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FLOODS IN ARKANSAS, MAGNITUDE AND FREQUENCY

CHARACTERISTICS THROUGH 1968

By
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U.S. Geological Survey

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FLOODS IN ARKANSAS, MAGNITUDE AND FREQUENCY CHARACTERISTICS THROUGH 1968

By James L. Patterson

ABSTRACT

Techniques are presented for estimating the magnitude and frequency of floods on Arkansas streams. Modern topographic maps now available and computer techniques facilitate in making a comprehensive analysis in which physical and climatic characteristics of river basins are related to flood characteristics at gaging stations. Equations derived from the analysis make it possible to estimate the magnitude of future floods with recurrence intervals of as much as 50 years on gaged and ungaged streams that have drainage areas of 0.1-3,000 square miles. An estimate of the future flood potential can be used to locate and design flood-control structures, establish flood-insurance rates, and devise flood-zoning plans.

Appendixes in the report contain data on flood characteristics of gaged drainage basins, a summary of climatic and topographic characteristics of drainage basins, peak stages and discharges for gaging stations that have 5 or more years of record, and peak-flow data for outstanding floods at miscellaneous sites.

INTRODUCTION

This is the second report prepared by the U.S. Geological Survey on the magnitude and frequency of floods in Arkansas. The first report was published as an open-file report (Patterson, 1961), and as a part of Geological Survey Water-Supply Paper 1681 (Patterson, 1964). The first report contained flood data through 1958 and a regional analysis of these data. Ten more years of peak-flow data are now available at most gaging stations used in the original analysis, and 8-10 years of peak-flow data have been collected at 105 partial-record sites on small drainage areas.

During the past 10 years, topographic-map coverage of the State has greatly increased, permitting a more detailed determination of the physical characteristics of drainage basins. The use of physical and climatic characteristics of gaged basins in conjunction with the application of computer techniques provides a basis for better analysis of peak discharges than was possible at the time the first report was prepared.

Purpose and Scope

The purposes of this report are (1) to present available flood-peak data for streams in Arkansas, and (2) to describe methods by which the magnitude and frequency of floods on most streams in the State can be evaluated.

The evaluation of flood potential is necessary for the design and location of structures that control floodflows or that are subject to possible flooding, and is also essential for the purpose of establishing flood-insurance rates. Some structures must be designed so that they will not be damaged or flooded by any probable flood. However, for most structures the probable damage to the structure, the cost of repairing or replacing damaged property, or the inconvenience to the public must be balanced against the cost of designing to withstand rare flood events.

It is not possible to anticipate where flood information might be needed, nor is it economically feasible to collect data at all potential sites in the State. At the present time (1971), analysis of past flood events is considered the best method of evaluating the magnitude and frequency of probable future events.

Peak flows at gaging stations have been analyzed as to frequency of occurrence and related to topographic and climatic factors of the drainage basin. These relations, determined for gaged areas, can be used to predict probable magnitude and frequency of flood events on ungaged areas.

The maximum peak discharge occurring each year (annual flood) has been used in this analysis.

Acknowledgments

This report was prepared by the Water Resources Division of the U.S. Geological Survey in cooperation with the Arkansas State Highway Commission and the Arkansas Geological Commission. Some of the data were collected through cooperation with other Federal agencies, principally the U.S. Army Corps of Engineers.

DESCRIPTION OF THE AREA

Topography

Arkansas is divided diagonally, from the southwest corner to the northeast corner, into the Coastal Plain comprising the southeastern part of the State and the Interior Highlands comprising the northwestern part. The Interior Highlands is physiographically divided into three areas;

the Ozark Uplift in north Arkansas, the Arkansas Valley in the vicinity of the Arkansas River, and the Ouachita Mountain Uplift of south Arkansas, which extends from Oklahoma to the center of the State. The Coastal Plain is physiographically divided into the West Gulf Coastal Plain and the Mississippi Alluvial Plain.

The Ozark and Ouachita Mountains are rugged, with some peaks rising as high as 2,800 feet. The Coastal Plain is relatively flat, but minor relief is afforded by Crowleys Ridge, a narrow divide between the St. Francis and the White River basins in east Arkansas, and the rolling hills of the West Gulf Coastal Plain. Elevations in the Coastal Plain range from 60 feet in the southeastern part of the State to 500 feet on Crowleys Ridge.

Climate

The climate is mild and moderately humid. The average annual precipitation ranges from about 42 inches in northwest Arkansas to about 56 inches in parts of the Ouachita Mountains, and averages about 50 inches for the State. Rainfall is fairly uniformly distributed throughout the year. Average monthly precipitation ranges from about 3 inches in August to 5 inches in May. About 50 percent of the rainfall occurs during the 5-month period, January through May.

Floods may occur during any time of the year, but occur most frequently from January through May and are generally caused by storms moving northeastward from the west gulf region. Flood peaks for small areas are frequently caused by intense thunderstorms of short duration which occur during the summer months. Snowfall is not a significant factor in the magnitude of floods in Arkansas.

METHODS OF ANALYSIS

Methods of flood-frequency analysis used in this report are explained in detail in other reports, principally Benson, 1962; Thomas and Benson, 1970; and Water Resources Council, 1967; and will be explained only briefly here.

The analysis consists of two steps. The first step is the analysis of annual peaks at gaging stations (the highest peak discharge occurring each year) throughout the State to determine the magnitude and frequency of floods at individual gaging stations. The second step is the development of methods for transferring flood-frequency data at gaging stations so that flood characteristics may be estimated for ungaged sites.

Records Used

Peak data for 259 gaging stations that have 5 or more years of record are included in Appendix B of this report. Of these stations, three sites are in Missouri, three in Oklahoma, and 11 in Louisiana.

Peak data have been collected at two types of gaging stations: (1) Regular gaging stations where records of daily stage or daily stage and discharge are collected, and (2) crest-stage gaging stations where only the maximum peak stage and discharge for each year are determined. Of the 259 gaging stations for which peak data are included, 154 are regular gaging stations and 105 are crest-stage gaging stations. Generally, the regular gaging stations are on large streams and have been operated for a relatively long period. Only a small percentage of the drainage areas upstream from these gaging stations are less than 100 square miles. The crest-stage gaging program was begun in 1960 to fill the need for flood data on small areas. The drainage areas upstream from these sites range from less than 0.1 square mile to about 50 square miles. Only 8-10 years of record are now available for the crest-stage gage network.

Flood Frequency at Gaging Stations

Flood peaks at gaging stations have been analyzed by the annual-flood series method in which only the maximum peak discharge for each year is used as contrasted with the partial-duration series method in which all peaks higher than a selected base are used without regard to the time of occurrence.

Analysis of peak-flow data at a gaging station defines the relation between the magnitude of the peak flow and its recurrence interval or probability of occurrence. In the annual-flood series, a flood discharge that has a recurrence interval of 50 years may be expected to be exceeded as an annual maximum on the average of once in 50 years, and a discharge that has a recurrence interval of 5 years is expected to be exceeded as the annual maximum on the average of once in 5 years. The probability of exceedence is the reciprocal of the recurrence interval; thus, a flood having a recurrence interval of 5 years has a 20-percent chance of occurring during any year (1/5=0.20, or 20 percent). (See fig. 1.)

Frequency curves may be defined from a series of flood discharges by using either mathematically fitted probability distributions or graphical curves. As recommended by the Water-Resources Council (1967), the mathematically fitted log-Pearson Type III probability distribution

was used to define frequency curves for unregulated gaging-station records 10 or more years in length. In this method the peak discharge for selected recurrence intervals is computed by the equation

$$\log Q = M + KS,$$

where Q is the peak discharge for a selected recurrence interval, M is the mean of the logarithms of the annual peaks, K is Pearson Type III coordinates expressed in number of standard deviations from the mean for the selected recurrence interval, and S is the standard deviation of the logarithms of the annual peaks. Using the coefficient of skew of the logarithms of the annual peaks, values of K may be obtained for a wide range of recurrence intervals from standard tables in statistical textbooks.

Records for 78 regular gaging stations were analyzed. Most of the records were 25 years or more in length. A high degree of correlation existed between peak flows for most of the stations having less than about 20 years of record and those for nearby long-term stations, and records for all but four of the short-term stations could be extended on the basis of this correlation.

An extremely high or low value among the series of annual peaks may cause a distortion of shape of a mathematically computed frequency curve. To insure that frequency curves computed by the log-Pearson method were realistic, each curve was compared to a data plot. To make this comparison, each annual peak discharge was plotted at its recurrence interval (T), computed by:

$$T = (n+1)/m,$$

where T is the recurrence interval in years, n is the number of years of record, and m is the peak's numerical rank with the largest peak being 1. In general, the computed frequency curve agreed closely with the plotted data. In the few instances when a computed log-Pearson frequency curve obviously disagreed with station data, graphical frequency curves were drawn. Figure 1 is a flood-frequency curve for Buffalo River near St. Joe, based on log-Pearson Type III computations, which shows the close agreement with station data.

Peak discharges for recurrence intervals of 2, 5, 10, 25, and 50 years for 74 regular gaging stations for which data were analyzed are listed in table A1 in Appendix A. Peak discharges are not listed for a recurrence interval of 50 years for four gaging stations that have short periods of record not extended by correlation. Also listed are values of the mean, standard deviation, and skewness of the logarithms of the annual peak discharges for each of the gaging stations except where graphical frequency curves were used. These data can be used

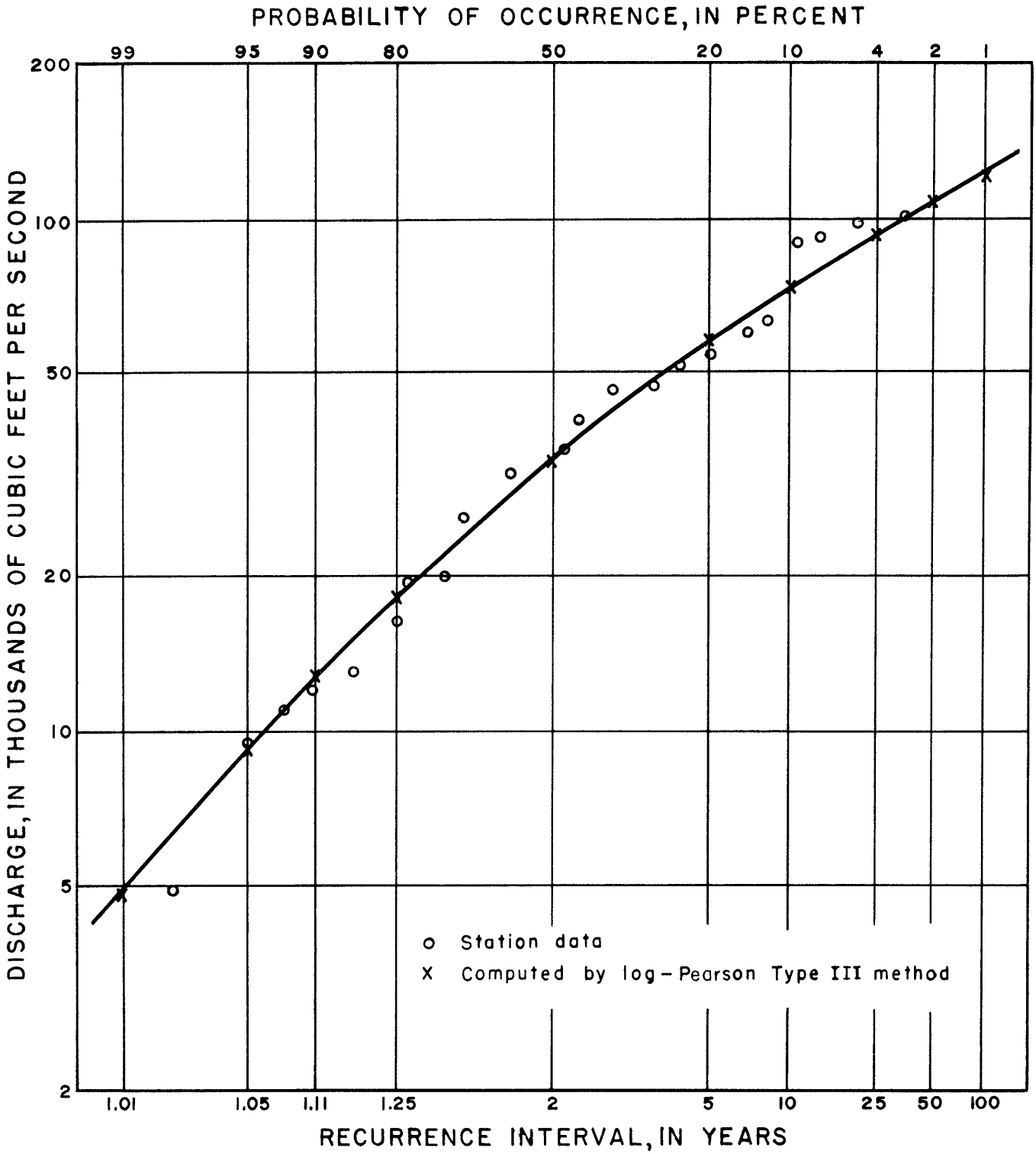

Figure 1.—Flood-frequency curve for Buffalo River near St Joe.

in conjunction with values of Pearson's K, obtained from statistical tables, to compute peak discharges for additional recurrence intervals. However, the accuracy of discharges computed for recurrence intervals greater than twice the period of record at the gaging station is questionable.

All except a small percentage of the frequency curves computed in the log-Pearson analyses are for drainage areas greater than 100 square miles. To define flood-frequency relations for smaller drainage areas, the peak-discharge data collected at 87 of the 105 short-term crest-stage gages, where only 8-10 years of record are available, were analyzed graphically. These stations were selected on the basis of adequacy of the stage-discharge relation and coverage by topographic maps. The log-Pearson Type III method was not used in the analysis of records for these stations because the 8-10 years of available record was considered inadequate for reliable definition of a mathematically fitted frequency curve. Recurrence intervals for each of the annual peaks were computed using the equation

$$T=(n+1)/m.$$

Peak discharge versus recurrence interval was plotted on suitable graph paper and a frequency curve drawn through each set of data to average the trend of the plotted points. The frequency curves were extended only to a recurrence interval of 10 years, and values of peak discharge for recurrence intervals of 2, 5, and 10 years for each of the short-term stations are listed in table A1.

Peak discharges for the main stems of the Arkansas, Red, lower White, and lower Ouachita Rivers have been regulated for many years, with the degree of regulation changing as additional reservoirs are built. Natural-flow flood-frequency characteristics for these streams are of only academic interest; hence, records for these streams have not been analyzed in this report.

Regional Analysis

The values of peak discharges for various recurrence intervals listed in table A1 for long-term gaging stations should be reliable for the sites at which the data were collected. However, information is generally required at points where data are not available.

The most effective way now known for estimating floodflow characteristics at ungaged sites is to define mathematical equations between streamflow characteristics and basin parameters by multiple-regression analysis of data collected at gaged sites. Once the equation is defined, streamflow characteristics for ungaged sites can be computed by determining the appropriate values of the basin parameters and substituting these values in the equation.

Data Used in Regional Analysis

The flood-peak data used in the multiple-regression analysis are the discharges from flood-frequency curves developed from gaging-station data and listed in table A1. Separate regression equations were developed for peak flows having recurrence intervals of 2, 5, 10, 25, and 50 years. In the equations developed, the peak-flow values are denoted as Q_2, Q_5, and so forth.

Preliminary analysis indicated that floodflow characteristics for streams with drainage areas greater than about 3,000 square miles did not agree with regression equations developed from data for smaller areas; therefore, flood data for the main stem of the St. Francis and Black Rivers, which have large drainage areas, were omitted in subsequent regression analyses.

The values of the following topographic and climatic parameters were determined for the drainage basin upstream from each of the gaging stations for which data were used in the analysis: (1) Drainage area, (2) stream length, (3) stream slope, (4) basin elevation, (5) forest cover, (6) area of lakes and ponds, (7) mean annual precipitation, and (8) rainfall intensity. Values were determined for each of these basin parameters, as described below, and used in the regression analysis.

a. Drainage area (A), in square miles, as determined by planimeter from the best available maps.

b. Main-channel length (L), in miles, from the gaging station to the basin divide, as measured with a template graduated in 0.1-mile units, or as taken from the report by the U.S. Army Corps of Engineers (1954).

c. Main-channel slope (S), in feet per mile, computed from elevations at points 10 percent and 85 percent of the distance along the main channel from the gaging station to the basin divide. This index was described and used by Benson (1962). Regression analysis revealed that peak discharges did not noticeably increase with increases in stream slope when the slope exceeded about 30 feet per mile. Therefore, when stream slope exceeds 30 feet per mile, a value of 30 should be used for S in equations containing this parameter.

d. Mean basin elevation (E), in feet above mean sea level, measured on 1:250,000 Army Map Service maps by laying a transparent grid over the map, determining the elevation at each grid intersection, and averaging those elevations. The grid spacing was selected to give at least 25 intersections within the basin boundary. For drainage areas less than about 5 square miles, larger scale maps were used where available.

e. Forest cover, in percentage of drainage area, computed by the same method as described for determining mean basin elevation.

f. Mean annual precipitation (P), in inches, computed from isohyetal map prepared from U.S. Weather Bureau records at 157 sites (fig. 2). The parameter used was mean annual precipitation minus 30.

g. Area of lakes and ponds, in percentage of drainage area, determined from Arkansas Soil and Water Conservation Commission (1968).

h. Rainfall intensity, in inches (the maximum 24-hour precipitation that will occur on the average of once in 2 years), determined from U.S. Weather Bureau (1961).

Although only five of the basin parameters proved significant, all values determined for the gaging stations used in the analysis are listed in table A2 for general information.

Regression Analysis

After the discharge-recurrence relation had been defined and basin parameters determined for gaging stations used in the analysis, the next step was to relate the peak discharge for each recurrence interval to basin parameters in equations developed by using multiple-regression techniques. The equation has the form:

$$Y = aA^{b_1}S^{b_2}P^{b_3}\text{----},$$

where Y is the peak-flow characteristic; A, S, and P are topographic and climatic basin characteristics; and a, b_1, b_2, and b_3 are constants obtained by regression analysis. All topographic and climatic basin parameters determined were used initially in each regression. The computer calculated the equation constants, the standard error of estimate, and the significance of each basin parameter. Then, the computer automatically repeated the calculations omitting the least significant parameter in each calculation until only the most significant parameter remained. This procedure was followed in computing equations for discharges having recurrence intervals of 2, 5, 10, 25, and 50 years.

Initially, equations were derived using all gaging-station data listed in table A1 except that for the main stems of the St. Francis and Black Rivers. The standard error of estimate of the equations averaged about 45 percent. This means that the computed value of the flood event is within 45 percent of the correct value about two out of three times, or computed values will be more than 45 percent in error about one out of three times.

In an attempt to improve the accuracy of the estimating equations, regression analyses were made with the State divided into subareas on the basis of topography, and also with the gaging stations separated on the basis of small or large drainage areas. About 15 analyses were made

using different combinations of geographical subdivisions and drainage-area sizes. On the basis of these analyses, the State was divided into two regions. Region A (fig. 3) includes most of the Mississippi Alluvial Plain in Arkansas, with the exception of Crowleys Ridge. Region B includes the rest of the State.

In region A three sets of equations were derived using peak data for (1) gaging stations with large drainage areas, (2) all stations, and (3) gaging stations with small drainage areas. The equation derived in step 1 checks gaging-station data for large drainage areas considerably closer than the equation derived in step 2. However, there is little difference in standard error of estimate of equations derived in steps 2 and 3 when compared with station data for small areas. Therefore, it was decided to use the first set of equations for streams having drainage areas of 100-3,000 square miles and the second set for drainage areas of 0.2-100 square miles.

The same procedure was used in analyzing data for gaging stations in region B. For this region, the equation derived using peak data for all gaging stations (step 2) checks station data for both large- and small-area stations, as well as equations derived as explained in step 1 or step 3 above. Therefore, in region B, equations derived by using peak data for all gaging stations should be used for drainage areas of 0.1-3,000 square miles.

As flood-frequency relations for the small-area crest-stage stations were defined only to 10-year recurrence intervals, the equations for 25- and 50-year recurrence intervals are based on records for large areas only, and should not be used for small drainage areas of less than 100 square miles in region A and less than 25 square miles in region B. (See footnote to table 1.)

A summary of the equations is given in tables 1 and 2. Initially, all parameters that are statistically significant were included in the equation. Subsequently, the least significant parameter was dropped from the equation until finally only the most significant parameter for a flow characteristic remains in the last equation. The change in standard error of estimates indicates the loss in accuracy resulting from eliminating a parameter.

Although equations for small-area streams in region A and for all streams in region B were derived using data for both large- and small-area streams, the standard errors of estimate listed in tables 1 and 2 were computed separately for small areas and for large areas to show the relative accuracy that can be expected from application of the equations. The standard error is generally larger for small areas. This is probably mostly due to the better definition of peak-flow characteristics for the long-term large-area gaging stations.

Table 1.—*Summary of regression equations for region A*

[Model is $Y=aA^{b_1}S^{b_2}L^{b}$]

Equation number	Peak-flow characteristic, Y	Regression constant, a	Exponent of basin characteristic			Standard error of estimate, percent	
			Drainage area, A	Main channel slope, S	Main channel length, L	Areas 100 sq mi or more	Areas less than 100 sq mi
Drainage areas, 100 square miles to 3,000 square miles							
1(a)	*Q_2	119	0.99	----------	-0.58	23	----------
(b)	Q_2	76.7	.64	----------	----------	34	----------
2(a)	*Q_5	168	1.05	----------	-.67	23	----------
(b)	Q_5	102	.64	----------	----------	36	
3(a)	*Q_{10}	215	1.08	----------	-.74	23	----------
(b)	Q_{10}	124	.64	----------	----------	39	----------
4(a)	*Q_{25}	264	1.10	----------	-.78	24	----------
(b)	Q_{25}	148	.63	----------	----------	41	----------
5(a)	*Q_{50}	295	1.11	----------	-.78	26	----------
(b)	Q_{50}	164	.63	----------	----------	42	----------
Drainage areas, 0.2 square mile to 100 square miles							
6(a)	*Q_2	105	0.59	0.24	----------	----------	32
(b)	Q_2	129	.55	----------	----------	----------	37
7(a)	*Q_5	152	.59	.30	----------	----------	35
(b)	Q_5	197	.54	----------	----------	----------	38
8(a)	*Q_{10}	185	.58	.31	----------	----------	34
(b)	Q_{10}	241	.53	----------	----------	----------	38

*See diagrams for graphical solution in appendix A.

Table 2.—*Summary of regression equations for region B*

[Model is $Y=aA^{b_1}S^{b_2}E^{b_3}P^{b_4}$; where S is greater than 30 feet per mile, use 30]

Equation number	Peak-flow characteristic, Y	Regression constant, a	Exponent of basin characteristic				Standard error of estimate, percent	
			Drainage area, A	Main channel slope, S	Mean basin elevation, E	Mean annual precipitation minus 30, P	Areas 25 sq mi or more	Areas less than 25 sq mi
Drainage area, 0.1 square mile to 3,000 square miles								
9(a)	Q_2	4.99	0.72	0.32	0.20	0.59	25	46
(b)	*Q_2	58.1	.77	.46	----------	----------	30	45
(c)	Q_2	276	.68	----------	----------	----------	41	50
10(a)	Q_5	11.8	.72	.35	.21	.43	22	40
(b)	*Q_5	91.8	.78	.50	----------	----------	26	36
(c)	Q_5	498	.68	----------	----------	----------	40	40
11(a)	Q_{10}	17.2	.73	.37	.21	.36	22	40
(b)	*Q_{10}	112	.78	.52	----------	----------	26	36
(c)	Q_{10}	653	.68	----------	----------	----------	40	40
**12(a)	Q_{25}	10.8	.62	.29	.36	.55	23	----------
(b)	Q_{25}	65.6	.69	.45	.22	----------	24	----------
(c)	*Q_{25}	117	.77	.63	----------	----------	26	----------
(d)	Q_{25}	2,680	.48	----------	----------	----------	40	----------
**13(a)	Q_{50}	21.9	.62	.33	.31	.45	25	----------
(b)	Q_{50}	96.4	.68	.46	.20	----------	26	----------
(c)	*Q_{50}	164	.75	.63	----------	----------	27	----------
(d)	Q_{50}	3,620	.46	----------	----------	----------	41	----------

* See diagrams for graphical solution in appendix A.
** Not applicable for drainage areas less than 25 square miles.

It is generally recommended that the equation having the smallest error of estimate be used in computing peak-flow characteristics. The user, however, must decide if the additional time required to determine values of the equation variables is justified by the increased accuracy. For example, equation 13(a), 13(b), 13(c), or 13(d) can be used to compute the peak discharge of a 50-year flood for areas between 25 and 3,000 square miles in region B. There is some question as to which of the first three equations to use, as the range in standard error is only from 25 percent to 27 percent. It is obvious, however, that equation 13(d), with a standard error of 41 percent, is much less accurate than the other three.

Diagrams (figs. A1-A13) for the solutions of equations having only two independent variables are included in Appendix A.

For small drainage areas, frequency relations are not defined for recurrence intervals greater than 10 years. Because frequency data are usually needed for greater recurrence intervals, a method of estimating magnitude of floods for 25- and 50-year recurrence intervals was developed.

Values of Q_{25}/Q_{10} and Q_{50}/Q_{10} for the long-term stations were related to basin parameters and a reasonably good correlation was obtained by using main-channel slope as an independent variable. Drainage-area size did not prove to be significant for areas less than about 500 square miles, and probably no great error will result in using the long-term gaging-station relation for small-area streams.

Peak flows for recurrence intervals of 25 and 50 years can be estimated by first computing the magnitude of the 10-year flood and then multiplying by the appropriate value from relation curves in figure 4.

APPLICATION OF REPORT DATA

Procedures for computing the magnitude of flood peaks that have recurrence intervals as great as 50 years are outlined in this section. These methods are usable at most sites where floodflows are virtually natural and drainage area ranges between about 0.2 and 3,000 square miles in region A and between 0.1 and 3,000 square miles in region B. The methods should not be used for estimates at sites where floodflow is materially affected by nonnatural storage in farm ponds or reservoirs, by diversion, by urban or suburban development of a significant part of the basin, or by other similar projects that man may have imposed upon the drainage basin.

Natural valley storage, although a factor that affects the magnitude of peak flows, is difficult to evaluate and has not been used as a parameter in this study. In most instances,

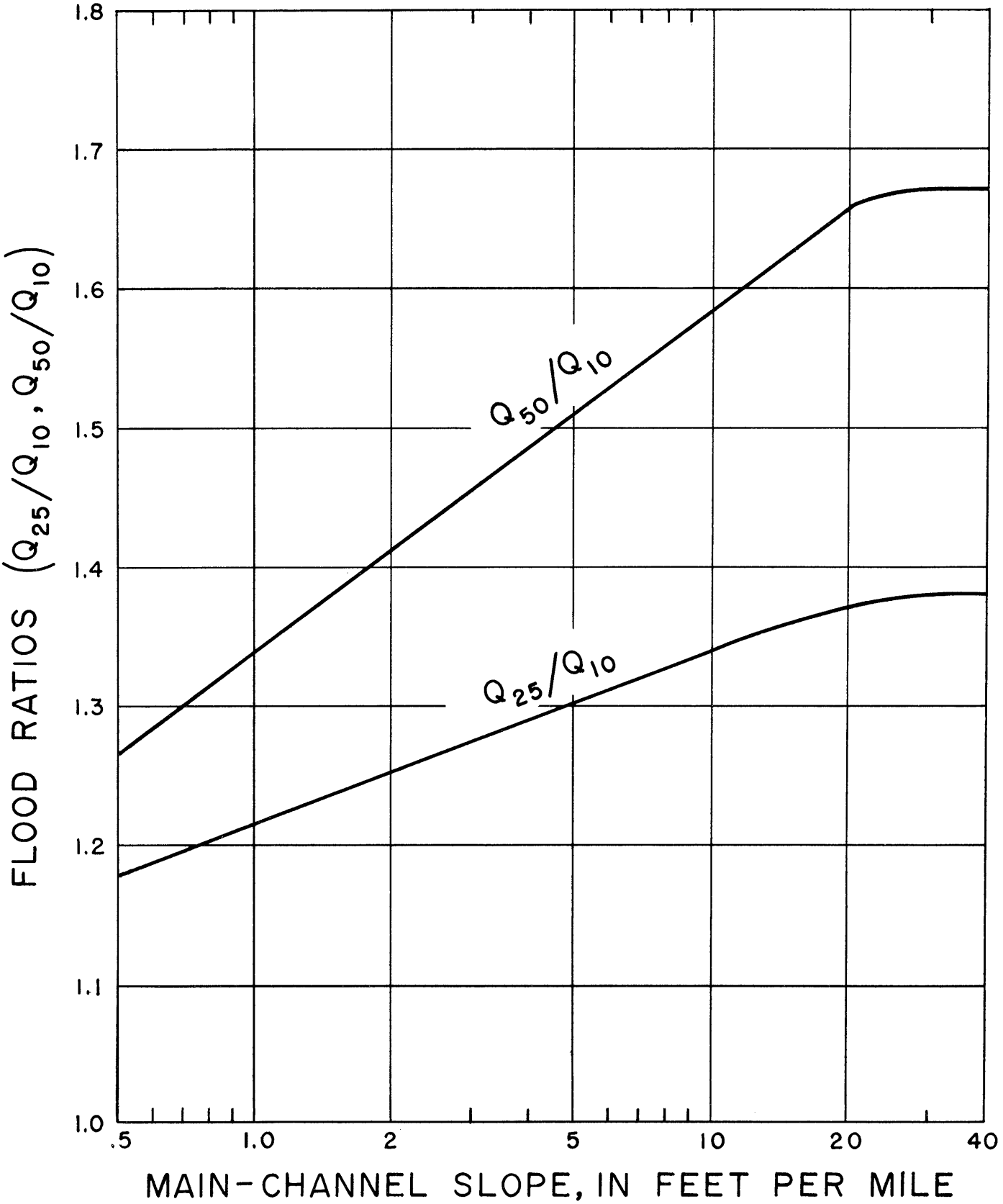

Figure 4.—Relation between flood ratios and main-channel slope.

this factor is at least partly incorporated in other parameters such as slope and stream length, or by division of the State into flat and mountainous regions, A and B. However, some streams in the State have a disproportionate amount of natural storage as they suddenly debouch from the upland areas and flow through low-lying areas adjacent to major rivers. The Black River, downstream from Black Rock, and the lower reaches of Arkansas River tributaries, Point Remove and Cadron Creeks, Petit Jean and Fourche La Fave Rivers, and possibly other streams, are in this category. Special studies must be made to determine flood-frequency relations for the lower reaches of these streams.

Regional Application

Flood-frequency relations for most sites on streams in Arkansas that have drainage areas less than 3,000 square miles and have floodflows that are virtually natural can be computed by using equations listed in tables 1 and 2. Alternate methods are recommended for streams on which long-term records of peak flows are available. These methods are described in the section "Application to Gaged Streams."

The following examples illustrate the use of regression equations in computing flood-frequency relations at sites where long-term records of peak flows are not available. For convenience, the sites selected are at gaging stations where basin characteristics have been determined, but where it is assumed that peak-flow records are not available.

Example 1.--Assume that the peak discharge for a 50-year flood for Strawberry River at bridge on U.S. Highway 167, near Evening Shade (station 730) is to be determined. This discharge is computed as follows.

1. Floodflows of this stream are virtually unaffected by manmade changes; hence, regression equations are applicable.

2. The site is in region B (fig. 3); therefore, one of the equations for streams in this region is applicable (table 2, equation 13(a), 13(b), 13(c), or 13(d)). Assume that it is decided to use equation 13(a),

$$Q_{50}=21.9A^{0.62}S^{0.33}E^{0.31}P^{0.45},$$

which contains all statistically significant variables. It will be necessary to determine values for drainage area (A), main-channel slope (S), mean basin elevation (E), and mean annual precipitation minus 30 (P).

3. The drainage area upstream from the site, measured from the best available maps, is 225 square miles. Drainage areas for most large streams in the Arkansas, White, and Red River

basins have been determined by the Corps of Engineers (1954). Drainage areas for most streams in the St. Francis and Arkansas River basins that have drainage areas of 15 square miles or more are published in Christensen and others (1967) and Sullavan and Terry (1970). Similar reports are being prepared for the rest of the State and will be published later.

4. The main-channel slope is computed as 6.02 feet per mile by (a) determining elevations at points 10 percent and 85 percent of the distance along the main channel from the site of investigation to the basin divide, (b) computing the arithmetic difference, in feet, between these elevations and dividing by distance, in miles, between the points. The best available topographic maps should be used for this purpose.

5. The mean basin elevation is determined as 740 feet above mean sea level by using transparent-grid overlay on 1:250,000 Army Map Service map.

6. The mean annual precipitation is determined as 44 inches from figure 2. The value of P, to be used in the regression equation, is 44 minus 30=14.

7. The peak discharge of the 50-year flood is computed as

$$Q_{50}=21.9(225)^{0.62}(6.02)^{0.33}(740)^{0.31}(14)^{0.45}=30,200 \text{ cfs.}$$

If it is decided to use equation 13(c), in which the only parameters considered are area and channel slope, the 50-year flood is computed as:

$$Q_{50}=164A^{0.75}S^{0.63}=164(225)^{0.75}(6.02)^{0.63}=29,500 \text{ cfs.}$$

Equation 13(c) can also be solved by using diagram in figure A13 in Appendix A. Based on 30 years of record, the 50-year peak discharge at this site, analyzed by log-Pearson Type III method and listed in table A1, is 30,100 cfs.

Example 2.--Assume the peak discharges for floods having recurrence intervals of 10, 25, and 50 years for Gum Springs Creek at U.S. Highway 67, near Higginson (station 768.2) are to be determined.

1. The site is in region B (fig. 3); therefore, equation 11(a), 11(b), or 11(c) should be used to compute the value of the 10-year peak flow. An examination of standard errors shown in table 2 indicates that equation 11(b),

$$Q_{10}=112A^{0.78}S^{0.52},$$

should be used.

2. The drainage area upstream from the site is determined to be 4.94 square miles.

3. The main-channel slope is computed as 35.2 feet per mile by method described in example 1. As this slope exceeds 30 feet per mile, use 30 in the equation.

4. The peak discharge for the 10-year flood is then computed as:

$$Q_{10}=112(4.94)^{0.78}(30)^{0.52}=2,280 \text{ cfs.}$$

This value can also be determined by using diagram in figure A11 in Appendix A.

5. Equations 12 and 13, used to determine peak flows having recurrence intervals of 25 and 50 years, are based on peak-flow data for only the long-term large-area gaging stations and should not be used for areas less than about 25 square miles. To compute values of peak discharge for recurrence intervals of 25 and 50 years at the site, the ratio curves shown in figure 4 should be used. Ratios of Q_{25} and Q_{50} to Q_{10} for a channel slope of 35.2 feet per mile are determined as 1.38 and 1.67, respectively, and

$$Q_{25}=Q_{10}X1.38=2,280X1.38=3,150 \text{ cfs},$$

$$Q_{50}=Q_{10}X1.67=2,280X1.67=3,810 \text{ cfs.}$$

In a few instances, the boundary between regions A and B cross drainage basins. The streams involved are Bayou Meto, Two Prairie Bayou, and small tributary streams debouching from Crowleys Ridge into the flat areas adjacent to this ridge. Floodflow characteristics for sites on these streams at, and upstream from, the region divide should be computed using the appropriate equation for region B. For sites downstream from the region boundary, it is recommended that the following procedure be used in determining peak-flow characteristics:

1. Compute characteristics at the region boundary by use of the appropriate region B equation.

2. For sites downstream from the boundary, compute characteristics using equations for region A applied only to that part of the drainage basin between the site and region boundary.

3. Weigh the computed values on the basis of drainage area, and use the weighted value. This method is somewhat arbitrary and judgment must be used in its application.

Application to Gaged Streams

If an analysis is made of floodflow characteristics at or near one of the long-term gaging stations for which data are listed in table A1, the listed data should be used. However, due to the short period of record at the crest-stage gaging stations, floodflow characteristics at these sites probably can best be determined from regression equations. On the basis of a theoretical relation of standard error to index of variability of annual peak flows for station data used in the analysis, the regression equations developed will give the same accuracy as about 15-20 years of record. As an arbitrary rule, use gaging-station data if the period of record exceeds 15 years. Use regression equations if there are no peak-flow data, or if the period of record is 15 years or less.

If information is desired at a point between two long-term gaging stations on a stream, peak-flow values may be computed by interpolation, on the basis of drainage area, between values taken from table A1. Interpolation can be done by plotting discharge versus drainage area on logarithmic plotting paper for the two gaged sites, connecting these two points with a straight line, and then entering this relation with the value of the drainage area at the site where information is desired. Interpolation should not be used if the drainage area of the upstream station is less than about half that of the downstream station.

When flood-frequency data are needed at a site upstream or downstream from a long-term gaging station for which flood-frequency relations have been defined, it is recommended that the appropriate regression equation listed in table 1 or 2 be used with an adjusted value of regression constant a computed on the basis of the discharge obtained from table A1. An example of this procedure follows.

Assume the value of the 50-year flood on Mulberry River at State Highway 23 near Cass is to be determined. The 50-year flood (table A1) for Mulberry River near Mulberry (station 2520), based on 30 years of record, is 50,500 cfs. Mulberry River is in region B (fig. 3). The regional equation for the 50-year flood (table 2) for areas greater than 25 square miles (equation 13(a)) is

$$Q_{50}=aA^{0.62}S^{0.33}E^{0.31}P^{0.45}.$$

Values of A, S, E, and P are listed in table A2 as 372 square miles, 18.1 feet per mile, 1,430 feet, and 22 (52 minus 30) inches, respectively. Substituting 50,500 cfs for Q_{50}, the value of a can be computed thus:

$$50{,}500=a(372)^{0.62}(18.1)^{0.33}(1{,}430)^{0.31}(22)^{0.45},$$

resulting in

$$a=12.9.$$

Values of A, S, E, and P for the site near Cass are determined as 311 square miles, 23.0 feet per mile, 1,590 feet, and 23 (53 minus 30) inches, respectively, Then

$$Q_{50} \text{ at Cass}=12.9(311)^{0.62}(23.0)^{0.33}(1{,}590)^{0.31}(23)^{0.45}=51{,}500 \text{ cfs}.$$

Depending upon the degree of accuracy desired, the same procedure can be followed using equation 13(b), 13(c), or 13(d). It is recommended that this method not be used for drainage areas more than twice, or less than one-half, the size of the drainage area of the gaged site.

Regression equations are not applicable to main stems of the St. Francis and Black Rivers. Diagrams in figures 5 and 6 show the relation between discharge for selected recurrence intervals and distance upstream from mouth for these streams for natural conditions. Floodflows on the

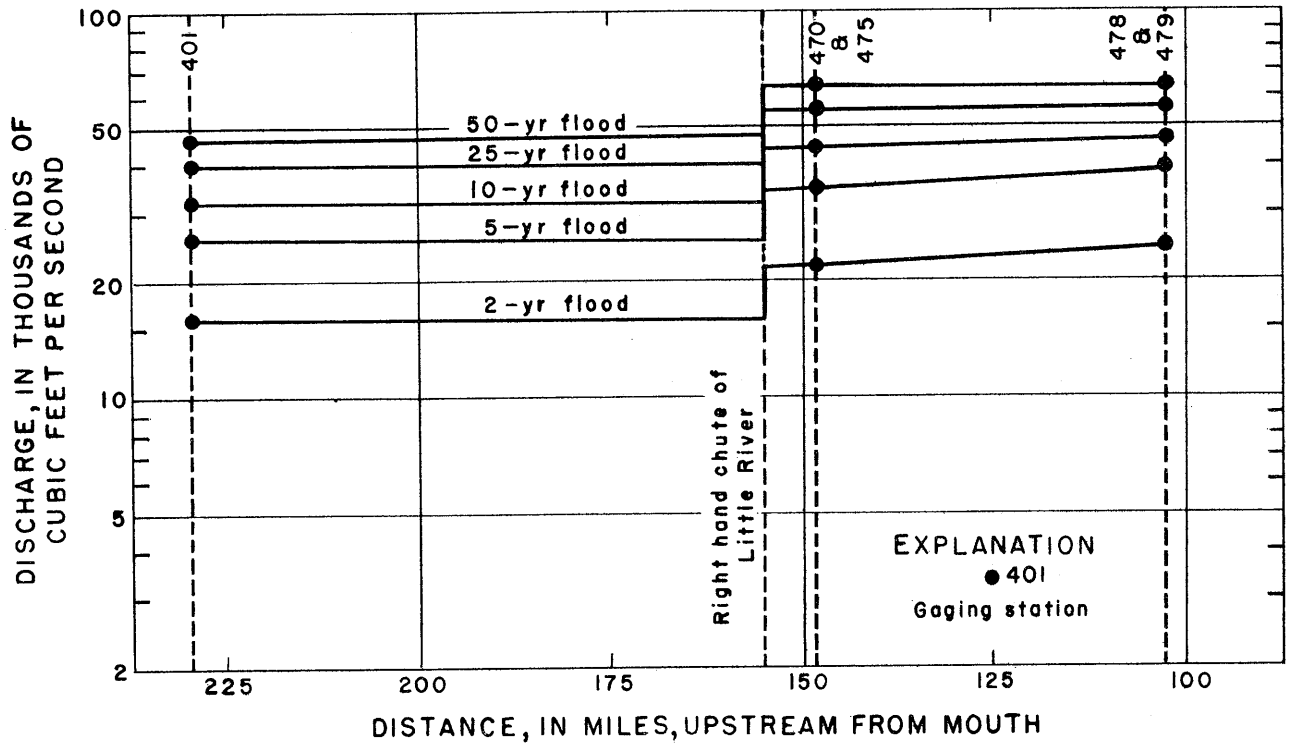

Figure 5.—Relation of discharge for selected recurrence intervals to miles upstream from mouth, St Francis River main stem.

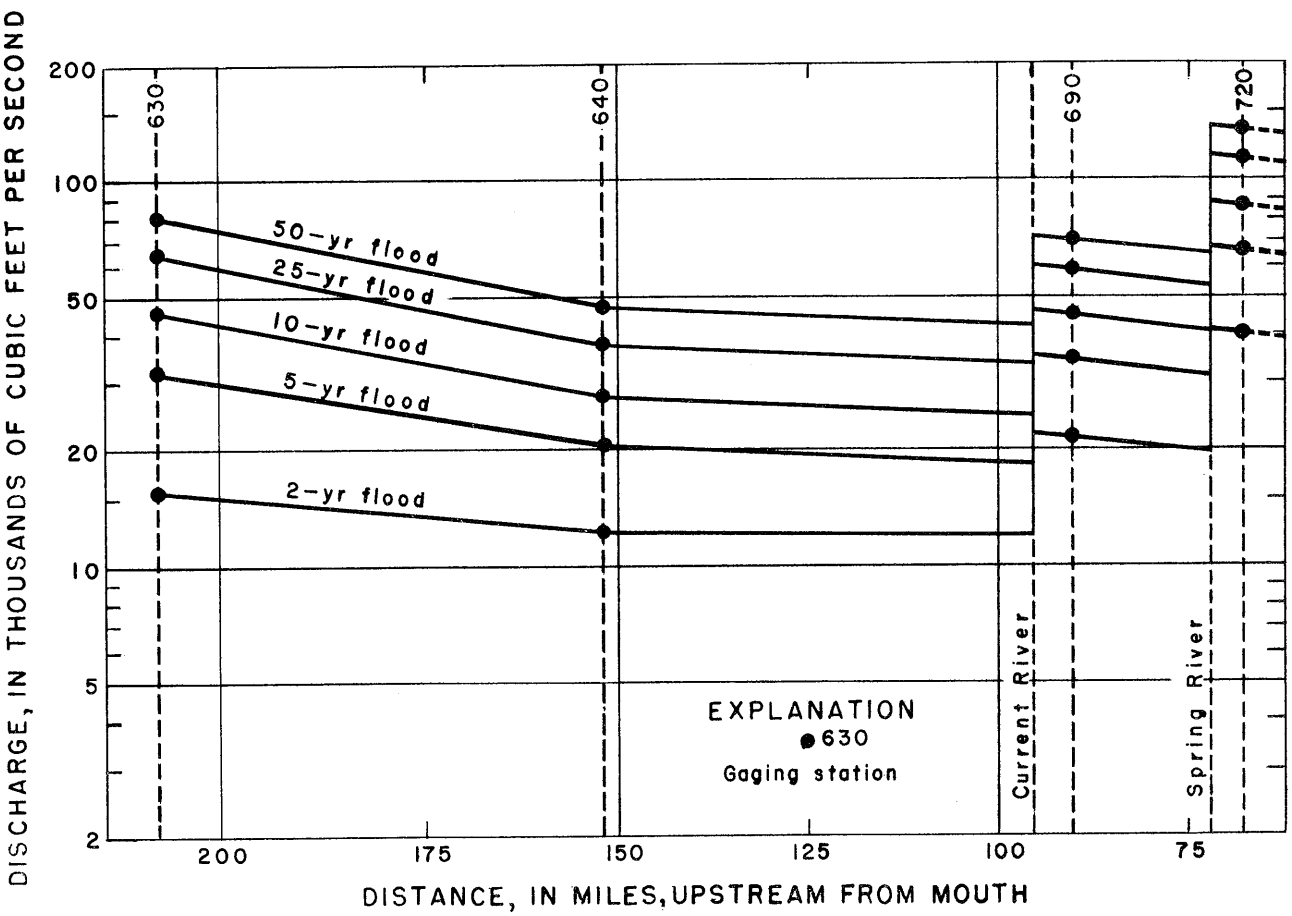

Figure 6.—Relation of discharge for selected recurrence intervals to miles upstream from mouth, Black River main stem.

St. Francis River downstream from Right Hand Chute Little River and Black River downstream from Current River are not greatly affected by regulation. Upstream from these points, regulation must be considered when determining flood-frequency relations.

FLOOD RECORDS AT GAGING STATIONS AND MISCELLANEOUS SITES

Information on outstanding flood peaks collected at miscellaneous sites and at gaging stations having less than 5 years of record is contained in table A3 of Appendix A.

Appendix B contains a compilation of flood peaks for the 259 gaging stations listed in the table of contents and shown in figure 3. These gaging stations are identified by permanent reference numbers used in Geological Survey publications since 1958. Because all stations are in Part 7, the prefix denoting the Part number has been omitted. Station records are presented in downstream order, in accordance with the system used in Geological Survey water-supply papers since 1951.

A brief description of each gaging station is included. A tabulation of all peaks higher than a selected base is shown for most regular gaging stations. Only the highest peak during the year (the annual flood) is shown for some daily discharge stations and for all crest-stage partial-record sites.

The peaks are arranged by water years unless otherwise noted. Both peak stages and discharges are generally listed. In a few instances, only peak stage or discharge is shown. If the peak stage and discharge did not occur on the same day, the date of peak discharge is given, with appropriate footnote to indicate the date of peak stage.

Peak discharges, unless otherwise noted, are instantaneous peaks expressed in cubic feet per second. In a few instances, only maximum daily mean discharges are available and are so listed, with appropriate footnotes.

Underlining in the tables of peak stages and discharges has the following significance.

1. Line under "water year" column means a discontinuous record.

2. Line beginning at "date" column and continuing through "discharge" column means a change in site and datum.

3. Line in "date" and "discharge" columns means a change in site without a change in datum.

4. Line in "gage height" column means a change in datum only.

5. No underlines are used for changes in site or datum if peaks have been adjusted to present conditions.

Depressions or closed basins in parts of the Arkansas and Red River basins outside the State do not permit direct surface runoff to defined streams. Such areas have been deducted from the total drainage area of the Arkansas and Red River main stems to determine the area that contributes directly to surface runoff. Both total and contributing drainage areas are shown. The bankful stage has been noted in station descriptions, where it has been determined. This is the stage at which one or both banks are overtopped in the vicinity of the gage and is sometimes referred to as flood stage.

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APPENDIX A

Table A1.—*Characteristics of annual floods*

[Type of station: D, continuous-record gaging station; P, crest-stage gaging station. Frequency data computed by the log-Pearson Type III method except as noted]

Station			Statistics of logarithms of annual peak discharges			Peak discharge, in cubic feet per second, for indicated recurrence interval, in years				
Number	Type	Name	Mean	Standard deviation	Skewness	2	5	10	25	50
		St. Francis River basin								
401	D	St. Francis River at St. Francis.	4.190	0.244	-0.227	15,800	25,000	31,300	39,600	45,800
465.3	P	Ditch No. 42 at Hickman---	------	-------	-------	*82	*110	*130	--------	--------
466	D	Right Hand Chute of Little River at Rivervale.	4.107	.294	-.599	13,700	22,800	28,800	36,000	41,000
472	P	Ditch No. 45 near Lepanto.	------	-------	-------	*175	*210	*233	--------	--------
475.01	D	(a)----------	4.309	.275	-.542	21,600	35,000	43,800	54,400	61,800
476	D	Tyronza River near Tyronza.	3.599	.080	-.463	4,030	4,650	4,970	5,320	5,530
478.2	P	Murray Creek near Jonesboro.	------	-------	-------	*575	*920	*1,150	--------	--------
478.8	P	Pope Creek tributary at Birdeye.	------	-------	-------	*38	*48	*54	--------	--------
479.02	D	(b)----------	4.371	.243	-.627	24,900	38,000	45,900	54,900	61,000
479.24	P	Crooked Bayou tributary at State Highway 149 at Hughes.	------	-------	-------	*94	*145	*200	--------	--------
479.5	D	L'Anguille River at Palestine.	3,958	.188	-.830	9,630	13,200	15,000	16,900	18,000
		White River basin								
479.75	P	Dog Branch at St. Paul----	------	-------	-------	*280	*454	*570	--------	--------
480	D	West Fork White River at Greenland.	3.941	0.358	0.044	8,690	17,400	25,200	37,400	48,300
489	P	Whitener Branch tributary near Spring Valley.	------	-------	-------	*260	*580	*800	--------	--------
490	D	War Eagle Creek near Hindsville.	4.129	.312	-.424	14,200	24,900	32,500	42,400	49,800
495	D	White River near Rogers---	4.467	.279	-.439	30,700	50,800	64,400	81,400	93,800
500	D	White River at Beaver-----	4.453	.280	-.331	29,400	49,200	63,100	81,200	94,900
505	D	Kings River near Berryville.	4.201	.339	-.207	16,300	30,800	42,400	58,800	72,200
544	P	Charley Creek near Omaha--	------	-------	-------	*840	*1,600	*2,080	--------	--------
555.5	P	Crooked Creek tributary near Dogpatch.	------	-------	-------	*640	*1,240	*1,730	--------	--------
556.5	P	Smith Creek near Boxley---	------	-------	-------	*1,100	*2,550	*3,520	--------	--------
558	P	Dry Branch near Vendor----	------	-------	-------	*970	*2,060	*2,800	--------	--------
560	D	Buffalo River near St. Joe.	4.500	.303	-.548	33,700	57,500	73,400	93,100	107,000
570	D	Buffalo River near Rush---	4.541	.304	-.319	36,000	63,100	82,900	109,000	129,000

See footnotes at end of table.

Table A1.—*Characteristics of annual floods*--Continued

Station			Statistics of logarithms of annual peak discharges			Peak discharge, in cubic feet per second, for indicated recurrence interval, in years				
Number	Type	Name	Mean	Standard deviation	Skewness	2	5	10	25	50
		White River basin--Continued								
573	P	Dodd Creek tributary near Mountain Home.	------	-------	-------	*310	*505	*640	--------	--------
606	P	Band Mill Creek near Brockwell.	------	-------	-------	*235	*500	*675	--------	--------
606.7	P	Hughes Creek near Mountain View.	------	-------	-------	*780	*1,350	*1,750	--------	--------
611	P	Gibbs Creek at Sulphur Rock.	------	-------	-------	*950	*1,600	*2,020	--------	--------
630	D	Black River at Poplar Bluff, Mo.	4.171	0.392	-0.333	15,600	32,100	45,500	64,700	80,300
640	D	Black River near Corning.	4.059	.295	.007	11,400	20,300	27,400	37,700	46,400
680	D	Current River at Doniphan, Mo.	4.389	.338	-.319	25,500	47,500	64,400	87,400	106,000
688.7	P	Fourche River tributary at Middlebrook.	------	-------	-------	*150	*210	*250	--------	--------
690	D	Black River at Pocahontas.	4.340	.232	.198	21,500	34,100	43,800	57,800	69,400
692.5	P	Brush Creek near Mammoth Spring.	------	-------	-------	*360	*570	*720	--------	--------
692.9	P	Miller Creek near Salem---	------	-------	-------	*850	*1,200	*1,760	--------	--------
695	D	Spring River at Imboden---	4.405	.310	-.297	26,300	46,700	61,800	82,100	97,900
715	D	Eleven Point River near Bardley, Mo.	3.895	.453	-.478	8,530	19,200	28,000	40,600	50,800
720	D	Eleven Point River near Ravenden Springs.	4.071	.290	.160	11,600	20,500	28,000	39,300	49,100
722	P	Hubble Creek near Pocahontas.	------	-------	-------	*600	*824	*975	--------	--------
725	D	Black River at Black Rock-	4.614	.244	.089	40,700	65,700	84,800	112,000	134,000
730	D	Strawberry River near Evening Shade.	3.969	.233	.250	9,110	14,500	18,800	24,900	30,100
735	D	Piney Fork Strawberry River at Evening Shade.	3.666	.278	-.102	4,690	7,970	10,500	13,900	16,700
740	D	Strawberry River near Poughkeepsie.	4.199	.250	-.365	16,400	25,900	32,200	40,100	45,900
742	P	Dry Branch tributary near Sidney.	------	-------	-------	*560	*950	*1,100	--------	--------
742.5	P	Reeds Creek near Strawberry.	------	-------	-------	*3,230	*5,300	*6,660	--------	--------
745.5	P	Village Creek near O'Kean.	------	-------	-------	*350	*680	*890	--------	--------
748.4	P	Cypress Creek tributary near Augusta.	------	-------	-------	*360	*605	*775	--------	--------
749	P	Trace Creek tributary near Marshall.	------	-------	-------	*80	*148	*194	--------	--------
750	D	Middle Fork Little Red River at Shirley.	4.323	.320	-.445	22,200	39,600	51,900	68,000	79,900
755	D	South Fork Little Red River near Clinton.	4.277	.285	-.448	19,900	33,200	42,300	53,700	62,000
760	D	Little Red River near Heber Springs.	------	-------	-------	*55,100	*75,600	*89,000	*107,000	*120,000
766.3	P	Key Branch near Searcy----	------	-------	-------	*300	*445	*580	--------	--------

See footnotes at end of table.

Table A1.—*Characteristics of annual floods*--Continued

Station			Statistics of logarithms of annual peak discharges			Peak discharge, in cubic feet per second, for indicated recurrence interval, in years				
Number	Type	Name	Mean	Standard deviation	Skewness	2	5	10	25	50
		White River basin--Continued								
768.2	P	Gum Springs Creek near Higginson.	------	-------	-------	*960	*1,470	*1,890	--------	--------
768.7	P	Pigeon Roost Creek at Butlerville.	------	-------	-------	*2,200	*3,850	*4,950	--------	--------
771	P	Big Creek near Boydsville-	------	-------	-------	*3,400	*4,540	*5,300	--------	--------
772	P	Big Creek tributary near Boydsville.	------	-------	-------	*410	*605	*740	--------	--------
773.4	P	Sugar Creek tributary near Walcott.	------	-------	-------	*330	*464	*560	--------	--------
774.3	P	Willow Ditch near Egypt---	------	-------	-------	*54	*118	*151	--------	--------
775	D	Cache River at Patterson--	3.823	-0.168	-0.420	6,830	9,270	10,700	12,400	13,500
776.8	P	Threemile Creek near Amagon.	------	-------	-------	*263	*400	*490	--------	--------
777	D	Bayou DeView at Morton----	3.535	.130	.140	3,400	4,400	5,060	5,880	6,490
778.6	P	Boat Gunnale Slash tributary near Holly Grove.	------	-------	-------	*370	*550	*650	--------	--------
779.2	P	Big Creek at Goodwin------	------	-------	-------	*590	*845	*970	--------	--------
779.3	P	Big Creek near Moro-------	------	-------	-------	*1,710	*2,140	*2,410	--------	--------
779.4	P	Spring Creek near Aubrey--	------	-------	-------	*1,460	*1,880	*2,160	--------	--------
780	D	LaGrue Bayou near Stuttgart.	3,361	.280	-.570	2,440	3,990	5,000	6,210	7,050
781.7	P	Little LaGrue Bayou tributary near DeWitt.	------	-------	-------	*180	*217	*240	--------	--------
782.1	P	Tarleton Creek tributary at Ethel.	------	-------	-------	*65	*84	*98	--------	--------
		Arkansas River basin								
1950	D	Osage Creek near Elm Springs.	3.625	0.411	-0.207	4,350	9,430	13,900	20,600	26,500
1952	P	Brush Creek tributary near Tontitown.	------	-------	-------	*177	*255	*308	--------	--------
1954.5	P	Ballard Creek at Summers--	------	-------	-------	*1,000	*2,450	*3,940	--------	--------
1955	D	Illinois River near Watts, Okla.	------	-------	-------	*17,800	*39,600	*58,000	*81,000	*100,000
1958	P	Flint Creek at Springtown.	------	-------	-------	*1,240	*3,120	*4,400	--------	--------
1960	D	Flint Creek near Kansas, Okla.	3.673	.440	-.013	4,720	11,100	17,200	27,700	37,500
2470	D	Poteau River at Cauthron--	4.039	.291	-.355	11,400	19,400	25,100	32,500	38,100
2493	P	James Fork near Midland---	------	-------	-------	*6,000	*10,500	*13,400	--------	--------
2494	D	James Fork near Hackett---	3.839	.325	.078	6,830	12,900	18,100	26,100	33,100
2495	D	Cove Creek near Lee Creek.	3.712	.350	.387	4,890	9,960	14,900	23,400	31,700
2496.5	P	Mountain Fork Creek near Evansville.	------	-------	-------	*930	*1,800	*2,350	--------	--------

See footnotes at end of table.

