# FLOW DURATION AND LOW-FLOW CHARACTERISTICS OF SELECTED ARKANSAS STREAMS



U.S. GEOLOGICAL SURVEY
Water-Resources Investigations
Report 92-4026

Prepared in cooperation with the ARKANSAS SOIL AND WATER CONSERVATION COMMISSION

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By A.H. Ludwig

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ARKANSAS SOIL AND WATER CONSERVATION COMMISSION

# U.S. DEPARTMENT OF THE INTERIOR

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# CONVERSION FACTORS AND VERTICAL DATUM

Multiply	<u>By</u>	To obtain
inch (in.)	25.4	millimeter
foot (ft)	0.3048	meter
cubic foot per second (ft <sup>3</sup> /s)	0.02832	cubic meter per second
mile (mi)	1.609	kilometer
square mile (mi <sup>2</sup> )	2.590	square kilometer
acre	0.4047	hectare
million gallon per day (Mgal/d)	0.0438	cubic meter per second

<u>Sea level</u>: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929--a geodetic datum derived from a general adjustement of the first-order level nets of the United States and Canada, formerly call Sea Level Datum of 1929.

# FLOW DURATION AND LOW-FLOW CHARACTERISTICS

#### OF SELECTED ARKANSAS STREAMS

By A.H. Ludwig

#### ABSTRACT

Water-supply characteristics of streams are determined by their low-flow frequency and flow duration. In Arkansas, duration and frequency of low flows have been determined from records at 48 currently active continuous-record gaging stations, 65 discontinued continuous-record gaging stations, and 182 partial-record gaging stations. Low-flow frequency is closely associated with physiographic characteristics. The analyses indicate that streams in the Springfield-Salem Plateau, in the southern Ouachita Mountains, and in parts of the Mississippi Alluvial Plain have dependable water supplies and that streams in the central and southern part of the Coastal Plain, in the Boston Mountains, Arkansas Valley, and northern Ouachita Mountains do not have dependable supplies.

#### INTRODUCTION

Water use in Arkansas has increased dramatically in recent years. Since 1960, when formal collection of water-use records was initiated in the State, the use of water for all purposes except power generation increased approximately 320 percent. When water use for power generation, which is entirely from surface water, is included, the increase is more than 4,000 percent. Thus competition for a share of the States' water resources is becoming more critical.

Although floods are impressive and often destructive, the low-flow characteristics of a stream ultimately affect its utilization by man. Specific information on the low-flow characteristics of streams is essential to State water-management agencies such as the Arkansas Soil and Water Conservation Commission and the Arkansas Department of Pollution Control and Ecology when dealing with problems related to irrigation, municipal and industrial water supplies, fish and wildlife conservation, and dilution of waste. Flow duration and low-flow frequency data are of particular value to management agencies responsible for the development and management of the State's water resources.

To provide the flow duration and low-flow frequency data needed by the various water-management agencies, the U.S. Geological Survey collects streamflow data at gaging stations throughout the State and periodically analyzes the streamflow characteristics at these stations. Data used in the streamflow analyses presented in this report were collected by the U.S. Geological Survey in cooperation with many State and Federal agencies, principally the Arkansas Geological Commission and the U.S. Army Corps of Engineers. The analysis of the data and the preparation of this report was done in cooperation with the Arkansas Soil and Water Conservation Commission.

## Purpose and Scope

This report updates previously published low-flow characteristics for streams in Arkansas and presents low-flow characteristics for stations established since 1970. The report contains low-flow characteristics for 113 continuous-record gaging stations, which includes 48 currently active and 65 discontinued stations. Low-flow characteristics computed for these stations include the annual 1-, 7-, 10-, 30-, and 60-day low flows with recurrence intervals of 2, 5, 10, 20, and 50 years, and flow duration values for a series of probabilities of exceedance between 2 and 98 percent. The report also includes estimates of the annual 7-day low-flow having recurrence intervals of 2 and 10 years for 182 partial-record gaging stations.

Flow-duration and low-flow characteristics for regulated and unregulated streams were updated for this report. Data for regulated streams are included herein when the length of record under regulated conditions is sufficient and where the pattern of regulation is considered to have been consistent for the period of regulation and is expected to continue. Data for unregulated periods prior to 1970 for currently regulated streams are contained in the previously published low-flow report by Hines (1975).

Low-flow characteristics were computed on the basis of streamflow data for the period of record for discontinued continuous-record gaging stations and through September 1990 for active continuous-record gaging stations. Base-flow measurements at partial-record stations were supplemented, for comparative purposes, by a minimum of three additional measurements made during 1988-1990. Data included herein are site specific, that is, they apply only to the point on a stream where the discharge measurements were made.

#### **Previous Investigations**

This report is the fourth in a series of reports dealing with statewide low-flow stream characteristics. The first report by Hines (1965) contained information on low-flow frequency and flow duration for unregulated sites. The second report (Hines, 1975) contained updated low-flow statistical information for regulated as well as unregulated sites. Hunrichs (1983) identified perennial streams in most areas of Arkansas based on a range of 7-day 10-year low flow  $(7Q_{10})$  discharges. This report is an update, based on the additional period of record (1970-1990), of the information contained in the second report by Hines (1975).

Techniques for determining the storage requirements of Arkansas streams are described in a report by Patterson (1968). Another report by Patterson (1971) contains information on the magnitude and frequency of floods in Arkansas through 1968. This work has also been updated through 1984 in a report by Neely (1987). These and other reports describing streamflow characteristics in Arkansas are listed in Selected References.

#### Stream Gaging Network

The data used in this report were collected at 113 continuous-record gaging stations and 182 partial-record stations. The location of these stations is shown in figure 1. Of the 113 continuous-record stations, 48 are currently active and 65 were discontinued prior to 1988. Six of the active continuous-record gaging stations have less than 10 years of record and have been analyzed as partial-record stations. A continuous-record gaging station is a gaging

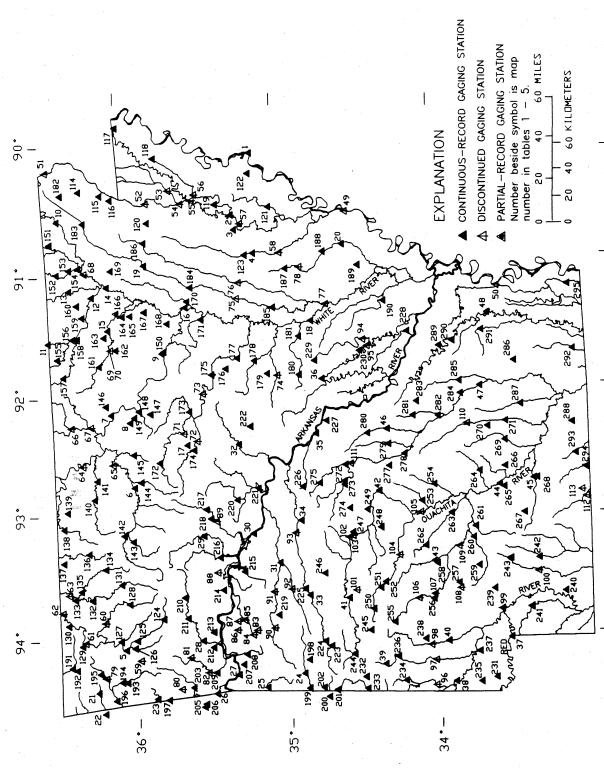


Figure 1.--Locations of continuous-record gaging stations and partial-record gaging stations in Arkansas.

station on a stream where gage height is recorded continuously and for which daily mean discharge is computed. A partial-record station is a station on a stream where limited hydrologic data, such as discharge measurements, are collected periodically.

Collection of daily-discharge data began in Arkansas in 1922. By 1939, daily-discharge data were collected at 42 gaging stations. In 1990, 103 (91 percent) of the 113 active and discontinued continuous-record gaging stations have 20 or more years of record. Thirty-nine percent of the stations have 40 or more years of record. Forty four (96 percent) of the active gaging stations have 20 or more years of record.

In addition to records collected at continuous-record gaging stations, a minimum of 6 base-flow discharge measurements were made at each of the 182 partial-record stations. Most discharge measurements at partial-record stations were made from 1957 to 1968. These were supplemented by additional measurements made from 1988 to 1990. These measurements were used for estimating low-flow frequency at the partial-record stations.

#### METHODS OF ANALYSIS

#### Flow Duration

The flow-duration characteristic is defined as a daily-mean discharge for a stream that has been equaled or exceeded a specific percentage of days during the period of record. The flow-duration curve is a means of representing streamflow data that combine in one curve the characteristics of a stream throughout the range of discharge at a site.

Searcy (1959) described a method for compiling daily discharge data that can be used to develop flow-duration characteristics. In this method, the daily-mean discharges are separated into about 30 class intervals. Each class interval represents an incremental range in daily-mean discharge so that the total suite of class intervals encompasses the total range of discharge at the station for the period of record. Each daily-mean discharge for the period of record is assigned to the appropriate class interval. The number of days thus represented in each class interval are accumulated and the percentage of time that daily-mean discharges exceeded each class interval threshold are calculated. A flow-duration curve for the station is then derived from a log-probability plot of the lower limit of each class interval, in cubic feet per second, and the corresponding percentage of time that the discharge was greater than the threshold discharge for the class interval. A smoothed curve drawn through these points allows for the determination of the percentage of time that any discharge was exceeded at the given station during the period of record. An example of a flow-duration curve developed by this procedure is shown in figure 2. Discharges for selected duration values ranging from 2 to 98 percent are given for active and discontinued continuous-record stations in tables 1 and 2 located at the back of this report.

Useful information about the hydrologic characteristics of the drainage basin can be gained by examining the shape of the flow-duration curve for a gaging station. A curve with a steep slope throughout, denotes a stream with highly variable flow such as might be derived largely from direct runoff whereas a curve with a more gentle slope indicates the presence of surface- or ground-water storage.

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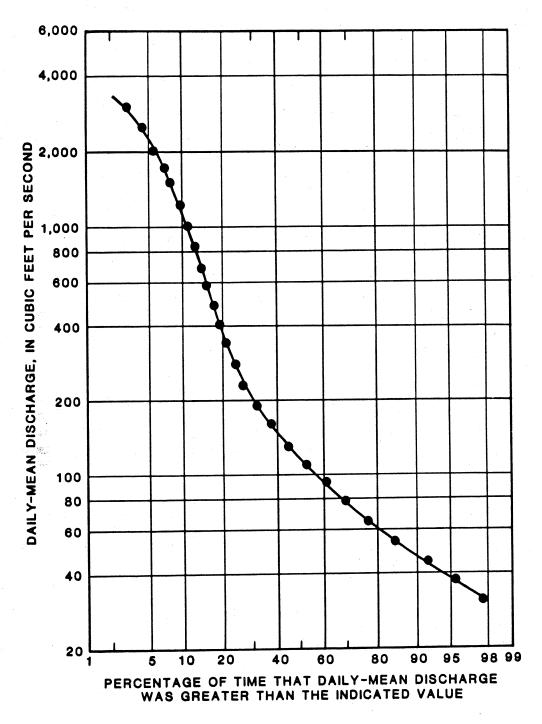


Figure 2.--Flow-duration curve for Tyronza River near Tyronza, Arkansas (07047600).

Three examples of flow-duration curves for streams with different drainage-basin characteristics are shown in figure 3. The flow-duration curve for James Fork near Hackett (07249400) is similar in shape to that of most streams in the Boston Mountains, Arkansas Valley, and Ouachita Mountains physiographic sections where streamflows recede rapidly after precipitation events because rocks underlying the basins are not capable of storing significant amounts of water for release during periods of deficient rainfall. The flow-duration curve for the station on the Saline River near Rye (07363500) is typical of the larger streams in the Coastal Plain Province where gradients are relatively flat, and flows are sustained, at least in part, by storage of water in the stream channels. Streamflow in the Eleven Point River (07072000) is well sustained as indicated by the flat slope of the flow-duration curve for the station near Ravenden Springs. This stream, like many others in the Springfield-Salem plateaus section is supported by discharges from springs in the carbonate rocks which underlie the area. Thus, by comparison of flow-duration data, the user obtains reconnaissance-type information to identify basins with similar geology. Flow-duration values can be used to evaluate the feasibility and adequacy of storage facilities and the availability of streamflow for water supply and waste dilution.

The flow-duration characteristic is not related to the sequence of flow events but does include the full range of daily-mean discharges at the station. In other words, the days characterized by a given exceedance level may not have been consecutive, and may have either occurred in a single year or have been distributed over several years.

### **Low-Flow Frequency**

# **Continuous-Record Stations**

The low-flow frequency characteristic is defined as the lowest daily-mean discharge for a selected consecutive-day period for a given recurrence interval in years. The data used to define low-flow frequency are the lowest daily-mean discharges for 1, 7, 10, 30, and 60 consecutive days in each year of record. Points on the frequency curve for the stated consecutive-day periods and for selected recurrence intervals define the frequency at which the discharge at a station on a given stream will recede to the level stated. For example, a 7-day 2-year low flow  $(7Q_2)$  of 10 ft /s for a station indicates that the minimum daily-mean discharge for 7 consecutive days will be equal to or less than 10 ft /s, on the average, once in 2 years. The probability that a given discharge will occur in any year is the reciprocal of the recurrence interval. Thus, in the example above there is a 50 percent chance that the stated flow will occur in any given year. Similarly a  $7Q_{10}$  has a 10 percent chance of occurring in any given year.

Frequency curves are defined by two methods: mathematical and graphical. For comparison purposes both methods are described separately herein. The graphical curve is considered to be the basic frequency curve for determining annual low flows (Riggs, 1972) and its use is recommended when the frequency curve based on a mathematical solution does not fit the lognormal plot of the data.

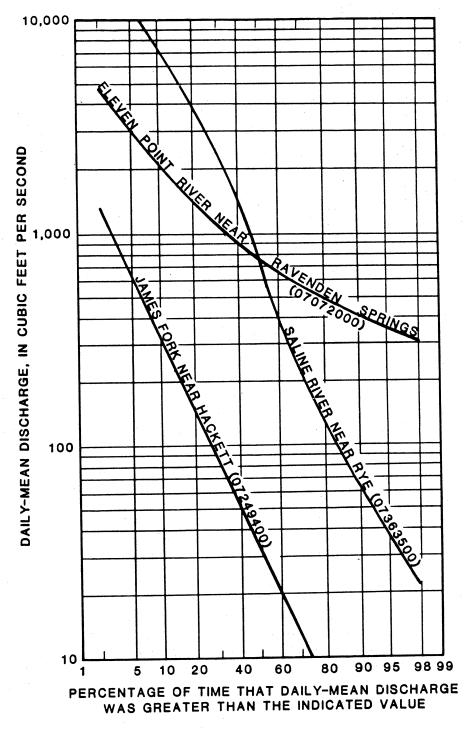


Figure 3.--Flow-duration curves for selected Arkansas streams.

For the mathematical solution, low-flow frequency curves were determined by fitting the three-parameter Pearson Type III statistical distribution to the selected minimum annual low flow series. Low flow characteristics for selected recurrence intervals were computed by solving the equation:

$$\text{Log Q} = X + KS$$

where Q is the low-flow characteristics for the selected recurrence interval,

X is the mean of the logarithms of the low-flow series,

K is a frequency factor for Pearson Type III distributions (Interagency Advisory

Committee on Water Data, 1982), and

S is the standard deviation of the logs of the annual low flow series.

For stations that contain zero flow or outlier values, a conditional probability was used. Initially, low-flow characteristics were computed for selected non-exceedance probabilities for the non-zero annual values. These were modified to produce a new non-exceedance probability based on the number of zero-flow years in the record and replaced the non-exceedance probability and K value in the above equation for each low-flow characteristic.

For the graphical solution, the values for each of the lowest daily-mean discharges were plotted as the ordinate on a log scale and the non-exceedance probability, or its reciprocal, the recurrence interval, was plotted as the abscissa. The non-exceedance probability was computed using the equation:

$$P = 1/R = M/(N+1)$$

where P is the non-exceedance probability,

R is the recurrence interval,

M is the order number of the annual value from the annual 1-, 7-, 10-, 30-, and 60-day low flow series arranged from lowest to highest in magnitude, and

N is the total number of years in the low flow series.

An example of low-flow frequency curves based on the log-Pearson Type III distribution and graphical methods is shown in figure 4. Points on the frequency curves for the above-stated consecutive-day periods and for selected recurrence intervals are given in table 3 for active continuous-record gaging stations and in table 4 for discontinued continuous-record gaging stations.

The annual low-flow series is based on data collected during the climatic year, April 1 through March 31. The climatic year begins and ends during the normal seasons of high flow so that all related low flows for a particular drought are contained in the same climatic year.

Stations analyzed as continuous-record gaging stations were limited to those having more than 10 years of record. Continuous-record gaging stations having less than 10 years of record were analyzed by the same procedures as those used for partial-record stations.

Statistical analyses for regulated streams are included in this report for streams with at least 13 years of post-regulation record. The first 3 years of post-regulation record are not included in the analyses to allow time for the complete filling of the reservoir and the development of a standardized procedure for reservoir operation.

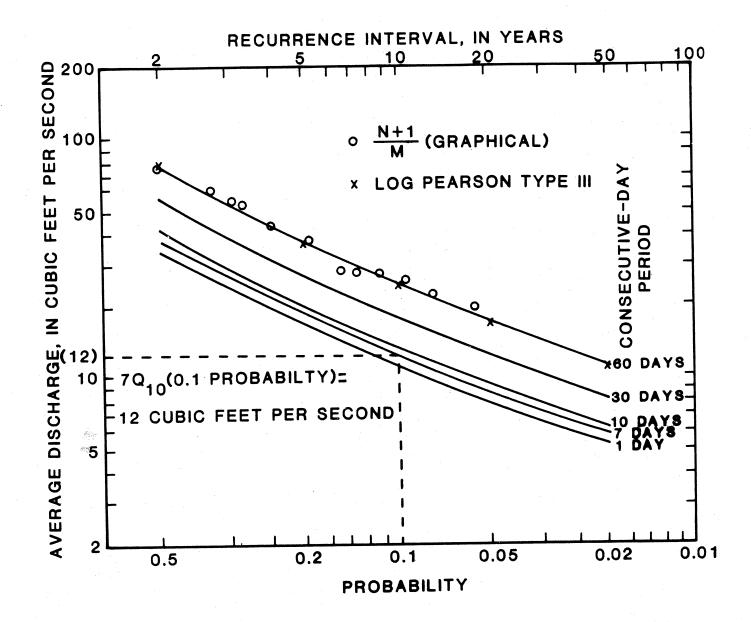


Figure 4.--Low-flow frequency curves for Saline River near Rye, Arkansas (07363500).

# **Partial-Record Stations**

Partial-record stations and those continuous-record stations having less than 10 years of record have inadequate data for analysis of the distribution of low-flow frequency curves as shown in figure 4. However, daily-mean flows from short-term continuous-record gaging stations and discharge measurements made during base-flow periods at partial-record stations may be correlated with daily-mean flows at nearby long-term continuous-record stations (index sites). This correlation usually involves plotting the measured discharges at partial-record stations with the concurrent daily-mean discharge at the nearby index site on log-log paper to define the relation between the two sets of data. Low-flow characteristics at the partial-record station can then be estimated by transferring the low-flow characteristics from the index site using the visually-determined relation to the partial-record station (fig. 5).

Correlations with index stations required a representative amount of concurrent data. For short-term continuous-record stations, between 10 and 25 concurrent daily-mean discharges during separate base-flow recessions were used to define the relation between the short-term and long-term continuous-record stations. For low-flow partial-record stations, only those stations having 6 or more measurements over a period of several years were used in the analyses. Most of the discharge measurements at the partial-record stations were made during the 1950's and 1960's. These were supplemented by at least three measurements at each station during low-flow periods in 1988 and 1990. This technique assumes that low-flow characteristics for a given frequency will occur concurrently at the partial-record station and at the index site. This assumption is most valid for two stations with hydrologically similar basins. Criteria used in this analysis is that the index station and the partial-record station selected for correlation drain basins with similar geology, have drainage basins of similar size (less than a ten fold difference in drainage area) and in geographic proximity to each other. Also, the 7Q and 7Q characteristics for the selected index station had to be greater than zero.

# **Evaluation of Trends in Streamflow Data**

Trends in stream discharges over long periods of time may be the result of natural or manmade influence. Man-induced changes include changes in land use, regulation by reservoirs, increased ground-water discharge due to channelization, and decreasing streamflow due to withdrawals for irrigation. Climatic trends generally are not significant for extended periods of time but within a limited time period, several climatic cycles may occur that might indicate a climatic trend and might effect the results of low-flow analyses. A plot of the percent difference of annual mean discharges from the daily-mean discharge for the 50-year period of record for stations on the Buffalo River in the northern part of the State and Saline River in the southern part are shown in figure 6. A Kendall Tau test (Kendall, 1975) for trends made on the annual 7-day low-flow series for the two stations indicates that no trend exists in the 7day low flows for the entire 50-year period of record. It is apparent, however, that within the period of record, streamflow was highly variable and there were periods, particularly during the 1950's and 1960's when streamflow was deficient and in the 1970's when it was It is possible that detectable trends in 7-day low flows may exist for these excessive. shorter periods.

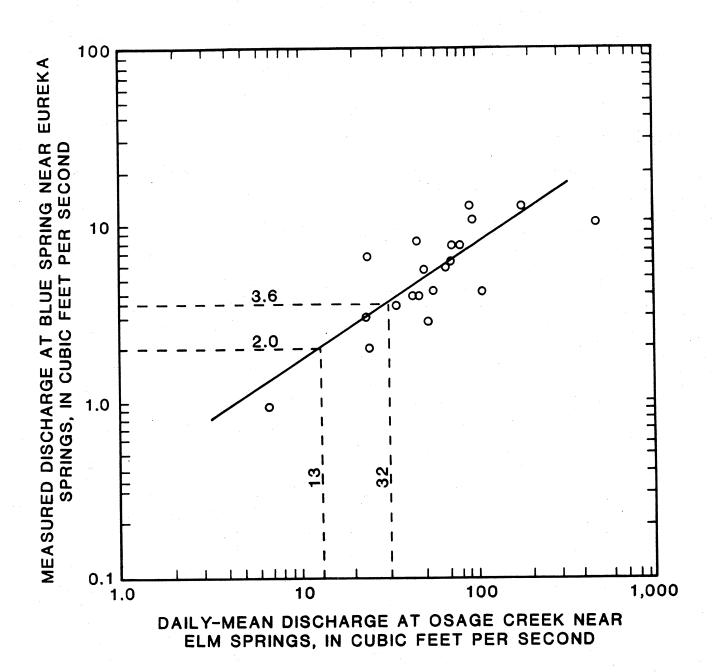


Figure 5.--Relation between daily-mean discharge at continuousrecord gaging station, Osage Creek near Elm Springs, Arkansas, and measured discharges at partial-record station, Blue Spring near Eureka Springs, Arkansas.

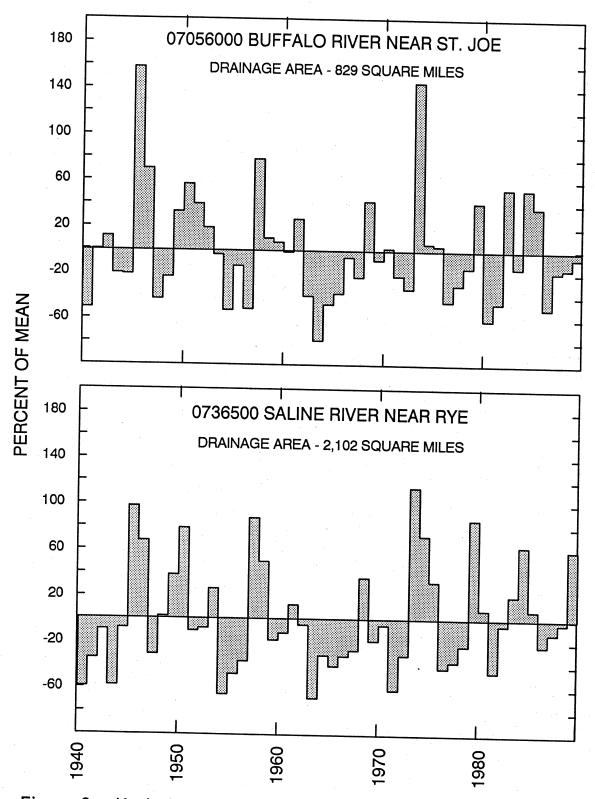


Figure 6.--Variation of annual mean discharge from daily-mean discharge, in percent, for Buffalo River near St. Joe and Saline River near Rye, Arkansas, 1941-90.

In the late 1960's two hydrologic benchmark stations were established in Arkansas, one on North Sylamore Creek near Fifty Six (07060710) and the other on the Cossatot River near Vandervoort (07340300). These stations are located in relatively undisturbed watersheds in remote parts of the State where hydrologic data are collected to identify climatic variations that could be separated from manmade influences in other basins. An analysis of discharges for the annual 7-day low-flow series at these stations indicates that no trend exists in the streamflow characteristics for the past 23 years. It is reasonable to infer therefore, that climatic conditions have been consistent during this period and that trends noted for streamflows elsewhere in the State could be attributed to man-induced influence.

Trend analyses were made of the annual 7-day low-flow series for all active and discontinued regular-gaging stations in the State as part of this study. The analyses indicate a long-term decline in flows in some streams in the Mississippi Alluvial Plain in eastern Arkansas, most notably in the St. Francis basin and in the main stem of Bayou Bartholomew where irrigation withdrawals from surface- and ground-water sources have increased with time. Elsewhere in the State there have been few long-term trends in 7-day low flows over the past two decades.

#### FACTORS AFFECTING LOW FLOW

#### Climate

The climate in Arkansas is mild and moderately humid. The average annual precipitation ranges from 40 inches in parts of northwestern Arkansas to 58 inches in parts of the Ouachita Mountains, and averages about 48 inches for the State (Freiwald, 1985). Rainfall is fairly well distributed throughout the year but periods of deficient precipitation may occur during any month. The average monthly precipitation ranges from about 3 inches in August to 5 inches in May. The lowest precipitation, and consequently the minimum streamflows generally occur during the late summer or fall.

#### **Physiography**

Arkansas is divided into three physiographic provinces (fig. 7). The southeastern half of the State lies in the Coastal Plain Province and the northwestern half lies in the Ozark Plateaus and Ouachita Province (Fenneman, 1938). The surficial features and underlying geologic formations in each province are the principal factors responsible for differences in low-flow characteristics of streams within and between the provinces.

