, GA

LOCATION.--Lat 34°34'13", long 84°28'08" referenced to North American Datum of 1927, Gilmer County, GA, Hydrologic Unit 03150102, on right bank 25.0 feet upstream from culvert on County Road 1011, 3.6 miles upstream from mouth, and 4.5 miles northeast of Talking Rock.

DRAINAGE AREA.—9.99 mi².

PERIOD OF RECORD.—October 1974 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1975 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—39

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.2	3.6	18	17
5	1.3	1.6	24	22
10	0.75	0.92	32	30
20	0.44	0.56	47	43
50	0.22	0.30	77	69

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	43	30	18	11	6.5	3.6	2.4

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STATION NAME AND NUMBER—02382000 Scarecorn Creek at Hinton, GA

LOCATION.--Lat 34°28'04", long 84°35'30" referenced to North American Datum of 1927, Pickens County, GA, Hydrologic Unit 03150102, on left bank 100 ft upstream from bridge on State Highway 53, 0.2 mi west of Hinton, 1 mi upstream from Dean's Mill, and 5 mi upstream from mouth.

DRAINAGE AREA.—21.3 mi².

PERIOD OF RECORD.—April 1939 to December 1942, May 1959 to September 1974, August 1986 to April 1991.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1942, April 1960 to March 1974, April 1981 to March 1991.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.6	4.2	19	18
5	1.8	2.2	24	23
10	1.2	1.5	32	31
20	0.81	1.0	46	45

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	81	50	29	15	8.6	5.5	3.9

STATION NAME AND NUMBER—02382200 Talking Rock Creek near Hinton, GA

LOCATION.--Lat 34°31'22", long 84°36'40" referenced to North American Datum of 1983, Pickens County, GA, Hydrologic Unit 03150102, on left bank, 300 feet downstream from Scarecorn Creek, and 3.3 miles northwest of Hinton, GA.

DRAINAGE AREA.—119 mi².

PERIOD OF RECORD.—November 1973 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1974 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—40

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	34	38	18	17
5	14	18	24	23
10	8.1	10	32	31
20	4.7	6.0	48	46
50	2.3	3.0	81	80

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	460	313	196	113	65	36	25

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STATION NAME AND NUMBER—02383000 Rock Creek near Fairmont, GA

LOCATION.--Lat 34°21'32", long 84°46'46" referenced to North American Datum of 1927, Bartow County, GA, Hydrologic Unit 03150102, on right upstream wingwall of culvert on State Highway 140, 2.8 mi upstream from mouth, and 7 mi southwest of Fairmont.

DRAINAGE AREA.—6.17 mi².

PERIOD OF RECORD.—October 1951 to September 1974.

PERIOD OF FREQUENCY ANALYSIS.—April 1952 to March 1974.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—22

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.70	0.76	11	9
5	0.45	0.54	14	11
10	0.35	0.44	18	13
20	0.28	0.38	24	17
50	0.22	0.31	33	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	22	13	6.8	3.1	1.6	1.0	0.86

STATION NAME AND NUMBER—02383500 Coosawattee River near Pine Chapel, GA

LOCATION.—Lat 34°33'51", long 84°49'59" referenced to North American Datum of 1983, Gordon County, GA, Hydrologic Unit 03150102, on the downstream side of right bank pier of Owens Bridge on Owens Gin Road, 1.4 miles downstream from Sallacoa Creek, 8.7 miles upstream from confluence with Conasauga River, and 2.4 miles east of Pine Chapel.

DRAINAGE AREA.—831 mi².

PERIOD OF RECORD.—November 1938 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1973.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—34

REMARKS.—Since 1974, flow regulated by Carters Lake and Carters Re-regulation Dam. Frequency and duration data represent pre-regulation conditions.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	338	356	5	5
5	282	296	4	4
10	259	273	4	4
20	244	256	5	5
50	230	241	7	7

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,950	2,660	1,670	992	592	424	368

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STATION NAME AND NUMBER—02387500 Oostanaula River near Resaca, GA

LOCATION.--Lat 34°34'37.6", long 84°56'30.67" referenced to North American Datum of 1983, Gordon County, GA, Hydrologic Unit 03150103, on downstream side of center pier of bridge on US 41 at Resaca, 200 feet downstream from Nashville, Chattanooga, & St. Louis Railway bridge, 0.8 miles upstream from Camp Creek, and 3.5 miles downstream from confluence of Conasauga and Coosawattee Rivers.

DRAINAGE AREA.—1,602 mi².

PERIOD OF RECORD.—November 1892 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1893 to March 1973.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—80

REMARKS.—Since 1974, flow regulated by Carters Lake and Carters Re-regulation Dam. Frequency and duration data represent pre-regulation conditions.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	480	505	4	4
5	358	378	4	4
10	309	327	5	5
20	274	291	6	6
50	241	256	8	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	9,200	5,780	3,120	1,700	920	600	505

STATION NAME AND NUMBER—02388000 West Armuchee Creek near Subligna, GA

LOCATION.--Lat 34°34'04", long 85°09'16" referenced to North American Datum of 1927, Chattooga County, GA, Hydrologic Unit 03150103, on left bank 500 ft downstream from bridge on county road, 1 mi upstream from Ruff Creek, and 2 mi east of Subligna.

DRAINAGE AREA.—36.4 mi².

PERIOD OF RECORD.—April 1939 to June 1940, May 1960 to September 1981.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1940, April 1961 to March 1981.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	6.9	7.2	6	6
5	5.7	6.1	6	5
10	5.2	5.6	6	5
20	4.8	5.3	7	6

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	209	129	61	26	12	8.6	7.4

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STATION NAME AND NUMBER—02388300 Heath Creek near Rome, GA

LOCATION.--Lat 34°21'57", long 85°16'17" referenced to North American Datum of 1927, Floyd County, GA, Hydrologic Unit 03150103.

DRAINAGE AREA.—14.7 mi².

PERIOD OF RECORD.—May 1968 to September 1989.

PERIOD OF FREQUENCY ANALYSIS.—April 1969 to March 1989.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—20

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	1.7	1.7	12	11
5	1.1	1.2	15	14
10	0.83	0.91	20	18
20	0.65	0.73	28	24

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	102	59	24	7.2	3.0	2.0	1.6

STATION NAME AND NUMBER—02389000 Etowah River near Dawsonville, GA

LOCATION.--Lat 34°22'57", long 84°03'21" referenced to North American Datum of 1927, Dawson County, GA, Hydrologic Unit 03150104, on left bank 0.4 mi upstream from Palmer Creek, 0.5 mi upstream from bridge on State Highway 53, 1.2 mi downstream from Russell Creek, 4 mi southeast of Dawsonville, and 7.5 mi upstream from Shoal Creek.

DRAINAGE AREA.—107 mi².

PERIOD OF RECORD.—March 1940 to September 1976.

PERIOD OF FREQUENCY ANALYSIS.—April 1940 to March 1976.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—36

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	91	95	6	6
5	70	73	6	6
10	61	64	7	7
20	55	57	9	9
50	49	50	11	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	599	470	323	212	139	104	88

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STATION NAME AND NUMBER—02390000 Amicalola Creek near Dawsonville, GA

LOCATION.—Lat 34°25'32", long 84°12'43" referenced to North American Datum of 1927, Dawson County, GA, Hydrologic Unit 03150104, at the bridge on SR 53, on left bank, 1.8 miles below Holly Creek and 6.9 miles above Etowah River.

DRAINAGE AREA.—89.0 mi².