Table A1.—*Characteristics of annual floods*--Continued

Station			Statistics of logarithms of annual peak discharges			Peak discharge, in cubic feet per second, for indicated recurrence interval, in years				
Number	Type	Name	Mean	Standard deviation	Skewness	2	5	10	25	50
Arkansas River basin--Continued										
2499.5	P	Webber Creek tributary near Cedarville.	------	-------	-------	*82	*165	*220	--------	--------
2500	D	Lee Creek near Van Buren--	4.336	0.290	0.186	21,200	37,700	51,600	72,700	91,100
2520	D	Mulberry River near Mulberry.	4.214	.299	-.744	17,800	29,500	36,800	45,000	50,500
2522	P	North Fork White Oak Creek tributary near Watalula.	------	-------	-------	*140	*320	*470	--------	--------
2525	D	Sixmile Creek subwatershed No. 6 near Chismville.	2.893	.321	-.569	837	1,470	1,900	2,430	--------
2540	D	Sixmile Creek subwatershed No. 5 near Chismville.	2.537	.440	-.602	381	820	1,160	1,620	--------
2545	D	Sixmile Creek subwatershed No. 2 near Caulksville.	2.925	.291	-.250	866	1,490	1,950	2,560	--------
2551	D	Sixmile Creek subwatershed No. 23 near Branch.	2.843	.403	-.671	773	1,540	2,100	2,800	--------
2565	D	Spadra Creek at Clarksville.	------	-------	-------	*5,150	*8,690	*11,500	*16,000	*19,000
2570	D	Piney Creek near Dover----	4.308	.309	-.232	20,900	37,200	49,600	66,500	80,000
2571	P	Minnow Creek tributary near Hagarville.	------	-------	-------	*51	*107	*156	--------	--------
2575	D	Illinois Bayou near Scottsville.	4.231	.246	.360	16,400	27,100	35,800	49,000	60,500
2577	P	McCoy Creek near Dover----	------	-------	-------	*850	*2,600	*3,900	--------	--------
2582	P	Pack Saddle Creek tributary near Waldron.	------	-------	-------	*235	*500	*680	--------	--------
2585	D	Petit Jean River near Booneville.	4.037	.309	-.295	11,300	19,900	26,400	35,000	41,700
2600	D	Dutch Creek at Waltreak---	3.789	.279	-.900	6,770	10,700	12,900	15,200	16,700
2605	D	Petit Jean River at Danville.	4.226	.324	-.176	17,200	31,700	43,100	59,400	72,600
2610	D	Cadron Creek near Guy-----	3.919	.234	-.171	8,430	13,100	16,400	20,600	23,800
2610.5	P	Pine Mountain Creek tributary near Damascus.	------	-------	-------	*85	*152	*197	--------	--------
2613	P	Tan-a-hill Creek near Boles.	------	-------	-------	*260	*550	*800	--------	--------
2615	D	Fourche La Fave River near Gravelly.	------	-------	-------	*22,300	*36,100	*44,800	*59,000	*72,000
2618	P	Brogan Creek near Rover---	------	-------	-------	*300	*560	*750	--------	--------
2630	D	South Fourche La Fave River near Hollis.	4.342	.188	.125	21,800	31,600	38,500	47,800	55,000
2631	P	Fourche La Fave River tributary near Perryville.	------	-------	-------	*240	*510	*690	--------	--------
2634	P	Little Maumelle River at Ferndale.	------	-------	-------	*3,000	*5,600	*7,200	--------	--------
2639.1	P	Cypress Branch near Jacksonville.	------	-------	-------	*720	*940	*1,090	--------	--------
2640	D	Bayou Meto near Lonoke----	3.337	.206	-.349	2,230	3,260	3,900	4,690	5,250
2641	P	White Oak Branch near Lonoke.	------	-------	-------	*840	*1,250	*1,500	--------	--------
2650.01	D	(c)----------	3.512	.205	-.410	3,360	4,870	5,810	6,930	7,710

See footnotes at end of table.

Table A1.—*Characteristics of annual floods*--Continued

Station			Statistics of logarithms of annual peak discharges			Peak discharge, in cubic feet per second, for indicated recurrence interval, in years				
Number	Type	Name	Mean	Standard deviation	Skewness	2	5	10	25	50
		Red River basin								
3387	P	Twomile Creek near Hatfield.	------	-------	-------	*1,340	*2,400	*3,200	--------	--------
3395	D	Rolling Fork near DeQueen-	4.155	0.243	-0.032	14,300	22,900	29,200	37,800	44,600
3398	P	Pepper Creek near DeQueen-	------	-------	-------	*620	*1,570	*2,350	--------	--------
3400	D	Little River near Horatio-	4.659	.216	.072	45,300	69,200	86,600	110,000	129,000
3402	P	West Flat Creek near Foreman.	------	-------	-------	*1,490	*2,600	*3,330	--------	--------
3405	D	Cossatot River near DeQueen.	4.426	.245	.130	26,400	42,700	55,400	73,400	88,300
3405.3	P	Mill Slough tributary near Lockesburg.	------	-------	-------	*230	*425	*560	--------	--------
3410	D	Saline River near Dierks--	3.997	.299	.669	9,200	17,100	24,800	38,200	51,600
3411	P	Rock Creek near Dierks----	------	-------	-------	*2,290	*3,830	*4,880	--------	--------
3417	P	Caney Creek near Hope-----	------	-------	-------	*2,600	*4,400	*5,520	--------	--------
3443.2	P	Mill Creek tributary near Fouke.	------	-------	-------	*270	*384	*460	--------	--------
3468	P	East Fork Kelly Bayou triburary at Kiblah.	------	-------	-------	*17	*45	*68	--------	--------
3486.3	P	Barlow Branch tributary near McNeil.	------	-------	-------	*32	*69	*93	--------	--------
3487	D	Bayou Dorcheat near Springhill, La.	3.806	.364	-.334	6,700	13,100	18,100	25,000	30,600
3558	P	Lewis Creek tributary near Mena.	------	-------	-------	*132	*203	*250	--------	--------
3560	D	Ouachita River near Mount Ida.	------	-------	-------	*23,400	*36,000	*45,000	*56,000	*67,500
3565	D	South Fork Ouachita River at Mount Ida.	3.816	.269	-.262	6,720	11,100	14,200	18,200	21,300
3567	P	Barnes Branch near Mount Ida.	------	-------	-------	*450	*800	*1,030	--------	--------
3575.01	D	Ouachita River at Blakely Mountain Dam near Hot Springs.	4.606	.251	-.351	41,800	66,200	82,700	103,000	119,000
3577	P	Glazypeau Creek at Mountain Valley.	------	-------	-------	*810	*1,750	*2,420	--------	--------
3595	D	Ouachita River near Malvern.	4.714	.278	-.518	54,600	88,700	111,000	138,000	157,000
3595.2	P	Ouachita River tributary near Malvern.	------	-------	-------	*360	*860	*1,300	--------	--------
3597	D	Caddo River at Glenwood---	4.351	.282	-.105	22,700	38,900	51,200	68,300	82,000
3597.5	P	Little Sugarloaf Creek near Bonnerdale.	------	-------	-------	*900	*1,600	*2,060	--------	--------
3598	D	Caddo River near Alpine---	4.426	.237	-.266	27,300	42,400	52,600	65,700	75,400
3601.5	P	Pearson Creek tributary near Dalark.	------	-------	-------	*90	*146	*184	--------	--------
3608	D	Muddy Fork Creek near Murfreesboro.	4.017	.278	.310	10,100	17,600	24,000	34,000	42,900

See footnotes at end of table.

Table A1.--*Characteristics of annual floods*--Continued

Station			Statistics of logarithms of annual peak discharges			Peak discharge, in cubic feet per second, for indicated recurrence interval, in years				
Number	Type	Name	Mean	Standard deviation	Skewness	2	5	10	25	50
		Red River basin--Continued								
3610.2	P	Prairie Creek tributary near Kirby.	------	-------	-------	*110	*210	*280	--------	--------
3611.8	P	South Fork Ozan Creek near Ozan.	------	-------	-------	*3,400	*5,030	*6,160	--------	--------
3612	D	Ozan Creek near McCaskill.	3.904	0.285	-0.059	8,060	13,900	18,500	24,900	30,200
3615	D	Antoine River at Antoine--	4.051	.235	.273	11,000	17,600	22,800	30,400	36,800
3617.8	P	Old Bradshaw Creek near Hollywood.	------	-------	-------	*530	*810	*1,000	--------	--------
3620.5	P	Ross Creek near Camden----	------	-------	-------	*570	*1,250	*1,750	--------	--------
3621	D	Smackover Creek near Smackover.	3.765	.374	-.431	6,200	12,200	16,800	23,000	27,900
3624.5	P	Cooks Creek near Fordyce--	------	-------	-------	*750	*1,530	*2,050	--------	--------
3625	D	Moro Creek near Fordyce---	3.677	.319	.129	4,680	8,770	12,300	17,700	22,600
3630	D	Saline River at Benton----	------	-------	-------	*30,600	*47,600	*63,000	*84,000	*100,000
3630.5	P	Holly Creek tributary near Benton.	------	-------	-------	*230	*420	*550	--------	--------
3632	D	Saline River near Sheridan.	------	-------	-------	*32,100	*44,200	*51,000	*61,000	*70,000
3633.3	P	West Fork Big Creek at Sheridan.	------	-------	-------	*430	*970	*1,400	--------	--------
3634.3	P	East Fork Derrieusseaux Creek near Pine Bluff.	------	-------	-------	*112	*205	*266	--------	--------
3635	D	Saline River near Rye-----	4.406	.275	-.323	26,300	43,700	55,900	71,600	83,500
3641.1	P	Nevins Creek tributary near Pine Bluff.	------	-------	-------	*125	*178	*215	--------	--------
3641.2	D	Bayou Bartholomew near Star City.	3.217	.183	-.356	1,690	2,360	2,770	3,260	3,600
3641.5	D	Bayou Bartholomew near McGehee.	------	-------	-------	*3,280	*4,600	*5,240	*6,100	*6,800
3641.9	D	Bayou Bartholomew at Wilmot.	------	-------	-------	*4,930	*6,340	*6,800	*7,200	*7,700
3645	D	Bayou Bartholomew near Beekman, La.	------	-------	-------	*6,900	*9,400	*10,600	*12,600	*14,000
3645.5	P	Cany Creek tributary near El Dorado.	------	-------	-------	*60	*114	*150	--------	--------
3658	D	Cornie Bayou near Three Creeks.	3.599	.362	.031	3,960	8,000	11,600	17,200	22,300
3660	D	Corney Bayou near Lillie, La.	3.781	.326	.206	5,880	11,300	16,000	23,700	30,600
3676.58	P	Cypress Creek Canal No. 19 tributary near Dumas.	------	-------	-------	*140	*250	*320	--------	--------
3676.65	P	Wards Bayou tributary at Montrose.	------	-------	-------	*200	*300	*366	--------	--------
3677.4	P	Camp Bayou near Parkdale--	------	-------	-------	*235	*343	*412	--------	--------

* Obtained from graphical frequency curve.
a St. Francis River floodway near Marked Tree (470) and St. Francis River at Marked Tree (475) combined.
b St. Francis River at Parkin (478) and St. Francis Bay at Riverfront (479) combined.
c Bayou Meto near Stuttgart (2645) and Crooked Creek near Humphrey (2650) combined.

Table A2.—*Characteristics of gaged drainage basins*

Station		Basin characteristics							
Number	Name	Drainage area (sq mi)	Slope (feet per mile)	Main channel length (miles)	Annual precip-itation (inches)	Forest cover (per-cent)	Eleva-tion (feet)	2-year 24-hour rainfall (inches)	Area of lakes and ponds (percent)
				St. Francis River basin					
401	St. Francis River at St. Francis.	1,772	2.46	204	44	62	720	3.7	---
465.3	Ditch No. 42 at Hickman---	1.08	.5	1.00	48	0	255	3.9	0
466	Right Hand Chute of Little River at Rivervale.	2,106	.88	118	47	2	260	3.7	---
472	Ditch No. 45 near Lepanto-	2.16	.8	3.30	48	0	218	3.9	0
475.01	(a)----------	5,148	2.13	285	46	26	400	3.8	---
476	Tyronza River near Tyronza.	290	.70	55	49	3	230	3.9	.07
478.2	Murray Creek near Jonesboro.	1.38	34.3	2.88	46	32	320	3.9	0
478.8	Pope Creek tributary at Birdeye.	.08	167	.34	48	95	370	4.0	0
479.02	(b)----------	6,475	1.70	311	47	26	360	3.8	---
479.24	Crooked Bayou tributary at State Highway 149 at Hughes.	.48	.8	1.00	48	5	200	4.0	0
479.5	L'Anguille River at Palestine.	786	.89	76.6	49	50	240	4.0	.54
				White River basin					
479.75	Dog Branch at St. Paul----	1.22	200	1.82	47	95	1,980	4.1	0
480	West Fork White River at Greenland.	83	30.3	19.5	46	78	1,730	4.1	.01
489	Whitener Branch tributary near Spring Valley.	1.0	106	1.24	40	24	1,380	4.0	0
490	War Eagle Creek near Hindsville.	262	9.91	43.4	45	86	1,590	4.0	0
495	White River near Rogers---	1,020	6.62	84.8	46	74	1,500	4.0	.08
500	White River at Beaver-----	1,238	4.22	132	46	80	1,450	4.0	.07
505	Kings River near Berryville.	532	13.0	73.1	45	90	1,540	4.0	.01
544	Charley Creek near Omaha--	3.41	104	3.60	41	87	1,020	4.0	0
555.5	Crooked Creek tributary near Dogpatch.	4.3	41.9	2.90	44	30	1,260	4.0	0
556.5	Smith Creek near Boxley---	8.32	210	4.76	43	89	1,900	4.0	0
558	Dry Branch near Vendor----	6.3	283	4.00	42	95	1,500	4.0	0
560	Buffalo River near St. Joe.	825	9.20	93.7	48	91	1,490	4.0	0
570	Buffalo River near Rush---	1,091	7.10	128	47	87	1,380	4.0	.05
573	Dodd Creek tributary near Mountain Home.	.76	124	1.82	43	60	840	3.9	0
606	Band Mill Creek near Brockwell.	1.37	86.4	1.96	44	33	700	3.9	0
606.7	Hughes Creek near Mountain View.	3.17	111	2.54	47	46	870	3.9	0

See footnotes at end of table.

Table A2.—*Characteristics of gaged drainage basins*--Continued

Station		Basin characteristics							
Number	Name	Drainage area (sq mi)	Slope (feet per mile)	Main channel length (miles)	Annual precipitation (inches)	Forest cover (percent)	Elevation (feet)	2-year 24-hour rainfall (inches)	Area of lakes and ponds (percent)
	White River basin--Continued								
611	Gibbs Creek at Sulphur Rock.	3.89	52.3	3.17	46	50	460	3.9	0
630	Black River at Poplar Bluff, Mo.	1,245	6.23	115	44	78	900	3.7	---
640	Black River near Corning--	1,749	4.42	174	43	77	730	3.7	---
680	Current River at Doniphan, Mo.	2,038	4.75	143	44	79	1,000	3.7	.01
688.7	Fourche River tributary at Middlebrook.	.18	124	.68	47	40	455	3.8	0
690	Black River at Pocahontas.	4,843	3.56	200	44	73	780	3.7	---
692.5	Brush Creek near Mammoth Spring.	.45	167	.90	44	70	670	3.9	0
692.9	Miller Creek near Salem---	2.1	91.5	2.20	44	94	775	3.9	0
695	Spring River at Imboden---	1,162	6.58	105	44	71	740	3.8	.12
715	Eleven Point River near Bardley, Mo.	793	10.1	79.4	44	69	1,000	3.8	.01
720	Eleven Point River near Ravenden Springs.	1,123	6.20	112	44	72	850	3.8	.01
722	Hubble Creek near Pocahontas.	1.32	56.5	2.23	47	9	465	3.9	0
725	Black River at Black Rock.	7,323	3.16	222	44	74	770	3.8	---
730	Strawberry River near Evening Shade.	225	6.02	56.2	44	70	740	3.9	.03
735	Piney Fork Strawberry River at Evening Shade.	99	7.69	33	45	43	670	3.9	.04
740	Strawberry River near Poughkeepsie.	476	5.98	76.6	45	66	680	3.9	.02
742	Dry Branch tributary near Sidney.	1.19	65.9	1.68	43	56	640	3.9	0
742.5	Reeds Creek near Strawberry.	34.9	15.9	13.3	45	54	400	3.9	0
745.5	Village Creek near O'Kean-	6.8	1.69	4.72	46	13	275	3.8	0
748.4	Cypress Creek tributary near Augusta.	5.9	1.0	5.90	47	20	220	4.0	0
749	Trace Creek tributary near Marshall.	.25	596	1.10	42	90	1,310	4.0	0
750	Middle Fork Little Red River at Shirley.	294	14.9	59.3	52	84	1,160	4.0	0
755	South Fork Little Red River near Clinton.	316	16.6	42.5	53	94	1,150	4.0	0
760	Little Red River near Heber Springs.	1,141	10.4	101	52	93	1,040	4.0	0
766.3	Key Branch near Searcy----	.64	86.2	1.07	50	12	330	4.0	0
768.2	Gum Springs Creek near Higginson.	4.94	35.2	4.24	50	21	305	4.0	0
768.7	Pigeon Roost Creek at Butlerville.	23.0	8.70	7.50	47	48	255	4.0	0
771	Big Creek near Boydsville-	12.9	18.5	4.40	47	23	405	3.8	0
772	Big Creek tributary near Boydsville.	1.52	50.0	2.80	47	38	405	3.8	0

See footnotes at end of table.

Table A2.—*Charcteristics of gaged drainage basins*--Continued

Station		Basin characteristics							
Number	Name	Drainage area (sq mi)	Slope (feet per mile)	Main channel length (miles)	Annual precip-itation (inches)	Forest cover (per-cent)	Eleva-tion (feet)	2-year 24-hour rainfall (inches)	Area of lakes and ponds (percent)
				White River basin--Continued					
773.4	Sugar Creek tributary near Walcott.	0.74	84.8	1.40	47	67	450	39	0
774.3	Willow Ditch near Egypt---	.30	4.6	.80	47	0	255	3.9	0
775	Cache River at Patterson--	1,041	.83	139	47	43	260	3.9	.08
776.8	Threemile Creek near Amagon.	8.2	1.31	7.1	47	17	230	3.9	0
777	Bayou DeView at Morton----	422	1.04	69.8	48	49	240	3.9	.41
778.6	Boat Gunnale Slash trib-utary near Holly Grove.	8.7	2.38	7.3	47	45	175	4.1	0
779.2	Big Creek at Goodwin------	35.9	1.4	14.0	49	62	210	4.0	0
779.3	Big Creek near Moro-------	80.9	1.5	22.4	48	51	205	4.0	0
779.4	Spring Creek near Aubrey--	36.0	2.27	10.6	48	33	200	4.1	0
780	Lagrue Bayou near Stuttgart.	175	1.09	39.2	49	33	200	4.1	7.50
781.7	Little LaGrue Bayou trib-utary near DeWitt.	3.10	2.34	5.15	48	0	195	4.2	0
782.1	Tarleton Creek tributary at Ethel.	.20	2.0	.40	49	0	180	4.2	0
				Arkansas River basin					
1950	Osage Creek near Elm Springs.	130	16.9	14.4	45	10	1,270	4.0	0.02
1952	Brush Creek tributary near Tontitown.	.37	144	.94	41	10	1,270	4.1	0
1954.5	Ballard Creek at Summers--	14.6	51.5	680	40	35	1,320	4.1	0
1955	Illinois River near Watts, Okla.	635	8.5	44.5	45	38	1,240	4.1	.35
1958	Flint Creek at Springtown.	14.2	46.4	5.20	41	75	1,340	4.1	0
1960	Flint Creek near Kansas, Okla.	110	19.4	23.4	43	44	1,140	4.0	.10
2470	Poteau River at Cauthron--	203	9.2	28.2	45	70	830	4.2	.01
2493	James Fork near Midland---	44.0	43.9	12.6	42	62	990	4.2	0
2494	James Fork near Hackett---	147	14.8	26.3	43	65	770	4.2	.44
2495	Cove Creek near Lee Creek.	35.3	37.0	13.4	48	88	1,400	4.1	0
2496.5	Mountain Fork Creek near Evansville.	7.80	74.4	5.20	43	95	1,410	4.1	0
2499.5	Webber Creek tributary near Cedarville.	.34	188	.92	42	10	1,000	4.1	0
2500	Lee Creek near Van Buren--	426	17.4	53.2	47	85	1,070	4.1	.02
2520	Mulberry River near Mulberry.	373	18.1	52.4	52	98	1,430	4.1	.03

See footnotes at end of table.

Table A2.—*Characteristics of gaged drainage basins*--Continued

Station		Basin characteristics							
Number	Name	Drainage area (sq mi)	Slope (feet per mile)	Main channel length (miles)	Annual precipitation (inches)	Forest cover (percent)	Elevation (feet)	2-year 24-hour rainfall (inches)	Area of lakes and ponds (percent)
	Arkansas River basin--Continued								
2522	North Fork White Oak Creek tributary near Watalula.	0.27	260	0.80	48	90	960	4.1	0
2525	Sixmile Creek subwatershed No. 6 near Chismville.	4.23	55.8	5.40	44	50	720	4.1	1.77
2540	Sixmile Creek subwatershed No. 5 near Chismville.	2.76	60.3	4.20	43	77	640	4.1	1.51
2545	Sixmile Creek subwatershed No. 2 near Caulksville.	5.81	19.8	11.6	43	62	720	4.1	.78
2551	Sixmile Creek subwatershed No. 23 near Branch.	4.49	7.80	5.40	43	18	460	4.1	.74
2565	Spadra Creek at Clarksville.	61.1	49.3	15.2	51	56	870	4.1	.78
2570	Piney Creek near Dover----	274	17.0	41.8	54	99	1,410	4.1	0
2571	Minnow Creek tributary near Hagarville.	.20	311	1.20	45	50	540	4.1	0
2575	Illinois Bayou near Scottsville.	241	28.0	34.1	54	92	1,320	4.1	0
2577	McCoy Creek near Dover----	7.05	82.5	6.87	46	55	880	4.1	0
2582	Pack Saddle Creek tributary near Waldron.	.92	58.6	2.10	44	71	810	4.2	0
2585	Petit Jean River near Booneville.	241	9.84	34.3	43	61	670	4.2	.02
2600	Dutch Creek at Waltreak---	81.4	19.4	28.9	47	82	930	4.2	0
2605	Petit Jean River at Danville.	764	2.96	87.8	45	62	720	4.2	.02
2610	Cadron Creek near Guy-----	169	7.41	36.0	51	46	720	4.0	0
2610.5	Pine Mountain Creek tributary near Damascus.	.29	88.2	.91	50	0	700	4.0	0
2613	Tan-a-hill Creek near Boles.	2.33	288	3.20	46	4	1,360	4.2	0
2615	Fourche La Fave River near Gravelly.	410	11.0	59.9	48	84	1,040	4.2	0
2618	Brogan Creek near Rover---	1.04	168	1.72	46	100	890	4.2	0
2630	South Fourche La Fave River near Hollis.	210	12.1	32.4	50	99	830	4.2	0
2631	Fourche La Fave River tributary near Perryville.	1.47	134	2.88	46	94	495	4.1	0
2634	Little Maumelle River at Ferndale.	15.0	35.5	7.13	50	100	590	4.1	0
2639.1	Cypress Branch near Jacksonville.	2.38	33.2	2.78	46	61	325	4.1	0
2640	Bayou Meto near Lonoke----	207	1.34	52.4	49	47	300	4.1	1.94
2641	White Oak Branch near Lonoke.	9.41	5.20	4.38	45	5	235	4.1	0
2650.01	(c)----------	653	1.10	83.7	49	49	230	4.1	2.67

See footnotes at end of table.

Table A2.—*Characteristics of gaged drainage basins*--Continued

Station		Basin characteristics							
Number	Name	Drainage area (sq mi)	Slope (feet per mile)	Main channel length (miles)	Annual precipitation (inches)	Forest cover (percent)	Elevation (feet)	2-year 24-hour rainfall (inches)	Area of lakes and ponds (percent)
				Red River basin					
3387	Twomile Creek near Hatfield.	16.1	48.9	9.50	49	100	1,240	4.3	0
3395	Rolling Fork near DeQueen.	181	18.6	35.1	52	87	840	4.3	.01
3398	Pepper Creek near DeQueen.	6.43	47.7	6.40	48	95	550	4.4	0
3400	Little River near Horatio.	2,674	4.20	145	52	80	820	4.2	0
3402	West Flat Creek near Foreman.	10.6	12.0	6.78	46	57	415	4.4	0
3405	Cossatot River near DeQueen.	361	15.5	53.7	54	93	890	4.3	0
3405.3	Mill Slough tributary near Lockesburg.	.64	60.5	197	46	18	395	4.4	0
3410	Saline River near Dierks--	124	21.5	35.9	54	77	760	4.3	.02
3411	Rock Creek near Dierks----	10.6	12.0	6.78	46	57	415	4.4	0
3417	Caney Creek near Hope-----	12.9	17.5	5.88	52	53	355	4.4	0
3443.2	Mill Creek tributary near Fouke.	1.43	36.3	1.51	48	88	295	4.5	0
3468	East Fork Kelly Bayou tributary at Kiblah.	.13	109	.56	46	59	260	4.5	0
3486.3	Barlow Branch tributary near McNeil.	.05	104	.28	48	25	325	4.5	0
3487	Bayou Dorcheat near Springhill, La.	605	3.49	47.8	50	45	290	4.5	.08
3558	Lewis Creek tributary near Mena.	.64	159	2.04	49	96	1,140	4.3	0
3560	Ouachita River near Mount Ida.	410	7.82	63.0	53	75	1,160	4.3	.09
3565	South Fork Ouachita River at Mount Ida.	64	15.4	20.4	53	99	830	4.3	0
3567	Barnes Branch near Mount Ida.	1.85	82.2	2.90	51	96	760	4.2	0
3575.01	Ouachita River at Blakely Mountain Dam near Hot Springs.	1,100	4.77	126	52	84	880	4.3	.03
3577	Glazypeau Creek at Mountain Valley.	4.30	70.0	2.00	52	95	790	4.2	0
3595	Ouachita River near Malvern.	1,562	4.45	166	53	78	810	4.3	.84
3595.2	Ouachita River tributary near Malvern.	2.98	72.1	5.10	52	100	530	4.2	0
3597	Caddo River at Glenwood---	192	18.7	31.2	55	86	970	4.3	.01
3597.5	Little Sugarloaf Creek near Bonnerdale.	2.34	86.7	2.30	53	73	740	4.3	0
3598	Caddo River near Alpine---	312	12.3	49.5	55	82	870	4.3	.01
3601.5	Pearson Creek tributary near Dalark.	.40	52.1	.95	46	50	340	4.3	0
3608	Muddy Fork Creek near Murfreesboro.	121	19.2	21.0	53	96	560	4.3	.06

See footnotes at end of table.

Table A2.—*Characteristics of gaged drainage basins*--Continued

Station		Basin characteristics							
Number	Name	Drainage area (sq mi)	Slope (feet per mile)	Main channel length (miles)	Annual precipitation (inches)	Forest cover (percent)	Elevation (feet)	2-year 24-hour rainfall (inches)	Area of lakes and ponds (percent)
				Red River basin--Continued					
3610.2	Prairie Creek tributary near Kirby.	0.16	217	0.57	52	98	635	4.3	0
3611.8	South Fork Ozan Creek near Ozan.	17.6	16.1	7.60	52	43	400	4.4	0
3612	Ozan Creek near McCaskill.	148	9.31	25.0	52	31	420	4.4	.14
3615	Antoine River at Antoine--	181	8.36	35.0	53	87	520	4.3	.04
3617.8	Old Bradshaw Creek near Hollywood.	3.46	21.9	3.70	50	90	320	4.4	0
3620.5	Ross Creek near Camden----	10.0	19.6	5.70	47	97	215	4.4	0
3621	Smackover Creek near Smackover.	377	3.98	37.9	50	62	230	4.4	.05
3624.5	Cooks Creek near Fordyce--	5.20	20.0	3.00	49	90	315	4.3	0
3625	Moro Creek near Fordyce---	216	5.55	31.8	51	84	270	4.3	.01
3630	Saline River at Benton----	569	12.4	55.4	53	90	650	4.2	.28
3630.5	Holly Creek tributary near Benton.	1.46	47.0	1.56	49	76	345	4.2	0
3632	Saline River near Sheridan.	1,129	4.48	122	52	85	460	4.2	.23
3633.3	West Fork Big Creek at Sheridan.	4.86	22.2	3.60	53	100	290	4.2	0
3634.3	East Fork Derrieusseaux Creek near Pine Bluff.	.64	64.5	1.23	50	100	350	4.2	0
3635	Saline River near Rye-----	2,062	2.42	182	52	82	360	4.2	.17
3641.1	Nevins Creek tributary near Pine Bluff.	.79	36.6	1.34	47	100	265	4.2	0
3641.2	Bayou Bartholomew near Star City.	215	.59	81.7	50	50	220	4.2	.20
3641.5	Bayou Bartholomew near McGehee.	592	.53	167	50	54	190	4.3	.77
3641.9	Bayou Bartholomew at Wilmot	1,170	.43	269	51	60	180	4.3	.62
3645	Bayou Bartholomew near Beekman, La.	1,645	.41	318	51	65	170	4.4	.56
3645.5	Cany Creek tributary near El Dorado.	.10	222	.30	47	67	235	4.5	0
3658	Cornie Bayou near Three Creeks.	180	5.05	25.9	50	62	250	4.5	.05
3660	Corney Bayou near Lillie, La.	462	3.47	46.6	50	67	160	4.5	.70
3676.58	Cypress Creek Canal No. 19 tributary near Dumas.	.60	5.24	1.51	47	0	160	4.3	0
3676.65	Wards Bayou tributary at Montrose.	1.60	8.19	1.34	46	9	120	4.4	0
3677.4	Camp Bayou near Parkdale--	1.90	4.54	2.64	49	10	115	4.4	0

a St. Francis River floodway near Marked Tree (470) and St. Francis River at Marked Tree (475) combined.
b St. Francis River at Parkin (478) and St. Francis Bay at Riverfront (479) combined.
c Bayou Meto near Stuttgart (2645) and Crooked Creek near Humphrey (2650) combined.

Table A3.—*Peak discharges at miscellaneous sites and outstanding floods at short-term gaging stations*

Stream and place of determination	Drainage area (sq mi)	Discharge		
		Date	Cfs	Cfs per sq mi
White River basin				
Prairie Creek tributary at culvert on private road 1.3 miles southeast of post office in Rogers.	0.55	July 16, 1961	626	1,140
Butler Creek 2.8 miles upstream from mouth and 2.8 miles west of Beaver.	23.3	May 15, 1956	4,440	191
Osage Creek at bridge on county road, at Osage----------	45.4	May 7, 1961	34,100	751
Osage Creek at county road 4.8 miles northwest of Berryville.	164	------do----------	40,000	244
Long Creek at bridge on U.S. Highway 62, 1 mile east of Alpena.	67.3	------do----------	30,000	446
West Fork Crooked Creek at bridge on State Highway 7, 3 miles south of Harrison.	20.1	------do----------	25,400	1,260
Crooked Creek at abandoned Arkansas-Ozark Railroad bridge in Harrison.	73	------do----------	54,100	741
Hussar Creek at bridge on U.S. Highway 65, at Bellefonte.	5.7	------do----------	5,570	977
North Sylamore Creek at bridge on National Forest Service road, 2.7 miles north of Fifty Six.	58.4	Apr. 23, 1968	14,900	255
Fourche River at bridge on State Highway 115, 5.6 miles north of Pocahontas.	228	Jan. 1, 1966	33,200	146
Town Branch at culvert on U.S. Highway 62 in Salem----	.36	May 26, 1963	567	1,580
Four Mile Creek at bridge on new U.S. Highway 67, 1.1 miles west of Austin.	16	Jan. 30, 1969	5,740	359
Cypress Bayou at bridge on new U.S. Highway 67, 1.0 miles north of Ward.	130	------do----------	24,100	185
Arkansas River basin				
Illinois River at bridge on U.S. Highway 62, 1.8 miles northeast of Prairie Grove.	53	May 6, 1960	39,800	751
Wildcat Creek at bridge on State Highway 68, 4.8 miles west of Tontitown.	13.8	July 25, 1960	10,500	761
Mill Creek at bridge on Y Street in Fort Smith----------	10.4	Apr. 4, 1964	4,000	385
Lee Creek at bridge on State Highway 59, at Natural Dam--	168	May 6, 1960	86,700	516
Mill Creek at bridge on U.S. Highway 71, 4.0 miles south of Boles.	50.5	May 20, 1960	16,700	331
Fourche La Fave River at bridge on State Highway 28, 2.4 miles east of Parks.	254	July 26, 1969	a57,500	226
Rock Creek at bridge on Shackleford Road 0.3 mile south of West Markham Street in Little Rock.	8.50	Jan. 30, 1969	4,970	585
Grassy Flat Creek at bridge on Rodney Parham Road 0.3 mile upstream from mouth in Little Rock.	4.71	------do----------	2,920	620
Coleman Creek at culvert on West 28th Street in Little Rock.	2.78	------do----------	1,430	514
Tar Camp Creek at culvert on Missouri Pacific Railroad 0.3 mile southeast of Redfield.	2.20	July 27, 1960	2,930	1,330
Bayou Two Prairie at bridge on new U.S. Highway 67, 1.9 miles southwest of Cabot.	13.1	Jan. 30, 1969	7,110	543

a-Water surface was about 2 feet higher at peak of flood of May 20, 1960.

Table A3.—*Peak discharges at miscellaneous sites and outstanding floods at short-term gaging stations*--Continued

Stream and place of determination	Drainage area (sq mi)	Discharge		
		Date	Cfs	Cfs per sq mi
Red River basin				
Cossatot River at bridge on State Highway 246, 7.5 miles east of Vandervoort.	89.4	May 6, 1961	48,000	537
Bear Creek at culvert on State Highway 227, 3 miles northwest of Mountain Pine.	.8	July 16, 1963	1,470	1,840
Glazypeau Creek at bridge on Missouri Pacific Railroad, 0.7 mile east of Mountain Pine.	29	------do----------	26,600	917
Bull Bayou tributary at culvert on U.S. Highway 270, 4.2 miles west of post office at Hot Springs.	2.5	------do----------	2,450	980
Hot Springs Creek at bridge on road 2.2 miles southeast of courthouse at Hot Springs.	5.81	------do----------	4,900	843
Gulpha Creek at bridge on U.S. Highway 270, 4.8 miles southeast of Hot Springs.	50	------do----------	36,800	736
Potash Sulphur Creek at culvert on U.S. Highway 270 at Lake Catherine.	1.25	------do----------	2,430	1,940
Tigre Creek at bridge on U.S. Highway 270, 2 miles northwest of Jones Mills.	9.3	------do----------	13,700	1,470
South Fork Saline River at bridge on U.S. Highway 70, 7 miles northeast of Hot Springs.	12.9	Dec. 3, 1952	11,100	860
Lost Creek at bridge on U.S. Highway 270, 4 miles west of Sheridan.	68.2	June 27, 1960	16,000	235

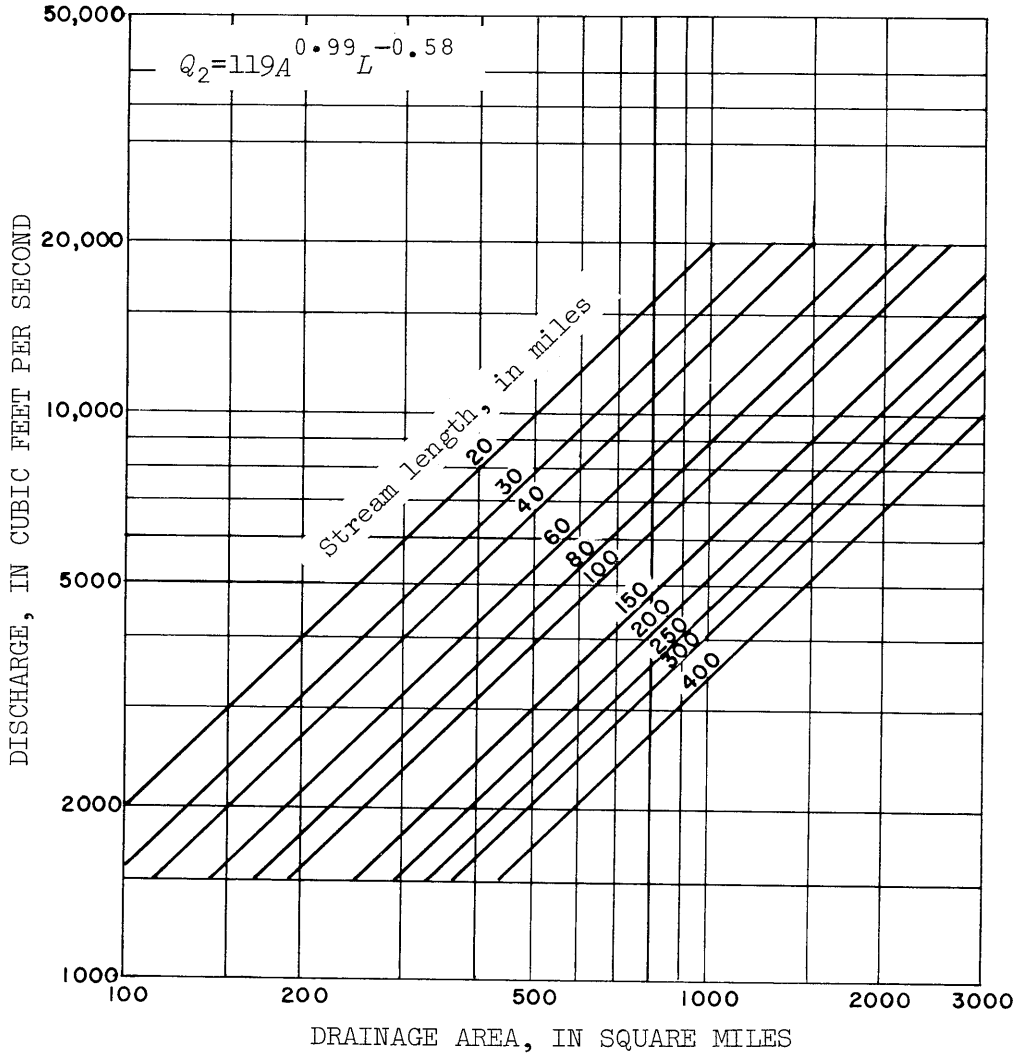

Figure A1.—Graphical solution of a 2-year-flood equation for region A (drainage areas, 100-3,000 square miles).

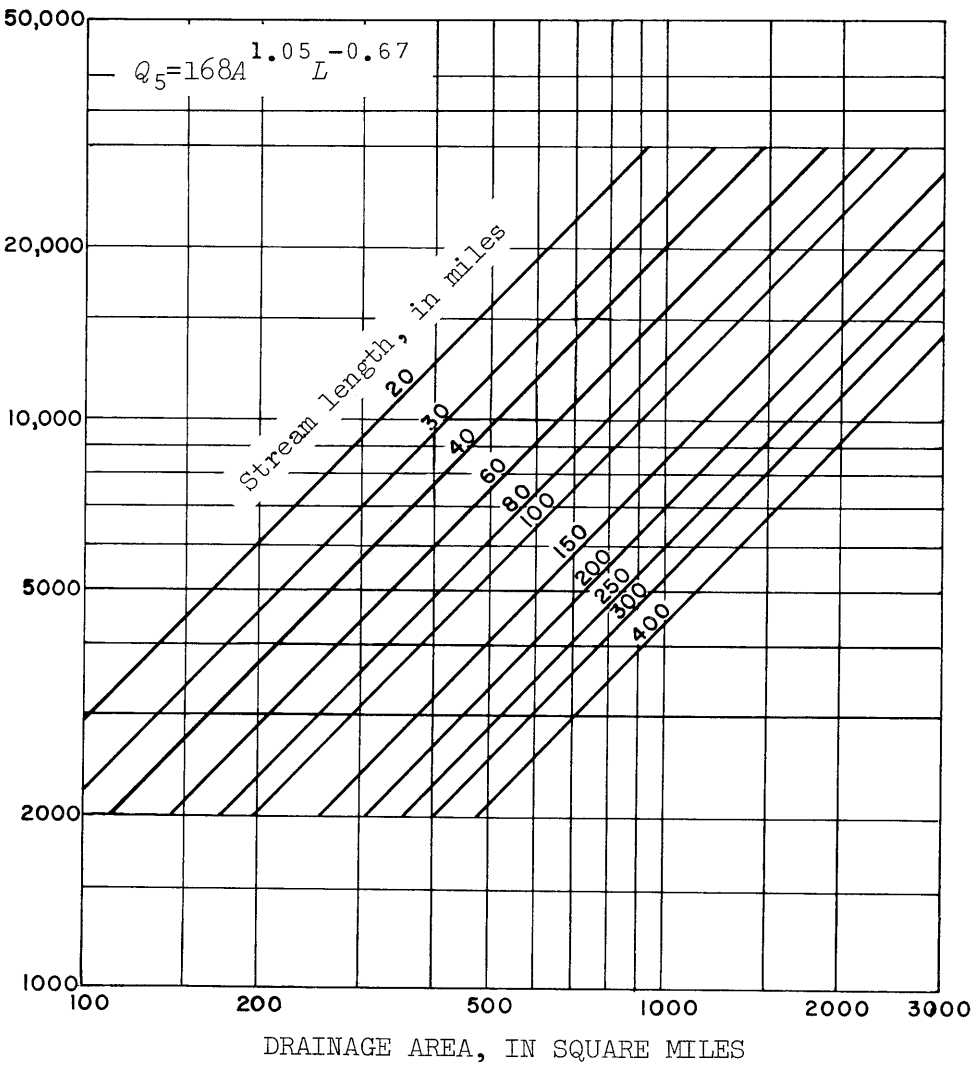

Figure A2.—Graphical solution of a 5-year-flood equation for region A (drainage areas, 100-3,000 square miles).

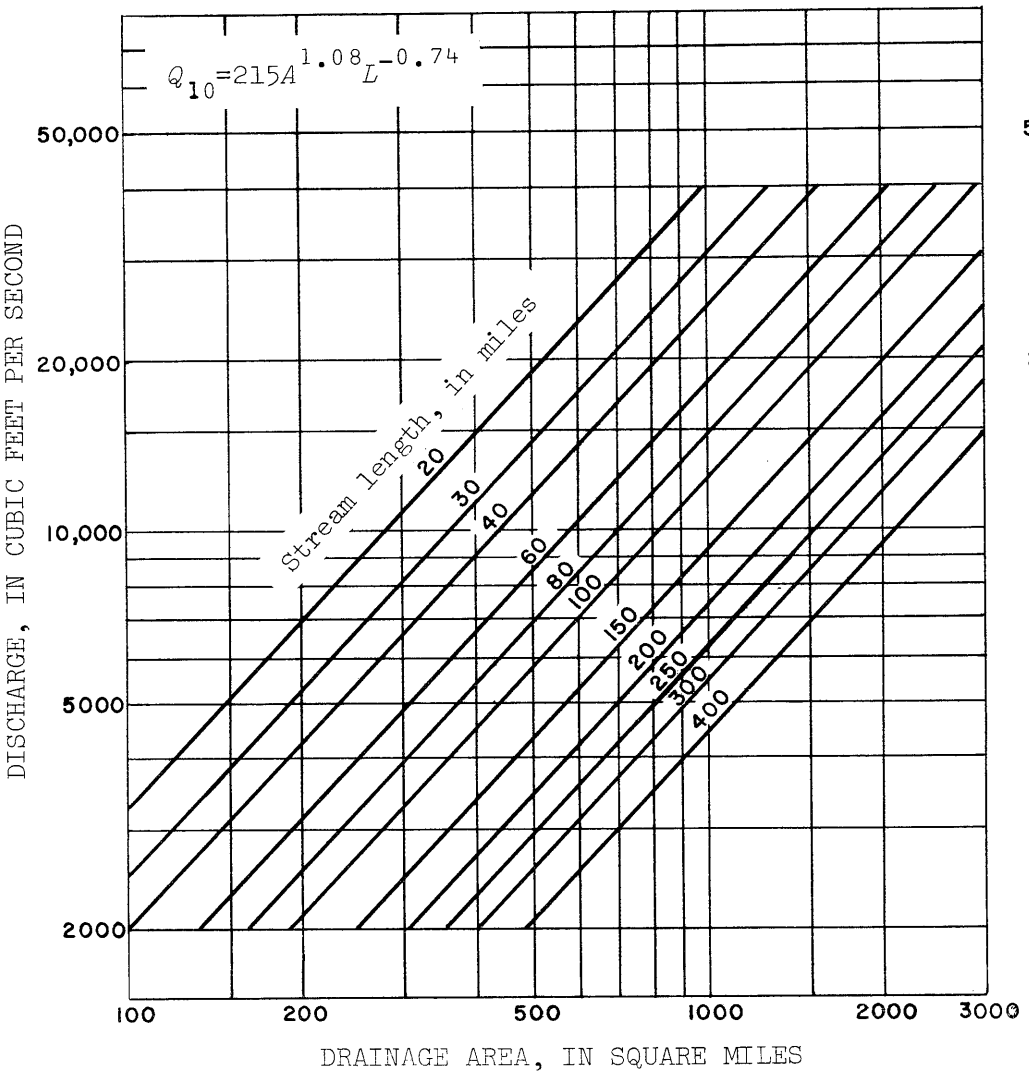

Figure A3.—Graphical solution of a 10-year-flood equation for region A (drainage areas, 100-3,000 square miles).

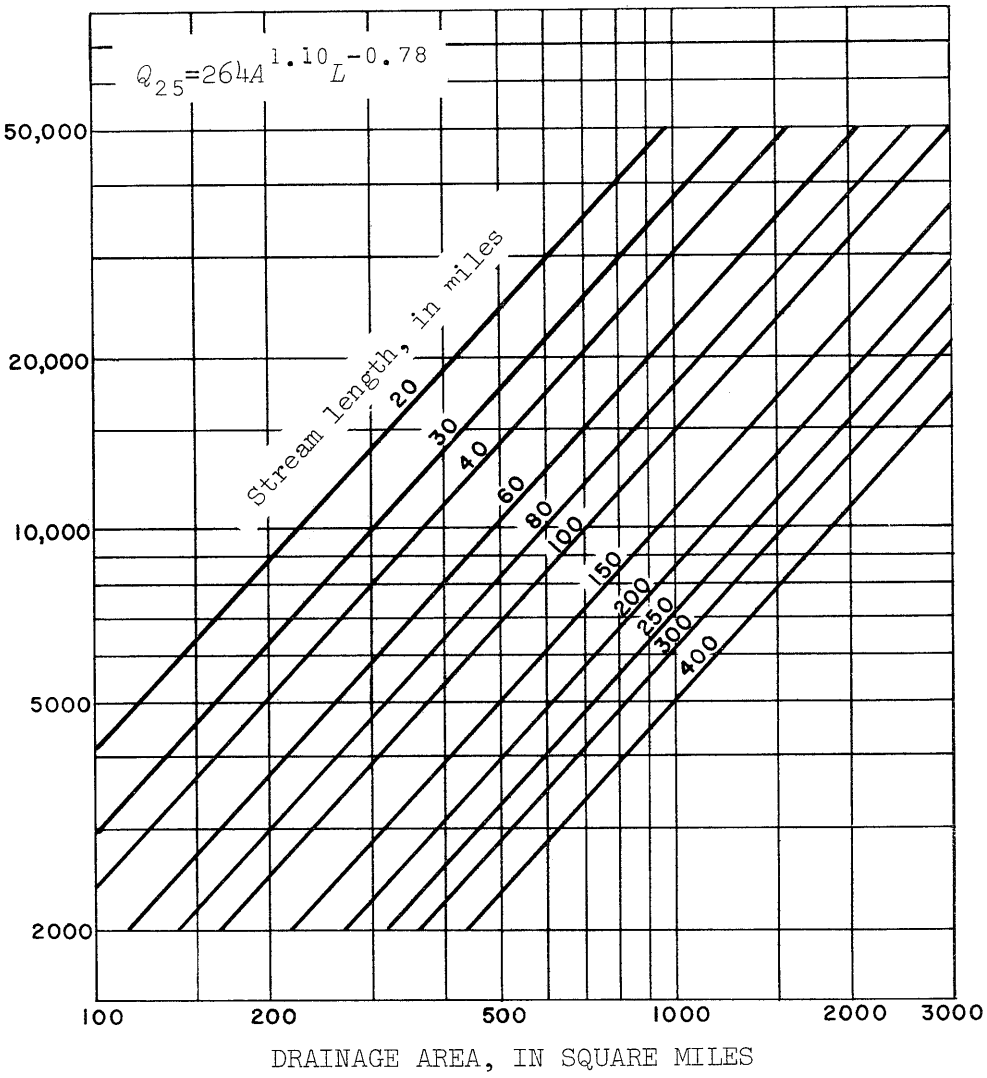

Figure A4.—Graphical solution of a 25-year-flood equation for region A (drainage areas, 100-3,000 square miles).

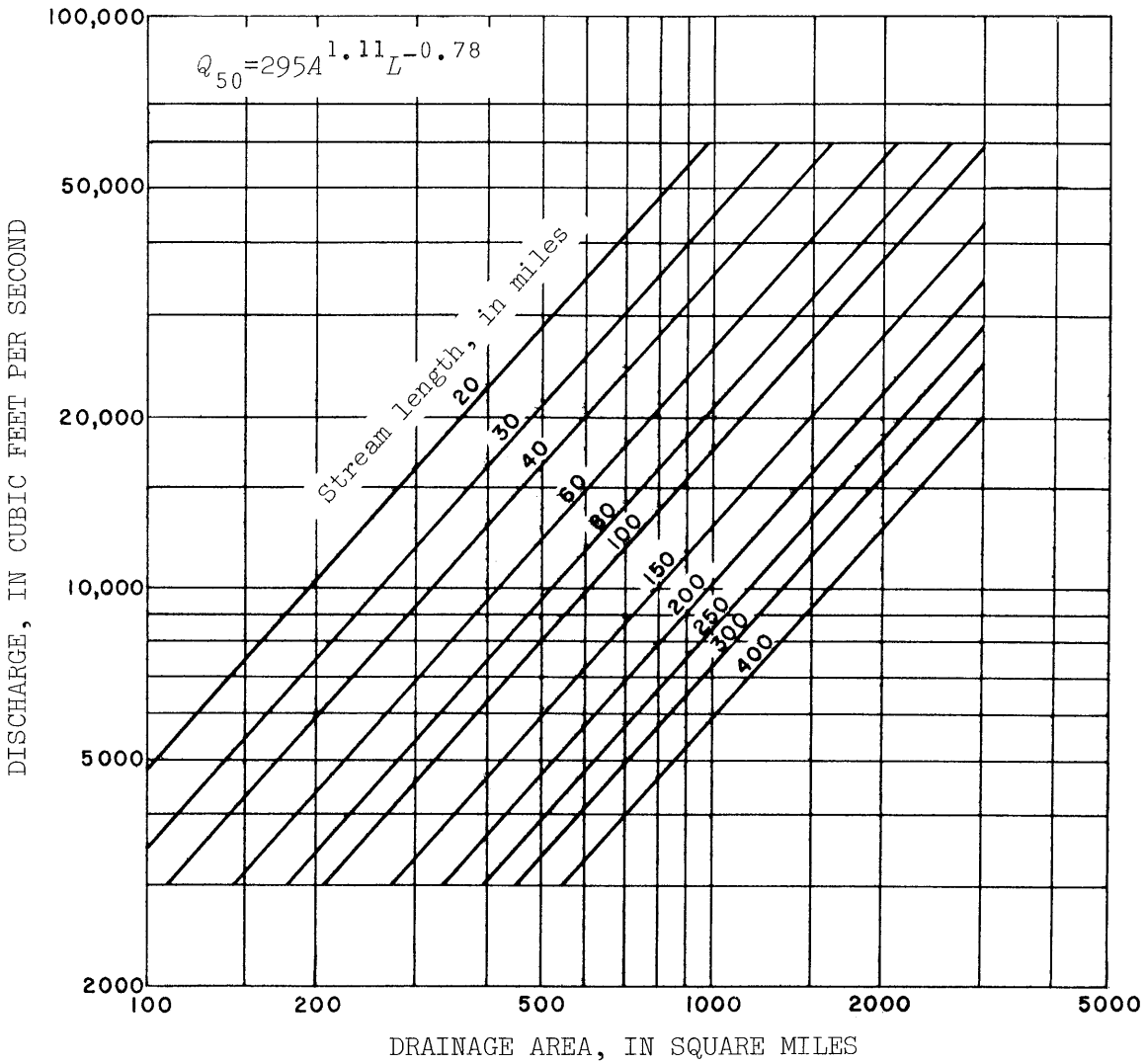

Figure A5.—Graphical solution of a 50-year-flood equation for region A (drainage areas, 100-3,000 square miles).

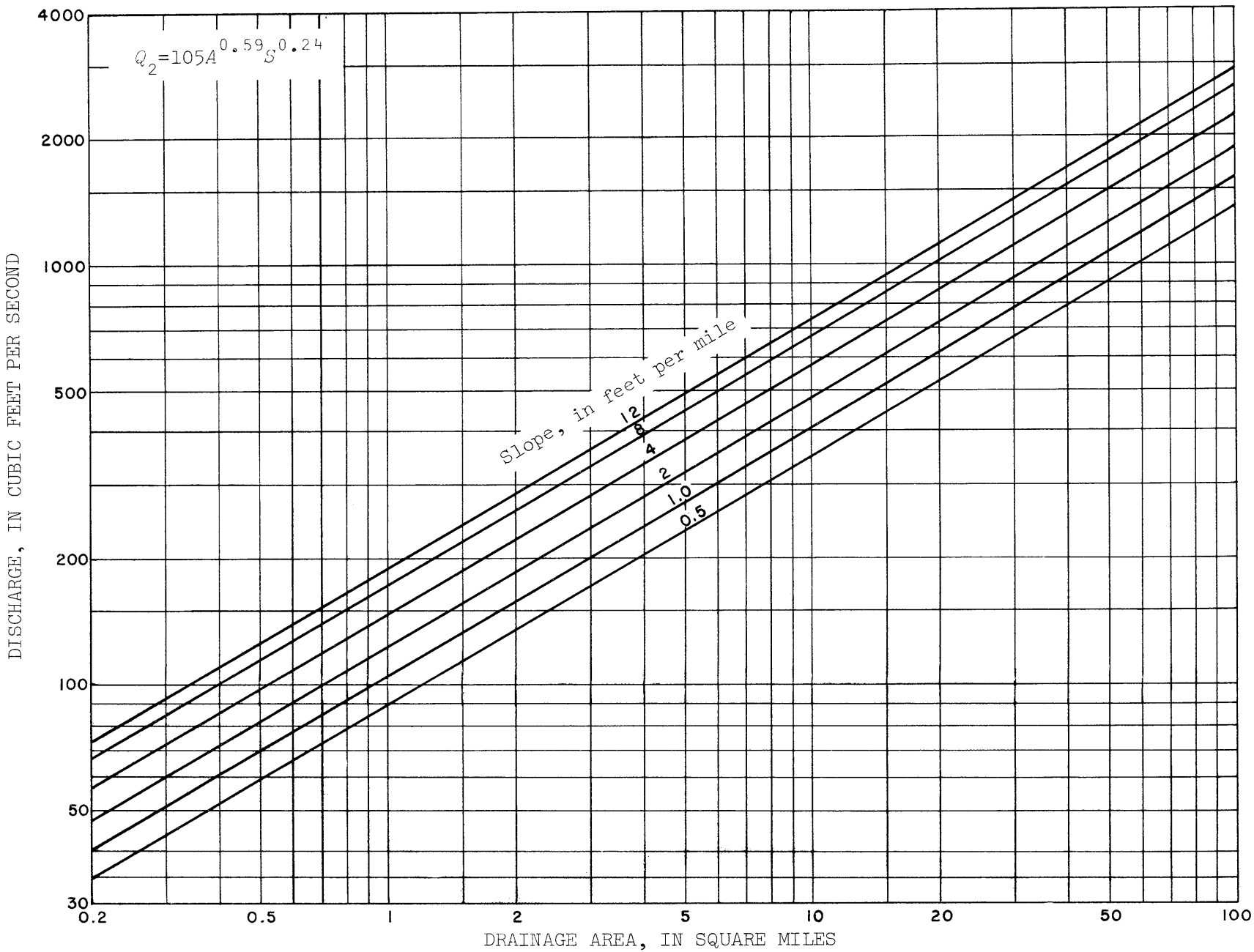

Figure A6.—Graphical solution of a 2-year-flood equation for region A (drainage areas, 0.2-100 square miles).