#### **Ozark Plateaus and Ouachita Province**

The Ozark Plateaus and Ouachita Province are underlain by consolidated rocks of Pennsylvanian and older age consisting of sandstones, shales, and carbonates. The area has, for the most part, been extensively folded and faulted. The primary porosity of the rocks has been reduced by compaction and cementation, and water movement in the subsurface is predominantly through secondary openings such as joints, fractures, or solution channels. Residual soils are thin, generally less than about 15 ft in thickness, thus limiting the potential for bank storage. The upper reaches of streams in the region have steep gradients and the streams are generally flashy.

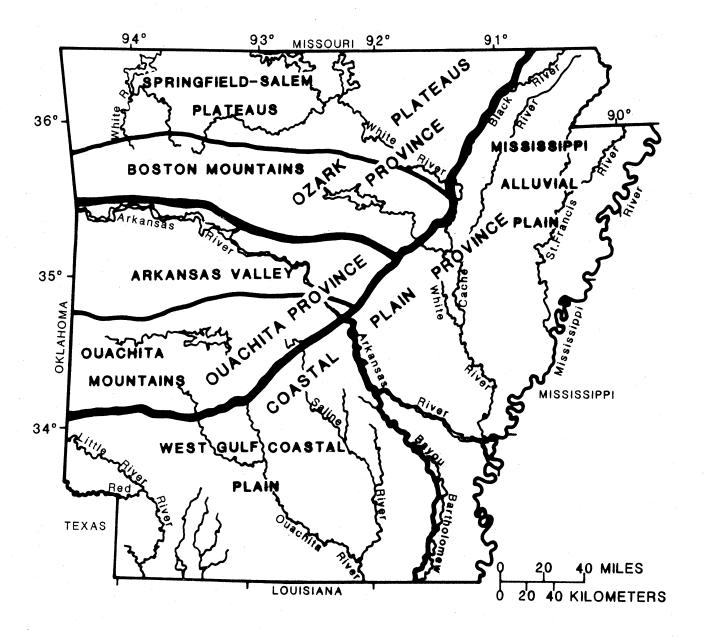


Figure 7.--Physiographic provinces in Arkansas (from Fenneman, 1938).

Two areas within the Ozark Plateaus and Ouachita Province are hydrologically significant because the rocks in these areas are capable of storing and subsequently releasing large amounts of water to sustain streamflow. These include the Springfield-Salem Plateaus and the southern part of the Ouachita Mountains sections.

The Springfield-Salem plateaus section is a highly dissected area of rugged relief with deep narrow valleys separated by sharp ridges. Local relief commonly is about 200 ft. The limestone and dolomite formations underlying the section contain numerous faults and solution channels which are the source of water for a large number of perennial springs. As a result, most of the streams in the section have a well sustained base flow.

The southern part of the Ouachita Mountains section is underlain by highly folded and faulted beds of sandstone, shale, chert, and novaculite. The surface expression of these beds is a series of east-west trending ridges, some of which are as much as 300 ft above the adjacent valley floor. Chert and novaculite units, which underlie some of the southern parts of the area, are very brittle and have been highly fractured because of intense deformation. The area has many springs which contribute to the base flow of streams locally.

The remainder of the Ouachita Province is essentially a large east-west trending synclinorium with the Boston Mountains to the north and the northern part of the Ouachita Mountains to the south. Some of the highest elevations (2,800 ft above sea level) in the State are on the ridges of the northern Ouachita Mountains near the Oklahoma State line. The Arkansas River traverses the approximate center of this area. Bedrock in this part of the State consists of alternating sequences of sandstone and shale which have a very low permeability and porosity. Except for the Arkansas River, all streams in this section recede to zero baseflow.

#### **Coastal Plain Province**

The Coastal Plain Province is a flat to gently rolling region which is underlain by interbedded layers of sand, silt, and clay, and in some places calcareous material. The Coastal Plain deposits are relatively young ranging in age from Cretaceous to Holocene. The beds are only slightly cemented and the region is free of major structural deformation. The Coastal Plain is divided into the Mississippi Alluvial Plain which includes most of eastern Arkansas and the West Gulf Coastal Plain in southern and southeastern Arkansas.

The Mississippi River Alluvial Plain is a relatively flat, featureless plain that encompasses about 3,000 mi<sup>2</sup> in eastern Arkansas. Principal relief in the section is Crowleys Ridge, a narrow north-south trending divide between the St. Francis and White Rivers. Although the section is well drained, numerous oxbow lakes and swampy areas delineating relic stream channels dot the landscape. Secondary streams are very sluggish, with gradients generally less than about 0.4 ft/mi. Much of the section is underlain by a layer of dense clay that retards the downward percolation of water into the underlying aquifer. The section contains excellent farmland, and irrigation, with ground water as the primary source of water, is practiced extensively.

The West Gulf Coastal Plain is a flat to gently rolling section with a well defined stream system. Local relief generally is less than about 100 ft. The section is underlain by unconsolidated sediments, which in many places allow for rapid infiltration of water. However, may of the smaller streams go dry during periods of deficient precipitation because they are not incised deeply enough to intercept the water table. Numerous seeps or springs occur in places where differences in permeability between subsurface units have produced perched water systems.

#### **Regulation and Diversion**

Few streams in Arkansas are completely unaffected by regulation or diversion. There are approximately 2,600 lakes and reservoirs in Arkansas with surface areas of 5 acres or more, some of which are located in virtually every drainage basin in the State (Arkansas Soil and Water Conservation Commission, 1981). The effects of regulation are slight downstream from small retention reservoirs that are used for sediment control, and livestock or small municipal-water supplies. However, in basins where major control structures have been built, streamflow no longer reflects short-term variations in natural flow.

The Arkansas River is completely regulated by a series of locks and dams, both in the State and upstream in Oklahoma, constructed as part of the McClellan-Kerr Navigation System. The system has been in place in Arkansas since 1970. Similarly, flows in the White River are regulated by six reservoirs on the mainstem and tributaries in Arkansas and Missouri; the most recent reservoir, Greers Ferry Lake, was placed in operation in 1962. The Red River has been regulated since 1943 with the construction of Lake Texoma, and more recently by municipal-supply reservoirs on Little River and its tributaries, Rolling Fork and Saline Rivers. The Ouachita River has been regulated since the 1920's by Lakes Catherine, Hamilton, and Ouachita and more recently by DeGray Lake on Caddo River.

Diversions for irrigation have affected the natural flow of many of the streams in eastern Arkansas. Two streams, Bayou Meto and L'Anguille river, are considered to be perennial only in certain upstream reaches but go dry downstream each year because of diversions for irrigation (Hunrichs, 1983). In other instances, return flows from irrigation runoff have been observed to contribute to the base flows of certain streams.

In some instances, municipal water supplies are withdrawn above a gaging station and treated sewage effluent is discharged below the gaging station or into another drainage basin. For example, the city of Little Rock diverts approximately 20 Mgal/d of water from Lake Winona on the Alum Fork of the Saline River and discharges its treated sewage effluent into the Arkansas River.

# FLOW DURATION AND LOW-FLOW FREQUENCY DATA

The results of the analyses performed for this report are presented in tables 1 through 5 at the back of this report. The format used in these tables is, for the most part, similar to that used in previous reports on low-flow characteristics in Arkansas.

Tables 1 and 2 contain flow-duration data for 48 active and 65 discontinued continuous-record gaging stations, respectively. Some station records have been separated into segments conforming to the unregulated and regulated periods for the station. The period of record used for each segment is shown in the "Records Used (Water Years)" column.

Tables 3 and 4 contain low-flow frequency data for 48 active and 65 discontinued continuous-record gaging stations, respectively. As in tables 1 and 2, these records have been separated into non-regulated and regulated periods when appropriate.

No values are shown in tables 3 and 4 for recurrence intervals beyond the period at which flows recede to zero. Also, a value of <0.1 is shown where zero flow is uncertain. This notation is arbitrary and is used where a small, but non-zero, value was computed for the particular frequency.

Table 5 contains station descriptions and abbreviated low-flow frequency data for 182 partial-record stations. These data are estimated from a relation between discharge measurements made at the partial-record station and concurrent daily-mean discharge at two or more continuous-record gaging stations. Data in table 5 also include the number of partial-record station measurements used to develop the relation and the index station which provided the best correlation. In cases where the inclusion of recent (1987-89) low-flow measurements did not improve a given correlation, the  $7Q_2$  and  $7Q_{10}$  values from the earlier report by Hines (1975) are given in the tables and noted.

Water !

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#### **GLOSSARY**

- Base flow, that part of streamflow derived mostly from effluent ground water.
- Continuous-record gaging station, a gaging station where a continuous record of discharge is obtained.
- <u>Flow duration</u>, the percentage of time during the period of record that a given daily-mean flow was equaled or exceeded. This parameter consists of two elements--magnitude, in cubic feet per second, and the percentage of time.
- <u>Flow-duration curve</u>, a cumulative frequency curve that shows the percentage of time that specified discharges are equaled or exceeded.
- Low-flow frequency, the recurrence interval at which the annual minimum average daily-mean streamflow for a specified number of consecutive days will recede to or less than a given amount. This parameter consists of three elements--specified number of consecutive days, magnitude, in cubic feet per second, and the average time interval of recurrence, in years. For example,  $7Q_{10}$  means that the annual minimum average daily-mean flow for 7 consecutive days will be equal to or less than the given amount on the average of once each 10 years.
- <u>Partial-record station</u>, a gaging station where periodic streamflow data are collected. A low-flow partial-record station is where base-flow discharge is measured.

Table 1.--Flow duration at active continuous-record gaging stations

Ma-	Station		Drainag	used		, in cub exceed	ic feet ed for	per se	cond, wh	ich was eq ime indica	ualed or
Map no.	number	Station name	(square miles)	(wate: years)		95	90	50	10	5	2
				Mississ	sippi Rive	r Main S	tem				
1	07032000	Mississippi River at Memphis	932,800	1934-90	119,000 1	42,000 1	72,000	394,000	944,000	1,120,000	1,300,000
				st	. Francis	River B	asin				
2	07047800	St. Francis River at Parkin	Indeter-	1931-90	290	382	545	2,000	5,630	7,820	10,600
3	07047900	St. Francis Bay at Riverfront	Indeter- minate	1936-90	248	383	581	3,100	15,300	20,600	27,300
4	07047942	L'Anguille River near Colt	535	1972-90	9.0	19	33	385	2,030	2,920	4,400
				Wh	ite River	Basin				-	
5	07048600	White River near Fayetteville	400	1965-90	2.0	4.2	6.1	3 162	1,310	2,290	4,280
, 6	07056000	Buffalo River near St. Joe	829	1940-90	23	32	46	315	2,320	3,710	7,580
7	07060500	White River at Calico Rock	9,978	1952-90	1,160	1,650	2,280	6,790	21,000	25,900	32,000
8	07060710	North Sylamore Creek near Fifty-Six	58.1	1967-90	2.9	3.1	4.1	13	86	158	337
9	07061000	White River at Batesville	11,070	1938-51	1,260	1,570	1,960	6,570	27,700	39,000	67,100
10	07064000	Black River near Corning	1,749	1939-90	291	333	384	1,000	4,060	5,390	8,790
11 .	07069200	Mammoth Spring at Mammoth Springs	Indeter- minate	1981-90	191	213	237	361	494	525	547
12	07069500	Spring River at Imboden	1,183	1937-90	292	328	368	771	2,570	3,790	6,700
13	07072000	Eleven Point River near Ravenden Springs	1,134	1931-33 1936-90	306	344	395	794	2,050	2,840	4,430
14	07072500	Black River at Black Rock	7,369	1931-90	2,060	2,320	2,610	5,430	18,700	24,400	36,500
15	07074000	Strawberry River near Poughkeepsie	473	1937-90	47	53	61	187	956	1,620	3,390
16	07074500	White River near Newport	19,860	1953-90	4,020	4,400	5,050	14,500	59,500	82,000	116,000
17	07075300	South Fork Little Red River at Clinton	148	1963-90	0	.1	1.2	82	543	918	1,820
18	07077000	White River at DeValls Bluff	23,431	1965-90	6,320	7,590	8,710	19,900	56,100	65,400	79,800
19	07077380	Cache River at Egypt	701	1966-90	17	25	42	279	2,660	3,500	4,640
20	07077950	Big Creek at Poplar Grove	448	1972-90	1.5	6.1	16	288	1,890	2,590	3,460

Table 1.--Flow duration at active continuous-record gaging stations--Continued

			Drainage area	used	Flow,	in cubi exceede	c feet p d for pe	er sec rcenta	ond, which ge of tim	ch was equa ne indicate	led or
Map no.	Station number	Station name	(square miles)	(water years)	98	95	90	50	. 10	5	2 .
				Arkan	sas Rive	r Basin			-		
21	07195800	Flint Creek at Springtown	14.2	1962-90	1.7	2.3	2.5	8.	0 28	41	69
22	07195855	Flint Creek near West Siloam Springs, Okla.	59.8	1980-90	3.5	4.7	6.4	26	103	152	252
23	07196900	Baron Fork near Dutch Mills	40.6	1959-90	.2	.3	.5	10	82	146	327
24	07247000	Poteau River at Cauthron	203	1940-90	0	0	.3	35	468	936	2,000
25	07249400	James Fork near Hackett	147	1959-90	0	.3	.7	31	264	544	1,270
26	07250000	Lee Creek near Van Buren	426	1932-37 1950-90	0	.2	1.6	125	1,220	2,210	4,190
27	07250550	Arkansas River at James W. Trimble Lock and Dam near Van Buren	<sup>1</sup> 150,547	1972-90	130	1,080	2,630 2	3,500	112,000	141,000	173,000
28	07252000	Mulberry River	373	1939-90	.1	.6	3.4	176	1,360	2,190	3,860
29	07257000	Big Piney Creek	274	1952-90	0	. 4	2.7	122	1,000	1,640	2,970
30	07258000	Arkansas River at Dardanelle	<sup>1</sup> 153,670	1972-90	178	1,100	2,810 2	25,900	114,000	149,000	176,000
31	0726050	Petit Jean River at Danville	764	1948-90	3.4	6.1	12	182	2,530	3,110	3,980
32	07261000	Cadron Creek near Guy	169	1956-90	0	.3	1.7	99	670	1,070	2,130
33	07261500	Fourche LaFave River near Gravelly	410	1940-90	0	.1	1.8	127	1,180	2,140	4,540
34	07263000	South Fourche LaFave near Hollis	210	1942-90	0	0	.6	54	618	1,280	2,700
35	07263450	Arkansas River at Murray Dam at Little Rock	<sup>1</sup> 158,030	1972-90	977	1,900	3,550	30,200	131,000	165,000	204,000
36	07264000	Bayou Meto near Lonoke	207	1956-90	1.2	4.5	8.0	91	923	1,370	1,960
				Re	d River	Basin					
37	07337000	Red River at	<sup>2</sup> 48,030	1946-90	1,350	1,780	2,260	5,460	30,700	45,800	62,40
38	07340000	Little River	2,662	1932-90	13	40	100	1,306	11,500	16,900	24,90
39	07340300	Cossatot River		1968-90	10	12	15	68	409	785	1,50
40	07341200	) Saline River nea		1964-90	.9	1.8	6.5	87	1,020	1,550	3,25

Table 1.--Flow duration at active continuous-record gaging stations--Continued

Map	Station		Drainage area	used	Flow,	in cubi	c feet p	per sec ercenta	ond, which	h was equa e indicate	led or
no.	number	Station name	(square miles)	(water years)	98	95	90	50	10	5	2
41	07356000	Ouachita River near Mt. Ida	414	1943-90	13	21	31	235	1,580	2,830	5,370
42	07359500	Ouachita River near Malvern	1,585	1955-90	258	321	403	1,680	5,750	8,120	10,400
43	07361500	Antoine River at Antoine	178	1956-90	.1	.3	1.3	65	594	1,120	2,280
44	07362000	Ouachita River at Camden	5,357	1970-90	785	902	1,100	4,390	20,800	29,000	40,100
45	07362100	Smackover Creek near Smackover	385	1963-90	1.4	2.6	4.5	91	1,150	1,810	2,830
46	07363300	Hurricane Creek near Sheridan	204	1963-90	.3	1.7	3.2	44	568	1,120	2,110
47	07363500	Saline River near Rye	2,102	1939-90	22	38	63	662	7,570	10,900	15,900
48	07364150	Bayou Bartholomew near McGehee	576	1940-90	14	22	33	249	2,010	2,840	3,620

 $<sup>^{1}</sup>$ 22,241 square miles probably noncontributing.

 $<sup>^{2}</sup>$ 5,936 square miles probably noncontributing.

Table 2. -- Flow duration at discontinued continuous-record gaging stations

Map	Station		Drainaq area (square	used		excee	ded for	percenta	age of time	ch was equa e indicate	1
no.	number	Station name	miles			95	90	50	10	5	2
				Mississ	ippi Riv	er Main	Stem				
49	07047970	Mississippi River at Helena	41,700	1929-77	119,000	139,000	168,000	377,000	961,000	1,120,000	1,330,00
50	07265450	Mississippi 1,1 River near Arkansas City	30,600	1929-80	133,000	155,000	190,000	445,000	1,090,000	1,270,000	1,470,00
				St. F	rancis R	diver Bas	in		-		
51	07040100	St. Francis River	1,772	1931-87	101	129	182	871	5,670	7,970	11,20
52	07040450	St. Francis River at Lake City	2,374	1932-77	137	193	287	1,480	7,690	10,600	14,00
53	07046600	Right Hand Chute of Little River at Riverdale	2,106	1948-77	198	293	415	1,660	7,020	9,820	14,30
5 4	07047000	St. Francis River Floodway near Marked Tree	Indeter- minate	1935-70	0	0	3	.2 1,660	12,200	17,100	24,30
55	07047500	St. Francis River at Marked Tree	5,148	1936-73	105	140	224	1,410	2,900	3,290	3,80
6	07047600	Tyronza River near Tyronza	290	1950-74	32	40	50	124	1,200	2,390	3,5
57	07047902	St. Francis River at latitude of Wittsburg	<sup>1</sup> 6,475	1936-77	560	784	1,090	4,480	20,300	25,500	33,2
58	07047950	L'Anguille River at Palestine	786	1950-77	.0.	5 6.	2 36	484	3,110	4,570	7,3
	-			Wh	ite Rive	r Basin				. •	
59	07048000	West Fork White River at Greenla		1947-83	. 0	0		.2 26	233	429	85
60	07049000	War Eagle Creek near Hindsville	263	1953-70	3.	4 6.	2 8	.9 73	588	1,130	2,27
61	07049500	White River near Rogers	1,020	1954-63	10	25	39	345	2,460	4,220	8,14
62	07050000	White River at Beaver	1,244	1923-58	31	43	65	517	3,560	6,200	11,70
63	07050500	Kings River near Berryville	527	1940-75	4.	4 12	20	168	1,340	2,280	4,52
64	07055000	White River near Flippin	6,081	1953-81	354	597	906	3,750	13,600	17,500	21,10
65	07057000	Buffalo River near Rush	1,096	1930-70	35	51	71	382	2,770	4,610	9,49
66	07059000	North Fork River near Henderson	1,611	1930-43	369	421	460	772	2,610	3,760	6,52
67	07060000	North Fork River near Norfork Dam	1,808	1945-77	20	66	110	1,540	3,980	5,240	6,60
68	07069000	Black River at Pocahontas	4,845	1937-70	1,340	1,520	1,670	3,410	12,100	16,000	23,30
69	07073000	Strawberry River near Evening Shace	217 le	1940-79	23	.9 9.	5 13	59	403	746	1,68

Table 2.--Flow duration at discontinued continuous-record gaging stations--Continued

75000 75500 76000 76850 777500 777700	Patterson  Bayou DeView at Morton	166 ,037 421		98 0 0 42 0 35	95 8 1.6 .4 .1 48	90 3.5 3.4 .7 57	29 124 173 1,160	175 1,070 1,280 4,230	5 299 1,830 2,140 5,150	2 65 3,68 4,40 6,50
75000 75500 76000 76850 777500 777700	Evening Shade  Middle Fork Little Red River at Shirley  South Fork Little Red River near Clinton  Little Red River 1 near Heber Springs  Cypress Bayou near Beebe  Cache River at 1 Patterson  Bayou DeView at Morton  White River at 25	302 316 ,153 166 ,037	1940-84 1940-61 1965-80 1963-76 1928-31 1938-88	0 42	.1	3.4 .7	124 173 1,160	1,070 1,280 4,230	1,830 2,140 5,150	3,68 4,40
75500 76000 76850 777500 777700 777800	Red River at Shirley  South Fork Little Red River near Clinton  Little Red River 1 near Heber Springs  Cypress Bayou near Beebe  Cache River at 1 Patterson  Bayou DeView at Morton  White River at 25	316 ,153 166 ,037	1940-61 1965-80 1963-76 1928-31 1938-88	0 42	.1	.7 57	173 1,160	1,280	2,140 5,150	4,40
76000 76850 77500 777700 777800	Red River near Clinton  Little Red River 1 near Heber Springs  Cypress Bayou near Beebe  Cache River at 1 Patterson  Bayou DeView at Morton  White River at 25	166 .,037	1965-80 1963-76 1928-31 1938-88	42	48	57	1,160	4,230	5,150	
76850 777500 777700 777800	near Heber Springs Cypress Bayou near Beebe Cache River at 1 Patterson Bayou DeView at Morton White River at 25	166 ,037 421	1963-76 1928-31 1938-88	0			•			6,50
77500 77700 77800	near Beebe  Cache River at 1 Patterson  Bayou DeView at Morton  White River at 25	421	1928-31 1938-88		0	0	27	607	000	
77700	Patterson  Bayou DeView at Morton  White River at 25	421	1938-88	35			21	607	992	1,7
77800	Morton White River at 25		1940-77		50	69	432	3,770	4,930	6,4
177930			10-11	0	0	0	112	1,809	2,500	3,2
		5,555	1952-81	6,050	7,080	8,330 1	9,100	60,100	76,500	99,20
	Big Creek near Moro	77.4	1962-70	0	.2	.8	21	254	374	5.5
			Arkan	sas Riv	er Basin					
95000	Osage Creek near Elm Springs	130	1952-75	16	21	25	65	210	313	5
49500	Cove Creek near Lee Creek	35.3	1951-70	0	.1	.2	6.6	78	153	3
51000	Frog Bayou near Mountainburg	74.2	1938-61	0	0	0	1.5	246	423	8
51500	Frog Bayou at Rudy	216	1951-70	0	0	1.2	48	573	1,030	1,9
53000	Sixmile Creek at Chismville	24.1	1955-70	0	0,	0	1.9	73	101	1
53500	Sixmile Creek near Branch	36.7	1955-70	0	0	. 0	4.0	102	152	2
55000	Sixmile Creek at Caulksville	104	1955-70	0	0 ,	0	12	259	440	8
55500	Hurricane Creek near Branch	17.2	1955-70	. 0	0	0	2.5	51	87	1
56000	Hurricane Creek near Caulksville	53.0	1955-70	0	0	0	7.4	118	213	4
56500	Spadra Creek at Clarksville	61.1	1953-70	0	0.5	1.3	18	171	272	5
57500	Illinois Bayou near Scottsville	241	1949-70	.1	.3	1.3	100	852	1,480	2,8
58500	Petit Jean River near Booneville	241	1940-84	0	0	.1	35	496	989	2,3
59500	Petit Jean River near Waveland	516	1940-80	1.0	3.8	7.7	96	1,850	2,480	2,9
60000	Dutch Creek at Waltreak	81.4	1946-75	. 0	0	0	18	183	360	8
62500	Fourche LaFave River near Nimrod	684	1937-80	1.0	2.4	6.2	159	3,230	4,510	5,9
	49500 51000 51500 53500 55500 55500 56500 57500 58500 59500 60000	49500 Cove Creek near Lee Creek 51000 Frog Bayou near Mountainburg 51500 Frog Bayou at Rudy 53000 Sixmile Creek at Chismville 53500 Sixmile Creek near Branch 55000 Sixmile Creek at Caulksville 55500 Hurricane Creek near Branch 56000 Hurricane Creek near Caulksville 57500 Spadra Creek at Clarksville 57500 Illinois Bayou near Scottsville 58500 Petit Jean River near Booneville 59500 Petit Jean River near Booneville 59500 Petit Jean River near Waveland 60000 Dutch Creek at Waltreak	Elm Springs  49500 Cove Creek near Lee Creek  51000 Frog Bayou near Mountainburg  51500 Frog Bayou at 216 Rudy  53000 Sixmile Creek at 24.1 Chismville  53500 Sixmile Creek near 36.7 Branch  55000 Sixmile Creek at 104 Caulksville  55500 Hurricane Creek at Caulksville  56500 Hurricane Creek near Branch  56000 Hurricane Creek at Clarksville  57500 Illinois Bayou near Scottsville  58500 Petit Jean River near Booneville  59500 Petit Jean River near Booneville  59500 Petit Jean River near Waveland  60000 Dutch Creek at 81.4 Waltreak  62500 Fourche LaFave	95000 Osage Creek near Elm Springs  49500 Cove Creek near	95000 Osage Creek near Elm Springs  49500 Cove Creek near 35.3 1951-70	Elm Springs  49500 Cove Creek near	95000 Osage Creek near	95000 Osage Creek near	95000 Osage Creek near 130 1952-75 16 21 25 65 210  49500 Cove Creek near 25.3 1951-70 0 .1 .2 6.6 78 Lee Creek 12 1938-61 0 0 0 1.5 246  51000 Frog Bayou near 74.2 1938-61 0 0 0 1.5 246  51500 Frog Bayou at 216 1951-70 0 0 1.2 48 573  Rudy 53000 Sixmile Creek at 24.1 1955-70 0 0 0 1.9 73  Chismville 53500 Sixmile Creek near 36.7 1955-70 0 0 0 1.2 259  Example Creek at 104 1955-70 0 0 0 12 259  Caulksville 55500 Hurricane Creek 17.2 1955-70 0 0 0 2.5 51  near Branch 56000 Hurricane Creek 53.0 1955-70 0 0 0 7.4 118  56500 Spadra Creek at 61.1 1953-70 0 0.5 1.3 18 171  Clarksville 57500 Illinois Bayou 241 1949-70 .1 .3 1.3 100 852  The sear Branch 56000 Petit Jean River 1241 1940-84 0 0 .1 35 496  The sear Booneville 516 1940-80 1.0 3.8 7.7 96 1,850  The sear Waveland 60000 Dutch Creek at 81.4 1946-75 0 0 0 0 18 183	95000 Osage Creek near 130 1952-75 16 21 25 65 210 313 49500 Cove Creek near 35.3 1951-70 0 .1 .2 6.6 78 153 Lee Creek   51000 Frog Bayou near 74.2 1938-61 0 0 0 1.5 246 423 Mountainburg   51500 Frog Bayou at 216 1951-70 0 0 1.2 48 573 1,030 Rudy   53000 Sixmile Creek at 24.1 1955-70 0 0 0 1.9 73 101 Chismville   53500 Sixmile Creek near 36.7 1955-70 0 0 0 1.9 73 101 53500 Sixmile Creek near 36.7 1955-70 0 0 0 1.2 259 440 Caulksville   55500 Sixmile Creek at 104 1955-70 0 0 0 12 259 440 Caulksville   55500 Hurricane Creek 17.2 1955-70 0 0 0 2.5 51 87 near Branch   56500 Hurricane Creek 53.0 1955-70 0 0 0 7.4 118 213 near Caulksville   55500 Spadra Creek at 61.1 1953-70 0 0.5 1.3 18 171 272 Clarksville   55500 Petit Jean River 241 1940-84 0 0 1.1 35 496 989 near Booneville   58500 Petit Jean River 241 1940-84 0 0 1.1 35 496 989 near Booneville   59500 Petit Jean River 516 1940-80 1.0 3.8 7.7 96 1,850 2,480 Waltreak   62500 Fourche LaFave 684 1937-80 1.0 2.4 6.2 159 3,230 4,510

Table 2.--Flow duration at discontinued continuous-record gaging stations--Continued

Map	Station		Draina area (squar	used						was equal indicated	ed or
no.	number	Station name	miles		98	95	90	50	10 .	5	2
94	07264500	Bayou Meto near Stuttgart	574	1937-54	0	0	0	213	1,640	2,190	2,970
95	07265000	Crooked Creek near Humphrey	79.2	1941-54	0	0	. 0	20	966	1,310	1,640
		andronen and organization and a second and organization and a second and a second and a second and a second and		Re	d River	Basin		1			
96	07339500	Rolling Fork near DeQueen	182	1950-80		1.3	2.9	62	672	1,360	2,600
97	07340500	Cossatot River near DeQueen	360	1939-81	6.3	10	17	155	1,540	2,600	4,890
98	07341000	Saline River near	121	1940-80	.1	.2	1.3	43	491	864	1,620
99	07341500	Red River at Fulton	<sup>2</sup> 52,336	1946-81	1,530	2,190	2,830	7,380	44,800	65,500	88,100
100	07349430	Bodcau Creek at Stamps	236	1960-70	0	.2	. 4	49	665	837	1,530
101	07356500	South Fork Ouachita River at Mount Ida	61	1950-70	1.0	2.9	4.2	23	172	354	838
102	07357000	Ouachita River near Mountain Pine	1,100	1938-50	33	49	74	598	4,190	7,820	15,700
103	07357501	Ouachita River at Blakely Mountain Dam (nea Hot Springs)	1,102 ar	1954-77	17	18	20	752	3,510	5,440	6,950
104	07359800	Caddo River near Alpine	301	1940-70	21	29	38	146	1,070	1,990	4,200
105	07360000	Ouachita River at Arkadelphia	2,314	1955-77	284	394	528	2,050	7,630	11,400	16,800
106	07360501	Little Missouri River at Narrows Dam near Murfreesboro	239	1951-77	10	11	12	198	1,070	1,510	2,120
107	07361000	Little Missouri River near Murfreesboro	383	1951-77	13	18	30	299	1,540	2,240	3,330
108	07361200	Ozan Creek near McCaskill	144	1963-70	0	0	0	21	303	762	1,770
109	07361600	Little Missouri River near Boughton	1,079	1951-77	45	63	94	547	3,490	5,770	10,300
110	07362500	Moro Creek near Fordyce	240	1953-83	0 .	0	0	15	696	1,170	2,270
111	07363000	Saline River at Benton	550	1952-79	10	18	30 ,	211	1,640	3,110	6,810
112	07365800	Cornie Bayou near	180	1957-87	0	.1	.9	29	476	789	1,460
113	07365900	Three Creeks near	50.4	1957-71	.1	. 2	. 4	5.6	108	246	506

 $<sup>^{1}</sup>_{2}\text{Combined}$  drainage area of St. Francis River at Parkin and St. Francis Bay at Riverfront.  $^{2}_{5},936$  square miles probably noncontributing.