PERIOD OF RECORD.—April 1939 to May 1952, September 2005 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1952, April 2006 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	63	66	10	10
5	43	46	12	12
10	35	37	15	14
20	29	32	19	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	472	364	248	157	99	69	59

STATION NAME AND NUMBER—02392000 Etowah River at Canton, GA

LOCATION.—Lat 34°14'23.4", long 84°29'41.08" referenced to North American Datum of 1927, Cherokee County, GA, Hydrologic Unit 03150104, on left bank 100 feet downstream from bridge on GA 5 Spur and GA 140 at Canton, 0.8 mi upstream from confluence with Canton Creek, 1.8 mi downstream from confluence with Hickory Log Creek, and 0.3 mi northwest of Canton.

DRAINAGE AREA.—613 mi².

PERIOD OF RECORD.—October 1896 to September 1905, October 1936 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1897 to March 1905, April 1937 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—85

REMARKS.—Negligible amount of regulation caused by mill dams on both mainstream and tributaries. There is an intake for the Hickory Log Creek Reservoir located approximately 1.75 miles upstream of the gage at USGS gaging station 02391860-Etowah River below I-575 at Canton, GA.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	343	363	6	6
5	221	237	7	7
10	168	183	10	9
20	131	145	14	13
50	96	109	20	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,840	2,150	1,430	900	562	386	291

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STATION NAME AND NUMBER—02392500 Little River near Roswell, GA

LOCATION.—Lat 34°07'09", long 84°23'18" referenced to North American Datum of 1927, Fulton County, GA, Hydrologic Unit 03150104, on upstream side of bridge on State Highway 140, 1 mi downstream from Cooper Sandy Creek, and 7 mi north of Roswell.

DRAINAGE AREA.—60.0 mi².

PERIOD OF RECORD.—January 1947 to September 1976.

PERIOD OF FREQUENCY ANALYSIS.—April 1947 to March 1976.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—29

REMARKS.—Potentially influenced by upstream diversions (Gotvald, 2016).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	13	15	15	15
5	6.9	8.0	19	18
10	4.7	5.5	24	24
20	3.3	3.9	33	33

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	245	153	91	56	33	21	14

STATION NAME AND NUMBER—02395120 Two Run Creek near Kingston, GA

LOCATION.—Lat 34°14'34", long 84°53'23" referenced to North American Datum of 1983, Bartow County, GA, Hydrologic Unit 03150104, on right bank 200.0 feet upstream from bridge on GA 293, 1.9 miles upstream from Limekiln Branch, and 3.0 miles east of Kingston.

DRAINAGE AREA.—33.1 mi².

PERIOD OF RECORD.—May 1980 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1981 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—33

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	8.0	9.2	8	8
5	5.7	6.4	9	9
10	4.6	5.2	12	12
20	3.9	4.3	15	17
50	3.1	3.4	22	23

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	121	79	43	22	13	9.3	7.5

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STATION NAME AND NUMBER—02411800 Little River near Buchanan, GA

LOCATION.—Lat 33°47'51", long 85°07'03", referenced to North American Datum of 1927, Haralson County, GA, Hydrologic Unit 03150108, on right bank 150.0 feet upstream from county highway bridge, 4.3 mi east of Buchanan, and 7 mi upstream from mouth.

DRAINAGE AREA.—20.2 mi².

PERIOD OF RECORD.—June 1959 to September 1985.

PERIOD OF FREQUENCY ANALYSIS.—April 1960 to March 1985.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.9	4.4	10	10
5	2.6	3.0	11	11
10	2.1	2.5	14	13
20	1.7	2.1	18	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	105	63	35	19	10	6.4	4.7

STATION NAME AND NUMBER—02429900 Big Brown Creek near Booneville, MS

LOCATION.—Lat 34°37'29", long 88°26'42" referenced to North American Datum of 1983, in SW 1/4 NE 1/4 sec.27, T.5 S., R.8 E., Prentiss County, MS, Hydrologic Unit 03160101, Chickasaw Meridian, on State Highway 30, 2.5 mi upstream from Martin Creek, 8 mi east of Highway 45 at Booneville and 14.2 mi upstream from the mouth at Tombigbee River.

DRAINAGE AREA.—27.1 mi².

PERIOD OF RECORD.—June 1973 to September 2003.

PERIOD OF FREQUENCY ANALYSIS.—April 1974 to March 2003.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—29

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.59	0.73	20	22
5	0.25	0.29	23	25
10	0.16	0.18	29	31
20	0.10	0.12	37	39

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	159	94	46	18	3.1	0.98	0.60

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STATION NAME AND NUMBER—02429980 Pollard Mill Branch at Paden, MS

LOCATION.—Lat 34°39'14", long 88°14'56" referenced to North American Datum of 1983, in SW ¼ SE ¼ sec.9, T.5 S., R.10 E., Tishomingo County, MS, Hydrologic Unit 03160101, Chickasaw Meridian, on State Highway 30, 0.8 mi east of Paden.

DRAINAGE AREA.—2.01 mi².

PERIOD OF RECORD.—October 1972 to May 2004.

PERIOD OF FREQUENCY ANALYSIS.—April 1973 to March 2004.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—31

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.6	2.8	7	6
5	2.0	2.1	9	8
10	1.6	1.8	12	10
20	1.3	1.5	17	15
50	1.1	1.3	26	22

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	12	8.6	5.8	4.3	3.5	2.9	2.4

STATION NAME AND NUMBER—02430000 Mackeys Creek near Dennis, MS

LOCATION.—Lat 34°31'34", long 88°19'22" referenced to North American Datum of 1983, in SE ¼ sec.26, T.6 S., R.9 E., Chickasaw Meridian, Tishomingo County, MS, Hydrologic Unit 03160101, on State Highway 4, 6.0 mi southwest of Dennis.

DRAINAGE AREA.—66.9 mi², prior to construction of Tennessee-Tombigbee Waterway.

PERIOD OF RECORD.—October 1937 to October 1979.

PERIOD OF FREQUENCY ANALYSIS.—April 1938 to March 1973.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—35

REMARKS.—Since 1975, site regulated by Tennessee-Tombigbee Waterway. Frequency and duration analyses for pre-regulated conditions. End date for period of frequency analysis was set based on reviews of data.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	16	18	6	6
5	12	13	7	7
10	10	11	8	9
20	9.2	9.6	10	12
50	7.9	8.1	14	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	311	189	104	57	32	22	17

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STATION NAME AND NUMBER—02430085 Red Bud Creek near Moores Mill, MS

LOCATION.—Lat 34°28'00", long 88°17'01" referenced to North American Datum of 1983, in SW ¼ SE ¼ sec.18, T.7 S., R.10 E., Tishomingo County, MS, Hydrologic Unit 03160101, Chickasaw Meridian, near left bank on upstream side of bridge on county road, 0.18 mi south of intersection of county road and blacktop road, 2.7 mi east-southeast of Moores Mill, and 5.6 mi southwest of Belmont.

DRAINAGE AREA.—15.7 mi².

PERIOD OF RECORD.—June 1975 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1976 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—38

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.8	3.1	7	6
5	2.1	2.3	7	6
10	1.8	2.0	7	7
20	1.6	1.8	9	9
50	1.4	1.6	12	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	85	52	26	13	6.1	3.7	2.9

STATION NAME AND NUMBER—02430615 Mud Creek near Fairview, MS

LOCATION.—Lat 34°23'33", long 88°21'18" referenced to North American Datum of 1983, in NW ¼ NE ¼ sec.16, T.8 S., R.9 E., Itawamba County, MS, Hydrologic Unit 03160101, Chickasaw Meridian, at left bank on downstream side of bridge on county road 3.0 mi northwest of Fairview and 8.8 mi north-northeast of Fulton.