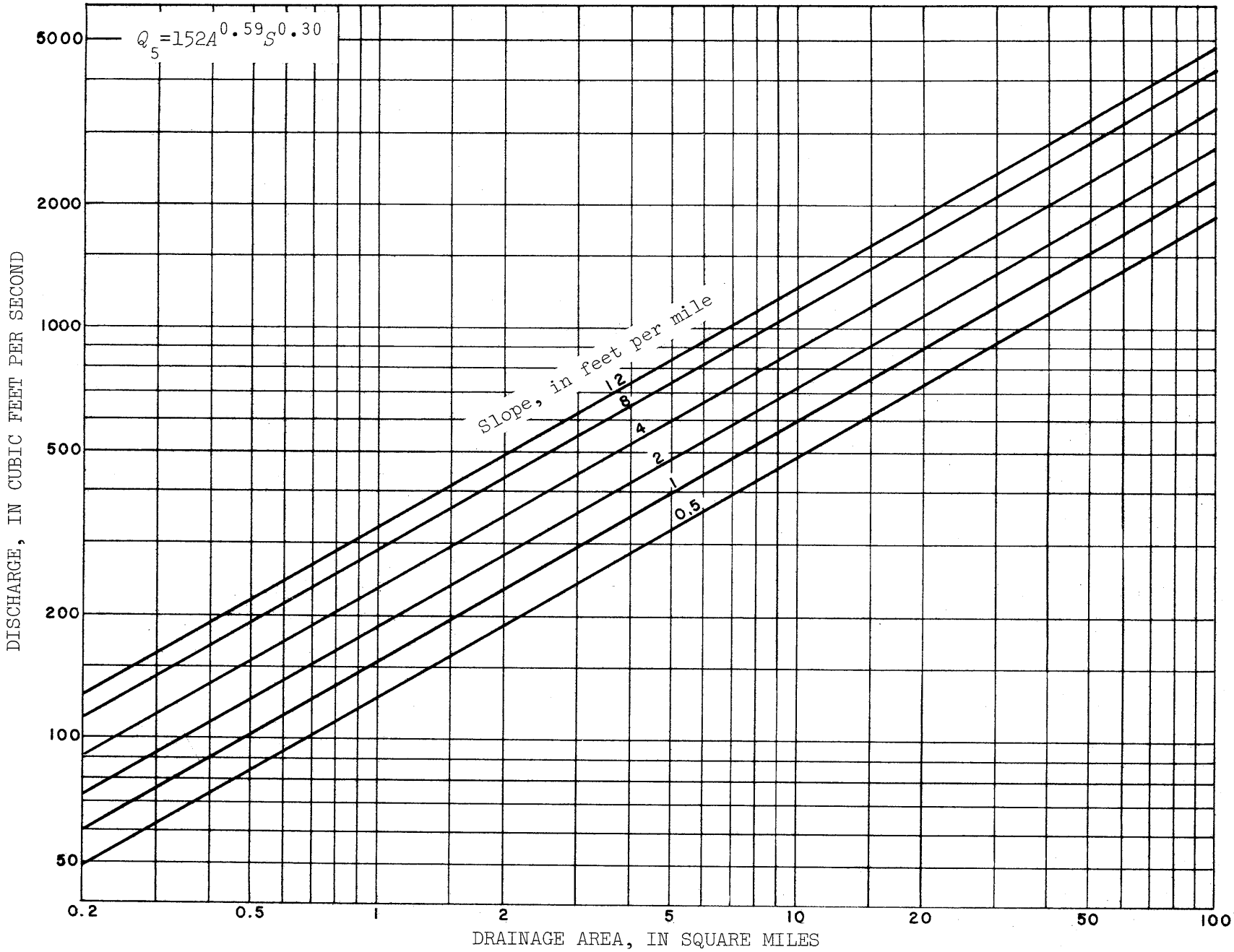

Figure A7.—Graphical solution of a 5-year flood equation for region A (drainage areas, 0.2-100 square miles)

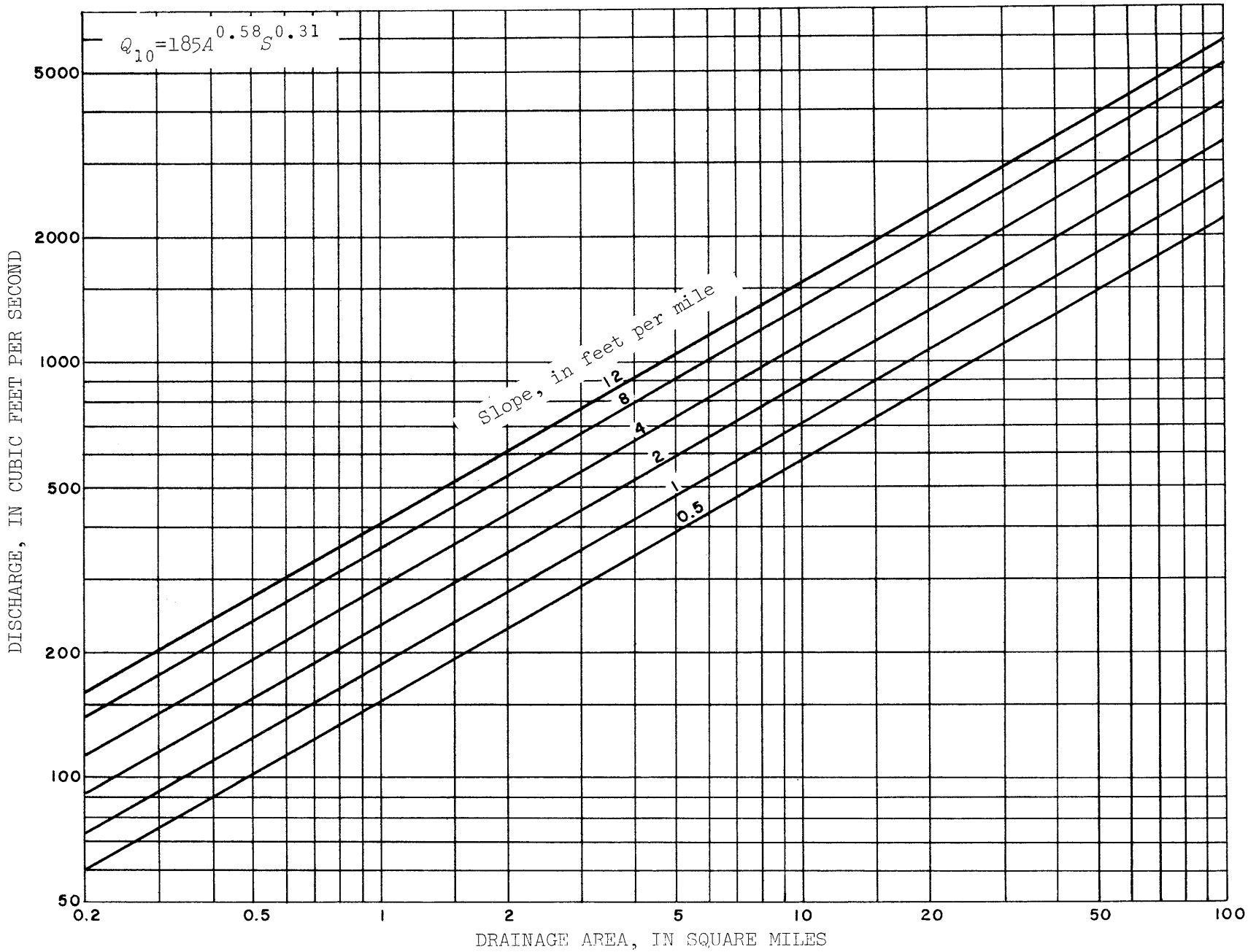

Figure A8.—Graphical solution of a 10-year-flood equation for region A (drainage areas, 0.2-100 square miles).

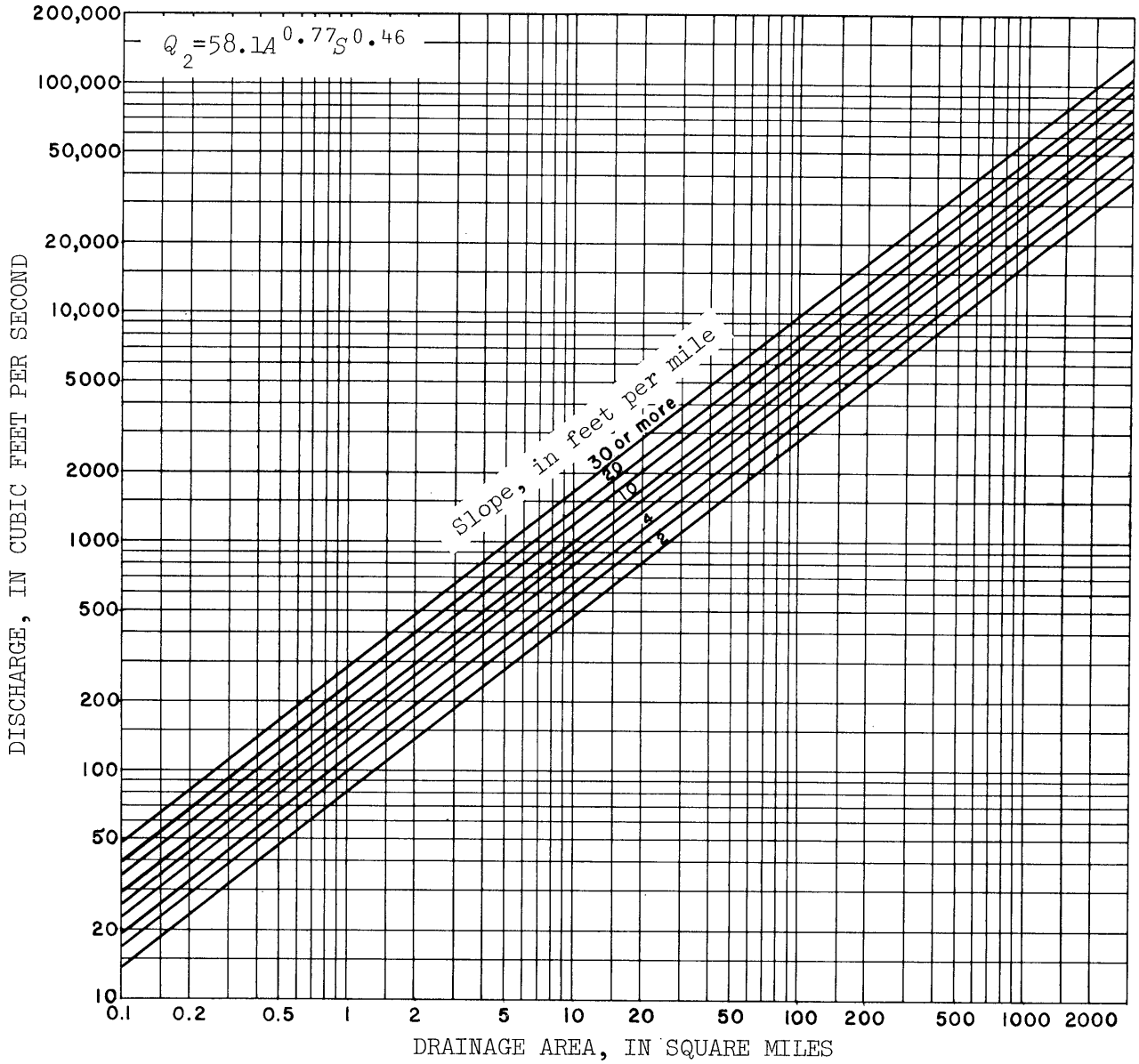

Figure A9.—Graphical solution of a 2-year-flood equation for region B.

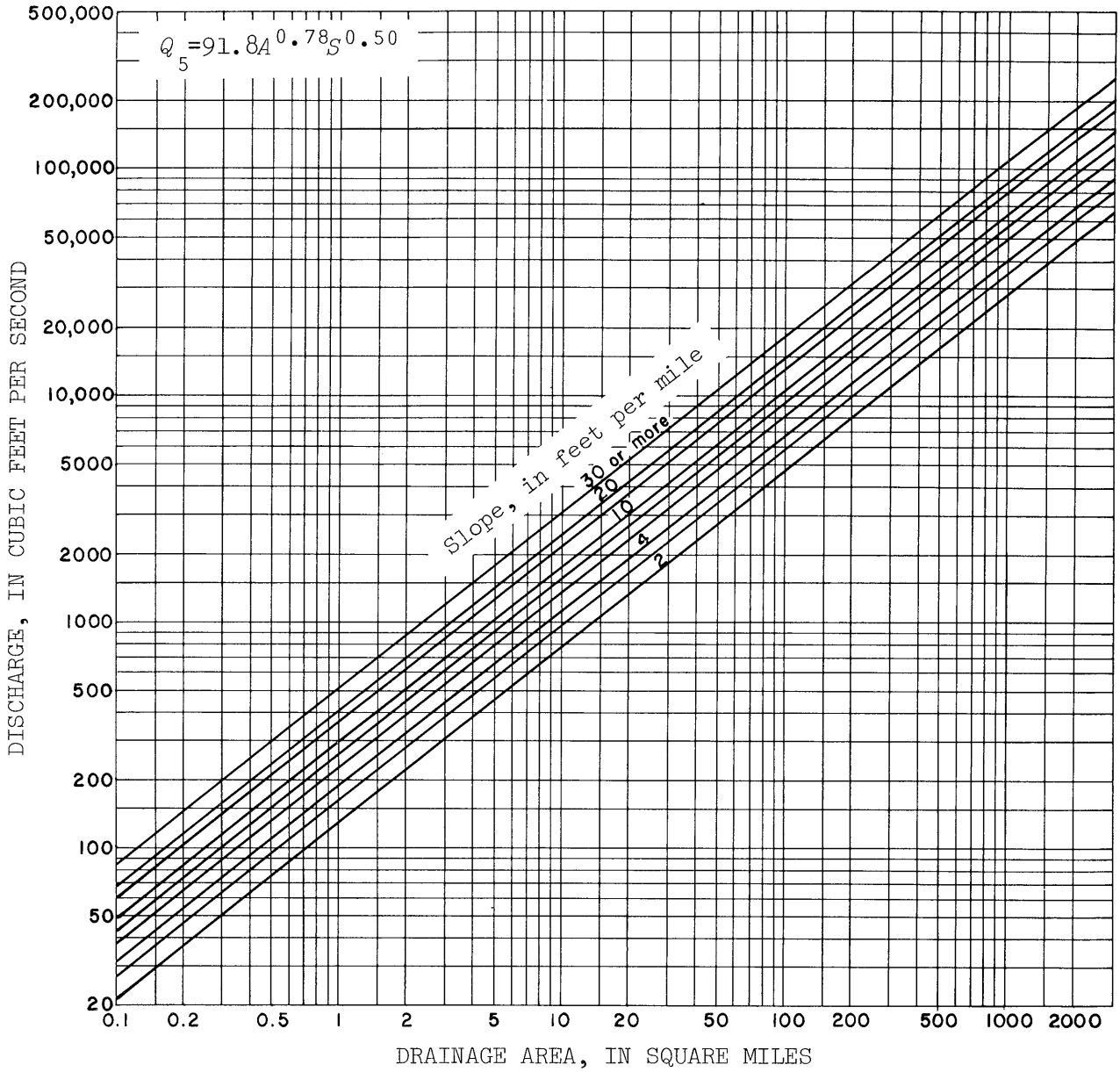

Figure A10.— Graphical solution of a 5-year-flood equation for region B.

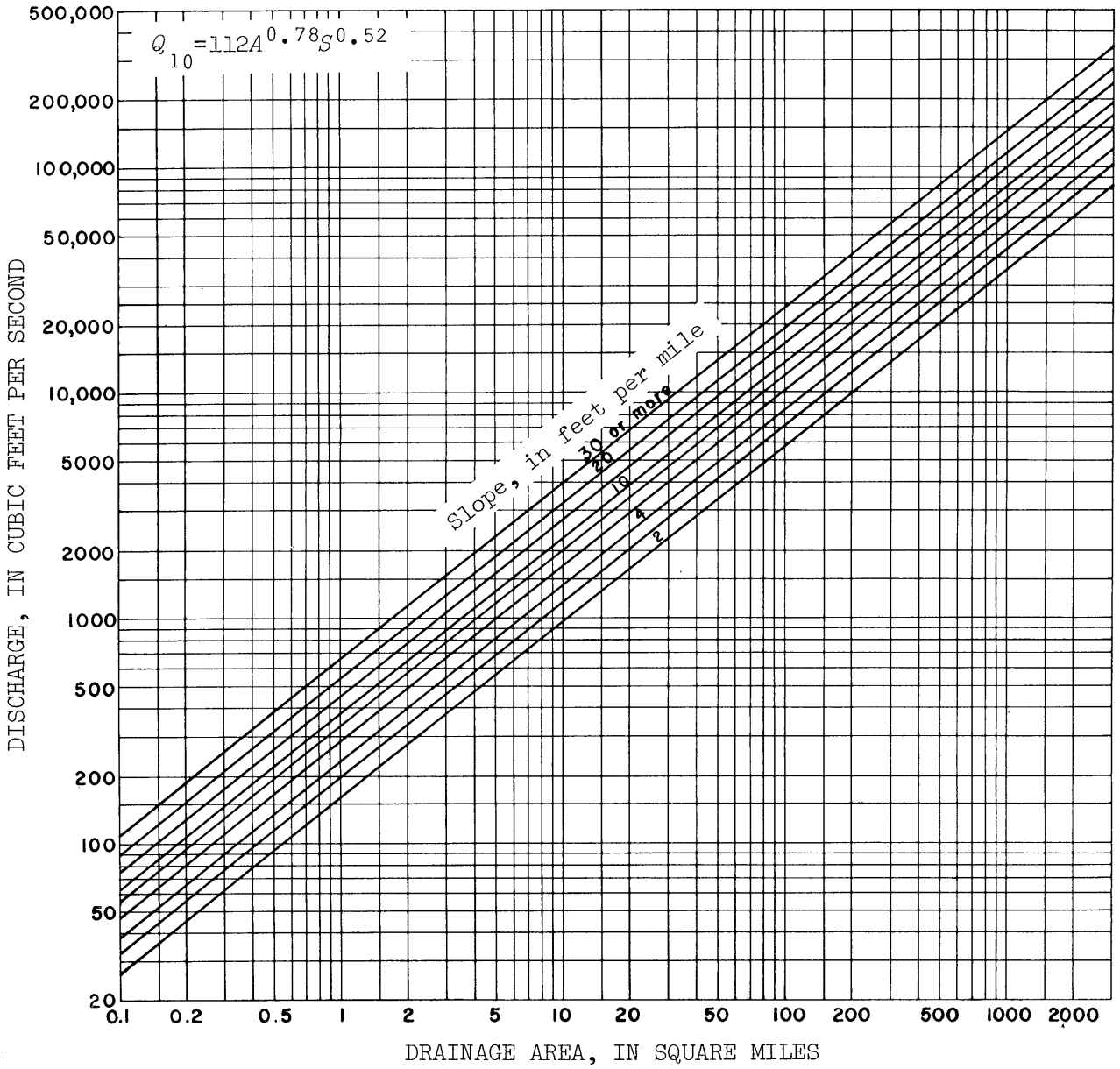

Figure All.—Graphical solution of a 10-year-flood equation for region B.

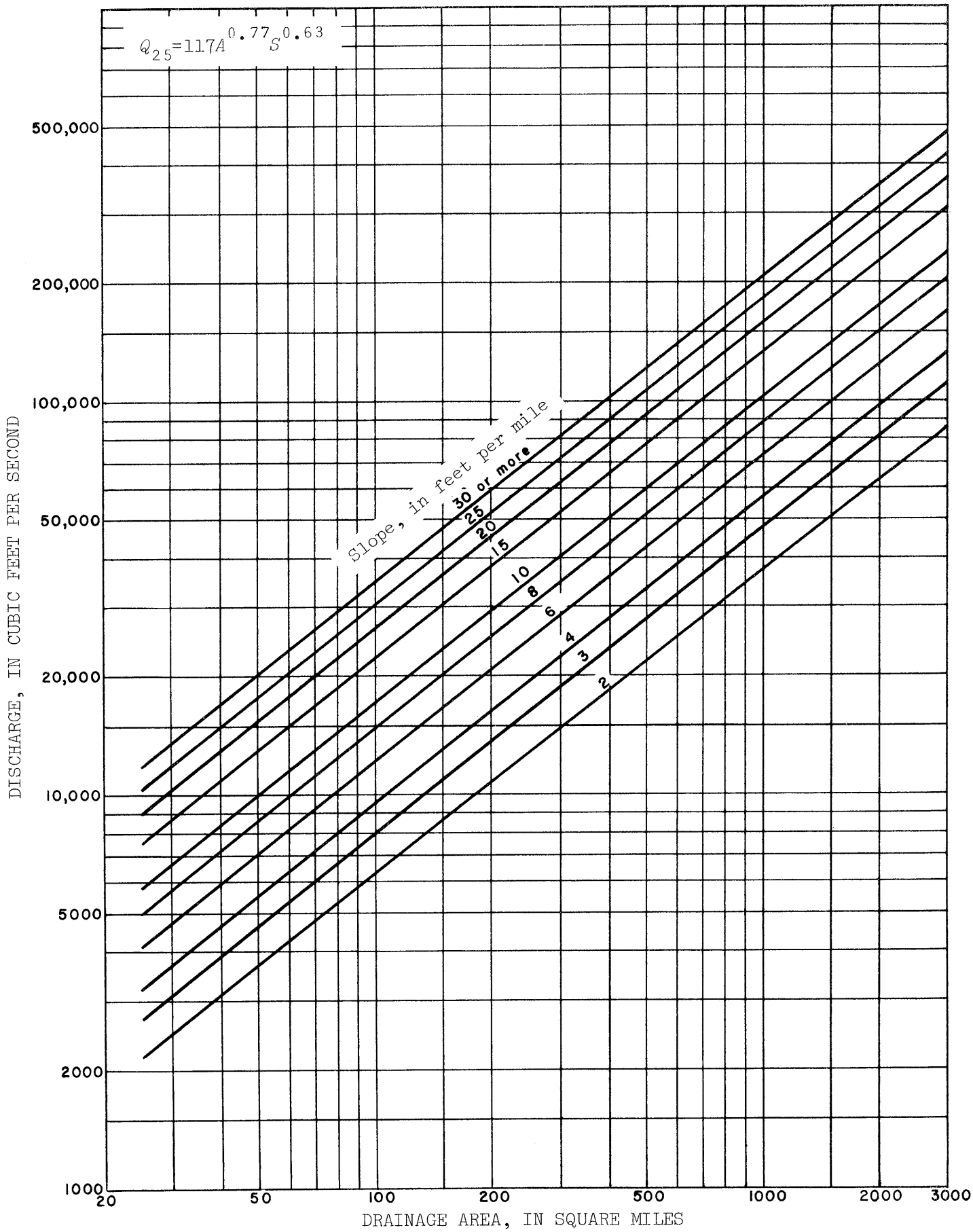

Figure A12.—Graphical solution of a 25-year-flood equation for region B (drainage areas, 25-3,000 square miles).

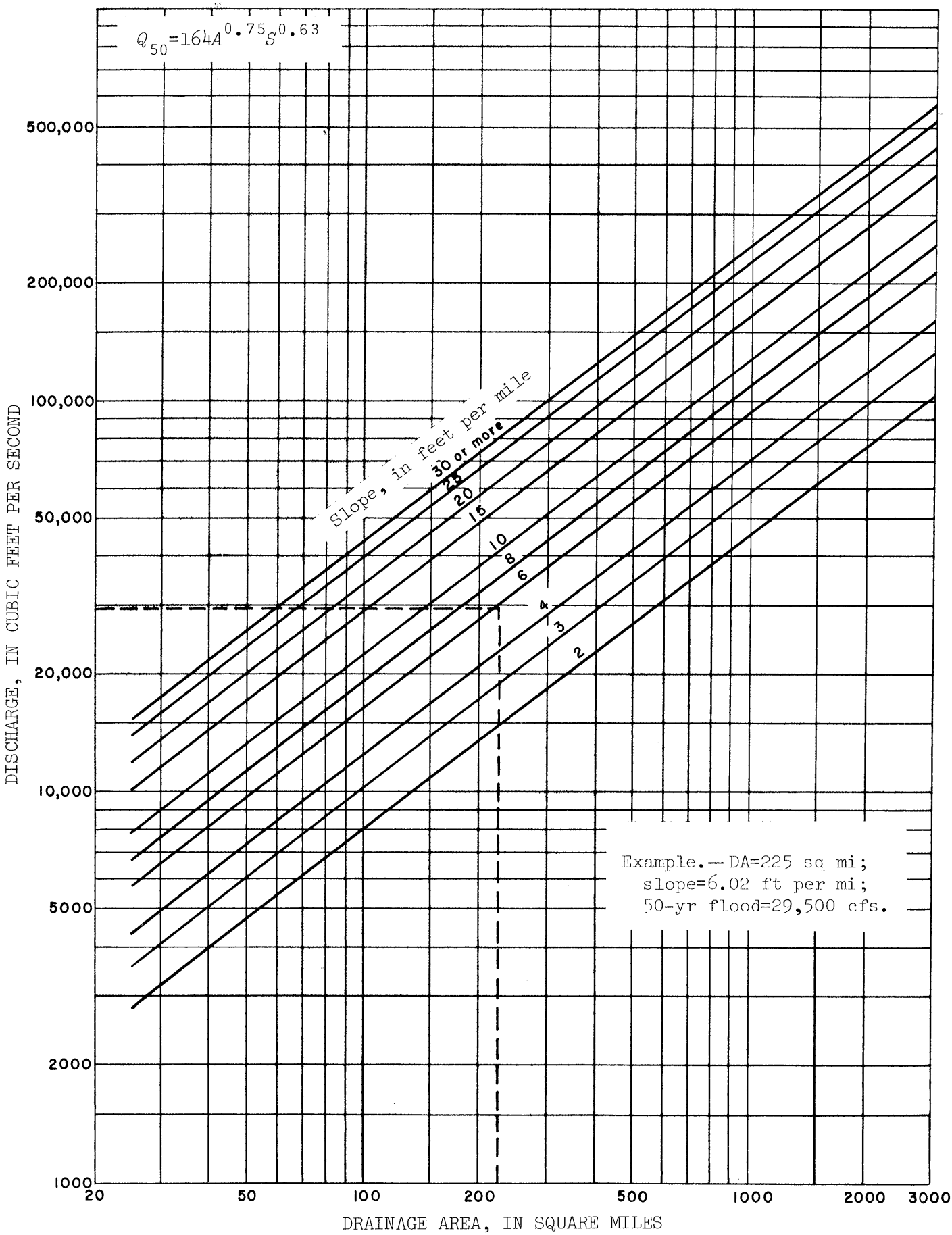

Figure A13.—Graphical solution of a 50-year-flood equation for region B (drainage areas, 25-3,000 square miles).

APPENDIX B

320. Mississippi River at Memphis, Tenn.

Location.--Lat 35°07'37", long 90°04'25", on left bank 50 ft downstream from Harahan Bridge at Memphis, Shelby County, 1.3 miles downstream from Beale Street gage, 3.5 miles downstream from Wolf River, 70 miles upstream from St. Francis River, and at mile 734.8.

Drainage area.--932,800 sq mi, approximately.

Gage.--Nonrecording prior to Apr. 16, 1934, at site 1.3 miles upstream (Beale Street gage) and Apr. 16 to Dec. 21, 1934, in present vicinity; recording thereafter. All gages at datum 183.91 ft above mean sea level, datum of 1929, 184.21 ft above mean Gulf level (1912, Missippi River Commission), and 190.86 ft on Memphis datum (1881, Mississippi River Commission). To adjust gage heights obtained at present site to those obtained at Beale Street, add 0.3 ft for each 10-ft increment of stage.

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs. (Measurements made frequently since 1932 and occasionally from 1882 to 1904.)

Bankfull stage.--34 ft.

Remarks.--Natural flow of stream affected by many reservoirs and navigation dams. Records of peaks prior to 1935 from reports of Mississippi River Commission. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1872	Apr. 24, 1872	31.5	----------	1907	Feb. 3, 1907	40.3	----------
1873	Mar. 3, 1873	32.5	----------	1908	Mar.24,25, 1908	35.55	----------
1874	May 2, 1874	34.0	----------	1909	Mar. 22, 1909	38.6	----------
1875	Aug.15-17, 1875	33.05	----------	1910	Mar. 19, 1910	33.12	----------
1876	Apr. 8,9, 1876	34.08	----------	1911	Apr.25,26, 1911	36.42	----------
1877	Apr. 29, 1877	32.05	----------	1912	Apr. 6, 1912	45.23	----------
1878	May 2, 1878	29.1	----------	1913	Apr. 9, 1913	46.55	----------
1879	Jan. 29, 1879	28.1	----------	1914	Apr. 15, 1914	32.63	----------
1880	Mar.24-29, 1880	33.4	----------	1915	Feb.17,18, 1915	36.08	----------
1881	Apr.27,28, 1881	33.3	----------	1916	Feb. 9, 1916	43.4	----------
1882	Mar. 6,9, 1882	35.15	----------	1917	Apr. 10, 1917	40.38	----------
1883	Mar. 6-8, 1883	34.75	----------	1918	Mar. 1,2, 1918	30.0	----------
1884	Mar. 1-3, 1884	34.15	----------	1919	Mar. 29, 1919	37.3	----------
1885	Jan. 28, 1885	29.25	----------	1920	Apr. 5, 1920	40.3	----------
1886	Apr. 28, 1886	34.8	----------	1921	Apr. 8, 1921	29.9	----------
1887	Mar. 9,10, 1887	35.3	----------	1922	Apr. 1,2, 1922	42.5	----------
1888	Apr.11,12, 1888	34.2	----------	1923	Mar. 27, 1923	36.3	----------
1889	June 26,27,1889	26.6	----------	1924	Jan.18-20, 1924	34.1	----------
1890	Mar. 20, 1890	a35.6	1,345,000	1925	Mar. 3, 1925	29.0	----------
1891	Mar. 10, 1891	34.9	1,289,000	1926	Apr.19,20, 1926	31.0	----------
1892	May 2,3, 1892	34.6	----------	1927	Apr.23-25, 1927	45.8	b1,744,000
1893	May 15,16, 1893	35.2	----------	1928	July 10, 1928	35.8	----------
1894	Feb.19,20, 1894	29.0	----------	1929	May 22-28, 1929	41.5	----------
1895	Jan.23,24, 1895	24.05	----------	1930	Jan.22,23, 1930	34.7	----------
1896	Apr.15,16, 1896	29.4	----------	1931	Apr. 15, 1931	24.4	----------
1897	Mar. 20, 1897	37.66	----------	1932	Feb. 19, 1932	38.7	1,308,000
1898	Apr. 10, 1898	37.22	----------	1933	Apr. 9, 1933	a40.4	1,416,000
1899	Apr. 1-11, 1899	35.2	----------	1934	Mar. 19, 1934	29.98	839,000
1900	Mar. 19, 1900	29.47	----------	1935	Mar. 28, 1935	37.2	1,190,000
1901	May 6, 1901	32.12	----------	1936	Apr. 21, 1936	39.33	1,340,000
1902	Mar. 21, 1902	30.9	----------	1937	Feb. 8, 1937	a48.69	1,980,000
1903	Mar. 20, 1903	40.1	----------	1938	Apr. 20, 1938	32.97	971,000
1904	Apr. 11, 1904	39.2	----------	1939	Feb.28,Mar.1,1939	a37.76	1,280,000
1905	Mar. 21, 1905	28.93	----------	1940	May 6, 1940	a31.7	962,000
1906	Apr. 15, 1906	37.07	----------	1941	Apr. 28, 1941	20.64	595,000

Peak stages and discharges of Mississippi River at Memphis, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Mar.27,28, 1942	30.20	987,000	1956	Feb.28,29, 1956	a29.37	1,012,000
1943	June 3,4, 1943	a37.75	1,384,000	1957	Feb. 16, 1957	31.16	1,060,000
1944	May 5, 1944	37.11	1,289,000	1958	July 31, 1958	a29.88	967,000
1945	Mar. 24, 1945	a39.26	1,446,000	1959	Feb. 26, 1959	27.90	884,000
				1960	Apr. 17, 1960	33.28	1,137,000
1946	Jan. 20, 1946	a36.14	1,410,000				
1947	Apr.23,24, 1947	a32.12	1,128,000	1961	May 20,21, 1961	a40.18	1,451,000
1948	Apr. 8, 1948	36.49	1,310,000	1962	Mar. 21, 1962	36.84	1,281,000
1949	Feb. 4, 1949	a35.20	1,271,000	1963	Mar. 28, 1963	a36.61	1,311,000
1950	Jan. 24, 1950	a40.50	1,568,000	1964	Mar.25-26, 1964	33.14	1,150,000
				1965	Apr. 12, 1965	a32.99	1,110,000
1951	Mar. 3, 1951	35.32	1,217,000				
1952	Apr. 1, 1952	37.12	1,323,000	1966	Feb.21-22, 1966	a27.69	931,000
1953	May 24, 1953	25.93	843,000	1967	May 24, 1967	29.77	1,010,000
1954	Jan.29,30, 1954	a19.17	630,000	1968	June 10, 1968	28.33	907,000
1955	Apr. 1,2, 1955	a35.47	1,247,000				

a Occurred on different day than peak discharge.

b Does not include flow around levees.

ST. FRANCIS RIVER BASIN

401. 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., at bridge on U.S. Highway 62 at St. Francis, at mile 229.0.

Drainage area.--1,772 sq mi.

Gage.--Nonrecording prior to Aug. 1, 1946; recording thereafter. Datum of gage is 270.57 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--19 ft.

Remarks.--Records furnished by Corps of Engineers. Flow regulated by Wappapello Reservoir since Apr. 1, 1941 (capacity at spillway crest, 625,000 acre-ft); flood records affected since that date. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1916	February 1916	23.16	----------	1933	May 18, 1933	27.1	31,000
1917	Apr. 9, 1917	20.5	----------	1934	Apr. 3, 1934	18.5	5,350
1918	May 18, 1918	22.1	----------	1935	Mar. 15, 1935	28.2	39,200
1919	Nov. 11, 1919	20.6	----------				
1920	May 25, 1920	22.6	----------	1936	Nov. 12, 1936	19.2	6,190
				1937	Jan. 19, 1937	26.7	28,600
1921	Nov. 27, 1921	23.3	----------	1938	Apr. 4, 1938	b23.6	18,600
1922	Apr. 6, 1922	23.6	----------	1939	Apr. 23, 1939	22.7	14,900
1923	May 21, 1923	25.1	----------	1940	Apr. 24, 1940	c21.0	9,720
1924	June 6, 1924	18.3	----------				
1925	Nov. 14, 1925	22.9	----------	1941	Nov. 13, 1941	17.9	4,820
				1942	Apr. 15, 1942	20.2	8,930
1926	Mar. 5, 1926	20.3	----------	1943	Jan. 5, 1943	19.6	7,460
1927	Apr. 18, 1927	26.6	----------	1944	Apr. 12, 1944	19.6	7,600
1928	June 26, 1928	26.7	----------	1945	Apr. 20, 1945	23.5	20,500
1929	May 19, 1929	25.2	----------				
1930	Jan. 18, 1930	26.5	33,100	1946	May 27-29, 1946	21.65	13,000
				1947	May 3, 1947	c20.53	8,950
1931	Mar. 15, 1931	19.4	6,540	1948	Jan. 12, 1948	d20.91	9,560
1932	Jan. 23, 1932	a21.6	11,200	1949	Feb. 15, 1949	22.82	17,000

Peak stages and discharges of St. Francis River at St. Francis, Ark.--Continued

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1950	Jan. 14, 1950	23.42	20,000	1960	May 26-27, 1960	17.10	5,180
1951	Feb. 25, 1951	e21.2	12,000	1961	May 13, 1961	21.85	13,600
1952	Mar. 19, 1952	20.7	10,500	1962	Mar. 4, 1962	20.83	9,540
1953	Mar. 23, 1953	19.1	6,250	1963	June 4, 1963	c17.67	4,940
1954	June 19, 1954	17.25	5,210	1964	Mar. 14, 1964	22.10	13,400
1955	Mar. 29, 1955	20.6	8,700	1965	Apr. 15, 1965	18.72	6,200
1956	Feb. 26, 1956	18.65	6,330	1966	May 2, 1966	21.88	13,500
1957	May 27, 1957	23.00	17,300	1967	Dec. 30, 1967	20.93	9,020
1958	Mar. 29, 1958	21.85	12,900	1968	Mar. 27, 1968	20.6	10,100
1959	Dec. 28, 1959	18.50	6,140				

a Maximum crest stage. Maximum stage occurred Dec. 31 on rise that crested Jan. 3, 1933.
b Occurred Feb. 24, 1938.
c Occurred on following day.
d Occurred Jan. 10, 1948.
e Occurred Nov. 30, 1951.

404.5. St. Francis River at Lake City, Ark.

Location.--Lat 35°49'16", long 90°25'56", in SE¼ sec.22, T.14 N., R.6 E., at bridge on State Highway 18 at Lake City, at mile 173.6.

Drainage area.--2,374 sq mi.

Gage.--Nonrecording prior to Sept. 1, 1948; recording thereafter. Datum of gage is 217.69 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--9 ft.

Remarks.--Records furnished by Corps of Engineers. Flow regulated by Wappapello Reservoir since Apr. 1, 1941 (capacity at spillway crest, 625,000 acre-ft). Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1917	Apr.13-17, 1917	8.9	----------	1933	May 25, 1933	10.9	16,800
1918	May 14,15, 1918	9.2	----------	1934	Mar. 28, 1934	9.4	11,900
1919	Jan. 3, 1919	9.8	----------	1935	Mar. 23, 1935	12.0	20,900
1920	June 2-4, 1920	9.1	----------				
				1936	Nov. 6,7, 1936	7.0	5,380
1921	May 12, 1921	9.3	----------	1937	Jan.22-24, 1937	13.3	36,700
1922	Apr.12-14, 1922	9.6	----------	1938	Apr. 9,10, 1938	10.7	16,100
1923	May 17, 1923	10.1	----------	1939	Mar.15,16, 1939	10.1	14,000
1924	Jan. 1, 1924	7.7	----------	1940	Apr.30-May 2,1940	8.7	9,470
1925	Oct.27-29, 1925	9.1	----------				
				1941	Nov.20,21, 1941	6.5	4,440
1926	Mar.12,13, 1926	8.2	----------	1942	Feb. 20, 1942	8.7	10,300
1927	Apr. 16, 1927	10.5	----------	1943	May 17,18, 1943	7.5	7,080
1928	June 24, 1928	10.7	----------	1944	Apr. 13, 1944	8.9	10,900
1929	May 18,19,22,1929	10.0	----------	1945	Apr.24,25, 1945	11.9	21,300
1930	Jan. 15, 1930	11.1	----------				
				1946	May 27,28, 1946	10.0	18,000
1931	Mar. 22, 1931	7.0	5,280	1947	May 10,11, 1947	8.1	9,260
1932	Jan. 19, 1932	10.5	15,400	1948	Jan.16,17, 1948	8.6	10,100

Peak stages and discharges of St. Francis River at Lake City, Ark.--Continued

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1949	Jan. 31, 1949	11.24	19,400	1959	Feb. 16, 1959	8.78	10,500
1950	Jan. 14, 1950	a12.98	25,700	1960	May 22, 1960	7.90	7,940
1951	Dec. 9, 1951	10.85	17,800	1961	May 9, 1961	9.90	14,400
1952	Jan. 5, 1952	10.9	18,600	1962	Feb. 28, 1962	10.88	18,300
1953	Mar. 19, 1953	9.9	15,200	1963	May 28, 1963	6.92	6,380
1954	May 4, 1954	6.95	5,730	1964	Mar. 11, 1964	10.96	17,700
1955	Apr. 6, 1955	8.76	10,600	1965	Feb. 13, 1965	8.87	9,670
1956	Feb. 19, 1956	10.25	15,500	1966	Jan. 3, 1966	12.2	22,500
1957	Nov. 20, 1957	12.95	24,200	1967	May 16, 1967	9.10	10,800
1958	Apr. 4, 1958	10.15	15,900	1968	Apr. 5, 1968	9.91	13,300

a Occurred on Jan. 17, 1950.

465. Big Lake Outlet near Manila, Ark.

Location.--Lat 35°51'00", long 90°07'40", in SE¼ sec.9, T.14 N., R.9 E., at bridge on State Highway 18, 3 miles southeast of Manila,

Drainage area.--2,084 sq mi.

Gage.--Nonrecording. Datum of gage is 223.44 ft above mean sea level (unadjusted).

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs.

Bankfull stage.--10 ft.

Remarks.--Flow is affected by natural regulation by Big Lake just upstream from gage. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	April 1927	20.3	16,900	1931	Mar.14,15, 1931	8.60	2,650
1928	July 4,5, 1928	19.7	15,700	1932	Jan.26,27, 1932	18.0	12,600
1929	Mar. 6, 1929	16.90	10,600	1933	May 21,22, 1933	16.8	12,800
1930	Jan. 16, 1930	19.85	15,900				

465.3. Ditch No. 42 at Hickman, Ark.

Location.--Lat 35°57'14", long 89°43'59", in SW¼NW¼ sec.5, T.15 N., R.13 E., on left bank 10 ft upstream from culvert on State Highway 137, 0.7 mile north of Hickman.

Drainage area.--1.08 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Ditch No. 42 at Hickman, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Mar. 4, 1963	9.15	66.1	1966	Aug. 17, 1966	9.69	76
1964	Mar. 9, 1964	10.18	66	1967	July 5, 1967	9.69	84
				1968	May 15, 1968	11.43	121
1965	Mar. 28, 1965	9.53	78	1969	Jan. 30, 1969	12.13	126

466. Right Hand Chute of Little River at Rivervale, Ark.

Location.--Lat 35°40'20", long 90°20'12", in SW¼ sec.10, T.12 N., R.7 E., at floodway bridge at Rivervale.

Drainage area.--2,106 sq mi.

Gage.--Nonrecording prior to Oct. 6, 1949; recording thereafter. Datum of gage is 213.15 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--8 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1939	Mar.12,13, 1939	11.2	----------	1954	May 8, 1954	5.0	2,680
1940	Apr.28,29, 1940	7.85	----------	1955	Mar.29,30, 1955	8.7	6,340
1941	Feb. 1,2, 1941	a4.85	----------	1956	Feb. 24, 1956	10.7	9,340
1942	Apr.18,19, 1942	8.45	----------	1957	Nov. 23, 1957	13.55	31,400
1943	May 21-24, 1943	8.4	----------	1958	Mar. 30, 1958	11.20	18,700
1944	Apr.20,21, 1944	10.0	----------	1959	Feb. 22, 1959	8.30	6,330
1945	June 22,23, 1945	12.9	23,000	1960	May 27, 1960	7.85	5,100
1946	Jan. 18, 1946	9.65	11,000	1961	May 14, 1961	11.30	18,600
1947	Apr.19,20, 1947	7.8	5,800	1962	Mar. 4, 1962	12.20	23,900
1948	Apr. 5, 1948	9.45	8,030	1963	Mar. 13, 1963	8.06	5,870
1949	Feb. 2, 1949	12.6	23,100	1964	Mar. 16, 1964	12.09	22,500
1950	Feb. 20, 1950	b13.57	29,200	1965	Feb. 16, 1965	11.21	16,400
1951	Jan. 22, 1951	10.6	14,900	1966	Jan. 6, 1966	12.54	24,700
1952	Jan. 10, 1952	11.82	20,600	1967	May 19, 1967	11.27	19,000
1953	Mar. 27, 1953	c9.27	8,540	1968	May 18, 1968	10.06	14,300

a Maximum crest stage; maximum stage occurred Dec. 31 on a rise that crested in January 1942.

b Occurred on Jan. 19, 1950.

c Occurred on the following day.

470. St. Francis River floodway near Marked Tree, Ark.

Location.--Lat 35°32'15", long 90°29'05", in SE¼NE¼ sec.31, T.11 N., R.6 E., on downstream side of bridge on U.S. Highway 63, 3.6 miles west of Marked Tree.

Drainage area.--Indeterminate. Total drainage area of St. Francis River and St. Francis River floodway, 5,148 sq mi.

Gage.--Nonrecording. Prior to Oct. 1, 1965, at site 4.8 miles upstream at datum 192.08 ft above mean sea level (Morgan Engineering Co. bench mark). Datum of present gage is 185.00 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 47,000 cfs.

Remarks.--Flow diverted from St. Francis River bypasses Marked Tree and returns to St. Francis River downstream from Marianna. Regulation by Wappapello Reservoir since 1941 (capacity, 625,000 acre-ft) does not materially affect peak flows. (See St. Francis River at Marked Tree for maximum daily discharges.)

472. Ditch No. 45 near Lepanto, Ark.

Location.--Lat 35°36'46", long 90°22'30", in SW¼SW¼ sec.32, T.12 N., R.7 E., on left upstream wingwall, 7 ft upstream from culvert on State Highway 14, 0.5 mile upstream from Ditch No. 45B, and 2.5 miles west of Lepanto.

Drainage area.--2.16 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since June 1969.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Nov. 22, 1961	8.46	185	1966	Feb. 9, 1966	8.25	168
1963	Mar. 5, 1963	8.71	208	1967	Oct. 1, 1966	8.27	169
1964	Mar. 9, 1964	8.40	180	1968	Apr. 4, 1968	8.19	162
1965	Feb. 11, 1965	8.21	165	1969	Jan. 30, 1969	8.78	215

475. St. Francis River at Marked Tree, Ark.

Location.--Lat 35°31'58", long 90°25'25", in NE¼SW¼ sec.35, T.11 N., R.6 E., near left bank on downstream side of pier of bridge on U.S. Highway 63 at Marked Tree, 4.8 miles downstream from Little River, and 7 miles downstream from dam of Poinsett County Drainage District 7.

Drainage area.--Indeterminate. Total drainage area of St. Francis River and St. Francis River floodway, 5,148 sq mi.

Gage.--Nonrecording prior to Jan. 18, 1935; recording thereafter. Auxiliary nonrecording gage from Dec. 23, 1934, to Feb. 18, 1941, and recording gage thereafter at site 3 miles upstream. All gages at datum 196.44 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,100 cfs. Affected by variable slope.

Bankfull stage.--17 ft.

Remarks.--Floodflow is diverted through St. Francis River floodway at dam of Poinsett County Drainage District 7, 7 miles upstream from station, and returns to St. Francis River downstream from Marianna. Discharges tabulated below are combined flows of St. Francis River floodway near Marked Tree and St. Francis River at Marked Tree. Only annual maximum daily discharges are shown.

Maximum daily discharges of St. Francis River floodway near Marked Tree and St. Francis River at Marked Tree

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 26, 1935	---------	40,400	1952	Jan. 11, 1952	--------	29,200
				1953	Mar. 23, 1953	--------	19,000
1936	Apr. 20, 1936	---------	4,980	1954	May 8, 1954	--------	6,460
1937	Jan. 27, 1937	---------	a58,000	1955	Apr. 7, 1955	--------	16,400
1938	Mar. 2,3, 1938	---------	24,000				
1939	Mar. 16, 1939	---------	23,400	1956	Feb. 25, 1956	--------	20,100
1940	May 3, 1940	---------	15,400	1957	June 2, 1957	--------	39,900
				1958	Nov. 24, 1957	--------	49,600
1941	Feb. 6, 1941	---------	4,870	1959	Feb. 24, 1959	--------	15,400
1942	Apr.21,22, 1942	---------	14,300	1960	May 28, 1960	--------	10,500
1943	May 25, 1943	---------	11,700				
1944	Apr. 22, 1944	---------	19,700	1961	May 18, 1961	--------	30,000
1945	June 22, 1945	---------	40,400	1962	Mar. 5, 1962	--------	37,500
				1963	Mar. 17, 1963	--------	9,830
1946	June 4, 1946	---------	19,100	1964	Mar. 20, 1964	--------	31,800
1947	Apr. 21, 1947	---------	11,500	1965	Feb. 18, 1965	--------	23,800
1948	Apr. 4, 1948	---------	15,600				
1949	Feb. 4, 1949	---------	36,700	1966	Jan. 9, 1966	--------	23,500
1950	Jan. 19, 1950	---------	51,800	1967	May 21, 1967	--------	20,800
				1968	May 21, 1968	--------	24,000
1951	Mar. 1, 1951	---------	23,700				

a Includes 4,700 cfs through 2 levee breaks upstream from station, estimated on basis of records for St. Francis Bay at Riverfront.

476. Tyronza River near Tyronza, Ark.

Location.--Lat 35°30'18", long 90°22'48", in SE¼ sec.7, T.10 N., R.7 E., at bridge on U.S. Highway 63, 2 miles northwest of Tyronza and at mile 34.8.

Drainage area.--290 sq mi.

Gage.--Nonrecording prior to Aug. 16, 1948; recording thereafter. Prior to Jan. 1, 1953, datum of gage was at mean Gulf level, or 0.30 ft below mean sea level. Present datum of gage is 183.87 ft above mean sea level, datum of 1929. All stages adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements. Affected at times by backwater from St. Francis River.

Bankfull stage.--27 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1937	----------	28.2	----------	1946	Jan. 12, 1946	29.6	----------
				1947	June 24, 1947	24.8	----------
1939	Feb. 5, 1939	29.9	----------	1948	Mar. 3, 1948	25.7	----------
1940	Apr. 20, 1940	18.0	----------	1949	Jan. 28, 1949	a29.2	4,040
				1950	Feb. 16, 1950	31.61	5,660
1941	Jan. 25, 1941	13.7	----------				
1942	Apr. 10, 1942	25.9	----------	1951	July 6, 1951	b31.2	4,080
1943	Mar. 22, 1943	23.5	----------	1952	Mar. 12, 1952	28.68	3,860
1944	Feb. 19, 1944	25.88	----------	1953	May 20, 1953	31.45	5,240
1945	Apr. 3, 1945	29.6	----------	1954	Jan. 17, 1954	28.5	3,370

Peak stages and discharges of Tyronza River near Tyronza, Ark.--Continued

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1955	Apr. 14, 1955	29.1	4,470	1962	Apr. 1, 1962	d30.60	3,940
				1963	May 29, 1963	27.98	4,130
1956	Jan. 31, 1956	c29.42	4,040	1964	Dec. 12, 1964	e30.10	3,560
1957	Nov. 20, 1957	b30.80	4,080	1965	Feb. 13, 1965	30.58	4,010
1958	May 4, 1958	a29.10	4,510				
1959	Feb. 17, 1959	29.53	3,950	1966	Feb. 11, 1966	a29.89	3,610
1960	Nov. 10, 1960	24.20	2,780	1967	July 29, 1967	24.80	f2,640
				1968	Apr. 5, 1968	30.40	6,700
1961	Dec. 13, 1961	29.40	4,720				

a Occurred on following day.
b Occurred Jan. 17, 1951.
c Occurred Feb. 20, 1956.
d Occurred Mar. 2-3, 1962.
e Occurred Mar. 12, 1964.
f Maximum peak discharge. Maximum discharge occurred Jan. 1 after rise that crested Dec. 30, 1966.

478. St. Francis River at Parkin, Ark.

Location.--Lat 35°16'23", long 90°33'33", in NE¼SE¼ sec.33, T.8 N., R.5 E., at bridge on U.S. Highway 64 at Parkin, 1.1 miles downstream from Tyronza River, and at mile 102.0.

Drainage area.--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 sq mi.

Gage.--Nonrecording prior to Sept. 10, 1948; recording thereafter. Prior to Apr. 25, 1968, at site 1.8 miles upstream. Datum of gage is 175.30 ft above mean sea level, datum of 1929, supplementary adjustment of 1959.

Stage-discharge relation.--Defined by current-meter measurements. Affected by backwater from St. Francis Bay.

Bankfull stage.--30 ft.

Historical data.--Gage-height records date back to 1893, but, due to levee construction, are not comparable to stages experienced since 1928.

Remarks.--The greater part of St. Francis River floodflow is diverted through St. Francis River floodway at lock and dam 7, about 4 miles northwest of Marked Tree, and is not included in records for this station. Diverted flow, which is included in records for St. Francis Bay at Riverfront, returns to St. Francis River below Marianna.

478.2. Murray Creek near Jonesboro, Ark.

Location.--Lat 35°51'52", long 90°38'26", in SW¼SW¼ sec.2, T.14 N., R.4 E., on left bank, 32 ft upstream from culvert on State Highway 1, 0.1 mile upstream from small tributary, and 4.0 miles northeast of Jonesboro.

Drainage area.--1.38 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 51 cfs and by culvert measurements at 292 cfs, 715 cfs, and 1,300 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Murray Creek near Jonesboro, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Aug. 20, 1960	13.9	1,300	1965	Feb. 10, 1965	9.96	530
1961	May 6, 1961	8.46	292	1966	Apr. 23, 1966	11.92	845
1962	June 1, 1962	9.25	413	1967	June 30, 1967	9.74	470
1963	Mar. 5, 1963	7.5	173	1968	May 16, 1968	13.21	1,160
1964	Mar. 9, 1964	11.20	620	1969	Nov. 28, 1968	9.93	500

478.8. Pope Creek tributary at Birdeye, Ark.

Location.--Lat 35°22'35", long 90°42'02", in NE¼SE¼ sec.30, T.9 N., R.4 E., on right bank 25 ft upstream from culvert on State Highway 42, 0.6 mile west of junction with State Highway 163, and 0.9 mile west of Birdeye.

Drainage area.--0.08 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 18 cfs and by culvert measurements at 42 cfs and 49 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Oct. 13, 1962	4.14	49	1966	Feb. 9, 1966	3.55	28
1964	Mar. 9, 1964	3.95	42	1967	July 30, 1967	3.87	38
				1968	Apr. 4, 1968	4.02	44
1965	Dec. 4, 1964	3.57	28	1969	Jan. 30, 1969	3.95	42

479. St. Francis Bay at Riverfront, Ark.

Location.--Lat 35°15'34", long 90°40'48", in W½ sec.4, T.7 N., R.4 E., at bridge on U.S. Highway 64 at Riverfront, 0.8 mile upstream from mouth, and 7 miles west of Parkin.

Drainage area.--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 sq mi.

Gage.--Nonrecording prior to Aug. 20, 1948; recording thereafter. Datum of gage is 171.22 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements. Affected by backwater from St. Francis River.

Bankfull stage.--30 ft.

Remarks.--Discharges tabulated on next page are combined flows of St. Francis River at Parkin (p. B-9) and St. Francis Bay at Riverfront and are published by Corps of Engineers as "St. Francis River near Wittsburg." Records furnished by Corps of Engineers. Only annual maximum daily discharges are shown.