Table 3.--Low-flow frequency at active continuous-record gaging stations

Map	Station number	Station name	area	Records used (climatic years)	Conse- cutive day period	Annual lo	ow flow, in ated recurr	n cubic fe rence inte	eet per se erval, in 20	cond, <u>years</u> 50
			Mi	.ssissippi	River M	ain Stem	· .			
1 0	7032000	Mississippi River at Memphis	<sup>1</sup> 932,800	1934-90	1 7 10 30 60	151,000 158,000 160,000 176,000 199,000	117,000 122,000 125,000 136,000 151,000	102,000 107,000 108,000 118,000 130,000	91,000 95,000 96,000 104,000 115,000	79,000 83,000 84,000 91,000 99,000
٠.				St. Fr	ancis Ri	ver				
2 0	7047800	St. Francis River at Parkin	(2)	1931-90	1 7 10 30 60	430 483 508 633 770	245 280 294 364 434	179 208 217 270 319	137 161 168 210 245	100 119 125 158 181
3 0	7047900	St. Francis Bay at Riverfront	(2)	1936-90	1 7 10 30 60	196 228 241 312 711	154 195 207 286 426	112 155 167 230 325	87 131 143 195 259	66 110 123 165 200
4 0	7047942	L'Anguille River near Colt	535	1972-90	1 7 10 30 60	6.6 9.0 10 29 92	2.8 4.4 4.9 15	1.7 2.9 3.2 10 36	2.0	0.6 1.3 1.4 3.8
				White I	River Ba	sin	,			
5 0	7048600	White River near Fayetteville	400	1965-90	1 7 10 30 60	2.4 3.5 4.0 6.7	1.0 1.5 1.9 3.6 5.2	.6 .8 1.2 2.5 3.7	.5 .8 1.9	.2 .4 .5 1.4 2.1
6 0	7056000	Buffalo River near St. Joe	829	1940-90	1 7 10 30 60	35 37 38 45 57	21 22 23 27 33	16 17 18 20 24	12 13 14 16 19	9.2 9.5 10 12 14
7 0	7060500	White River at Calico Rock	9,978	1952-90	1 7 10 30 60	1,110 2,230 2,420 3,350 4,180	713 1,310 1,450 1,980 2,450	568 963 1,070 1,420 1,740	1,040	385 526 592 709 845
8 0	7060710	North Sylamore Creek near Fifty-Six	58.1	1967-90	1 7 10 30 60	3. 3. 3. 4.	2 2. 3 2. 9 3.	7 2.4 7 2.5 1 2.8	2.2 2.3 2.5	1.8 2.0 2.1 2.3 2.6
9 0	7061000	White River at Batesville	11,070	1938-51	1 7 10 30 60	1,380 1,840 1,850 2,090 2,410	966 1,170 1,190 1,360 1,570	826 946 974 1,120 1,280		658 667 711 828 919
10 0	7064000	Black River near Corning	1,749	1939-90	1 7 10 30 60	349 360 363 396 441	291 297 299 317 338	269 273 276 288 301	255 257 260 268 276	241 242 247 250 253
11 07	7069200	Mammoth Spring at Mammoth Springs	Indeter- minate	1981-90	1 7 10 30 60	233 235 237 240 245	207 208 209 212 216	193 194 195 197 200	179 182 183 185 188	165 169 170 171 174

Table 3.--Low-flow frequency at active continuous-record gaging stations--Continued

Map no.	Station number	Station name	Drainage area (square miles)	Records used (climatic years)	Conse- cutive day period	Annual low for indicat 2				
12 0	7069500	Spring River at Imboden	1,183	1936-90	1 7 10 30 60	358 370 374 393 421	291 310 312 323 337	260 284 286 294 304	237 265 266 274 281	213 245 247 254 259
13 (	7072000	Eleven Point River near Ravenden Springs	1,134	1931-33 1936-90	1 7 10 30 60	413 422 424 443 470	324 332 334 346 363	288 295 297 307 321	262 269 271 280 291	237 244 245 253 262
14 (	7072500	Black River at Black Rock	7,369	1931-90	1 7 10 30 60	2,590 2,630 2,640 2,770 3,010	2,170 2,190 2,200 2,280 2,400	1,990 2,010 2,020 2,080 2,150	1,860 1,870 1,880 1,940 1,960	1,720 1,740 1,750 1,780 1,800
15 (	07074000	Strawberry River near Poughkeepsie	473	1937-90	1 7 10 30 60	52 54 55 59 70	43 45 45 48 53	40 41 42 45 48	37 39 39 43 44	35 37 37 42 42
16 (	07074500	White River at	19,860	1953-90	1 7 10 30 60	5,160 6,080 6,290 7,210 7,980	4,080 4,650 4,780 5,370 5,920	3,670 4,070 4,160 4,620 5,110	3,370 3,660 3,710 4,100 4,560	3,100 3,260 3,280 3,580 4,030
17 (	07075300	South Fork Little Red River at Clinton	148	1963-90	1 7 10 30 60	0 .1 .2 1.2 3.3	0 0 .1 .6	0	0	
18 (	07077000	White River at DeValls Bluff	23,483	1965-90	1 7 10 30 60	6,810 7,220 7,320 7,990 8,660	5,300 5,550 5,610 5,980 6,310	4,650 4,830 4,890 5,190 5,450	4,180 4,300 4,360 4,630 4,870	3,710 3,770 3,840 4,100 4,340
19 (	07077380	Cache River at Egypt	701	1966-90	1 7 10 30 60	23 30 32 42 86	7.4 10 11 17 42	2.9 4.0 4.2 9.5 28	.6 1.6 1.7 5.7	0 .4 .5 3.0
20 (	)7077950	Big Creek at Poplar Grove	448	1972-90	1 7 10 30 60	2.5 3.0 3.5 8.1	0 .6 .7 2.9	0 0 1.7 8.2	1.1 5.3	.6 3.2
				Arkansas	River I	Basin				
21 (	07195800	Flint Creek at Springtown	14.2	1962-90	1 7 10 30 60	2.8 3.2 3.4 3.8 4.4	1.3 1.6 1.7 2.2 2.7	.7 1.0 1.1 1.6 2.0	.3 .7 .8 1.2 1.6	0 .4 .5 .9
22 (	07195855	Flint Creek near West Siloam Springs, Okla.	59.8	1980-90	1 7 10 30 60	6.8 7.3 7.5 8.7	2.6 2.9 3.0 3.5 4.6	1.3 1.5 1.6 1.9 2.7	.6 .8 .9 1.1 1.6	.3 .4 .5 .6
23 (	7196900	Baron Fork at Dutch Mills	46.0	1959-90	1 7 10 30 60	.3 .4 .5 .8	.1 .2 .2 .2 .4	<.1 .1 .1 .1	0 <.1	0 <.1

Table 3.--Low-flow frequency at active continuous-record gaging stations--Continued

Map no.	Station number	Station name	area	e Records used (climatic years)	Conse- cutive day period	Annual lo for indica 2				
24 0	7247000	Poteau River at Cauthron	203	1940-90	1 7 10 30 60	.1 .2 .3 .8 2.2	0 0 0 0	0		
25 0	7249400	James Fork near Hackett	147	1959-90	1 7 10 30 60	.3 .5 .6 1.4 3.4	0 .1 .1 .4 .6	0 0 0.1 .1	0 <.1	
26 07	7250000	Lee Creek near Van Buren	426	1932-37 1950-90	1 7 10 30 60	.5 .7 .8 1.6 4.1	0 0 0 <.1	0 <.1	0	
27 07	7250550	Arkansas River at James W. Trimble Lock and Dam near Van Buren	<sup>3</sup> 150,482	1972-90	1 7 10 30 60	48 2,030 2,460 4,330 6,340	0 978 1,140 2,050 3,360	0 666 735 1,330 2,330	484 504 909 1,700	337 424 576 1,170
28 07	7252000	Mulberry River near Mulberry	373	1939-90	1 7 10 30 60	1.0 1.2 1.3 3.1 6.1	.1 .1 .1 .3	0 0 0 <.1 .3	0	
29 07	7257000	Big Piney Creek near Dover	274	1952-90	1 7 10 30 60	.6 .7 .8 2.3 6.6	0 0 <.1 .2 .6	0 0 .1	0	
30 07	7258000	Arkansas River at Dardanelle	153,670	1972-90	1 7 10 30 60	79 2,260 2,750 4,720 7,090	45 1,080 1,370 2,260 3,660	36 725 933 1,460 2,440	32 518 673 985 1,700	29 352 460 614 1,090
31 0	7260500	Petit Jean River at Danville	764	1948-90	1 7 10 30 60	4.7 6.7 7.7 12 19	1.3 2.3 2.6 4.3 7.1	.6 1.2 1.3 2.4 4.4	.3 .7 .7 1.4 3.1	0
32 0	7261000	Cadron Creek near Guy	169	1956-90	1 7 10 30 60	0 .2 .3 1.7 5.9	0 0 .2 .9	<.1 .2	0 <.1	
33 0	7261500	Fourche LaFave River near Gravelly	410	1940-90	1 7 10 30 60	.6 .8 .9 1.8 4.0	0 0 0 <.1 .3	0 0		
34 07	7263000	South Fourche LaFave River near Hollis	210	1942-90	1 7 10 30 60	0 .1 .1 .7 2.5	0 0 0	0		
35 07	7263450	Arkansas River at Murray Dam at Little Rock	<sup>3</sup> 158,030	1972-90	1 7 10 30 60	796 2,410 2,960 5,050 7,140	200 1,050 1,430 2,440 3,870	81 659 947 1,600 2,750	35 440 665 1,100 2,050	12 275 439 702 1,460
36 07	7264000	Bayou Meto near Lonoke	207	1956-90	1 7 10 30 60	2.0 4.1 4.6 7.4	.2 .9 1.2 3.0 6.1	0 .2 .4 1.8 3.9	<.1 .1 1.2 2.6	0 0

Table 3.--Low-flow frequency at active continuous-record gaging stations--Continued

Map no.	Station number	Station name	Drainage area (square miles)	Records used (climatic years)	Conse- cutive day period	Annual log				
Red River Basin										
37 (	07337000	Red River at Index	<sup>4</sup> 48,030	1946-90	1 7 10 30 60	1,610 1,870 2,000 2,550 3,100	1,160 1,290 1,360 1,750 2,120	935 1,010 1,060 1,350 1,620	759 808 838 1,040 1,260	581 608 622 750 905
38 (	07340000	Little River near Horatio	2,662	1932-90	1 7 10 30 60	62 72 77 121 188	15 17 18 27 47	6.4 7.0 7.3 11 20	3.0 3.2 3.3 4.7 9.5	1.2 1.2 1.3 1.7 3.8
39 (	07340300	Cossatot River near Vandervoort	89.6	1968-90	1 7 10 30 60	10 11 12 14 18	8.8 9.5 10 11 13	8.2 8.7 8.9 10 12	7.7 8.1 8.3 9.4	7.2 7.5 7.7 8.6 9.1
40 (	07341200	Saline River near Locksburg	256	1964-90	1 7 10 30 60	3.4 3.9 4.2 6.5	1.0 1.2 1.3 2.2 4.2	.5 .6 .7 1.1 2.4	.3 .4 .7	.1 .2 .2 .3
41 (	07356000	Ouachita River near Mount Ida	414	1943-90	1 7 10 30 60	18 20 22 29 39	10 11 12 16 20	6.6 7.4 8.0 11	4.7 5.3 5.7 8.0	3.1 3.5 3.8 5.4 8.0
42 (	07359500	Ouachita River near Malvern	1,585	1955-90	1 7 10 30 60	271 397 414 548 706	189 304 311 378 461	146 261 267 308 373	114 229 235 262 313	83 195 202 217 258
43 (	07361500	Antoine River at Antoine	178	1956-90	1 7 10 30 60	.3 .4 .5 1.2 3.0	0 0 <.1 .2 .8	0 <.1 .3	0	0
44 (	07362000	Ouachita River at at Camden	5,357	1970-90	1 7 10 30 60	793 863 902 1,170 1,490	589 678 741 907 1,100	474 607 690 814 964	383 559 660 753 875	290 513 635 699 796
45 (	07362100	Smackover Creek near Smackover	385	1963-90	1 7 10 30 60	2.7 3.6 3.8 5.7 9.9	.7 1.0 1.2 2.1 3.7	.3 .4 .6 1.2 2.3	.1 .2 .4 .8	0 .1 .2 .5
46 (	07363300	Hurricane Creek near Sheridan	204	1963-90	1 7 10 30 60	.6 1.0 1.4 3.3 5.4	0 <.1 .2 .9 2.1	0 <.1 .3 1.2	0 .1 .8	0
47 (	07363500	Saline River near Rye	2,102	1939-90	1 7 10 30 60	36 40 42 57 82	17 19 20 26 36	11 12 13 17 23	7.8 8.9 9.4 12	5.2 6.1 6.4 8.2
48 (	07364150	Bayou Bartholomew at McGehee	576	1940-90	1 7 10 30 60	28 30 31 40 50	11 11 12 15 22	5.1 5.4 5.7 7.8 14	2.4 2.6 2.7 4.1 9.0	.9 1.0 1.0 1.8 5.4

Approximate.
2Approximate.
3Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 square miles.
422,241 square miles probably not contributing.
45,936 square miles probably not contributing.
29

Table 4.--Low-flow frequency at discontinued continuous-record gaging stations

Map	Station		Drainage area (square	Records used (climatic	cutive	seco	ond, for		ubic feet d recurre ears	
no.	numbe:	r Station name	miles)	years)	period	i 2	. 5	10	20	50
			Missi	ssippi Riv	er Main	Stem				
49	07047970	Mississippi River <sup>1</sup> 9 at Helena	41,700	1929-77	1 7 10 30 60	152,000 155,000 172,000	109,000 119,000 122,000 134,000 148,000	105,000 107,000 117,000	79,000 94,500 96,000 105,000 113,000	65,000 83,900 86,000 92,000 99,000
50	07265450	Mississippi <sup>1</sup> 1,1 River near Arkansas City	30,600	1929-80	1 7 10 30 60	175,000 178,000 195,000	131,000 136,000 138,000 150,000 166,000	119,000 120,000 130,000	103,000 106,000 108,000 116,000 126,000	
			St.	Francis R	iver Bas	sin				
51	07040100	St. Francis River at St. Francis	1,772	1931-87	1 7 10 30 60	122 135 141 168 221	88 95 98 114 143	74 79 82 96 119	63 69 72 85 104	54 59 62 76 92
52	07040450	St. Francis River at Lake City	2,374	1932-77	1 7 10 30 60	218 237 244 285 341	127 138 141 163 196	96 104 106 124 151	76 82 84 99 125	59 63 64 78 102
53	07046600	Right Hand Chute of Little River at Riverdale	2,106	1948-77	1 7 10 30 60	315 356 370 447 541	170 198 207 263 309	120 142 149 196 226	89 107 113 153 173	63 76 81 114 127
54	07047000	St. Francis River floodway near Marked Tree	(2)	1935-70	1 7 10 30 60	0 0 0 25 87	0			
55	07047500	St. Francis River at Marked Tree	5,148	1936-73	1 7 10 30 60	168 197 237 365 479	103 120 134 175 220	84 98 103 119 143	72 84 85 86 99	63 65 68 70 72
56	07047600	Tyronza River near Tyronza	290	1950-74	1 7 10 30 60	41 48 50 59 73	27 34 36 41 48	21 29 31 34 38	17 25 27 29 31	13 21 23 24 25
57	07047902	St. Francis River at latitude of Wittsburg	6,475	1936-77	1 7 10 30 60	826 949 994 1,170 1,366	465 565 596 719 820	342 430 454 558 635	265 343 362 453 515	198 266 281 358 409
58	07047950	L'Anguille River at Palestine	786	1950-77	1 7 10 30 60	0 3. 6. 30 97			7 0.	9 0
			ĭ	White River	Basin					
59	07048000	West Fork White River at Greenland	83.1	1947-83	1 7 10 30 60	•	1 0 2 0 3 0 4 0 9 .	1 0		

Table 4.--Low-flow frequency at discontinued continuous-record gaging stations--Continued

Map	Station		Drainage area (square	Records used (climatic	cutive		, for in	, in cubi dicated i , in vear	recurrenc rs	e 
no.	number	Station name	miles)	years)	period	2	5	10	20	50
60	07049000	War Eagle Creek near Hindsville	262	1953-70	1 7 10 30 60	7.9 8.5 8.9 11 15	2.7 3.1 3.4 4.0 5.8	1.2 1.6 1.8 2.1 3.4	0.6 .8 .9 1.2 2.2	0.2 .4 .4 .6
61	07049500	White River near Rogers	1,020	1954-63	1 7 10 30 60	36 38 39 48 74	12 13 13 16 24	6.4 6.8 7.1 8.5	3.5 3.8 4.0 4.8 7.4	1.7 1.9 2.0 2.5 4.0
62	07050000	White River at Beaver	1,244	1923-58	1 7 10 30 60	58 61 63 74 89	23 24 25 32 41	11 12 13 18 27	5.6 6.4 6.9 10	2.2 2.7 3.0 5.2
63	07050500	Kings River near Berryville	527	1940-75	1 7 10 30 60	9.5 11 12 19 27	3.0 3.8 4.2 6.6	1.5 1.9 2.1 3.4 5.5	.7 1.0 1.2 1.8 3.2	.3 .4 .5 .8 1.7
64	07055000	White River near Flippin	6,081	1953-81	1 7 10 30 60	329 585 1,100 1,760 2,470	200 306 575 910 1,320	162 219 389 574 822	140 166 274 367 514	121 122 179 207 277
65	07057000	Buffalo River near Rush	1,091	1930-70	1 7 10 30 60	56 59 60 71 84	34 35 36 42 50	25 26 27 31 37	19 20 20 24 29	13 14 14 17 22
66	07059000	North Fork River near Henderson	1,611	1930-43	1 7 10 30 60	445 451 456 472 500	384 388 391 401 415	355 359 361 369 379	332 337 337 346 353	308 313 313 322 327
67	07060000	North Fork River a North Fork Dam, near North Fork	t 1,808	1945-77	1 7 10 30 60	62 310 312 530 743	20 86 93 176 334	0 31 37 82 196	8 12 40 118	0 0 16 62
68	07069000	Black River at Pocahontas	4,845	1937-70	1 7 10 30 60	1,630 1,650 1,650 1,720 1,830	1,380 1,390 1,400 1,440 1,500	1,270 1,280 1,290 1,330 1,380	1,190 1,210 1,220 1,260 1,290	1,110 1,130 1,140 1,190 1,220
69	07073000	Strawberry River near Evening Shade	217	1940-79	1 7 10 30 60	9.8 10 11 12 16	6.8 7.3 7.5 8.4 9.8	5.8 6.2 6.4 7.3 8.1	5.1 5.4 5.6 6.6 7.0	4.5 4.7 5.0 6.1 6.4
70	07073500	Piney Fork at Evening Shade	99.2	1940-84	1 7 10 30 60	1.7 2.4 2.5 3.5 5.3	.4 .5 .7 1.3 2.2	0 .2 .3 .8 1.4	<.1 .1 .5	0 0 .3 .6
71	07075000	Middle Fork Little Red River at Shirl		1940-84	1 10 30 60	.6 7 1.1 2.4 5.7	0 .9 < .1 .1 .6	0	0	
72	07075500	South Fork Little Red River near Clinton	316	1940-61	1 7 10 30 60	.4 .6 .7 1.3 4.0	0 0 0 <.1	0		

Table 4.--Low-flow frequency at discontinued continuous-record gaging stations--Continued

Map	Station		Drainage area (square	Records used (climatic	cutive	Annual second	i, for in	v, in cub ndicated L. in vea	ic feet precurrence	oer ce
no.	number	Station name	miles)	years)	period	2	5	10	20	50
73	07076000	Little Red River near Heber Springs	1,153	1965-80	1 7 10 30 60	33 99 124 274 377	24 53 69 127 218	20 37 47 76 153	16 27 34 47 114	13 19 22 26 81
74	07076850	Cypress Bayou near Beebe	166	1963-76	1 7 10 30 60	0 0 0 0.1 1.0	0			
75	07077500	Cache River at Patterson	1,037	1928-31 1938-88	1 7 10 30 60	52 57 66 76 110	16 20 25 30 57	4.8 6.1 7.6 16 40	0 1.2 1.4 9.1	0 0 4.3 21
76	07077700	Bayou DeView at Morton	421	1940-77	1 7 10 30 60	0 0 0 2.5	0 1.6	0		
77	07077800	White River at Clarendon	25,555	1952-81	1 7 10 30 60	7,560 8,040 8,200 9,210 10,200	5,770 6,050 6,160 6,780 7,320	5,050 5,250 5,330 5,800 6,220	4,540 4,680 4,760 5,110 5,450	4,040 4,130 4,190 4,440 4,710
78	07077930	Big Creek near Moro	77.4	1962-70	1 7 10 30 60	0 .1 .1 1.0 4.7	0 <.1 .2 .9	0 0 .3	.1	<.1
			A:	rkansas Ri	ver Basiı	n				
79	07195000	Osage Creek near Elm Springs	130	1952-75	1 7 10 30 60	29 30 32 35 38	17 18 19 21 23	12 13 14 15	8.8 9.7 10 12 14	5.9 6.6 6.9 8.5
80	07249500	Cove Creek near Lee Creek	35.3	1951-70	1 7 10 30 60	<.1 .1 .1 .2 .4	0 0 0 <.1 .1	0		
81	07251000	Frog Bayou near Mountainburg	74.2	1938-61	1 7 10 30 60	0 0 0 0				
82	07251500	Frog Bayou at Rudy	216	1951-70	1 7 10 30 60	.7 1.0 1.1 1.5 2.6	0 0 0 0			
83	07253000	Sixmile Creek at Chismville	24.1	1955-70	1 7 10 30 60	0 0 0 0 <.1	0			
84	07253500	Sixmile Creek near Branch		1955-70	1 7 10 30 60	0 0 0 <.1 .2	0			

Table 4.--Low-flow frequency at discontinued continuous-record gaging stations--Continued