DRAINAGE AREA.—11.1 mi².

PERIOD OF RECORD.—June 1975 to December 2011.

PERIOD OF FREQUENCY ANALYSIS.—April 1976 to March 2011.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—35

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.2	3.4	11	11
5	1.9	2.0	12	12
10	1.5	1.5	15	15
20	1.1	1.2	19	20
50	0.87	0.92	26	27

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	49	32	19	11	6.5	3.8	2.7

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STATION NAME AND NUMBER—02430680 Twentymile Creek near Guntown, MS

LOCATION.—Lat 34°27'10", long 88°34'38" referenced to North American Datum of 1983, in SW ¼ SW ¼ sec.21, T.7 S., R.7 E., Lee County, MS, Hydrologic Unit 03160101, Chickasaw Meridian, on downstream side of bridge on county road 2578, and 6.0 mi southeast of Baldwyn, and 6.0 mi east of Guntown.

DRAINAGE AREA.—131 mi².

PERIOD OF RECORD.—October 1982 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1983 to March 2011.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—31

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.56	0.76	26	27
5	0.16	0.23	30	32
10	0.08	0.12	37	40
20	0.03	0.07	46	51
50	0.00	0.04	--	71

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	933	413	124	42	7.3	2.1	0.99

STATION NAME AND NUMBER—02430880 Cummings Creek near Fulton, MS

LOCATION.—Lat 34°18'16", long 88°22'16" referenced to North American Datum of 1983, in SE ¼ NE ¼ sec.17, T.9 S., R.9 E., Itawamba County, MS, Hydrologic Unit 03160101, in left bank, 20 ft downstream from bridge, on county road, 3.2 mi northeast of Fulton, and 4.2 mi upstream from mouth and Tenn Tombigbee Waterway.

DRAINAGE AREA.—19.1 mi².

PERIOD OF RECORD.—July 1975 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1976 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—38

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	5.8	6.5	8	8
5	3.9	4.3	9	10
10	3.1	3.4	12	12
20	2.6	2.8	15	15
50	2.1	2.3	19	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	77	53	33	20	12	8.0	5.9

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STATION NAME AND NUMBER—02431000 Tombigbee River near Fulton, MS

LOCATION.—Lat 34°15'54", long 88°26'43" referenced to North American Datum of 1983, in SW ¼ SE ¼ sec.27, T.9 S., R.8 E., Itawamba County, MS, Hydrologic Unit 03160101, Chickasaw Meridian, on left bank at downstream side of bridge on old U.S. Highway 78, 1,000 ft downstream from Twentymile-Fulton Canal, 2.2 mi west of Fulton, 6.2 mi upstream from Mantachie Creek Canal, 13.5 mi downstream from Twentymile Creek Canal, and at mile 421.8.

DRAINAGE AREA.—612 mi².

PERIOD OF RECORD.—October 1928 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1929 to March 1984.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—55

REMARKS.—Since about 1985, flows influenced by upstream diversions and regulation. Frequency analysis represents period prior to Tennessee-Tombigbee Waterway.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	49	54	7	7
5	32	36	8	8
10	26	29	10	9
20	21	24	13	12
50	17	19	17	15

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,500	2,080	1,040	387	132	71	52

STATION NAME AND NUMBER—02433000 Bull Mountain Creek near Smithville, MS

LOCATION.—Lat 34°05'18", long 88°23'26" referenced to North American Datum of 1983, in SE ¼ sec.30, T.11 S., R.9 E., Chickasaw Meridian, Itawamba County, MS, Hydrologic Unit 03160101, on State Highway 25, 1.1 mi north of Smithville.

DRAINAGE AREA.—336 mi².

PERIOD OF RECORD.—October 1940 to September 1984.

PERIOD OF FREQUENCY ANALYSIS.—April 1941 to March 1984.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—43

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	48	51	6	6
5	35	37	7	7
10	29	31	9	8
20	25	27	11	10
50	21	23	15	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,990	1,290	625	252	102	63	51

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STATION NAME AND NUMBER—02433500 Tombigbee River at Bigbee, MS

LOCATION.—Lat 34°00'41", long 88°30'49" referenced to North American Datum of 1983, in SW ¼ NE ¼ sec.25, T.12 S., R.7 E., Monroe County, MS, Hydrologic Unit 03160101, Chickasaw Meridian, near right bank on downstream side of bridge on State Highway 6, 0.2 mi upstream from St. Louis-San Francisco Railway bridge, 0.5 mi southeast of Bigbee, 2 mi northwest of Amory, 3.7 mi upstream from Town Creek, and at mile 383.1.

DRAINAGE AREA.—1,226 mi².

PERIOD OF RECORD.—October 1944 to September 1946, October 1947 to September 1954, October 1963 to September 1998, October 2001 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1945 to March 1946, April 1948 to March 1954, April 1964 to March 1984.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—27

REMARKS.—Since about 1985, flows influenced by upstream diversions and regulation. Frequency analysis represents period prior to Tennessee-Tombigbee Waterway.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	139	151	9	9
5	99	112	9	7
10	84	98	9	8
20	75	89	11	10

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	7,440	5,100	2,580	960	343	194	148

STATION NAME AND NUMBER—02435020 Town Creek at Eason Boulevard at Tupelo, MS

LOCATION.—Lat 34°14'08", long 88°41'45" referenced to North American Datum of 1983, in NE 1/4 NW 1/4 sec.8, T.10 S., R.6 E., Lee County, MS, Hydrologic Unit 03160102, Chickasaw Meridian, on Eason Blvd. in Tupelo, 400 ft upstream from Kings Creek and 2.0 mi upstream from the mouth..

DRAINAGE AREA.—233 mi².

PERIOD OF RECORD.—October 1970 to September 2003.

PERIOD OF FREQUENCY ANALYSIS.—April 1971 to March 2003.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—32

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	4.1	4.8	16	15
5	2.0	2.5	19	18
10	1.3	1.7	25	22
20	0.90	1.2	33	28
50	0.58	0.82	47	39

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,750	868	306	96	19	7.5	4.5

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STATION NAME AND NUMBER—02436500 Town Creek near Nettleton, MS

LOCATION.—Lat 34°03'33", long 88°37'41" referenced to North American Datum of 1983, in NW ¼ NW ¼ sec.12, T.12 S., R.6 E., Monroe County, MS, Hydrologic Unit 03160102, Chickasaw Meridian, near right bank on downstream side of downstream bridge on U.S. Highway 45, 1.5 mi downstream from Chiwapa Creek, 2.1 mi south of Nettleton, and 9.2 mi upstream from mouth.

DRAINAGE AREA.—620 mi².

PERIOD OF RECORD.—October 1939 to September 1988, June 1989 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1940 to March 1988, April 1990 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—71

REMARKS.—Prior to October 1970, published as West Fork Tombigbee River near Nettleton.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	17	19	10	10
5	8.1	9.6	13	12
10	5.3	6.5	17	15
20	3.7	4.6	22	20
50	2.4	3.1	31	27

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	4,480	2,110	674	209	55	23	14

STATION NAME AND NUMBER—02439400 Buttahatchee River near Aberdeen, MS

LOCATION.—Lat 33°47'24", long 88°18'55" referenced to North American Datum of 1983, in NW ¼ SW ¼ sec.3, T.15 S., R.17 W., Monroe County, MS, Hydrologic Unit 03160103, Huntsville Meridian, near right bank on downstream side of bridge on county highway, 10.1 mi downstream from Sipsey Creek, 13.7 mi southeast of Aberdeen, and 28.6 mi upstream from the mouth.