Maximum daily discharges of St. Francis River at Parkin and St. Francis Bay at Riverfront, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	July 15, 1928	---------	28,900	1949	Feb. 8, 1949	---------	37,600
1929	May 30, 1929	---------	22,900	1950	Jan. 21, 1950	---------	53,400
1930	Feb. 8, 1930	---------	36,300				
				1951	Jan. 23, 1951	---------	24,700
1931	Dec. 17, 1931	---------	12,700	1952	Jan. 16, 1952	---------	31,100
1932	Feb. 3, 1932	---------	32,600	1953	Mar. 24, 1953	---------	28,000
1933	June 2, 1933	---------	26,500	1954	Jan. 22, 1954	---------	10,900
1934	Apr. 4, 1934	---------	21,100	1955	Apr. 15, 1955	---------	24,900
1935	Mar. 30, 1935	---------	37,300				
				1956	Feb. 24, 1956	---------	27,900
1936	May 1, 1936	---------	7,630	1957	June 5, 1957	---------	37,400
1937	Feb. 2, 1937	---------	74,100	1958	Nov. 27, 1957	---------	45,200
1938	Mar. 7, 1938	---------	26,100	1959	Feb. 19, 1959	---------	24,500
1939	Feb. 21, 1939	---------	26,400	1960	Mar. 17, 1960	---------	11,200
1940	May 6, 1940	---------	14,700				
				1961	May 25, 1961	---------	28,500
1941	Jan. 26, 1941	---------	5,340	1962	Mar.11-12, 1962	---------	39,000
1942	Apr. 12, 1942	---------	17,800	1963	May 29, 1963	---------	15,800
1943	June 1-2, 1943	---------	11,700	1964	Mar. 20, 1964	---------	30,300
1944	Apr. 24, 1944	---------	22,700	1965	Apr. 7, 1965	---------	23,300
1945	June 27, 1945	---------	44,500				
				1966	May 2, 1966	---------	31,200
1946	Jan. 17, 1946	---------	26,600	1967	May 24-25, 1967	---------	23,000
1947	May 22, 1947	---------	14,300	1968	May 20,21, 1968	---------	34,000
1948	Apr. 15, 1948	---------	23,200				

479.24. Crooked Bayou tributary at State Highway 149, at Hughes, Ark.

Location.--Lat 34°57'07", long 90°28'00", in SW¼SE¼ sec.16, T.4 N., R.6 E., on right bank 19 ft upstream from culvert on State Highway 149, 0.2 mile upstream from U.S. Highway 79, and 0.4 mile northeast of junction with State Highway 38 at Hughes.

Drainage area.--0.48 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 7 cfs and by culvert measurements at 18 cfs, 81 cfs, 115 cfs, and 167 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Mar. 11, 1963	(a)	110	1966	Feb. 9, 1966	8.68	115
1964	Apr. 5, 1964	8.39	81	1967	Aug. 3, 1967	7.92	46
1965	May 27, 1965	9.24	167	1968	Dec. 2, 1967	8.79	119
				1969	Nov. 28, 1968	8.16	62

a Peak stage did not reach bottom of gage.

479.5. L'Anguille River at Palestine, Ark.

Location.--Lat 34°58'20", long 90°53'10", in NW¼ sec.10, T.4 N., R.2 E., at bridge on U.S. Highway 70, 1 mile east of Palestine, and at mile 11.6.

Drainage area.--786 sq mi.

Gage.--Nonrecording prior to Nov. 1, 1949; recording thereafter. Prior to Jan. 1, 1952, datum of gage was at mean Gulf level, or 0.32 ft below mean sea level. Present datum of gage is 166.68 ft above mean sea level, datum of 1929. All stages adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 13,700 cfs and extended above by logarithmic plotting. Affected at times by backwater from Mississippi River.

Bankfull stage.--22 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1933	Apr.13,14, 1933	28.8	----------	1952	Mar. 14, 1952	b24.65	6,430
				1953	May 20, 1953	27.55	15,600
1935	Apr. 1,2, 1935	27.45	----------	1954	Jan. 24, 1954	23.9	5,800
1936	Apr.23,24, 1936	28.87	----------	1955	May 29, 1955	24.55	8,150
1937	Feb. 13, 1937	39.7	----------				
				1956	Feb. 20, 1956	25.7	11,000
1939	Mar. 3,4, 1939	26.8	----------	1957	Nov. 20, 1957	27.65	15,300
				1958	May 11, 1958	26.35	12,500
1942	Dec. 31, 1942	20.9	----------	1959	Feb. 18, 1959	25.10	10,200
1943	June 8, 1943	26.08	----------	1960	June 29, 1960	23.65	4,300
1944	May 7,8, 1944	25.2	----------				
1945	Apr. 3, 1945	29.6	----------	1961	Dec. 18, 1961	c26.95	11,000
				1962	Mar. 1, 1962	26.38	13,700
1946	Jan. 12, 1946	26.75	----------	1963	Mar. 14, 1963	d23.46	4,610
1947	May 26,27, 1947	22.9	----------	1964	Mar. 12, 1964	25.41	9,980
1948	Mar.3,Apr.13,1948	25.4	----------	1965	Feb. 15, 1965	24.89	8,880
1949	Jan. 29, 1949	26.6	13,500				
1950	Jan. 14, 1950	a30.92	12,400	1966	May 2, 1966	26.20	10,700
				1967	Dec. 22, 1967	23.16	3,660
1951	Jan. 18, 1951	24.7	9,000	1968	May 19, 1968	24.80	7,700

a Occurred Feb. 3, 1950.
b Occurred Apr. 4, 1952.
c Occurred May 25, 1961.
d Occurred on following day.

MISSISSIPPI RIVER MAIN STEM

479.7. Mississippi River at Helena, Ark.

Location.--Lat 34°31'26", long 90°35'02", on right bank at Helena, Phillips County, 10 miles downstream from St. Francis River and at mile 663.3.

Drainage area.--941,700 sq mi, approximately.

Gage.--Nonrecording. Datum of gage is 141.70 ft above mean sea level, datum of 1929, supplementary adjustment of 1958.

Stage-discharge relation.--Defined by current-meter measurements below 2,014,000 cfs. Measurements made occasionally since 1882 and frequently since 1928.

Bankfull stage.--41 ft.

Remarks.--Natural flow of stream affected by many reservoirs and navigation dams. Records from publications of Mississippi River Commission and Memphis District, Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges of Mississippi River at Helena, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1828	----------	43.11	----------
1844	----------	42.21	----------
1849	----------	42.81	----------
1850	May 1, 1850	42.81	----------
1851	----------	39.81	----------
1858	July 2-6, 1858	44.61	----------
1859	Mar. 22, 1859	43.61	----------
1862	----------	46.4	----------
1865	----------	44.4	----------
1867	----------	45.82	----------
1872	Apr. 26, 1872	39.03	----------
1873	Mar. 6, 1873	40.0	----------
1874	May 11, 1874	45.82	----------
1875	Apr.12-14, 1875	42.4	----------
1876	Apr.18,19, 1876	44.85	----------
1877	Apr.30,May 1,1877	41.8	----------
1878	May 3,4, 1878	38.75	----------
1879	Jan. 31, 1879	37.25	----------
1880	Mar. 31, 1880	43.7	----------
1881	May 14, 1881	43.74	----------
1882	Mar. 8, 1882	a47.2	1,558,000
1883	Mar. 8,9, 1883	46.9	----------
1884	Mar. 6, 1884	47.0	----------
1885	Jan. 28, 1885	a40.7	1,021,000
1886	Apr. 30, 1886	48.1	----------
1887	Mar.21,22, 1887	46.4	----------
1888	Apr.14,15, 1888	42.8	----------
1889	June 28, 1889	34.1	----------
1890	Mar.29,30, 1890	47.72	----------
1891	Mar. 21, 1891	a44.7	1,455,000
1892	May 11, 1892	45.73	1,326,000
1893	May 23, 1893	a47.92	1,594,000
1894	Feb. 21, 1894	38.07	----------
1895	Mar.30,31, 1895	31.3	----------
1896	Apr. 17, 1896	38.42	----------
1897	Apr. 4, 1897	51.75	----------
1898	Apr.14,15, 1898	a49.11	1,405,000
1899	Apr.12-15, 1899	46.75	----------
1900	Mar. 21, 1900	38.25	----------
1901	May 8,9, 1901	41.45	----------
1902	Mar.23,24, 1902	39.58	----------
1903	Mar. 25, 1903	a51.0	1,558,000
1904	Apr. 14, 1904	a47.62	1,412,000
1905	May 29, 1905	37.77	----------
1906	Apr. 18, 1906	a47.05	1,259,000
1907	Feb. 3, 1907	a50.39	1,691,000
1908	Mar. 23, 1908	a45.2	1,356,000
1909	Mar. 23, 1909	a47.65	1,429,000
1910	Mar. 21, 1910	40.7	----------
1911	Apr.28,29, 1911	44.56	----------
1912	Apr. 23, 1912	a54.3	2,041,000
1913	Apr. 22, 1913	55.2	1,805,000
1914	Apr. 17, 1914	39.43	----------
1915	Feb. 20, 1915	43.55	----------
1916	Feb. 10, 1916	a53.4	1,565,000
1917	Apr. 13, 1917	a49.9	1,474,000
1918	Mar. 2,3, 1918	37.49	----------
1919	Apr. 1, 1919	46.2	----------
1920	Apr. 5, 1920	a50.1	1,535,000
1921	Apr. 9,10, 1921	38.65	----------
1922	Apr. 3,4, 1922	a53.1	1,612,000
1923	Mar.30,Apr.1, 1923	45.4	----------
1924	Jan.21,22, 1924	42.2	----------
1925	Mar. 4, 1925	35.1	----------
1926	Apr.23,24, 1926	38.3	----------
1927	Apr. 29, 1927	a56.75	b1,756,000
1928	July 12,13,1928	45.7	1,242,000
1929	May 27, 1929	a52.62	1,584,000
1930	Jan. 25, 1930	43.86	1,133,000
1931	Apr. 16, 1931	a30.3	685,000
1932	Feb. 20, 1932	a49.2	1,287,000
1933	Apr. 12, 1933	a50.62	1,264,000
1934	Mar. 18, 1934	a36.77	866,000
1935	Mar.28,Apr.1, 1935	a48.94	1,192,000
1936	Apr. 23, 1936	a50.64	1,369,000
1937	Feb. 12, 1937	a60.21	1,968,000
1938	Apr. 23, 1938	43.55	1,028,000
1939	Mar. 27, 1939	a48.2	1,309,000
1940	May 9, 1940	40.51	993,000
1941	Apr. 29, 1941	27.0	587,000
1942	Mar. 30, 1942	a38.22	990,000
1943	June 7,8, 1943	a46.89	1,298,000
1944	May 10, 1944	a45.95	1,361,000
1945	Apr. 12, 1945	a49.27	1,442,000
1946	Jan. 23, 1946	a44.2	1,333,000
1947	Apr. 25, 1947	a40.38	1,103,000
1948	Apr. 6, 1948	a45.3	1,296,000
1949	Feb. 6,7, 1949	a43.9	1,284,000
1950	Feb. 23, 1950	a50.28	1,643,000
1951	Mar. 5, 1951	a43.35	1,176,000
1952	Apr. 3, 1952	45.46	1,366,000
1953	May 25, 1953	34.97	866,000
1954	Jan.30,31, 1954	26.25	622,000
1955	Apr. 4, 1955	44.12	1,298,000
1956	Mar. 2, 1956	38.1	1,019,000
1957	Feb. 17, 1957	a39.05	1,027,000
1958	May 16, 1958	a39.02	1,021,000

Peak stages and discharges of Mississippi River at Helena, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 27, 1959	35.70	895,000	1964	Mar.26,27, 1964	a39.73	1,195,000
1960	Apr. 20, 1960	40.6	1,136,000	1965	Apr.13,14, 1965	a40.64	1,139,000
1961	May 23, 1961	48.00	1,541,000	1966	Feb. 25, 1966	a35.3	972,000
1962	Apr. 5, 1962	a44.70	1,308,000	1967	May 25, 1967	37.0	1,022,000
1963	Apr. 1, 1963	42.70	1,329,000	1968	June 10, 1968	a36.02	942,000

a Occurred on different day than peak discharge.
b Does not include flow around levees.

Note.--Daily discharges computed since 1928. Peaks prior to 1928 are results of discharge measurements made during periods of maximum stage.

WHITE RIVER BASIN

479.75. Dog Branch at St. Paul, Ark.

Location.--Lat 35°49'35", long 93°45'50", in NW¼NW¼ sec.4, T.13 N., R.26 W., on left bank 26 ft upstream from culvert on State Highway 23, 200 ft upstream from mouth, at St. Paul.

Drainage area.--1.22 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 8 cfs and by culvert measurement at 547 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 19, 1961	8.50	547	1966	Feb. 9, 1966	7.59	330
1962	1962	(a)	----------	1967	Sept. 15, 1967	7.04	205
1963	1963	(a)	----------	1968	Oct. 30, 1967	8.19	475
1964	Apr. 5, 1964	7.40	290	1969	Jan. 29, 1969	7.57	330
1965	July 3, 1965	7.11	225				

a Peak stage did not reach bottom of gage.

479.9. West Fork White River tributary near Greenland, Ark.

Location.--Lat 35°58'20", long 94°09'55", in SE¼ sec.16, T.15 N., R.30 W., on right bank 15 ft upstream from culvert on U.S. Highway 71, 0.5 mile upstream from mouth, and 1.5 miles south of Greenland.

Drainage area.--0.7 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 36 cfs and by culvert measurements at 640 cfs and 1,360 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of West Fork White River tributary near Greenland, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	May 5, 1960	11.4	1,360	1965	Jan. 22, 1965	4.34	24
1961	May 7, 1961	7.70	640	1966	Feb. 9, 1966	5.10	88
1962	Apr. 10, 1962	a5.64	260	1967	July 5, 1967	4.97	72
1963	Mar. 5, 1963	a3.6	15	1968	Dec. 21, 1967	5.59	165
1964	Sept. 22, 1964	4.59	38	1969	Jan. 29, 1969	5.36	127

a Higher peak may have occurred while gage was out temporarily.

480. West Fork White River at Greenland, Ark.

Location.--Lat 35°59', long 94°10', in NW¼ sec.16, T.15 N., R.30 W., near left bank on downstream side of pier of bridge on old U.S. Highway 71, 1 mile south of Greenland, 5.5 miles upstream from small tributary, and 10.5 miles upstream from mouth.

Drainage area.--83 sq mi.

Gage.--Recording. Datum of gage is 1,233.00 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and by contracted-opening measurement at 34,700 cfs.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Feb. 13, 1946	9.66	6,410	1953	Mar. 17, 1953	6.95	4,750
	May 24, 1946	13.71	23,400		May 12, 1953	7.50	5,560
1947	Nov. 6, 1946	9.09	5,080	1954	May 2, 1954	5.98	3,270
	Nov. 9, 1946	9.28	5,500				
	Dec. 10, 1946	8.65	4,150	1955	Dec. 27, 1954	6.56	4,140
	Apr. 10, 1947	7.86	3,170		Feb. 19, 1955	8.20	6,790
	June 1, 1947	9.76	6,660		Mar. 20, 1955	7.40	5,390
					Apr. 21, 1955	8.35	7,180
1948	Aug. 11, 1948	10.60	11,800		May 21, 1955	6.38	3,840
	Aug. 14, 1948	12.10	18,600		May 26, 1955	6.43	3,840
					June 15, 1955	8.03	6,420
1949	Jan. 24, 1949	9.16	8,050				
	Jan. 27, 1949	6.58	3,390	1956	Apr. 29, 1956	7.70	5,530
	Feb. 14, 1949	9.05	7,570		May 15, 1956	10.00	10,800
	June 13, 1949	10.64	12,100				
				1957	Feb. 5, 1957	7.32	4,430
1950	Jan. 4, 1950	6.62	3,540		Apr. 3, 1957	13.54	27,700
	Jan. 13, 1950	8.54	6,920		Apr. 26, 1957	6.59	3,360
	Feb. 12, 1950	7.06	4,290		May 17, 1957	9.52	8,700
	May 11, 1950	9.71	9,900		May 22, 1957	13.47	27,700
	July 18, 1950	6.60	3,750		May 25, 1957	7.62	4,940
	July 22, 1950	6.98	4,380				
				1958	July 12, 1958	9.75	9,420
1951	Feb. 20, 1951	8.72	7,410		July 26, 1958	6.66	3,430
1952	Apr. 12, 1952	6.08	3,600	1959	Nov. 16, 1958	7.30	4,430
	May 23, 1952	7.60	5,700		Mar. 5, 1959	8.90	7,400
					May 11, 1959	7.25	4,270
1953	Mar. 14, 1953	9.50	9,800				

Peak stages and discharges of West Fork White River at Greenland, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Nov. 4, 1959	9.54	8,700	1964	May 11, 1964	6.54	3,360
	Dec. 27, 1959	7.46	4,770				
	May 6, 1960	a14.50	34,700	1965	Apr. 6, 1965	6.50	3,360
	May 20, 1960	8.30	6,220		May 9, 1965	6.86	3,830
	July 25, 1960	8.75	7,200	1966	Jan. 1, 1966	10.52	11,400
1961	May 5, 1961	11.15	14,200		Feb. 9, 1966	12.96	24,200
	Aug. 14, 1961	6.56	3,270		Apr. 23, 1966	9.60	8,940
	Sept. 13, 1961	6.73	3,420	1967	May 6, 1967	4.56	1,890
1962	Apr. 11, 1962	6.15	2,740	1968	Oct. 30, 1967	8.90	7,400
					Dec. 21, 1967	7.65	5,020
1963	May 5, 1963	5.50	2,330		Feb. 1, 1968	8.80	7,200
					Mar. 19, 1968	7.24	4,340
1964	Apr. 5, 1964	7.63	4,940		Apr. 19, 1968	6.16	3,060

a Gage height in gage well, 13.60 ft from floodmarks.

485. West Fork White River near Fayetteville, Ark.

Location.--Lat 36°03'12", long 94°06'16", in NE¼NE¼ sec.24, T.16 N., R.30 W., at bridge on State Highway 16, 3 miles southeast of Fayetteville, and at mile 3.4.

Drainage area.--118 sq mi.

Gage.--Recording. Datum of gage is 1,158.06 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,600 cfs and extended above by slope-area and contracted-opening measurements at 26,500 cfs, 36,000 cfs, and 53,000 cfs.

Bankfull stage.--13 ft.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Feb. 15, 1938	13.62	5,780	1943	Dec. 27, 1942	19.03	25,500
	Feb. 18, 1938	16.18	9,010		May 10, 1943	19.71	36,000
	May 23, 1938	15.20	7,530				
				1944	Apr. 8, 1944	16.33	9,210
1939	Feb. 19, 1939	12.75	5,080		Apr. 10, 1944	15.11	7,150
					June 14, 1944	18.16	17,000
1940	Sept. 24, 1940	11.61	4,100				
				1945	Feb. 21, 1945	15.78	8,290
1941	Jan. 1, 1941	15.83	8,900		Feb. 26, 1945	14.06	5,870
	Apr. 19, 1941	19.10	26,500		Mar. 19, 1945	17.05	10,900
					Mar. 30, 1945	14.43	6,230
1942	Oct. 16, 1941	13.60	5,780		Apr. 14, 1945	21.50	53,000
	Oct. 31, 1941	12.80	5,080		June 10, 1945	17.66	13,700
	Apr. 8, 1942	13.12	5,340				
				1960	May 6, 1960	a21.5	53,000
1943	Nov. 7, 1942	14.34	6,050				

a Annual peak only, from floodmark.

486. White River near Fayetteville, Ark.

Location.--Lat 36°04'23", long 94°04'51", in NE¼SW¼ sec. 8, T.16 N., R.29 W., 0.65 mile downstream from West Fork White River, 4.3 miles east of Fayetteville, and at mile 684.0.

Drainage area.--396 sq mi.

Gage.--Recording. Datum of gage is 1,138.25 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs.

Remarks.--Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	Mar. 9, 1964	14.2	8,500	1967	Apr. 14, 1967	11.88	6,370
	Apr. 5, 1964	17.75	13,200				
	May 11, 1964	14.56	8,900	1968	Oct. 30, 1967	22.48	27,000
					Dec. 14, 1967	15.17	9,490
1965	Apr. 6, 1965	13.66	8,020		Dec. 21, 1968	17.88	13,400
	May 10, 1965	15.35	9,740		Jan. 30, 1968	14.27	8,570
					Feb. 1, 1968	18.49	14,600
1966	Jan. 1, 1966	22.15	25,700		Mar. 21, 1968	19.61	17,100
	Feb. 9, 1966	24.92	39,400		Apr. 3, 1968	14.20	8,500
	Apr. 24, 1966	20.30	18,900		Apr. 20, 1968	15.10	9,410

489. Whitener Branch tributary near Spring Valley, Ark.

Location.--Lat 36°10'24", long 93°54'59", in SE¼NW¼ sec.1, T.17 N., R.28 W., on left bank 30 ft upstream from culvert on State Highway 68, 1.0 mile east of Spring Valley, and 1.3 miles upstream from mouth.

Drainage area.--1.00 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 138 cfs and by culvert measurements at 686 cfs and 1,410 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	July 25, 1960	17.6	1,500	1965	1965	(a)	<80
1961	May 7, 1961	11.46	686	1966	Feb. 9, 1966	7.66	262
1962	1962	(a)	<145	1967	July 5, 1967	4.88	60
1963	May 26, 1963	6.27	153	1968	Dec. 21, 1967	5.59	107
1964	Apr. 5, 1964	5.27	85	1969	Jan. 29, 1969	5.48	100

< Less than.
a Peak stage did not reach bottom of gage.

489.4. War Eagle Creek near Witter, Ark.

Location.--Lat 35°54'12", long 93°42'06", in SE¼SE¼ sec.2, T.14 N., R.26 W., on right bank on downstream side of bridge on State Highway 23, 800 ft upstream from small tributary, and 2.8 miles south of Witter.

Drainage area.--22 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 490 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	May 26, 1963	9.2	500	1966	Apr. 23, 1966	13.63	----------
1964	Mar. 9, 1964	11.52	----------	1967	May 14, 1967	10.37	----------
				1968	Oct. 30, 1967	12.59	----------
1965	May 9, 1965	11.70	----------	1969	Jan. 29, 1969	14.54	----------

490. War Eagle Creek near Hindsville, Ark.

Location.--Lat 36°12'02", long 93°51'16", in SE¼NE¼ sec.28, T.18 N., R.27 W., on left bank 800 ft upstream from bridge on State Highway 45, 3.8 miles downstream from Clear Creek, 3.9 miles north of Hindsville, and at mile 22.4.

Drainage area.--262 sq mi.

Gage.--Recording. Datum of gage is 1,168.06 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1964, at datum 2.00 ft higher.

Stage-discharge relation.--Defined by current-meter measurements below 28,000 cfs.

Bankfull stage.--15 ft.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	May 10, 1943	28.1	a50,000	1957	May 14, 1957	11.10	7,080
					May 17, 1957	19.65	21,200
1953	Mar. 14, 1953	12.98	9,260		May 23, 1957	23.30	32,300
	Mar. 18, 1953	11.98	8,020		May 25, 1957	12.39	8,480
	May 13, 1953	12.91	9,770		May 30, 1957	9.16	5,310
					June 2, 1957	11.06	7,080
1954	May 2, 1954	7.47	3,810		June 18, 1957	10.13	6,120
1955	Dec. 28, 1954	11.38	7,380	1958	Mar. 9, 1958	9.80	5,140
	Feb. 20, 1955	10.00	6,030		July 25, 1958	10.14	5,450
	Mar. 21, 1955	14.56	11,900		Aug. 2, 1958	15.04	12,200
1956	Apr. 29, 1956	14.16	11,100	1959	June 12, 1959	10.54	5,890
	May 15, 1956	14.84	12,300				
				1960	Oct. 3, 1959	16.78	13,800
1957	Feb. 5, 1957	10.51	6,500		Nov. 4, 1959	16.73	13,600
	Mar. 24, 1957	9.86	5,940		May 6, 1960	16.10	14,000
	Apr. 3, 1957	23.86	34,600		May 20, 1960	16.26	14,300
	Apr. 26, 1957	14.38	11,200		July 25, 1960	20.25	22,700

Peak stages and discharges of War Eagle Creek near Hindsville, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 6, 1961	9.84	5,140	1966	Jan. 2, 1966	18.08	14,900
	May 7, 1961	23.10	31,600		Feb. 10, 1966	19.84	18,200
	May 20, 1961	12.84	8,820		Apr. 24, 1966	15.28	10,200
1962	Aug. 1, 1962	12.25	7,980	1967	Apr. 14, 1967	9.34	3,450
1963	Mar. 5, 1963	6.21	2,320	1968	Oct. 30, 1967	20.30	19,200
					Dec. 14, 1967	11.79	5,720
1964	Mar. 9, 1964	10.46	6,500		Dec. 21, 1967	12.33	6,310
	Apr. 5, 1964	13.12	9,950		Feb. 1, 1968	13.22	7,390
					Mar. 21, 1968	16.08	11,400
1965	Apr. 6, 1965	12.11	6,060		Apr. 4, 1968	11.93	5,870
	May 10, 1965	16.27	11,800				

a Annual peak only, approximately.

495. White River near Rogers, Ark.

Location.--Lat 36°19'59", long 94°01'07", in N½ 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 sq mi.

Gage.--Recording. Datum of gage is 1,006.47 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 67,000 cfs.

Bankfull stage.--31 ft.

Historical data.--Flood in May 1943 was highest known since at least 1892, from information by local residents.

Remarks.--Base for partial-duration series, 18,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	May 1943	52.9	a100,000	1957	May 24, 1957	42.66	62,700
					May 26, 1957	25.61	25,600
1945	April 1945	50.4	a89,000				
				1958	Aug. 3, 1958	22.08	20,100
1953	Mar. 15, 1953	27.04	27,800				
	Mar. 18, 1953	23.77	22,700	1959	Mar. 6, 1959	20.34	17,400
	May 13, 1953	27.34	28,300				
				1960	Oct. 4, 1959	23.69	21,200
1954	May 3, 1954	16.58	11,600		Nov. 5, 1959	27.78	27,500
					May 7, 1960	39.13	51,400
1955	Dec. 29, 1954	21.72	18,600		May 21, 1960	30.43	31,800
	Feb. 21, 1955	22.93	20,400		July 26, 1960	30.89	32,800
	Mar. 21, 1955	25.42	24,500				
				1961	May 8, 1961	40.60	53,600
1956	Apr. 30, 1956	21.85	19,600		May 20, 1961	24.46	21,200
	May 16, 1956	29.58	32,200				
				1962	Nov. 23, 1961	17.95	12,300
1957	Apr. 4, 1957	43.73	65,700				
	Apr. 27, 1957	23.42	22,000	1963	Mar. 6, 1963	9.80	4,470
	May 18, 1957	30.70	34,300				

a Annual peak only.

500. White River at Beaver, Ark.

Location.--Lat 36°28'20", long 93°45'55", in NE¼ sec.20, T.21 N., R.26 W., on upstream side of Missouri & North Arkansas Railway bridge, a quarter of a mile east of Beaver, 2¾ miles upstream from Leatherwood Creek, and at mile 595.5.

Drainage area.--1,238 sq mi.

Gage.--Nonrecording. Datum of gage is 883.04 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 90,000 cfs.

Bankfull stage.--30 ft.

Remarks.--Peaks for period 1921-23 computed from plotted Empire District Electric Co. gage readings at site 1,500 ft upstream revised to read same as present gage. Base for partial-duration series, 22,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1898	----------	40	a94,000	1935	June 4, 1935	23.73	34,800
					June 9, 1935	21.70	29,900
1910	May 17, 1910	17.35	a21,500		June 19, 1935	27.55	41,100
1922	Apr. 6, 1922	10.50	9,400	1936	Dec. 8, 1935	12.32	12,000
1923	Feb. 2, 1923	21.08	28,200	1937	Jan. 16, 1937	18.58	23,400
1924	May 1, 1924	18.35	23,500	1938	Feb. 19, 1938	26.80	40,300
					May 24, 1938	19.82	25,700
1925	Dec. 20, 1924	18.12	22,900				
				1939	Apr. 18, 1939	16.70	19,700
1926	Oct. 11, 1925	12.3	b12,300				
				1940	Apr. 13, 1940	16.00	18,400
1927	Jan. 25, 1927	21.70	29,400				
	Apr. 16, 1927	37.0	80,200	1941	Jan. 3, 1941	19.44	24,800
	Apr. 20, 1927	25.10	36,300		Apr. 20, 1941	26.3	39,500
1928	Oct. 2, 1927	25.65	39,700	1942	Nov. 1, 1941	20.5	27,200
	Oct. 4, 1927	26.85	43,000		Apr. 10, 1942	20.35	27,000
	Dec. 15, 1927	30.60	48,900				
	Apr. 7, 1928	22.10	30,800	1943	Dec. 29, 1942	31.95	59,500
	Apr. 22, 1928	26.50	42,200		May 12, 1943	42.33	105,000
	June 14, 1928	23.73	34,800				
	June 22, 1928	18.78	23,500	1944	June 16, 1944	22.3	31,300
1929	Jan. 26, 1929	23.85	33,900	1945	Feb. 23, 1945	23.00	33,000
	Apr. 10, 1929	19.01	23,900		Feb. 28, 1945	21.40	29,200
	May 10, 1929	20.99	28,300		Mar. 4, 1945	19.96	26,100
	July 9, 1929	22.00	30,600		Mar. 20, 1945	28.25	47,100
					Apr. 1, 1945	22.65	32,000
1930	May 12, 1930	19.15	24,500		Apr. 16, 1945	40.9	98,200
					May 17, 1945	18.38	22,600
1931	Feb. 10, 1931	19.69	25,100		June 12, 1945	29.75	52,000
1932	Jan. 18, 1932	16.15	19,100	1946	Feb. 15, 1946	22.55	32,000
					May 26, 1946	32.50	61,400
1933	Dec. 25, 1932	20.46	27,200				
	May 15, 1933	27.70	42,200	1947	Nov. 11, 1946	20.60	27,400
	Sept. 5, 1933	18.89	23,700		Dec. 12, 1946	20.97	28,300
1934	Oct. 23, 1933	14.83	16,500	1948	Aug. 16, 1948	24.52	36,800
1935	Mar. 13, 1935	22.74	32,300	1949	Jan. 26, 1949	26.3	41,600

Peak stages and discharges of White River at Beaver, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Feb. 16, 1949	28.5	48,000	1953	May 14, 1953	21.65	27,100
1950	Jan. 6, 1950	19.9	25,900	1954	May 4, 1954	13.8	12,100
	Jan. 15, 1950	21.0	28,300				
	Feb. 14, 1950	20.1	26,300	1955	Mar. 22, 1955	20.20	23,900
	May 12, 1950	31.95	59,500				
	July 20, 1950	21.3	29,000	1956	May 17, 1956	23.7	31,800
	Aug. 7, 1950	20.1	26,300				
				1957	Apr. 5, 1957	33.50	61,600
1951	Feb. 20, 1951	27.75	45,900		Apr. 28, 1957	19.3	22,000
					May 19, 1957	24.5	34,400
1952	Mar. 12, 1952	18.58	23,100		May 25, 1957	33.0	59,700
	Apr. 14, 1952	19.10	24,100				
				1958	Aug. 3, 1958	16.72	17,700
1953	Mar. 16, 1953	21.10	25,900				

a Annual peak only.
b Maximum crest discharge; maximum discharge, 19,300 cfs at 12 p.m. Sept. 30, 1926, rising stage.

502. Maxwell Creek at Kingston, Ark.

Location.--Lat 36°03'06", long 93°31'03", in SW¼NW¼ sec.15, T.16 N., R.24 W., on right bank 60 ft upstream from bridge on State Highway 21, 0.1 mile north of Kingston, and 0.4 mile upstream from mouth.

Drainage area.--2.9 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 12 cfs, by slope-area measurement at 971 cfs, and by contracted-opening measurement at 4,270 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	14.4	4,270	1966	Jan. 1, 1966	6.65	850
				1967	June 29, 1967	5.08	215
1963	Mar. 4, 1963	4.25	70	1968	Mar. 20, 1968	6.87	971
1964	Apr. 5, 1964	4.80	160	1969	Jan. 29, 1969	6.35	660
1965	May 9, 1965	6.79	900				

504. Osage Creek tributary at Berryville, Ark.

Location.--Lat 36°22'07", long 93°33'30", in SE¼NW¼ sec.29, T.20 N., R.24 W., on left bank 20 ft upstream from culvert on College Street, 0.5 mile east of State Highway 21 in Berryville, and 2.4 miles upstream from mouth.

Drainage area.--1.0 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 3.6 cfs and by culvert measurements at 128 cfs, 160 cfs, and 406 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Osage Creek tributary at Berryville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	7.58	406	1966	Feb. 9, 1966	6.02	252
1962	Apr. 22, 1962	5.27	185	1967	June 29, 1967	3.97	70
1963	May 26, 1963	5.01	160	1968	May 13, 1968	7.20	368
1964	Apr. 5, 1964	4.55	126	1969	Jan. 29, 1969	4.90	152
1965	June 13, 1965	5.02	160				

505. Kings River near Berryville, Ark.

Location.--Lat 36°25'30", long 93°37'20", in E½ sec.3, T.20 N., R.25 W., on right bank at downstream side of highway bridge, 1¼ miles downstream from Bee Creek, 2¼ miles upstream from Clabber Creek, 5¼ miles northwest of Berryville, and at mile 35.1.

Drainage area.--532 sq mi.

Gage.--Nonrecording Apr. 4 to July 11, 1939, and Oct. 1, 1951, to Oct. 22, 1952; recording July 12, 1939, to Sept. 30, 1951, and since Oct. 23, 1952. Prior to Oct. 1, 1951, at site 5 miles upstream at datum 27.71 ft higher. Present datum is 963.10 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 cfs.

Bankfull stage.--28 ft; 16 ft at former site and datum.

Remarks.--Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 14, 1927	a38.0	b62,000	1946	May 25, 1946	17.82	18,900
1939	Apr. 17, 1939	17.0	19,000	1947	Nov. 10, 1946	13.25	10,700
	May 12, 1939	13.3	11,300		Dec. 12, 1946	15.64	15,500
1940	Apr. 11, 1940	13.93	12,400		May 14, 1947	10.60	8,000
1941	Jan. 1, 1941	13.01	10,100	1948	Jan. 1, 1948	9.55	6,210
	Apr. 19, 1941	20.18	25,600	1949	Jan. 25, 1949	18.24	20,600
1942	Oct. 31, 1941	15.30	14,000		Jan. 28, 1949	12.40	9.980
	Apr. 9, 1942	13.16	10,400		Feb. 14, 1949	20.65	26,200
1943	Dec. 27, 1942	24.48	39,900	1950	Jan. 4, 1950	17.48	19,100
	May 10, 1943	30.20	59,000		Jan. 13, 1950	a16.1	11,200
1944	Feb. 29, 1944	12.22	8,840		Feb. 13, 1950	16.00	16,200
	June 15, 1944	13.23	10,400		May 10, 1950	24.32	39,400
1945	Feb. 21, 1945	18.68	20,500		May 21, 1950	a13.2	8,180
	Feb. 26, 1945	16.40	15,300		July 19, 1950	15.60	15,500
	Mar. 3, 1945	13.88	11,000	1951	Feb. 18, 1951	20.40	25,900
	Mar. 19, 1945	22.35	32,100	1952	Mar. 11, 1952	18.24	13,700
	Mar. 31, 1945	16.74	15,900		Apr. 12, 1952	17.43	12,700
	Apr. 2, 1945	21.16	27,900	1953	Mar. 15, 1953	13.68	8,680
	Apr. 14, 1945	26.90	50,000		Mar. 18, 1953	14.99	9,980
	May 16, 1945	12.75	10,000		May 13, 1953	17.50	12,800
	June 11, 1945	17.98	19,400	1954	May 3, 1954	7.01	2,760
1946	Jan. 9, 1946	15.44	14,300				
	Feb. 13, 1946	17.53	18,300	1955	Mar. 21, 1955	16.80	12,000

Peak stages and discharges of Kings River near Berryville, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	May 21, 1955	17.07	12,300	1961	May 7, 1961	35.98	55,900
1956	Apr. 29, 1956	20.32	17,500	1962	Apr. 11, 1962	12.24	6,890
	May 15, 1956	20.50	17,900				
				1963	Mar. 5, 1963	8.84	3,720
1957	Feb. 26, 1957	13.68	8,180				
	Apr. 4, 1957	33.28	46,300	1964	Mar. 10, 1964	14.80	9,430
	Apr. 27, 1957	17.53	13,000		Apr. 6, 1964	15.01	9,630
	May 18, 1957	22.40	21,300		Sept. 1, 1964	13.39	8,030
	May 23, 1957	29.85	36,800				
	May 25, 1957	20.99	18,800	1965	Apr. 3, 1965	14.80	9,430
	June 2, 1957	15.35	10,400		May 10, 1965	16.90	11,500
	June 9, 1957	19.05	15,300				
				1966	Jan. 2, 1966	21.66	18,800
1958	Mar. 9, 1958	13.66	8,680		Feb. 10, 1966	25.34	26,500
	Mar. 24, 1958	13.83	8,780		Apr. 24, 1966	21.50	18,400
	Aug. 2, 1958	13.44	8,380				
				1967	Apr. 14, 1967	10.42	5,340
1959	June 12, 1959	16.84	12,100				
				1968	Oct. 31, 1967	19.27	14,500
1960	Oct. 3, 1959	15.86	10,500		Dec. 15, 1967	15.90	10,500
	Nov. 4, 1959	19.07	14,300		Dec. 21, 1967	15.94	10,600
	May 6, 1960	22.66	20,700		Feb. 2, 1968	16.78	11,400
	May 21, 1960	22.59	20,500		Mar. 21, 1968	21.56	18,500
	July 26, 1960	30.41	40,000		June 1, 1968	14.95	9,580

a Present site and datum.
b Annual peak only.

544. Charley Creek near Omaha, Ark.

Location.--Lat 36°27'24", long 93°04'46", in NW¼SW¼ sec.23, T.21 N., R.20 W., on right bank 44 ft upstream from culvert on State Highway 14, 0.1 mile upstream from Sidney Creek, 0.5 mile upstream from mouth, and 6.1 miles east of Omaha.

Drainage area.--3.41 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 3.1 cfs, by slope-area measurement at 725 cfs, and by culvert measurement at 2,740 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	1962	(a)	----------	1966	Feb. 9, 1966	8.84	775
1963	June 19, 1963	12.95	2,740	1967	June 30, 1967	8.79	760
1964	Mar. 9, 1964	7.92	480	1968	Oct. 30, 1967	8.58	690
1965	June 24, 1965	10.07	1,280	1969	Nov. 2, 1968	10.42	1,440

a Peak stage did not reach bottom of gage.

544.5. East Sugarloaf Creek tributary near Lead Hill, Ark.

Location.--Lat 36°22'26", long 92°49'55", in NW¼NW¼ sec.19, T.20 N., R.17 W., on left upstream wingwall 40 ft upstream from culvert on State Highway 14, 0.2 mile upstream from mouth, and 5.0 miles southeast of Lead Hill.

Drainage area.--0.8 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 1 cfs and by culvert measurements at 255 cfs, 466 cfs, 543 cfs, and 2,480 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 14, 1962	a7.24	75	1966	Jan. 1, 1966	7.61	240
1963	Mar. 16, 1963	8.96	466	1967	July 6, 1967	6.95	125
1964	June 1964	7.71	255	1968	July 2, 1968	9.39	543
1965	May 9, 1965	7.91	287	1969	Oct. 13, 1968	15.30	2,480

a Peak stage affected by rockfill at culvert entrance.

550. White River near Flippin, Ark.

Location.--Lat 36°18'50", long 92°33'20", in NE¼ sec.10, T.19 N., R.15 W., 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.--6,067 sq mi.

Gage.--Nonrecording prior to Dec. 21, 1938, at site 1.1 miles upstream at datum 1.52 ft higher; recording thereafter at present site and datum. Datum of present gage is 419.66 ft above mean sea level, datum of 1929 (Corps of Enginners bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 217,000 cfs.

Bankfull stage.--36 ft.

Remarks.--Flow completely regulated since July 23, 1951, by Bull Shoals Reservoir (capacity, 5,408,000 acre-ft). Base for partial-duration series, 34,000 cfs. Only annual peaks are shown since 1950.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 16, 1927	41	a240,000	1931	Aug. 7, 1931	17.3	38,800
1929	Jan. 27, 1929	20.2	52,500	1932	Jan. 17, 1932	18.9	46,100
	Apr. 11, 1929	22.6	64,400		Jan. 25, 1932	18.2	42,800
	Apr. 17, 1929	17.0	37,300				
	Apr. 22, 1929	17.2	38,200	1933	Dec. 26, 1932	21.5	58,900
	May 9, 1929	23.8	70,400		Jan. 22, 1933	17.0	37,500
	May 14, 1929	20.2	52,500		Apr. 18, 1933	19.0	46,500
	May 28, 1929	18.4	43,800		May 16, 1933	32.3	116,000
	June 8, 1929	17.0	37,300				
				1934	Mar. 29, 1934	13.52	23,500
1930	Jan. 15, 1930	19.69	50,100				
	May 13, 1930	16.9	36,900	1935	Mar. 12, 1935	38.1	164,000
					Mar. 25, 1935	22.7	64,900
1931	Feb. 12, 1931	16.3	34,600		June 5, 1935	25.2	78,000

Peak stages and discharges of White River near Flippin, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1935	June 9, 1935	26.8	86,900
	June 19, 1935	29.3	102,000
1936	Sept.29,30, 1936	14.73	27,500
1937	Jan. 10, 1937	17.3	38,700
	Jan. 17, 1937	21.54	58,900
	Feb. 2, 1937	18.7	45,300
	June 11, 1937	17.0	37,300
1938	Jan. 27, 1938	17.4	37,200
	Feb. 19, 1938	34.1	134,000
	Mar. 30, 1938	19.3	46,300
	May 13, 1938	19.0	44,800
	May 24, 1938	22.2	61,000
1939	Nov. 7, 1938	16.8	34,500
	Apr. 19, 1939	17.44	44,200
	May 14, 1939	20.12	54,700
	May 27, 1939	20.14	54,700
	July 3, 1939	20.61	56,600
1940	Apr. 11, 1940	20.33	57,800
1941	Jan. 4, 1941	14.70	34,200
	Apr. 17, 1941	22.20	69,200
	Apr. 21, 1941	29.60	115,000
1942	Oct. 18, 1941	16.74	42,400
	Nov. 1, 1941	21.54	65,300
	Apr. 11, 1942	18.30	49,300
1943	Dec. 27, 1942	23.91	79,200
	Dec. 30, 1942	28.72	110,000
	May 12, 1943	39.06	201,000
	May 21, 1943	29.89	118,000
1944	Mar. 2, 1944	14.71	34,200
	Mar. 23, 1944	15.58	37,900
	Apr. 12, 1944	14.75	34,600
1945	Feb. 21, 1945	22.75	73,500
	Feb. 26, 1945	24.13	80,500
	Mar. 22, 1945	24.03	80,000
	Apr. 3, 1945	28.56	108,000
	Apr. 17, 1945	39.82	215,000
	June 14, 1945	24.68	83,900
1946	Jan. 9, 1946	16.75	43,900
	Feb. 16, 1946	19.62	57,200
	May 16, 1946	21.83	68,300
	May 28, 1946	22.90	74,000
1947	Nov. 7, 1946	18.10	50,000
1947	Nov. 10, 1946	22.82	73,500
	Dec. 13, 1946	22.13	69,800
	Apr. 12, 1947	15.58	38,500
	Apr. 27, 1947	19.01	54,300
1948	Mar. 2, 1948	15.58	38,500
	Mar. 27, 1948	14.82	35,000
	June 19, 1948	20.57	62,200
1949	Jan. 25, 1949	21.10	64,700
	Jan. 28, 1949	24.89	85,000
	Feb. 18, 1949	23.79	78,900
1950	Jan. 4, 1950	22.23	70,400
	Jan. 16, 1950	18.98	54,300
	Feb. 15, 1950	17.63	47,600
	May 13, 1950	36.82	178,000
1951	Feb.23,24,1951	16.54	43,900
1952	Apr. 25, 1952	11.70	21,500
1953	May 3, 1953	13.52	27,500
1954	Apr. 22, 1954	8.06	10,500
1955	July 1, 1955	12.68	24,800
1956	Sept. 12, 1956	8.32	11,100
1957	July 25, 1957	13.30	27,200
1958	Oct. 3, 1957	12.30	24,400
1959	Aug. 31, 1959	7.63	9,680
1960	June 6, 1960	12.71	25,800
1961	Aug. 11, 1961	11.73	21,500
1962	July 13, 1962	10.16	16,800
1963	July 24, 1963	10.66	18,300
1964	Aug. 3, 1964	12.37	23,800
1965	Aug. 26, 1965	12.81	25,100
1966	Aug. 16, 1966	12.50	24,100
1967	July 10, 1967	12.81	26,100
1968	July 17, 1968	13.24	29.700

a Annual peak only, from information by Corps of Engineers.

555.5. Crooked Creek tributary near Dogpatch, Ark.
(Published as "near Marble Falls" prior to 1967)

Location.--Lat 36°09'01", long 93°07'23", in SW¼SW¼ sec.4, T.17 N., R.20 W., on right bank 28 ft upstream from culvert on State Highway 7, 0.4 mile downstream from small tributary, 1.1 miles upstream from mouth, and 2.9 miles north of Dogpatch.

Drainage area.--4.30 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since September 1968.

Stage-discharge relation.--Defined by culvert measurements at 518 cfs, 962 cfs, and 2,980 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	17.4	a2,980	1966	Jan. 1, 1966	6.52	462
1962	1962	(b)	----------	1967	June 29, 1967	6.97	540
1963	May 26, 1963	6.83	518	1968	July 1, 1968	9.86	1,110
1964	Mar. 9, 1964	6.06	384	1969	Jan. 29, 1969	8.85	900
1965	June 24, 1965	7.07	560				

a Peak discharge reduced by storage caused by debris in culvert.
b Peak stage did not reach bottom of gage.

556.5. Smith Creek near Boxley, Ark.

Location.--Lat 35°56'50", long 93°23'52", in SW¼NW¼ sec.23, T.15 N., R.23 W., on left bank 75 ft upstream from bridge on State Highway 21, 1,000 ft upstream from mouth, and 1.7 miles south of Boxley.

Drainage area.--8.32 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since July 1969.

Stage-discharge relation.--Defined by current-meter measurements below 52 cfs and by slope-area measurements at 659 cfs and 3,510 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	June 16, 1963	5.4	140	1966	Feb. 9, 1966	8.67	1,900
1964	Apr. 5, 1964	8.3	1,560	1967	May 14, 1967	5.96	300
1965	Apr. 2, 1965	5.83	260	1968	Oct. 30, 1967	7.37	910
				1969	Jan. 29, 1969	11.06	3,510

558. Dry Branch near Vendor, Ark.

Location.--Lat 35°56'00", long 93°06'46", in SW¼SW¼ sec.21, T.15 N., R.20 W., on right bank 85 ft upstream from bridge on county road, 1,000 ft upstream from mouth, and 2.4 miles southwest of Vendor.

Drainage area.--6.30 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 65 cfs and by field estimates at 1,200 cfs and 2,900 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Dry Branch near Vendor, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Aug. 1, 1962	8.3	40	1966	Feb. 9, 1966	10.70	1,200
1963	May 26, 1963	9.0	200	1967	June 30, 1967	11.58	1,830
1964	May 11, 1964	10.06	790	1968	July 1, 1968	11.36	1,670
1965	July 2, 1965	9.36	350	1969	Jan. 29, 1969	13.10	2,900

560. Buffalo River near St. Joe, Ark.

Location.--Lat 35°59'02", long 92°44'44", in SW¼SW¼ sec.36, T.16 N., R.17 W., near right bank on downstream side of pier 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.--825 sq mi.

Gage.--Nonrecording prior to Mar. 1, 1940; recording thereafter. Prior to Oct. 1, 1939, at site 4.5 miles downstream and at datum 15.25 ft lower (stages published by U.S. Weather Bureau as "at Gilbert"). Datum of present gage is 560.35 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 69,000 cfs and extended above by logarithmic plotting. Not defined at Gilbert site.

Bankfull stage.--25 ft.

Historical data.--Maximum stage known, 50.5 ft in August 1915 (present site and datum), from information by Corps of Engineers; 54.0 ft (former site and datum), from information by U.S. Weather Bureau.

Remarks.--Gage-height records prior to October 1939 furnished by U.S. Weather Bureau. Base for partial-duration series, 13,000 cfs. Only annual peak stages are shown prior to 1940.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	August 1915	54.0	----------	1942	Oct. 16, 1941	17.08	22,100
					Oct. 31, 1941	20.80	32,000
1927	Apr. 14, 1927	40.0	----------		Apr. 8, 1942	17.58	23,400
1928	Dec. 13, 1927	39.0	----------	1943	Dec. 27, 1942	31.0	64,800
					May 10, 1943	39.7	96,900
1929	Jan. 25, 1929	23.5	----------				
				1944	Feb. 28, 1944	15.95	19,300
1930	May 10, 1930	24.4	----------				
				1945	Feb. 21, 1945	25.60	42,500
1931	Feb. 9, 1931	18.8	----------		Feb. 26, 1945	19.04	26,400
					Mar. 3, 1945	20.00	29,100
1932	July 6, 1932	13.5	----------		Mar. 6, 1945	14.08	14,600
					Mar. 19, 1945	25.70	46,500
1933	May 14, 1933	28.8	----------		Mar. 25, 1945	17.00	20,900
					Mar. 30, 1945	30.30	63,300
1936	Dec. 7, 1935	11.6	----------		Apr. 2, 1945	24.00	41,000
					Apr. 15, 1945	41.00	100,000
1937	Jan. 4, 1937	17.0	----------		May 15, 1945	16.08	18,600
					June 11, 1945	32.80	73,100
1938	Feb. 18, 1938	28.0	----------				
				1946	Jan. 9, 1946	19.42	27,900
1939	Apr. 17, 1939	29.0	----------		Feb. 13, 1946	23.90	40,600
					May 16, 1946	16.90	21,700
1940	Apr. 11, 1940	13.79	13,000		May 25, 1946	25.65	46,200
1941	Jan. 1, 1941	13.70	12,800	1947	Nov. 10, 1946	18.57	25,600

Peak stages and discharges of Buffalo River near St. Joe, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Dec. 12, 1946	22.92	37,500	1957	May 14, 1957	16.80	20,200
	Apr. 11, 1947	15.00	17,200		May 17, 1957	16.92	20,400
					May 23, 1957	27.40	49,500
1948	Jan. 1, 1948	19.34	27,300				
				1958	Mar. 9, 1958	16.70	19,900
1949	Jan. 24, 1949	38.80	91,100		Mar. 23, 1958	14.56	15,500
	Jan. 27, 1949	16.65	20,300		May 9, 1958	15.50	17,400
	Feb. 14, 1949	24.75	43,500		Aug. 2, 1958	16.35	19,300
1950	Jan. 4, 1950	25.58	46,200	1959	Nov. 17, 1958	18.60	24,300
	Jan. 13, 1950	15.45	18,000		Apr. 19, 1959	20.11	24,900
	Feb. 12, 1950	24.06	41,300		June 12, 1959	18.08	20,700
	May 12, 1950	22.40	36,000				
	June 3, 1950	14.50	16,000	1960	Nov. 4, 1959	19.52	23,600
	July 19, 1950	16.03	19,400		Feb. 5, 1960	15.10	14,600
					May 6, 1960	21.26	27,600
1951	Feb. 20, 1951	27.57	50,900		May 20, 1960	22.88	31,600
1952	Nov. 24, 1951	18.80	26,000	1961	Mar. 6, 1961	15.06	14,600
	Mar. 11, 1952	21.87	34,300		May 6, 1961	28.66	53,300
	Apr. 12, 1952	22.30	35,400				
	May 23, 1952	17.57	23,000	1962	Jan. 22, 1962	12.34	9,430
1953	Nov. 25, 1952	19.60	28,100	1963	Mar. 17, 1963	9.15	4,820
	Mar. 14, 1953	16.67	19,900				
	Mar. 18, 1953	20.63	29,400	1964	Mar. 9, 1964	22.50	31,800
	Apr. 24, 1953	14.35	15,100		Apr. 5, 1964	25.12	40,400
	May 13, 1953	20.18	28,300		May 11, 1964	19.50	23,700
1954	Apr. 16, 1954	14.50	15,300	1965	Apr. 3, 1965	14.70	13,800
	May 2, 1954	22.70	35,200				
				1966	Jan. 2, 1966	29.4	55,500
1955	Feb. 20, 1955	15.72	17,800		Feb. 9, 1966	37.46	85,900
	Mar. 21, 1955	25.11	42,200		Apr. 24, 1966	20.62	26,300
	Apr. 21, 1955	14.92	16,100				
	May 21, 1955	19.02	25,300	1967	May 15, 1967	13.85	10,900
1956	Feb. 2, 1956	16.10	18,700	1968	Oct. 31, 1967	18.26	19,600
	Feb. 18, 1956	15.82	18,000		Dec. 15, 1967	15.74	14,200
	May 15, 1956	15.00	15,900		Dec. 21, 1967	19.62	22,900
					Feb. 2, 1968	18.61	20,400
1957	Apr. 4, 1957	31.30	62,600		Mar. 21, 1968	28.16	50,400
	Apr. 30, 1957	18.10	23,100		May 14, 1968	16.00	14,700

570. Buffalo River near Rush, Ark.

Location.--Lat 36°07'02", long 92°33'17", in SE¼NE¼ sec.15, T.17 N., R.15 W., 0.6 mile upstream from Rush Creek, 1.4 miles southeast of Rush, and at mile 24.3.

Drainage area.--1,091 sq mi.

Gage.--Nonrecording prior to Jan. 27, 1939, at site 0.6 mile downstream at present datum; recording thereafter at present site and datum. Datum of present gage is 451.98 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 120,000 cfs and by slope-area measurement at 164,000 cfs.

Bankfull stage.--24 ft.

Remarks.--Base for partial-duration series, 14,000 cfs.

Peak stages and discharges of Buffalo River near Rush, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1915	Aug. 19, 1915	45.5	a164,000
1927	Apr. 14, 1927	35.9	a110,000
1929	Jan. 25, 1929	22.2	50,100
	Feb. 26, 1929	14.4	26,300
	Apr. 9, 1929	14.5	26,600
	Apr. 21, 1929	15.0	28,000
	May 9, 1929	15.0	28,000
	July 8, 1929	15.0	28,000
1930	Jan. 13, 1930	13.7	24,400
	Feb. 4, 1930	10.2	15,100
	May 11, 1930	22.7	51,800
1931	Feb. 9, 1931	15.2	28,600
	May 26, 1931	11.5	18,500
1932	Feb. 17, 1932	10.0	15,200
	July 6, 1932	9.9	14,900
1933	Dec. 24, 1932	10.5	16,700
	May 14, 1933	23.9	56,000
1934	Mar. 26, 1934	12.38	22,600
1935	Mar. 11, 1935	24.5	58,300
	Mar. 22, 1935	12.6	21,200
	May 5, 1935	22.0	53,900
	May 15, 1935	10.2	14,700
	June 3, 1935	12.8	21,800
	June 7, 1935	11.7	18,700
	June 17, 1935	21.3	51,100
1936	Dec. 7, 1935	9.7	13,500
1937	Oct. 26, 1936	10.9	16,500
	Jan. 15, 1937	16.9	35,000
	May 2, 1937	14.8	28,000
1938	Jan. 24, 1938	14.0	25,400
	Feb. 15, 1938	17.6	37,400
	Feb. 18, 1938	26.4	65,800
	Mar. 29, 1938	14.4	26,700
	Apr. 16, 1938	12.5	21,000
	May 23, 1938	11.2	17,300
1939	Jan. 30, 1939	11.34	17,300
	Feb. 20, 1939	12.08	19,300
	Mar. 5, 1939	12.41	20,100
	Apr. 17, 1939	26.46	58,900
	May 27, 1939	19.05	37,700
1940	Apr. 12, 1940	9.98	14,000
1941	Jan. 2, 1941	9.97	14,000
1942	Oct. 17, 1941	14.13	21,200
	Oct. 31, 1941	18.33	32,300
	Apr. 9, 1942	14.86	23,100
1943	Dec. 27, 1942	27.24	62,200
	May 11, 1943	37.38	120,000
1944	Feb. 29, 1944	12.96	20,200
1945	Feb. 21, 1945	21.82	45,400
	Feb. 27, 1945	17.28	30,800
	Mar. 3, 1945	16.98	29,900
	Mar. 19, 1945	22.66	48,400
	Mar. 30, 1945	27.68	66,700
	Apr. 2, 1945	20.86	42,400
	Apr. 15, 1945	38.86	121,000
	May 16, 1945	12.74	18,800
	June 11, 1945	31.10	81,800
	June 17, 1945	10.47	14,100
1946	Jan. 9, 1946	17.72	33,700
	Feb. 14, 1946	20.90	44,000
	May 16, 1946	13.98	22,800
	May 25, 1946	20.80	43,600
1947	Nov. 10, 1946	13.49	21,500
	Dec. 12, 1946	19.23	38,400
	Apr. 11, 1947	11.90	17,600
1948	Jan. 1, 1948	15.00	25,600
1949	Jan. 24, 1949	37.06	114,000
	Jan. 28, 1949	14.36	23,700
	Feb. 14, 1949	21.74	46,700
1950	Jan. 4, 1950	21.66	46,700
	Jan. 14, 1950	12.06	18,000
	Feb. 13, 1950	20.32	42,000
	Apr. 4, 1950	10.35	14,000
	May 12, 1950	18.67	36,800
	June 3, 1950	12.07	18,000
	July 19, 1950	11.32	16,100
1951	Feb. 20, 1951	24.35	56,000
	Apr. 22, 1951	10.61	14,500
1952	Nov. 24, 1951	16.13	28,800
	Mar. 11, 1952	20.08	41,300
	Apr. 12, 1952	19.40	39,100
	May 24, 1952	14.06	23,100
1953	Nov. 25, 1952	16.52	30,000
	Mar. 15, 1953	13.60	21,700
	Mar. 18, 1953	17.41	32,800
	Apr. 25, 1953	10.86	15,200
	May 13, 1953	16.36	29,700
1954	Apr. 16, 1954	10.48	14,300
	May 2, 1954	18.83	37,200
1955	Feb. 20, 1955	12.22	18,200
	Mar. 21, 1955	21.23	45,000
	Apr. 21, 1955	11.62	16,800
	May 21, 1955	16.48	30,000

Peak stages and discharges of Buffalo River near Rush, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 2, 1956	12.87	19,900	1961	Apr. 1, 1961	11.97	17,300
	Feb. 18, 1956	13.70	22,000		May 6, 1961	27.55	61,700
	May 16, 1956	11.01	15,400				
				1962	Jan. 23, 1962	8.24	9,570
1957	Apr. 4, 1957	28.30	67,000				
	Apr. 28, 1957	13.10	20,400	1963	May 27, 1963	6.61	6,530
	Apr. 30, 1957	14.60	24,400				
	May 14, 1957	12.78	20,900	1964	Mar. 10, 1964	19.60	37,700
	May 18, 1957	12.98	20,200		Apr. 6, 1964	21.70	41,200
	May 23, 1957	23.66	53,600		May 11, 1964	14.45	23,200
	June 9, 1957	12.40	18,700				
				1965	Apr. 4, 1965	11.05	15,100
1958	Mar. 9, 1958	13.14	21,300				
	Mar. 24, 1958	11.93	18,300	1966	Jan. 2, 1966	25.11	57,000
	May 10, 1958	12.84	20,500		Feb. 10, 1966	32.99	93,600
	Aug. 2, 1958	11.93	18,300		Apr. 24, 1966	18.97	35,100
1959	Nov. 17, 1958	15.48	27,800	1967	May 15, 1967	9.93	11,600
	Apr. 19, 1959	16.06	29,500				
	June 13, 1959	13.21	21,500	1968	Oct. 18, 1967	11.04	14,500
					Oct. 31, 1967	13.75	20,600
1960	Nov. 4, 1959	16.22	28,300		Dec. 15, 1967	11.79	15,800
	Feb. 5, 1960	11.63	16,400		Dec. 21, 1967	15.03	23,700
	May 6, 1960	18.16	34,300		Feb. 2, 1968	15.08	23,800
	May 21, 1960	19.42	38,200		Mar. 21, 1968	25.77	56,400
					May 14, 1968	12.26	17,200
1961	May 6, 1961	11.45	16,000				

a Annual peak only, from information by Corps of Engineers.