Map	Station number		Drainage area (square miles)	Records used (climatic years)	cutive	second,	for ind	in cubic icated re in years		50
	07255000	Sixmile Creek at Caulksville	104	1955-70	1 7 10 30 60	0 <0.1 .1 .6	0 0 <0.1	0		
86	07255500	Hurricane Creek near Branch	17.2	1955-70	1 7 10 30 60	0 0 0 0 0 0 <.1	0			
87	07256000	Hurricane Creek near Caulksville	53.0	1955-70	1 7 10 30 60	0 0 0 <.1 .2	0 0			
88	07256500	Spadra Creek at Clarksville	61.1	1953-70	1 7 10 30 60	1.2 1.5 1.6 2.1 3.2	.3 .4 .4 .5	0 0 0 0 0.1	<0.1	0
89	07257500	Illinois Bayou near Scottsville	241	1949-70	1 7 10 30 60	.8 1.1 1.3 2.1 4.8	<.1 <.1 <.1 .1	0 0 0 <.1 .1	0 <.1	0
90	07258500	Petit Jean River near Booneville	241	1940-84	1 7 10 30 60	0 <.1 .1 .3 1.3	0 0 0 <.1	0		
91	07259500	Petit Jean River near Waveland	516	1940-80	1 7 10 30 60	3.8 5.3 6.4 9.5	.7 1.3 1.5 2.6 4.1	.1 .4 .5 1.1 1.9	0 .1 .1 .5	0 0 0.2
92	07260000	Dutch Creek at Waltreak	81.4	1946-75	1 7 10 30 60	0 0 0 .1 .5	0 0			
93	07262500	Fourche LaFave River near Nimrod	684	1937-80	1 7 10 30 60	1.2 2.3 3.4 6.7 20	.3 .6 .7 1.6 4.8	.1 .2 .3 .7	0 .1 .2 .3 .7	0 0 0 0
94	07264500	Bayou Meto near Stuttgart	574	1937-54	1 7 10 30 60	0 0 0 .3	0.3	0		
95	07265000	Crooked Creek near Humphrey	79.2	1941-54	1 7 10 30 60	0 0 0 0	0			
				Red Rive	r Basin			·		***************************************
96	07339500	Rolling Fork near DeQueen	182	1950-80	1 7 10 30 60	1.6 2.0 2.1 4.6 6.9	.4 .5 .6 .8	.1 .2 .3 .4 .5	0 0 0 <.1 .2	0.1

Table 4.--Low-flow frequency at discontinued continuous-record gaging stations--Continued

Map no.	Station number		Drainage area (square miles)	Records used (climatic years)	cutive	Annual second	i, for in	v, in cub ndicated L. in yea 10	recurrence	per ce
97	07340500	Cossatot River near DeQueen	360	1939-81	1 7 10 30 60	8.4 9.6 10 16 25	3.8 4.5 4.8 7.4	2.4 2.9 3.1 4.8 7.3	1.6 1.9 2.1 3.3 5.1	0.9 1.2 1.3 2.1 3.5
98	07341000	Saline River near Dierks	121	1940-87	1 7 10 30 60	.3 .4 .5 1.2 2.9	0 0 .1 .1 .4	0 <.1 .1	0 <.1	0 0
99	07341500	Red River at Fulton	52,336	1946-81	1 7 10 30 60	2,040 2,430 2,550 3,290 3,880	1,290 1,540 1,610 2,110 2,560	951 1,120 1,170 1,560 1,970	710 840 860 1,180 1,540	490 570 590 815 1,140
100	07349430	Bodcau Creek at Stamps	236	1960-70	1 7 10 30 60	0 <.1 .1 .7 1.5		.1 <.1	0 <.1	<.1
101	07356500	South Fork Ouachita River at Mt. Ida	a 61	1950-70	1 7 10 30 60	2.2 2.6 2.9 4.5 6.4	.5 .7 1.7 3.1	0 .1 .2 .8 2.0	0 0 .4 1.4	0 . 2 . 8
102	07357000	Ouachita River near Mountain Pine	1,100	1938-50	1 7 10 30 60	45 48 49 62 82	28 29 30 35 45	23 24 25 27 34	19 20 21 23 27	15 16 17 19 22
103	07357501	Ouachita River at Blakely Mountain Dam near Hot Spring	1,102 rs	1954-77	1 7 10 30 60	19 34 50 188 365	9.7 12 16 93 203	5.2 6.5 9.0 65 153	1.4 4.1 5.4 49 122	0 2.4 3.0 35 96
104	07359800	Caddo River at Alpine	301	1940-70	1 7 10 30 60	24 27 28 36 43	14 17 18 23 28	11 13 14 18 23	7.9 9.5 10 14 19	5.5 6.7 7.6 11 16
105	07360000	Ouachita River at Arkadelphia	2,314	1955-77	1 7 10 30 60	354 455 475 667 915	260 319 330 407 525	221 264 273 310 387	194 225 233 247 299	168 188 196 220 255
106	07360501	Little Missouri River at Narrows Da near Murfreesboro		1951-77	1 7 10 30 60	10 12 13 38 75	5.7 6.6 7.2 14 37	0 5.1 5.6 8.3 25		3.5 3.9 4.2 12
	07361000	Little Missouri Riv near Murfreesboro	er 383	1951-77	1 7 10 30 60	12 22 29 75 131	7.8 12 15 36 67	6.4 9.6 11 24 46	5.4 8.1 8.3 17 34	4.5 6.9 7.3 11 23
108	07361200	Ozan Creek near McCaskill	144	1963-70	1 7 10 30 60	0 0 0 .1 .5	0 <.1	0		
109	07361600	Little Missouri River near Boughton	1,079	1951-77	1 7 10 30 60	42 67 76 130 198	28 37 42 72 106	23 28 32 52 75	21 23 25 40 56	18 19 20 29 41

Table 4.--Low-flow frequency at discontinued continuous-record gaging stations--Continued

Map no.	Station number		Drainage area (square miles)	Records used (climatic years)	Conse- cutive day period	second,	for ind nterval.	icated r	c feet pe ecurrence s 20	
110	07362500	Moro Creek near Fordyce	240	1953-83	1 7 10 30 60	0 0 0 <0.1	0			
111	07363000	Saline River at Benton	550	1952-79	1 7 10 30 60	12 21 22 32 48	4.4 6.2 7.4 13 20	2.2 2.3 3.3 7.6	0.8 1.0 1.5 4.4 7.0	0 0.2 .5 2.3 3.9
112	07365800	Cornie Bayou near Three Creeks	180	1957-87	1 7 10 30 60	.1 .2 .3 1.3 3.3	0 0 0 .1 .7	0.3	.1	0
113	07365900	Three Creeks near Three Creeks	50.4	1957-71	1 7 10 30 60	.1 .2 .3 .7	0 0 <.1 .2 .5	0 .1 .2	<.1	< .1

<sup>&</sup>lt;sup>1</sup>Approximate. <sup>2</sup>Indeterminate.

Table 5.--Station description and estimates of low-flow frequency at partial-record stations

р	Station number	Station description	Number of discharge leasurements	Index station	Annual 7-day indicated recurring cubic feet	rence interval,
				50001011	2-year	10-year
.4	07040175	Post Oak Creek near Rector, Ark., Lat 36°15′02", long 90°18′21" in NE 1/4 SE 1/4 sec.27, T.19 N., R.7 at bridge on Highway 1, 1.1 miles southwest of Rector. Drainage area: 9.82 square miles. Remarks:	8 E.,	(1)	0	0
5	07040300	Big Slough Ditch near Marmaduke, Ark., Lat 36°06'55", long 90°20'45" in SW 1/4 sec.9, T.17 N., R.7 E., 5.5 mil southeast of Marmaduke Drainage area: 247 square miles. Remarks:		07041000	66	31
6	07040400	Locust Creek Ditch near Paragould, Ark Lat 36°03'10", long 90°23'10" in NE 1/4 NE 1/4 sec.1, T.16 N., R.6 E., at bridge on State Highway 25, 6.0 miles east of Paragould Drainage area: 78.3 square miles. Remarks: Low flow may be affected by irrigation practices.	., 17	07041000	1.0	0.1
7	07046532	Crooked Lake Bayou at Number Nine, Ark., Lat 35°59'13", long 89°48'15", in W 1/2 and on line between secs.5, 22, and 27, T.16 N., R.12 E., at bridg on State Highway 150 and 0.2 mile east of Number Nine.  Drainage area: 34.5 square miles. Remarks: Low flow may be affected by irrigation practices.		07041000	.2	<.1
8	07047550	Tyronza River Ditch 31 at Victoria, Ark., Lat 35°45′23″, long 90°04′10″, W 1/2 and on line between secs.7 and 18, T.13 N., R.10 E., at bridge on State Highway 158, and 0.5 mile west of Victoria.  Drainage area: 63.5 square miles. Remarks: Low flow may be affected by irrigation practices.	6	07047950	14	10
9	07047700	Tyronza River near Twist, Ark., Lat 35°22'29", long 90°28'05" near center and on line between secs.28 and 29, T.9 N., R.6 E., at bridge on State Highway 42 and 7.0 miles north of Earle. Drainage area: 533 square miles. Remarks: Low flow may be affected by irrigation practices.	10	07047950	57	33
0	07047850	Little Bay Ditch near Jonesboro, Ark., Lat 35°49′20″, long 90°35′15″, SE 1/4 sec.19, T.14 N., R.5 E., at bridge on State Highway 18, 6.5 miles east of Jonesboro Drainage area: 27.1 square miles. Remarks: Low flow may be affected by irrigation practices.	15	(1)	0	0
1	07047910	Blackfish Bayou near Forrest City, Ark., Lat 35°01'20", long 90°31'10", E 1/2 and on line between secs.24 and 25, T.5 N., R.5 E., at bridge on State Highway 50, 10 miles east of Widener. Drainage area: 227 square miles. Remarks: Low flow affected by irrigation practices.	7	(2)	2.4	.7

Map no.	Station number	Station description r	Number of discharge measurements	Index station	Annual 7-day I indicated recurs in cubic feet 2-year	ence interval,
122	07047920	Fifteen Mile Bayou near West Memphis, Ark., Lat 35°08'50", long 90°14'09", SW 1/4 sec.10, T.6 N., R.8 E., at bridge on U.S. Highway 70, 3.5 miles west of West Memphis. Drainage area: 66.1 square miles. Remarks: Low flow affected by irrigation practices.	15	(2)	1.7	0.6
123	07047940	L'Anguille River near Wynne, Ark., Lat 35°12'00", long 90°53'20", sec.28, T.7 N., R.2 E., at highway bridge, 2.6 miles downstream from Brushy Creek and 6.0 miles southwest of Wynne. Drainage area: 442 square miles. Remarks: Low flow may be affected by irrigation practices.	11	07047950	0	0
124	07047976	White River at Combs, Ark., Lat 35°49'40", long 93°49'54", NW 1/4 sec.2, T.13 N., R.27 W., at bridge on State Highway 295, 0.3 miles north- east of Combs. Drainage area: 90.3 square miles. Remarks: Natural-flow data.		07252000	.1	0
125	07047980	White River at Elkins, Ark., Lat 36°00'03", long 94°00'13", SE 1/4 sec.1, T.15 N., R.29 W., at highway bridge at Elkins. Drainage area: 184 square miles. Remarks: Low flow may be affected by diversion.	22	07048000	.9	.1
126	07047985	Middle Fork White River near Fayetteville, Ark., Lat 36°00′58", long 94°03′59", SE 1/4 sec.33, T.16 N. R.29 W., at ford on farm road, 2.0 mil south of State Highway 16, and 5.9 mil southeast of Fayetteville.  Drainage area: 73.4 square miles. Low flow may be affected by diversion.	es es	07048600	<.1	0
127	07048800	Richland Creek at Goshen, Ark., Lat 36°06'14", long 94°00'26", NE 1/4 sec.31, T.17 N., R.28 W., at bridge on State Highway 45, 1.0 mile west of Gos Drainage area: 138 square miles. Remarks: Natural-flow data.		07195800	1.4	<.1
128	07048960	War Eagle Creek near Huntsville, Ark., Lat 36°02'30", long 93°42'17", SE 1/4 NW 1/4 sec.23, T.16 N., R.26 W. at bridge on State Highway 23 and 3.6 miles south of Huntsville. Drainage area: 105 square miles. Remarks: Natural-flow data.		07049000	.8	.2
129	07049600	Prairie Creek near Rogers, Ark., Lat 36°21'54", long 94°05'15", NE 1/4 sec.2 T.19 N., R.29 W., at bridge on State Highway 12, 4.5 miles northeast of Rogers. Drainage area: 19.5 square miles. Remarks: Natural-flow data.	19	(2)	2.0	.6
130	07049700	Blue Spring near Eureka Springs, Ark., Lat 36°27'52", long 93°48'45", NW 1/4 sec.25, T.21 N., R.27 W., at Blue Spring Farm, 6.0 miles northwest of Eureka Springs. Drainage area: Indeterminate. Remarks: Natural-flow data.	24	07195000	3.6	2.0

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map no.	Station number	Station description m	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interval,
					2-year	10-year
131	07050225	Kings River near Kingston, Ark., Lat 36°05'17", long 93°32'30" SE 1/4 sec.33, T.17 N., R.24 W., at bridge on State Highway 21 and 3.5 miles northwest of Kingston. Drainage area: 98.0 square miles. Remarks: Natural-flow data.	15	07049000	1.5	0.3
132	07050230	Warm Fork Creek at Rockhouse, Ark., Lat 36°16'47", long 93°40'03" SW 1/4 sec.29, T.19 N., R.25 W., at low water crossing on county road, 0.4 mile southeast of Rockhouse, and 13.8 miles north-northeast of Huntsville,	8	(1)	0	0
133	07050250	Drainage area: 19.1 square miles. Remarks: Natural-flow data.  Kings River near Pleasant Valley, Ark. Lat 36°23'22", long 93°39'33", NE 1/4 sec.20, T.20 N., R.25 W., at bridge or county road, 2.1 miles downstream from Keets Creek, and 2.7 miles west of Pleasant Valley. Drainage area: 346 square miles. Remarks: Natural-flow data.	) 	07050500	2.6	.2
134	07050285		,	(1)	0	0 ,
135	07050390	Osage Creek southwest of Berryville, Ark., Lat 36°20'55", long 93°35'26", NW 1/4 sec.5, T.19 N., R.24 W., at bri on State Highway 221, 1.7 miles southw of Berryville. Drainage area: 139 square miles. Remarks: Natural-flow data.		07050500	.8	.1
136	07053200	Long Creek at Alpena, Ark., Lat 36°17'31", long 93°16'54", NW 1/4 sec.23, T.19 N., R.22 W., at bridge on U.S. Highway 62, 0.7 mile east of Alpena. Drainage area: 67.2 square miles. Remarks: Natural-flow data.	24	07050500	.8	.1
137	07053250	Yocum Creek near Oak Grove, Ark., Lat 36°27'17", long 93°21'21", NE 1/2 sec.30, T.21 N., R.22 W., at low-water crossing on county road, 4.5 miles east of Oak Grove. Drainage area: 52.8 square miles. Remarks: Natural-flow data.	13	07074000	4.0	2.9
138	07054410	Bear Creek near Omaha, Ark., Lat 36°26′58", long 93°04′31", NW 1/4 sec.26 T.21 N., R.20 W., at bridge on State Highway 14, and 6.5 miles east of Omaha. Drainage area: 133 square miles. Remarks: Natural-flow data.	13	(2)	2.8	1.7
139	07054420	West Sugarloaf Creek near Lead Hill Ark., Lat 36°25'13", long 92°56'05", NW 1/4 sec.6, T.20 N., R.18 W., at bri on State Highway 14, 1.2 mile west of Lead Hill. Drainage area: 31.9 square miles. Remarks: Natural-flow data.	12 dge	(2)	1.8	.3

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map no.	Station number	Station description r	Number of discharge neasurements	Index station	Annual 7-day indicated recur in cubic feet 2-year	rence interval, per second
140	07055600	Crooked Creek at Pyatt, Ark., Lat 36°14'45", long 92°50'04", SE 1/4 sec.36, T.19 N., R.18 W., at bridge on U.S. Highway 62 at Pyatt. Drainage area: 207 square miles. Remarks: Natural-flow data.	30	07056000	14	6.5
141	07055608	Crooked Creek at Yellville, Ark., Lat 36°13'23", long 92°40'47", in NW NE sec.9, T.18 N., R.16 W., at bridge on State Highway at Yellville. Drainage area: 406 square miles. Remarks: Regular gaging station analyzed as partial-record station. Low flows lost to underground seepage.	50	07060710	0.2	0
142	07055680	Buffalo River at Pruitt, Ark., Lat 36°03'39", long 93°08'18" NW 1/4 SE 1/4 sec.7, T.16 N., R.20 W., at bridge on State Highway 7 at Pruitt. Drainage area: 190 square miles. Remarks: Natural-flow data.	15	07056000	4.4	1.0
143	07055700	Little Buffalo River at Jasper, Ark., Lat 36°00'37", long 93°11'02" SE 1/4 sec.27, T.16 N., R.21 W., at bridge on State Highway 7 at Jasper. Drainage area: 126 square miles. Remarks: Natural-flow data.	25	07056000	2.4	.3
144	07056510	Bear Creek near Marshall, Ark., Lat 35°56'23", long 92°42'47", SW 1/4 sec.17, T.15 N., R.16 W., at bridge on U.S. Highway 65, 5.0 miles northwest of Marshall. Drainage area: 64.3 square miles. Remarks: Natural-flow data.	14	07056000	4.2	2.0
145	07057100	Big Creek near Big Flat, Ark., Lat 35°58'43", long 92°28'53", NW 1/4 sec.4, T.15 N., R.14 W., at bridge on State Highway 14, 4.7 miles southwest of Big Flat. Drainage area: 91.6 square miles. Remarks: Natural-flow data.	33	07056000	5.0	2.2
146	07060520	Piney Creek near Calico, Rock, Ark., Lat 36°08'49", long 92°04'16", NE 1/4 sec.8, T.17 N., R.10 W., at bridge on State Highway 65, 4.5 miles norther of Calico Rock. Drainage area: 78.3 square miles. Remarks: Natural-flow data.	12 e ast	07074000	8.4	6.3
147	07060670	Hughes Creek near Mountain View, Ark., Lat 35°51'46", long 92°08'47", W 1/2 sec.10, T.14 N., R.11 W., at bridge on State Highway 66, 1.7 miles west of Mountain View. Drainage area: 3.20 square miles. Remarks: Natural-flow data.	, 24	(1)	0	0
148	07060700	South Sylamore Creek at Allison, Ark., Lat 35°56'09", long 92°07'17" near center of sec.14, T.15 N., R.11 W., at bridge on State Highway 14 at Allison Drainage area: 143 square miles. Remarks: Natural-flow data.	:	07074000	8.0	5.9

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interval
					2-year	10-year
149	07060720	North Sylamore Creek near Allison, Ark., NE 1/4 sec.5, T.15 N., R.11 W., at low-water crossing on county road at Blanchard Springs recreation area, 1.5 miles north of State Highway 14, and 4.0 miles northwest of Allison. Drainage area: 68.0 square miles. Remarks: Natural-flow data.		07056000	3.0	1.4
150	07060900	Polk Bayou at Batesville, Ark., Lat 35°46'16", long 91°39'18" NE 1/4 sec.17, T.13 N., R.6 W., at bridge on State Highway 69 at Batesville. Drainage area: 168 square miles. Remarks: Natural-flow data.	21	07074000	34	26
151	07068600	Little Black River at Success, Ark., Lat 36°27'25", long 90°43'33", NW 1/4 sec.23, T.21 N., R.3 E., at bridge or State Highway 211 at Success. Drainage area: 385 square miles. Remarks: Low flow may be affected by irrigation practices.		(2)	38	26
152	07068880	Mud Creek near Ingram, Ark., Lat 36°25'33", long 90°58'30" SW 1/4 sec.33, T.21 N., R.1 E., at low-water crossing on county road, 2.5 miles northeast of Ingram and State Highway 251. Drainage area; 34.2 square miles. Remarks: Natural-flow data.	14	07074000	.7	.3
153	07068890	Fourche River above Pocahontas, Ark., Lat 36°20'21", long 90°56'33", in NE 1/4 NW 1/4 sec.35, T.20 N., R.1 E. at bridge on State Highway 115, 5.6 miles north of Pocahontas. Drainage area: 229 square miles. Remarks: Natural-flow data.		(2)	12	6.3
154	07068900	Fourche River near Pocahontas, Ark., Lat 36°16′52", long 90°55′46", NW 1/4 sec.24, T.19 N., R.1 E., at bridge on U.S. Highway 67, 2.7 miles northeast of Pocahontas. Drainage area: 304 square miles. Remarks: Natural-flow data	20	07074000	14	8.5
155	07069265	Myatt Creek near Salem, Ark., Lat 36°26'39", long 91°40'11", SW 1/4 sec.30, T.21 N., R.6 W., at bridge on State Highway 9, 10 miles northeast of Salem Drainage area: 101 square miles. Remarks: Natural-flow data.	13	07074000	2.4	1.7
156	07069266	Spring River near Hardy, Ark., Lat 36°20'17", long 91°30'30", in SW 1/4 sec.34, T.20 N., R.5 W., at bridge on county road 1.1 miles west of U.S. Highway 63 and 2.0 miles northwest of Hardy. Drainage area: 540 square miles. Remarks: Natural-flow data.	29	07069500	250	190
157		South Fork Spring River near Salem, Ark., Lat 36°24'31", long 91°49'04", near center and on line between secs. 10 and 11, T.20 N., R.8 W., at low-water crossing on county road, 2.7 miles north of Salem.  Drainage area: 170 square miles.	13	07074000	10	7.5

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map	Station	Station description	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interval
	Humber	description	measurements	Scacion	2-year	10-year
158	07069300	Ark., Lat 36°18'33", long 91°30'34", on line between secs.9 and 10, T.19 N R.5 W., at bridge on county road, 0.3 miles west of U.S. Highway 62, 2.0 mi west of Hardy. Drainage area: 324 square miles.		07074000	55	41
		Remarks: Low flow affected by urban runoff.				
159	07069350	Martins Creek near Williford, Ark., Lat 36°16'23", long 91°19'59", NE 1/4 sec.30, T.19 N., R.3 W., at bridge on U.S. Highway 63, 2.0 miles northeast of Williford. Drainage area: 66.9 square miles. Remarks: Natural-flow data.	14	07074000	4.2	3.0
160	07069400	Janes Creek at Ravenden Springs, Ark. Lat 36°18'09", long 91°13'58", SW 1/4 sec.7, T.19 N., R.2 W., at bridge on State Highway 90, 1.0 mile south of Ravenden Springs. Drainage area: 79.3 square miles. Remarks: Natural-flow data.		07074000	1.2	.6
161	07072900	Strawberry River near Franklin, Ark., Lat 36°10'4", long 91°44'19", NW 1/4 sec.33, T.18 N., R.7 W., at bridge on State Highway 56, 2.3 miles east of Franklin. Drainage area: 155 square miles. Remarks: Natural-flow data.	12	07074000	3.2	1.7
162	07073600	Mill Creek at Evening Shade, Ark., Lat 36°03'56", long 91°36'37", NE 1/4 sec.3, T.16 N., R.6 W., at highway bridge 0.1 miles east of U.S. Highway 167 and 0.5 mile southeast of Evening Shade. Drainage area: 12.2 square miles. Remarks: Natural-flow data.	21	07057000	14	12
163	07073995	North Big Creek near Evening Shade, Ark., Lat 36°08'17", long 91°30'12", NW 1/4 sec.10, T.17 N., R.5 W., at bridge on county road, 6.0 miles nort east of U.S. Highway 167, and 8.0 mil northeast of Evening Shade. Drainage area: 74.8 square miles. Remarks: Natural-flow data.		07074000	8.5	6.3
164	07074248	South Big Creek near Strawberry, Ark. Lat 36°01'12", long 91°20'09", N 1/2 and on line between secs.19 and 20,	, 15	07056000	20	13
		T.16 N., R.3 W., at bridge on State Highway 117, 4.0 miles north of Strawberry. Drainage area: 69.4 square miles. Remarks: Natural-flow data.				
165	07074250	Reeds Creek near Strawberry, Ark., Lat 35°58'58", long 91°20'12" SW 1/4 SW 1/4 sec.32, T.16 N., R.3 W., at bridge on State Highway 117, 1.4 miles northwest of Strawberry. Drainage area: 34.9 square miles. Remarks: Natural-flow data.	24	07074000	12	9.5

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day l indicated recur in cubic feet	rence interval, per second
					2-year	10-year
166	07074260	Cooper Creek near Smithville, Ark., Lat 36°03'11", long 91°18'36" SW 1/4 sec.4, T.16 N., R.3 W., at bridge on State Highway 115, 2.0	15	(2)	6.8	5.4
		miles south of Smithville. Drainage area: 31.9 square miles. Remarks: Natural-flow data.				
167	07074400	Curia Creek near Dowdy, Ark., Lat 35°52'15", long 91°18'36", NE 1/4 sec.9 T.14 N., R.3 W., at bridge on State Highway 25, and 1.3 miles north of Dowdy. Drainage area: 55.6 square miles. Remarks: Natural-flow data.	17	07074000	5.4	4.1
174	07075390	Archey Creek at Clinton, Ark., Lat 35°36'15", long 92°27'35" SE 1/4 sec.10, T.11 N., R.14 W., at bridge on U.S. Highway 65 at northeast city limits of Clinton. Drainage area: 118 square miles. Remarks: Natural-flow data.	11	07075300	.3	0
175	07076510	Big Creek near Pangburn, Ark., Lat 35°27'22", long 91°50'42" NW 1/4 sec.34, T.10 N., R.8 W., at bridge on county road, and 2.0 miles north of Pangburn. Drainage area: 51.4 square miles. Remarks: Natural-flow data.	12	07261000	.2	0
176	07076530	Big Creek near Letona, Ark., Lat 35°21'43", long 91°48'04" SE 1/4 sec.36, T.9 n., R.8 W., at bridge on State Highway 16, 1.8 miles east of Letona. Drainage area: 72.6 square miles. Remarks: Natural-flow data.	14	07261000	.3	0
177	07076620	Little Red River near Searcy, Ark., Lat 36°16'57", long 91'43'09", in NE, NE sec.35, T.8 N., R.7 W., 1.0 mile upstream from old U.S. Highway 67 bridge, 2.0 miles north of Searcy. Drainage area: 1,648 square miles. Remarks: Regular gaging station (198 being analyzed as a partial record st	33-90)	(3)	67	0
178	07076800	Bayou Des Arc near Garner, Ark., Lat 35°10'19", long 91°44'47" SE 1/4 sec.3, T.6 N., R.7 W., at bridge on U.S. Highway 367, 2.7 miles northeast of Garner. Drainage area: 96.7 square miles. Remarks: Natural-flow data.	21	07261000	<.1	0
179	07076880	Bull Creek near McRae, Ark., Lat 35°05′30", long 91°51′17", NW 1/4 sec.3, T.5 N., R.8 W., at bridge on U.S. Highway 367, 2.5 miles southwest of McRae. Drainage area; 95.8 square miles. Remarks: Natural-flow data.	12	(1)	0	0
180	07076940	Wattensaw Bayou near Lonoke, Ark., Lat 34°53'06", long 91°52'28", near center and on line between secs.16 and 17, T.3 N., R.8 W., at bridge on State Highway 31, and 7.3 miles north of Lonoke. Drainage area: 31.6 square miles.	8	07077500	<.1	0
		Remarks: Low flow affected by irrigation practices.				