DRAINAGE AREA.—798 mi².

PERIOD OF RECORD.—July 1966 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1967 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—47

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	163	174	6	6
5	118	126	7	7
10	98	105	9	8
20	84	90	11	11
50	70	76	15	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	4,620	3,030	1,540	745	336	213	168

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STATION NAME AND NUMBER—02440000 Chuquatonchee Creek near Egypt, MS

LOCATION.—Lat 33°50'24", long 88°45'43" referenced to North American Datum of 1983, in NW 1/4 NE 1/4 sec.27, T.14 S., R.5 E., Chickasaw County, MS, Hydrologic Unit 03160104, Chickasaw Meridian, at bridge on State Highway 8, 4.5 mi southwest of Egypt.

DRAINAGE AREA.—167 mi².

PERIOD OF RECORD.—October 1951 to September 1973.

PERIOD OF FREQUENCY ANALYSIS.—April 1952 to March 1973.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—21

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.15	0.50	38	39
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	885	340	99	27	6.1	1.5	0.0

STATION NAME AND NUMBER—02440500 Chuquatonchee Creek near West Point, MS

LOCATION.—Lat 33°36'26", long 88°42'33" referenced to North American Datum of 1983, in NW 1/4 NE 1/4 sec.18, T.17 S., R.6 E., Clay County, MS, Hydrologic Unit 03160104, Chickasaw Meridian, at bridge on State Highway 50, 3.0 mi west of West Point.

DRAINAGE AREA.—505 mi².

PERIOD OF RECORD.—October 1943 to September 1946, October 1947 to September 1973, April 1996 to September 2004.

PERIOD OF FREQUENCY ANALYSIS.—April 1944 to March 1946, April 1948 to March 1973, April 1997 to March 2004.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—34

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.67	0.93	43	48
5	0.00	0.00	--	--
10	0.00	0.00	--	--
20	0.00	0.00	--	--
50	0.00	0.00	--	--

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	3,900	2,280	527	108	17	2.5	0.3

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STATION NAME AND NUMBER—02443000 Luxapallila River at Steens, MS

LOCATION.—Lat 33°33'37", long 88°18'55" referenced to North American Datum of 1983, in NE 1/4 sec.28, T.17 S., R.17 W., Lowndes County, MS, Hydrologic Unit 03160105, Huntsville Meridian, on county highway 0.2 mi southeast of Steens.

DRAINAGE AREA.—309 mi².

PERIOD OF RECORD.—October 1943 to September 1947, October 1949 to October 1977, November 1987 to August 1989.

PERIOD OF FREQUENCY ANALYSIS.—April 1944 to March 1947, April 1950 to March 1977.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—30

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	57	61	7	7
5	42	44	8	8
10	35	37	9	10
20	31	32	11	12
50	27	28	15	16

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,730	1,050	540	227	107	70	57

STATION NAME AND NUMBER—02448000 Noxubee River at Macon, MS

LOCATION.—Lat 33°06'07", long 88°33'42" referenced to North American Datum of 1983, in NW ¼ NE ¼ sec.4, T.14 N., R.17 E., Noxubee County, MS, Hydrologic Unit 03160108, Choctaw Meridian, over mid-channel on the downstream side of the downstream bridge on U.S. Highway 45 at Macon, 3 miles south of the Highway 14 and Highway 45 intersection.

DRAINAGE AREA.—768 mi².

PERIOD OF RECORD.—August 1928 to September 1932, September 1938 to September 1989, October 1990 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1929 to March 1932, April 1939 to March 1989, April 1991 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—76

REMARKS.—Since 1950, minor regulation from Bluff Lake, which is on a tributary to Noxubee River (Telis, 1991).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	51	54	4	4
5	38	40	4	4
10	33	35	5	5
20	30	31	6	6
50	26	27	8	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	4,920	3,120	913	240	94	60	50

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STATION NAME AND NUMBER—02477000 Chickasawhay River at Enterprise, MS

LOCATION.—Lat 32°10'33", long 88°49'11" referenced to North American Datum of 1983, in SE ¼ SE ¼ NW ¼ sec.24, T.4 N., R.14 E., Clarke County, MS, Hydrologic Unit 03170002, Choctaw Meridian, on right bank at downstream side of right-main pie of the old Highway 513 bridge in Enterprise, at river mile 158.2, 0.5 mi downstream from confluence of Chunky River and Okatibbee Creek.

DRAINAGE AREA.—918 mi².

PERIOD OF RECORD.—August 1938 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 1968.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—29

REMARKS.—Since November 1968, regulated by Okatibbee Lake. Analysis represents pre-regulation period.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	49	53	12	12
5	30	32	13	13
10	23	24	15	15
20	19	20	18	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	4,910	2,940	1,130	392	132	71	49

STATION NAME AND NUMBER—02477990 Buckatunna Creek near Denham, MS

LOCATION.—Lat 31°41'39", long 88°31'09" referenced to North American Datum of 1983, in NE ¼ NE ¼ sec.6, T.8 N., R.5 W., Wayne County, MS, Hydrologic Unit 03170002, St. Stephens Meridian, on right bank on downstream side of bridge on county road, 3.5 mi north of Denham, and 8.0 mi east of Waynesboro.

DRAINAGE AREA.—492 mi².

PERIOD OF RECORD.—January 1972 to September 2013.

PERIOD OF FREQUENCY ANALYSIS.—April 1972 to March 2013.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—41

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	24	26	13	14
5	12	13	15	15
10	8.3	9.1	19	18
20	6.0	6.7	24	23
50	4.2	4.7	32	30

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,900	1,920	812	279	84	37	25

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STATION NAME AND NUMBER—02478500 Chickasawhay River at Leakesville, MS

LOCATION.—Lat 31°08'55", long 88°32'53" referenced to North American Datum of 1983, in NE ¼ SW ¼ sec.12, T.2 N., R.6 W., Greene County, MS, Hydrologic Unit 03170003, St. Stephens Meridian, on left bank on downstream side of abandoned bridge 400 ft below State Highway 63, 0.5 mi southeast of Leakesville, 1.8 mi upstream from Faulk Ditch, and 29.1 mi upstream from confluence with Leaf River.

DRAINAGE AREA.—2,690 mi².

PERIOD OF RECORD.—September 1938 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1939 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—75

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	401	417	5	5
5	290	299	5	5
10	245	253	6	6
20	215	220	7	7
50	185	190	9	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	14,500	10,200	4,590	1,840	794	480	381

STATION NAME AND NUMBER—03543500 Sewee Creek near Decatur, TN

LOCATION.—Lat 35°34'52.48", long 84°44'53.19" referenced to North American Datum of 1927, Meigs County, TN, Hydrologic Unit 06020001, on right bank 0.3 mi downstream from bridge on State Hwy. 58, 0.5 mi downstream from Dry Fork, 5.0 mi north of Decatur, and at mile 5.7.

DRAINAGE AREA.—117 mi².

PERIOD OF RECORD.—June 1934 to November 1994, April 2012 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1935 to March 1994, April 2012 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—61

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	19	21	5	5
5	15	16	5	5
10	13	14	6	5
20	11	12	7	6
50	10	11	9	8

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	659	406	197	77	34	24	20

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STATION NAME AND NUMBER—03544500 Richland Creek near Dayton, TN

LOCATION.—Lat 35°30'17", long 85°01'20" referenced to North American Datum of 1927, Rhea County, TN, Hydrologic Unit 06020001, on left bank at Morgantown, 0.4 mi upstream from bridge on State Highway 30, 1.0 mi northwest of Dayton, 1.8 mi downstream from Payne Creek, and at mile 5.2.