573. Dodd Creek tributary near Mountain Home, Ark.

Location.--Lat 36°19'05", long 92°24'01", in NE¼SW¼ sec.17, T.19 N., R.13 W., on right bank 25 ft upstream from culvert on U.S. Highway 62, 0.4 mile upstream from small tributary, and 1.5 miles southwest of Mountain Home.

Drainage area.--0.76 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since September 1968.

Stage-discharge relation.--Defined by current-meter measurement at 263 cfs and by culvert measurements at 223 cfs and 449 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	11.50	449	1966	Feb. 9, 1966	9.85	222
1962	1962	(a)	----------	1967	Apr. 14, 1967	9.31	165
1963	May 26, 1963	11.27	408	1968	Mar. 20, 1968	9.64	198
1964	Aug. 15, 1964	11.70	483	1969	Jan. 29, 1969	12.08	543
1965	Apr. 3, 1965	9.86	223				

a Peak stage did not reach bottom of gage.

590. North Fork River near Henderson, Ark.
(Published as "North Fork of White River" prior to 1940)

Location.--Lat 36°22', long 92°14', in SE¼NW¼ sec.26, T.20 N., R.12 W., half a mile downstream from Bennetts Bayou, half a mile east of Henderson, 8¾ miles northeast of Mountain Home, and 15 miles upstream from Norfork Dam.

Drainage area.--1,612 sq mi.

Gage.--Nonrecording prior to Jan. 14, 1939; recording Jan. 14, 1939, to June 25, 1943. Nonrecording gage was at site a quarter of a mile downstream at datum 2.00 ft lower. Datum of last used gage was 432.67 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 36,000 cfs. Maximum discharge for flood of May 11, 1943, furnished by Corps of Engineers, computed on basis of records for station at Tecumseh, Mo., and unit hydrograph method for ungaged area.

Remarks.--Station discontinued as a result of backwater from Norfolk Dam. Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	July 10, 1910	7.2	----------	1937	Apr. 24, 1937	10.5	16,200
					May 2, 1937	11.8	19,500
1915	August 1915	29.5	----------		June 10, 1937	10.8	17,000
1929	Jan. 24, 1929	17.0	33,700	1938	Jan. 24, 1938	7.6	10,300
	Feb. 25, 1929	9.7	14,200		Feb. 18, 1938	19.0	39,800
	Apr. 8, 1929	12.0	20,000		Mar. 29, 1938	13.85	24,800
	Apr. 14, 1929	7.9	10,100		Apr. 16, 1938	9.8	14,500
	May 8, 1929	13.0	22,600		May 13, 1938	8.5	11,400
	May 28, 1929	8.0	10,300		May 24, 1938	14.8	27,500
					May 29, 1938	7.6	10,300
1930	Oct. 31, 1929	10.0	15,000				
	Jan. 13, 1930	12.2	20,600	1939	Nov. 8, 1938	8.5	11,400
					Jan. 30, 1939	9.27	16,200
1931	Oct. 7, 1930	10.4	16,000		Feb. 20, 1939	7.42	11,800
	Nov. 19, 1930	7.7	10,500		Mar. 4, 1939	10.97	20,300
	Feb. 7, 1931	9.3	13,300		Apr. 17, 1939	18.20	38,300
					July 3, 1939	9.62	16,900
1932	Jan. 23, 1932	6.72	7,930				
				1940	Apr. 11, 1940	15.22	30,600
1933	Dec. 30, 1932	8.5	11,400				
	Apr. 16, 1933	8.5	11,400	1941	Apr. 4, 1941	8.43	14,100
	May 14, 1933	14.6	26,900		Apr. 17, 1941	9.66	17,200
1934	Apr. 6, 1934	5.70	6,000	1942	Oct. 17, 1941	9.36	16,200
					Oct. 31, 1941	13.64	26,500
1935	Mar. 11, 1935	22.2	50,400		Nov. 4, 1941	6.92	10,500
	June 2, 1935	13.5	24,000		Apr. 8, 1942	12.36	23,500
	June 7, 1935	11.2	18,000		May 19, 1942	7.92	12,700
	June 17, 1935	11.4	18,500		June 18, 1942	8.57	14,400
1936	Dec. 7, 1935	7.56	10,300	1943	Nov. 17, 1942	7.89	12,700
					Nov. 21, 1942	7.89	12,700
1937	Nov. 3, 1936	7.5	10,000		Dec. 27, 1942	22.36	50,200
	Jan. 14, 1937	18.7	38,900		May 11, 1943	--------	61,000

600. North Fork River at Norfork Dam, near Norfork, Ark.

Location.--Lat 36°15', long 92°14', in SE¼ sec.2, T.18 N., R.12 W., at Norfork Dam, 4.3 miles northeast of Norfork.

Drainage area.--1,806 sq mi.

Gage.--Recording. Datum of gage is at mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Discharge computed from powerplant records, flow through flood-control conduits, and flow over spillway.

Remarks.--Floodflow regulated by Norfork Dam (capacity, 1,983,000 acre-ft). Records furnished by Corps of Engineers and reviewed by Geological Survey. Only annual maximum daily discharges are shown.

Maximum daily discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 16, 1945	---------	21,000	1957	Aug. 15, 1957	--------	5,900
				1958	July 19, 1958	--------	7,590
1946	Mar. 17, 1946	---------	8,400	1959	Dec. 1, 1958	--------	4,040
1947	May 18,20,1947	---------	4,260				
1948	Mar. 23, 1948	---------	4,730	1960	Jan. 22, 1960	--------	3,720
1949	February 1949	---------	11,200	1961	Apr. 3, 1961	--------	6,060
1950	Apr. 10, 1950	---------	10,200	1962	Jan. 23, 1962	--------	5,710
				1963	Sept. 18, 1963	--------	2,780
1951	July 31, 1951	---------	5,450	1964	May 20, 1964	--------	3,230
1952	Mar. 18, 1952	---------	10,400	1965	June 3, 1965	--------	3,480
1953	May 28, 1953	---------	8,780				
1954	Apr. 30, 1954	---------	2,980	1966	Feb. 19, 1966	--------	10,800
1955	Sept. 16, 1955	---------	2,600	1967	July 10, 1967	--------	3,070
				1968	Feb. 23, 1968	--------	6,040
1956	Mar. 23, 1956	---------	2,660				

605. White River at Calico Rock, Ark.

Location.--Lat 36°06'58", long 92°08'35", in SE¼NE¼ sec.22, T.17 N., R.11 W., on left bank at Calico Rock, just upstream from Calico Creek, 3¼ miles downstream from Cataract Creek, 6 miles upstream from Piney Creek, and at mile 359.1.

Drainage area.--9,965 sq mi.

Gage.--Nonrecording prior to Aug. 14, 1940, at datum 2.07 ft higher; recording thereafter. At datum 1.00 ft higher Aug. 14, 1940, to Dec. 5, 1966. At site 500 ft downstream Jan. 27 to Aug. 13, 1940. Datum of present gage is 316.38 ft above mean sea level, datum of 1929. All stages have been adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 290,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--37 ft.

Remarks.--Annual flood height for 1904-39 computed from graph based on U.S. Weather Bureau readings adjusted to present datum. Flow regulated by Norfork Reservoir on North Fork River since 1943, by Bull Shoals Reservoir since 1951, by Table Rock Reservoir since 1956, and by Beaver Reservoir since 1964; total capacity at top of designated flood-control pools, 12,804,500 acre-ft. Only annual peaks are shown prior to 1940 and subsequent to 1950.

Peak stages and discharges of White River at Calico Rock, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	Aug. 1, 1905	32.0	146,000	1936	Sept. 29, 1936	15.5	46,800
1906	Mar. 27, 1906	35.0	166,000	1937	Jan. 15, 1937	29.4	128,000
1907	May 7, 1907	43.5	239,000	1938	Feb. 19, 1938	44.5	250,000
1908	May 15, 1908	31.6	143,000	1939	Apr. 17, 1939	32.5	149,000
1909	Mar. 9, 1909	23.0	89,000	1940	Apr. 12, 1940	24.05	95,000
1910	June 10, 1910	15.3	45,800	1941	Apr. 22, 1941	27.85	118,000
1911	Aug. 15, 1911	27.6	117,000	1942	Oct. 18, 1941	22.78	88,500
					Nov. 1, 1941	28.40	122,000
1912	Apr. 27, 1912	28.7	123,000		Apr. 10, 1942	20.30	74,300
1913	Jan. 24, 1913	16.6	52,600	1943	Dec. 28, 1942	39.64	199,000
					May 12, 1943	47.50	269,000
1914	Apr. 29, 1914	20.6	74,600		May 21, 1943	30.52	131,000
1915	Aug. 21, 1915	50.5	318,000	1944	Feb. 29, 1944	16.23	48,900
1916	Jan. 31, 1916	52.9	350,000	1945	Feb. 22, 1945	28.21	120,000
					Feb. 27, 1945	27.85	119,000
1917	Apr. 2, 1917	25.2	102,000		Mar. 20, 1945	28.97	125,000
					Mar. 31, 1945	30.46	135,000
1918	May 12, 1918	37.0	182,000		Apr. 3, 1945	33.97	160,000
					Apr. 16, 1945	49.84	310,000
1919	June 3, 1919	20.0	71,300		June 12, 1945	34.43	162,000
1920	Mar. 26, 1920	32.6	150,000	1946	Jan. 9, 1946	22.77	91,800
					Feb. 14, 1946	25.05	106,000
1921	Apr. 27, 1921	37.2	183,000		May 16, 1946	25.61	110,000
					May 26, 1949	23.06	93,700
1922	Apr. 11, 1922	16.6	52,600	1947	Nov. 11, 1946	22.41	89,200
1923	Feb. 2, 1923	29.3	127,000		Dec. 13, 1946	25.94	112,000
					Apr. 28, 1947	17.80	61,400
1924	June 12, 1924	28.0	119,000	1948	June 20, 1948	18.49	65,400
1925	Apr. 28, 1925	22.5	86,000				
				1949	Jan. 25, 1949	38.14	190,000
1926	Oct. 9, 1925	19.0	65,800		Jan. 28, 1949	28.86	124,000
					Feb. 16, 1949	25.14	102,000
1927	Apr. 15, 1927	51.5	332,000	1950	Jan. 5, 1950	27.29	121,000
1928	Dec. 14, 1927	41.5	220,000		Jan. 16, 1950	19.56	71,900
					Feb. 13, 1950	23.63	96,900
1929	Jan. 25, 1929	29.2	126,000		May 13, 1950	39.25	211,000
1930	May 11, 1930	24.2	96,200	1951	Feb. 21, 1951	25.56	110,000
1931	Feb. 9, 1931	19.0	65,800	1952	Mar. 11, 1952	18.66	66,600
1932	Jan. 23, 1932	18.8	64,700	1953	Mar. 18, 1953	15.07	46,900
1933	May 16, 1933	38.4	193,000	1954	May 3, 1954	14.25	42,400
1934	Mar. 27, 1934	15.2	45,300	1955	Mar. 21, 1955	15.90	51,100
1935	Mar. 12, 1935	43.8	242,000	1956	Feb. 18, 1956	12.27	33,400

Peak stages and discharges of White River at Calico Rock, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Apr. 4, 1957	25.05	106,000	1963	June 8, 1963	8.20	16,600
1958	May 10, 1958	13.73	40,000	1964	Mar. 10, 1964	15.97	51,600
1959	Nov. 17, 1958	13.52	39,000	1965	Mar. 11, 1965	10.76	24,800
1960	May 21, 1960	17.26	58,600	1966	Feb. 10, 1966	23.30	92,400
1961	May 6, 1961	23.97	99,500	1967	July 11, 1967	10.03	22,500
1962	Jan. 23, 1962	10.30	24,800	1968	Mar. 21, 1968	21.14	79,100

606. Band Mill Creek near Brockwell, Ark.

Location.--Lat 36°08'02", long 91°58'48", in SE¼SE¼ sec.7, T.17 N., R.9 W., on right bank 52 ft upstream from culvert on State Highway 56 at Band Mill, 1.7 miles upstream from mouth, and 3.1 miles west of Brockwell.

Drainage area.--1.37 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements below 417 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	7.46	529	1966	Jan. 1, 1966	4.73	150
1962	May 1962	7.39	518	1967	June 29, 1967	4.65	140
1963	May 26, 1963	5.06	190	1968	Oct. 30, 1967	4.91	171
1964	Mar. 9, 1964	4.55	128	1969	Oct. 6, 1968	5.73	295
1965	Apr. 3, 1965	6.48	417				

606.7. Hughes Creek near Mountain View, Ark.
(Published as "Lick Fork tributary" prior to 1969)

Location.--Lat 35°51'46", long 92°08'47", in NE¼SW¼ sec.10, T.14 N., R.11 W., on right bank 45 ft upstream from bridge on State Highway 66, 1.5 miles upstream from Tubbs Creek, and 1.7 miles west of Mountain View.

Drainage area.--3.17 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 75 cfs and by contracted-opening measurements at 699 cfs and 2,700 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Hughes Creek near Mountain View, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	4.15	650	1966	Jan. 1, 1966	4.37	750
1962	May 1, 1962	3.80	500	1967	Aug. 2, 1967	3.67	450
1963	May 26, 1963	2.68	165	1968	Dec. 21, 1967	7.59	1,010
1964	Mar. 9, 1964	4.43	780	1969	Dec. 27, 1968	7.81	1,080
1965	Sept. 22, 1965	6.64	2,700				

Note.--Gage heights prior to 1967 for gage on downstream side of bridge.

608.3. Wolf Bayou near Drasco, Ark.

Location.--Lat 35°39'33", long 91°55'18", in NW¼SE¼ sec.23, T.12 N., R.9 W., on right bank 20 ft upstream from culvert on State Highway 25, 2.4 miles northeast of Drasco.

Drainage area.--0.4 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 25 cfs and by culvert measurements at 47 cfs and 103 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	May 26, 1963	4.0	6	1966	Apr. 23, 1966	5.92	80
1964	Sept. 27, 1964	5.15	47	1967	Sept. 8, 1967	4.22	18
1965	Mar. 29, 1965	6.45	103	1968	May 13, 1968	6.97	131
				1969	Jan. 29, 1969	5.26	52

610. White River at Batesville, Ark.

Location.--Lat 35°45'37", long 91°38'28", in NE¼ sec.21, T.13 N., R.6 W., 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.--11,062 sq mi.

Gage.--Nonrecording prior to Jan. 28, 1939, at site 0.3 mile downstream at present datum; recording thereafter at present site. Datum of gage is 237.72 ft above mean sea level, datum of 1929. All gage heights adjusted to present site.

Stage-discharge relation.--Defined by current-meter measurements below 290,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--16 ft.

Remarks.--Peak gage heights for 1904-38 computed from graph based on Corps of Engineers readings. For regulation, see remarks for station at Calico Rock. Base for partial-duration series, 75,000 cfs. Only annual peaks are shown prior to 1938 and subsequent to 1950.

Peak stages and discharges of White River at Batesville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 27, 1904	24.9	220,000	1935	Mar. 13, 1935	27.0	266,000
1905	Aug. 2, 1905	20.8	141,000	1936	Dec. 8, 1935	13.7	51,500
1906	Mar. 28, 1906	23.9	199,000	1937	Jan. 16, 1937	20.4	134,000
1907	May 8, 1907	26.7	259,000	1938	Feb. 19, 1938	27.4	260,000
					Mar. 30, 1938	20.2	130,000
1908	May 16, 1908	22.1	164,000		May 24, 1938	18.6	107,000
1909	Mar. 10, 1909	17.5	94,600	1939	Mar. 5, 1939	15.81	76,200
					Apr. 18, 1939	21.65	165,000
1910	June 10, 1910	13.7	51,500		May 28, 1939	17.95	100,000
1911	Aug. 15, 1911	20.2	130,000	1940	Apr. 12, 1940	16.66	93,600
1912	Apr. 27, 1912	20.1	129,000	1941	Apr. 22, 1941	19.24	114,000
1913	Jan. 12, 1913	15.1	67,600	1942	Oct. 18, 1941	16.65	85,200
					Nov. 2, 1941	20.00	122,000
1914	Apr. 29, 1914	16.3	82,200		Apr. 10, 1942	16.34	82,200
1915	Aug. 22, 1915	31.6	373,000	1943	Dec. 29, 1942	25.81	213,000
					May 12, 1943	28.01	281,000
1916	Feb. 1, 1916	31.9	382,000		May 22, 1943	21.04	131,000
1917	Apr. 2, 1917	18.7	108,000	1944	Mar. 1, 1944	13.96	54,800
1918	May 13, 1918	24.9	220,000	1945	Feb. 22, 1945	a19.69	121,000
					Feb. 27, 1945	20.41	131,000
1919	June 3, 1919	16.5	84,200		Mar. 21, 1945	20.58	134,000
					Mar. 30, 1945	a22.07	160,000
1920	Mar. 27, 1920	22.7	175,000		Apr. 4, 1945	23.06	177,000
					Apr. 16, 1945	29.43	324,000
1921	Apr. 27, 1921	25.1	224,000		June 12, 1945	23.63	189,000
					June 17, 1945	21.40	148,000
1922	Mar. 31, 1922	15.7	74,900				
				1946	Jan. 10, 1946	17.24	93,000
1923	Feb. 3, 1923	21.5	153,000		Feb. 14, 1946	a18.52	106,000
					May 17, 1946	18.06	101,000
1924	June 13, 1924	19.5	120,000		May 26, 1946	17.54	95,000
1925	Apr. 29, 1925	16.8	87,200	1947	Nov. 11, 1946	16.81	89,800
					Dec. 13, 1946	19.12	114,000
1926	Oct. 17, 1925	16.6	85,200				
				1948	June 20, 1948	15.27	73,900
1927	Apr. 15, 1927	31.4	369,000				
				1949	Jan. 26, 1949	25.72	236,000
1928	Dec. 15, 1927	26.0	244,000		Feb. 16, 1949	18.79	107,000
1929	Jan. 26, 1929	20.4	134,000	1950	Jan. 5, 1950	19.50	119,000
					Jan. 17, 1950	15.70	78,800
1930	May 12, 1930	18.4	105,000		Feb. 14, 1950	17.92	99,000
					May 13,14,1950	24.77	216,000
1931	Feb. 9, 1931	16.2	81,100		June 3, 1950	16.06	82,300
1932	Jan. 24, 1932	15.9	77,500	1951	Feb. 21, 1951	18.80	107,000
1933	May 17, 1933	24.9	220,000	1952	Mar. 12, 1952	15.62	77,700
1934	Mar. 26, 1934	15.0	66,400	1953	Mar. 18, 1953	14.48	63,500

Peak stages and discharges of White River at Batesville, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	May 2, 1954	13.20	47,900	1957	Apr. 4, 1957	19.82	124,000
1955	Mar. 22, 1955	14.14	58,500	1958	May 9, 1958	13.87	56,100
1956	Feb. 18, 1956	12.95	45,700				

a Occurred on following day.

Note.--Peak stage frequently occurs at different time than peak discharge.

611. Gibbs Creek at Sulphur Rock, Ark.

Location.--Lat 35°45'32", long 91°30'52", in SE¼SW¼ sec.15, T.13 N., R.5 W., on right bank 38 ft upstream from culvert on State Highway 69, 0.4 mile upstream from small tributary, 0.8 mile downstream from Cooper Cane Creek, and 0.9 mile west of Sulphur Rock.

Drainage area.--3.89 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since November 1968.

Stage-discharge relation.--Defined by current-meter measurements below 352 cfs and by culvert measurements at 990 cfs and 2,660 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 26, 1962	8.38	820	1966	Jan. 1, 1966	9.01	990
1963	May 26, 1963	6.7	480	1967	May 14, 1967	6.22	330
1964	Mar. 9, 1964	7.71	700	1968	May 13, 1968	10.97	1,620
1965	Apr. 4, 1965	13.62	2,660	1969	Jan. 29, 1969	8.26	780

630. Black River at Poplar Bluff, Mo.

Location.--Lat 36°45'35", long 90°23'15", in SW¼NW¼ sec.2, T.24 N., R.6 E., 1,500 ft upstream from bridge on U.S. Highway 60 in Poplar Bluff, 4¾ miles downstream from Indian Creek, and at mile 211.2.

Drainage area.--1,245 sq mi.

Gage.--Nonrecording prior to June 8, 1955; recording thereafter. Prior to July 17, 1935, at site 300 ft downstream at datum 1.89 ft higher. July 17, 1935, to Sept. 30, 1940, at present site at datum 2.00 ft higher. Datum of present gage is 317.38 ft above mean sea level, datum of 1929. Gage heights given herein converted to present site and datum.

Stage-discharge relation.--Defined by current-meter measurements below 44,000 cfs; shifts in relation occur. Stage-discharge relation affected by right-bank levee constructed 1906-10 and left-bank levee constructed 1918-22.

Bankfull stage.--16 ft.

Remarks.--Flow regulated since June 3, 1948, by Clearwater Reservoir (capacity, 413,700 acre-ft). Peaks prior to Oct. 1, 1936, and Oct. 1, 1937, to Sept. 30, 1939, computed from plotted U.S. Weather Bureau gage readings. Base for partial-duration series, 6,000 cfs. Only annual peaks are shown subsequent to 1948.

Peak stages and discharges of Black River at Poplar Bluff, Mo.

Water year	Date	Gage height (feet)	Discharge (cfs)
1904	March 1904	---------	a100,000
1915	August 1915	a21.1	----------
1923	Jan. 21, 1923	16.3	7,260
	Feb. 3, 1923	19.3	23,900
	Mar. 17, 1923	18.5	17,700
	May 6, 1923	17.1	9,900
	May 17, 1923	19.2	23,100
1924	May 31, 1924	14.8	5,000
1925	June 14, 1925	15.9	6,420
1926	Oct. 18, 1925	15.8	6,250
	Nov. 10, 1925	17.5	11,700
1927	Jan. 23, 1927	18.0	14,500
	Mar. 19, 1927	17.2	10,300
	Apr. 2, 1927	19.8	28,100
	Apr. 16, 1927	20.3	32,500
	May 10, 1927	16.7	8,420
	May 27, 1927	19.3	23,900
	June 3, 1927	20.0	29,800
1928	Dec. 15, 1927	20.1	30,700
	Apr. 8, 1928	18.5	17,700
	Apr. 23, 1928	17.9	13,900
	June 15, 1928	19.9	29,000
	June 23, 1928	19.8	28,100
1929	Jan. 27, 1929	18.5	17,700
	Apr. 11, 1929	18.0	14,500
	May 15, 1929	20.2	31,600
	June 15, 1929	17.2	10,300
1930	Jan. 16, 1930	19.3	23,900
1931	Mar. 9, 1931	14.6	4,820
1932	Jan. 24, 1932	14.6	4,820
1933	Dec. 31, 1932	16.6	8,100
	Jan. 23, 1933	16.8	8,760
	Apr. 17, 1933	19.5	25,600
	May 16, 1933	20.6	35,300
1934	Mar. 27, 1934	10.0	2,880
1935	Mar. 12, 1935	21.1	40,200
	May 6, 1935	15.7	6,090
	June 23, 1935	17.7	12,700
1936	Apr. 6, 1936	12.6	3,796
1937	Oct. 11, 1936	16.2	7,020
	Jan. 10, 1937	17.2	10,300
	Jan. 16, 1937	19.66	27,300
	May 4, 1937	16.51	7,800
1938	Feb. 20, 1938	19.42	24,800
1938	Mar. 31, 1938	17.81	13,300
	May 26, 1938	15.9	6,420
1939	Feb. 1, 1939	16.3	7,260
	Mar. 7, 1939	17.9	13,900
	Apr. 19, 1939	19.4	24,800
1940	Apr. 21, 1940	17.8	10,300
1941	Apr. 19, 1941	13.6	4,880
1942	Nov. 3, 1941	17.38	8,520
	Feb. 2, 1942	16.26	6,770
	Apr. 10, 1942	17.3	8,290
1943	Dec. 29, 1942	19.56	21,500
	May 12, 1943	20.77	52,600
	May 21, 1943	17.53	8,770
1944	Apr. 25, 1944	17.40	8,520
	May 5, 1944	15.68	6,190
1945	Feb. 24, 1945	16.00	6,260
	Feb. 28, 1945	19.70	27,000
	Mar. 8, 1945	18.82	14,800
	Mar. 21, 1945	17.18	8,080
	Apr. 1, 1945	19.85	28,800
	Apr. 16, 1945	20.54	43,400
	June 10, 1945	20.80	50,800
	June 19, 1945	17.78	9,670
1946	Jan. 11, 1946	16.73	7,210
	Feb. 15, 1946	19.53	23,500
	May 3, 1946	17.77	9,670
	May 18, 1946	18.21	11,200
	May 26, 1946	20.02	32,600
1947	Apr. 13, 1947	16.29	6,620
	Apr. 27, 1947	18.81	14,800
	June 29, 1947	16.25	6,490
1948	Jan. 3, 1948	18.09	10,800
1949	Jan. 25, 1949	18.85	14,800
1950	Feb. 14,June 5	17.9	10,000
1951	Feb. 21, 1951	16.81	6,060
1952	Nov. 25, 1951	16.66	7,210
1953	Mar. 29, 1953	11.50	3,630
1954	May 9, 1954	9.49	2,840
1955	Mar. 22, 1955	16.85	7,370
1956	Feb. 18, 1956	12.92	4,400
1957	Apr. 5, 1957	18.59	14,300
1958	Mar. 25, 1958	17.81	10,200

Peak stages and discharges of Black River at Poplar Bluff, Mo.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Nov. 18, 1958	16.35	7,220	1964	Mar. 10, 1964	19.72	17,200
1960	May 21, 1960	12.30	3,800	1965	Apr. 4, 1965	13.04	4,420
1961	May 8, 1961	18.65	14,300	1966	Apr. 24, 1966	17.42	8,380
1962	Feb. 27, 1962	15.80	6,550	1967	May 14,15,1967	12.13	4,050
1963	Mar. 17, 1963	12.22	4,000	1968	Mar. 21, 1968	14.81	5,720

a Annual peak only, estimated.

640. Black River near Corning, Ark.

Location.--Lat 36°24'07", long 90°32'29", in SW¼NE¼ sec.4, T.20 N., R.5 E., on left bank at downstream side of bridge on U.S. Highway 62, 2¾ miles east of Corning, 11.9 miles downstream from Cane Creek, and at mile 152.2.

Drainage area.--1,749 sq mi.

Gage.--Nonrecording prior to Nov. 5, 1953; recording thereafter. Datum of gage is 272.90 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 32,000 cfs. Affected by variable slope.

Bankfull stage.--10 ft.

Remarks.--Flow partly regulated since June 3, 1948, by Clearwater Reservoir 105 miles upstream. Peak stages prior to 1939 furnished by Corps of Engineers. Base for partial-duration series, 5,000 cfs. Only annual peaks are shown prior to 1939 and since 1958.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1915	----------	13.3	18,900	1928	June 18, 1928	13.1	17,400
1916	----------	13.9	23,400	1929	May 19, 1929	12.7	14,400
1919	Dec. 6, 1919	11.7	7,750	1930	Jan. 20, 1930	13.0	16,600
1920	May 20, 1920	11.6	7,210	1931	Mar. 10, 1931	11.2	5,480
1921	May 1, 1921	12.4	12,300	1932	Jan. 20, 1932	11.8	8,330
1922	Apr. 5, 1922	12.5	13,000	1933	May 19, 1933	13.8	22,600
1923	May 21, 1923	12.5	13,000	1934	Mar. 30, 1934	11.1	5,160
1924	June 4, 1924	10.8	4,430	1935	Mar. 15, 1935	14.2	25,600
1925	Nov. 10, 1925	11.5	6,710	1936	Apr. 9, 1936	11.1	5,160
1926	Jan. 16, 1926	10.8	4,430	1937	Jan. 19, 1937	14.1	24,900
1927	Apr. 18, 1927	14.4	27,200	1938	Feb. 23, 1938	13.6	21,200

Peak stages and discharges of Black River near Corning, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 5, 1939	12.06	9,900	1951	Jan. 18, 1951	11.79	8,330
	Mar. 10, 1939	12.48	12,600		Feb. 24, 1951	12.02	10,200
	Apr. 22, 1939	13.15	18,000		Mar. 14, 1951	11.56	7,800
1940	Apr.22-26,1940	11.62	6,900		July 3, 1951	11.66	8,350
1941	Jan. 7, 1941	9.00	2,800	1952	Nov. 28, 1951	12.27	12,000
					Jan. 8, 1952	11.80	8,950
1942	Feb. 6-8, 1942	11.24	5,120		Feb. 6, 1952	11.12	5,340
	Apr.12-14,1942	12.09	9,900		Mar. 14, 1952	12.20	11,400
1943	Jan. 3, 1943	12.56	13,200		Mar. 25, 1952	11.71	8,350
	May 15-16,1943	15.2	30,800		Apr. 16, 1952	11.66	8,350
1944	Apr.14-15,1944	11.88	8,620	1953	Mar. 20, 1953	11.07	5,340
	Apr. 29, 1944	11.44	6,030	1954	Mar. 28, 1954	8.76	2,630
1945	Mar. 4, 1945	13.70	21,900	1955	Mar. 25, 1955	11.98	8,950
	Apr. 5, 1945	14.12	24,900	1956	Feb. 21, 1956	11.60	7,210
	Apr. 19, 1945	15.02	31,900				
	May 12, 1945	11.61	7,210	1957	Apr. 8, 1957	13.54	18,700
	June 13, 1945	16.92	48,600		May 27, 1957	13.34	17,200
1946	Jan. 15, 1946	11.72	7,750		July 4, 1957	12.27	10,100
	Feb. 19, 1946	12.82	15,200	1958	Nov. 18, 1957	12.37	10,600
	May 7, 1946	12.20	11,600		Dec. 23, 1957	11.65	7,010
	May 30, 1946	13.08	17,400		Jan. 24, 1958	11.20	5,220
1947	Apr. 14, 1947	11.38	7,000		Mar. 28, 1958	13.03	15,000
	May 1, 1947	a12.03	10,500		May 7-8, 1958	12.50	13,000
1948	Jan. 8-9, 1948	12.19	11,200	1959	Jan. 24, 1959	10.67	4,060
	Apr. 2, 1948	11.27	6,590	1960	May 23, 1960	11.47	6,150
	Apr. 16, 1948	11.63	7,910				
1949	Jan. 29, 1949	13.78	22,800	1961	May 11, 1961	13.73	19,900
	Feb. 17, 1949	a12.45	12,500	1962	Mar. 1, 1962	12.92	14,000
	Mar.12-13,1949	11.47	6,710				
	Mar.29-30,1949	11.83	8,500	1963	May 30-31,1963	11.22	5,220
1950	Oct. 15, 1949	11.30	6,200	1964	Mar.12-13,1964	15.23	32,500
	Jan. 8, 1950	13.15	18,600				
	Jan. 29, 1950	11.94	9,550	1965	Feb. 14, 1965	12.22	8,550
	Feb. 17, 1950	12.65	14,100				
	Feb. 25, 1950	11.31	6,200	1966	Jan. 5, 1966	13.54	17,300
	Mar. 30, 1950	11.92	9,550				
	Apr. 7, 1950	11.74	8,350	1967	May 17, 1967	12.27	8,940
	May 3, 1950	11.09	5,340				
	May 15, 1950	11.95	10,200	1968	Mar. 23, 1968	12.78	11,900

a Occurred on following day.

Note.--Peak stage frequently occurs at different time than peak discharge. Calendar year basis prior to 1939; water year thereafter.

680. Current River at Doniphan, Mo.

Location.--Lat 36°37'25", long 90°50'55", in NW¼NW¼ sec.27, T.23 N., R.2 E., half a mile upstream from U.S. Highway 160, 1 mile west of Doniphan, 2½ miles upstream from Briar Creek, and at mile 51.3.

Drainage area.--2,038 sq mi.

Gage.--Nonrecording prior to July 2, 1936, recording thereafter. Prior to May 22, 1928, at site 2,700 ft downstream at datum 0.06 ft higher; May 22, 1928, to Sept. 30, 1929, at site 2,800 ft downstream at datum 0.07 ft lower; Oct. 1, 1929, to Sept. 30, 1932, at site 2,800 ft downstream at datum 1.07 ft lower; Oct. 1, 1932, to July 2, 1936, at site 2,800 ft downstream at datum 3.07 ft lower. Datum of present gage is 322.21 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 60,000 cfs.

Bankfull stage.--12 ft.

Remarks.--Peaks for 1919-21 computed from plotted Corps of Engineers gage readings. Base for partial-duration series, 14,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)
1904	March 1904	23.4	a130,000
1915	August 1915	22.2	a105,000
1919	June 5, 1919	10.0	19,400
1920	Mar. 27, 1920	10.1	19,700
1921	Mar. 26, 1921	9.8	18,800
	Apr. 27, 1921	14.3	35,400
1922	Nov. 21, 1921	11.10	21,000
	Apr. 1, 1922	11.50	22,000
1923	Feb. 3, 1923	13.00	29,600
	Mar. 17, 1923	11.02	20,800
	May 17, 1923	11.22	21,300
1924	May 31, 1924	5.48	8,300
1925	June 13, 1925	4.50	6,540
1926	Oct. 18, 1925	6.50	10,300
1927	Apr. 7, 1927	12.55	28,600
	Apr. 15, 1927	17.30	48,800
	Apr. 20, 1927	12.58	28,600
	May 27, 1927	9.45	17,600
	June 2, 1927	15.98	43,000
1928	Dec. 15, 1927	14.80	37,600
	Apr. 7, 1928	9.35	17,600
	Apr. 23, 1928	10.33	20,400
	June 10, 1928	15.94	42,600
	June 14, 1928	15.98	43,000
	June 23, 1928	10.42	20,700
1929	Jan. 26, 1929	9.55	18,200
	Apr. 11, 1929	8.84	16,000
	May 8, 1929	9.60	18,200
	May 14, 1929	12.40	27,800
	June 14, 1929	8.60	15,500
1930	Jan. 15, 1930	12.10	25,500
1931	Mar. 9, 1931	6.95	9,500
1932	Jan. 24, 1932	6.41	8,300
1933	Jan. 22, 1933	11.20	14,500
	Apr. 17, 1933	17.65	35,200
	May 15, 1933	19.93	49,000
1934	Sept. 16, 1934	6.63	6,210
1935	Mar. 12, 1935	23.89	94,400
	June 4, 1935	13.47	20,200
1936	Nov. 11, 1935	7.45	7,400
1937	Jan. 14, 1937	16.28	48,400
	May 4, 1937	12.28	22,400
1938	Feb. 19, 1938	15.72	43,100
	Mar. 31, 1938	10.26	15,500
	May 25, 1938	11.74	20,100
1939	Mar. 5, 1939	10.10	14,900
	Apr. 18, 1939	16.41	49,300
1940	Apr. 20, 1940	9.02	12,500
1941	Jan. 3, 1941	5.00	5,110
1942	Nov. 2, 1941	9.89	15,400
	Apr. 9, 1942	9.80	15,100
1943	Dec. 29, 1942	19.13	63,600
	May 12, 1943	18.06	55,400
	May 20, 1943	12.65	24,100
1944	Apr. 24, 1944	11.70	20,300
1945	Feb. 27, 1945	15.11	35,200
	Mar. 8, 1945	11.92	21,000

Peak stages and discharges of Current River at Doniphan, Mo.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 1, 1945	15.65	38,000	1955	Mar. 22, 1955	13.88	30,900
	Apr. 16, 1945	19.05	62,800				
	June 11, 1945	14.10	30,200	1956	May 16, 1956	17.17	49,000
	June 19, 1945	13.40	27,000				
				1957	Apr. 5, 1957	17.98	54,600
1946	Feb. 15, 1946	15.70	38,600		Apr. 23, 1957	12.20	24,000
	Mar. 8, 1946	9.75	15,600		Apr. 29, 1957	12.55	25,500
	May 18, 1946	9.3	14,300		May 12, 1957	9.50	15,900
	May 26, 1946	16.71	44,900		May 24, 1957	15.20	37,000
	Aug. 16, 1946	17.46	50,600				
				1958	Dec. 19, 1957	10.80	19,400
1947	Nov. 12, 1946	11.80	20,600		Mar. 25, 1958	15.72	39,600
	Apr. 27, 1947	13.2	26,800		May 5, 1958	10.66	19,100
1948	Jan. 2, 1948	11.50	20,600	1959	Nov. 17, 1958	13.38	28,700
1949	Jan. 20, 1949	10.8	18,400	1960	Dec. 29, 1959	11.63	21,900
	Jan. 26, 1949	18.3	57,000				
	Jan. 29, 1949	10.8	18,400	1961	Mar. 8, 1961	9.40	15,600
	Feb. 16, 1949	13.5	28,000		May 9, 1961	17.00	47,600
	Mar. 27, 1949	9.3	14,700				
				1962	Mar. 22, 1962	10.50	18,600
1950	Jan. 5, 1950	18.0	54,600				
	Jan. 15, 1950	10.82	18,400	1963	May 19, 1963	9.21	15,200
	Feb. 15, 1950	9.2	14,500		May 28, 1963	12.64	25,500
	Apr. 5, 1950	14.7	33,500				
	May 11, 1950	18.2	56,200	1964	Mar. 10, 1964	13.71	30,100
	June 12, 1950	11.3	20,000		Apr. 7, 1964	12.10	23,800
1951	Feb. 20, 1951	12.11	23,700	1965	Apr. 8, 1965	6.93	10,700
	July 2, 1951	10.20	17,700				
	July 11, 1951	12.26	24,400	1966	Jan. 3, 1966	9.97	18,200
	July 15, 1951	10.90	19,700		Feb. 11, 1966	19.27	65,300
					Apr. 25, 1966	11.82	23,400
1952	Nov. 25, 1951	10.46	18,600				
	Mar. 12, 1952	11.73	22,200	1967	Jan. 28, 1967	4.06	6,250
	Apr. 14, 1952	11.22	20,600				
				1968	Dec. 23, 1967	12.35	26,000
1953	Mar. 5, 1953	6.23	8,530		Feb. 3, 1968	9.52	17,700
					Apr. 21, 1968	9.99	19,000
1954	May 3, 1954	6.68	9,530				

a Annual peak only.

688.7. Fourche River tributary at Middlebrook, Ark.
(Published as "Fourche Creek tributary" prior to 1969)

Location.--Lat 36°27'46", long 90°55'26", in NW¼SW¼ sec.13, T.21 N., R.1 E., on left bank 20 ft upstream from culvert on State Highway 115, 0.3 mile north of Middlebrook, and 1.1 miles upstream from mouth.

Drainage area.--0.18 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 8 cfs and by culvert measurements at 88 cfs and 220 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Fourche River tributary at Middlebrook, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	7.7	220	1966	June 13, 1966	6.99	154
1962	June 24, 1962	6.65	125	1967	May 14, 1967	7.03	158
1963	Mar. 4, 1963	6.08	83	1968	May 11, 1968	6.99	154
1964	Mar. 9, 1964	6.9	146	1969	Jan. 29, 1969	6.80	137
1965	July 10, 1965	6.58	120				

690. Black River at Pocahontas, Ark.

Location.--Lat 36°15'14", long 90°58'12", in SW¼SW¼ sec.27, T.19 N., R.1 E., at 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.--4,843 sq mi.

Gage.--Nonrecording prior to July 23, 1940; recording thereafter. Prior to July 15, 1937, at site 0.3 mile upstream at present datum. Datum of gage is 241.81 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 56,000 cfs.

Bankfull stage.--18 ft.

Remarks.--Records for Jan. 1, 1936, to July 14, 1937, computed by Corps of Engineers and reviewed by Geological Survey. Peak flows not materially affected by regulation by Clear Water Reservoir. Base for partial-duration series, 12,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 17, 1927	25.9	a80,000	1946	Jan. 12, 1946	16.90	13,100
					Feb. 23, 1946	20.40	22,500
1937	Jan.21,22,1937	24.0	31,600		May 29, 1946	21.66	30,300
	May 8, 1937	16.6	13,800				
				1947	May 1, 1947	17.16	14,700
1938	Feb. 25, 1938	21.92	30,100				
	Apr. 5,6 1938	21.54	27,300	1948	Jan. 5, 1948	c17.51	15,800
					Apr. 14, 1948	c16.34	14,800
1939	Feb. 11, 1939	17.87	15,200				
	Mar. 12, 1939	20.63	22,200	1949	Jan. 29, 1949	24.07	53,800
	Apr. 24, 1939	21.15	28,000		Feb. 19, 1949	21.88	31,800
					Apr. 1, 1949	19.66	19,800
1940	Apr. 24, 1940	17.85	15,000				
				1950	Jan. 11, 1950	22.92	39,100
1941	Jan. 25, 1941	b8.92	7,270		Feb. 18, 1950	21.58	28,600
					Apr. 8, 1950	20.43	21,600
1942	Nov. 5, 1941	15.86	12,800		May 15, 1950	21.46	27,900
	Apr. 16, 1942	19.60	18,600				
				1951	Jan. 17, 1951	15.20	12,100
1943	Jan. 2, 1943	20.36	21,600		Feb. 25, 1951	20.83	23,600
	May 18, 1943	22.46	39,500		Mar. 18, 1951	17.88	15,300
					July 17, 1951	19.52	18,600
1944	Apr.26,27,1944	19.07	17,300				
				1952	Dec. 1, 1951	20.78	23,600
1945	Mar. 7, 1945	22.45	38,500		Jan. 6, 1952	18.00	15,500
	Apr. 6, 1945	23.04	44,700		Mar. 18, 1952	20.27	21,100
	Apr. 20, 1945	23.60	51,400		Apr. 18, 1952	19.04	17,400
	June 17, 1945	24.32	59,600				

Peak stages and discharges of Black River at Pocahontas, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Mar. 24, 1953	17.37	14,500	1962	Mar. 5-6, 1962	18.02	15,500
					Apr. 12, 1962	c16.99	14,400
1954	May 4, 1954	12.68	10,200				
				1963	May 31, 1963	c16.40	13,800
1955	Mar. 26, 1955	18.38	16,200				
				1964	Mar. 14, 1964	23.32	42,900
1956	May 20, 1956	16.68	13,700		Apr. 11, 1964	19.53	17,700
1957	Apr. 9, 1957	22.42	34,800	1965	Apr. 10, 1965	15.11	12,000
	May 1, 1957	21.25	25,900				
	May 29, 1957	23.34	42,800	1966	Jan. 7-8, 1966	21.68	28,500
	July 8, 1957	15.55	12,500		Feb. 14, 1966	20.20	20,000
					Apr. 30, 1966	21.77	29,400
1958	Nov. 22, 1957	19.38	18,300		May 22, 1966	19.02	16,800
	Dec. 21, 1957	c15.70	12,800				
	Mar.29,30,1958	22.13	32,400	1967	May 16, 1967	18.46	15,800
	May 10,11,1958	21.33	26,600				
				1968	Dec. 27, 1967	18.67	15,900
1959	Nov. 22, 1958	17.68	15,000		Feb. 6, 1968	16.69	13,200
					Mar. 27, 1968	19.14	16,700
1960	May 22, 1960	15.57	12,600		Apr. 25, 1968	19.07	16,500
					May 17, 1968	19.55	17,600
1961	Mar.14-15,1961	18.14	15,700				
	May 12, 1961	24.18	52,300				

a Annual peak only.
b Occurred at different time than peak discharge.
c Occurred on following day.

692.5. Brush Creek near Mammoth Spring, Ark.
(Published as "Spring River tributary" prior to 1967)

Location.--Lat 36°25'36", long 91°29'27", in SE¼SE¼ sec.34, T.21 N., R.5 W., on left bank 32 ft upstream from culvert on U.S. Highway 63, 1.3 miles upstream from mouth, and 5.5 miles southeast of Mammoth Spring.

Drainage area.--0.45 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements at 191 cfs and 597 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	12.30	597	1966	Apr. 23, 1966	12.42	610
1962	Feb. 25, 1962	8.55	191	1967	May 13, 1967	10.85	420
1963	Mar. 4, 1963	9.60	286	1968	Sept. 16, 1968	10.28	356
1964	Mar. 9, 1964	8.91	221	1969	Jan. 29, 1969	8.67	200
1965	Apr. 3, 1965	12.32	600				

692.9. Miller Creek near Salem, Ark.

Location.--Lat 36°20'13", long 91°46'32", in SE¼NW¼ sec.6, T.19 N., R.7 W., on left bank 34 ft upstream from culvert on U.S. Highway 62, 0.7 mile upstream from mouth, and 3.6 miles southeast of Salem.

Drainage area.--2.10 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since June 1969.

Stage-discharge relation.--Defined by current-meter measurement at 21 cfs and by culvert measurements at 1,380 cfs and 2,160 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	10.7	2,160	1966	Jan. 1, 1966	6.32	725
				1967	June 29, 1967	4.49	220
1963	May 26, 1963	8.2	1,380	1968	Dec. 14, 1967	5.16	400
1964	Mar. 9, 1964	5.32	450	1969	Jan. 29, 1969	7.33	1,060
1965	Sept. 22, 1965	7.00	947				

695. Spring River at Imboden, Ark.

Location.--Lat 36°12'19", long 91°10'19", in SE¼NE¼ sec.15, T.18 N., R.2 W., at bridge on U.S. Highway 62 at Imboden, 3.9 miles downstream from Janes Creek, 8.2 miles upstream from Eleven Point River, and at mile 12.1.

Drainage area.--1,162 sq mi.

Gage.--Nonrecording prior to Feb. 9, 1939; recording thereafter. Datum of gage is 254.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 45,000 cfs and extended above by logarithmic plotting and area-velocity study.

Bankfull stage.--16 ft.

Remarks.--Records for Feb. 21, 1936, to July 17, 1937, furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 9,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	August 1915	32.1	a125,000	1941	Jan. 24, 1941	9.87	4,680
1937	Jan. 15, 1937	22.3	a31,800	1942	Oct. 31, 1941	19.09	17,800
					Apr. 8, 1942	23.10	36,600
1938	Feb. 15, 1938	16.60	10,500		May 4, 1942	18.60	15,500
	Feb. 18, 1938	23.97	42,200		Aug. 23, 1942	15.89	9,690
	Mar. 29, 1938	23.7	40,200				
	Apr. 16, 1938	19.9	19,200	1943	Dec. 27, 1942	24.10	42,800
					May 11, 1943	26.10	57,300
1939	Jan. 30, 1939	18.5	14,200				
	Mar. 5, 1939	22.40	32,400	1944	Apr. 11, 1944	19.13	16,100
	Apr. 6, 1939	15.70	9,440		Apr. 23, 1944	19.12	16,100
	Apr. 17, 1939	22.25	31,200		May 3, 1944	19.08	16,100
1940	Apr. 12, 1940	17.86	13,100	1945	Feb. 22, 1945	20.02	19,600

Peak stages and discharges of Spring River at Imboden, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 27, 1945	23.05	36,000
	Mar. 3, 1945	17.32	11,500
	Mar. 19, 1945	20.98	24,600
	Mar. 31, 1945	24.87	48,300
	Apr. 15, 1945	23.70	40,200
	May 10, 1945	21.38	26,800
	June 9, 1945	19.06	16,100
	June 11, 1945	23.21	37,200
	June 18, 1945	19.04	15,800
	Sept. 25, 1945	17.46	11,900
1946	Jan. 9, 1946	20.95	24,600
	Feb. 14, 1946	22.16	31,600
	Mar. 6, 1946	22.16	31,600
	May 1, 1946	17.38	11,700
	May 16, 1946	16.00	9,750
	May 25, 1946	19.46	17,500
	June 1, 1946	16.81	10,800
1947	Dec. 10, 1946	14.54	8,290
1948	Jan. 1, 1948	19.10	16,100
	June 19, 1948	17.87	12,700
1949	Jan. 19, 1949	20.21	20,500
	Jan. 24, 1949	28.42	78,500
	Jan. 28, 1949	18.20	13,400
	Feb. 14, 1949	24.68	46,900
	Mar. 27, 1949	19.54	17,500
	July 8, 1949	21.85	29,000
1950	Dec. 12, 1949	15.52	9,240
	Jan. 4, 1950	25.08	49,800
	Jan. 10, 1950	17.84	12,500
	Jan. 13, 1950	19.28	16,800
	Jan. 16, 1950	17.59	12,100
	Jan. 26, 1950	16.27	10,100
	Feb. 13, 1950	22.48	33,000
	May 12, 1950	18.85	15,100
	June 4, 1950	18.10	13,100
1951	Jan. 14, 1951	16.57	10,500
	Feb. 20, 1951	21.27	26,200
	Apr. 21, 1951	16.95	12,300
	July 4, 1951	16.00	10,600
	July 11, 1951	15.34	9,860
1952	Nov. 24, 1951	22.43	32,400
	Jan. 4, 1952	19.30	16,800
	Mar. 11, 1952	22.24	31,200
	Apr. 13, 1952	15.79	9,860
1953	Mar. 18, 1953	18.16	13,400
1954	May 3, 1954	17.82	12,500
1955	Mar. 21, 1955	18.49	14,200
1956	Feb. 18, 1956	16.50	10,600
1957	Jan. 22, 1957	15.96	10,100
	Apr. 4, 1957	25.74	54,200
	Apr. 22, 1957	16.45	10,500
	Apr. 28, 1957	19.07	16,100
	May 23, 1957	24.18	43,500
1958	Nov. 13, 1957	17.44	11,800
	Nov. 18, 1957	17.70	12,300
	Mar. 24, 1958	19.04	15,800
	May 3, 1958	16.12	10,200
	May 5, 1958	22.10	30,600
1959	Nov. 17, 1958	26.50	60,500
1960	May 7, 1960	16.07	10,200
	May 21, 1960	15.58	9,660
1961	Apr. 1, 1961	15.14	9,160
	May 7, 1961	27.75	72,500
1962	Feb. 26, 1962	19.34	16,800
	Apr. 11, 1962	16.84	11,000
1963	Mar. 5, 1963	17.44	11,800
	Mar. 17, 1963	15.10	9,160
	May 27, 1963	20.25	20,500
1964	Mar. 9, 1964	26.16	58,100
	Apr. 5, 1964	19.49	17,500
1965	Sept. 22, 1965	19.51	17,500
1966	Jan. 2, 1966	26.15	58,100
	Feb. 11, 1966	19.61	19,500
	Apr. 23, 1966	21.84	29,700
1967	May 13, 1967	17.92	13,800
1968	Dec. 12, 1967	16.09	11,100
	Dec. 15, 1967	17.32	12,700
	Dec. 22, 1967	16.31	11,400
	Feb. 2, 1968	18.55	15,500
	Mar. 21, 1968	20.40	23,000
	Apr. 21, 1968	15.90	10,900
	May 10, 1968	14.79	9,010
	May 16, 1968	21.80	26,700
	Sept. 18, 1968	15.62	10,600

a Annual peak only.

715. Eleven Point River near Bardley, Mo.

Location.--Lat 36°38'55", long 91°12'03", in NE¼SE¼ sec.17, T.23 N., R.2 W., at bridge on U.S. Highway 160, 7 miles southwest of Bardley and 7½ miles upstream from Fredericks Fork.

Drainage area.--793 sq mi.

Gage.--Nonrecording prior to Oct. 20, 1939; recording thereafter. Datum of gage is 410.84 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	Aug. 20, 1915	19.7	a44,000	1936	Dec. 8, 1935	3.1	900
1922	Mar. 31, 1922	10.0	7,560	1937	Jan. 14, 1937	13.9	20,900
1923	Feb. 2, 1923	10.1	7,600	1938	Feb. 19, 1938	10.0	9,100
	Mar. 12, 1923	7.2	4,400		Mar. 29, 1938	9.3	7,640
	Mar. 16, 1923	10.6	9,450		May 24, 1938	8.1	5,880
	May 15, 1923	8.8	6,120				
	June 11, 1923	8.1	5,350	1939	Mar. 5, 1939	8.4	6,670
					Apr. 17, 1939	13.9	20,900
1924	Aug. 10, 1924	3.9	1,680				
				1940	Apr. 12, 1940	8.3	6,530
1925	June 13, 1925	7.2	4,400				
				1941	Apr. 4, 1941	3.4	976
1926	Nov. 8, 1925	5.1	2,490				
				1942	Oct. 31, 1941	10.1	9,830
1927	Apr. 14, 1927	18.7	40,000		Apr. 8, 1942	7.7	5,750
	Apr. 19, 1927	11.6	11,400		May 31, 1942	15.7	28,300
	May 5, 1927	10.0	8,640				
	June 1, 1927	10.2	8,960	1943	Nov. 18, 1942	6.86	4,620
	June 21, 1927	8.2	6,040		Nov. 22, 1942	6.56	4,230
					Dec. 28, 1942	14.10	22,200
1928	Dec. 14, 1927	15.0	18,700		May 11, 1943	15.18	25,800
	Apr. 6, 1928	11.6	11,400				
	Apr. 21, 1928	9.3	7,560	1944	Apr. 23, 1944	8.36	6,840
	June 13, 1928	15.6	27,200		May 3, 1944	8.12	6,360
	June 21, 1928	7.8	5,560				
				1945	Feb. 27, 1945	---------	b15,000
1929	Jan. 25, 1929	9.5	8,000		Mar. 3, 1945	---------	b4,000
	Feb. 26, 1929	6.9	4,480		Mar. 7, 1945	---------	b7,200
	Apr. 9, 1929	7.3	4,960		Mar. 20, 1945	---------	b6,900
					Mar. 31, 1945	15.5	27,200
1930	Jan. 13, 1930	8.0	5,800		Apr. 15, 1945	13.6	20,360
					June 11, 1945	10.01	9,600
1931	Aug. 6, 1931	5.2	2,640		June 18, 1945	8.32	6,680
1932	Jan.23,24,1932	3.6	1,280	1946	Jan. 9, 1946	7.30	5,280
					Feb. 14, 1946	10.88	11,400
1933	Apr. 16, 1933	10.9	10,100		Mar. 6, 1946	8.21	6,570
	May 14, 1933	9.5	8,000		May 17, 1946	7.07	5,010
					May 25, 1946	9.30	8,330
1934	Sept. 15, 1934	3.5	1,190		Aug. 14, 1946	7.42	5,420
1935	Mar. 12, 1935	13.7	20,200	1947	Dec. 12, 1946	5.50	3,100
	June 3, 1935	9.5	7,840				
	June 17, 1935	7.8	5,560	1948	Jan. 1, 1948	7.75	5,980

Peak stages and discharges of Eleven Point River near Bardley, Mo.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	June 19, 1948	9.54	8,680	1957	May 11, 1957	7.80	5,980
					May 23, 1957	10.38	10,400
1949	Jan. 18, 1949	6.9	4,750		May 25, 1957	8.60	7,180
	Jan. 24, 1949	16.7	33,200				
	Jan. 28, 1949	8.3	6,700	1958	Mar. 24, 1958	10.15	9,980
	Feb. 14, 1949	7.1	5,010		May 3, 1958	6.64	4,360
	Feb. 16, 1949	8.6	7,180		May 5, 1958	10.35	10,400
1950	Jan. 4, 1950	12.80	16,200	1959	Nov. 17, 1958	16.10	30,100
	Feb. 13, 1950	8.67	7,340				
	May 11, 1950	9.55	8,860	1960	Dec. 28, 1959	7.41	5,420
	May 30, 1950	7.22	5,140				
	June 3, 1950	8.20	6,570	1961	May 7, 1961	12.80	16,200
1951	Feb. 21, 1951	8.50	7,020	1962	Jan. 22, 1962	6.63	4,400
	July 11, 1951	8.00	6,270		Feb. 26, 1962	8.30	6,720
1952	Nov. 24, 1951	9.66	9,040	1963	June 17, 1963	7.94	6,120
	Mar. 11, 1952	9.16	8,160		July 5, 1963	6.57	4,400
	Apr. 13, 1952	6.41	4,120				
				1964	Mar. 9, 1964	12.81	16,200
1953	Apr. 18, 1953	4.90	2,530		June 17, 1964	11.25	12,000
1954	Apr. 16, 1954	8.66	7,340	1965	Apr. 16, 1965	3.85	1,750
	May 2, 1954	10.60	10,800				
				1966	Jan. 2, 1966	7.23	5,140
1955	Mar. 21, 1955	11.23	12,000		Feb. 10, 1966	15.56	27,700
					Apr. 23, 1966	15.00	24,900
1956	May 16, 1956	7.37	5,420				
				1967	May 15, 1967	3.44	1,390
1957	Apr. 4, 1957	15.76	28,600				
	Apr. 22, 1957	6.64	4,360	1968	Dec. 22, 1967	8.98	7,820
	Apr. 28, 1957	8.25	6,570		Apr. 20, 1968	10.46	10,400

a Annual peak only.
b Estimated on basis of records for station near Ravenden Springs, Ark.