Map	Station number	Station	Number of discharge measurements	Index station	Annual 7-day indicated recursion cubic feet	rence interval,
			reasurements	Station	2-year	10-year
181	07076950	Wattensaw Bayou near Hazen, Ark., Lat 34°52′34″, long 91°33′56″, near south edge of and on line between secs.17 and 18, T.3 N., R.5 W., at bridge on State Highway 11, 6.8 miles north of Hazen. Drainage area: 192 square miles. Remarks: Low flow affected by irrigation practices.	21	07077500	0.2	<0.1
168	07074450	Dota Creek near Newark, Ark., Lat 35°43'43", long 91°24'51" W 1/2 and on line between secs.27 and 34, T.13 N., R.4 W., at bridge on State Highway 122, 2.5 miles northeast of Newark. Drainage area: 56.6 square miles. Remarks: Natural-flow data.	18	07074000	4.0	3.0
169	07074600	Village Creek at Walnut Ridge, Ark., Lat 36°04'27", long 90°57'44", NE 1/4 sec.34, T.17 N., R.1 E., at bridge on State Highway 25 at Walnut Ridge. Drainage area: 35 square miles. Remarks: Low flow affected by urban runoff.	20	07264000	<.1	<.1
170	07074700	Village Creek near Newport, Ark., Lat 35°35'33", long 91°14'31" E 1/2 sec.5, T.11 N., R.2 W., at bridge on State Highway 14, 3.5 miles east of Newport. Drainage area: 277 square miles. Remarks: Low flow affected by irrigation practices.	37	(2)	4.1	1.9
171	07074800	Departee Creek near Coffeeville, Ark., Lat 35°30′24″, long 91°23′32″, NE 1/4 sec.11, T.10 N., R.4 W., at bridge on U.S. Highway 67, 1.2 miles northeast of Coffeeville, Drainage area: 101 square miles. Remarks: Low flow affected by diversi	f	(2)	<.1	<.1
172	07074890	Middle Fork Little Red River at Leslie, Ark., Lat 35°48'59", long 92°32'58", in NW, NE sec.35, T.14 N., R.15 W., at bridge on U.S. Highway 65, at Leslie. Drainage area: 71.8 square miles. Remarks: Natural-flow data.	5	(1)	0	0
173	07075200	Devils Fork Little Red River near Brownsville, Ark., Lat 35°38'22", Long 92°01'57", NW 1/4 sec.35, T.12 N., R.10 W., at highway bridge 3.0 miles northeast of Brownsville. Drainage area: 209 square miles. Remarks: Natural-flow data	16	07257000	.2	0
182	07077100	Big Creek near Boydsville, Ark., Lat 36°22'12", long 90°19'46" SE 1/4 NW 1/4 sec.16, T.20 N., R.7 E., at bridge on county road, 0.5 mile south of Crockett and 4.0 miles northeast of Boydsville. Drainage area: 12.8 square miles. Remarks: Natural-flow data.	13	(1)	0	0

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interval, per second
				·	2-year	10-year
183	07077300	Cache River near Stonewall, Ark., Lat 36°14'02", long 90°33'55", W 1/2 sec.5, T.18 N., R.5 E., 1.2	15	(2)	0.9	0.3
		miles southwest of Stonewall. Drainage area: 284 square miles. Remarks: Low flow affected by irrigation practices.				
184	07077450	Cache River near Newport, Ark., Lat 35°33'47", long 91°08'23", W 1/2 and on line between secs. 19 and 30, T.11 N., R.1 W., at bridge on State Highway 14, 8.0 miles southwest of Newport. Drainage area: 871 square miles.	<b>7</b>	(2)	21	11
		Remarks: Low flow affected by irrigation practices.				
185	07077555	Cache River at Cotton Plant, Ark., Lat 35°02'07", long 91°19'19", in SE 1/4 SW 1/4 sec.21, T.5 N., R.3 W. bridge on county road 4.2 miles northwest of Cotton Plant. Drainage area: 1,172 square miles.	70 , at	07077380	95	14
		Remarks: Regular gaging station (1987-90) analyzed as a partial record station.				
186	07077650	Big Creek near Jonesboro, Ark., Lat 35°51'11", long 90°45'00", SE 1/4 sec.10, T.14 N., R.3 E.,	22	07363300	.4	0
		at bridge on U.S. Highway 63, 2.7 miles northwest of Jonesboro. Drainage area: 50.6 square miles. Remarks: Low flow affected by urban runoff.				
187	07077920	Big Creek at Goodwin, Ark., Lat 34°56'22", long 91°00'55" NE 1/4 NE 1/4 sec.29, T.4 N., R.1 E., at bridge on U.S. Highway 70, 0.3 mile east of Goodwin. Drainage area: 31.1 square miles.	17	07363300	<.1	0
		Remarks: Low flow affected by irrigation practices.				
188	07077940	Spring Creek near Aubrey, Ark., Lat 34°41'16", long 90°53'45", SW 1/4 SE 1/4 sec.16, T.1 N., R.2 E. at bridge on State Highway 121, 2.1	23	(1)	<.1	0
		miles south of Aubrey. Drainage area: 38 square miles. Remarks: Low flow affected by irrigation practices.				
189	07077970	Lat 34°27′43", long 91°01′07", E 1/2 sec.5, T.3 S., R.1 E., at	9	07363000	<.1	0
		bridge on State Highway 1, 1.0 mile south of Turner. Drainage area: 106 square miles. Remarks: Low flow affected by irrigation practices.				
190	07078180	Little Lagrue Bayou near Dewitt, Ark Lat 34°18′12″, long 91°18′46″, NE 1/4 sec.34, T.4 S., R.3 W., at bridge on State Highway 1, 1.6 miles northeast of DeWitt.	., 9	(1)	< .1	0 ,
		Drainage area: 123 square miles. Remarks: Low flow affected by irrigation practices.				

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day indicated recursion cubic feet 2-year	rence interval
						1
		Arkansa	s River Basin			
191	07188810	McKisic Creek near Bella Vista, Ark., Lat 36°25'34", long 94°13'15", NW 1/4 sec.7, T.20 N., R.30 W., at bridge on county road, 0.2 mile east of U.S. Highway 71, and 1.0 mile southeast of Bella Vista. Drainage area: 22.2 square miles. Remarks: Low flow affected by municipal effluent.	11	07195000	4.5	1.3
192	07188813	Ford Spring near Bentonville, Ark., Lat 36°25′16", long 94°12′45", SW 1/4 sec.7, T.20 N., R.30 W., 0.6 mile east of U.S. Highway 71 and 3.5 miles north of Booneville. Drainage area: Indeterminate. Records analyzed: 23 discharge measurements made during 1952-63. Remarks: Natural-flow data.	27	07195000	3.1	.5
193	07194790	Muddy Fork Illinois River near Savoy, Ark., Lat 36°04'12", long 94°20'45", NW 1/4 sec.14, T.16 N., R.32 W., at bridge on county road, 2.0 miles south of State Highway 16, and 3.0 miles south of Savoy.  Drainage area: 73.5 square miles. Remarks: Natural-flow data.	12	07049000	1.5	.3
194	07194800	Illinois River at Savoy, Ark., Lat 36°06'11", long 94°20'39", SE 1/4 sec.36, T.17 N., R.32 W., at bridge on State Highway 16, 0.5 mile west of Savory. Drainage area: 167 square miles. Remarks: Natural-flow data.	74	07196900	3.5	1.2
195	07194950	Little Osage Creek near Healing Springs, Ark., Lat 36°13′57", long 94°16′37", NW 1/4 sec.15, T.18 N., R.31 W., 1.5 miles south of Healing Springs. Drainage area: 46.8 square miles. Remarks: Natural-flow data.	25	07195000	14	6.5
96	07195400	Illinois River near Siloam Springs, Ark., Lat 36°08'41", long 94°29'41", in SW 1/4 SW 1/4 sec.15, T.17 N., R.33 W., at bridge on State Highway 10 3.8 miles southeast of Siloam Springs Drainage area: 509 square miles. Remarks: Natural-flow data.	46 6,	07195000	65	18
97	07196950	Evansville Creek at Evansville, Ark., Lat 35°48'20", long 94°29'45", near south edge of and on line between secs.15 and 16, T.13 N., R.33 W., at bridge on State Highway 59, 1.0 mile north of Evansville. Drainage area: 24.4 square miles. Remarks: Natural-flow data.	22	07196900	.1	<.1
98	07246970	Jones Creek near Waldron, Ark., Lat 34°53'14", long 94°11'18", SE 1/4 sec.28, T.3 N., R.30 W., at bridge on Forest Service road, 6.0 miles west of Waldron. Drainage area: 70.6 square miles. Remarks: Natural-flow data.	12	07247000	< .1	0

Map	Station number	ation Station	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interval,
	•	•			2-year	10-year
199	07247010	Poteau River near Bates, Ark., Lat 34°53'20", long 94°25'11", SE 1/4 SW 1/4 sec.29, T.3 N., R.32 W., at low-water crossing on county road, 2.1 miles upstream from Oklahoma State line and 2.3 miles southwest of Bates. Drainage area: 251 square miles.	11	07247000	0.3	0
200	07247100	Remarks: Natural-flow data.  Black Fork near Page, Okla. Lat 34°45'35", long 94°29'34", sec.5, T.3 N., R.27 E., at highway bridge, 2.0 miles west	18	07249400	.1	0
		of Arkansas-Oklahoma State line and 5.0 miles northeast of Page. Drainage area: 46.6 square miles. Remarks: Natural-flow data.				
201	07247200	Big Creek at Howard, Ark., Lat 34°42′24", long 94°26′14" sec.31, T.1 N., R.32 W., 300 feet north of U.S. Highway 270, 1.0 mile east of Arkansas-Oklahoma State line at Howard. Drainage area: 11.1 square miles. Remarks: Natural-flow data.	20	07263000	<.1	0
202	07247300		2.0	07249400	<.1	0
203	07249600	Lee Creek at Natural Dam, Ark., Lat 35°38'46", long 94°23'37", SW 1/4 sec.10, T.11 N., R.32 W., at bridge on State Highway 59 at Natural Dam. Drainage area: 168 square miles. Remarks: Natural-flow data.	40	07250000	.3	0
204	07249700	Mountain Fork Creek at Natural Dam, Ark., Lat 35°38'43", long 94°23'49" SE 1/4 sec.9, T.11 N., R.32 W., at bridge on State Highway 59 at Natural Dam. Drainage area: 38.9 square miles. Remarks: Natural-flow data.	31	07196900	<.1	0
205	07249800	Lee Creek near Short, Okla. Lat 35°33'57", long 94°31'53", on line between secs.27 and 34, T.13 N., R.26 E., at bridge on State Highway 101, 0.5 mile west of Short. Drainage area: 236 square miles. Remarks: Natural-flow data.	20	07250000	. 4	0
206	07249900	Little Lee Creek near Short, Okla. Lat 35°34'32", long 94°33'20", NW 1/4 sec.28, T.13 N., R.26 E., at bridge on State Highway 101, 3.0 miles west of Short. Drainage area: 103 square miles. Remarks: Natural-flow data.	29	07250000	<.1	0
207	07250600	Vache Grasse Creek near Lavaca, Ark., Lat 35°19'03", long 94°12'55", NW 1/4 sec.5, T.7 N., R.30 W., at bridge on State Highway 22, 2.5 miles south of Lavaca. Drainage area: 105 square miles. Remarks: Natural-flow data.		07252000	< .1	0

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day low flow for indicated recurrence intering cubic feet per second 2-year 10-year	val,
208	07250700	Big Creek at Bloomer, Ark., Lat 35°17'34", long 94°07'58" SW 1/4 SW 1/4 sec.7, T.7 N., R.29 W., at bridge on State Highway 22 at Bloomer. Drainage area: 53.1 square miles. Remarks: Natural-flow data.	32	(1)	0 0	
209	07251400	Cedar Creek near Rudy, Ark., Lat 35°31'45" long 94°16'39" SE 1/4 sec.22, T.10 N., R.31 W., 200 feet upstream from mouth and 0.5 mile northwest of Rudy. Drainage area: 51.5 square miles. Remarks: Natural-flow data.	22	07252000	<0.1 0	
210	07251800	Little Mulberry Creek near Oark, Ark. Lat 35°41'11", long 93°39'45", SW 1/4 sec.21, T.12 N., R.25 W., at bridge on Forest Service road, 3.7 miles wes of end of State Highway 103, and 5.0 miles west of Oark. Drainage area: 66.3 square miles. Remarks: Natural-flow data.	l .	07252000	.2 0	
211	07251900	Mulberry River near Cass, Ark., Lat 35°40'10", long 93°49'46", NE 1/4 sec.35, T.12 N., R.27 W., at bridge on State Highway 23, 1.5 miles southwest of Cass. Drainage area: 266 square miles. Remarks: Natural-flow data.	12	07252000	.8 0	
212	07252100	Little Mulberry Creek near Mulberry, Ark., Lat 35°30'37", long 94°04'15", SW 1/4 sec.27, T.10 N., R.29 W., at bridge on U.S. Highway 64, 1.2 miles northwest of Mulberry. Drainage area: 49.7 square miles. Remarks: Natural-flow data.	24	07252000	<.1 0	
213	07252300	White Oak Creek near Ozark, Ark., Lat 35°30'24", long 93°56'45", SW 1/4 sec.26, T.10 N., R.28 W., at bridge on U.S. Highway 64, 7.0 miles west of Ozark. Drainage area: 75.0 square miles. Remarks: Natural-flow data.	24	07257000	.1 0	
214	07256200	Horsehead Creek at Hartman, Ark., Lat 35°26'06", long 93°36'21", SE 1/4 sec.13, T.9 N., R.25 W., at bridge on U.S. Highway 64, 0.5 mile east of Hartman. Drainage area: 127 square miles. Remarks: Natural-flow data.	22	07257000	.2 0	
215	07256700	Big Shoal Creek near New Blaine, Ark., Lat 35°17'30", long 93°27'35" SE 1/4 sec.5, T.7 N., R.23 W., at bridge on State Highway 22, 2.3 miles west of New Blaine. Drainage are: 50.0 square miles. Remarks: Natural-flow data.	24	07257000	<.1 0	
216	07257200	Little Piney Creek near Lamar, Ark., Lat 35°26′54″, long 93°20′17″, near center of sec.9, T.9 N., R.22 W., at bridge on State Highway 359, 2.5 miles east of Lamar. Drainage area: 154 square miles. Remarks: Natural-flow data.	45	07252000	.5 0	

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interva
					2-year	10-year
17	07257470	Middle Fork Illinois Bayou near Hector, Ark., Lat 35°31'42", long 92°56'29", E 1/2 sec.7, T.10 N., R.18 W., at bridge on State Highway 27, 4.9 miles northeast of Hector. Drainage area: 57.3 square miles. Remarks: Natural-flow data.	12	07257500	0.3	0
218	07257480	North Fork Illinois Bayou near Scottsville, Ark., Lat 35°30'00", long 93°01'07", S 1/2 sec.21, T.10 N., R.19 W., at bridge on Forest Service road, 2.4 miles southwest of State Highway 27 and 4.0 miles northeast of Scottsville. Drainage area: 87.4 square miles. Remarks: Natural-flow data.	12	07257000	.5	0
19	07258700	Sugar Creek near Sugar Grove, Ark., Lat 35°04'38", long 93°49'08", NE 1/4 sec.25, T.5 N., R.27 W., at bridge on State Highway 217, 1.1 miles west of Sugar Grove. Drainage area: 95.0 square miles. Remarks: Natural-flow data.	29	07255000	<.1	0
220	07260673	West Fork Point Remove Creek near Hattieville, Ark., Lat 35°19'25", long 92°52'22", in NE 1/4 SE 1/4 sec.23, T.8 N., R.18 W at bridge on State Highway 247, 5.4 miles northwest of Hattieville. Drainage area: 222 square miles. Remarks: Natural-flow data.	27	07257000	.6	0
21	07260700	Point Remove Creek near Morrilton, Ark., Lat 35°10′56", long 92°47′01", NW 1/4 sec.11, T.6 N., R.17 W., at bridge on U.S. Highway 64, 3.0 miles northwest of Morrilton. Drainage area: 488 square miles. Remarks: Low flow affected by irrigation practices.		(2)	1.0	
22	07261200	East Fork Cadron Creek near Enola, Ark., Lat 35°13'06", long 92°16'44" NE 1/4 sec.28, T.7 N., R.12 W., at bridge on county road, 2.1 miles south of State Highway 225, and 4.5 miles west of Enola. Drainage area: 122 square miles. Remarks: Natural-flow data.	18	07261000	.6	0
23	07261400	Mill Creek near Boles, Ark., Lat 34°44′14", long 94°04′49" SE 1/4 SE 1/4 sec.16, T.1 N., R.29 W., at bridge on U.S. Highway 71, 4.0 miles south of Boles. Drainage area: 50.5 square miles. Remarks: Natural-flow data.	21	07247000	<.1	0
24	07261420	Fourche LaFave River at Boles, Ark., Lat 34°46′35", long 94°02′27", NW 1/4 sec.1, T.1 N., R.29 W., at bridge on Forest Service road, 0.8 mile east of U.S. Highway 71, and 0.6 mile southwest of Boles. Drainage area: 176 square miles. Remarks: Low flow may be affected by diversion.	13	07247000	.2	0

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map	Station number	n Station	Number of discharge leasurements	Index station	Annual 7-day low flow for indicated recurrence interval, in cubic feet per second		
					2-year	10-year	
225	07261600	Gafford Creek near Bluffton, Ark., Lat 34°53′53", long 93°36′44", sec.24, T.3 N., R.25 W., at bridge on State Highway 28, 0.8 mile southwest of	24	07261500	<.1	0	
		Bluffton. Drainage area: 41.0 square miles. Remarks: Natural-flow data.					
226	07263290	Maumelle River at Williams Junction, Ark., Lat 34°53′32″, long 92°46′58″, NW 1/4 sec.23, T.3 N., R.17 W., at bridge on State Highway 9, 1.0 mile northwest of Williams Junction. Drainage area: 26.5 square miles. Remarks: Natural-flow data.	11	(1)	0	0	
227	07263600	Fourche Creek at Little Rock, Ark., Lat 34°43'01", long 92°15'28", NE 1/4 sec.14, T.1 N., R.12 W., at bridge on U.S. Highway 365, 0.3 mile north of Interstate 440 at Little Rock.	17	07363000	1.5	.6	
		Drainage area: 163 square miles. Remarks: Low flow affected by urban runoff.					
228	07263890	Little Bayou Meto at Reydell, Ark., Lat 34°09'24", long 91°33'56", E 1/2 sec.20, T.6 S., R.5 W., at bridge	22	(1)	0	0	
		on State Highway 88 at Reydell. Drainage area: 425 square miles. Remarks: Low flow affected by irrigation practices.					
229	07264200	Bayou Two Prairie at Carlisle, Lat 34°46'44", long 91°45'58", SW 1/4 sec.21, T.2 N., R.7 W., at bridge on U.S. Highway 70, 1.0 mile west of Carlisle. Drainage area: 151 square miles. Remarks: Low flow affected by	17	07077500	0.4	0.2	
230	07265000	irrigation practices.	10	(1)		_	
230	07263000	Crooked Creek near Humphrey, Ark., Lat 34°25'35", long 91°40'04", in SE 1/4 sec.20, T.3 S., R.6 W., at brid on U.S. Highway 79, 2.3 miles east	12 .ge		0	0	
		of Humphrey. Drainage area: 79.2 square miles. Remarks: Low flow affected by irrigation practices.					
		Red Ri	ver Basin				
231	07336900	Walnut Bayou near Foreman, Ark., Lat 33°39'14", long 94°21'33", on east line sec.12, T.13 S., R.32 W., at highway bridge 5.0 miles southeast	21	07340500	<.1	0	
		of Foreman. Drainage area: 90.4 square miles. Remarks: Natural-flow data.					
232	07338700	Twomile Creek near Hatfield, Ark., Lat 34°30'52", long 94°20'14", NW 1/4 NW 1/4 sec.8, T.3 S., R.31 W., at bridge on U.S. Highway 71, 3.1 mile	33 s	07356000	.8	.3	
		northeast of Hatfield. Drainage area: 15.9 square miles. Remarks: Natural-flow data.					

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day lo indicated recurre in cubic feet p	nce interval, er second
-	· · · · · · · · · · · · · · · · · · ·				2-year	10-year
233	07338720	Mountain Fork near Hatfield, Ark., Lat 34°30'18", long 94°25'50" E 1/2 and on line between secs.8 and 17, T.3 S., R.32 W., at bridge on State Highway 246, 3.5 miles northwest of Hatfield. Drainage area: 168 square miles. Remarks: Natural-flow data.	38	07356000	1.3	0.2
234	07339200	Rolling Fork near Grannis, Ark., Lat 34°14'48", long 94°22'21" NW 1/4 sec.14, T.6 S., R.32 W., at bridge on county road 2.0 miles west of Grannis. Drainage area: 51.0 square miles. Remarks: Natural-flow data.	14	07339500	.2	0
235	07340200	West Flat Creek near Foreman, Ark., Lat 33°45'13", long 94°23'28" NE 1/4 SE 1/4 sec.3, T.12 S., R.32 W., at bridge on State Highway 41, 2.3 miles north of Foreman. Drainage area: 10.7 square miles. Remarks: Natural-flow data.	20	(1)	0	0
236	07340400	Cossatot River near Umpire, Ark., Lat 34°17'45", long 94°10'39", SE 1/4 SW 1/4 sec.23, T.5 S., R.30 W., at bridge on State Highway 4, 7.5 miles west of Umpire. Drainage area: 142 square miles. Remarks: Natural-flow data.	13	(2)	8.6	3.4
237	07340750	Lick Creek near Wilton, Ark., Lat 33°45'39", long 94°08'53", SW 1/4 sec.31, T.11 S., R.29 W., at bridge on U.S. Highway 71, 1.3 miles north of Wilton. Drainage area: 19.3 square miles. Remarks: Natural-flow data.	13	(1)	0	0
238	07341100	Rock Creek near Dierks, Ark., Lat 34°06'46", long 94°02'25" NE 1/4 sec.36, T.7 S., R.29 W., at bridge on U.S. Highway 70, 1.4 miles southwest of Dierks. Drainage area: 9.46 square miles. Remarks: Natural-flow data.	24	(1)	0	0.2
239	07341690	Bois D'Arc Creek near Hope, Ark., Lat 33°39'08", long 93°39'07" NE 1/4 sec.2, T.13 S., R.25 W., at bridge on U.S. Highway 67, 4.0 miles southwest of Hope. Drainage area: 36.4 square miles. Remarks: Natural-flow data.	13	(1)	1.0	.3
240	07342150	Maniece Bayou near Canfield, Ark., Lat 33°11'42", long 93°41'07", SW 1/4 sec.10, T.18 S., R.25 W., at a highway bridge 3.1 miles west of Canfield. Drainage area: 85.2 square miles. Remarks: Natural-flow data.	21	07365800	.6	0
241	07342350	McKinney Bayou near Garland, Ark., Lat 33°24'46", long 93°48'27", SE 1/4 sec.29, T.15 S., R.26 W., at bridge on U.S. Highway 82, 1.0 mile downstream from Red Chute and 6.7 miles northwest of Garland. Drainage area: 175 square miles. Remarks: Natural-flow data.	20	07365800	< .1	0

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interval,
					2-year	10-year
242	07348600	Bayou Dorcheat at Buckner, Ark., Lat 33°21'32", long 93°24'47", NW 1/4 sec.18, T.16 S., R.22 W., at bridge on U.S. Highway 82, 1.0 mile east of Buckner. Drainage area: 125 square miles. Remarks: Natural-flow data.	25	(1)	0	0
243	07349420	Whetton Branch near Bodcaw, Ark., Lat 33°23'36", long 93°24'39", N 1/2 and on line between secs. 7 and 8, T.14 S., R.22 W., at bridge on State Highway 53, 1.1 miles south of Bodcaw. Drainage area: 3.09 square miles. Remarks: Natural-flow data.	13	(1)	0	0
244	07355810	Ouachita River near Mena, Ark., Lat 34°35'01", long 94°09'06", NW 1/4 NE 1/4 sec.13, T.2 S., R.30 W., at bridge on State Highway 88, 4.7 miles east of Mena. Drainage area: 39.6 square miles. Remarks: Natural-flow data.		07356000	.1	<.1
245	07355900	Big Fork tributary at Big Fork, Ark. Lat 34°28'23", long 93°57'58", SE 1/4 NW 1/4 sec.23, T.3 S., R.28 W., at culvert on State Highway 8, 0.9 mile southeast of Big Fork. Drainage area: 0.19 square miles. Remarks: Natural-flow data.	, 29	07356000	0.1	<0.1
246	07356300	Irons Fork near Aly, Ark., Lat 34°46′02", long 93°29′35", NW 1/4 sec.6, T.1 N., R.23 W., at bridge on State Highway 27, 1.6 miles south of Aly. Drainage area: 47.2 square miles. Remarks: Natural-flow data.	11	07263000	<.1	0
247	07357710	Glazypeau Creek at Mountain Pine, Ark., Lat 34°34'18", long 93°09'83" SE 1/4 sec.8 T.2 S., R.20 W., at bridge on State Highway 227, 0.5 mile east of Mountain Pine. Drainage area: 30.1 square miles. Remarks: Natural-flow data.	11	07356500	1.8	.1
248	07358010	Fourche a Loupe Creek near Hot Springs, Ark., Lat 34°23'00", long 93°07'57", SW 1/4 sec.15, T.4 S., R.20 W., at bridge on State Highway 7 and 9.2 miles southwest of Hot Springs. Drainage area: 4.37 square miles. Remarks: Natural-flow data.	13	07356500	.2	<.1
249	07358700	Gulpha Creek near Hot Springs, Ark., Lat 34°28'16", long 92°59'09", E 1/2 sec.13, T.3 S., R.19 W., at bridge on U.S. Highway 270, 4.6 miles southeast of Hot Springs. Drainage are: 38.8 square miles. Remarks: Natural-flow data.	19	07356500	1.6	.1
250	07359590	Caddo River near Black Springs, Ark., Lat 34°7'00", long 93°47'25", SW 1/4 sec.28, T.3 S., R.26 W., at bridge on State Highway 8, 4.6 miles west of Black Springs. Drainage area: 14.7 square miles. Remarks: Natural-flow data.	13	07356000	7.0	5.8