DRAINAGE AREA.—50.2 mi².

PERIOD OF RECORD.—July 1927 to September 1931, July 1934 to September 1955, July 1979 to December 1981.

PERIOD OF FREQUENCY ANALYSIS.—April 1928 to March 1931, April 1935 to March 1955, April 1980 to March 1981.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	0.10	0.15	31	31
5	0.03	0.05	30	30
10	0.02	0.02	33	33
20	0.01	0.01	40	40

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	398	252	121	34	2.4	0.3	0.2

STATION NAME AND NUMBER—03566420 Wolftever Creek near Ooltewah, TN

LOCATION.—Lat 35°03'43", long 85°03'59" referenced to North American Datum of 1927, Hamilton County, TN, Hydrologic Unit 06020001, on right bank at bridge on county road, 0.6 mi downstream from Southern Railway bridge, 0.85 mi south of post office at Ooltewah, and 1.65 mi above mouth of Little Wolftever Creek.

DRAINAGE AREA.—18.8 mi².

PERIOD OF RECORD.—February 1964 to September 1989.

PERIOD OF FREQUENCY ANALYSIS.—April 1964 to March 1989.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.9	3.1	10	10
5	2.0	2.1	12	11
10	1.6	1.7	15	14
20	1.3	1.4	19	18

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	113	66	30	13	5.7	3.8	2.9

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STATION NAME AND NUMBER—03567500 South Chickamauga Creek near Chickamauga, TN

LOCATION.—Lat 35°00'50.57", long 85°12'23.91" referenced to North American Datum of 1927, Hamilton County, TN, Hydrologic Unit 06020001, on left bank, atop flood levee, 400 ft. upstream from bridge on U.S. Hwy 11/64 (Brainerd Rd.), 0.8 mi. downstream of confluence of West Chickamauga Creek and South Chickamauga Creek, 6.0 miles east of the city hall in Chattanooga, and at river mile 12.2.

DRAINAGE AREA.—428 mi².

PERIOD OF RECORD.—October 1928 to September 1978, October 1980 to September 1994, May 2012 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1929 to March 1978, April 1981 to March 1994, April 2013 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—63

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	111	116	3	3
5	90	95	4	4
10	81	86	5	4
20	73	78	6	6
50	65	70	8	7

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,680	1,480	675	301	167	125	110

STATION NAME AND NUMBER—03568933 Lookout Creek near New England, GA

LOCATION.—Lat 34°53'51", long 85°27'47" referenced to North American Datum of 1983, Dade County, GA, Hydrologic Unit 06020001, at bridge on County Road 2214, 0.4 miles downstream of Squirrel Town Creek, 2.2 miles southeast of New England.

DRAINAGE AREA.—149 mi².

PERIOD OF RECORD.—August 1979 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1980 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—34

REMARKS.—Potential influence by upstream diversions (Gotvald, 2016).

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	18	19	7	7
5	13	13	9	9
10	11	11	12	11
20	8.8	9.2	15	15
50	7.1	7.5	21	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	849	540	256	93	35	21	16

STATION NAME AND NUMBER—03578000 Elk River near Pelham, TN

LOCATION.—Lat 35°17'48.19", long 85°52'11.19" referenced to North American Datum of 1927, Grundy County, TN, Hydrologic Unit 06030003, on top of left abutment at downstream side of bridge on U.S. Highway 41, 1.1 mi southeast of Pelham, 1.8 mi upstream from Caldwell Creek, and at mile 194.2.

DRAINAGE AREA.—65.6 mi².

PERIOD OF RECORD.—December 1951 to December 1987, November 2000 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1952 to March 1987, April 2001 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—48

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	2.9	3.1	12	11
5	1.5	1.8	14	11
10	1.0	1.3	18	13
20	0.73	1.1	23	15
50	0.50	0.82	31	20

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	528	309	147	52	11	4.0	2.6

STATION NAME AND NUMBER—03584000 Richland Creek near Pulaski, TN

LOCATION.—Lat 35°12'51", long 87°06'05" referenced to North American Datum of 1927, Giles County, TN, Hydrologic Unit 06030004, on right bank 1,200 ft upstream from bridge on U.S. Highway 64, 1 mi downstream from Weakley Creek, 4 mi west of Pulaski, and at mile 30.1.

DRAINAGE AREA.—366 mi².

PERIOD OF RECORD.—May 1934 to October 1975.

PERIOD OF FREQUENCY ANALYSIS.—April 1935 to March 1975.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—40

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	25	27	9	9
5	17	18	8	8
10	14	16	8	8
20	13	14	10	10
50	11	12	14	14

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	2,340	1,400	606	193	74	41	31

STATION NAME AND NUMBER—03588000 Shoal Creek at Lawrenceburg, TN

LOCATION.—Lat 35°14'40", long 87°21'02" referenced to North American Datum of 1927, Lawrence County, TN, Hydrologic Unit 06030005, on left bank at downstream side of highway bridge, 1,500 feet upstream from Crowson Creek, 1,800 feet downstream from Little Shoal Creek, 1.1 miles west of the courthouse in Lawrenceburg, and at mile 55.6

DRAINAGE AREA.—55.4 mi².

PERIOD OF RECORD.—July 1932 to March 1934, March 1967 to November 1991.

PERIOD OF FREQUENCY ANALYSIS.—April 1933 to March 1934, April 1967 to March 1991.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—25

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	22	23	5	5
5	18	20	5	5
10	17	18	5	5
20	15	17	6	6

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	298	168	92	53	34	25	22

STATION NAME AND NUMBER—03588400 Chisholm Creek at Westpoint, TN

LOCATION.—Lat 35°08'04", long 87°31'45" referenced to North American Datum of 1927, Lawrence County, TN, Hydrologic Unit 06030005, on downstream side of left pier of county road bridge 0.3 mi northeast of Westpoint, and 1.2 mi above mouth.

DRAINAGE AREA.—43.0 mi².

PERIOD OF RECORD.—August 1962 to December 1987.

PERIOD OF FREQUENCY ANALYSIS.—April 1963 to March 1987.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—24

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	15	16	7	7
5	11	12	8	8
10	9.9	10	9	9
20	8.9	9.3	11	11

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	253	152	78	40	24	17	15

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STATION NAME AND NUMBER—03588500 Shoal Creek at Iron City, TN

LOCATION.—Lat 35°01'26.54", long 87°34'44.43" referenced to North American Datum of 1927, Lawrence County, TN, Hydrologic Unit 06030005, on right downstream bank at bridge, on county road, 400 ft downstream from Holly Creek, 1,350 ft upstream from Louisville and Nashville Railroad bridge, 1,350 ft northeast of Iron City Post Office, and at mile 22.3.

DRAINAGE AREA.—348 mi².

PERIOD OF RECORD.—July 1925 to September 1994, October 2000 to March 2014.

PERIOD OF FREQUENCY ANALYSIS.—April 1951 to March 1994, April 2001 to March 2014.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—56

REMARKS.—Prior to January 1951, diurnal fluctuation at low flow caused by powerplant near Lawrenceburg.

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	119	125	4	4
5	93	98	5	5
10	82	86	5	6
20	74	77	7	7
50	65	68	9	9

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	1,940	1,240	650	334	189	140	120

STATION NAME AND NUMBER—03592718 Little Yellow Creek near Burnsville, MS

LOCATION.—Lat 34°50'08", long 88°17'17" referenced to North American Datum of 1983, in SE ¼ NW ¼ sec.7, T.3 S., R.10 E., Tishomingo County, MS, Hydrologic Unit 06030005, Chickasaw Meridian, on right bank about 70 ft downstream of bridge on county road 0.2 mi northeast of Walker Siding, 2.0 mi east of Burnsville, 0.1 mi north of railroad and 0.25 mi upstream of confluence of Tenn-Tom Waterway.