720. Eleven Point River near Ravenden Springs, Ark.
(Published as "near Eleven Point" prior to October 1949)

Location.--Lat 36°20'48", long 91°06'48", in SE¼SE¼ sec.30, T.20 N., R.1 W., on left bank at downstream side of bridge on State Highway 90, 0.9 mile downstream from Hincha Creek, 6.6 miles northeast of Ravenden Springs, and at mile 21.2.

Drainage area.--1,123 sq mi.

Gage.--Nonrecording prior to Dec. 11, 1938; recording thereafter. Prior to Nov. 21, 1938, at datum 0.04 ft higher. Datum of present gage is 291.98 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 23,000 cfs and extended above by means of velocity-area studies for the main channel and slope-area measurements of overbank flow.

Bankfull stage.--14 ft.

Remarks.--Records for periods 1929-33 and 1935-38 collected and computed by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 6,000 cfs.

Peak stages and discharges of Eleven Point River near Ravenden Springs, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Jan. 14, 1930	13.01	9,460
1931	Mar. 7, 1931	10.0	5,680
1932	Jan. 17, 1932	11.65	7,160
1933	Dec. 24, 1932	12.0	7,540
	Dec. 30, 1932	13.0	9,020
	Jan. 22, 1933	12.7	8,550
	Apr. 16, 1933	14.3	11,400
	May 15, 1933	14.92	12,800
1936	Apr. 6, 1936	11.6	7,160
1939	Jan. 30, 1939	11.70	7,270
	Mar. 5, 1939	16.12	16,100
	Apr. 18, 1939	16.55	17,800
1940	Apr. 12, 1940	11.38	6,770
1941	Sept. 3, 1941	9.63	5,120
1942	Nov. 1, 1941	13.40	10,500
	Apr. 8, 1942	16.31	16,700
	May 4, 1942	11.12	6,440
	June 1, 1942	18.04	23,000
1943	Dec. 28, 1942	17.63	21,400
	May 11, 1943	18.97	26,900
1944	Apr. 11, 1944	11.62	6,550
	Apr. 23, 1944	14.03	10,800
	May 4, 1944	11.02	6,330
1945	Feb. 22, 1945	11.18	6,550
	Feb. 27, 1945	18.60	25,400
	Mar. 3, 1945	11.36	6,780
	Mar. 7, 1945	12,86	8,860
	Mar. 19, 1945	14.38	11,600
	Mar. 31, 1945	18.84	26,200
	Apr. 2, 1945	14.90	12,800
	Apr. 16, 1945	17.56	21,400
	May 10, 1954	14.78	12,600
	June 9, 1945	15.70	14,900
	June 11, 1945	17.10	19,500
	June 17, 1945	12.90	8,860
1946	Jan. 9, 1946	12.70	8,550
	Feb. 14, 1946	15.81	15,200
	Mar. 7, 1946	12.78	8,700
	May 26, 1946	12.74	8,550
1947	Apr. 11, 1947	8.65	4,340
1948	Jan. 1, 1948	12.30	7,960
	June 19, 1948	12.20	7,820
1949	Jan. 19, 1949	12.94	8,860
	Jan. 25, 1949	20.21	34,000
	Feb. 14, 1949	16.69	18,100
	Mar. 27, 1949	13.81	10,400
1950	Jan. 5, 1950	17.22	19,800
1950	Jan. 10, 1950	12.12	7,680
	Jan. 13, 1950	12.60	8,400
	Jan. 16, 1950	12.44	8,100
	Feb. 13, 1950	16.10	16,100
	May 12, 1950	14.00	10,800
	May 31, 1950	12.41	8,100
	June 4, 1950	14.20	11,200
1951	Jan. 14, 1951	10.84	6,130
	Feb. 20, 1951	13.92	10,600
	July 11, 1951	11.33	6,660
1952	Nov. 25, 1951	13.56	10,000
	Jan. 4, 1952	11.84	7,280
	Mar. 12, 1952	14.43	11,600
1953	Mar. 18, 1953	9.87	5,340
1954	Apr. 8, 1954	10.95	6,330
	May 3, 1954	12.30	7,960
1955	Mar. 22, 1955	14.58	12,000
1956	Feb. 18, 1956	8.99	4,640
1957	Apr. 5, 1957	18.80	26,400
	Apr. 28, 1957	13.10	9,180
	May 12, 1957	10.86	6,230
	May 23, 1957	18.19	23,800
	May 26, 1957	12.69	8,550
1958	Mar. 24, 1958	14.46	11,800
	May 3, 1958	11.10	6,440
	May 5, 1958	16.24	16,400
1959	Nov. 17, 1958	20.83	37,600
1960	Dec. 29, 1959	9.04	4,640
1961	May 8, 1961	20.47	35,800
1962	Feb. 27, 1962	13.12	9,180
1963	Mar. 5, 1963	12.01	7,540
1964	Mar. 10, 1964	20.05	31,000
	Apr. 5, 1964	12.84	8,700
	June 18, 1964	11.03	6,330
1965	June 13, 1965	8.34	4,120
1966	Jan. 1, 1966	16.84	18,400
	Feb. 11, 1966	17.15	19,800
	Apr. 24, 1966	17.27	20,200
1967	May 13, 1967	13.91	10,600
1968	Dec. 15, 1967	10.69	6,020
	Dec. 22, 1967	11.19	6,540
	Mar. 21, 1968	12.90	8,860
	Apr. 21, 1968	13.00	9,020
	May 16, 1968	15.98	14,500

722. Hubble Creek near Pocahontas, Ark.

Location.--Lat 36°15'32", long 91°02'02", in SE¼SW¼ sec.25, T.19 N., R.1 W., on left bank 45 ft upstream from culvert on U.S. Highway 62, 3.4 miles west of Pocahontas, and 5.3 miles upstream from mouth.

Drainage area.--1.32 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 278 cfs and by culvert measurements at 666 cfs and 925 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 14, 1961	9.7	666	1966	July 24, 1966	9.79	715
1962	Apr. 10, 1962	8.03	373	1967	May 14, 1967	9.13	600
1963	Mar. 4, 1963	7.33	260	1968	Apr. 20, 1968	10.26	765
1964	Mar. 9, 1964	11.14	925	1969	Jan. 29, 1969	10.08	735
1965	July 10, 1965	8.68	490				

725. Black River at Black Rock, Ark.

Location.--Lat 36°06'15", long 91°05'50", in NW¼ sec.21, T.17 N., R.1 W., on right bank 900 ft downstream from St. Louis-San Francisco Railway Co. bridge at Black Rock, 3.7 miles downstream from Spring River, and at mile 68.3.

Drainage area.--7,323 sq mi.

Gage.--Nonrecording. Prior to Aug. 1, 1946, at site 900 ft upstream at same datum. Datum of gage is 229.56 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurement below 100,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--20 ft.

Remarks.--Peak gage heights for 1904-29 and 1932-39 computed from plotted U.S. Weather Bureau gage readings. Discharge records for 1940-68 furnished by Corps of Engineers and reviewed by Geological Survey. Some regulation since June 3, 1948, by Clearwater Reservoir (effect on peak discharge slight). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	May 8, 1905	22.9	37,500	1916	Jan. 31, 1916	26.5	75,600
				1917	Apr. 3, 1917	24.6	52,700
1906	Jan. 23, 1906	24.5	51,700	1918	May 14, 1918	25.9	67,800
1907	Jan. 4, 1907	26.0	69,000	1919	Dec. 14, 1918	19.9	23,800
1908	May 7, 1908	23.4	41,400	1920	Mar. 27, 1920	21.1	26,800
1909	Mar. 10, 1909	25.0	56,900				
1910	Apr. 18, 1910	17.0	19,300	1921	Apr. 28, 1921	25.7	65,300
				1922	Apr. 9, 1922	23.4	41,400
1911	Aug. 16, 1911	19.1	22,500	1923	May 16, 1923	24.3	49,600
1912	Apr. 28, 1912	23.5	42,200	1924	May 30, 1924	14.3	15,800
1913	Jan. 12, 1913	24.4	50,700	1925	June 15, 1925	12.1	13,300
1914	Apr. 30, 1914	21.6	28,800				
1915	Aug. 21, 1915	31.9	160,000	1926	Oct. 18, 1925	20.8	26,000

Peak stages and discharges of Black River at Black Rock, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 15, 1927	30.3	132,000	1948	Jan. 2, 1948	b19.8	29,500
1928	June 14, 1928	26.2	71,700	1949	Jan. 25, 1949	28.5	103,000
1929	Jan. 26, 1929	24.7	53,800	1950	Jan. 5, 1950	25.9	67,800
1930	Jan. 15, 1930	23.6	43,000				
				1951	Feb. 22, 1951	23.1	38,800
1931	Mar. 8, 1931	18.0	20,600	1952	(c)	23.3	40,600
1932	Jan. 18, 1932	19.6	23,300	1953	Mar. 18, 1953	d20.0	30,100
1933	May 22, 1933	23.1	38,900	1954	May 3, 1954	d17.6	24,900
1934	Mar. 27, 1934	19.3	22,800	1955	Mar. 21, 1955	e19.5	26,200
1935	Mar. 12, 1935	26.7	78,300				
				1956	Feb. 18, 1956	d17.6	25,700
1936	Apr. 6, 1936	16.4	18,500	1957	Apr. 5, 1957	26.9	77,800
1937	Jan. 16, 1937	26.2	71,700	1958	May 6, 1958	24.5	50,200
1938	Feb. 19, 1938	25.5	63,000	1959	Nov. 18, 1958	25.1	57,800
1939	Apr. 18, 1939	24.8	54,800	1960	May 20, 1960	d18.4	27,400
1940	May 1, 1940	18.2	22,800				
				1961	May 8, 1961	28.0	96,300
1941	Jan. 25, 1941	10.0	11,800	1962	Feb. 26, 1962	f21.7	33,300
1942	Apr. 10, 1942	23.0	37,300	1963	May 27, 1963	d19.3	29,900
1943	May 12, 1943	26.2	68,200	1964	Mar. 10, 1964	27.8	90,800
1944	Apr. 24, 1944	22.0	31,200	1965	Sept. 23, 1965	16.6	26,600
1945	Mar. 31, 1945	27.2	87,400				
				1966	Jan. 2, 1966	26.8	75,100
1946	June 1, 1946	23.6	42,000	1967	May 13, 1967	15.7	27,600
1947	Apr. 11, 1947	a16.0	21,200	1968	May 17, 1968	23.80	40,700

a Occurred Dec. 13, 1946.
b Occurred at different time than peak discharge.
c Nov. 27, 1951; Mar. 12, 1952.
d Occurred on following day.
e Occurred Mar. 23, 1955.
f Occurred Feb. 28, 1962.

730. Strawberry River near Evening Shade, Ark.

Location.--Lat 36°05'56", long 91°36'30", in NE¼NE¼ sec.27, T.17 N., R.6 W., at bridge on State Highway 11, 2 miles north of Evening Shade, 6.3 miles upstream from Piney Fork, and at mile 55.9.

Drainage area.--225 sq mi.

Gage.--Nonrecording prior to July 23, 1939; recording thereafter. Datum of gage is 406.56 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 16,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--9 ft.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Apr. 17, 1939	19.78	8,750	1942	Apr. 8, 1942	19.18	8,120
					Apr. 28, 1942	15.74	4,750
1940	Apr. 11, 1940	15.42	4,650				
				1943	Dec. 27, 1942	20.84	11,300
1941	Jan. 24, 1941	13.43	3,080		May 11, 1943	24.55	22,700
1942	Oct. 31, 1941	17.21	6,100	1944	Feb. 28, 1944	15.56	4,520
	Mar. 8, 1942	16.89	5,810		Apr. 11, 1944	16.90	5,580

Peak stages and discharges of Strawberry River near Evening Shade, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Apr. 23, 1944	15.82	4,670
	May 3, 1944	18.50	7,290
1945	Feb. 21, 1945	18.67	7,540
	Feb. 27, 1945	19.23	8,240
	Mar. 31, 1945	22.46	15,900
	Apr. 2, 1945	19.17	8,240
	Apr. 15, 1945	20.72	11,100
	June 11, 1945	20.44	10,400
1946	Jan. 9, 1946	18.32	7,040
	Feb. 14, 1946	20.18	9,970
	Mar. 6, 1946	21.07	12,000
	Apr. 30, 1946	19.26	8,400
	May 25, 1946	16.60	5,320
1947	Dec. 10, 1946	17.63	6,260
	May 20, 1947	16.38	5,160
1948	Jan. 1, 1948	16.91	5,580
	Feb. 25, 1948	15.09	4,140
	June 18, 1948	17.33	5,960
	June 27, 1948	14.98	4,060
1949	Jan. 18, 1949	18.17	7,310
	Jan. 24, 1949	26.59	31,000
	Jan. 27, 1949	15.77	5,020
	Feb. 14, 1949	19.94	9,760
	Mar. 26, 1949	18.64	7,830
	July 7, 1949	20.49	10,800
1950	Dec. 11, 1949	15.76	5,020
	Jan. 4, 1950	21.82	13,800
	Jan. 13, 1950	17.40	6,480
	Jan. 26, 1950	15.35	4,700
	Feb. 13, 1950	17.93	6,980
	May 30, 1950	14.93	4,300
	June 3, 1950	18.85	8,090
1951	Jan. 14, 1951	15.19	4,540
	Feb. 20, 1951	18.44	7,570
	Apr. 21, 1951	14.80	4,220
	June 20, 1951	15.01	4,380
	July 4, 1951	18.77	8,090
	July 10, 1951	15.62	4,860
	Aug. 18, 1951	16.65	5,720
1952	Nov. 6, 1951	14.36	4,060
	Nov. 24, 1951	20.36	10,900
	Jan. 4, 1952	17.36	6,920
	Mar. 11, 1952	18.52	8,200
	Apr. 12, 1952	14.67	4,310
1953	Nov. 25, 1952	15.48	5,030
	Dec. 4, 1952	14.70	4,310
	Mar. 14, 1953	15.95	5,480
1953	Mar. 18, 1953	17.04	6,480
	Mar. 22, 1953	15.86	5,390
1954	Jan. 20, 1954	14.40	4,060
	May 3, 1954	15.38	4,940
1955	Mar. 20, 1955	16.82	6,280
	May 20, 1955	18.16	7,840
1956	Feb. 18, 1956	15.62	5,120
	June 25, 1956	15.86	5,410
1957	Jan. 22, 1957	14.38	4,120
	Apr. 4, 1957	21.80	14,700
	Apr. 22, 1957	16.34	5,800
	Apr. 28, 1957	16.82	6,300
	May 23, 1957	19.03	9,000
1958	Nov. 13, 1957	15.56	5,380
	Nov. 18, 1957	16.72	6,570
	Mar. 24, 1958	16.25	6,020
	Apr. 3, 1958	14.95	4,780
	May 5, 1958	22.02	15,200
1959	Nov. 17, 1958	22.80	17,100
1960	May 20, 1960	16.10	5,910
1961	Mar. 31, 1961	15.42	5,180
	May 8, 1961	23.12	17,900
1962	Feb. 26, 1962	15.70	5,480
	Apr. 11, 1962	14.66	4,480
1963	Mar. 5, 1963	14.80	4,580
	May 27, 1963	16.68	6,570
1964	Mar. 9, 1964	21.37	13,900
	Apr. 5, 1964	16.53	6,350
1965	Apr. 3, 1965	14.87	4,680
	Sept. 22, 1965	19.46	10,400
1966	Jan. 2, 1966	22.97	17,600
	Feb. 10, 1966	16.10	5,910
	Apr. 23, 1966	20.40	11,900
1967	June 30, 1967	17.85	8,000
1968	Dec. 11, 1967	14.36	4,160
	Dec. 14, 1967	14.76	4,540
	Feb. 1, 1968	16.70	6,570
	Mar. 20, 1968	16.60	6,460
	Sept. 17, 1968	16.60	6,460
	Sept. 25, 1968	15.61	5,390

735. Piney Fork at Evening Shade, Ark.
(Prior to 1962 published as "Piney Fork Strawberry River")

Location.--Lat 36°04'50", long 91°36'39", in SE¼NE¼ sec.34, T.17 N., R.6 W., 20 ft upstream from bridge on U.S. Highway 167, three-quarters of a mile north of Evening Shade, and at mile 5.8.

Drainage area.--99 sq mi.

Gage.--Nonrecording prior to Oct. 5, 1945; recording thereafter. Datum of gage is 420.62 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--12 ft.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Apr. 16, 1939	14.4	5,740
1940	Apr. 19, 1940	8.5	1,900
1941	Nov. 11, 1940	7.26	1,220
1942	Jan. 1, 1942	9.60	2,490
	Apr. 8, 1942	14.74	6,000
	Apr. 28, 1942	12.86	4,540
1943	Dec. 27, 1942	16.60	7,720
	May 11, 1943	19.96	11,300
1944	Feb. 28, 1944	9.86	2,650
	Apr. 11, 1944	11.68	3,680
	Apr. 23, 1944	10.95	3,230
	May 3, 1944	10.88	3,180
1945	Feb. 21, 1945	12.16	4,020
	Feb. 27, 1945	10.02	2,700
	Mar. 3, 1945	9.27	2,330
	Mar. 6, 1945	10.18	2,810
	Mar. 19, 1945	10.74	3,070
	Mar. 30, 1945	18.00	9,100
	Apr. 2, 1945	15.56	6,790
	Apr. 15, 1945	18.50	9,650
	June 11, 1945	16.87	8,000
	June 17, 1945	16.64	7,720
	Sept. 25, 1945	11.63	3,610
1946	Jan. 9, 1946	12.64	4,320
	Feb. 14, 1946	12.89	4,540
	Mar. 6, 1946	17.84	8,900
	Mar. 16, 1946	9.32	2,330
	Apr. 30, 1946	13.98	5,410
	May 25, 1946	11.79	3,740
1947	Dec. 10, 1946	11.39	3,490
	May 21, 1947	14.00	5,200
1948	Jan. 1, 1948	9.52	2,540
	June 18, 1948	11.60	3,700
	June 27, 1948	9.48	2,540
	July 7, 1948	8.92	2,210
1949	Jan. 18, 1949	11.49	3,640
	Jan. 24, 1949	23.42	17,500
	Jan. 27, 1949	10.07	2,860
	Feb. 14, 1949	10.39	3,030
	Mar. 26, 1949	12.47	4,230
	July 8, 1949	14.80	5,810
1950	Jan. 4, 1950	15.45	6,310
	Jan. 10, 1950	9.67	2,640
	Jan. 13, 1950	11.14	3,420
	Jan. 15, 1950	8.58	2,040
	Jan. 26, 1950	9.64	2,590
	Feb. 1, 1950	9.21	2,370
	Feb. 13, 1950	13.34	4,740
	June 3, 1950	17.77	8,700
1951	Jan. 14, 1951	9.70	2,640
	Feb. 20, 1951	12.90	4,480
	Apr. 21, 1951	10.10	2,860
	June 20, 1951	8.58	2,040
	July 4, 1951	8.99	2,260
	Aug. 18, 1951	8.57	2,040
	Sept. 13, 1951	8.76	2,150
1952	Nov. 6, 1951	9.17	2,370
	Nov. 24, 1951	12.40	4,170
	Jan. 4, 1952	12.10	3,980
	Mar. 10, 1952	10.98	3,360
	Apr. 12, 1952	9.56	2,590
1953	Dec. 4, 1952	9.82	2,700
	Mar. 14, 1953	9.37	2,480
	Mar. 18, 1953	11.70	3,750
1954	Sept. 30, 1954	8.27	1,720
1955	Mar. 21, 1955	9.92	2,760
	May 20, 1955	9.64	2,590
1956	Feb. 18, 1956	10.69	2,950
	June 25, 1956	9.99	2,530
1957	Jan. 22, 1957	9.89	2,470
	Apr. 4, 1957	18.64	9,620

Peak stages and discharges of Piney Fork at Evening Shade, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Apr. 22, 1957	12.59	4,200	1962	Apr. 11, 1962	10.19	2,440
	Apr. 27, 1957	11.00	3,140				
	May 23, 1957	13.88	5,140	1963	May 27, 1963	10.69	2,740
1958	Nov. 13, 1957	10.24	2,650	1964	Mar. 9, 1964	19.20	10,400
	Nov. 18, 1957	13.95	5,220		Apr. 5, 1964	12.24	3,720
	Mar. 24, 1958	9.02	2,020				
	Apr. 3, 1958	10.09	2,640	1965	Sept. 22, 1965	16.50	7,300
	May 3, 1958	9.54	2,300				
	May 5, 1958	14.60	5,680	1966	Jan. 2, 1966	16.40	7,200
	May 9, 1958	9.70	2,400		Feb. 10, 1966	10.89	2,860
					Apr. 23, 1966	17.40	8,240
1959	Nov. 17, 1958	11.79	3,660				
				1967	June 30, 1967	8.64	1,610
1960	Nov. 4, 1959	10.42	2,560				
	May 20, 1960	12.53	3,930	1968	Dec. 11, 1967	10.15	2,410
					Dec. 21, 1967	10.39	2,550
1961	Apr. 1, 1961	11.54	3,230		Feb. 1, 1968	10.22	2,450
	May 5, 1961	13.20	4,460		Mar. 21, 1968	13.84	4,970
					May 14, 1968	9.87	2,240

740. Strawberry River near Poughkeepsie, Ark.

Location.--Lat 36°06'37", long 91°26'59", in SE¼NW¼ sec.19, T.17 N., R.4 W., on right bank at downstream side of bridge on State Highway 58, half a mile downstream from Hurricane Creek, 2½ miles northeast of Poughkeepsie, and at mile 35.9.

Drainage area.--476 sq mi.

Gage.--Nonrecording prior to Dec. 11, 1938; recording thereafter. Datum of gage is 298.07 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and by slope-area measurement at 52,000 cfs.

Bankfull stage.--20 ft.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Oct. 25, 1936	18.3	14,600	1939	Apr. 16, 1939	19.5	17,600
	Dec. 30, 1936	16.5	10,900		July 3, 1939	15.96	10,000
	Jan. 14, 1937	16.8	11,500				
	Jan. 22, 1937	15.8	9,670	1940	Apr. 19, 1940	12.43	5,230
	June 15, 1937	14.3	7,450				
				1941	Jan. 24, 1941	10.9	3,850
1938	Oct. 4, 1937	21.4	26,900				
	Feb. 15, 1938	17.6	13,000	1942	Oct. 31, 1941	15.30	8,100
	Feb. 18, 1938	23.6	31,600		Mar. 8, 1942	14.84	7,350
	Mar. 29, 1938	22.0	25,300		Apr. 8, 1942	21.25	22,700
	Apr. 16, 1938	18.1	14,100		Apr. 28, 1942	16.17	9,600
	June 19, 1938	21.9	28,800				
				1943	Dec. 27, 1942	18.10	13,800
1939	Jan. 29, 1939	16.73	11,300		May 11, 1943	24.60	32,900
	Mar. 5, 1939	18.36	14,800				

Peak stages and discharges of Strawberry River near Poughkeepsie, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 28, 1944	16.14	9,400
	Apr. 11, 1944	17.40	12,200
	Apr. 23, 1944	16.98	11,300
	May 3, 1944	16.99	11,300
1945	Feb. 27, 1945	18.33	13,500
	Mar. 19, 1945	17.99	12,600
	Mar. 30, 1945	21.34	22,500
	Apr. 1, 1945	19.46	17,100
	Apr. 15, 1945	22.24	25,200
	June 11, 1945	22.62	26,500
1946	Jan. 8, 1946	19.06	15,900
	Feb. 13, 1946	18.88	15,300
	Mar. 6, 1946	20.25	19,200
	May 1, 1946	19.20	16,200
	May 25, 1946	18.19	13,200
1947	Dec. 10, 1946	16.94	10,100
	May 21, 1947	16.64	9,660
1948	Jan. 1, 1948	16.67	9,820
	June 18, 1948	17.79	12,100
	June 27, 1948	15.06	7,530
1949	Jan. 18, 1949	18.27	13,500
	Jan. 24, 1949	29.30	52,000
	Feb. 15, 1949	17.84	12,600
	Mar. 26, 1949	18.72	14,700
	July 8, 1949	22.88	27,500
1950	Jan. 4, 1950	21.41	22,800
	Jan. 10, 1950	16.68	9,820
	Jan. 13, 1950	18.55	14,400
	Jan. 26, 1950	14.73	7,080
	Feb. 1, 1950	15.40	7,920
	Feb. 13, 1950	20.53	20,100
	June 4, 1950	19.23	16,200
1951	Jan. 14, 1951	16.40	9,340
	Feb. 20, 1951	19.56	17,400
	Apr. 21, 1951	15.80	8,440
	July 4, 1951	16.77	9,980
1952	Nov. 25, 1951	19.64	17,400
	Jan. 4, 1952	19.04	15,600
	Mar. 11, 1952	19.33	16,500
	Apr. 12, 1952	15.87	8,570
1953	Dec. 4, 1952	16.23	9,020
	Mar. 18, 1953	18.07	12,900
1954	May 2, 1954	13.83	6,200
1955	Mar. 21, 1955	16.16	9,020
	May 20, 1955	17.77	12,100
1956	Feb. 18, 1956	17.15	10,800
	June 25, 1957	15.30	7,790
1957	Jan. 22, 1957	15.63	8,180
	Apr. 4, 1957	24.36	32,700
	Apr. 22, 1957	16.49	9,500
	Apr. 28, 1957	18.72	14,700
	May 23, 1957	18.82	15,000
1958	Nov. 13, 1957	17.92	12,400
	Nov. 18, 1957	18.80	15,000
	Mar. 24, 1958	15.06	7,530
	May 3, 1958	14.71	7,100
	May 5, 1958	20.44	19,800
1959	Nov. 18, 1958	19.30	16,500
1960	May 20, 1960	16.84	9,980
1961	Apr. 1, 1961	15.93	8,580
	May 7, 1961	22.24	25,200
1962	Feb. 27, 1962	14.78	8,180
	Apr. 11, 1962	16.40	10,500
1963	May 27, 1963	14.77	8,180
1964	Mar. 9, 1964	24.22	31,900
	Apr. 5, 1964	18.09	12,800
1965	Sept. 22, 1965	19.06	16,100
1966	Jan. 2, 1966	22.73	26,800
	Feb. 10, 1966	15.96	9,800
	Apr. 24, 1966	21.26	22,500
1967	June 30, 1967	17.14	11,800
1968	Dec. 11, 1967	14.71	8,080
	Dec. 21, 1967	14.60	7,960
	Feb. 1, 1968	16.56	10,800
	Mar. 20, 1968	19.83	18,100
	May 11, 1968	13.96	7,710
	May 14, 1968	15.13	8,960
	Sept. 17, 1968	13.64	7,430

742. Dry Branch tributary near Sidney, Ark.

Location.--Lat 36°00'12", long 91°35'06", in NW¼SW¼ sec.25, T.16 N., R.6 W., on left bank 20 ft upstream from culvert on U.S. Highway 167, 0.8 mile upstream from mouth, and 4.2 miles east of Sidney.

Drainage area.--1.19 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements at 324 cfs, 491 cfs, 675 cfs, and 1,000 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	10.5	675	1966	Apr. 23, 1966	11.5	1,000
1962	1962	(a)	----------	1967	Sept. 8, 1967	11.57	1,100
1963	May 26, 1963	8.66	324	1968	May 10, 1968	8.95	390
1964	Mar. 9, 1964	9.39	491	1969	Mar. 23, 1969	11.51	995
1965	May 10, 1965	9.78	540				

a Peak stage did not reach bottom of gage.

742.5. Reeds Creek near Strawberry, Ark.

Location.--Lat 35°58'58", long 91°20'12", in SW¼SW¼ sec.32, T.16 N., R.3 W., on left bank 20 ft downstream from bridge on State Highway 117, 0.2 mile downstream from small tributary, 0.4 mile upstream from small tributary, and 1.4 miles northwest of Strawberry.

Drainage area.--34.9 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 3,410 cfs and extended above by logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	May 26, 1963	12.3	1,450	1966	Jan. 1, 1966	14.35	5,500
1964	Mar. 9, 1964	13.65	3,600	1967	July 6, 1967	12.82	2,010
1965	May 10, 1965	13.15	2,570	1968	May 13, 1968	13.41	3,060
				1969	Dec. 27, 1968	14.94	7,200

745. White River at Newport, Ark.
(Published as "near Newport" 1927-31)

Location.--Lat 35°36'22", long 91°17'19", in NE¼NE¼ sec.10, T.11 N., R.3 W., at bridge on U.S. Highway 67 at Newport, 7.2 miles downstream from Black River, and at mile 257.6.

Drainage area.--19,812 sq mi.

Gage.--Nonrecording prior to Aug. 14, 1953; recording thereafter. October 1927 to September 1931, 2.8 miles upstream at datum 2.30 ft lower. Datum of present gage is 194.09 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 341,000 cfs at present site and below 162,000 cfs at former site.

Bankfull stage.--26 ft.

Remarks.--Records of peak stage 1885-1927 and 1932-37 furnished by U.S. Weather Bureau. Discharge records since 1938 furnished by Corps of Engineers and reviewed by Geological Survey. Peak flows affected to some extent since 1943 by regulation by Norfork Reservoir on North Fork River, since 1948 by Clearwater Reservoir on Black River, since 1950 by Bull Shoals Reservoir, since 1956 by Table Rock Reservoir, and since 1964 by Beaver Reservoir; total capacity at top of designated flood-control pools, 13,218,200 acre-ft. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1886	May 12, 1886	24.0	66,500	1916	Feb. 1, 1916	34.3	303,000
1887	May 8, 1887	24.5	69,500	1917	Apr. 6, 1917	24.9	71,900
1888	May 23, 1888	26.1	80,900	1918	May 15, 1918	32.2	207,000
1889	Mar. 28, 1889	23.0	61,000	1919	June 5, 1919	23.4	63,200
1890	Mar. 14, 1890	33.0	235,000	1920	Mar. 29, 1920	29.3	125,000
1891	Apr. 26, 1891	23.8	65,400	1921	Apr. 30, 1921	31.3	174,000
1892	May 21, 1892	29.6	132,000	1922	Apr. 14, 1922	26.2	81,800
1893	May 5, 1893	30.7	158,000	1923	Feb. 5, 1923	29.5	130,000
1894	May 11, 1894	28.0	102,000	1924	June 14, 1924	25.4	75,500
1895	July 11, 1895	19.6	45,900	1925	May 1, 1925	21.8	55,100
1896	Dec. 24, 1895	28.8	116,000	1926	Oct. 19, 1925	26.1	80,900
1897	Jan.7,Mar.22,1897	27.9	101,000	1927	Apr. 17, 1927	35.6	387,000
1898	May 8, 1898	32.1	199,000	1928	June 15, 1928	33.1	172,000
1899	May 13, 1899	28.0	102,000	1929	May 12,13,1929	30.0	108,000
1900	Mar. 3, 1900	18.5	41,800	1930	Jan. 17, 1930	30.3	112,000
1901	Mar. 15, 1901	23.5	63,800	1931	Feb. 13, 1931	23.6	64,200
1902	Mar. 2, 1902	18.1	40,400	1932	Jan. 26, 1932	26.7	86,300
1903	Mar.12,13,1903	28.7	114,000	1933	May 19, 1933	32.1	199,000
1904	Mar. 29, 1904	28.9	117,000	1934	Mar. 29, 1934	25.7	77,800
1905	May 26, 1905	28.2	105,000	1935	Mar. 14, 1935	33.7	270,000
1906	Mar. 29, 1906	30.5	152,000	1936	Dec. 9, 1935	18.0	40,000
1907	May 11, 1907	30.7	158,000	1937	Jan.18,19,1937	30.7	158,000
1908	May 1908	29.4	127,000	1938	Feb. 20, 1938	33.4	259,000
1909	Mar. 14, 1909	26.0	80,000	1939	Apr. 20, 1939	30.3	144,000
1910	June 13, 1910	20.5	49,500	1940	Apr. 14, 1940	a24.4	75,200
1911	Aug. 17, 1911	24.8	71,300	1941	Apr. 23, 1941	a27.25	106,000
1912	May 2, 1912	29.4	127,000	1942	Nov. 5, 1941	28.1	102,000
1913	Jan. 26, 1913	26.0	80,000	1943	May 14, 1943	34.68	304,000
1914	May 1, 1914	23.1	61,600	1944	Mar. 3, 1944	b23.0	60,700
1915	Aug. 24, 1915	33.9	280,000	1945	Apr. 17, 1945	a35.9	343,000

Peak stages and discharges of White River at Newport, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	May 30, 1946	30.0	125,000	1958	May 11, 1958	27.54	92,800
1947	Dec. 16, 1946	28.2	100,000	1959	Nov. 17, 1958	d20.40	60,300
1948	June 21, 1948	a23.3	66,200	1960	May 22, 1960	a24.87	70,200
1949	Jan. 28, 1949	c34.0	260,000				
1950	May 15, 1950	32.1	194,000	1961	May 9, 1961	30.16	130,000
				1962	Feb. 28, 1962	21.45	56,000
1951	Feb. 23, 1951	28.5	104,000	1963	May 28, 1963	a13.42	33,400
1952	Apr. 15, 1952	25.6	75,200	1964	Mar. 13, 1964	27.46	99,000
1953	Mar. 20, 1953	24.4	66,300	1965	Apr. 5, 1965	e19.75	50,900
1954	May 3, 1954	a19.49	48,000				
1955	Mar. 22, 1955	a21.70	54,800	1966	Apr. 27, 1966	28.12	99,000
				1967	May 17, 1967	16.16	37,900
1956	Feb. 19, 1956	a22.10	55,300	1968	Mar. 23, 1968	26.69	84,700
1957	Apr. 6, 1957	28.25	101,000				

a Occurred on following day.
b Occurred Apr. 15, 1944.
c Occurred Jan. 24, 1949.
d Occurred Nov. 19, 1959.
e Occurred Apr. 7, 1965.

Note.--Discharges 1886-1927 and 1932-37 computed on basis of measurements made prior to construction of levees in 1940.

745.5. Village Creek near O'Kean, Ark.
(Published as "Village Creek Main Ditch" prior to 1965)

Location.--Lat 36°10'45", long 90°50'29", on south line SW¼SW¼ sec.23, T.18 N., R.2 E., on left bank 10 ft upstream from bridge on State Highway 90, 0.5 mile downstream from small tributary, 0.6 mile upstream from small tributary, and 1.6 miles northwest of O'Kean.

Drainage area.--6.8 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 291 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 7, 1961	8.25	360	1966	Jan. 2, 1966	10.0	----------
1962	Feb. 26, 1962	7.62	185	1967	May 13, 1967	7.39	145
1963	May 26, 1963	6.69	54	1968	May 10, 1968	7.85	242
1964	Mar. 9, 1964	8.42	420	1969	Jan. 29, 1969	8.73	450
1965	July 9, 1965	9.61	----------				

748.4. Cypress Creek tributary near Augusta, Ark.

Location.--Lat 35°20'37", long 91°20'38", in SE¼SE¼ sec.6, T.8 N., R.3 W., on right bank 18 ft upstream from culvert on State Highway 33, 0.4 mile upstream from small tributary, 0.7 mile upstream from mouth, and 4.4 miles north of Augusta.

Drainage area.--5.9 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 247 cfs and by culvert measurement at 525 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 26, 1962	5.08	145	1966	Jan. 2, 1966	4.55	370
1963	Mar. 5, 1963	4.46	131	1967	Aug. 3, 1967	4.04	260
1964	July 12, 1964	6.07	748	1968	May 13, 1968	4.40	335
1965	June 24, 1965	4.96	460	1969	Jan. 30, 1969	6.04	740

748.5. White River near Augusta, Ark.

Location.--Lat 35°17'23", long 91°23'33", in sec.26, T.8 N., R.4 W., at bridge on U.S. Highway 64, 2 miles northwest of Augusta and at mile 201.5.

Drainage area.--20,473 sq mi.

Gage.--Nonrecording. Datum of gage is 169.85 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Bankfull stage.--32 ft.

Remarks.--Records furnished by Corps of Engineers. For regulation, see Remarks for White River at Newport. Only annual peak stages are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1933	May 21, 1933	36.5	----------	1951	Feb. 26, 1951	34.02	----------
				1952	Apr. 17, 1952	32.58	----------
1935	Mar. 16, 1935	38.9	----------	1953	Mar.22,23,1953	32.5	----------
				1954	May 6, 1954	29.98	----------
1937	Jan.23-25,1937	36.6	----------	1955	Mar. 25, 1955	31.33	----------
1938	Feb. 23, 1938	39.27	----------				
1939	Apr. 22, 1939	34.9	----------	1956	Feb. 21, 1956	31.99	----------
1940	Apr. 18, 1940	32.23	----------	1957	May 3, 1957	34.05	----------
				1958	May 13, 1958	33.4	----------
1941	Nov. 7, 1941	33.37	----------	1959	Dec. 31, 1959	28.05	----------
1942	Apr. 18, 1942	33.66	----------	1960	May 25, 1960	32.33	----------
1943	May 16, 1943	39.84	----------				
1944	Apr. 17, 1944	31.93	----------	1961	May 12, 1961	35.07	----------
1945	Apr. 19, 1945	40.83	----------	1962	Mar. 2, 1962	31.78	----------
				1963	June 1, 1963	25.95	----------
1946	May 31, 1946	34.89	----------	1964	Mar. 19, 1964	32.82	----------
1947	Apr. 17, 1947	31.84	----------	1965	Apr. 9, 1965	30.2	----------
1948	Mar. 7, 1948	32.22	----------				
1949	Jan. 30, 1949	39.33	----------	1966	Apr. 28, 1966	33.0	----------
1950	May 17,18,1950	36.5	----------	1967	Dec. 24, 1967	31.2	----------
				1968	May 18, 1968	a32.40	----------

a Maximum peak stage; maximum stage, 32.45 feet Dec. 31, 1968, on rise that crested Jan. 2, 1969.

749. Trace Creek tributary near Marshall, Ark.

Location.--Lat 35°52'14", long 92°36'08", in NE¼SW¼ sec.8, T.14 N., R.15 W., on left bank 21 ft upstream from culvert on U.S. Highway 65, 0.2 mile upstream from mouth, and 3.2 miles south of Marshall.

Drainage area.--0.25 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 6 cfs and by culvert measurements at 85 cfs and 208 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	9.96	208	1966	Feb. 9, 1966	8.16	95
1962	1962	(a)	----------	1967	Mar. 6, 1967	7.81	74
1963	May 26, 1963	7.0	25	1968	Oct. 18, 1967	7.88	79
1964	Apr. 5, 1964	8.14	94	1969	Dec. 27, 1968	7.99	85
1965	Nov. 19, 1964	7.89	80				

a Peak stage did not reach bottom of gage.

749.5. Tick Creek near Leslie, Ark.

Location.--Lat 35°51'30", long 92°26'24", in SW¼NE¼ sec.14, T.14 N., R.14 W., on left wingwall 25 ft upstream from culvert on State Highway 66, 1.5 miles east of Oxley, and 7.0 miles east of Leslie.

Drainage area.--0.9 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 148 cfs and by culvert measurements at 806 cfs and 915 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	8.74	915	1966	Apr. 23, 1966	7.39	350
1962	January 1962	6.09	72	1967	Mar. 6, 1967	6.68	140
1963	May 26, 1963	5.7	40	1968	Oct. 18, 1967	7.39	350
1964	Apr. 5, 1964	7.24	320	1969	Dec. 27, 1968	8.06	625
1965	Sept. 22, 1965	7.09	250				

750. Middle Fork Little Red River at Shirley, Ark.

Location.--Lat 35°39', long 92°18', in SW¼ sec.20, T.12 N., R.12 W., on right bank half a mile downstream from Sugar Camp (or Weavers) Creek, 1 mile east of Shirley, and at mile 122.0.

Drainage area.--294 sq mi.

Gage.--Nonrecording prior to June 6, 1939; recording thereafter. Prior to July 16, 1952, 70 ft upstream at same datum. Datum of present gage is 483.12 ft above mean sea level, datum of 1929. Recording gage at former site located on downstream side of railroad pier and subject to considerable drawdown. All crest stages subject to drawdown adjusted to nonrecording gage by stage-relation curve.

Stage-discharge relation.--Defined by current-meter measurements below 59,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--19 ft.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 10, 1935	27.3	a61,000
1939	Apr. 17, 1939	19.5	16,800
1940	Apr. 19, 1940	11.40	3,480
1941	Jan. 1, 1941	14.22	7,770
	Sept. 25, 1941	13.76	7,140
1942	Oct. 17, 1941	17.36	13,200
	Oct. 31, 1941	19.95	18,900
	Dec. 23, 1941	13.09	6,050
	Mar. 8, 1942	14.53	8,250
	Apr. 8, 1942	19.55	17,900
	May 20, 1942	14.32	7,930
1943	Nov. 7, 1942	14.98	9,080
	Dec. 27, 1942	23.08	34,000
	Apr. 11, 1943	15.68	10,200
	May 11, 1943	27.15	60,700
1944	Feb. 28, 1944	16.28	11,300
	Apr. 11, 1944	13.74	6,970
	Apr. 23, 1944	21.28	24,700
	May 3, 1944	13.73	6,970
1945	Feb. 21, 1945	22.10	28,500
	Mar. 3, 1945	19.27	17,500
	Mar. 30, 1945	24.60	43,200
	Apr. 15, 1945	19.91	19,200
	June 10, 1945	23.40	35,800
1946	Jan. 5, 1946	14.04	7,350
	Jan. 9, 1946	20.26	21,300
	Feb. 13, 1946	21.45	25,500
	Mar. 6, 1946	17.48	13,700
	May 2, 1946	14.74	8,400
	May 23, 1946	15.37	9,550
1947	Dec. 10, 1946	19.58	19,000
	Apr. 8, 1947	13.14	6,000
	Apr. 11, 1947	17.12	12,800
	May 13, 1947	14.01	7,350
1948	Jan. 1, 1948	19.47	18,800
	Mar. 2, 1948	14.59	8,250
1949	Dec. 15, 1948	14.95	8,700
	Jan. 4, 1949	13.44	6,120
	Jan. 18, 1949	17.67	14,000
	Jan. 24, 1949	31.0	101,000
	Jan. 27, 1949	16.49	11,600
	Feb. 14, 1949	17.03	12,600
	Mar. 26, 1949	14.97	8,700
1950	Oct. 22, 1949	15.91	10,400
	Jan. 4, 1950	21.73	27,900
	Jan. 13, 1950	16.27	11,200
	Jan. 26, 1950	13.55	6,280
	Feb. 1, 1950	13.94	6,920
	Feb. 13, 1950	15.90	10,400
	May 12, 1950	13.43	6,120
	June 3, 1950	21.73	27,900
	July 18, 1950	13.97	6,920
	Aug. 28, 1950	18.56	16,500
1951	Jan. 3, 1951	15.20	9,060
	Feb. 20, 1951	19.73	20,000
	Apr. 21, 1951	16.43	11,400
	July 4, 1951	14.23	7,440
1952	Nov. 1, 1951	14.89	8,520
	Nov. 6, 1951	15.00	8,700
	Nov. 24, 1951	18.62	16,500
	Jan. 4, 1952	15.12	8,880
	Mar. 10, 1952	18.38	15,900
	Apr. 12, 1952	18.16	15,300
	Apr. 22, 1952	16.30	11,200
	May 23, 1952	14.57	7,980
1953	Nov. 25, 1952	21.26	27,900
	Dec. 4, 1952	14.55	8,160
	Jan. 23, 1953	14.84	8,520
	Mar. 4, 1953	13.44	6,120
	Mar. 14, 1953	16.88	12,600
	Mar. 18, 1953	19.17	18,900
	Apr. 24, 1953	15.00	8,880
	May 13, 1953	15.03	8,880

Peak stages and discharges of Middle Fork Little Red River at Shirley, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 20, 1954	14.40	7,260	1960	Feb. 5, 1960	15.26	9,240
	May 2, 1954	21.13	29,000		May 6, 1960	17.78	14,500
					May 20, 1960	20.00	20,800
1955	Feb. 20, 1955	16.4	11,600				
	Mar. 18, 1955	13.76	6,760	1961	Dec. 6, 1960	13.70	6,420
	Mar. 21, 1955	20.25	22,800		Dec. 11, 1960	13.90	6,740
	Apr. 21, 1955	20.04	22,000		Mar. 6, 1961	14.46	7,800
	May 21, 1955	18.16	15,900		Mar. 27, 1961	13.94	6,740
	June 6, 1955	13.42	6,120		Apr. 1, 1961	16.75	12,200
	July 18, 1955	15.33	9,420		May 6, 1961	23.45	35,100
1956	Feb. 2, 1956	17.95	15,300	1962	Feb. 26, 1962	16.31	11,100
	Feb. 8, 1956	14.53	7,980				
	Feb. 18, 1956	17.82	14,800	1963	Mar. 17, 1963	13.10	5,460
1957	Jan. 22, 1957	18.97	18,200	1964	Mar. 10, 1964	25.01	43,700
	Feb. 25, 1957	17.38	13,800		Apr. 5, 1964	19.67	19,900
	Apr. 3, 1957	23.49	37,800		May 11, 1964	18.02	15,000
	Apr. 21, 1957	17.12	13,000				
	Apr. 25, 1957	14.34	7,620	1965	Jan. 9, 1965	13.78	6,580
	May 23, 1957	15.76	10,400		Feb. 10, 1965	13.90	6,740
	Aug. 13, 1957	26.03	51,700		Mar. 29, 1965	13.90	6,740
					Sept. 22, 1965	14.56	7,980
1958	Nov. 13, 1957	17.20	13,300				
	Nov. 18, 1957	17.39	13,800	1966	Jan. 2, 1966	15.90	10,300
	Mar. 9, 1958	15.62	10,000		Feb. 10, 1966	21.80	27,700
	Mar. 23, 1958	15.85	10,400		Apr. 23, 1966	20.12	21,200
	May 3, 1958	14.98	8,880				
	May 9, 1958	17.89	15,000	1967	May 14, 1967	13.97	6,850
1959	Nov. 17, 1958	23.42	37,200	1968	Oct. 17, 1967	15.57	9,740
	Mar. 5, 1959	13.37	6,120		Oct. 30, 1967	13.89	6,720
	Mar. 26, 1959	13.78	6,760		Dec. 12, 1967	15.20	9,060
					Dec. 21, 1967	15.78	10,100
1960	Nov. 4, 1959	23.57	36,200		Mar. 21, 1968	21.24	25,400
	Dec. 11, 1959	13.80	6,580		May 14, 1968	19.31	18,700
	Dec. 28, 1959	15.56	9,780				

a Annual peak only.

753. South Fork Little Red River at Clinton, Ark.

Location.--Lat 35°35'29", long 92°27'20", in SW¼ sec.14, T.11 N., R.14 W., on downstream side of bridge on U.S. Highway 65 at Clinton, a quarter of a mile upstream from Archey Fork, and at mile 23.7.

Drainage area.--145 sq mi.

Gage.--Nonrecording prior to October 1966; recording thereafter. Datum of gage is 481.11 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs.

Remarks.--Base for partial-duration series, 5,000 cfs. Only annual peaks are shown prior to 1966.

Peak stages and discharges of South Fork Little Red River at Clinton, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 26, 1962	16.19	6,910	1966	Feb. 10, 1966	19.00	10,600
					Apr. 23, 1966	18.14	9,340
1963	Mar. 17, 1963	10.50	1,560				
				1967	Apr. 14, 1967	12.30	2,930
1964	Mar. 9, 1964	24.00	22,200				
				1968	Mar. 20, 1968	18.68	12,500
1965	Mar. 29, 1965	14.34	4,720		May 14, 1968	19.50	14,200

755. South Fork Little Red River near Clinton, Ark.

Location.--Lat 35°34', long 92°23', in NE¼ sec.29, T.11 N., R.13 W., on left bank 1¾ miles downstream from Pedee Creek, 4½ miles southeast of Clinton, and 6 miles downstream from Archey Fork.

Drainage area.--316 sq mi.

Gage.--Nonrecording prior to July 14, 1939; recording thereafter. Datum of gage is 430.02 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 42,000 cfs.

Bankfull stage.--20 ft.

Historical data.--Maximum stage known prior to Jan. 24, 1949, 25.2 ft, date unknown, from information by local residents.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Apr. 17, 1939	21.1	a31,300	1945	Mar. 30, 1945	23.36	43,100
					Apr. 2, 1945	16.42	17,000
1940	May 1, 1940	10.67	5,770		Apr. 15, 1945	13.89	11,800
					June 11, 1945	20.43	28,500
1941	May 7, 1941	11.4	6,820		June 17, 1945	11.34	7,220
1942	Oct. 17, 1941	16.30	16,200	1946	Jan. 9, 1946	18.04	20,700
	Oct. 31, 1941	18.40	20,800		Feb. 13, 1946	20.1	27,300
	Dec. 23, 1941	11.37	7,350		Mar. 6, 1946	14.62	13,200
	Apr. 8, 1942	17.66	19,200		May 2, 1946	12.72	9,600
	Apr. 26, 1942	12.65	9,220		May 23, 1946	14.00	12,000
1943	Dec. 27, 1942	20.58	29,300	1947	Dec. 12, 1946	18.00	20,700
	Apr. 12, 1943	16.25	16,600				
	May 11, 1943	24.27	43,800	1948	Jan. 1, 1948	16.24	16,600
					Mar. 2, 1948	13.48	11,100
1944	Feb. 9, 1944	11.60	7,130				
	Feb. 28, 1944	13.84	10,200	1949	Dec. 15, 1948	13.80	11,600
	Apr. 8, 1944	19.20	24,200		Jan. 18, 1949	16.15	15,400
	Apr. 23, 1944	21.01	30,900		Jan. 24, 1949	26.55	54,900
	May 3, 1944	11.61	7,130		Jan. 27, 1949	13.96	11,000
					Feb. 14, 1949	12.25	8,000
1945	Feb. 17, 1945	14.00	12,000		Mar. 26, 1949	12.97	9,300
	Feb. 21, 1945	20.28	28,100				
	Mar. 3, 1945	17.97	20,700	1950	Oct. 5, 1949	14.96	12,900
	Mar. 19, 1945	13.29	10,700		Oct. 22, 1949	14.40	11,800

Peak stages and discharges of South Fork Little Red River near Clinton, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Dec. 11, 1949	12.26	8,150	1956	Feb. 8, 1956	12.34	8,860
	Jan. 4, 1950	17.83	19,400		Feb. 18, 1956	15.08	14,300
	Jan. 13, 1950	16.66	16,500				
	Feb. 1, 1950	12.70	8,790	1957	Jan. 22, 1957	19.44	21,000
	Feb. 13, 1950	13.51	10,200		Feb. 25, 1957	14.76	12,800
	May 12, 1950	11.97	7,700		Apr. 3, 1957	24.26	41,300
	Aug. 25, 1950	12.00	7,700		Apr. 21, 1957	14.90	13,000
	Aug. 29, 1950	12.73	8,790		May 23, 1957	15.36	14,000
					Aug. 13, 1957	28.16	59,500
1951	Jan. 3, 1951	13.86	10,800		Sept. 1, 1957	14.39	11,900
	Feb. 20, 1951	14.25	11,400				
				1958	Oct. 23, 1957	12.07	7,760
1952	Nov. 1, 1951	12.55	8,620		Nov. 13, 1957	17.48	18,800
	Nov. 6, 1951	14.14	11,200		Nov. 18, 1957	17.84	19,500
	Nov. 24, 1951	14.40	11,800		Mar. 8, 1958	12.76	8,880
	Jan. 4, 1952	14.10	11,200		Mar. 24, 1958	13.87	10,900
	Mar. 11, 1952	16.27	16,800		May 2, 1958	14.37	13,000
	Apr. 12, 1952	15.62	15,300		May 5, 1958	12.78	9,960
	Apr. 22, 1952	16.03	16,100		May 9, 1958	12.09	8,720
1953	Nov. 25, 1952	19.55	25,500	1959	Nov. 15, 1958	12.26	8,080
	Dec. 4, 1952	14.01	12,000		Nov. 17, 1958	19.12	22,800
	Jan. 23, 1953	12.09	8,480		Mar. 21, 1959	12.07	7,760
	Mar. 14, 1953	14.34	12,600				
	Mar. 18, 1953	17.70	20,000	1960	Nov. 4, 1959	14.20	11,500
	Apr. 24, 1953	12.99	10,200		Dec. 11, 1959	12.78	8,880
	May 13, 1953	11.49	7,520		Dec. 27, 1959	12.04	7,600
					May 6, 1960	14.15	11,500
1954	May 2, 1954	18.43	19,800		May 20, 1960	17.15	18,100
1955	Feb. 20, 1955	13.99	12,000	1961	Dec. 6, 1960	14.17	11,500
	Mar. 18, 1955	11.46	7,520		Dec. 11, 1960	12.47	8,400
	Mar. 21, 1955	17.44	19,300		Mar. 12, 1961	13.03	9,200
	Apr. 21, 1955	15.30	14,700		Mar. 27, 1961	12.36	8,240
	May 21, 1955	13.27	10,700		Apr. 1, 1961	14.92	13,000
					May 6, 1961	18.13	20,200
1956	Feb. 2, 1956	16.06	16,300				

a Annual peak only.

756. Choctaw Creek tributary near Choctaw, Ark.

Location.--Lat 35°31'30", long 92°25'03", in SE¼SW¼ sec.6, T.10 N., R.13 W., on right bank 26 ft upstream from culvert on State Highway 330, 0.2 mile upstream from mouth, and 1.4 miles east of Choctaw.

Drainage area.--1.6 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 73 cfs and by culvert measurments at 207 cfs and 337 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Choctaw Creek tributary near Choctaw, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	May 11, 1964	10.81	337	1967	May 15, 1967	7.80	110
1965	Feb. 9, 1965	7.74	106	1968	May 13, 1968	11.20	368
				1969	Dec. 27, 1968	10.59	318
1966	Apr. 23, 1966	9.74	249				

758. Peter Creek tributary near Ida, Ark.

Location.--Lat 35°32'36", long 91°57'25", in E½ sec.33, T.11 N., R.9 W., on left bank 9 ft upstream from culvert on State Highway 25, 0.3 mile upstream from mouth, and 3.5 miles southwest of Ida.

Drainage area.--0.3 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 43 cfs and by culvert measurements at 32 cfs, 52 cfs, and 79 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	Mar. 9, 1964	6.79	52	1967	Dec. 27, 1966	5.88	15
1965	Nov. 19, 1964	6.34	32	1968	May 13, 1968	8.33	125
				1969	Jan. 30, 1969	6.90	58
1966	Jan. 1, 1966	7.35	79				

760. Little Red River near Heber Springs, Ark.

Location.--Lat 35°31'02", long 91°59'50", in NE¼ sec.7, T.10 N., R.9 W., on right bank 1,600 ft downstream from Greers Ferry Dam, 3 miles northeast of Heber Springs, and at mile 78.8.