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day indicated recur in cubic feet	rence interval,
					2-year	10-year
251	07359600	Caddo River at Caddo Gap, Ark., Lat 34°23′50", long 93°37′18", NE 1/4 sec.13, T.4 S., R.25 W., at highway bridge at Caddo Gap. Drainage area: 125 square miles. Remarks: Natural-flow data.	22	07356000	22	14
252	07359610	Caddo River near Caddo Gap, Ark., Lat 34°22′59", long 93°36′21" in in SW 1/4 NE 1/4 sec.19 T.4 S., R.24 W., at bridge on State Highway 240, 1.3 miles southeast of Caddo Ga Drainage area: 136 square miles. Remarks: Regular gaging station (1988-90) analyzed as a partial- record station.	86 p.	07356000	27	16
253	07360100	L'eau Frais Creek at Joan, Ark., Lat 34°06'27", long 92°55'52", SW 1/4 sec.22, T.7 S., R.18 W., at bridge on State Highway 128, 0.5 mile southeast of Joan. Drainage area: 74.2 square miles. Remarks: Natural-flow data.	32	07363000	3.0	0.4
254	07360160	Cypress Creek at Manning, Ark., Lat 34°01'23", long 92°48'07" SW 1/4 sec.13, T.8 S., R.17 W., at bridge on State Highway 8, 0.4 mile west of Manning. Drainage area: 55.9 square miles. Remarks: Natural-flow data.	15	(2)	1.3	.1
255	07360200	Little Missouri River near Langley, Ark., Lat 34°18,41", long 93°53′58", SW 1/4 sec.16, T.5 S., R.27 W., at highway bridge 3.5 miles west of Langley. Drainage area: 68.4 square miles. Remarks: Natural-flow data.	40	07340300	10	8.0
256	07361025	Prairie Creek near Murfreesboro, Ark., Lat 34°02'34", long 93°41'02", NE 1/4 sec.20, T.8 S., R.25 W., at bridge on State Highway 301, 1.5 miles south of Murfreesboro. Drainage area: 33.7 square miles. Remarks: Natural-flow data.	14	(2)	.2	0
257	07361160	North Fork Ozan Creek near McCaskill, Ark., Lat 33°52'24", long 93°38'30", near center and on line between secs.14 and 23, T.10 S., R.25 W., at bridge on county road, 3.0 miles south of McCaskill. Drainage area: 97.3 square miles. Remarks: Natural-flow data.	13	07340500	.1	0
258	07361540	Wolf Creek near Antoine, Ark., Lat 34°01'11", long 93°26'15", SE 1/4 sec.27, T.8 S., R.23 W., at bridge on State Highway 29, 1.5 miles southwest of Antoine. Drainage area: 37.4 square miles. Remarks: Natural-flow data.	13	(2)	.8	0
259	07361640	Little Terre Rouge Creek near Emmet, Ark., Lat 33°44′55", long 93°27′45", NE 1/4 sec.34, T.11 S., R.23 W., at bridge on U.S. Highway 67, 1.4 miles northeast of Emmet. Drainage area: 40.5 square miles. Remarks: Natural-flow data.	14	(2)	.2	<.1

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day low flow for indicated recurrence interval, in cubic feet per second 2-year 10-year
260	07361650	Terre Rouge Creek near Prescott, Ark., Lat 33°46'46", long 93°14'10", SW 1/4 sec.14, T.11 S., R.21 W., at bridge on State Highway 24, 8.5 miles east of Prescott. Drainage area: 232 square miles. Remarks: Natural-flow data.	23	07359800	1.1 0.2
261	07361700	Caney Creek near Bluff City, Ark., Lat 33°45′50", long 93°08′50", NW 1/4 sec.22, T.11 S., R.20 W., at bridge on State Highway 24, 3.6 miles north of Bluff City. Drainage area: 181 square miles. Remarks: Natural-flow data.	26	(1)	0 0
262	07361755	Terre Noire Creek near Hollywood, Ark., Lat 34°05'36", long 93°17'29", in SW 1/4 NW 1/4 sec.31, T.7 S. R.21 W., at bridge on State Highway 26, 2.5 miles west of Hollywood. Drainage are: 35.9 square miles. Remarks: Natural-flow data.	9	(1)	0 0
263	07361800	Terre Noire Creek near Gurdon, Ark., Lat 33°55'02", long 93°02'08", SW 1/4 sec.27, T.2 S., R.19 W., at highway bridge 7.0 miles east of Gurdon. Drainage are: 258 square miles. Remarks: Natural-flow data.	22	07359800	.5 0
264	07361900	Freeo Creek near Eagle Mills, Ark., Lat 33°43'24" long 92°42'24", on line between and near south edge of secs.35 and 36, T.11 S., R.16 W., at bridge on State Highway 9, 2.5 miles north of Eagle Mills. Drainage area: 78 square miles. Remarks: Natural-flow data.	23	07365800	.4 <.1
265	07362060	Two Bayou at Camden, Ark., Lat 33°34'04", long 92°50'21", SE 1/4 sec.27, T.13 S., R.17 W., at bridge on U.S. Highway 79 near southwest city limits of Camden. Drainage area: 118 square miles. Remarks: Low flow may be affected by urban runoff.	14	(2)	<.1 0
266	07362070	Locust Bayou at Locust Bayou, Ark., Lat 33°33'27", long 92°40'33", NW 1/4 sec.32, T.13 S., R.15 W., at bridge on State Highway 4, 0.4 mile west of Locust Bayou. Drainage area: 62.3 square miles. Remarks: Natural-flow data.	14	(1)	0 0
267	07362080	Gum Creek near Stephens, Ark., Lat 33°26'39", long 93°02'54", SE 1/4 sec.10, T.15 S., R.19 W., at bridge on U.S. Highway 79, 2.5 miles northeast of Stephens. Drainage area: 26.9 square miles. Remarks: Low flow may be affected by oil-field drainage and diversion.	18	(1)	0 0
268	07362090	Camp Creek near Smackover, Ark., Lat 33°21'12", long 92°46'28", NE 1/4 sec.8 T.16 S., R.16 W., at bridge on State Highway 160, 2.0 miles west of Smackover city limits. Drainage area: 43.3 square miles. Remarks: Low flow may be affected by oil-field drainage and diversion.	15	(2)	.1 0

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day loindicated recurrent in cubic feet page 2-year	ence interval,
269	07362300	Champagnolle Creek at Hampton, Ark., Lat 33°33'09", long 92°28'05", NW 1/4 sec.32, T.13 S., R.13 W., at bridge on U.S. Highway 167, 1.0 mile north of Hampton. Drainage area: 69.4 square miles. Remarks: Natural-flow data.	15	(1)	0	0
270	07362540	Whitewater Creek near Tinsman, Ark., Lat 33°39'40", long 92°21'15", NW 1/4 sec.21, T.12 S., R.12 W., at bridge on State Highway 274, 2.2 miles north of Tinsman. Drainage area: 25 square miles. Remarks: Natural-flow data.	14	(1)	0	0
271	07362550	Moro Creek near Banks, Ark., Lat 33°32'38", long 92°19'00", NW 1/4 sec.35, T.13 S., R.12 W., at bridge on State Highway 4, 3.5 miles southwest of Banks. Drainage area: 385 square miles. Remarks: Natural-flow data.	19	07363500	0	0
272	07362600	Alum Fork at Crows, Ark., Lat 34°36′56", long 92°44′55", NW 1/4 sec.29, T.1 S., R.16 W., at bridge on State Highway 5, 1.0 mile east of Crows. Drainage area: 121 square miles. Remarks: Natural-flow data.	19	07363000	1.8	0.2
273	07362700	Middle Fork at Crows, Ark., Lat 34°36′54″, long 92°46′44″, NW 1/4 sec.25, T.1 S., R.17 W., at bridge on State Highway 5, 0.5 mile west of Crows. Drainage area: 102 square miles. Remarks: Natural-flow data.	19	07356000	6.5	2.3
274	07362800	South Fork near Hot Springs, Ark., Lat 34°35′10", long 92°58′11", SE 1/4 sec.6, T.2 S., R.18 W., at bridge on State Highway 5, 7.0 miles northeast of Hot Springs. Drainage area: 12.6 square miles. Remarks: Low flow may be affected by diversion.	23	07356000	1.8	1.1
275	07362870		11	(1)	0	0
276	07362900	North Fork near Benton, Ark., Lat 34°36'18", long 92°37'07", SW 1/4 sec.28, T.1 S., R.15 W., at bridge on State Highway 5, 4.0 miles northwest of Benton. Drainage area: 133 square miles. Remarks: Low flow affected by regulation at Lake Norrell.	22	07363000	1.8	0.1
277	07363110	Big Creek at Poyen, Ark., Lat 34°18′52", long 92°38′25", SE 1/4 sec.5, T.5 S., R.15 W., at bridge on State Highway 229, 0.7 mile south of Poyen. Drainage area: 32.1 square miles. Remarks: Natural-flow data.	14	07363300	.6	<.1

Map no.	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day low indicated recurrent in cubic feet per 2-year	nce interval,
278	07363160	Saline River near Leola, Ark., Lat 34°12′37", long 92°32′52", in NW 1/4 SW 1/4 sec.8, T.6 S., R.14 W., at bridge on State Highway 46, 3.8 miles northeast of Leola.	8	07363500	20	6.0
		Drainage area: 896 square miles. Remarks: Natural-flow data.				•
279	07363180	Lost Creek near Sheridan, Ark., Lat 34°18'52", long 92°27'58", SE 1/4 sec.1, T.5 S., R.14 W., at bridge on U.S. Highway 270, 4.0 miles west of Sheridan. Drainage area: 68.0 square miles. Remarks: Natural-flow data.	11	07363300	0	0
280	07363276	Hurricane Creek near Ico, Ark., Lat 34°27'05", long 92°22'18", in NE, NE, sec.23, T.3 S., R.13 W., at bridge on county road, 1.2 miles west of Ico. Drainage area: 90.4 square miles.   (approximately). Remarks: Natural-flow data.	9	07363300	0.8	0
281	07363435	Derrieusseaux Creek near Grapevine, Ark., Lat 34°08'44", long 92°14'39", in NE, NW, sec.5, T.7 S., R.11 W., at bridge on county road, 0.6 mile west of Grant-Jefferson county line, 4.3 miles east of Grapevine. Drainage area: 77 square miles. Remarks: Natural-flow data.	7	(1)	0	0
282	07363440	Derrieusseaux Creek near Rison, Ark., Lat 33°58'46", long 92°15'18", SE 1/4 sec.31, T.8 S., R.11 W., at bridge on State Highway 35, 4.0 miles northwest of Rison. Drainage area: 140 square miles. Remarks: Natural-flow data.	14	(1)	0	0
283	07363460	Big Creek near Pine Bluff, Ark., Lat 34°07'05", long 92°07'54", NE 1/4 sec.17, T.7 S., R.10 W., at bridge on U.S. Highway 79, 7.0 miles southwest of Pine Bluff. Drainage area: 14.8 square miles. Remarks: Natural-flow data.	12	(1)	0	0
284	07363465	Big Creek near Pansy, Ark., Lat 33°49'47", long 92°04'58", NE 1/4 sec.24, T.10 S., R.10 W., at bridge on State Highway 35, 5.0 miles west of Pansy. Drainage area: 153 square miles. Remarks: Natural-flow data.	13	(1)	0	0
285	07363700	Hudgin Creek near Pansy, Ark., Lat 33°50'00" long 91°58'48", NE 1/4 sec.24, T.10 S., R.9 W., at bridge on State Highway 11, 1.5 miles northeast of Pansy, Drainage area: 109 square miles. Remarks: Natural-flow data.	22	(1)	0	0
286	07364010	Brown Creek near Lacey, Ark., Lat 33°28'22", long 91°50'09", SW 1/4 sec.21, T.14 S., R.7 W., at bridge on State Highway 81, 1.2 miles north of Lacey. Drainage area: 14.6 square miles. Remarks: Natural-flow data.	13	(1)	0	0

Table 5.--Station description and estimates of low-flow frequency at partial-record stations--Continued

Map	Station number	Station description	Number of discharge measurements	Index station	Annual 7-day lo indicated recurre in cubic feet r	ence interval,
	number	description			2-year	10-year
287	07364020	L'Aigle Creek at Hermitage, Ark., Lat 33°26'29", long 92°11'07", NE 1/4 sec.1, T.15 S., R.11 W., at bridge on State Highway 15,	21	(1)	0	0
		0.5 mile southeast of Hermitage. Drainage area: 172 square miles. Remarks: Natural-flow data.				
288	07364060	Bayou Lapile at Strong, Ark., Lat 33°06'53", long 92°20'47", N 1/2 sec.33, T.18 S., R.12 W., at highway bridge 0.5 mile	26	(2)	0.4	<0.1
		northeast of Strong. Drainage area: 93.3 square miles. Remarks: Low flow may be affected by oil-field drainage and diversion.				
289	07364130	Deep Bayou near Star City, Ark., Lat 33°57'17", long 91°41'33", NE 1/4 SW 1/4 sec.2, T.9 S.,	6	(1)	0	0
		R.6 W., at bridge on State Highway 114, 9.2 miles east of Star City. Drainage area: 99.2 square miles. Remarks: Low flow affected by irrigation practices.				
290	07364133	Bridge, Ark., Lat 33°51′59″, long 91°39′22″, in SE 1/4 SW 1/4 sec.6, T.10 S., R.5 W., at bridge on State Highway	75	07364150	5.7	1.0
		54, 1.9 miles upstream from Flat Creek at Garrett Bridge. Drainage area: 380 square miles. Remarks: Regular gaging station (1987-90) analyzed as a partial- record station.				
291	07364170	Cutoff Creek near Selma, Ark., Lat 33°40'23", long 91°34'48", SE 1/4 sec.11, T.12 S., R.6 W., at bridge on State Highway 4, 1.6 miles southwest of Selma.	15	07365800	0	0
		Drainage area: 91.5 square miles. Remarks: Low flow affected by irrigation practices.				
292	07364250	Berlin, Ark., Lat 33°05'22", long 91°45'47",	17	07364300	.2	<.1
		SW 1/4 sec.31, T.18 S., R.6 W., at highway bridge 1.0 mile north of Berlin. Drainage area: 116 square miles. Remarks: Low flow may be affected by irrigation practices.				
293	07364600		21	(2)	2.7	.8
		R.14 W., at highway bridge 1.1 miles northeast of State Highway 7, and 8. miles southeast of El Dorado. Drainage area: 78.2 square miles. Remarks: Low flow may be affected by oil-field drainage and diversion.	5			
294	07366100	Little Cornie Bayou near Junction City, Ark., Lat 33°02′10", long 92°42′25", NE 1/4 sec.25, T.19 S., R.16 W., at bridge on U.S. Highway 167, 2 miles northeast	25	07364300	1.1	0
		of Junction City. Drainage area: 106 square miles. Remarks: Low flow may be affected by oil-field drainage and diversion.	56			

Map no.	Station	Station description	Number of discharge measurements	Index station	Annual 7-day low flow for indicated recurrence interval, in cubic feet per second 2-year 10-year
295	07369680	Bayou Macon at Eudora, Ark., Lat 33°06'09", long 91°15'08", in SE 1/4, SE 1/4 sec.25, T.18 S., R.2 W., at bridge on U.S. Highway 65, 0.6 mile south of Eudora. Drainage area: 500 square miles. Remarks: Regular gaging station (1988-90) analyzed as a partial- record station.	47	07364150	75 52

<sup>1</sup> Statistics based on numerous observations of no flow at the site over a period of years. 2 Data from Hines (1975) with additional measurements during 1987-89. 3 Statistics based on analysis of daily flow records from 1983-90.

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# APPENDIX STATION DESCRIPTIONS

## STATION DESCRIPTIONS

# **Active Continuous-Record Gaging Stations**

#### Map Number

1

#### Description

## Mississippi River Main Stem

07032000 Mississippi River at Memphis, Tenn.

LOCATION.--Lat 35<sup>0</sup>07'37", long 90<sup>0</sup>04'25", Shelby County, Hydrologic Unit 08010100, on left bank 50 ft downstream from Harahan Bridge at Memphis, 1.3 miles downstream from Beale Street gage, 3.5 miles downstream from Wolfe river, 70 miles upstream from St. Francis River, at mile 734.8

DRAINAGE AREA .-- 932,800 square miles (approximately).

PERIOD OF RECORD .-- January 1933 - current year.

REMARKS.--Regulated by many reservoirs and dams.

# St. Francis River Basin

2 07047800 St. Francis River at Parkin, Ark.

LOCATION.--Lat 35°16'23", long 90°33'33", in NE 1/4 SE 1/4 sec.33, T.8 N., R.5 E., Cross County, Hydrologic Unit 08020203, at bridge on U.S. Highway 64 at Parkin, 1.1 miles downstream from Tyronza River, and at mile 102.0. DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD .-- January 1930-current year.

REMARKS.--Regulated since April 1, 1941, by Wappapello Lake (Mo.).

3 07047900 St. Francis Bay at Riverfront, Ark.

LOCATION.--Lat 35<sup>0</sup>15'34", long 90<sup>0</sup>40'48", in W 1/2 sec.4, T.7 N., R.4 E., Cross County, Hydrologic Unit 08020203, at bridge on U.S. Highway 64 at Riverfront, 7 miles west of Parkin.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD .-- January 1935-current year.

REMARKS.-Regulated since April 1, 1941, by Wappapello Lake (Missouri).

4 07047942 L'Anguille River near Colt, Ark.

LOCATION.--Lat 35<sup>0</sup>08'40", long 90<sup>0</sup>52'42", in NE 1/4 NW 1/4 sec.15, T.6 N., R.2 E., St. Francis County, Hydrologic Unit 08020205, near center of span on downstream side of bridge on State Highway 306, 1.1 miles downstream from Lick Creek, 3.9 miles northwest of Colt, and at mile 52.8.

DRAINAGE AREA.--535 mi<sup>2</sup>.

PERIOD OF RECORD .-- October 1970-current year.

REMARKS: Affected by irrigation practices.

### White River Basin

5 07048600 White River near Fayetteville Ark.

LOCATION.-Lat 36<sup>0</sup>04'23", long 94<sup>0</sup>04'51", in NE 1/4 SW 1/4 sec.8, T.16 N., R.29 W., Washington County, Hydrologic Unit 11010001, on left bank at downstream side of bridge on county road, 0.6 mile downstream from West Fork White River, 0.8 mile downstream from Lake Sequoyah Dam on White River 4.3 miles east of Fayetteville, and at mile 684.0.

DRAINAGE AREA.--400 mi<sup>2</sup>.

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

REMARKS: Natural-flow data.

#### Description

6 07056000 Buffalo River near St. Joe, Ark.

LOCATION.--Lat 35<sup>0</sup>59'02", Long 92<sup>0</sup>44'44", in SW 1/4 SW 1/4 sec.36, T.16 N., R.17 W., Searcy County, Hydrologic Unit 11010005, near right bank on downstream side of bridge on U.S. Highway 65, 1.6 miles downstream from Mill Creek, 5.4 miles upstream from Bear Creek, 4.5 miles southeast of St. Joe, and at mile 58.3. DRAINAGE AREA.--829 mi<sup>-2</sup>.

PERIOD OF RECORD.--October 1939-current year.

REMARKS .-- Natural-flow data.

#### 7 07060500 White River at Calico Rock, Ark.

LOCATION.--Lat 36<sup>0</sup>06'58", long 92<sup>0</sup>08'35", in SE 1/4 SE 1/4 sec.22,T.17 N., R.11 W., Izard County, Hydrologic Unit 11010004, on left bank at Calico Rock, 200 ft upstream from bridge on State Highway 5, 700 ft upstream from Calico Creek, 3.2 miles downstream from Cataract Creek, 6 miles upstream from Piney Creek, and at mile 359.1. DRAINAGE AREA.--9,978 mi

PERIOD OF RECORD .-- October 1939-current year.

REMARKS.--1940-50: Regulated by Norfork Lake after May 1943. 1952-70: Regulated by Norfork Lake and Bull Shoals Lake since 1951, Table Rock Lake since 1956, and by Beaver Lake since 1963.

# 8 07060710 North Sylamore Creek near Fifty-Six, Ark.

LOCATION.--lat 35°59'30", long 92°12'50", in 1/4 NW 1/4 sec.25, T.16. N., R.12 W., Stone County, Hydrologic Unit 11010004, on right bank 30 ft upstream from bridge on Ozark National Forest service road, 200 ft downstream from Gunner Creek, 2.7 miles north of Fifty-Six, and 7.0 miles upstream from South Sylamore Creek. DRAINAGE AREA.--58.1 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1965-current year.

REMARKS.--Hydrologic bench-mark station. Natural-flow data.

## 9 07061000 White River at Batesville, Ark.

LOCATIONS.--lat 35<sup>0</sup>45'37", long 91<sup>0</sup>38'28", in NE 1/4 sec.21, T.13 N., R.6 W., Independence County, Hydrologic Unit 11010004, on left bank at downstream side of bridge on State Highway 11 at Batesville, 0.3 mile upstream from Lock and Dam 1, 0.6 mile downstream from Polk Bayou, and at mile 300.1. DRAINAGE AREA.--11,070 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1937-September 1958, October 1986-current year.

REMARKS.--1940-50: Regulated by Norfork Lake after May 1943. 1952-70: Regulated by Norfork Lake and Bull Shoals Lake since 1951, Table Rock Lake since 1956, and by Beaver Lake since 1963.

#### 10 07064000 Black River near Corning, Ark.

LOCATION.--Lat 36<sup>0</sup>24'07", long 90<sup>0</sup>32'29", in SW 1/4 NE 1/4 sec.4, T.20 N., R.5 E., Clay County, Hydrologic Unit 11010007, near left bank on downstream side of bridge on U.S. Highway 62, 2.2 miles east of Corning, 11.9 miles downstream from Cane Creek, and at mile 152.2. DRAINAGE AREA.--1,749 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1938-current year.

REMARKS.--Regulated since 1948 by Clearwater Lake, 105 miles upstream.

## 11 07069200 Mammoth Spring at Mammoth Spring, Ark.

LOCATION.--Lat 36<sup>0</sup>29'53", long 91<sup>0</sup>32'08", in SE 1/4 SE 1/4 sec.5, T.21 N., R.5 W., Fulton County, Hydrologic Unit 11010010, at north bank of spring outlet pool, 0.25 mile upstream from confluence of Mammoth Spring and Warm Fork at town of Mammoth Spring.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1981-current year.

REMARKS.--Flows affected by diversions for municipal water supply at Mammoth Spring.

#### Description

12 07069500 Spring River at Imboden, Ark.

LOCATION.--Lat 36<sup>0</sup>12'19", long 91<sup>0</sup>10'19", in SE 1/4 NE 1/4, sec.15, T.18 N., R.2 W., Randolph County, Hydrologic Unit 11010010, near left bank on downstream side of bridge on U.S. Highway 62 at Imboden, 1.8 miles upstream from Harding Creek, 3.9 miles downstream from Janes Creek, 8.2 miles upstream from Eleven Point River, and at mile 12.1.

DRAINAGE AREA.--1,183 mi<sup>2</sup>.

PERIOD OF RECORD .-- February 1936-current year.

REMARKS .-- Natural-flow data.

13 07072000 Eleven Point River near Ravenden Springs, Ark.

LOCATION.--Lat 36<sup>0</sup>20'48", long 91<sup>0</sup>06'48", in SE 1/4 SE 1/4, sec.30, T.20 N., R.1 W., Randolph County, Hydrologic Unit 11010010, on left bank at downstream side of bridge on State Highway 90, 0.9 mile downstream from Hincha Creek, 1.9 miles upstream from Eassis Creek, 6.6 miles northeast of Ravenden Springs, and at mile 21.2.

DRAINAGE AREA.--1,134 mi.

PERIOD OF RECORD.--October 1929-September 1933, October 1935-current year.

REMARKS.--Natural-flow data.

14 07072500 Black River at Black Rock, Ark.

LOCATION.--Lat 36<sup>0</sup>06'15", long 91<sup>0</sup>05'50", in NW 1/4 sec.21, T.17 N., R.1 W., Lawrence County, Hydrologic Unit 11010009, on right bank 900 ft downstream from St. Louis-San Francisco Railway bridge at Black Rock, 3.7 miles downstream from Spring Rivez, and at mile 68.3.

DRAINAGE AREA.--7,369 mi

PERIOD OF RECORD.-June 1929-September 1931, October 1939-current year.

REMARKS.--Regulated since 1948 by Clearwater Lake (Mo.), 189 miles upstream.

15 07074000 Strawberry River near Poughkeepsie, Ark.

LOCATION.--Lat 36<sup>0</sup>06'37", long 91<sup>0</sup>26'59", in SE 1/4 NW 1/4 sec.19, T.17 N., R.4 W., Sharp County, Hydrologic Unit 11010012, on right bank on downstream side of bridge on State Highway 58, 0.5 mile downstream from Hurricane Creek, 2.5 miles northeast of Poughkeepsie, and at mile 35.9.

DRAINAGE AREA.-473 mi

PERIOD OF RECORD.--February 1936-current year.

REMARKS .-- Natural-flow data.

16 07074500 White River at Newport, Ark.

LOCATION.--Lat 35°36'22", long 91°17'19", in NE 1/4 NE 1/4 sec.10, T.11 N., R.3 W., Jackson County, Hydrologic Unit 11010013, on right bank on downstream side of bridge on U.S. Highway 67 at Newport, 7.2 miles downstream from Black River, and at mile 257.6.

DRAINAGE AREA.--19,860 mi

PERIOD OF RECORD.--September 1927-September 1931, October 1937-current year.

REMARKS.--1928-31, 1938-50: Regulated by Norfork Lake after 1943, by Clearwater Lake after 1948. 1952-90: Regulated by Norfork, Clearwater Lake, Bull Shoals Bake, and Table Rock Lake since 1956; and by Beaver Lake since 1963.

17 07075300 South Fork Little Red River at Clinton, Ark.

LOCATION.--Lat 35<sup>0</sup>35'29", long 92<sup>0</sup>27'20", in SW 1/4 sec.14, T.11 N., R.14 W., Van Buren County, Hydrologic Unit 11010014, near right bank on upstream side of bridge on U.S. Highway 65 at Clinton, 0.2 mile upstream from Archey Creek, and at mile 23.7.

DRAINAGE AREA.--148 mi<sup>2</sup>.

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

REMARKS .-- Natural-flow data.

#### Description

18 07077000 White River at DeValls Bluff, Ark.

LOCATION.--Lat 34<sup>0</sup>47'25", long 91<sup>0</sup>26'45", in SE 1/4 sec.17, T.2 N., R.4 W., Prairie County, Hydrologic Um. 08020301, near center of span on downstream side of bridge on U.S. Highway 70, 1 mile northeast of DeValls Bluff, 7.5 miles downstream from Wattensaw Bayou, 24.1 miles upstream from Cache River, and at mile 125.3. DRAINAGE AREA.--23,483 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1949-September 1970, October 1988-current year.

REMARKS.--Regulated by Norfork Lake, Clearwater Lake, and Bull Shoals Lake since 1951, Table Rock since 1956, Greers Ferry Lake since 1962, and Beaver Lake since 1963.

19 07077380 Cache River at Egypt, Ark.