DRAINAGE AREA.—24.7 mi², Tennessee Valley Authority.

PERIOD OF RECORD.—May 1973 to March 2013.

PERIOD OF FREQUENCY ANALYSIS.—April 1974 to March 2012.

NUMBER OF CLIMATE YEARS IN FREQUENCY ANALYSIS.—38

REMARKS.—

Recurrence intervals (years)	Lowest average flow for indicated number of consecutive days (cubic feet per second)		Time-sampling error (in percent)	
	1	7	1	7
2	3.7	4.2	7	6
5	2.7	3.1	7	7
10	2.3	2.7	9	8
20	2.0	2.4	11	9
50	1.7	2.1	14	12

DURATION OF DAILY FLOW							
Flow equaled or exceeded for indicated percentage of time (cubic feet per second)							
Percentage	5	10	25	50	75	90	95
Flow	126	72	36	18	8.5	5.1	4.2

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	USGS station number	Station name	Drainage area (mi ²)	Regulated	From Atkins and Pearman (1994)	
					7Q10 (ft ³ /s)	Period of record
2	02342500	Uchee Creek near Fort Mitchell, AL	322	N	9.5	October 1946 to September 1990
3	02342933	South Fork Cowikee Creek near Batesville, AL	112	N	0.8	October 1963 to September 1971, October 1974 to September 1990
7	02361000	Choctawhatchee River near Newton, AL	686	N	83	November 1921 to September 1927, May 1935 to September 1990
8	02361500	Choctawhatchee River near Bellwood, AL	1,280	N	225	December 1921 to October 1925
9	02362240	Little Double Bridges Creek near Enterprise, AL	21.4	N	3.1	August 1985 to September 1990
10	02363000	Pea River near Ariton, AL	498	N	14	October 1938 to September 1970, October 1987 to September 1990
11	02364500	Pea River near Samson, AL	1,182	N	138	August 1904 to August 1913, October 1922 to September 1925, October 1935 to September 1970
12	02364570	Panther Creek near Hacoda, AL	26.2	N	1.1	October 1974 to September 1990
13	02369800	Blackwater River near Bradley, AL	87.7	N	24	October 1967 to September 1990
15	02371500	Conecuh River at Brantley, AL	500	N	31	October 1937 to September 1990
17	02372250	Patsaliga Creek near Brantley, AL	442	N	26	October 1974 to September 1990
19	02372500	Conecuh River near Andalusia, AL	1,344	Y	147	September 1904 to December 1919, October 1929 to September 1952, October 1965 to September 1968
20	02373000	Sepulga River near McKenzie, AL	470	N	11	October 1937 to September 1967, October 1974 to September 1990
24	02374500	Murder Creek near Evergreen, AL	176	N	55	October 1937 to September 1990
29	02376500	Perdido River at Barrineau Park, FL	394	N	226	June 1941 to September 1990
33	02378500	Fish River near Silver Hill, AL	55.3	N	40	July 1953 to September 1969, October 1970 to September 1971, November 1986 to September 1990
34	02398300	Chattooga River above Gaylesville, AL	366	N	94	January 1959 to September 1967, October 1984 to September 1990
38	02399200	Little River near Blue Rond, AL	199	N	0.60	October 1958 to September 1967, October 1970 to September 1990
41	02400100	Terrapin Creek at Ellisville, AL	252	N	62	October 1962 to September 1967, October 1980 to September 1990
44	02401000	Big Wills Creek near Reece City, AL	182	N	31	October 1943 to September 1970, October 1986 to September 1990
45	02401370	Big Canoe Creek near Springville, AL	45	N	5.6	October 1978 to September 1990
47	02401470	Little Canoe Creek near Steele, AL	22.3	N	1.4	April 1982 to September 1990

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	Current investigation		Percentage change	Remarks
	7Q10 (ft ³ /s)	Period of record analyzed		
2	5.6	April 1947 to March 2014	-41	
3	0.57	April 1964 to March 1971, April 1975 to March 2011	-29	
7	71	April 1922 to March 1927, April 1936 to March 2014	-14	
8	267	April 1922 to March 1925, April 2001 to March 2014	19	Current frequency statistics were computed based on a MOVE.1 correlation with station 02361000 Choctawhatchee River near Newton, AL, which has a period of record from December 1921 to September 1927, June 1935 to March 2014.
9	2.9	April 1986 to March 2014	-6.5	
10	11	April 1939 to March 1970, April 1988 to March 2014	-21	
11	109	April 1905 to March 1913, April 1923 to March 1925, April 1936 to March 1970, April 2003 to March 2014	-21	
12	0.98	April 1975 to March 1995	-11	
13	23	April 1968 to March 2014	-4.2	
15	27	April 1938 to March 2014	-13	
17	20	April 1975 to March 2014	-23	
19	127	April 1930 to March 1952, April 1966 to March 1968	-14	Regulated by Gantt Dam since 1924 and Point A Reservoir since 1925. Analysis is regulation conditions only. Atkins and Pearman (1994) included unregulated and regulated data in analysis.
20	9.4	April 1938 to March 1967, April 1975 to March 2014	-15	
24	52	April 1938 to March 2014	-5.5	
29	209	April 1942 to March 2014	-7.5	
33	39	April 1954 to March 1969, April 1987 to March 2014	-2.5	
34	92	April 1959 to March 1967, April 1985 to March 2014	-2.1	
38	0.56	April 1959 to March 1967, April 1971 to March 2014	-6.7	
41	57	April 1963 to March 1967, April 1981 to March 2014	-8.1	
44	34	April 1944 to March 1970, April 1987 to March 2014	9.7	
45	5.5	April 1979 to March 1995	-1.8	
47	1.5	April 1982 to March 1995	7.1	

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	USGS station number	Station name	Drainage area (mi ²)	Regulated	From Atkins and Pearman (1994)	
					7Q10 (ft ³ /s)	Period of record
50	02403500	Coldwater Spring near Anniston, AL	Indeterminate	N	34	July 1944 to March 1947, April 1957 to September 1990
52	02404400	Choccolocco Creek at Jackson Shoal near Lincoln, AL	481	N	121	October 1960 to September 1967, October 1984 to September 1990
54	02405500	Kelly Creek near Vincent, AL	193	N	1.7	December 1951 to September 1970, October 1986 to September 1990
54	02405500	Kelly Creek near Vincent, AL	193	N	1.7	December 1951 to September 1970, October 1986 to September 1990
55	02405800	Talladega Creek above Talladega, AL	69.6	N	8.9	June 1959 to September 1970
56	02406500	Talladega Creek at Alpine, AL	150	N	48	August 1900 to December 1904, October 1938 to September 1951, October 1987 to September 1990
60	02408540	Hatchet Creek below Rockford, AL	263	N	22	October 1980 to September 1990
61	02410000	Paterson Creek near Central, AL	4.91	N	0.10	October 1953 to September 1987
64	02412000	Tallapoosa River near Heflin, AL	448	N	38	July 1952 to September 1990
66	02413300	Little Tallapoosa River near Newell, AL	406	N	44	October 1975 to September 1990
70	02415000	Hillabee Creek near Hackneyville, AL	190	N	14	July 1952 to September 1970, October 1985 to September 1990
75	02419000	Uphapee Creek near Tuskegee, AL	333	N	5.3	October 1939 to September 1970, October 1974 to September 1990
81	02422500	Mulberry Creek at Jones, AL	203	N	43	October 1938 to September 1970, October 1974 to September 1990
86	02423398	Little Cahaba River near Leeds, AL	19.4	N	4.4	October 1980 to September 1981, May 1988 to September 1990
87	02423400	Little Cahaba River near Jefferson Park, AL	24.4	N	3.6	July 1986 to September 1990
96	02424000	Cahaba River at Centreville, AL	1,027	N	146	August 1901 to February 1908, October 1929 to March 1932, May 1935 to September 1990
98	02424590	Cahaba River near Suttle, AL	1,480	N	298	October 1987 to September 1990