Drainage area.--1,146 sq mi.

Gage.--Nonrecording prior to Dec. 15, 1938, at site 2¼ miles upstream at datum 8.97 ft higher than present datum; recording thereafter. Dec. 15, 1938, to Sept. 30, 1960, at site 1¾ miles upstream at datum 10.03 ft higher than present datum. Datum of present gage is 261,78 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Records since July 1935 furnished by Corps of Engineers and reviewed by Geological Survey. Flow completely regulated since March 1962 by Greers Ferry Reservoir. Only annual peaks are shown prior to 1937 and subsequent to 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	April 1927	44.00	78,900	1931	Oct. 8, 1930	24.45	28,500
1928	Apr. 6, 1928	42.35	74,400	1932	Jan. 6, 1932	31.3	47,400
1929	Feb. 26, 1929	29.10	41,100	1933	May 16, 1933	38.0	62,900
1930	May 11, 1930	38.90	65,200	1934	Mar. 26, 1934	31.86	49,100

Peak stages and discharges of Little Red River near Heber Springs, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1935	May 5, 1935	42.0	73,300
1937	Jan. 15, 1937	29.9	41,800
	Jan. 22, 1937	24.5	27,600
	May 2, 1937	25.3	29,500
1938	Jan. 24, 1938	26.4	32,300
	Feb. 18, 1938	41.9	73,100
	Mar. 30, 1938	39.0	70,200
	Apr. 16, 1938	28.5	37,800
1939	Jan. 30, 1939	25.19	36,100
	Apr. 17, 1939	36.83	72,800
	May 27, 1939	25.40	36,600
1940	May 1, 1940	17.55	17,300
1941	Jan. 2, 1941	16.60	15,300
1942	Oct. 18, 1941	24.38	33,800
	Nov. 1, 1941	29.00	46,700
	Apr. 9, 1942	32.37	57,900
1943	Dec. 28, 1942	32.32	51,000
	Apr. 12, 1943	24.53	31,400
	May 11, 1943	43.95	99,100
1944	Feb. 29, 1944	23.31	28,800
	Apr. 11, 1944	25.93	34,500
	Apr. 23, 1944	33.08	53,600
	May 3, 1944	22.86	28,000
1945	Feb. 22, 1945	35.09	65,900
	Feb. 27, 1945	26.58	37,500
	Mar. 3, 1945	28.33	42,500
	Mar. 20, 1945	25.83	35,200
	Mar. 31, 1945	42.47	96,200
	Apr. 2, 1945	30.37	49,200
	Apr. 16, 1945	27.90	41,300
	June 11, 1945	40.77	88,900
	June 18, 1945	24.39	31,400
1946	Jan. 9, 1946	31.17	49,400
	Feb. 14, 1946	33.90	58,800
	Mar. 6, 1946	30.93	48,500
	May 3, 1946	26.97	37,800
	May 24, 1946	25.22	33,300
1947	Dec. 12, 1946	29.30	43,800
1948	Jan. 1, 1948	27.66	39,600
	Mar. 12, 1948	22.33	26,300
1949	Dec. 16, 1948	24.34	31,100
	Jan. 19, 1949	27.80	39,900
	Jan. 25, 1949	46.53	117,000
	Jan. 28, 1949	24.76	32,300
	Feb. 14, 1949	23.68	29,700
	Mar. 27, 1949	27.53	39,100
1950	Oct. 6, 1949	24.82	30,500
	Jan. 5, 1950	32.51	53,700
1950	Jan. 14, 1950	28.76	41,900
	Feb. 13, 1950	26.88	36,200
	June 4, 1950	24.18	29,000
1951	Jan. 14, 1951	25.06	31,300
	Feb. 21, 1951	27.67	38,600
1952	Nov. 6, 1951	23.08	26,400
	Nov. 24, 1951	27.37	37,700
	Jan. 4, 1952	26.24	34,200
	Mar. 11, 1952	28.18	40,100
	Apr. 13, 1952	26.55	35,400
	Apr. 23, 1952	24.85	30,500
1953	Nov. 26, 1952	30.56	47,500
	Dec. 4, 1952	25.43	32,100
	Mar. 15, 1953	23.16	26,600
	Mar. 18, 1953	31.15	49,400
1954	May 3, 1954	29.76	45,000
1955	Mar. 21, 1955	28.37	40,700
	Apr. 21, 1955	27.37	37,700
1956	Feb. 2, 1956	27.70	38,600
	Feb. 18, 1956	28.37	40,700
1957	Jan. 23, 1957	30.29	46,600
	Apr. 4, 1957	44.23	96,500
	Apr. 22, 1957	23.26	27,300
	Apr. 28, 1957	23.62	28,000
	May 24, 1957	29.11	42,800
	Aug. 14, 1957	40.84	87,500
1958	Nov. 14, 1957	29.49	44,000
	Nov. 18, 1957	30.30	46,600
	Mar. 24, 1958	24.70	30,400
	May 3, 1958	30.85	48,200
	May 10, 1958	23.72	28,200
1959	Nov. 17, 1958	31.47	50,400
1960	Nov. 5, 1959	27.63	36,400
	May 7, 1960	23.98	27,800
	May 21, 1960	31.75	49,900
1961	May 7, 1961	40.00	66,000
1962	Dec. 10, 1961	16.20	8,000
1963	Jan. 11, 1963	5.44	273
1964	Apr. 2, 1964	15.54	7,350
1965	Sept. 14, 1965	16.84	8,940
1966	July 12, 1966	16.38	8,430
1967	Jan. 3, 1967	15.89	7,820
1968	Dec. 22, 1967	16.34	8,360

766.3. Key Branch near Searcy, Ark.

Location.--Lat 35°14'47", long 91°47'01", in NW¼SW¼ sec.8, T.7 N., R.7 W., on right bank 23 ft upstream from culvert on State Highway 36, 1.0 mile upstream from mouth, and 2.8 miles west of Searcy.

Drainage area.--0.64 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 52 cfs and by culvert measurements at 244 cfs, 338 cfs, and 457 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 6, 1961	5.77	244	1966	Aug. 20, 1966	7.07	457
1962	Sept. 9, 1962	6.34	338	1967	May 31, 1967	5.37	125
1963	Mar. 4, 1963	5.49	204	1968	May 10, 1968	6.86	415
1964	Mar. 9, 1964	5.88	262	1969	Jan. 30, 1969	6.86	415
1965	Sept. 11, 1965	5.46	195				

767.5. White River at Georgetown, Ark.

Location.--Lat 35°07'45", long 91°27'00", in sec.20, T.6 N., R.4 W., on right bank at Georgetown, 9.2 miles downstream from Little Red River, and at mile 167.0.

Drainage area.--22,330 sq mi.

Gage.--Nonrecording. Prior to August 1949, at site 1.0 mile downstream at present datum. Datum of gage is 170.08 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Bankfull stage.--21 ft.

Remarks.--Records furnished by U.S. Weather Bureau. For regulation see Remarks for White River at DeValls Bluff. Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Jan. 19, 1913	24.1	----------	1928	June 27, 1928	29.9	----------
1914	May 8-11, 1914	22.3	----------	1929	May 16, 1929	26.6	----------
1915	Aug.27,28,1915	26.2	----------	1930	Jan.20,21,1930	26.8	----------
1916	Feb. 3,4, 1916	27.5	----------	1931	Feb.19-21,1931	21.7	----------
1917	Apr. 12, 1917	22.2	----------	1932	Jan.29,30,1932	25.0	----------
1918	May 20, 1918	28.2	----------	1933	May 23, 1933	28.4	----------
1919	Jan. 3,4, 1919	22.3	----------	1934	Mar. 31, 1934	24.5	----------
1920	Apr. 2, 1920	25.5	----------	1935	Mar. 18, 1935	31.3	----------
1921	May 3, 1921	28.0	----------	1936	Dec. 10, 1935	19.5	----------
1922	Apr.6-9,11,15,1922	23.9	----------	1937	Jan.24,25,1937	30.3	----------
1923	May 31, 1923	25.9	----------	1938	Feb. 24, 1938	31.5	----------
1924	June 18-20,1924	22.0	----------	1939	Apr. 24, 1939	27.0	----------
1925	May 5,6, 1925	18.2	----------	1940	Apr. 22, 1940	22.7	----------
1926	Oct.23,24,1925	23.3	----------	1941	Apr. 28, 1941	22.6	----------
1927	Apr. 17, 1927	30.4	----------	1942	Apr. 17, 1942	24.8	----------

Peak stages and discharges of White River at Georgetown, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	May 18, 1943	31.4	----------	1956	Feb. 22, 1956	22.8	----------
1944	Apr. 27, 1944	22.7	----------	1957	May 4, 1957	27.0	----------
1945	Apr. 4, 1945	32.0	----------	1958	May 13, 1958	25.1	----------
				1959	Feb.17-19,1959	18.7	----------
1946	June 1,2, 1946	27.4	----------	1960	May 26, 1960	22.10	----------
1947	Dec.19,20,1946	24.5	----------				
1948	Mar. 8,9, 1948	22.9	----------	1961	May 13, 1961	28.00	----------
1949	Feb. 1, 1949	32.8	----------	1962	Mar. 6-7, 1962	21.20	----------
1950	Jan. 19, 1950	29.1	----------	1963	Mar. 13, 1963	13.00	----------
				1964	Mar. 17, 1964	23.1	----------
1951	Feb.28-Mar.2,1951	24.7	----------	1965	Apr. 11, 1965	18.6	----------
1952	Apr. 26, 1952	23.2	----------				
1953	Mar. 24, 1953	23.3	----------	1966	May 1-2, 1966	24.5	----------
1954	May 6, 1954	20.0	----------	1967	May 21, 1967	15.6	----------
1955	Mar. 25, 1955	21.0	----------	1968	May 16, 1968	23.1	----------

768.2. Gum Springs Creek near Higginson, Ark.
(Published as "Glade Creek" prior to 1964)

Location.--Lat 35°12'04", long 91°43'56", on east line NE¼SE¼ sec.27, T.7 N., R.7 W., on right bank 30 ft downstream from bridge on U.S. Highway 67, just south of junction with U.S. Highway 67C south of Searcy, 0.5 mile downstream from tributary, 1.0 mile upstream from tributary, and 1.2 miles northwest of Higginson.

Drainage area.--4.94 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since November 1967.

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and by contracted-opening measurements at 1,460 cfs and 1,880 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 6, 1961	9.51	765	1966	Aug. 13, 1966	11.08	1,100
1962	Sept. 9, 1962	11.38	1,460	1967	May 7, 1967	9.45	675
1963	Mar. 5, 1963	9.10	600	1968	May 10, 1968	11.24	1,150
1964	Mar. 9, 1964	11.01	1,050	1969	Jan. 30, 1969	11.77	1,880
1965	Sept. 11, 1965	9.60	730				

768.5. Cypress Bayou near Beebe, Ark.

Location.--Lat 35°01'30", long 91°52'23", in SW¼SW¼ sec.28, T.5 N., R.8 W., on downstream side of bridge on State Highway 31, 2.1 miles downstream from Mill Creek, and 3.2 miles south of Beebe.

Drainage area.--166 sq mi.

Gage.--Recording. Datum of gage is 194.54 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs (1969).

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges of Cypress Bayou near Beebe, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 24, 1962	11.80	2,560	1966	Jan. 3, 1966	13.25	8,110
	Feb. 28, 1962	12.97	6,640		Feb. 11, 1966	11.64	2,120
	Apr. 1, 1962	12.07	3,730		Apr. 27, 1966	12.85	6,210
	Sept. 11, 1962	11.92	2,920				
				1967	Mar. 8, 1967	12.02	2,590
1963	Mar. 6, 1963	12.01	2,860		June 2, 1967	11.90	2,160
1964	Mar. 10, 1964	13.88	11,900	1968	Dec. 13, 1967	12.31	3,680
	Apr. 6, 1964	12.72	5,610		Mar. 22, 1968	12.22	3,450
					Apr. 24, 1968	11.73	2,220
1965	Jan. 11, 1965	12.67	5,410		May 12, 1968	14.27	10,800
	Feb. 12, 1965	12.28	4,040		May 14, 1968	14.27	10,800

768.7. Pigeon Roost Creek at Butlerville, Ark.

Location.--Lat 34°58'36", long 91°50'38", in NW¼NE¼ sec.15, T.4 N., R.8 W., near left bank on downstream side of bridge on State Highway 38, 0.1 mile upstream from small tributary, and 0.6 mile west of Butlerville.

Drainage area.--23.0 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs and by contracted-opening measurement at 7,400 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	March 1961	---------	>112	1966	Apr. 26, 1966	10.19	1,500
1962	Jan. 22, 1962	10.47	1,950	1967	Mar. 7, 1967	10.33	1,700
1963	May 6, 1963	8.71	228	1968	May 14, 1968	10.81	2,600
1964	Mar. 9, 1964	11.84	5,000	1969	Jan. 30, 1969	12.30	7,400
1965	Feb. 11, 1965	11.12	3,300				

> Greater than.

769. White River at Des Arc, Ark.

Location.--Lat 34°58'36", long 91°29'33", in SE¼ sec.11, T.4 N., R.5 W., on right bank at Des Arc, 2.0 miles downstream from Bayou Des Arc, and at mile 143.2.

Drainage area.--23,111 sq mi.

Gage.--Nonrecording. Datum of gage is 159.87 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Bankfull stage.--24 ft.

Remarks.--Records furnished by Corps of Engineers. For regulation see Remarks for White River at De Valls Bluff. Only annual peak stages are shown.

Peak stages and discharges of White River at Des Arc, Ark.

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1933	May 24,25,1933	32.0	----------	1951	Mar. 2, 1951	27.9	----------
				1952	Apr.27,28,1952	25.9	----------
1935	Mar. 19, 1935	35.0	----------	1953	Mar. 25, 1953	26.6	----------
				1954	May 7, 1954	22.55	----------
1937	Jan. 24, 1937	35.15	----------	1955	Mar.27,28,1955	22.9	----------
1938	Feb. 24, 1938	34.7	----------				
1939	Apr.25,26,1939	30.2	----------	1956	Feb. 23, 1956	25.46	----------
1940	Apr. 25, 1940	24.8	----------	1957	May 3-5, 1957	30.20	----------
				1958	May 14, 1958	28.3	----------
1941	Nov. 12, 1941	26.2	----------	1959	Feb. 18, 1959	22.40	----------
1942	Apr. 19, 1942	27.8	----------	1960	May 28,29,1960	24.10	----------
1943	May 20, 1943	34.9	----------				
1944	May 8, 1944	24.9	----------	1961	May 15, 1961	30.90	----------
1945	Apr. 4, 1945	35.6	----------	1962	Mar. 4-6, 1962	23.30	----------
				1963	Mar. 13, 1963	16.30	----------
1946	June 2,3, 1946	30.0	----------	1964	Mar. 19, 1964	25.4	----------
1947	Apr. 22, 1947	22.8	----------	1965	Feb. 15, 1965	20.9	----------
1948	Mar. 7, 1948	25.15	----------				
1949	Feb. 2, 1949	37.3	----------	1966	May 2-3, 1966	27.5	----------
1950	Jan. 20, 1950	32.9	----------	1967	Dec. 31, 1967	21.9	----------
				1968	May 17, 1968	27.2	----------

770. White River at DeValls Bluff, Ark.

Location.--Lat 34°47'25", long 91°26'45", in SE¼ sec.17, T.2 N., R.4 W., 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.--23,431 sq mi.

Gage.--Nonrecording prior to Dec. 22, 1933; recording thereafter. Datum of gage is 152.93 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 220,000 cfs.

Bankfull stage.--20 ft.

Historical data.--Maximum stage known, 34.6 ft Apr. 23, 1927, from information by U.S. Weather Bureau.

Remarks.--Prior to 1948, a large part of floodflows bypassed the station and overflowed into Cache River. Peak flows affected since 1943 by regulation by Norfork Reservoir on North Fork River, since 1948 by Clearwater Reservoir on Black River, since 1951 by Bull Shoals Reservoir, since 1956 by Table Rock Reservoir, since 1962 by Greers Ferry Reservoir on Little Red River, and since 1964 by Beaver Reservoir; total capacity at top of designated flood-control pools, 16,062,700 acre-ft. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 23, 1927	a34.6	----------	1936	Dec. 15, 1935	20.42	37,100
1928	June 28,29,1928	28.5	140,000	1937	Jan. 23, 1937	29.20	151,000
1929	May 19,20,1929	26.8	113,000	1938	Feb. 25, 1938	b28.42	134,000
1930	Jan. 22,23,1930	26.8	113,000	1939	Apr. 27, 1939	26.08	102,000
				1940	Apr.25,26,1940	23.1	60,100
1931	Feb. 25, 1931	22.6	54,200				
1932	Jan. 30,31,1932	25.7	96,600	1941	May 1, 1941	22.22	56,900
1933	May 25, 1933	26.9	114,000	1942	Apr. 19, 1942	24.6	86,100
1934	Apr. 2, 1934	24.8	83,600	1943	May 19-21,1943	27.98	131,000
1935	Mar. 19, 1935	28.04	132,000	1944	May 8,9, 1944	23.06	63,300

Peak stages and discharges of White River at DeValls Bluff, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 3, 1945	c30.3	146,000	1958	May 15, 1958	26.06	101,000
				1959	Feb.18-19,1959	21.92	53,600
1949	Feb. 3, 1949	31.35	d220,000	1960	May 29-30,1960	22.78	62,000
1950	Jan.20,21,1950	28.42	154,000				
				1961	May 15-16,1961	27.40	126,000
1951	Mar. 3, 1951	25.07	94,900	1962	Mar. 5, 1962	22.38	58,100
1952	Dec. 8-10,1951	24.02	82,000	1963	Mar. 14, 1963	17.83	31,200
1953	Mar.25,26,1953	24.02	82,000	1964	Mar. 20, 1964	23.66	71,700
1954	May 7,8, 1954	22.08	58,100	1965	Feb. 15, 1965	20.86	46,200
1955	Mar.27-29,1955	22.42	58,000				
				1966	May 3, 1966	25.71	96,100
1956	Feb. 24, 1956	24.17	77,400	1967	May 22, 1967	19.51	38,400
1957	May 4,5, 1957	27.47	117,000	1968	May 18, 1968	25.60	98,700

a From information by U.S. Weather Bureau.
b Occurred Feb. 27, 1938.
c Occurred Apr. 23, 1945.
d Furnished by Corps of Engineers.

771. Big Creek near Boydsville, Ark.

Location.--Lat 36°22'12", long 90°19'50", in SE¼NW¼ sec.16, T.20 N., R.7 E., on right bank 120 ft upstream from bridge on county road, 300 ft upstream from tributary, 0.5 mile south of Crockett, and 4.0 miles northeast of Boydsville.

Drainage area.--12.9 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 94 cfs and by conracted-opening measurements at 1,840 cfs and 3,260 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Sept. 14, 1962	16.85	3,420	1966	Apr. 23, 1966	18.85	5,300
1963	Mar. 4, 1963	13.60	1,960	1967	May 13, 1967	15.42	2,750
1964	Apr. 5, 1964	16.11	3,080	1968	May 10, 1968	17.91	4,100
1965	Sept. 11, 1965	16.30	3,170	1969	Mar. 24, 1969	17.69	4,000

772. Big Creek tributary near Boydsville, Ark.

Location.--Lat 36°22'32", long 90°19'56", in SE¼SW¼ sec.9, T.20 N., R.7 E., on left bank 22 ft upstream from culvert on county road, 0.1 mile west of Crockett, 0.5 mile upstream from mouth, and 4.1 miles northeast of Boydsville.

Drainage area.--1.5 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 17 cfs and by culvert measurements at 193 cfs, 427 cfs, and 735 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Big Creek tributary near Boydsville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Apr. 30, 1962	7.97	427	1966	Apr. 23, 1966	9.17	735
1963	Mar. 4, 1963	6.01	172	1967	May 13, 1967	8.47	495
1964	Apr. 5, 1964	8.35	479	1968	May 10, 1968	7.97	427
1965	Sept. 11, 1965	7.77	400	1969	Apr. 24, 1969	7.63	383

773.4. Sugar Creek tributary near Walcott, Ark.

Location.--Lat 36°04'26", long 90°36'55", in NW¼SW¼ sec.25, T.17 N., R.4 E., on left bank 45 ft upstream from culvert on State Highway 25, 1.0 mile upstream from mouth, 3.2 miles east of junction of State Highways 25 and 141, and 3.9 miles northeast of Walcott.

Drainage area.--0.74 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since November 1968.

Stage-discharge relation.--Defined by culvert measurements at 205 cfs and 369 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Mar. 4, 1963	6.67	205	1966	Jan. 2, 1966	8.06	338
1964	Mar. 9, 1964	8.39	369	1967	July 5, 1967	8.19	350
1965	July 10, 1965	9.76	510	1968	Apr. 19, 1968	8.69	402
				1969	Apr. 9, 1969	6.87	225

773.8. Cache River at Egypt, Ark.

Location.--Lat 35°51'28", long 90°56'00", in NW¼SE¼ sec.12, T.14 N., R.1 E., 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.--698 sq mi.

Gage.--Nonrecording prior to Oct. 29, 1964; recording thereafter. Datum of gage is 222.99 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 5,400 cfs since 1964. Measurements made occasionally by Corps of Engineers prior to that date (maximum measured, 7,720 cfs).

Remarks.--Gage-height records prior to 1965 furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges of Cache River at Egypt, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Feb.22,23,1938	21.3	----------	1956	Feb.19,20,1956	18.40	----------
1939	Feb.11,12,1939	19.3	----------	1957	May 15,16,1957	19.3	----------
1940	Apr.20,21,1940	15.4	----------	1958	Nov. 23, 1957	21.10	----------
				1959	Feb. 16, 1959	16.70	----------
1945	June 19-21,1945	21.5	----------	1960	May 22, 1960	16.30	----------
1946	Jan.12,13,1946	18.3	----------	1961	May 17, 1961	17.29	----------
1947	Apr.12,13,1947	17.4	----------	1962	Mar. 6, 1962	19.13	----------
1948	Mar. 3,4, 1948	18.1	----------	1963	Mar. 11, 1963	15.90	----------
1949	Feb. 1, 1949	20.7	----------	1964	Mar. 15, 1964	20.64	----------
1950	Jan.16-18,1950	21.9	----------	1965	Feb. 12, 1965	b17.87	3,420
1951	Dec. 9, 1951	a18.8	----------	1966	Jan. 6, 1966	21.88	5,920
1952	Jan.11,12,1952	20.8	----------	1967	July 6, 1967	16.60	2,900
1953	Mar. 19, 1953	18.8	----------	1968	May 16, 1968	19.60	4,260
1954	Feb. 21, 1954	15.0	----------				
1955	Mar. 22, 1955	17.30	----------				

a Maximum for calendar year.
b Occurred Apr. 5, 1965.

774.3. Willow Ditch near Egypt, Ark.

Location.--Lat 35°56'29", long 90°56'33", in SW¼SW¼ sec.12, T.15 N., R.1 E., on left bank 8 ft upstream from culvert on State Highway 91 and 5.1 miles north of Egypt.

Drainage area.--0.3 sq mi, approximately.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since June 1969.

Stage-discharge relation.--Defined by current-meter measurements below 31 cfs and by culvert measurements at 26 cfs, 101 cfs, and 157 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	May 27, 1963	4.33	17	1966	Jan. 1, 1966	6.26	157
1964	Mar. 9, 1964	6.19	101	1967	June 29, 1967	4.59	20
1965	Mar. 29, 1965	5.30	31	1968	May 13, 1968	5.42	33
				1969	Jan. 30, 1969	5.62	35

775. Cache River at Patterson, Ark.
(Prior to 1920, published by U.S. Weather Bureau as "at Jelks")

Location.--Lat 35°16'10", long 91°14'15", in SE¼ sec.31, T.8 N., R.2 W., at bridge on U.S. Highway 64, 1 mile northwest of Patterson, 10.9 miles upstream from Maple Slough, and at mile 77.2.

Drainage area.--1,041 sq mi.

Gage.--Nonrecording prior to Oct. 6, 1949; recording thereafter. Prior to Oct. 3, 1966, at or within 1,000 ft of old U.S. Highway 64 crossing 1.4 miles downstream. Prior to 1931 and since Jan. 1, 1950, at datum 182.96 ft above mean sea level, datum of 1929. January 1937 to Dec. 31, 1950, at mean Gulf level or 0.24 ft below mean sea level, datum of 1929. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs since 1931. Peak discharge for earlier years computed from rating curve defined since 1931.

Bankfull stage.--9 ft.

Remarks.--Peak flow of 1927 affected by White River overflow. Records since January 1937 furnished by Corps of Engineers. Gage-height records from 1916 to 1931 from publications of U.S. Weather Bureau. Only annual peaks are shown.

Peak stages and discharges of Cache River at Patterson, Ark.

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1916	January 1916	13.0	----------	1945	Apr. 21, 1945	12.1	10,200
1917	Apr.20-22,1917	9.5	----------				
1918	May 24,25,1918	9.8	----------	1946	May 27,28,1946	10.3	6,020
1919	Jan. 2,3, 1919	11.1	----------	1947	Apr.17,18,1947	9.5	4,360
1920	Jan. 25, 1920	10.3	----------	1948	Mar. 6, 1948	9.85	5,560
				1949	Jan. 31, 1949	11.3	10,400
1921	Apr.18,May 12-15	9.7	5,100	1950	Feb. 15, 1950	11.65	11,600
1922	Apr. 1, 1922	10.3	6,600				
1923	Feb. 3,4, 1923	10.8	8,000	1951	Dec. 11, 1951	10.0	7,550
1924	June 6, 1924	9.7	5,100	1952	Jan. 8, 1952	10.4	8,550
1925	Oct. 22, 1925	10.5	7,200	1953	Mar. 24, 1953	10.65	8,640
				1954	May 4, 1954	c8.85	3,880
1926	Feb. 1,2, 1926	9.9	a5,600	1955	Mar. 24, 1955	9.76	5,720
1927	Apr. 19, 1927	16.1	24,500				
1928	June 27,28,1928	11.8	12,100	1956	Feb.19,20,1956	10.98	9,250
1929	May 16, 1929	10.3	6,340	1957	May 25, 1957	d12.00	11,200
1930	Jan. 15, 1930	11.5	10,800	1958	May 11, 1958	10.60	8,590
				1959	Feb. 23, 1959	9.60	5,320
1931	Feb.19-22,1931	8.7	2,400	1960	May 28, 1960	8.80	4,810
1937	Jan. 24, 1937	13.2	13,200	1961	Apr. 2, 1961	10.00	7,550
1938	Feb. 24, 1938	11.9	10,100	1962	Mar. 2, 1962	10.25	7,690
1939	Feb. 7, 1939	10.9	7,320	1963	Mar. 13, 1963	8.80	4,160
1940	Apr. 21, 1940	9.95	5,380	1964	Mar. 13, 1964	10.28	7,460
				1965	Apr. 11, 1965	9.25	5,230
1941	Feb. 3, 1941	8.7	a2,820				
1942	Apr. 14, 1942	b10.15	6,200	1966	Jan. 14, 1966	11.06	9,210
1943	May 18, 1943	10.3	6,060	1967	Dec. 18, 1967	10.00	4,280
1944	Apr.13,16,17,1944	9.7	4,760	1968	May 17, 1968	10.56	6,010

a Maximum peak discharge. Maximum discharge occurred Dec. 31 on a rise that crested in the following calendar year.
b Occurred Apr. 15,16, 1942.
c Occurred Jan. 28, 1954.
d Occurred Nov. 22, 1957.

776.8. Threemile Creek near Amagon, Ark.

Location.--Lat 35°33'42", long 91°01'25", in NW¼NE¼ sec.30, T.11 N., R.1 E., near right bank on downstream side of bridge on State Highway 14, 4.8 miles east of Amagon.

Drainage area.--8.2 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 6, 1961	4.98	130	1966	Jan. 3, 1966	3.61	295
1962	Sept. 9, 1962	5.42	a220	1967	Dec. 28, 1966	3.51	285
1963	May 28, 1963	4.58	158	1968	May 13, 1968	4.22	350
1964	Mar. 10, 1964	4.85	a180	1969	Jan. 30, 1969	5.00	422
1965	Feb. 11, 1965	4.65	390				

a Estimated.

777. 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., at bridge on U.S. Highway 64, 1 mile west of Morton, and at mile 39.6.

Drainage area.--422 sq mi.

Gage.--Nonrecording prior to Nov. 8, 1949; recording thereafter. Prior to Jan. 1, 1952, at datum 0.26 ft below mean sea level. Datum of present gage is 187.71 ft above mean sea level. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 4,900 cfs and extended above by logarithmic plotting.

Bankfull stage.--16 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1933	Apr. 5, 1933	16.0	----------	1951	Jan. 17, 1951	a17.18	3,010
				1952	Jan. 13, 1952	17.53	4,100
1935	Mar. 24, 1935	15.88	----------	1953	May 20, 1953	17.68	3,940
				1954	Jan. 21, 1954	a17.33	2,700
1937	Jan. 26, 1937	18.57	----------	1955	Mar. 28, 1955	17.49	2,820
1939	Feb. 10, 1939	16.8	4,150	1956	Feb. 25, 1956	17.92	6,340
1940	Apr. 21, 1940	16.0	2,870	1957	Nov. 23, 1957	18.23	6,700
				1958	May 13, 1958	17.55	4,350
1941	Dec. 29, 1941	15.5	2,040	1959	Feb. 16, 1959	17.64	3,190
1942	Apr. 14, 1942	a16.2	3,480	1960	Jan. 18, 1960	16.87	1,750
1943	Mar.20-22,1943	16.0	2,790				
1944	Apr. 13, 1944	16.7	3,710	1961	Dec. 13, 1961	a17.55	2,770
1945	June 21,22, 1945	16.6	3,800	1962	Mar. 5, 1962	17.93	3,190
				1963	Mar. 9, 1963	17.49	2,610
1946	Jan.15-20, 1946	16.5	3,780	1964	Mar. 17, 1964	17.96	4,180
1947	Apr.13-15, 1947	16.2	2,800	1965	Feb. 14, 1965	17.71	3,500
1948	Mar. 2-8, 1948	16.5	3,510				
1949	Mar. 30, 1949	a16.8	4,430	1966	May 4, 1966	a17.80	3,750
1950	Jan. 17, 1950	17.16	5,300	1967	Dec. 15, 1967	17.34	2,360
				1968	May 18, 1968	17.90	3,230

a Peak stage occurred on different date than peak discharge.

778. White River at Clarendon, Ark.

Location.--Lat 34°41'08", long 91°18'55", in W½ sec.22, T.1 N., R.3 W., on St. Louis Southwestern Railroad bridge at Clarendon, 1.1 miles downstream from Cache River, and at mile 100.1.

Drainage area.--25,497 sq mi.

Gage.--Nonrecording. Datum of gage is 139.91 ft above mean sea level or 140.02 ft above mean Gulf level.

Stage-discharge relation.--Defined by current-meter measurements below 297,000 cfs.

Bankfull stage.--23 ft.

Remarks.--Records furnished by Corps of Engineers. Floodflows regulated to some extent since June 1943. See Remarks for White River at DeValls Bluff. Only annual peaks are shown.

Peak stages and discharges of White River at Clarendon, Ark.

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1885	Jan. 8, 1885	33.58	----------	1925	Mar. 3-5, 1925	22.5	----------
1886	May 4, 1886	29.2	----------	1926	Oct. 28, 1925	28.35	----------
1887	Mar. 22, 1887	27.9	----------	1927	Apr. 23, 1927	43.3	395,000
1888	Apr. 8,9, 1888	25.7	----------	1928	June 30, 1928	a34.9	230,000
1889	Apr. 11, 1889	29.1	----------	1929	May 24,25,1929	b31.3	156,000
1890	Mar. 20, 1890	36.63	----------	1930	Jan.23,24,1930	30.98	135,000
1891	Mar. 19, 1891	29.1	----------	1931	Feb. 26, 1931	26.95	56,900
1892	May 27,28,1892	32.65	----------	1932	Jan. 30-Feb. 1	b30.38	105,000
1893	May 11, 1893	33.95	----------	1933	May 27,28,1933	b30.97	124,000
1894	Feb. 20, 1894	30.8	----------	1934	Apr. 5, 1934	b29.78	106,000
1895	July 24-26, 1895	24.2	----------	1935	Mar.25,26,1935	33.7	179,000
1896	Jan. 5,6, 1896	28.2	----------	1936	Dec. 18, 1935	23.0	34,200
1897	Apr. 14, 1897	32.4	----------	1937	Jan. 27, 1937	b35.75	215,000
1898	Apr. 5, 1898	35.47	----------	1938	Feb. 28, 1938	a35.05	203,000
1899	May 21, 1899	29.55	----------	1939	Apr.28,29,1939	b30.75	119,000
1900	Mar. 16, 1900	25.45	----------	1940	Apr.28-30,1940	27.75	67,800
1901	Mar. 26, 1901	26.75	----------	1941	May 3,4, 1941	b26.10	50,400
1902	Dec. 30, 1902	28.3	----------	1942	Apr. 22, 1942	b29.28	94,200
1903	Mar. 20, 1903	32.63	----------	1943	May 27-29,1943	b33.25	147,000
1904	Apr. 8, 1904	29.6	----------	1944	May 9-10,1944	b27.80	69,800
1905	June 3, 1905	29.9	----------	1945	Apr. 23, 1945	a39.10	299,000
1906	Apr. 6, 1906	33.1	----------	1946	June 4-6, 1946	31.40	132,000
1907	May 18, 1907	34.2	----------	1947	Dec.24,25,1946	28.6	89,200
1908	May 25, 1908	30.7	----------	1948	Mar. 10, 1948	a28.55	75,400
1909	Mar.21,22,1909	28.9	----------	1949	Feb. 4,5, 1949	b35.32	211,000
1910	Oct. 18, 1910	25.77	----------	1950	Jan. 21, 1950	b33.55	157,000
1911	Apr. 27, 1911	29.02	----------	1951	Mar. 4-6, 1951	b29.95	104,000
1912	Apr. 14, 1912	32.6	----------	1952	Jan. 15, 1952	b28.85	83,500
1913	Apr. 15, 1913	30.35	----------	1953	Mar. 28, 1953	29.31	92,100
1914	May 15, 1914	27.0	----------	1954	May 11, 1954	26.07	54,700
1915	Sept. 2, 1915	33.02	----------	1955	Apr. 2, 1955	27.0	62,200
1916	Feb. 7, 1916	38.43	----------	1956	Feb. 26, 1956	29.05	80,700
1917	Apr. 20, 1917	27.57	----------	1957	May 6,7, 1957	31.20	120,000
1918	May 27,28,1918	30.4	----------	1958	May 16, 1958	30.50	115,400
1919	Jan. 8,9, 1919	28.5	----------	1959	Feb. 21, 1959	26.60	58,700
1920	Apr. 9, 1920	29.6	----------	1960	June 2, 1960	27.55	64,600
1921	May 10, 1921	30.75	----------	1961	May 17, 1961	31.00	129,000
1922	Apr. 18, 1922	30.72	----------	1962	Mar. 12, 1962	27.90	70,600
1923	June 3,4, 1923	30.36	----------	1963	Mar. 19, 1963	b22.80	35,200
1924	June 23,24, 1924	26.95	----------	1964	Mar.21-23,1964	28.6	84,000
				1965	Feb.17-20,1965	26.1	51,000
				1966	May 5,6, 1966	30.3	107,000
				1967	May 22-25,1967	24.2	40,000
				1968	May 20-21,1968	30.0	119,000

a Occurred on following day.
b Occurred on different date than peak discharge.

Note.--Calendar year basis prior to 1925; water year thereafter.

778.1. White River at Aberdeen, Ark.

Location.--Lat 34°26'24", long 91°19'58", in sec.21, T.1 S., R.3 W., 1,000 ft upstream from old ferry landing at Aberdeen, 2 miles downstream from Rock Roe Bayou, and at mile 91.4.

Drainage area.--25,574 sq mi.

Gage.--Nonrecording. Datum of gage is 138.50 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Bankfull stage.--20 ft.

Remarks.--Records furnished by Corps of Engineers. For regulation see Remarks for White River at DeValls Bluff. Only annual peak stages are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 5, 1932	27.6	----------	1951	Mar. 4-7, 1951	29.0	----------
1933	May 29, 1933	30.1	----------	1952	Jan.14,15,1952	28.2	----------
1934	Apr. 6-8, 1934	28.9	----------	1953	Mar.28-30,1953	28.5	----------
1935	Mar.24-28,1935	32.6	----------	1954	May 11,12,1954	25.6	----------
				1955	Apr. 1-3, 1955	26.5	----------
1936	Nov.14,15,1936	22.5	----------				
1937	Jan.28,29,1937	34.8	----------	1956	Feb.26,27,1956	28.3	----------
1938	Mar. 1, 1938	33.9	----------	1957	May 7-9, 1957	30.1	----------
1939	Apr. 29, 1939	29.8	----------	1958	May 16-18,1958	29.4	----------
1940	Apr.28-30, May 1	27.2	----------	1959	Feb.22,23,1959	26.2	----------
				1960	June 2, 1960	27.0	----------
1941	Nov.16,17,1941	27.3	----------				
1942	Apr.21-23,1942	28.5	----------	1961	May 18-20, 1961	29.8	----------
1943	June 1, 1943	32.6	----------	1962	Mar.13-15,1962	27.3	----------
1944	May 9-12, 1944	27.25	----------	1963	Mar.22-25,1963	22.5	----------
1945	Apr.24,25,1945	38.2	----------	1964	Mar.22-25,1964	27.9	----------
				1965	Feb. 20, 1965	25.6	----------
1946	June 4-8, 1946	30.3	----------				
1947	Jan. 1, 1947	26.6	----------	1966	May 5-7, 1966	29.1	----------
1948	Mar.11-13,1948	27.9	----------	1967	May 25,26,1967	a23.8	----------
1949	Feb. 6,7, 1949	34.4	----------	1968	Apr. 3, 1968	27.6	----------
1950	Jan.22-24,1950	32.7	----------				

a Maximum peak stage. Maximum stage for year occurred Dec. 31 on rise that crested in 1969 calendar year.

778.2. White River at St. Charles, Ark.

Location.--Lat 34°22'38", long 91°07'32", in sec.4, T.4 S., R.1 W., at St. Charles, 3.5 miles upstream from Island Chute, and at mile 59.7.

Drainage area.--25,732 sq mi.

Gage.--Nonrecording. Prior to Feb. 9, 1944, at site a quarter of a mile upstream. Prior to Dec. 22, 1936, datum of gage was at mean Gulf level. Datum of present gage, 129.95 ft above mean sea level, datum of 1929. All stages adjusted to present datum.

Stage-discharge relation.--Not defined.

Bankfull stage.--20 ft.

Remarks.--Records furnished by Corps of Engineers. For regulation see Remarks for White River at DeValls Bluff. Only annual peak stages are shown.

Peak stages and discharges of White River at St. Charles, Ark.

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1933	June 3-5, 1933	34.0	----------	1951	Mar.8-10, 1951	27.8	----------
1934	Apr.13,14,1934	27.9	----------	1952	Apr. 5-9, 1952	27.1	----------
1935	Apr. 3, 1935	35.3	----------	1953	May 21-23,1953	27.4	----------
				1954	May 16, 1954	24.0	----------
1936	Apr.28,29,1936	28.2	----------	1955	Apr. 5-8, 1955	25.8	----------
1937	Feb.13-14,1937	40.1	----------				
1938	Mar. 2,3, 1938	31.9	----------	1956	Feb.28,29,1956	26.8	----------
1939	May 1,2, 1939	28.9	----------	1957	June 6, 1957	31.2	----------
1940	May 1,2, 1940	26.0	----------	1958	May 20, 1958	29.05	----------
				1959	Feb.26-27,1959	25.1	----------
1941	Nov.18,19,1941	26.1	----------	1960	June 4-7, 1960	25.4	----------
1942	Apr.26,27,1942	27.8	----------				
1943	June 3, 1943	35.4	----------	1961	May 26, 1961	31.6	----------
1944	May 11,12,1944	30.8	----------	1962	Mar. 16-17, Apr.9	26.5	----------
1945	Apr. 26, 1945	39.4	----------	1963	Mar.28-30,1963	23.5	----------
				1964	Mar.26-28,1964	26.5	----------
1946	June 9, 1946	29.8	----------	1965	Apr.19-23,1965	24.9	----------
1947	Jan. 1,2, 1947	26.0	----------				
1948	Mar.13,14,1948	26.9	----------	1966	May 7-9, 1966	27.6	----------
1949	Feb. 8-10,1949	33.9	----------	1967	May 29 to June 2	a23.4	----------
1950	Feb. 25, 1950	33.2	----------	1968	May 21, 1968	27.3	----------

a Maximum peak stage; maximum stage occurred Dec. 31 on a rise that crested in 1968 calendar year.

778.6. Boat Gunnale Slash tributary near Holly Grove, Ark.

Location.--Lat 34°36'18", long 91°10'12", in SE¼SW¼ sec.13, T.1 S., R.2 W., on right bank 15 ft upstream from State Highway 86, 1,500 ft upstream from small tributary, and 1.8 miles northeast of Holly Grove.

Drainage area.--8.7 sq mi, approximately.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since September 1968.

State-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Dec. 16, 1961	9.26	465	1966	Feb. 9, 1966	9.33	480
1963	May 27, 1963	7.30	138	1967	May 6, 1967	7.73	200
1964	Apr. 5, 1964	9.73	558	1968	May 13, 1968	8.99	414
1965	Feb. 11, 1965	9.23	460	1969	Jan. 30, 1969	7.97	235

779.2. Big Creek at Goodwin, Ark.

Location.--Lat 34°56'22", long 91°00'55", in NE¼NE¼ sec.29, T.4 N., R.1 E., near right bank on downstream side of bridge on U.S. Highway 70, 0.3 mile east of Goodwin, and 0.8 mile upstream from Hog Tusk Creek.

Drainage area.--35.9 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Big Creek at Goodwin, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 31, 1961	8.78	310	1966	Apr. 26, 1966	9.62	790
1962	Feb. 27, 1962	9.83	910	1967	July 6, 1967	8.90	380
1963	Apr. 29, 1963	7.59	88	1968	May 13, 1968	9.66	815
1964	Apr. 24, 1964	9.39	660	1969	Jan. 30, 1969	9.01	440
1965	Feb. 11, 1965	9.51	730				

779.3. Big Creek near Moro, Ark.

Location.--Lat 34°50'50", long 91°00'35", in SW¼NW¼ sec.28, T.3 N., R.1 E., on downstream side of bridge on State Highway 78, 3½ miles north of Moro, and 5¼ miles upstream from Flat Fork Little River.

Drainage area.--80.9 sq mi.

Gage.--Recording. Datum of gage is 178.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs.

Bankfull stage.--8 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Dec. 17, 1961	10.00	2,090	1966	May 1, 1966	9.80	1,810
1963	Mar. 17, 1963	8.11	404	1967	May 7, 1967	9.33	1,240
1964	Apr. 24, 1964	9.72	2,160	1968	May 14, 1968	9.91	1,960
1965	Feb. 26, 1965	9.82	1,950				

779.4. Spring Creek near Aubrey, Ark.

Location.--Lat 34°41'16", long 90°53'45", in SW¼SE¼ sec.16, T.1 N., R.2 E., on downstream side of bridge on State Highway 121, 1.0 mile downstream from Cat Creek, 1.8 miles upstream from mouth, and 2.1 miles south of Aubrey.

Drainage area.--36 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 22, 1962	13.02	1,040	1966	Feb. 9, 1966	15.28	1,750
1963	Mar. 11, 1963	10.79	560	1967	May 6, 1967	14.99	1,670
1964	Apr. 4, 1964	15.43	1,820	1968	Mar. 21, 1968	15.59	1,920
1965	Mar. 25, 1965	14.45	1,500	1969	Jan. 30, 1969	12.93	1,050

780. LaGrue Bayou near Stuttgart, Ark.

Location.--Lat 34°31'55", long 91°21'20", in NW¼ sec.17, T.2 S., R.3 W., on downstream side of bridge on State Highway 146, 7½ miles downstream from small tributary, 11 miles east of Stuttgart, and 24 miles upstream from Little LaGrue Bayou.

Drainage area.--175 sq mi.

Gage.--Nonrecording prior to Sept. 13, 1940; recording thereafter. Datum of gage is 175.14 ft above mean Gulf level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above by velocity-area studies.

Bankfull stage.--10 ft.

Remarks.--Flow affected by diversions for irrigation of ricefields and return flow from irrigated areas. Peak discharge not seriously affected. Gage was discontinued Sept. 30, 1954, due to backwater from local dam. Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	July 5, 1936	11.40	1,210	1948	Nov. 16, 1947	11.42	1,110
					Jan. 4, 1948	10.90	925
1937	Jan. 24, 1937	16.9	6,580		Feb. 14, 1948	14.83	3,970
					Mar. 3, 1948	13.85	2,850
1938	Jan. 25, 1938	14.74	3,860		Mar. 25, 1948	13.90	2,980
	Feb. 21, 1938	14.10	3,200		Apr. 16, 1948	11.69	1,260
	Apr. 11, 1938	10.78	1,030		June 20, 1948	12.68	1,860
1939	Feb. 4, 1939	14.95	4,210	1949	Nov. 25, 1948	11.20	1,030
	Apr. 21, 1939	12.35	1,460		Jan. 8, 1949	12.23	1,560
					Jan.28,29,1949	14.45	3,530
1940	Feb. 22, 1940	10.71	850		Mar. 12, 1949	11.42	1,240
					Mar. 29, 1949	12.86	2,120
1941	Apr.25,26,1941	9.44	592				
				1950	Oct. 8, 1949	12.52	1,410
1942	Apr. 13, 1942	13.28	2,340		Oct. 27, 1949	11.08	1,020
	Apr. 29, 1942	11.73	1,180		Dec. 19, 1949	12.25	1,530
					Jan. 6, 1950	12.91	2,000
1943	Jan. 1, 1943	11.71	1,180		Jan. 14, 1950	14.00	3,090
	Mar. 16, 1943	12.94	1,930		Feb. 4, 1950	13.53	2,540
					Feb. 16, 1950	13.03	2,080
1944	Mar. 31, 1944	12.63	1,740		Mar. 15, 1950	12.32	1,590
	Apr. 13, 1944	12.02	1,410		Mar. 31, 1950	11.32	1,090
	May 7, 1944	11.11	995		May 10, 1950	13.64	2,650
					Aug. 28, 1950	12.66	1,860
1945	Jan. 1, 1945	14.22	3,310				
	Feb. 23, 1945	12.41	1,650	1951	Jan. 15, 1951	14.36	3,530
	Mar. 3, 1945	12.94	2,000		Feb. 10, 1951	11.69	1,260
	Mar. 27, 1945	11.18	1,030		Feb. 23, 1951	11.08	1,020
	Apr. 4, 1945	13.87	2,980				
	May 19, 1945	11.36	1,110	1952	Dec. 14, 1951	12.10	1,410
	June 20, 1945	12.24	1,530		Feb. 24, 1952	11.75	1,240
					Mar. 14, 1952	11.12	1,000
1946	Oct. 3, 1945	13.36	2,390				
	Nov. 12, 1945	14.01	3,090	1953	Feb. 4, 1953	11.88	1,360
	Jan. 9, 1946	14.66	3,860		Feb. 14, 1953	12.35	1,620
	Feb. 12, 1946	12.59	1,790		Mar. 24, 1953	12.24	1,560
	Mar. 30, 1946	13.34	2,390		Apr. 9, 1953	10.88	925
	May 5, 1946	11.44	1,140		May 17, 1953	14.17	3,310
	May 26, 1946	14.01	3,090				
				1954	Jan. 17, 1954	12.33	1,620
1947	Jan.21,22,1947	10.97	960		Jan. 27, 1954	12.11	1,470
					Feb. 22, 1954	12.31	1,590

781.7. Little LaGrue Bayou tributary near DeWitt, Ark.

Location.--Lat 34°19'58", long 91°24'06", on east line of NE¼NE¼ sec.26, T.4 S., R.4 W., on left bank 20 ft upstream from bridge on county road, 4.5 miles northwest of DeWitt.

Drainage area.--1.54 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 134 cfs and extended above by logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 30, 1961	8.60	167	1966	Feb. 9, 1966	8.78	178
1962	Nov. 22, 1961	8.86	183	1967	May 6, 1967	8.25	145
1963	Apr. 28, 1963	8.77	177	1968	May 13, 1968	9.58	234
1964	Apr. 5, 1964	9.25	210	1969	Jan. 30, 1969	8.83	180
1965	Mar. 29, 1965	8.99	192				

782.1. Tarleton Creek tributary at Ethel, Ark.

Location.--Lat 34°18'02", long 91°09'45", in NW¼SE¼ sec.31, T.4 S., R.1 W., on right bank 12 ft upstream from culvert on State Highway 17, 0.6 mile upstream from mouth, and 1.0 mile north of Ethel.

Drainage area.--0.20 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 6 cfs and by culvert measurements at 39 cfs, 61 cfs, and 107 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Apr. 28, 1963	5.11	68	1966	May 1, 1966	5.02	63
1964	Apr. 23, 1964	6.24	107	1967	May 6, 1967	4.80	55
1965	Sept. 21, 1965	5.00	62	1968	Mar. 21, 1968	4.89	59
				1969	Nov. 28, 1968	5.27	72

1889. Butler Creek tributary near Gravette, Ark.

Location.--Lat 36°26'51", long 94°26'36", in SW¼SE¼ sec.36, T.21 N., R.33 W., on right bank 40 ft upstream from culvert on State Highway 59, 1.9 miles upstream from mouth, and 2.0 miles north of Gravette.

Drainage area.--0.96 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 10 cfs, by slope-area measurement at 88 cfs, and by culvert measurement at 562 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 19, 1961	6.85	562	1966	Feb. 9, 1966	4.71	53
1962	1962	(a)	<37	1967	June 28, 1967	3.58	2
1963	Mar. 4, 1963	4.69	52	1968	Mar. 19, 1968	4.40	29
1964	June 17, 1964	4.20	17	1969	Jan. 29, 1969	4.67	50
1965	Apr. 2, 1965	4.78	58				

< Less than.
a Peak stage did not reach bottom of gage.

1912.2. Spavinaw Creek near Sycamore, Okla.
(Published as "near Row" prior to 1962)

Location.--Lat 36°20'00", long 94°38'30", in NE¼NW¼ sec.4, T.21 N., R.25 E., 1.8 miles downstream from Cherokee Creek, 6.5 miles southeast of Sycamore, and at mile 35.0.

Drainage area.--133 sq mi (128 sq mi at former site).

Gage.--Recording. Prior to Oct. 1, 1961, at site 1 mile upstream at altitude 880 ft (from topographic map). Altitude of gage is 875 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs at former site and below 2,600 cfs at present site.

Bankfull stage.--18 ft.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Apr. 1, 1959	3.50	690	1963	Oct. 7, 1962	8.66	1,940
1960	Apr. 15, 1960	5.75	3,030	1964	June 17, 1964	7.25	1,210
	May 6, 1960	8.33	11,400				
				1965	Apr. 3, 1965	10.05	2,920
1961	May 5, 1961	7.95	6,860		Apr. 15, 1965	11.76	4,240
	May 7, 1961	6.67	3,420				
	May 19, 1961	11.04	15,000	1966	Feb. 10, 1966	8.78	2,020
	July 14, 1961	6.18	3,640				
	July 23, 1961	6.17	3,560	1967	Apr. 14, 1967	4.25	242
	Aug. 14, 1961	10.75	14,400				
				1968	Feb. 1, 1968	9.62	2,580
1962	July 10, 1962	5.74	595				

1948.9. Osage Creek at Cave Springs, Ark.

Location.--Lat 36°15'56", long 94°14'15", in SW¼NW¼ sec.1, T.18 N., R.31 W., on upstream abutment at right end of bridge on county road, just downstream from small tributary, 0.4 mile west of Cave Springs, 0.6 mile upstream from Cave Springs Branch, and 2.1 miles upstream from Spring Creek.

Drainage area.--40.4 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 309 cfs and by contracted opening measurement at 5,420 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Oct. 7, 1962	7.40	2,500	1966	Feb. 9, 1966	6.42	1,200
1964	1964	(a)	----------	1967	1967	(a)	----------
1965	Apr. 13, 1965	6.70	1,450	1968	July 1, 1968	7.11	1,900
				1969	Jan. 29, 1969	8.83	5,420

a Peak stage did not reach bottom of gage.

1950. Osage Creek near Elm Springs, Ark.

Location.--Lat 36°13', long 94°17', in sec.21, T.18 N., R.31 W., on left bank 1 mile downstream from Little Osage Creek and 3¼ miles northwest of Elm Springs.

Drainage area.--129 sq mi.

Gage.--Recording. Altitude of gage is 1,052 ft (by barometer).

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and slope-area measurement at 22,500 cfs.

Historical data.--Flood of May 10, 1950, was greatest known by local residents.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	May 10, 1950	16.7	a22,500	1960	Nov. 4, 1959	8.37	3,180
					May 6, 1960	8.46	3,270
1951	Feb. 20, 1951	11.72	6,770		July 25, 1960	8.20	3,000
	June 9, 1951	9.32	4,230				
				1961	May 4, 1961	12.77	8,420
1952	Aug. 22, 1952	6.99	2,210		May 7, 1961	13.66	9,750
					May 19, 1961	16.66	22,500
1953	Mar. 17, 1953	6.40	1,820		July 22, 1961	8.45	3,180
					Aug. 14, 1961	11.00	6,020
1954	May 2, 1954	9.44	4,050				
				1962	July 10, 1962	7.33	2,170
1955	Feb. 19, 1955	10.58	5,280				
				1963	Oct. 7, 1962	8.50	3,270
1956	May 15, 1956	5.79	1,160				
				1964	Aug. 28, 1964	3.86	492
1957	Jan. 22, 1957	8.96	3,760				
	Apr. 3, 1957	14.36	10,800	1965	Apr. 6, 1965	11.11	6,140
	May 21, 1957	10.78	5,760		Apr. 15, 1965	10.36	5,300
	May 22, 1957	12.50	8,000				
	May 25, 1957	14.09	10,300	1966	Feb. 9, 1966	9.34	3,270
	June 2, 1957	10.00	4,870				
	Aug. 17, 1957	8.11	3,050	1967	June 11, 1967	4.52	684
1958	July 25, 1958	7.05	2,200	1968	Feb. 1, 1968	9.18	3,940
					July 1, 1968	12.76	8,360
1959	July 23, 1959	10.37	5,300				

a Annual peak only.

1952. Brush Creek tributary near Tontitown, Ark.

Location.--Lat 36°10'38", long 94°16'40", in NW¼SW¼ sec.3, T.17 N., R.31 W., on right bank 14 ft upstream from culvert on State Highway 68, 1.6 miles upstream from mouth, and 2.2 miles west of Tontitown.

Drainage area.--0.37 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 11 cfs and by culvert measurements at 100 cfs, 131 cfs, 193 cfs, 264 cfs, and 278 cfs.

Remarks.--Only annual peaks are shown. Annual peaks greater than about 60 cfs affected by storage.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	July 23, 1959	17.0	278	1965	Aug. 27, 1965	15.58	261
1960	July 25, 1960	15.8	264				
				1966	1966	(a)	<11
1961	May 7, 1961	11.77	193	1967	Sept. 15, 1967	5.61	18
1962	1962	(a)	<29	1968	Feb. 1, 1968	5.82	24
1963	May 5, 1963	5.1	8	1969	Jan. 29, 1969	8.36	96
1964	Sept. 22, 1964	5.49	16				

< Less than.
a Peak stage did not reach bottom of gage.

1954.5. Ballard Creek at Summers, Ark.

Location.--Lat 35°58'42", long 94°29'56", in SW¼SW¼ sec.16, T.15 N., R.33 W., on right bank 110 ft upstream from bridge on U.S. Highway 62, 100 ft downstream from Price Creek, 0.8 mile upstream from small tributary, and 0.4 mile west of Summers.

Drainage area.--14.6 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 122 cfs and by slope-area measurement at 1,620 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Apr. 27, 1963	3.4	144	1966	Feb. 9, 1966	6.35	1,150
1964	Sept. 22, 1964	4.79	455	1967	May 14, 1967	4.12	275
1965	Apr. 15, 1965	4.70	425	1968	Feb. 1, 1968	7.17	1,620
				1969	Jan. 29, 1969	9.89	4,700

1955. Illinois River near Watts, Okla.

Location.--Lat 36°07'48", long 94°34'12", in NE¼ sec.18, T.19 N., R.26 E., on downstream side of bridge on U.S. Highway 59, 1.5 miles north of Watts, 4.5 miles downstream from Cincinnati Creek, and at mile 106.2.

Drainage area.--635 sq mi.

Gage.--Recording. Datum of gage is 893.78 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 51,000 cfs.