LOCATION.--Lat 35<sup>0</sup>51'28", long 90<sup>0</sup>56'00", in NW 1/4 SE 1/4 sec.12, T.14 N., R.1 E., Craighead County, Hydrologic Unit 08020302, on right bank on downstream side of bridge on State Highway 91, 1.0 mile southeast of Egypt, 2.2 miles northwest of Winesburg, and at mile 143.

DRAINAGE AREA.--701 mi<sup>4</sup>.

PERIOD OF RECORD.--October 1964-current year.

REMARKS. Low flow affected by irrigation practices.

20 07077950 Big Creek at Poplar Grove, Ark.

LOCATION.--N 1/2 sec.1, T.2 S., R.2 E., Phillips County, Hydrologic Unit 08020304, at bridge on U.S. Highway 49, 0.8 mile northeast of Poplar Grove.

DRAINAGE AREA.--448 mi

PERIOD OF RECORD .-- October 1970-current year.

REMARKS.--Low flow affected by irrigation practices.

#### **Arkansas River Basin**

21 07195800 Flint Creek at Springtown, Ark.

LOCATION.--Lat 36°15'20", long 94°25'50", in NW 1/4 sec.7, T.18 N., R.32 W., Benton County, Hydrologic Unit 11110103, on right bank 20 ft downstream from State Highway 12, 0.8 mile southwest of Springtown. DRAINAGE AREA.--14.2 mi<sup>2</sup>.

PERIOD OF RECORD .-- June 1961-current year.

REMARKS.--Affected by irrigation practices.

22 07195855 Flint Creek near West Siloam Springs, Okla.

LOCATION.--Lat 36<sup>0</sup>12'58", long 94<sup>0</sup>36'15", in NE 1/4 NE 1/4 sec.14, T.20 N., R.25 E., Delaware County, Hydrodeck Unit 11110103, on left bank 180 ft downstream from county bridge, 2.5 miles from Arkansas-Oklahoma State line, northwest of West Siloam Springs, Okla.

DRAINAGE AREA.--59.8 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1979-current year.

REMARKS .-- Low flows partially affected by Lake Siloam Spring and by sewage discharge from the city of Gentry.

23 07196900 Baron Fork at Dutch Mills, Ark.

LOCATION.--Lat 35<sup>0</sup>52'48", long 94<sup>0</sup>29'11", on line between secs.21 and 22, T.14 N., R.33 W., Washington County, Hydrologic Unit 11110103, near right bank on downstream side of bridge on State Highway 59 at Dutch Mills, 2.2 miles downstream from Fly Creek, and 2.9 miles upstream from Arkansas-Oklahoma State line. DRAINAGE AREA.--46.0 mi<sup>2</sup>.

PER!OD OF RECORD .-- April 1958-current year.

REMARKS .-- Natural-flow data.

24 07247000 Poteau River at Cauthron, Ark.

LOCATION.--Lat 34<sup>0</sup>55'08", long 94<sup>0</sup>17'55", in NW 1/4 SW 1/4 sec.16, T.3 N., R.31 W., Scott County, Hydrologic Unit 11110105, on right bank at downstream side of highway bridge at Cauthron, 2.9 miles downstream from Cross Creek, 7.8 miles downstream from Jones Creek, and at mile 109.0.

DRAINAGE AREA.--203 mi<sup>2</sup>.

PERIOD OF RECORD .-- February 1939-current year.

REMARKS.--Regulated by 9 floodwater-detention reservoirs since September 1970.

#### Description

25 07249400 James Fork near Hackett, Ark.

LOCATION.-lat 35<sup>0</sup>09'45", long 94<sup>0</sup>24'55", in NW 1/4 NW 1/4 sec.34, T.6 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, near left bank on downstream side of bridge on State Highway 45, 1.7 miles south of Hackett, 2 miles downstream from Elder Branch, 2 miles upstream from small tributary, and 3.6 miles upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--147 mi<sup>2</sup>.

PERIOD OF RECORD .-- April 1958-current year.

REMARKS .-- Natural-flow data.

26 07250000 Lee Creek near Van Buren, Ark.

LOCATION.--Lat 35<sup>0</sup>29'40", long 94<sup>0</sup>26'56", in SE 1/4 sec.21, T.12 N., R.27 E., Indian Meridian, Sequoyah County, Okla., Hydrologic Unit 11110104, on right bank 300 ft west of Arkansas-Oklahoma State Line, 3.2 miles downstream from Webbers Creek, 6.8 miles northwest of Van Buren, and at mile 7.8.

DRAINAGE AREA .- 426 mi 4.

PERIOD OF RECORD.--September 1930-June 1937, October 1950-current year.

REMARKS .-- Natural-flow data.

27 07250550 Arkansas River at James W. Trimble Lock and Dam near Van Buren, Ark.

LOCATION.--Lat 35<sup>0</sup>20'56", long 94<sup>0</sup>17'54", in sec.28, T.8 N., R.31 W., Sebastian County, Hydrologic Unit 11110104, in Dam No. 13 control house on right bank and at mile 308.9. Prior to Dec. 21, 1969, at site 7.9 miles upstream. DRAINAGE AREA.--150,482 square miles (22,241 square miles probably noncontributing).

PERIOD OF RECORD .-- October 1927-current year.

REMARKS.--Regulated by storage reservoirs and power development.

28 07252000 Mulberry River near Mulberry, Ark.

LOCATION.--Lat 35<sup>0</sup>34'37", long 94<sup>0</sup>00'55", in SE 1/4 SW 1/4 sec.31, T.11 N., R.28 W., Franklin County, on left bank, 0.6 mile upstream from Mill Creek, 5.7 miles north of Mulberry, and at mile 11.3. DRAINAGE AREA.--373 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1938-current year.

REMARKS .-- Natural-flow data.

29 07257000 Big Piney Creek near Dover, Ark.

LOCATION.--Lat 35<sup>0</sup>32'58", long 93<sup>0</sup>09'30", in SW 1/4 NE 1/4 sec.6, T.10 N., R.20 W., Pope County, Hydrologic Unit 11110202, on left bank 7.2 miles downstream from Indian Creek, 10.4 miles north of Dover, and at mile 28.0.

DRAINAGE AREA.--274 mi<sup>2</sup>.

PERIOD OF RECORD .-- October 1950-current year.

REMARKS .-- Natural-flow data.

30 07258000 Arkansas River at Dardanelle, Ark.

LOCATION.--Lat 35<sup>0</sup>13'34", long 93<sup>0</sup>08'58", in SW 1/4 sec.29, T.7 N., R.20 W., Pope County, Hydrologic Unit 11110203, near left bank on downstream side of bridge on State Highway 7 at Dardanelle, 1 mile upstream from Whig Creek, 2.0 miles downstream from Dardanelle Dam, 4.7 miles downstream from Illinois Bayou, and at mile 219.5.

DRAINAGE AREA.--153,670 square miles (22,241 square miles probably noncontributing).

PERIOD OF RECORD .-- July 1937-current year.

REMARKS.--Regulated by Lake Dardanelle since 1970.

31 07260500 Petit Jean River at Danville, Ark.

LOCATION.--Lat 35<sup>0</sup>03'33", long 93<sup>0</sup>23'44", in NW 1/4 SE 1/4 sec.25, T.5 N., R.23 W., Yell County, Hydrologic Unit 11110204, on left bank at downstream side of bridge on State Highway 10 at Danville, 0.3 mile upstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 0.5 mile upstream from Spring Creek, and 0.5 mile downstream from Dutch Creek, and at mile 48.8.

DRAINAGE AREA.--764 mi<sup>2</sup>.

PERIOD OF RECORD .-- June 1916-current year.

REMARKS.--1917-46: Regulated after May 1946 by construction at Blue Mountain Dam. 1948-90: Regulated by Blue Mountain Lake and by diversion for municipal supply at Danville.

# Description

07261000 Cadron Creek near Guy, Ark.

LOCATION.--Lat 35°17'56", long 92°24'10", in NW 1/4 SE 1/4 sec.29, T.8 N., R.13 W., Faulkner County, Hydrologic Unit 11110205, on left bank on downstream side of bridge on U.S. Highway 65, 4.3 miles southwest of Guy, and 10.5 miles upstream from Cove Creek, and at mile 48.3.

DRAINAGE AREA.--169 mi

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

REMARKS .-- Natural-flow data.

07261500 Fourche LaFave River near Gravelly, Ark.

LOCATION.--Lat 34°52'21", long 93°39'24", in NW 1/4 NW 1/4 sec.34, T.3 N., R.25 W., Yell County, Hydrologic Unit 11110206, near left bank on downstream side of bridge on State Highway 28, 1.2 miles downstream from Garner Creek, 1.9 miles east of Gravelly, 6.4 miles upstream from Gaffords Creek, and at mile 103.7. DRAINAGE AREA.-410 mi2.

PERIOD OF RECORD.--February 1939-current year.

REMARKS .-- Natural-flow data.

34

07263000 South Fourche LaFave River near Hollis, Ark.

LOCATION.--Lat 34<sup>0</sup>54'41", long 93<sup>0</sup>03'21", in SE 1/4 NE 1/4 sec.18, T.3 N., R.19 W., Perry County, Hydrologic Unit 11110206, on left bank, 0.8 mile upstream from Big Cove Creek, 2.1 miles downstream from Cedar Creek, 4 miles northeast of Hollis, and at mile 5.6.

DRAINAGE AREA.--210 mi2

PERIOD OF RECORD.--May 1941-current year.

REMARKS .-- Natural-flow data.

07263450 Arkansas River at Murray Dam, at Little Rock, Ark.

LOCATION.--Lat 34<sup>0</sup>47'27", long 92<sup>0</sup>21'32", in sec.23, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, in Murray Dam control house on right bank and at mile 141.5.

DRAINAGE AREA.--158,030 square miles (22,241 square miles probably noncontributing).

PERIOD OF RECORD.--September 1927-current year.

REMARKS.--Regulated by storage reservoirs and power development since 1970.

07264000 Bayou Meto near Lonoke, Ark.

LOCATION.--Lat 34°44'10", long 91°54'58", in SW 1/4 sec.6, T.1 N., R.8 W., Lonoke County, Hydrologic Unit 08020402, near left bank on downstream side of bridge on State Highway 31, 3 miles upstream from Brushy Slough, 3.5 miles south of Lonoke, and at mile 106.4.

DRAINAGE AREA.--207 mi 2

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

REMARKS .-- Affected by irrigation practices and minnow farm operations.

#### **Red River Basin**

07337000 Red River at Index, Ark.

LOCATION.--Lat 33<sup>o</sup>33'07", long 94<sup>o</sup>02'28", in NW 1/4 SW 1/4 sec.7, T.14 S., R.28 W., Miller County, Hydrologic Unit 11140106, near right bank on downstream side of bridge on U.S. Highway 71 at Index, 2.2 miles south of Ogden, 20.6 miles upstream from Little River, and at mile 485.3.

DRAINAGE AREA.-48,030 square miles (5,936 square miles probably noncontributing).

PERIOD OF RECORD.-July 1936-current year.

REMARKS.--1937-43: Natural-flow data. 1945-90: Regulated by Lake Texoma (Tex.).

07340000 Little River near Horatio, Ark.

LOCATION.--Lat 35°55'10", long 94°23'15", in NE 1/4 sec.10, T.10 S., R.32 W., Sevier County, Hydrologic Unit 11140109, near left bank on downstream side of bridge on State Highway 41, 0.9 mile downstream from Rolling Fork, 2 miles southwest of Horatio, 28.5 miles upstream from Cossatot River, and at mile 72.0. DRAINAGE AREA.--2,662 mi 2.

PERIOD OF RECORD .-- October 1930-current year.

REMARKS .-- Natural-flow data.

#### Description

39 07340300 Cossatot River near Vandervoort, Ark.

LOCATION.--Lat 34<sup>0</sup>22'46", long 94<sup>0</sup>14'08", in SE 1/4 NE 1/4 sec.30, T.4 S., R.30 W., Polk County, near left bank on downstream side of bridge on State Highway 246, 0.3 mile downstream from Brushy Creek, 3.2 miles upstream from Flat Creek, and 7.5 miles east of Vandervoort.

DRAINAGE AREA.--89.6 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1967-current year.

REMARKS.--Natural-flow data. Hydrologic bench-mark station.

40 07341200 Saline River near Lockesburg, Ark.

LOCATION.--Lat 33<sup>0</sup>57'43", long 94<sup>0</sup>03'40", in NW 1/4 SE 1/4 sec.23, T.9 S., R.29 W., Sevier County, Hydrologic Unit 11140109, near right bank on downstream side of bridge on State Highway 24, 2 miles downstream from Brushy Creek, 6 miles east of Lockesburg, and at mile 30.

DRAINAGE AREA.--256 mi<sup>2</sup>.

PERIOD OF RECORD .-- June 1963-current year.

REMARKS.--Some regulation since 1975 by Dierks Lake.

41 07356000 Ouachita River near Mount Ida, Ark.

LOCATION.--Lat 34°36'36", long 93°41'50", in SE 1/4 SW 1/4 sec.32, T.1 S., R.25 W., Montgomery County, Hydrologic Unit 08040101, on right bank 350 ft upstream from bridge on U.S. Highway 270, 3.1 miles upstream from Fiddler's Creek, 5.2 miles northwest of Mount Ida, and at mile 553.4.

DRAINAGE AREA.--414 mi<sup>2</sup>.

PERIOD OF RECORD .-- October 1941-current year.

REMARKS .-- Natural-flow data.

42 07359500 Ouachita River near Malvern, Ark.

LOCATION.--Lat 34<sup>0</sup>23'10", long 92<sup>0</sup>50'20", in NW 1/4 sec.16, T.4 S., R.17 W., Hot Spring County, Hydrologic Unit 08040102, near right bank on downstream side of bridge on State Highway 84, 2 miles northwest of Malvern, 5.8 miles downstream from Remmel Dam, and at mile 450.1.

DRAINAGE AREA.--1,585 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1928-current year.

REMARKS.--1929-52: Regulated by Lake Catherine, and since 1932 by Lake Hamilton. 1954-90: Regulated by Lake Ouachita, Lake Hamilton, and Lake Catherine.

43 07361500 Antoine River at Antoine, Ark.

LOCATION.--Lat 34<sup>0</sup>02'20", long 93<sup>0</sup>25'05", in NW 1/4 NW 1/4 sec.24, T.8 S., R.23 W., Pike County, Hydrologic Unit 08040103, near right bank on downstream side of bridge on State Highway 26 at Antoine, 1.6 miles downstream from Brushy Creek, 1.9 miles downstream from Suck Creek, and at mile 8.5.

DRAINAGE AREA.--178 mi<sup>2</sup>.

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

REMARKS .-- Natural-flow data.

44 07362000 Ouachita River at Camden, Ark.

LOCATION.--Lat 33<sup>0</sup>35'47", long 92<sup>0</sup>49'05", in SE 1/4 sec.14, T.13 S., R.17 W., Ouachita County, Hydrologic Unit 08040102, at bridge on U.S. Highway 79 at Camden, 3.4 miles downstream from Ecore Fabre Bayou, 6.2 miles upstream from Two Bayou Creek, and at mile 354.1.

DRAINAGE AREA.--5,357 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1928-September 1960, October 1965-current year.

REMARKS.--1929-52: Regulated by Lake Catherine and Lake Hamilton after 1932, and by Lake Greeson after 1949. 1954-90: Regulated by Lake Ouachita, Lake Hamilton, Lake Catherine, Lake Greeson, and DeGray Lake since 1969.

45 07362100 Smackover Creek near Smackover, Ark.

LOCATION.--Lat 33<sup>o</sup>22'33", long 92<sup>o</sup>46'37", in NW 1/4 SE 1/4 sec.32, T.15 S., R.16 W., Union County, Hydrologic Unit 08040201, near right bank on downstream side of bridge on State Highway 7, 0.1 mile downstream from Camp Creek, 3.3 miles northwest of Smackover, and at mile 23.0.

DRAINAGE AREA.--385 mi

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

REMARKS .-- Affected by drainage from oil fields.

## Description

46

07363300 Hurricane Creek near Sheridan, Ark.

LOCATION.—Lat 34°19'10", long 92°20'40", in NW 1/4 NE 1/4 sec.6, T.4 S., R.12 W., Grant County, Hydrologic Unit 08040203, on downstream side of bridge on U.S. Highway 270, 2.8 miles downstream from Simpson Creek, 3.5 miles east of Sheridan, and at mile 16.9.

DRAINAGE AREA.--204 mi<sup>2</sup>.

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

REMARKS.--Regulated by Hurricane Lake and industrial effluent.

47

07363500 Saline River near Rye, Ark.

LOCATION.--Lat 33°42'00", long 92°01'33", in SW 1/4 NW 1/4 sec.3, T.12 S., R.9 W., Bradley County, Hydrologic Unit 08040204, near left bank on downstream side of bridge on State Highway 15, 3.6 miles southwest of Rye, 5.8 miles upstream from Hudgin Creek, and at mile 71.0.

DRAINAGE AREA.--2,102 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1937-current year.

REMARKS .-- Natural-flow data.

48

07364150 Bayou Bartholomew near McGehee, Ark.

LOCATION.--Lat 33<sup>0</sup>37'40", long 91<sup>0</sup>26'45", in NE 1/4 SW 1/4 sec.30, T.12 S., R.3 W., Desha County, Hydrologic Unit 08050001, near center of stream on downstream side of Bridge on State Highway 4, 2.7 miles west of McGehee, 17.5 miles downstream from Ables Creek, and at mile 200.5. DRAINAGE AREA.--576 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1938-current year.

REMARKS.--Affected by irrigation practices.

# **Discontinued Continuous-Record Gaging Stations**

## Map Number

#### Description

## Mississippi River Main Stem

49 07047970 Mississippi River at Helena, Ark.

LOCATION.--Lat 34<sup>0</sup>31'26", long 90<sup>0</sup>35'02", Phillips County, Hydrologic Unit 08020100, on right bank at railroad ferry landing at Helena, 10 miles downstream from St. Francis River, and at mile 666.3 (1962 adjustment).

DRAINAGE AREA.--941,700 square miles (approximately).

PERIOD OF RECORD.--June 1928-September 1977.

REMARKS.--Regulated by many reservoirs and dams.

50 07265450 Mississippi River near Arkansas City, Ark.

LOCATION.--Lat 33<sup>0</sup>33'55", long 91<sup>0</sup>14'35", sec.18, T.13 S., R.1 W., Desha County, Hydrologic Unit 08030100, on right bank 3 miles southwest of Arkansas City, and at mile 554.1.

DRAINAGE AREA.--1,130,600 square miles (approximately).

PERIOD OF RECORD .-- January 1928-September 1980.

REMARKS.--Regulated by many reservoirs and dams.

#### St. Francis River Basin

51 07040100 St. Francis River at St. Francis, Ark.

LOCATION.--Lat 36°27'21", long 90°08'13", in sec.18, T.21 N., R.9 E., Clay County, Hydrologic Unit 08020203, at bridge on U.S. Highway 62 at St. Francis and at mile 229.

DRAINAGE AREA.--1,772 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1930-September 1987.

REMARKS.--Regulated since April 1, 1941, by Wappapello Lake (Mo.), 80 miles upstream.

52 07040450 St. Francis River at Lake City, Ark.

LOCATION.--Lat 35°49'16", long 90°25'56", in SE 1/4 sec.22, T.14 N. R.6 E., Craighead County, Hydrologic Unit 08020203, on left-bank pier of bridge on State Highway 18 at Lake City and at mile 173.6. DRAINAGE AREA.--2,374 mi<sup>-2</sup>.

PERIOD OF RECORD.--January 1931-September 1977.

REMARKS.--Regulated since April 1, 1941, by Wappapello Lake (Mo.), 135 miles upstream.

53 07046600 Right Hand Chute of Little River at Rivervale, Ark.

LOCATION.--Lat 35°40'20", long 90°20'12", in SW 1/4 sec.10, T.12 N., R.7 E., Poinsett County, Hydrologic Unit 08020204, at bridge on State Highway 135 at Rivervale, 9 miles upstream from St. Francis River. DRAINAGE AREA.--2,106 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1947-September 1977.

REMARKS .-- Affected by irrigation practices.

54 07047000 St. Francis River Floodway near Marked Tree, Ark.

LOCATION.--Lat 35°32'15", long 90°29'05", in SE 1/4 NE 1/4 sec.31, T.11 N., R.6 E., Poinsett County, Hydrologic Unit 08020203, on downstream side of bridge on U.S. Highway 63, 3.6 miles west of Marked Tree.

DRAINAGE AREA.--Indeterminate

PERIOD OF RECORD.--July 1934-September 1970.

REMARKS.--Regulated since April 1, 1941, by Wappapello Lake (Mo.).

## Description

55

07047500 St. Francis River at Marked Tree, Ark.

LOCATION.--Lat 35°32'58", long 90°25'25", in NE 1/4 SW 1/4 sec.35, T.11 N., R.6 W., Poinsett County, Hydrologic Unit 08020203, near nleft bank on downstream side of bridge on U.S. Highway 63 at Marked Tree, 4.8 miles downstream from Little River 7 miles downstream from dam of Poinsett County Drainage District 7, and at mile 148.0.

DRAINAGE AREA.--5,148 mi<sup>2</sup>, includes that of floodway.

PERIOD OF RECORD.--July 1934-September 1973.

REMARKS.--Regulated since April 1, 1941 by Lake Wappapello Lake (Mo.)

56

07047600 Tyronza River near Tyronza, Ark.

LOCATION.--Lat 35°30'18", long 90°22'48", in SE 1/4 sec.7, T.10 N., R.7 E., Poinsett County, Hydrologic Unit 08020203, at bridge on U.S. Highway 63, 1.5 miles northwest of Tyronza, and at mile 34.8.

DRAINAGE AREA.--290 mi 2.

PERIOD OF RECORD.--January 1949-September 1974.

REMARKS.--Affected by irrigation practices.

57

07047902 St. Francis River at latitude of Wittsburg, Ark.

LOCATION.--Lat 35<sup>0</sup>13'00", long from 90<sup>0</sup>38'00", to 90<sup>0</sup>42'00". Hydrologic Unit 08020203.

DRAINAGE AREA.--6,475 square miles (combined drainage area of St. Francis River at Parkin and St. Francis Bay at Riverfront).

PERIOD OF RECORD.--January 1935-September 1977.

REMARKS.--Represents total flow of St. Francis River.

58

07047950 L'Anguille River at Palestine, Ark.

LOCATION.--Lat 34<sup>0</sup>58'20", long 90<sup>0</sup>53'10", in NW 1/4 sec.10, T.4 N., R.2 E., St. Francis County, Hydrologic Unit 08020205, at bridge on U.S. Highway 70, 1 mile east of Palestine, and at mile 33.6. DRAINAGE AREA.--786 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1949-September 1977.

REMARKS .-- Affected by irrigation practices.

#### White River Basin

59

07048000 West Fork White River at Greenland, Ark.

LOCATION.--Lat 35<sup>0</sup>58'50", long 94<sup>0</sup>10'25", in NW 1/4 NW 1/4 sec.16, T.15 N., R.30 W., Washington County, Hydrologic Unit 11010001, near left bank on downstream side of highway bridge, 800 ft upstream from bridge on U.S. Highway 71, 1 mile south of Greenland, 5.5 miles upstream from small tributary, and at mile 10.5. DRAINAGE AREA.--83.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1945-September 1983.

REMARKS .-- Natural-flow data.

60

07049000 War Eagle Creek near Hindsville, Ark.

LOCATION.--Lat 36<sup>o</sup>12'02", long 93<sup>o</sup>51'20", in SE 1/4 NE 1/4 sec.28, T.18 N., R.27 W., Madison County, Hydrologic Unit 11010001, on left bank about 800 ft upstream from bridge on State Highway 45, 3.9 miles downstream from Clear Creek, 3.9 miles north of Hindsville, and at mile 22.4.

DRAINAGE AREA.--263 mi 2.

PERIOD OF RECORD.--June 1952-September 1970.

#### Description

61 07049500 White River near Rogers, Ark.

LOCATION.-Lat 36<sup>0</sup>19'59", long 94<sup>0</sup>01'07", in N 1/2 sec.12, T.19 N., R.29 W., on right bank at downstream side of pier of bridge on State Highway 12, 2.6 miles upstream from Prairie Creek, 5.5 miles east of Rogers, and at mile 643.2.

DRAINAGE AREA.--1,020 mi<sup>2</sup>.

PERIOD OF RECORD .-- October 1952-September 1963.

REMARKS .-- Low flow affected by diversion.

62 0705000 White River at Beaver, Ark.

LOCATION.--Lat 36°28'20", long 93°45'55", Hydrologic Unit 11010001, in NE 1/4 sec.20, T.21 N., R.26 W., on upstream side at center of main truss of Missouri and North Arkansas Railway bridge, a quarter of a mile east of beaver, 2.8 miles upstream from Leatherwood Creek, and at mile 595.5.

DRAINAGE AREA.--1,244 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1922-September 1958.

REMARKS .-- Natural-flow data.

63 07050500 Kings River near Berryville, Ark.

LOCATION.--Lat 36<sup>0</sup>25'36", long 93<sup>0</sup>37'15", in SE 1/4 NE 1/4 sec.3, T.20 N., R.25 W., Carroll County, Hydrologic Unit 11010001, on right bank at downstream side of bridge on State Highway 143, 1.5 miles downstream from Bee Creek, 2.5 miles upstream from Clabber Creek, 5.3 miles northwest of Berryville, and at mile 35.1.

DRAINAGE AREA.--527 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1939-September 1975.

REMARKS .-- Natural-flow data.

64 07055000 White River near Flippin, Ark.

LOCATION.--Lat 36<sup>0</sup>18'50", long 92<sup>0</sup>33'20", in NE 1/4 sec.10, T.19 N., R.15 W., Marion County, Hydrologic Unit 11010003, on right bank, 1.3 miles upstream from Hightower Creek, 3 miles northeast of Flippin, 11.5 miles downstream from Bull Shoals Dam, 11.8 miles upstream from Crooked Creek, and at mile 406.7.

DRAINAGE AREA.--6,081 mi 2

PERIOD OF RECORD.--October 1928-September 1980.

REMARKS.--1920-50: Low flow regulated by Lake Taneycomo (Mo.): 1952-81. Completely regulated by Bull Shoals Lake.

07057000 Buffalo River near Rush, Ark.

LOCATION.-Lat 36<sup>0</sup>07'02", long 92<sup>0</sup>33'17", in SE 1/4 NE 1/4 sec.15, T.17 N., R.15 W., Marion County, Hydrologic Unit 11010005, on left bank 0.6 mile upstream from Rush Creek, 1.4 miles southeast of Rush, and at mile 24.3. DRAINAGE AREA.--1,096 mi.

PERIOD OF RECORD .-- October 1928-September 1970.

REMARKS .-- Natural-flow data.

66 07059000 North Fork River near Henderson, Ark.