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	Current investigation		Percentage change	Remarks
	7Q10 (ft ³ /s)	Period of record analyzed		
50	35	April 1957 to March 1996	2.9	Atkins and Pearman (1994) stated that about 20 ft ³ /s was diverted by the City of Anniston. No drainage area (DA) provided in NWISweb due to this being a spring. The DA shown computed from StreamStats was 1.25 mi ² .
52	117	April 1961 to March 1967, April 1985 to March 2014	−3.3	
54	2.1	April 1952 to March 1970	24	The period from 1951 to 1970 is likely more representative of natural conditions than the latter period of record. SIMS notes “Record considered fair due to backwater from the Coosa River and overbank storage. This station is subject to high negative shifts due to beaver activity.”
54	1.8	April 1987 to March 2014	5.9	From QAQC reviews, the period from 1986 to 2014 is likely more influenced by anthropogenic sources than the earlier period of record.
55	9	April 1960 to March 1970	1.1	
56	43	April 1901 to March 1904, April 1940 to March 1951, April 1988 to March 2014	−10	
60	9.9	April 1981 to March 2014	−55	
61	0.13	April 1954 to March 1987	30	
64	22	April 1953 to March 2014	−42	
66	17	April 1976 to March 2014	−61	
70	8.5	April 1953 to March 1970, April 1986 to March 2014	−39	
75	6.2	April 1940 to March 1970, April 1975 to March 2014	17	SIMS notes “Slight diurnal fluctuation and some regulation caused by plant above station. Small amount of diversion by City of Tuskegee and U.S. Veterans Hospital.”
81	38	April 1939 to March 1970, April 1975 to March 2014	−12	
86	5.9	April 1989 to March 2006	34	
87	4.9	April 1987 to March 1999, April 2008 to March 2014	36	
96	145	April 1902 to March 1907, April 1930 to March 1932, April 1936 to March 2014	−0.7	Flow diverted upstream from station by Birmingham Water Works Board, and is not included in records. Flow partly regulated by Lake Purdy Reservoir (1929) (capacity, 15,300 acre-ft) on Little Cahaba River and several wastewater-treatment plants. At this downstream location, Lake Purdy is not likely to influence the flows.
98	267	April 1988 to March 2011	−10	Flow partly regulated by Lake Purdy Reservoir (1929) (capacity, 15,300 acre-ft) on Little Cahaba River. At this downstream location, Lake Purdy is not likely to influence the flows. Flow is diverted upstream from station by Birmingham Water Works Board and releases by several wastewater-treatment plants.

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	USGS station number	Station name	Drainage area (mi ²)	Regulated	From Atkins and Pearman (1994)	
					7Q10 (ft ³ /s)	Period of record
100	02425000	Cahaba River near Marion Junction, AL	1,766	N	321	October 1938 to September 1954, October 1968 to September 1990
101	02425200	Big Swamp Creek near Orrville, AL	35.8	N	0.50	March 1972 to September 1985
106	02427700	Turkey Creek at Kimbrough, AL	97.5	N	0.60	October 1958 to September 1990
108	02428500	Big Flat Creek near Fountain, AL	247	N	1.5	October 1943 to September 1970
112	02438000	Buttahatchee River below Hamilton, AL	277	N	27	October 1950 to September 1970
115	02442500	Luxapallila Creek at Millport, AL	247	N	42	August 1954 to September 1959, December 1980 to September 1986
116	02444000	Coal Fire Creek near Pickensville, AL	126	N	6.7	October 1954 to September 1971, October 1974 to September 1980
118	02444500	Tombigbee River near Cochrane, AL	5,940	Y (PR)	346	October 1938 to March 1978
119	02445500	Sipsey River at Fayette, AL	282	N	12	February 1939 to September 1959
120	02446000	Sipsey River at Moores Bridge, AL	413	N	33	February 1939 to September 1951
121	02446500	Sipsey River near Elrod, AL	528	N	29	September 1928 to March 1932, October 1939 to September 1971, October 1978 to September 1990
122	02447000	Sipsey River near Pleasant Ridge, AL	769	N	29	February 1939 to September 1959
124	02448500	Noxubee River near Geiger, AL	1,097	N	35	March 1939 to September 1940, August 1944 to September 1965, October 1966 to September 1990
126	02449000	Tombigbee River at Gainesville, AL	8,632	Y (PR)	487	October 1938 to September 1955, October 1960 to September 1978
127	02449245	Brush Creek near Eutaw, AL	43.2	N	0.04	June 1975 to September 1990
130	02450000	Mulberry Fork near Garden City, AL	358	N	5.3	October 1928 to September 1990

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	Current investigation		Percentage change	Remarks
	7Q10 (ft ³ /s)	Period of record analyzed		
100	303	April 1939 to March 1954, April 1969 to March 2014	–5.6	Flow partly regulated by Lake Purdy Reservoir (1929) (capacity, 15,300 acre-ft) on Little Cahaba River. At this downstream location, Lake Purdy is not likely to influence the flows. Flow is diverted upstream from station by Birmingham Water Works Board and releases by several wastewater-treatment plants.
101	0.54	April 1972 to March 1985	8.0	
106	0.62	April 1959 to March 1996	3.3	
108	1.5	April 1944 to March 1970	0.0	
112	30	April 1951 to March 1970, April 1992 to March 2014	11	
115	48	April 1955 to March 1959, April 1981 to March 1986, April 2002 to March 2011	14	
116	7.0	April 1955 to March 1971, April 1975 to March 1980	4.5	
118	353	April 1939 to March 1978	2.0	Estimates for pre-regulated conditions
119	16	April 1939 to March 1959	33	Current frequency statistics were computed based on a MOVE.1 correlation with station 02446500 Sipsey River near Elrod, AL, which has a period of record from September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014, which represents 69 climatic years.
120	25	April 1939 to March 1951	–24	The current frequency statistics were computed based on a MOVE.1 correlation with station 02446500 Sipsey River near Elrod, AL, which has a period of record from September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014, which represents 69 climatic years.
121	32	April 1929 to March 1932, April 1940 to March 1971, April 1979 to March 2014	10	
122	40	April 1939 to March 1959	38	Current frequency statistics were computed based on a MOVE.1 correlation with station 02446500 Sipsey River near Elrod, AL, which has a period of record from September 1928 to March 1932, October 1939 to September 1971, October 1978 to March 2014, which represents 69 climatic years.
124	39	April 1939 to March 1940, April 1945 to March 1965, April 1967 to March 2014	11	
126	504	April 1939 to March 1955, April 1961 to March 1978	3.5	Estimates for pre-regulated conditions
127	0.05	April 1976 to March 1997	25	
130	4.4	April 1929 to March 1964	–17	The flow patterns changed in the mid 1960s with increasing annual 7-day minimum average flows likely associated with anthropogenic changes in the watershed. This analysis is for October 1928 to March 1964, which likely represents more of a natural condition than the latter period of record.