LOCATION.--Lat 36°22', long 92°14', Hydrologic Unit 11010006, in SE 1/4 NW 1/4 sec.26, T.20 N., R.12 W., 0.5 mile downstream from Bennetts Bayou, 0.5 mile west of Henderson, and 19 miles upstream from mouth.

DRAINAGE AREA.--1,611 mi<sup>2</sup>.

PERIOD OF RECORD, -- October 1929-September 1943.

REMARKS .-- Natural-flow data.

7 07060000 North Fork River at Norfork Dam, near Norfork, Ark.

LOCATION.--Lat 36<sup>0</sup>14'57", long 92<sup>0</sup>14'18", in SE 1/4 SW 1/4 sec.2, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010006, at Norfork Dam, 3.9 miles northeast of Norfork, and at mile 4.8.

DRAINAGE AREA.--1,808 mi

PERIOD OF RECORD.--May 1944-September 1977.

REMARKS.--Completely regulated by Norfork Lake.

# Description

68 07069000 Black River at Pocahontas, Ark.

LOCATION.--Lat 36°15'14", long 90°58'12", in SW 1/4 SW 1/4 sec. 27, T.19 N., R.1 E., Randolph County, Hydrologic Unit 11010009, near right bank on downstream side of bridge on U.S. Highway 67 at Pocahontas, 2.2 miles downstream from Fourche River, 6.4 miles downstream from Current River, 18.1 miles upstream from Spring River, and at mile 90.1.

DRAINAGE AREA.--4,845 mi<sup>2</sup>.

PERIOD OF RECORD.-January 1936-September 1970.

REMARKS.--Regulated since 1948 by Clearwater Lake, 167 miles upstream.

69 07073000 Strawberry River near Evening Shade, Ark.

LOCATION.--Lat 36<sup>0</sup>05'56", long 91<sup>0</sup>36'30", in NE 1/4 NE 1/4 sec.27, T.17 N., R.6 W., Sharp County, Hydrologic Unit 11010012, near left bank on downstream side of bridge on U.S. Highway 167, 2 miles north of Evening Shade, 6.3 miles upstream from Piney Fork, and at mile 55.9.

DRAINAGE AREA.--217 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1939-September 1979.

REMARKS .-- Natural-flow data.

70 07073500 Piney Fork at Evening Shade, Ark.

LOCATION.--Lat 36<sup>0</sup>04'50", long 91<sup>0</sup>36'39", in SE 1/4 NE 1/4 sec.34, T.17 N., R.6 W., Sharp County, Hydrologic Unit 11010012, on right bank 20 ft upstream from bridge on U.S. Highway 167, 0.8 mile north of Evening Shade, and at mile 5.8.

DRAINAGE AREA.-99.2 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1939-September 1984.

REMARKS .-- Natural-flow data.

71 07075000 Middle Fork Little Red River at Shirley, Ark.

LOCATION.--Lat 35°39'10", long 92°19'10", in SW 1/4 sec.20, T.12 N., R.12 W., Van Buren County, Hydrologic Unit 11010014, on right bank 0.5 mile downstream from Sugar Camp (or Weavers) Creek, 1 mile east of Shirley, and at mile 122.0.

DRAINAGE AREA.--302 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1939-September 1984.

REMARKS .-- Natural-flow data.

72 07075500 South Fork Little Red River near Clinton, Ark.

LOCATION.--Lat 35°34', long 92°23', in NE 1/4 sec.29, T.11 N., R.13 W., Van Buren County, Hydrologic Unit 11010014, on left bank 1.8 miles downstream from Pedee Creek, 4.3 miles southeast of Clinton, and 6 miles downstream from Archey Fork.

DRAINAGE AREA.--316 mi<sup>2</sup>

PERIOD OF RECORD.--July 1939-September 1961.

REMARKS .-- Natural-flow data.

73 07076000 Little Red River near Heber Springs, Ark.

LOCATION.--Lat 35°31'02", long 91°59'50", in NE 1/4 sec.7, T.10 N., R.9 W., Cleburne County, Hydrologic Unit 11010014, on right bank 1,600 ft downstream from Greers Ferry Dam, 3 miles northeast of Heber Springs, and at mile 78.8.

DRAINAGE AREA.--1,153 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1927-September 1980.

REMARKS.--Flow completely regulated after 1962 by Greers Ferry Lake.

#### Description

74 07076850 Cypress Bayou near Beebe, Ark.

LOCATION.--Lat 35<sup>0</sup>01'30", long 91<sup>0</sup>52'23", in SW 1/4 SW 1/4 sec.28, T.5 N., R.8 W., White-Lonoke County line, Hydrologic Unit 08020301, on downstream side of bridge on State Highway 31, 2.1 miles downstream from Mill Creek, 3.2 miles south of Beebe, and 4.7 miles upstream from Pigeon Roost Creek.

DRAINAGE AREA.--166 mi<sup>2</sup>.

PERIOD OF RECORD .-- October 1961-September 1976.

REMARKS .-- Natural-flow data.

75 07077500 Cache River at Patterson, Ark.

LOCATION.--Lat 35°16'10", long 91°14'15" in SE 1/4 sec.31, T.8 N., R.2 W., Woodruff County, Hydrologic Unit 08020302, at bridge on U.S. Highway 64 at Patterson, 10.9 miles upstream from Maple Slough, and at mile 77.2. DRAINAGE AREA.--1,037 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1927-September 1931, August 1937-September 1988.

REMARKS.--Affected by irrigation practices.

76 07077700 Bayou DeView at Morton, Ark.

LOCATION.--Lat 35°15'07", long 91°06'37", near corner of secs.4, 5, 8, and 9, T.7 N., R.1 W., Woodruff County, Hydrologic Unit 08020302, at bridge on U.S. Highway 64, 1 mile west of Morton, and at mile 39.6.

DRAINAGE AREA.--421 mi<sup>2</sup>.

PERIOD OF RECORD .-- February 1939-September 1977.

REMARKS.--Affected by irrigation practices.

77 07077800 White River at Clarendon, Ark.

LOCATION.--Lat 34°41'08", long 91°18'55", in W 1/2 sec.22, T.1 N., R.3 W., Monroe County, Hydrologic Unit 08020303, at St. Louis Southwestern Railway bridge at Clarendon, 1.1 miles downstream from Cache River, and at mile 100.1.

DRAINAGE AREA.--25,555 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1929-September 1981.

REMARKS.--1929-50: Regulated by Norfork Lake after 1943, by Clearwater Lake after 1948. 1951-70: Regulated by Norfork Lake, Clearwater Lake, and Bull Shoals Lake since 1951, Table Rock Lake since 1956, Greers Ferry Lake since 1962, and Beaver Lake since 1963.

78 07077930 Big Creek near Moro, Ark.

LOCATION.-Lat 34°50′50″, long 91°00′35″, in SW 1/4 NW 1/4 sec.28, T.3 N., R.1 E., Lee County, Hydrologic Unit 08020304, on right bank on downstream side of bridge on State Highway 78, 3.5 miles north of Moro, and 5.2 miles upstream from Flat Fork Little River.

DRAINAGE AREA.--77.4 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1961-September 1970.

REMARKS.--Affected by irrigation practices.

#### **Arkansas River Basin**

79 07195000 Osage Creek near Elm Springs, Ark.

LOCATION.--Lat 36<sup>0</sup>13'19", long 94<sup>0</sup>17'18", in SW 1/4 NE 1/4 sec.21, T.18 N., R.31 W., Benton County, Hydrologic Unit 11110103, on left bank 0.7 mile downstream from Little Osage Creek, and 3.2 miles northwest of Elm Springs. DRAINAGE AREA.--130 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950-September 1975.

REMARKS .-- Regulated by lake at Cave Springs.

80 07249500 Cove Creek near Lee Creek, Ark.

LOCATION.--Lat 35<sup>0</sup>43'20", long 94<sup>0</sup>24'28", in SW 1/4 NW 1/4 sec.16, T.12 N., R.32 W., Crawford County, Hydrologic Unit 11110104, near left bank on downstream side of bridge, 4.5 miles northwest of Lee Creek, and at mile 5.8. DRAINAGE AREA.--35.3 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1950-September 1970.

## Description

81 07251000 Frog Bayou near Mountainburg, Ark.

LOCATION.--Lat 35°39'40", long 94°09'10", in NW 1/4 NE 1/4 sec.2 T.11 N., R.30 W., Hydrologic Unit 11110201, on left bank above concrete weir in spillway of Fort Smith Dam 0.8 mile upstream from Warloop Creek, 1.3 miles upstream from Howard Fork, 2.5 miles northeast of Mountainburg, and 3 miles downstream from Jones Fork. DRAINAGE AREA.--74.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1937-September 1961.

REMARKS.--Regulated by Lake Fort Smith and since 1956 by Lake Shepherd Springs, and by diversion for municipal supply at Fort Smith.

82 07251500 Frog Bayou at Rudy, Ark.

LOCATION.--Lat 35<sup>0</sup>31'32", long 94<sup>0</sup>16'18", in SW 1/4 sec.23, T.10 N., R.31 W., Crawford County, Hydrologic Unit 11110201, on left bank at downstream side of bridge on State Highway 282 at Rudy, 0.5 mile downstream from Cedar Creek.

DRAINAGE AREA.--216 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1950-September 1970.

REMARKS.--See station 07251000.

83 07253000 Sixmile Creek at Chismville, Ark.

LOCATION.--Lat 35<sup>0</sup>13'15", long 93<sup>0</sup>56'20", in E 1/2 sec.2, T.6 N., R.28 W., Logan County, Hydrologic Unit 11110202, on right bank on downstream side of highway bridge at Chismville, 0.5 mile downstream from Rocky Creek, and at mile 25.6.

DRAINAGE AREA.--24.1 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1954-April 1970.

REMARKS.--Regulated by four floodwater-detention reservoirs.

84 07253500 Sixmile Creek near Branch, Ark.

LOCATION.--Lat 35°14'55", long 93°58'28" in NE 1/4 SE 1/4 sec.28, T.7 N., R.28 W., Franklin County, Hydrologic Unit 11110202, 0.4 mile downstream from Rattlesnake Creek, 1.0 mile upstream from Prairie Creek, 4.2 miles southwest of Branch, and at mile 21.5.

DRAINAGE AREA.--36.7 mi<sup>2</sup>

PERIOD OF RECORD.--June 1954-April 1970.

REMARKS.--Regulated by six floodwater-detention reservoirs.

85 07255000 Sixmile Creek at Caulksville, Ark.

LOCATION.--Lat 35°18'05", long 93°51'15", on line between secs.3 and 10, T.7 N., R.27 W., Logan County, Hydrologic Unit 11110202, on left bank at upstream side of bridge on State Highway 22, 0.6 mile east of Caulksville, 0.8 mile downstream from Shaver Creek, and at mile 11.0.

DRAINAGE AREA.--104 mi ...

PERIOD OF RECORD.-June 1954-April 1970.

REMARKS.--Regulated by 13 floodwater-detention reservoirs.

86 07255500 Hurricane Creek near Branch, Ark.

LOCATION.--Lat 35°21'03", long 93°56'02", on line between and near south edge of secs.23 and 24, T.8 N., and R.28 W., Franklin County, Hydrologic Unit 11110202, at center of span on downstream side of bridge on State Highway 41, 1.5 miles upstream from Perry Creek, 3.2 miles northeast of Branch, and at mile 9.0.

DRAINAGE AREA.--17.2 square miles

PERIOD OF RECORD.--June 1954-April 1970.

REMARKS.--Regulated by four floodwater-detention reservoirs.

87 07256000 Hurricane Creek near Caulksville, Ark.

LOCATION.--Lat 35°20'49", long 93°51'44", on line between and near south edge of secs.21 and 22, T.8 N., R.27 W., Franklin County, Hydrologic Unit 11110202, at bridge on State Highway 23, 1.0 mile upstream from Garner Creek, 3.2 miles north of Caulksville, and at mile 4.0.

DRAINAGE AREA.--53.0 mi<sup>2</sup>

PERIOD OF RECORD.--June 1954-April 1970.

REMARKS.--Regulated by seven floodwater-detention reservoirs.

#### Description

88

07256500 Spadra Creek at Clarksville, Ark.

LOCATION.--Lat 35°28'06", long 93°27'46", in NE 1/4 sec.5, T.9 N., R.23 W., Johnson County, Hydrologic Unit 11110202, on right bank at Clarksville, 0.2 mile downstream from bridge on U.S. Highway 64, and at mile 6.2. DRAINAGE AREA.--61.1 mi<sup>-2</sup>.

PERIOD OF RECORD.--August 1952-September 1970.

REMARKS.--Affected by diversion for municipal supply at Clarksville.

89

07257500 Illinois Bayou near Scottsville, Ark.

LOCATION.--Lat 35<sup>0</sup>27'58", long 93<sup>0</sup>02'28", in SE 1/4 SW 1/4 sec.32, T.10 N., R.19 W., Pope County, Hydrologic Unit 11110202, near center of span on downstream side of bridge on county road, 1.3 miles north of Scottsville, and 3.2 miles downstream from North Fork Illinois Bayou.

DRAINAGE AREA.--241 mi

PERIOD OF RECORD.--October 1947-September 1970.

REMARKS .-- Natural-flow data.

90

07258500 Petit Jean River near Booneville, Ark.

LOCATION.--Lat 35<sup>0</sup>06'25", long 93<sup>0</sup>55'25", in NW 1/4 NW 1/4 sec.18, T.5 N., R.27 W., Logan County, Hydrologic Unit 11110204, on right bank at downstream side of bridge on State Highway 23, 0.5 mile downstream from Fletcher Creek, 2.3 miles south of Booneville, and at mile 102.3.

DRAINAGE AREA.--241 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1938-September 1984.

REMARKS .-- Natural-flow data.

91

07259500 Petit Jean River near Waveland, Ark.

LOCATION.--Lat 35<sup>0</sup>06'17", long 93<sup>0</sup>37'53", in SE 1/4 SW 1/4 sec.11, T.5 N., R.25 W., Yell County, Hydrologic Unit 11110204, on left bank 0.8 mile downstream from Rock Creek, 1.2 miles downstream from Cedar Creek, 1.3 miles south of Waveland, 1.4 miles downstream from Blue Mountain Dam, and at mile 73.0. DRAINAGE AREA.--516 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1939-September 1980.

REMARKS .-- Regulated by Blue Mountain Lake.

99

07260000 Dutch Creek at Waltreak, Ark.

LOCATION.--Lat 34<sup>0</sup>59'15", long 93<sup>0</sup>36'45", in SE 1/4 NW 1/4 sec.24, T.4 N., R.25 W., Yell County, Hydrologic Unit 11110204, on left bank 0.2 mile north of Waltreak, and at mile 21.0.

DRAINAGE AREA.--81.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1945-September 1975.

REMARKS .-- Natural-flow data.

93

07262500 Fourche LaFave River near Nimrod, Ark.

LOCATION.--Lat 34<sup>0</sup>57'02", long 93<sup>0</sup>09'16", in NW 1/4 SW 1/4 sec.32, T.4 N., R.20 W., Perry County, Hydrologic unit 11110206, on left bank 2,000 ft downstream from Nimrod Dam, 4.5 miles southwest of Nimrod, and 9.8 miles upstream from South Fourche LaFave, River, and at mile 62.2.

DRAINAGE AREA.--684 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1936-September 1980.

REMARKS.--Regulated by Nimrod Lake.

94

07264500 Bayou Meto near Stuttgart, Ark.

LOCATION.--Lat 34<sup>0</sup>27'15", long 91<sup>0</sup>37'00", in SE 1/4 sec.11, T.3 S., R.6 S., Hydrologic Unit 08020402, on downstream side of bridge on U.S. Highway 79, 5.5 miles southwest of Stuttgart, and 8 miles upstream from Crooked Creek.

DRAINAGE AREA.--574 mi<sup>2</sup>.

PERIOD OF RECORD .-- October 1936-September 1954.

REMARKS.--Affected by irrigation practices.

#### Description

95

07265000 Crooked Creek near Humphrey, Ark.

LOCATION.--Lat 34<sup>0</sup>25'35", long 91<sup>0</sup>40'00", in SE 1/4 sec.20, T.3 S., R.6 W., Hydrologic Unit 08020402, near center of span on downstream side of pier of bridge on U.S. Highway 79, 100 ft upstream from St. Louis-Southwestern Railway bridge, 2 miles east of Humphrey, and 5.8 miles upstream from mouth. DRAINAGE AREA.--79.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1940-September 1954.

REMARKS.--Affected by irrigation practices.

#### **Red River Basin**

96

07339500 Rolling Fork near DeQueen, Ark.

LOCATION.--Lat 34<sup>0</sup>02'51", long 94<sup>0</sup>24'47", in SW 1/4 SW 1/4 sec.21, T.8 S., R.32 W., Sevier County, Hydrologic Unit 11140109, near center of span on downstream side of bridge on U.S. Highway 70, 4 miles west of DeQueen, 6 miles upstream from Rock Creek, and at mile 17.0.

DRAINAGE AREA.--182 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1948-September 1980.

REMARKS.--Some regulation since 1977 by DeQueen Lake.

97

07340500 Cossatot River near DeQueen, Ark.

LOCATION.--Lat 34<sup>0</sup>02'45", long 94<sup>0</sup>12'42", in NE 1/4 NE 1/4 sec.29, T.8 S., R.30 W., Sevier County, Hydrologic Unit 11140109, near right bank on downstream side of bridge on U.S. Highway 71, just downstream from Hale Creek, 7 miles east of DeQueen, and 3t mile 33.5.

DRAINAGE AREA.--360 mi2.

PERIOD OF RECORD.--January 1938-September 1981.

REMARKS.--Regulated by diversion for municipal supply at DeQueen.

98

07341000 Saline River near Dierks, Ark.

LOCATION.--Lat 34<sup>0</sup>05'45", long 94<sup>0</sup>05'04", in NW 1/4 SW 1/4 sec.3, T.8 S., R.29 W., Howard County, Hydrologic Unit 11140109, near left bank on downstream side of bridge on U.S. Highway 70, 3.5 miles upstream from Holly Creek, 4 miles southwest of Dierks, and at mile 50.7. DRAINAGE AREA.--121 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1938-September 1980.

REMARKS.--Some regulation since 1975 by Dierks Lake.

99 07341500 Red River at Fulton, Ark.

LOCATION.--Lat 33°36'26", long 93°48'56", in NE 1/4 SE 1/4 sec.20, T.13 S., R.26 W., Hempstead-Miller County line, Hydrologic Unit 11140201, near left bank on downstream side of bridge on U.S. Highway 67 at Fulton, 0.2 mile downstream from Missouri Pacific Railroad Co. bridge, 2.5 miles downstream from Little River, and at mile 463.0. DRAINAGE AREA.--52,336 square miles (5,936 square miles probably noncontributing).

PERIOD OF RECORD.--October 1927-September 1981.

REMARKS.--1928-43: Natural-flow data. 1945-70: Regulated by Lake Texoma (Tex.) since 1943 and by Millwood Lake since 1966.

100 07349430 Bodcau Creek at Stamps, Ark.

LOCATION.--Lat 33°22'00", long 93°31'20", in NW 1/4 sec.7, T.16 S., R.23 W., Lafayette County, Hydrologic Unit 11140205, near center of span on downstream side of bridge on U.S. Highway 82, 0.1 mile upstream from Tatum Branch, and 1 mile west of Stamps.

DRAINAGE AREA.--236 mi<sup>2</sup>

PERIOD OF RECORD.--October 1958-September 1970.

### Description

101

07356500 South Fork Ouachita River at Mount Ida, Ark.

LOCATION.--Lat 34<sup>0</sup>33'36", long 93<sup>0</sup>38'16", in NE 1/4 NE 1/4 sec.23, T.2 S., R.25 W., Montgomery County, Hydrologic Unit 08040101, near right bank on downstream side of bridge on U.S. Highway 270 at Mount Ida, 3.4 miles upstream from Williams Creek, and at mile 22.5.

DRAINAGE AREA.--61 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1949-September 1970.

REMARKS .-- Natural-flow data.

102

07357000 Ouachita River near Mountain Pine, Ark.

LOCATION.--Lat 34°36′, long 93°12′, in NW 1/4 NW 1/4 sec.1, T.2 S., R.21 W., Hydrologic Unit 08040101, 0.8 mile downstream from Mill Creek, 2 miles downstream from Blakely Creek, and 4 miles northwest of Mountain Pine. DRAINAGE AREA.--1,100 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1937-September 1950.

REMARKS .-- Natural-flow data.

103

07357501 Ouachita River at Blakely Mountain Dam near Hot Springs, Ark.

LOCATION.--Lat 34°34'17", long 93°11'23", in NE 1/4 sec.12, T.2 S., R.21 W., Garland County, Hydrologic Unit 08040101, in outlet of power tunnel at Blakely Mountain Dam, 2.3 miles upstream from Glazypeau Creek, 10 miles northwest of Hot Springs, and at mile 486.9.

DRAINAGE AREA.--1,102 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950-September 1977.

REMARKS .-- Regulated by Lake Ouachita.

104 073

07359800 Caddo River near Alpine, Ark.

LOCATION.--Lat 34°16'00", long 93°21'45", in SW 1/4 SE 1/4 sec.28, T.5 S., R.22 W., Clark County, Hydrologic Unit 08040102, at Runyan Bridge on gravel road between Alpine and Bismarck, 7.1 miles downstream from Fork Creek, 11.4 miles downstream from Cangy Creek, and at mile 33.8.

DRAINAGE AREA.--301 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1938-September 1970.

REMARKS .-- Natural-flow data.

105

07360000 Ouachita River at Arkadelphia, Ark.

LOCATION.--Lat 34<sup>0</sup>07'16", long 93<sup>0</sup>02'46", in sec.17, T.7 S., R.19 W., Clark County, Hydrologic Unit 08040102, on downstream side of bridge on State Highway 7 at Arkadelphia, 5.4 miles downstream from Caddo River, and at mile 420.6.

DRAINAGE AREA.--2,314 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1905-December 1906, May 1929-September 1977.

REMARKS.--1906, 1930-52: Regulated by Lake Catherine after 1925 and by Lake Hamilton after 1932. 1954-77: Regulated by Lake Ouachita, Lake Hamilton, Lake Catherine, and DeGray Lake since 1969.

106 07360501 Little Missouri River at Narrows Dam near Murfreesboro, Ark.

LOCATION.--Lat 34<sup>0</sup>08'51", long 93<sup>0</sup>43'04", in NW 1/4 sec.18, T.7 S., R.25 W., Pike County, Hydrologic Unit 08040103, in powerhouse at Narrows Dam, 6.5 miles northwest of Murfreesboro, 9.5 miles upstream from Muddy Fork Creek, and at mile 105.5.

DRAINAGE AREA.--239 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1946-September 1977.

REMARKS.--Regulated since 1949 by Lake Greeson.

### Description

107

07361000 Little Missouri River near Murfreesboro, Ark.

LOCATION.--Lat 34<sup>0</sup>02'55", long 93<sup>0</sup>43'12", in NE 1/4 NE 1/4 sec.24, T.8 S., R.26 W., Pike County, Hydrologic Unit 08040103, near right bank on downstream side of bridge on State Highway 27, 1.8 miles downstream from Muddy Fork Creek, 2.0 miles southwest of Murfreesboro, 4.6 miles upstream from Prairie Creek, 11.4 miles downstream from Lake Greeson, and at mile 94.1. DRAINAGE AREA.--383 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1928-September 1931, July 1937-September 1977.

REMARKS.--1929-31, 1938-49: Natural-flow data. 1951-77: Regulated by Lake Greeson.

108

07361200 Ozan Creek near McCaskill, Ark.

LOCATION.--Lat 33°52'55", long 93°35'59", in SE 1/4 NE 1/4 sec.18, T.10 S., R.24 W., Hempstead County, Hydrologic Unit 08040103, on downstream side of bridge on State Highway 24, 1.7 miles upstream from Haley Branch, 3.5 miles southeast of McCaskill, and at mile 14.5.

DRAINAGE AREA .-- 144 mi".

PERIOD OF RECORD.--October 1961-September 1970.

REMARKS .-- Natural-flow data.

109

07361600 Little Missouri River near Boughton, Ark.

LOCATION.--Lat 33°52'32", long 93°18'16", in NE 1/4 sec.13, T.10 S., R.22 W., Nevada County, Hydrologic Unit 08040103, on downstream side of bridge on U.S. Highway 67, 1.5 miles northeast of Boughton, 5.9 miles downstream from Howard Creek, 10.2 miles downstream from Antoine River, and at mile 46.8. DRAINAGE AREA.--1,079 mi

PERIOD OF RECORD.--October 1937-September 1942, October 1945-Spetmeber 1977. REMARKS.--1938-42, 1946-49: Natural-flow data. 1951-77: Regulated by Lake Greeson.

110 07362500 Moro Creek near Fordyce, Ark.

LOCATION.--Lat 33<sup>0</sup>47'32", long 92<sup>0</sup>19'30", in NW 1/4 NW 1/4 sec.3, T.11 S., R.12 W., Calhoun-Cleveland County line, Hydrologic Unit 08040201, near center of stream on downstream side of bridge on State Highway 8, 1,100 ft upstream from Caney Creek, 4 miles southeast of Fordyce, 12 miles upstream from White Water Creek, and at mile 38.2. DRAINAGE AREA.--240 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1951-September 1983.

REMARKS .-- Natural-flow data.

111 07363000 Saline River at Benton, Ark.

LOCATION.--Lat 34°34'05", long 92°36'40", in SE 1/4 NE 1/4 sec.9, T.2 S., R.15 W., Saline County, Hydrologic Unit 08040203, on left bank 0.8 mile west of Benton, 3 miles downstream from confluence of North Fork and Alum Fork, and at mile 198.1.

DRAINAGE AREA.--550 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950-September 1979.

REMARKS.--Regulated by Lake Winona (Little Rock water supply), Lake Norrell, and by diversion for municipal supply at Benton.

07365800 Cornie Bayou near Three Creeks, Ark. 112

LOCATION.--Lat 33<sup>0</sup>02'21", long 92<sup>0</sup>56'15", in SW 1/4 NW 1/4 sec.36, T.19 S., R.18 W., Union County, Hydrologic Unit 08040206, on left bank at downstream side of bridge on State Highway 15, 3.4 miles downstream from Pidgeon Roose Creek, and 6 miles southwest of town of Three Creeks.

DRAINAGE AREA.--180 mi~

PERIOD OF RECORD.--February 1956-September 1987.

### Description

113

07365900 Three Creeks near Three Creeks, Ark.

08040206, near right bank on downstream side of bridge on State Highway 15, 2.2 miles southwest of town of Three Creeks, and 1.8 miles upstream from Ash Branch. DRAINAGE AREA.--50.4 mi

PERIOD OF RECORD.--February 1956-September 1971.