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	USGS station number	Station name	Drainage area (mi ²)	Regulated	From Atkins and Pearman (1994)	
					7Q10 (ft ³ /s)	Period of record
130	02450000	Mulberry Fork near Garden City, AL	358	N	5	October 1928 to September 1990
131	02450180	Mulberry Fork near Arkadelphia, AL	487	N	13	October 1976 to September 1986, October 1988 to September 1990
132	02450250	Sipsey Fork near Grayson, AL	92.1	N	1.9	October 1966 to September 1990
134	02450825	Clear Creek at New Hope Church near Poplar Springs, AL	101	N	7	October 1980 to September 1981
136	02453000	Blackwater Creek near Manchester, AL	181	N	4	October 1938 to September 1971, October 1979 to September 1982, October 1988 to September 1990
136	02453000	Blackwater Creek near Manchester, AL	181	N	4	October 1938 to September 1971, October 1979 to September 1982, October 1988 to September 1990
140	02455000	Locust Fork near Cleveland, AL	303	N	5.5	December 1936 to September 1986
141	02455500	Locust Fork at Trafford, AL	624	N	15	October 1930 to September 1969
142	02455980	Turkey Creek at Sewage Plant near Pinson, AL	27.4	N	11.0	July 1988 to September 1990
143	02456000	Turkey Creek at Morris, AL	80.9	N	10	January 1944 to September 1979
145	02456500	Locust Fork at Sayre, AL	885		29	October 1928 to March 1932, October 1941 to September 1990
147	02457595	Fivemile Creek near Republic, AL	51.9	N	14	May 1988 to September 1990
155	02462800	Davis Creek below Abernath, AL	45.3	N	0.20	October 1956 to September 1971
158	02464000	North River near Samantha, AL	223	N	1.8	December 1938 to September 1954, October 1968 to September 1990
159	02464146	Turkey Creek near Tuscaloosa, AL	6.16	N	0.70	February 1981 to September 1984, October 1986 to September 1990
160	02464360	Binion Creek below Gin Creek near Samantha, AL	57.2	N	8.4	October 1986 to September 1990
163	02465200	Lake Creek near Northport, AL	3.71	Y	0.30	August 1956 to September 1970
165	02465493	Elliotts Creek at Moundville, AL	32.3	N	8.7	October 1976 to September 1990
170	02467500	Sucarnoochee River at Livingston, AL	607	N	70	October 1938 to September 1990
178	02469800	Satilpa Creek near Coffeeville, AL	164	N	7.4	October 1956 to September 1970, October 1974 to September 1990
181	02471001	Chickasaw Creek near Kushla, AL	125	N	37	October 1951 to September 1990

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	Current investigation		Percentage change	Remarks
	7Q10 (ft ³ /s)	Period of record analyzed		
130	11	April 1965 to March 2014	108	The flow patterns changed in the mid 1960s with increasing annual 7-day minimum average flows likely associated with anthropogenic changes in the watershed. This analysis is for April 1965 to March 2014, which likely represents the current conditions.
131	13	April 1977 to March 1986, April 1989 to March 2014	0.0	Based on findings from station 02450000, the low flows at this station are likely substantially influenced by anthropogenic influences.
132	1.7	April 1967 to March 2014	-10	
134	11	April 1994 to March 2014	51	
136	3.1	April 1939 to March 1971	-22	QAQC analysis indicated differences in flow patterns from the early to latter periods of record. This period likely represents more natural conditions than the latter period of record.
136	3.4	April 1980 to March 1982, April 1989 to March 2014	-15	QAQC analysis indicated differences in flow patterns from the early to latter periods of record. This period likely includes anthropogenic influences.
140	5.6	April 1937 to March 1986, April 1993 to March 2014	1.8	
141	15	April 1931 to March 1969, April 1993 to March 1997	0.0	
142	8.5	April 1989 to March 2014	-23	
143	10	April 1944 to March 1979, April 2002 to March 2011	0.0	
145	38	April 1964 to March 2014	31	Early part of record excluded due to differences in flow patterns as indicated in the QAQC analyses. Possible influence from mining operations.
147	15	April 1989 to March 2014	7.1	
155	0.23	April 1957 to March 1971	15	
158	1.9	April 1939 to March 1954, April 1969 to March 2014	5.6	
159	0.74	April 1981 to March 1984, April 1987 to March 2014	5.7	
160	8.6	April 1987 to March 2014	2.4	
163	0.28	April 1957 to March 1970	-6.7	
165	8.4	April 1977 to March 2014	-3.4	
170	69	April 1939 to March 2014	-1.4	
178	5.9	April 1957 to March 1970, April 1975 to March 2014	-20	
181	32	April 1952 to March 2014	-14	

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

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Site index number (fig. 1)	USGS station number	Station name	Drainage area (mi ²)	Regulated	From Atkins and Pearman (1994)	
					7Q10 (ft ³ /s)	Period of record
184	02479431	Pond Creek near Deer Park, AL	20.4	N	0.10	October 1976 to September 1990
186	02479560	Escatawapa River near Agricola, AL	562	N	115	August 1973 to September 1990
190	03572110	Crow Creek at Bass, AL	131	N	2.5	May 1975 to September 1990
192	03574500	Paint Rock River near Woodville, AL	320	N	6.1	January 1936 to September 1990
194	03575000	Flint River near Chase, AL	342	N	68.0	October 1929 to September 1981, October 1982 to September 1990
197	03575830	Indian Creek near Madison, AL	49	N	1.9	October 1959 to September 1966, October 1975 to September 1990
199	03576250	Limestone Creek near Athens, AL	119	N	10	October 1939 to September 1970
200	03576500	Flint Creek near Falkville, AL	86.3	N	0.0	August 1952 to September 1970
202	03586500	Big Nance Creek at Courtland, AL	166	N	0.8	September 1935 to September 1940, April 1945 to September 1981, March 1988 to September 1990
202	03586500	Big Nance Creek at Courtland, AL	166	N	0.8	September 1935 to September 1940, April 1945 to September 1981, March 1988 to September 1990
210	03592500	Bear Creek at Bishop, AL	667	Y (PR)	28	October 1926 to May 1928, March 1929 to March 1932, October 1933 to September 1979

Table 7. Differences between the annual minimum 7-day average streamflow with a 10-year recurrence interval published in this report and previously published values.—Continued

[USGS, U.S. Geological Survey; mi², square mile; ft³/s, cubic foot per second; N, no; Y, yes; Y (PR), currently regulated but comparison was for pre-regulation conditions; QAQC, quality assurance and quality control; SIMS, Site Information Management System]

Site index number (fig. 1)	Current investigation		Percentage change	Remarks
	7Q10 (ft ³ /s)	Period of record analyzed		
184	0.14	April 1977 to March 1999	40	
186	89	April 1974 to March 2014	-23	
190	2.7	April 1976 to March 1996	8.0	
192	6.0	April 1936 to March 2014	-1.6	
194	69	April 1931 to March 1981, April 1983 to March 1994	1.5	
197	1.9	April 1960 to March 1966, April 1976 to March 2002	0.0	
199	10	April 1940 to March 1970, April 1995 to March 2014	0.0	
200	0.0	April 1953 to March 1970, April 1993 to March 1999, April 2012 to March 2014	0.0	
202	0.81	April 1936 to March 1940, April 1945 to March 1981	1.3	
202	0.89	April 1988 to March 2014	11	
210	30	April 1927 to March 1928, April 1929 to March 1932, April 1934 to March 1979	7.1	

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