Bankfull stage.--13 ft.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	May 15, 1956	13.05	8,650	1961	May 5, 1961	17.73	17,600
					May 7, 1961	24.32	51,600
1957	Jan. 22, 1957	10.55	5,680		May 20, 1961	20.55	27,200
	Apr. 3, 1957	24.73	49,000		July 17, 1961	9.96	5,070
	Apr. 23, 1957	11.25	6,340		Aug. 14, 1961	19.10	21,800
	Apr. 26, 1957	10.03	5,020				
	May 17, 1957	17.82	17,300	1962	Apr. 11, 1962	10.91	6,020
	May 23, 1957	21.93	31,400		Aug. 1, 1962	12.97	8,630
	May 25, 1957	21.86	31,400				
	June 2, 1957	13.30	9,050	1963	Oct. 8, 1962	9.69	4,770
	June 10, 1957	12.83	8,350				
				1964	May 11, 1964	8.98	4,100
1958	Nov. 8, 1957	11.18	6,140				
	Nov. 18, 1957	11.32	6,260	1965	Apr. 6, 1965	14.57	11,100
	Feb. 7, 1958	10.40	5,210				
	Mar. 24, 1958	12.17	7,290	1966	Jan. 2, 1966	10.30	5,320
	May 3, 1958	13.82	9,790		Feb. 9, 1966	20.54	26,800
	July 12, 1958	18.25	18,200		Apr. 24, 1966	13.38	9,200
	July 29, 1958	11.07	6,020				
	Aug. 8, 1958	13.15	8,870	1967	Apr. 14, 1967	8.21	3,430
1959	Mar. 5, 1959	14.92	11,600	1968	Oct. 31, 1967	11.70	6,940
	July 23, 1959	15.46	12,600		Dec. 15, 1967	10.62	5,690
					Dec. 22, 1967	11.70	6,940
1960	Oct. 4, 1959	12.08	7,430		Jan. 1, 1968	10.91	6,020
	Nov. 4, 1959	16.97	15,600		Feb. 2, 1968	17.35	16,800
	May 6, 1960	21.56	31,600		Mar. 15, 1968	10.16	5,270
	May 21, 1960	15.08	11,900		Mar. 21, 1968	14.24	10,400
	July 25, 1960	25.96	68,000		July 2, 1968	13.28	9,050

1958. Flint Creek at Springtown, Ark.

Location.--Lat 36°15'20", long 94°25'50", in NW¼ sec.7, T.18 N., R.32 W., 20 ft downstream from bridge on State Highway 12 and 0.8 mile southwest of Springtown.

Drainage area.--14.2 sq mi.

Gage.--Recording. Datum of gage is 1,173.47 ft above mean sea level. Recording rainfall gage since Dec. 5, 1967.

Stage-discharge relation.--Defined by current-meter measurements below 230 cfs and by contracted-opening measurements at 1,850 cfs and 6,730 cfs.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 260 cfs.

Peak stages and discharges of Flint Creek at Springtown, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	June 14, 1961	6.14	310	1965	Apr. 5, 1965	7.55	665
	July 16, 1961	6.47	370		Apr. 14, 1965	8.20	870
	July 21, 1961	10.13	1,700				
	Aug. 14, 1961	14.75	a6,730	1966	Feb. 9, 1966	7.82	740
1962	July 10, 1962	6.23	330	1967	June 11, 1967	5.19	120
1963	July 8, 1963	6.25	310	1968	Dec. 21, 1967	6.90	475
					Jan. 30, 1968	7.59	677
1964	Aug. 21, 1964	b4.93	70		Feb. 1, 1968	7.52	656
					Mar. 19, 1968	6.03	286
1965	Apr. 3, 1965	7.45	635		July 1, 1968	6.31	342

a Maximum for water year.
b Occurred Apr. 5, 1964.

Note.--Peaks listed for 1961 are for the period June to September.

1960. Flint Creek near Kansas, Okla.

Location.--Lat 36°11'54", long 94°42'30", in SW¼ sec.24, T.20 N., R.24 E., on downstream side of bridge on Oklahoma State Highway 33, 6 miles southwest of Kansas, 6 miles downstream from Sugar Creek, and at mile 2.8.

Drainage area.--110 sq mi.

Gage.--Recording. Datum of gage is 854.59 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs.

Bankfull stage.--17 ft.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	May 15, 1956	8.42	1,370	1961	June 14, 1961	9.01	2,930
					Aug. 14, 1961	15.66	23,600
1957	Apr. 3, 1957	10.20	5,300				
	May 18, 1957	10.12	5,060	1962	Aug. 1, 1962	9.10	3,140
	May 23, 1957	9.04	2,660				
	May 25, 1957	11.52	8,780	1963	Oct. 7, 1962	7.68	680
1958	July 12, 1958	12.55	12,000	1964	Apr. 5, 1964	7.58	580
1959	Apr. 1, 1959	9.05	2,680	1965	Apr. 3, 1965	8.92	2,720
	July 23, 1959	9.44	3,530		Apr. 6, 1965	9.07	3,040
					Apr. 15, 1965	8.99	2,930
1960	Nov. 4, 1959	9.93	4,880				
	Apr. 14, 1960	9.85	4,640	1966	Feb. 9, 1966	8.98	2,930
	May 6, 1960	12.47	11,700				
	May 20, 1960	8.98	2,720	1967	June 25, 1967	8.05	1,210
1961	May 7, 1961	11.47	8,780	1968	Jan. 30, 1968	9.17	3,240
	May 19, 1961	10.19	5,550		Feb. 1, 1968	9.32	3,980

1969. Barren Fork at Dutch Mills, Ark.

Location.--Lat 35°52'40", long 94°29'10", on line between secs.21 and 22, T.14 N., R.33 W., on downstream side of bridge on State Highway 59 at Dutch Mills, $1\frac{3}{4}$ miles downstream from Fly Creek, and $2\frac{3}{4}$ miles upstream from Arkansas-Oklahoma State line.

Drainage area.--46.0 sq mi.

Gage.--Recording. Datum of gage is 986.47 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,900 cfs and by contracted-opening measurement at 12,900 cfs.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 2, 1958	6.96	2,920	1961	July 16, 1961	11.96	12,600
	May 4, 1958	6.39	2,400		Sept. 13, 1961	7.16	3,040
	June 25, 1958	8.50	4,530				
	July 12, 1958	12.8	14,800	1962	Nov. 2, 1961	5.96	1,850
	Aug. 1, 1958	6.75	2,740				
				1963	Aug. 10, 1963	3.04	174
1959	Mar. 5, 1959	9.18	5,630				
	Apr. 1, 1959	7.30	3,210	1964	May 11, 1964	6.30	1,950
	Apr. 19, 1959	6.84	2,740				
	May 16, 1959	7.08	3,020	1965	Jan. 2, 1965	5.71	1,360
	July 23, 1959	11.02	9,750				
				1966	Jan. 1, 1966	6.99	2,660
1960	Oct. 3, 1959	6.80	2,740		Feb. 9, 1966	8.89	5,950
	Nov. 3, 1959	9.38	5,990		Apr. 23, 1966	7.34	3,620
	May 5, 1960	12.12	12,800				
	May 20, 1960	6.20	2,220	1967	Apr. 13, 1967	5.53	1,140
	July 25, 1960	11.67	11,700				
				1968	Oct. 30, 1967	6.72	2,030
1961	May 5, 1961	11.00	9,750		Feb. 1, 1968	7.48	2,790
	May 7, 1961	9.98	7,250		July 1, 1968	8.75	4,620

Note.--Peaks listed for 1958 are for the period April to September. Peak of July 12 is maximum for water year.

2470. Poteau River at Cauthron, Ark.

Location.--Lat 34°55'08", long 94°17'55", in SW¼ sec.16, T.3 N., R.31 W., on right bank at downstream side of highway bridge at Cauthron, 7.8 miles downstream from Jones Creek, and at mile 109.0.

Drainage area.--203 sq mi.

Gage.--Nonrecording prior to May 2, 1939; recording thereafter. Datum of gage is 569.53 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--19 ft.

Historical data.--Flood in June 1935 was reported by local residents as greatest known.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges of Poteau River at Cauthron, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1935	June 1935	a27.4	----------
1939	Feb. 19, 1939	15.1	5,640
	Feb. 25, 1939	17.0	7,460
	Mar. 5, 1939	14.6	5,240
	Apr. 6, 1939	17.8	8,470
	Apr. 16, 1939	22.5	24,400
1940	Apr. 29, 1940	10.71	2,810
1941	Dec. 16, 1940	10.57	2,760
1942	Oct. 4, 1941	17.34	7,820
	Oct. 31, 1941	18.87	10,500
	Apr. 8, 1942	16.70	7,130
	May 20, 1942	14.54	5,160
1943	May 11, 1943	21.74	19,000
	May 20, 1943	19.43	11,800
1944	Feb. 17, 1944	15.23	5,720
	Feb. 28, 1944	17.09	7,580
	Mar. 16, 1944	14.33	5,010
	May 2, 1944	16.96	7,460
1945	Feb. 21, 1945	21.03	16,600
	Feb. 27, 1945	19.07	10,800
	Mar. 3, 1945	16.14	6,640
	Mar. 6, 1945	14.13	5,050
	Mar. 12, 1945	17.34	7,950
	Mar. 19, 1945	17.78	8,590
	Mar. 29, 1945	22.11	22,000
	May 15, 1945	22.39	23,800
	June 11, 1945	18.56	9,850
1946	Jan. 9, 1946	16.37	6,940
	Feb. 13, 1946	18.30	9,350
	May 23, 1946	17.44	8,070
	May 31, 1946	17.67	8,450
1947	Nov. 26, 1946	15.58	6,180
	Dec. 10, 1946	21.18	17,400
1948	Dec. 7, 1947	14.90	5,610
	Jan. 1, 1948	21.08	17,000
	Feb. 26, 1948	14.52	5,330
	Mar. 2, 1948	14.44	5,260
1949	Jan. 24, 1949	23.34	31,000
	Feb. 14, 1949	17.68	8,520
	Mar. 26, 1949	14.20	5,120
	May 1, 1949	16.29	6,840
1950	Jan. 4, 1950	17.08	7,710
	Jan. 13, 1950	19.81	13,200
	Feb. 1, 1950	17.92	8,840
	Feb. 12, 1950	22.78	27,800
	May 8, 1950	18.28	9,500
	May 12, 1950	14.98	5,690
	July 23, 1950	14.55	5,400
	Aug. 2, 1950	15.60	6,180
	Sept. 16, 1950	14.42	5,260
1951	Feb. 15, 1951	15.08	5,770
1951	Feb. 20, 1951	14.59	5,400
1952	Nov. 1, 1951	15.13	5,770
	Jan. 2, 1952	16.16	6,740
	Mar. 10, 1952	15.88	6,450
	Apr. 12, 1952	18.86	10,700
	Apr. 22, 1952	18.69	10,900
1953	Nov. 25, 1952	20.44	15,600
	Mar. 18, 1953	20.28	15,200
	Apr. 24, 1953	17.23	7,830
	Apr. 29, 1953	18.90	10,700
	May 13, 1953	20.46	16,000
1954	May 2, 1954	19.86	13,600
1955	Mar. 21, 1955	17.22	7,830
1956	Feb. 18, 1956	16.52	6,790
1957	Jan. 22, 1957	14.57	5,220
	Apr. 4, 1957	18.37	9,680
	Apr. 25, 1957	16.28	6,840
	Apr. 27, 1957	18.15	9,320
	May 23, 1957	18.73	10,300
	June 5, 1957	16.20	6,740
	Aug. 12, 1957	18.38	9,320
1958	Nov. 18, 1957	18.63	10,100
	Mar. 7, 1958	15.85	6,820
	May 2, 1958	18.91	11,200
1959	Mar. 26, 1959	12.44	4,130
1960	May 20, 1960	23.76	32,200
1961	Dec. 11, 1960	16.42	7,430
	May 6, 1961	17.59	8,930
	July 15, 1961	16.34	7,320
1962	Nov. 22, 1961	17.60	8,930
	Dec. 9, 1961	14.20	5,460
	Feb. 23, 1962	13.64	5,010
1963	Mar. 19, 1963	11.76	3,750
1964	Mar. 9, 1964	17.20	8,380
1965	Nov. 19, 1964	16.32	6,340
	Feb. 9, 1965	20.23	14,400
	Mar. 29, 1965	17.01	7,200
	Sept. 22, 1965	18.00	8,600
1966	Feb. 10, 1966	20.42	15,200
	Apr. 24, 1966	17.54	7,900
1967	Apr. 17, 1967	16.70	6,820
	May 6, 1967	16.85	7,000
1968	Oct. 30, 1967	18.93	10,300
	Dec. 14, 1967	16.48	6,560
	Jan. 29, 1968	15.00	5,200
	Mar. 21, 1968	20.63	16,400
	Apr. 4, 1968	19.21	10,900
	May 14, 1968	21.75	22,000

a Annual peak only.

2493. James Fork near Midland, Ark.

Location.--Lat 35°04'27", long 94°20'20", in NW¼NW¼ sec.32, T.5 N., R.31 W., on right bank on downstream side of bridge pier on State Highway 252, 1.6 miles southeast of Midland, 2.1 miles upstream from Prairie Creek, and 2.5 miles downstream from West Creek.

Drainage area.--44.0 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and by contracted-opening measurement at 25,400 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Nov. 7, 1962	6.09	2,450	1966	May 18, 1966	6.25	2,650
1964	Sept. 27, 1964	8.17	5,800	1967	May 6, 1967	6.89	3,500
1965	Nov. 19, 1964	8.07	5,700	1968	May 14, 1968	13.49	25,400
				1969	Dec. 28, 1968	11.47	15,700

2494. James Fork near Hackett, Ark.

Location.--Lat 35°09'45", long 94°24'25", in NW¼NW¼ sec.34, T.6 N., R.32 W., on downstream side of bridge on State Highway 45, 1.7 miles south of Hackett, 2 miles downstream from Elder Branch, and 3.6 miles upstream from Arkansas-Oklahoma State line.

Drainage area.--147 sq mi.

Gage.--Recording. Datum of gage is 459.71 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs.

Bankfull stage.--20 ft.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 2, 1958	21.40	10,300	1965	Nov. 19, 1964	19.61	5,360
	May 9, 1958	20.16	5,770		Feb. 9, 1965	17.74	3,920
	June 26, 1958	18.17	3,690		Feb. 24, 1965	17.87	4,040
					Mar. 29, 1965	19.18	3,000
1959	Mar. 21, 1959	14.68	2,180		May 10, 1965	16.78	3,480
					May 27, 1965	19.78	5,540
1960	Nov. 4, 1959	20.98	8,100				
	May 6, 1960	20.65	6,750	1966	Feb. 9, 1966	18.51	3,910
	May 19, 1960	21.30	9,700		May 18, 1966	17.80	3,430
1961	Mar. 31, 1961	18.12	3,620	1967	Apr. 23, 1967	17.43	3,540
	May 6, 1961	21.21	9,150		May 6, 1967	16.29	3,020
	July 15, 1961	21.84	13,600				
				1968	Oct. 30, 1967	21.66	12,100
1962	Nov. 21, 1961	20.69	6,900		Dec. 14, 1967	17.73	3,700
					Dec. 21, 1967	17.67	3,670
1963	Nov. 7, 1962	13.19	1,780		Mar. 21, 1968	21.00	8,100
					Mar. 31, 1968	17.50	3,580
1964	Mar. 9, 1964	17.66	3,580		Apr. 4, 1968	18.18	3,960
	May 11, 1964	16.50	3,060		May 14, 1968	23.00	30,000

2494.5. Arkansas River at Fort Smith, Ark.

Location.--Lat 35°23'35", long 94°26'00", in S½ sec.27, T.11 N., R.27 E., Indian Meridian, on upstream side of bridge on U.S. Highway 64, at Fort Smith, 0.2 mile downstream from Poteau River, 7.1 miles upstream from Lee Creek, and at mile 361.8.

Drainage area.--149,972 sq mi, of which about 127,731 sq mi contributes directly to surface runoff.

Gage.--Nonrecording. Prior to Oct. 1, 1903, at present site and Oct. 1, 1903, to July 23, 1942, on Missouri Pacific Railroad Co. bridge 800 ft upstream. All gages at datum 380.24 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Bankfull stage.--22 ft.

Historical data.--The flood in June 1833 was highest known prior to flood in 1943.

Remarks.--Gage heights furnished by U.S. Weather Bureau. Crest stages affected by storage reservoirs and power development since 1940. Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1833	June 1833	38.0	----------	1911	Aug. 7, 1911	21.2	----------
				1912	May 1, 1912	28.2	----------
1879	May 4, 1879	10.8	----------	1913	Mar. 28, 1913	16.0	----------
1880	Apr. 5, 1880	12.9	----------	1914	May 6, 1914	17.2	----------
				1915	May 30, 1915	29.2	----------
1881	May 25, 1881	15.8	----------				
1882	Feb. 23, 1882	21.8	----------	1916	Jan. 30, 1916	32.7	----------
1883	June 11, 1883	22.8	----------	1917	June 10, 1917	15.0	----------
1884	Feb. 14, 1884	27.9	----------	1918	May 12, 1918	18.00	----------
1885	Apr. 26, 1885	27.9	----------	1919	Nov. 10, 1918	20.7	----------
				1920	Mar. 28, 1920	22.9	----------
1886	Aug. 9, 1886	13.7	----------				
1887	June 18, 1887	9.3	----------	1921	Mar. 25, 1921	22.8	----------
1888	May 21, 1888	17.8	----------	1922	Apr. 12, 1922	27.8	----------
1889	Mar. 26, 1889	20.0	----------	1923	June 15, 1923	29.4	----------
1890	Mar.12, Apr.28	21.0	----------	1924	May 2, 1924	23.0	----------
				1925	Apr. 30, 1925	15.8	----------
1891	June 8, 1891	20.4	----------				
1892	May 19, 1892	30.95	----------	1926	Sept. 8, 1926	19.7	----------
1893	May 1, 1893	26.8	----------	1927	Apr. 16, 1927	36.7	----------
1894	Mar. 8-9, 1894	17.6	----------	1928	June 24, 1928	24.8	----------
1895	Aug. 1, 1895	19.6	----------	1929	May 16, 1929	29.7	----------
				1930	May 13, 1930	21.5	----------
1896	Dec. 26, 1895	27.6	----------				
1897	Jan. 5, 1897	18.6	----------	1931	Feb. 10, 1931	14.2	----------
1898	May 7, 1898	35.4	----------	1932	Jan. 24, 1932	22.0	----------
1899	May 9, 1899	26.4	----------	1933	May 17, 1933	27.7	----------
1900	May 23, 1900	12.8	----------	1934	Apr. 8, 1934	18.1	----------
				1935	June 19, 1935	34.4	----------
1901	Apr. 19, 1901	14.7	----------				
1902	May 25, 1902	19.0	----------	1936	Sept. 30, 1936	20.00	----------
1903	May 26, 1903	25.1	----------	1937	June 14, 1937	21.7	----------
1904	June 7, 1904	33.4	----------	1938	Feb. 19, 1938	33.2	----------
1905	May 30, 1905	22.4	----------	1939	May 16, 1939	16.6	----------
				1940	Sept. 6, 1940	19.1	----------
1906	Aug. 10, 1906	20.2	----------				
1907	May 17-18,1907	19.3	----------	1941	Apr. 22, 1941	31.4	----------
1908	May 27, 1908	32.7	----------	1942	Nov. 1, 1941	37.3	----------
1909	May 27, 1909	26.6	----------	1943	May 12, 1943	41.7	----------
1910	Nov. 19, 1909	12.4	----------	1944	May 4, 1944	26.7	----------

Peak stages and discharges of Arkansas River at Fort Smith, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 16, 1945	38.4	----------	1951	July 19, 1951	25.9	----------
				1952	Apr. 24, 1952	19.2	----------
1946	Oct. 2, 1945	28.8	----------	1953	Apr. 26, 1953	18.3	----------
1947	Dec. 13, 1946	26.6	----------	1954	May 3, 1954	22.5	----------
1948	June 26, 1948	29.7	----------	1955	May 31, 1955	17.7	----------
1949	May 22, 1949	28.6	----------				
1950	May 13, 1950	31.0	----------	1957	May 27, 1957	35.75	----------

2495. Cove Creek near Lee Creek, Ark.

Location.--Lat 35°43'20", long 94°24'30", in SW¼NW¼ sec.16, T.12 N., R.32 W., on downstream side of highway bridge, 4½ miles northwest of Lee Creek, and at mile 5.8.

Drainage area.--35.3 sq mi.

Gage.--Recording. Datum of gage is 850.07 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.-- Defined by current-meter measurements below 5,000 cfs and extended on basis of slope-area measurements at 20,500 cfs and 33,600 cfs.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	May 10, 1950	10.50	a9,510	1957	May 22, 1957	11.75	13,700
					May 25, 1957	7.00	3,300
1951	Feb. 18, 1951	6.65	2,850		June 9, 1957	6.30	2,440
	July 2, 1951	8.80	5,890		Aug. 13, 1957	8.70	5,840
					Aug. 16, 1957	9.60	7,680
1952	Mar. 10, 1952	5.28	1,580		Sept. 21, 1957	5.83	2,000
	Apr. 12, 1952	5.79	2,150				
	May 23, 1952	6.01	2,250	1958	Nov. 7, 1957	6.09	2,230
					Nov. 18, 1957	6.44	2,610
1953	Mar. 14, 1953	8.03	4,640		Mar. 8, 1958	6.15	2,280
	May 17, 1953	6.45	2,520		June 25, 1958	6.90	3,170
	May 12, 1953	6.20	2,250		July 12, 1958	12.45	16,100
					Aug. 2, 1958	6.30	2,200
1954	May 2, 1954	5.56	1,670				
				1959	Mar. 5, 1959	8.36	5,300
1955	Oct. 11, 1954	6.78	2,930		Apr. 1, 1959	6.16	2,280
	Dec. 27, 1954	6.20	2,250		May 10, 1959	6.49	2,670
	Feb. 19, 1955	7.90	4,190		May 16, 1959	5.89	2,030
	Mar. 20, 1955	7.20	3,470				
	May 26, 1955	6.30	2,350	1960	Nov. 3, 1959	7.00	3,300
	June 5, 1955	7.95	4,640		Apr. 14, 1960	5.58	1,760
	June 15, 1955	7.80	4,340		May 5, 1960	15.60	33,600
					May 20, 1960	5.78	1,940
1956	Apr. 28, 1956	7.80	4,320		July 23, 1960	5.50	1,670
	May 15, 1956	6.60	2,790				
				1961	May 5, 1961	9.25	6,820
1957	Apr. 3, 1957	13.50	20,500		July 16, 1961	6.10	2,230
	May 17, 1957	11.75	13,700		Sept. 13, 1961	6.03	2,180

Peak stages and discharges of Cove Creek near Lee Creek, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Nov. 2, 1961	5.32	1,510	1966	Feb. 9, 1966	10.40	9,640
	July 31, 1962	6.65	2,850		Apr. 23, 1966	6.05	2,180
1963	Oct. 13, 1962	4.80	1,140	1967	July 5, 1967	5.85	1,980
1964	May 11, 1964	7.04	3,360	1968	Oct. 30, 1967	6.32	2,460
					Dec. 14, 1967	5.30	1,510
1965	Apr. 5, 1965	5.44	1,630		Dec. 21, 1967	6.25	2,380
	Apr. 14, 1965	5.92	2,030		Jan. 28, 1968	5.52	1,690
	July 25, 1965	5.88	2,030		Feb. 1, 1968	7.03	3,340
	July 27, 1965	5.34	1,550		Mar. 20, 1968	6.35	2,500
					Apr. 19, 1968	5.44	1,620
1966	Jan. 1, 1966	7.48	3,960		July 1, 1968	8.35	5,220

a Annual peak only.

2496.5. Mountain Fork Creek near Evansville, Ark.

Location.--Lat 35°42'23", long 94°28'57", in NE¼SE¼ sec.22, T.12 N., R.33 W., on right bank 100 ft upstream from bridge on State Highway 59, 0.5 mile upstream from Indian Creek, and 6.2 miles south of Evansville.

Drainage area.--7.80 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 346 cfs and by contracted-opening measurement at 2,390 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Nov. 22, 1961	6.4	600	1966	Feb. 9, 1966	8.74	2,390
1963	Apr. 27, 1963	5.8	345	1967	July 5, 1967	6.43	625
1964	Apr. 5, 1964	5.72	310	1968	July 2, 1968	7.71	1,380
1965	Apr. 14, 1965	6.97	910	1969	Jan. 29, 1969	6.38	600

2499.5. Webber Creek tributary near Cedarville, Ark.

Location.--Lat 35°36'00", long 94°22'49", in SE¼SE¼ sec.27, T.11 N., R.32 W., on right bank 24 ft upstream from culvert on State Highway 59, 200 ft upstream from small tributary, and 2.3 miles north of Cedarville.

Drainage area.--0.34 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 24 cfs and by culvert measurements at 187 cfs and 205 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Webber Creek tributary near Cedarville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Nov. 22, 1961	(a)	b10	1966	Feb. 9, 1966	6.70	122
1963	Apr. 27, 1963	5.9	18	1967	May 6, 1967	5.54	3
1964	May 11, 1964	6.41	83	1968	Apr. 19, 1968	7.30	205
1965	May 26, 1965	7.07	187	1969	Dec. 27, 1968	5.97	24

a Peak stage did not reach bottom of gage.
b Estimated.

2500. Lee Creek near Van Buren, Ark.

Location.--Lat 35°29'40", long 94°26'56", in SE¼ sec.21, T.12 N., R.27 E., Indian Meridian, on right bank 300 ft west of Arkansas-Oklahoma State line, 3.2 miles downstream from Webbers Creek, 6¾ miles northwest of Van Buren, and at mile 7.8.

Drainage area.--426 sq mi.

Gage.--Nonrecording prior to June 1937; recording thereafter. Datum of gage is 408.04 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 55,000 cfs.

Bankfull stage.--17 ft.

Remarks.--Base for partial-duration series, 13,000 cfs. Only annual peaks are shown prior to 1951.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 8, 1931	20.5	27,700	1955	Mar. 20, 1955	16.06	17,300
1932	Jan. 16, 1932	18.1	23,200	1956	Apr. 29, 1956	14.02	13,000
1933	May 14,15,1933	22.3	32,200	1957	Apr. 3, 1957	29.37	73,200
					May 17, 1957	17.98	21,700
1934	Sept. 2, 1934	13.3	13,700		May 23, 1957	25.16	48,500
					June 2, 1957	15.86	16,700
1935	June 17, 1935	27.0	57,700		June 13, 1957	20.66	29,800
					Aug. 16, 1957	14.04	13,000
1936	Dec. 6, 1935	14.8	15,100	1958	May 9, 1958	14.34	14,800
					June 25, 1958	15.22	16,600
1943	May 10, 1943	27.0	57,700		July 13, 1958	22.32	35,900
1945	Apr. 15, 1945	a35.0	a112,000	1959	Mar. 5, 1959	16.70	21,100
					May 11, 1959	15.66	18,000
1950	May 10, 1950	27.2	58,900				
				1960	Nov. 4, 1959	13.83	14,100
1951	Feb. 18, 1951	17.76	20,900		May 6, 1960	30.30	80,600
	July 2, 1951	19.46	25,000		May 18, 1960	14.16	14,900
1952	Apr. 12, 1952	15.02	15,000	1961	May 5, 1961	21.38	32,700
					July 15, 1961	14.60	15,700
1953	Mar. 14, 1953	15.65	16,200				
	Mar. 18, 1953	17.24	19,500	1962	Nov. 22, 1961	12.33	11,300
	May 12, 1953	16.57	18,300				
				1963	Apr. 27, 1963	7.89	5,200
1954	May 2, 1954	15.34	15,600				
				1964	Apr. 5, 1964	14.14	13,900
1955	Feb. 20, 1955	18.54	22,500		May 11, 1964	15.72	18,000

Peak stages and discharges of Lee Creek near Van Buren, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1965	May 9, 1965	11.17	9,440	1968	Jan. 29, 1968	13.49	13,500
					Feb. 1, 1968	15.20	16,900
1966	Jan. 1, 1966	19.44	26,800		Mar. 20, 1968	16.81	20,400
	Feb. 9, 1966	25.38	49,600		Apr. 20, 1968	14.13	14,900
	Apr. 24, 1966	18.92	25,500		May 13, 1968	13.62	13,900
1967	May 6, 1967	11.25	9,520				

a Approximately.

2505. Arkansas River at Van Buren, Ark.

Location.--Lat 35°25'42", long 94°21'37", in NW¼ sec.36, T.9 N., R.32 W., near right bank on downstream side of bridge on U.S. Highway 64 and 71 at Van Buren, 1.3 miles downstream from Lee Creek, 8.6 miles downstream from Poteau River, and at mile 353.4.

Drainage area.--150,483 sq mi, of which about 128,242 sq mi contributes directly to surface runoff.

Gage.--Nonrecording prior to Oct. 1, 1934; recording thereafter. Datum of gage is 372.36 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 760,000 cfs.

Bankfull stage.--22 ft.

Historical data.--Maximum stage known since at least 1833, that of Apr. 16, 1945.

Remarks.--Peak discharges affected by storage reservoirs and power development since March 1940. Base for partial-duration series, 110,000 cfs. Only annual peaks are shown prior to 1934 and subsequent to 1958.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 16, 1927	35.0	----------	1936	Dec. 8, 1935	20.10	118,000
					Sept. 30, 1936	21.17	143,000
1928	Oct. 5, 1927	25.2	243,000				
				1937	Oct. 10, 1936	20.10	126,000
1929	May 16, 1929	29.0	315,000		Jan. 17, 1937	21.9	154,000
					Feb. 2, 1937	21.1	143,000
1930	May 10, 1930	22.6	164,000		June 2, 1937	18.9	122,000
					June 14, 1937	21.9	148,000
1931	Dec. 6, 1930	15.5	82,500		June 19, 1937	21.0	134,000
1932	Jan. 24, 1932	22.15	184,000	1938	Feb. 19, 1938	32.71	375,000
					Mar. 30, 1938	a25.40	195,000
1933	May 17, 1933	27.88	278,000		May 25, 1938	25.12	200,000
1934	Apr. 9, 1934	17.90	116,000	1939	May 16, 1939	16.68	77,400
1935	Nov. 24, 1934	18.60	111,000	1940	Sept. 6, 1940	20.45	127,000
	Mar. 14, 1935	25.10	206,000				
	Mar. 26, 1935	23.78	179,000	1941	Apr. 22, 1941	30.58	311,000
	May 6, 1935	22.41	165,000		June 13, 1941	27.52	244,000
	May 22, 1935	25.48	215,000		Sept. 11, 1941	a19.64	115,000
	June 9, 1935	a29.47	269,000				
	June 19, 1935	b34.1	418,000	1942	Oct. 7, 1941	a25.93	209,000

Peak stages and discharges of Arkansas River at Van Buren, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Oct. 18, 1941	a26.32	204,000	1950	July 24, 1950	25.30	226,000
	Oct. 28, 1941	26.56	203,000		July 30, 1950	23.20	173,000
	Nov. 2, 1941	a35.70	485,000		Aug. 4, 1950	24.50	204,000
	Apr. 12, 1942	27.78	268,000		Sept. 17, 1950	22.80	185,000
	Apr. 30, 1942	31.00	328,000				
	June 26, 1942	26.20	218,000	1951	Feb. 21, 1951	21.19	164,000
					May 22, 1951	a22.08	164,000
1943	Dec. 29, 1942	a23.30	188,000		June 13, 1951	20.72	138,000
	May 12, 1943	b38.00	850,000		June 28, 1951	20.98	140,000
	May 23, 1943	b36.80	752,000		July 6, 1951	26.76	250,000
	June 8, 1943	22.80	144,000		July 19, 1951	26.92	238,000
					Sept. 17, 1951	19.56	117,000
1944	Mar. 21, 1944	22.50	152,000				
	Apr. 13, 1944	24.63	182,000	1952	Apr. 24, 1952	20.70	145,000
	May 3, 1944	a26.84	238,000				
	June 15, 1944	20.32	127,000	1953	Apr. 26, 1953	b19.28	133,000
1945	Dec. 9, 1944	19.37	124,000	1954	May 3, 1954	23.84	205,000
	Feb. 24, 1945	19.28	111,000				
	Mar. 4, 1945	b23.88	177,000	1955	May 31, 1955	18.91	101,000
	Mar. 21, 1945	b29.78	304,000				
	Apr. 2, 1945	23.70	156,000	1956	Oct. 7, 1955	19.63	128,000
	Apr. 17, 1945	c38.10	650,000				
	May 17, 1945	21.86	146,000	1957	Apr. 5, 1957	21.78	150,000
	June 11, 1945	b26.70	229,000		Apr. 28, 1957	25.32	197,000
	July 4, 1945	20.40	130,000		May 28, 1957	35.97	510,000
1946	Oct. 2, 1945	29.42	287,000	1958	Mar. 28, 1958	20.17	132,000
	Jan. 12, 1946	20.45	139,000		May 10, 1958	18.93	117,000
	Feb. 20, 1946	20.13	128,000		June 26, 1958	21.90	171,000
	May 24, 1946	21.63	148,000		July 15, 1958	22.20	160,000
	June 2, 1946	19.62	118,000				
				1959	July 28, 1959	22.50	158,000
1947	Nov. 10, 1946	19.68	119,000				
	Dec. 13, 1946	27.80	262,000	1960	Oct. 7, 1959	32.55	418,000
	Apr. 17, 1947	26.36	238,000				
	Apr. 30, 1947	25.80	205,000	1961	May 11, 1961	28.17	284,000
	May 18, 1947	26.72	224,000				
	June 3, 1947	23.53	155,000	1962	Nov. 6, 1961	21.92	158,000
1948	June 25-26,1948	b30.61	330,000	1963	Oct. 4, 1962	15.11	63,700
	July 20, 1948	22.12	152,000				
	Aug. 17, 1948	21.9	149,000	1964	June 17, 1964	19.53	84,700
1949	Jan.27-28,1949	b22.02	157,000	1965	Apr. 9, 1965	21.57	121,000
	Feb. 16, 1949	b24.90	205,000				
	May 2, 1949	b21.40	152,000	1966	Feb. 10, 1966	d18.32	72,500
	May 22, 1949	b29.03	323,000				
	June 15, 1949	23.04	173,000	1967	July 9, 1967	19.54	77,400
1950	May 13, 1950	b30.90	402,000	1968	Mar. 21, 1968	23.13	134,000

a Occurred on following day.
b Occurred at different time than peak discharge.
c Occurred on Apr. 16, 1945.
d Occurred on Apr. 24, 1966.

2510. Frog Bayou near Mountainburg, Ark.

Location.--Lat 35°39'37", long 94°08'56", in NW¼NE¼ sec.2, T.11 N., R.30 W., on left bank above concrete weir in spillway of Fort Smith Dam, three-quarters of a mile upstream from Warloop Creek, 1¼ miles upstream from Howard Fork, 2½ miles northeast of Mountainburg, and 3 miles downstream from Jones Fork.

Drainage area.--74.2 sq mi.

Gage.--Nonrecording gage and concrete control prior to Aug. 28, 1939; recording thereafter. Datum of gage is 800.00 ft above mean sea level, datum of 1929 (levels by city of Fort Smith).

Stage-discharge relation.--Defined by current-meter measurements below 11,100 cfs and extended by logarithmic plotting.

Remarks.--Records represent spillway overflow from Lake Fort Smith and do not include water diverted for municipal supply of Fort Smith. Peak discharge affected by storage in Lake Fort Smith (capacity, 10,000 acre-ft) and since Jan. 1, 1956, by Lake Sheppard Springs (capacity, 19,000 acre-ft). Base for partial-duration series, 3,000 cfs. Only annual peaks are shown subsequent to 1958.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Jan. 14, 1937	26.6	2,400	1949	Jan. 24, 1949	28.21	6,500
					Feb. 15, 1949	27.66	4,940
1938	Feb. 15, 1938	27.90	5,600				
	Feb. 18, 1938	28.20	6,500	1950	Jan. 13, 1950	27.00	3,270
					May 10, 1950	27.61	4,800
1939	Feb. 19, 1939	26.55	2,190				
				1951	Feb. 18, 1951	28.01	5,920
1940	Apr. 11, 1940	27.35	4,220		July 2, 1951	28.48	7,440
1941	Apr. 19, 1941	26.58	2,310	1952	Apr. 12, 1952	26.58	2,310
1942	Apr. 8, 1942	27.96	5,780	1953	Mar. 17, 1953	27.05	3,390
					Apr. 29, 1953	27.09	3,510
1943	Nov. 5, 1942	26.92	3,300		May 12, 1953	27.08	3,510
	Dec. 27, 1942	29.61	11,100				
	May 10, 1943	29.84	12,000	1954	May 3, 1954	25.46	397
1944	Apr. 8, 1944	28.40	7,120	1955	Feb. 19, 1955	27.32	4,010
	June 14, 1944	27.06	3,390		Mar. 20, 1955	26.91	3,030
1945	Feb. 21, 1945	28.81	8,420	1956	June 9,10,1956	25.16	92
	Mar. 2, 1945	27.71	5,070				
	Mar. 19, 1945	28.43	7,120	1957	Apr. 3, 1957	27.83	5,630
	Mar. 30, 1945	27.92	5,630		May 13, 1957	26.85	3,030
	Apr. 15, 1945	31.06	17,300		May 23, 1957	30.28	13,700
	June 10, 1945	29.10	9,420				
				1958	(a)	26.48	2,100
1946	Feb. 13, 1946	27.77	5,210				
	May 24, 1946	29.14	9,420	1959	May 11, 1959	26.42	1,980
1947	Nov. 9, 1946	28.12	6,210	1960	May 6, 1960	28.08	6,210
	Dec. 10, 1946	27.41	4,270				
	June 21, 1947	27.58	4,800	1961	May 5, 1961	27.89	5,630
1948	Aug. 14, 1948	26.69	2,550				

a Nov. 18, 1957, July 12, 1958.

2515. Frog Bayou at Rudy, Ark.

Location.--Lat 35°31'25", long 94°16'30", in SW¼ sec.23, T.10 N., R.31 W., on left bank at downstream side of bridge on State Highway 282 at Rudy, 0.5 mile downstream from Cedar Creek.

Drainage area.--216 sq mi.

Gage.--Recording. Datum of gage is 475.08 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 26,000 cfs.

Bankfull stage.--10 ft.

Remarks.--Peak discharge affected to some extent by storage in Lake Fort Smith (capacity, 10,000 acre-ft) and since Jan. 1, 1956, by Lake Sheppard Springs (capacity, 19,000 acre-ft). Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 15, 1945	18.5	a39,500	1958	Nov. 18, 1957	9.02	6,200
					May 9, 1958	10.85	9,890
1950	May 10, 1950	11.40	a13,200		June 25, 1958	8.62	5,480
					July 12, 1958	14.25	19,100
1951	Feb. 15, 1951	9.07	7,110				
	Feb. 18, 1951	11.35	13,200	1959	May 11, 1959	8.07	4,650
	Feb. 20, 1951	8.75	6,490				
	July 2, 1951	11.77	14,700	1960	Nov. 4, 1959	8.00	4,500
					May 6, 1960	14.60	20,400
1952	Nov. 25, 1951	7.98	4,980		May 18, 1960	11.70	12,000
	Mar. 10, 1952	8.46	5,900				
	Apr. 12, 1952	8.86	6,690	1961	Mar. 30, 1961	7.78	4,220
					May 5, 1961	13.60	17,300
1953	Mar. 14, 1953	8.55	5,860				
	Mar. 17, 1953	10.22	9,250	1962	Nov. 22, 1961	8.73	5,660
	Apr. 29, 1953	9.90	8,570				
	May 12, 1953	10.18	9,250	1963	Apr. 27, 1963	6.20	2,140
1954	May 2, 1954	5.86	1,520	1964	Apr. 5, 1964	11.46	11,600
					May 11, 1964	9.94	7,950
1955	Dec. 28, 1954	9.15	7,070				
	Feb. 19, 1955	11.34	12,600	1965	May 10, 1965	9.72	7,550
	Mar. 20, 1955	9.17	7,070				
				1966	Jan. 1, 1966	9.30	6,560
1956	May 15, 1956	6.82	2,710		Feb. 9, 1966	15.14	18,900
					Apr. 23, 1966	13.12	14,200
1957	Apr. 3, 1957	12.88	13,900				
	Apr. 26, 1957	7.74	4,140	1967	Apr. 30, 1967	8.47	5,240
	May 13, 1957	9.32	6,810				
	May 23, 1957	18.04	36,200	1968	Oct. 30, 1967	8.45	5,210
	May 24, 1957	11.85	12,400		Dec. 21, 1967	7.87	4,400
	June 13, 1957	12.37	13,800		Jan. 29, 1968	10.43	8,560
	Aug. 13, 1957	8.45	5,130		Feb. 1, 1968	8.70	5,600
	Aug. 16, 1957	16.24	25,800		Mar. 20, 1968	11.73	11,200
					Apr. 19, 1968	10.98	9,660

a Annual peak only

2520. Mulberry River near Mulberry, Ark.

Location.--Lat 35°34', long 94°01', in NW¼ sec.6, T.10 N., R.28 W., on left bank a quarter of a mile upstream from Mill Creek, 5 miles northeast of Mulberry, and at mile 11.3.

Drainage area.--373 sq mi.

Gage.--Nonrecording prior to Apr. 19, 1940, at site 500 ft downstream; recording thereafter. Datum of gage is 432.75 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 39,000 cfs and extended on basis of velocity-area study.

Bankfull stage.--18 ft.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)
1928	December 1927	a22.0	59,000
1939	Apr. 17, 1939	11.2	12,600
1940	Apr. 11, 1940	8.6	8,010
1941	Jan. 24, 1941	8.32	7,110
1942	Oct. 31, 1941	10.79	12,200
	Apr. 8, 1942	12.89	17,500
1943	Dec. 27, 1942	14.00	20,700
	May 10, 1943	18.23	40,100
1944	Apr. 8, 1944	12.82	17,600
	June 14, 1944	11.83	15,000
1945	Feb. 21, 1945	17.17	35,400
	Mar. 3, 1945	12.77	18,300
	Mar. 19, 1945	15.06	26,400
	Mar. 30, 1945	14.17	23,100
	Apr. 2, 1945	10.52	12,300
	Apr. 15, 1945	19.70	47,800
	May 16, 1945	10.37	12,100
	June 10, 1945	17.30	35,800
1946	Jan. 9, 1946	10.33	11,900
	Feb. 6, 1946	10.56	12,600
	Feb. 13, 1946	13.57	20,900
	May 25, 1946	14.93	25,700
1947	Nov. 10, 1946	13.93	22,000
	Dec. 12, 1946	15.28	27,200
	May 20, 1947	15.4	27,600
1948	Jan. 1, 1948	12.04	16,100
	Feb. 26, 1948	9.68	10,500
1949	Jan. 24, 1949	18.61	42,100
	Feb. 14, 1949	15.98	30,100
1950	Jan. 4, 1950	13.90	22,000
	Jan. 13, 1950	10.53	12,300
	Feb. 12, 1950	13.44	20,300
	May 11, 1950	12.74	18,000
1951	Feb. 15, 1951	10.95	13,500
	Feb. 18, 1951	14.55	24,500
1952	Nov. 25, 1951	11.10	13,800
	Mar. 11, 1952	11.57	14,500
	Apr. 12, 1952	11.63	15,000
	May 23, 1952	10.93	13,300
1953	Mar. 14, 1953	10.52	12,300
	Mar. 18, 1953	15.17	26,800
	Apr. 29, 1953	11.07	13,800
	May 12, 1953	13.92	22,000
1954	Apr. 16, 1954	8.33	7,320
1955	Feb. 20, 1955	12.14	15,600
	Mar. 21, 1955	13.28	19,000
1956	May 15, 1956	11.68	15,300
1957	Apr. 3, 1957	15.70	28,800
	Apr. 26, 1957	10.81	13,100
	May 13, 1957	13.54	21,600
	May 23, 1957	11.90	16,600
	June 13, 1957	9.55	10,700
1958	Mar. 8, 1958	9.54	10,100
	May 9, 1958	9.88	11,100
1959	Nov. 15, 1958	7.06	5,240
1960	Oct. 3, 1959	11.56	14,900
	Nov. 4, 1959	11.65	14,900
	May 6, 1960	12.78	18,300
	May 20, 1960	11.94	15,700
1961	May 6, 1961	12.23	16,600
	May 19, 1961	15.61	28,400
1962	Nov. 22, 1961	11.34	14,300
1963	Oct. 16, 1962	5.03	2,530
1964	Mar. 9, 1964	11.57	14,900
	Apr. 5, 1964	13.98	22,300
	May 11, 1964	12.02	16,000

Peak stages and discharges of Mulberry River near Mulberry, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1965	Feb. 9, 1965	7.78	6,420	1968	Oct. 30, 1967	11.01	13,600
					Dec. 21, 1967	10.40	12,100
1966	Feb. 9, 1966	17.85	38,200		Jan. 29, 1968	10.61	12,600
	Apr. 24, 1966	9.94	11,000		Feb. 1, 1968	10.18	11,600
					Mar. 20, 1968	13.78	21,600
1967	May 14, 1967	8.48	7,640		Apr. 20, 1968	11.13	13,900
					May 14, 1968	11.18	14,000

a Annual peak only.

2522. North Fork White Oak Creek tributary near Watalula, Ark.

Location.--Lat 35°35'43", long 93°50'50", in SE¼NE¼ sec.27, T.11 N., R.27 W., on left bank 42 ft upstream from culvert on State Highway 23, 2.2 miles northwest of Watalula, and 2.4 miles upstream from mouth.

Drainage area.--0.27 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 51 cfs and by culvert measurements at 332 cfs and 729 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	6.30	125	1966	Feb. 9, 1966	6.01	86
1962	Aug. 1, 1962	5.93	78	1967	Sept. 17, 1967	5.69	51
1963	Oct. 13, 1962	6.51	156	1968	July 19, 1968	7.66	332
1964	Apr. 3, 1964	10.66	729	1969	Jan. 29, 1969	6.04	90
1965	May 9, 1965	6.46	148				

2524. Arkansas River at Ozark, Ark.

Location.--Lat 35°29'02", long 93°49'56", in SE¼ sec.35, T.10 N., R.27 W., at bridge on State Highway 23 at Ozark, 14 miles downstream from Mulberry River, and at mile 310.3.

Drainage area.--151,797 sq mi, of which about 129,556 sq mi contributes directly to surface runoff.

Gage.--Nonrecording. Datum of gage is 337.06 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Bankfull stage.--22 ft.

Remarks.--Records furnished by U.S. Weather Bureau. Crest stages affected by storage reservoir and power development since March 1940. Only annual peak stages are shown.

Peak stages and discharges of Arkansas River at Ozark, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 27, 1927	35.4	----------	1948	June 27, 1948	25.2	----------
1928	Oct. 5, 1927	22.4	----------	1949	May 22, 1949	24.9	----------
1929	May 17, 1929	24.9	----------	1950	May 13, 1950	27.5	----------
1930	May 11, 1930	21.0	----------				
				1951	July 7, 1951	22.8	----------
1931	Feb. 10, 1931	12.0	----------	1952	Apr. 24, 1952	15.9	----------
1932	Nov. 26, 1931	14.8	----------	1953	Mar. 27, 1953	15.1	----------
1933	May 18, 1933	23.7	----------	1954	May 4, 1954	19.2	----------
1934	Apr. 9, 1934	13.2	----------	1955	May 25, 1955	13.7	----------
1935	June 21, 1935	31.1	----------				
				1956	Oct. 8, 1955	14.9	----------
1936	June 10, 1936	12.2	----------	1957	May 28, 1957	34.4	----------
1937	Jan. 17, 1937	17.0	----------	1958	June 27, 1958	19.3	----------
1938	Feb. 20, 1938	28.9	----------	1959	July 28, 1959	18.6	----------
1939	May 16, 1939	12.0	----------	1960	Oct. 8, 1959	28.9	----------
1940	Sept. 7, 1940	14.3	----------				
				1961	May 11, 1961	24.1	----------
1941	Apr. 22, 1941	26.0	----------	1962	Nov. 6, 1961	18.7	----------
1942	Nov. 4, 1941	33.0	----------	1963	Oct. 5, 1962	11.8	----------
1943	May 14, 1943	38.4	----------	1964	June 17, 1964	16.03	----------
1944	May 4, 1944	23.2	----------	1965	Apr. 10, 1965	18.49	----------
1945	Apr. 19, 1945	35.9	----------				
				1966	Feb. 10, 1966	17.83	----------
1946	Oct. 3, 1945	25.8	----------	1967	July 10, 1967	15.55	----------
1947	Dec. 13, 1946	23.3	----------	1968	Mar. 22, 1968	21.2	----------

2525. Sixmile Creek subwatershed No. 6 near Chismville, Ark.

Location.--Lat 35°12'30", long 93°52'55", in NW¼ sec.9, T.6 N., R.27 W., in upstream slope of earth dam on Six Mile Creek, 3.3 miles southeast of Chismville.

Drainage area.--4.23 sq mi.

Gage.--Recording and concrete drop inlet. Datum of gage is 576.67 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).

Stage-discharge relation.--Outflow defined by current-meter measurements and by critical-depth computations at 587 cfs. Peak reservoir inflow computed from outflow and rate of change of reservoir contents, adjusted for rainfall on reservoir at time of peak inflow.

Remarks.--Only annual peak inflow is shown (average for 5-minute intervals).

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	----------	a1,610	1962	Nov. 22, 1961	---------	437
				1963	Mar. 16, 1963	---------	197
1956	July 23, 1956	----------	351	1964	May 11, 1964	---------	1,050
1957	Apr. 27, 1957	----------	1,320	1965	May 26, 1965	---------	944
1958	Nov. 17, 1957	----------	1,420				
1959	Mar. 21, 1959	----------	274	1966	Feb. 9, 1966	---------	735
1960	Nov. 4, 1959	----------	1,100	1967	Aug. 4, 1967	---------	470
				1968	May 13, 1968	---------	1,930
1961	May 4, 1961	----------	1,730				

a Average for 10-minute interval.

2530. Sixmile Creek at Chismville, Ark.

Location.--Lat 35°13'15", long 93°56'20", in E½ sec.2, T.6 N., R.28 W., on downstream side of highway bridge at Chismville, half a mile downstream from Rocky Creek, and at mile 25.6.

Drainage area.--24.1 sq mi.

Gage.--Recording. Datum of gage is 478.42 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,780 cfs and by contracted-opening measurement at 2,810 cfs.

Bankfull stage.--8 ft.

Remarks.--Peak flows are materially affected by four floodwater-detention reservoirs that have a total capacity of 5,086 acre-ft below flood-spillway crests, of which 4,292 acre-ft is flood-detention capacity and 794 acre-ft is sediment-storage capacity. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	10.74	2,810	1962	Nov. 22, 1961	4.75	602
				1963	Oct. 16, 1962	2.58	177
1956	Feb. 17, 1956	3.07	218	1964	May 11, 1964	6.04	862
1957	Apr. 13, 1957	10.05	1,850	1965	May 26, 1965	8.95	1,630
1958	July 12, 1958	9.47	1,650				
1959	June 1, 1959	5.77	680	1966	May 18, 1966	7.58	1,230
1960	May 6, 1960	8.78	1,440	1967	May 6, 1967	3.22	302
				1968	May 13, 1968	9.60	1,900
1961	May 5, 1961	10.62	2,670				

2535. Sixmile Creek near Branch, Ark.

Location.--Lat 35°15', long 93°59', in SE¼ sec.28, T.7 N., R.28 W., half a mile downstream from Rattle Snake Creek, 1 mile upstream from Prairie Creek, 4¾ miles southwest of Branch, and at mile 21.5.

Drainage area.--36.7 sq mi.

Gage.--Recording. Datum of gage is 422.77 ft above mean sea level, datum of 1929 (Soil Conservation Service bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,700 cfs and by slope-area measurement at 4,480 cfs.

Bankfull stage.--8 feet.

Remarks.--Peak flows are materially affected by six floodwater-detention reservoirs that have a total capacity of 6,232 acre-ft below the flood spillway crests, of which 5,344 acre-ft is flood-detention capacity and 888 acre-ft is sediment-storage capacity. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	11.75	4,530	1962	Nov. 22, 1961	5.80	1,100
				1963	Oct. 14, 1962	8.88	2,350
1956	Feb. 17, 1956	4.77	609	1964	May 11, 1964	6.85	1,480
1957	Apr. 3, 1957	10.90	3,660	1965	May 26, 1965	10.10	3,040
1958	July 12, 1958	11.38	4,130				
1959	Mar. 25, 1959	4.83	663	1966	Feb. 9, 1966	8.07	2,000
1960	Nov. 4, 1959	10.74	3,520	1967	June 30, 1967	4.54	672
				1968	May 13, 1968	11.81	4,540
1961	May 5, 1961	11.05	3,750				

2540. Sixmile Creek subwatershed No. 5 near Chismville, Ark.

Location.--Lat 35°13'45", long 93°54'50", in N½ sec.6, T.6 N., R.27 W., in upstream slope of earth dam on Little Caney Creek, 1.7 miles northeast of Chismville.

Drainage area.--2.76 sq mi.

Gage.--Recording and concrete drop inlet. Datum of gage is 475.83 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).

Stage-discharge relation.--Reservoir outflow defined by current-meter measurements. Peak reservoir inflow computed from outflow and rate of change of reservoir contents, adjusted for rainfall on reservoir at time of peak.

Remarks.--Only annual peak inflow is shown (average for 5-minute intervals).

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	---	a783	1962	Nov. 22, 1961	---	145
				1963	Oct. 14, 1962	---	78
1956	Feb. 17, 1956	---	147	1964	May 11, 1964	---	397
1957	Apr. 3, 1957	---	832	1965	May 26, 1965	---	714
1958	July 12, 1958	---	705				
1959	Mar. 21, 1959	---	b75	1966	May 18, 1966	---	448
1960	May 5, 1960	---	646	1967	May 6, 1967	---	77
				1968	May 13, 1968	---	852
1961	May 5, 1961	---	1,070				

a Average for 10-minute interval.
b Average for 1-hour interval.

2545. Sixmile Creek subwatershed No. 2 near Caulksville, Ark.

Location.--Lat 35°15'49", long 93°49'52", in SE¼NE¼ sec.23, T.7 N., R.27 W., in upstream slope of earth dam on Shaver Creek, 3.2 miles southeast of Caulksville.

Drainage area.--5.81 sq mi.

Gage.--Recording and concrete drop inlet. Datum of gage is 490.00 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).

Stage-discharge relation.--Reservoir outflow defined by current-meter measurements. Peak reservoir inflow computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir at time of peak inflow.

Remarks.--Only annual peak inflow is shown (average for 5-minute intervals).

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	---	a1,790	1962	Nov. 22, 1961	---	353
				1963	Oct. 14, 1962	---	404
1956	Feb. 17, 1956	---	266	1964	May 11, 1964	---	1,120
1957	Apr. 27, 1957	---	a1,280	1965	Nov. 19, 1964	---	792
1958	May 2, 1958	---	a1,010				
1959	June 11, 1959	---	813	1966	Feb. 9, 1966	---	1,110
1960	Nov. 4, 1959	---	755	1967	Aug. 4, 1967	---	395
				1968	May 13, 1968	---	2,470
1961	May 5, 1961	---	1,740				

a Average for 10-minute interval.

2550. Sixmile Creek at Caulksville, Ark.

Location.--Lat 35°18', long 93°51', on line between secs.3 and 10, T.7 N., R.27 W., at upstream side of bridge on State Highway 22, 0.6 mile east of Caulksville, 1¾ miles downstream from Shaver Creek, and at mile 11.0.

Drainage area.--104 sq mi.

Gage.--Recording. Datum of gage is 356.16 ft above mean sea level, datum of 1929. Prior to July 15, 1957, at datum 2.00 ft higher. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 9,300 cfs.

Bankfull stage.--12 ft.

Remarks.--Peak flows are materially affected by 13 floodwater-detention reservoirs that have a total capacity of 14,229 acre-ft below the flood spillway crests, of which 12,175 acre-ft is flood-detention capacity and 2,054 acre-ft is sediment-storage capacity. Major channel improvements made during 1957. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	19.37	8,780	1962	Nov. 22, 1961	12.66	3,490
				1963	Oct. 14, 1962	13.17	3,680
1956	Feb. 17, 1956	15.00	1,800	1964	May 11, 1964	14.54	4,280
1957	Apr. 3, 1957	17.40	9,460	1965	May 26, 1965	15.80	5,490
1958	May 2, 1958	15.85	6,180				
1959	June 1, 1959	9.74	2,380	1966	Feb. 9, 1966	16.10	4,550
1960	Nov. 4, 1959	16.88	6,380	1967	May 6, 1967	9.45	2,040
				1968	May 14, 1968	18.79	9,960
1961	May 6, 1961	17.79	10,100				

2551. Sixmile Creek subwatershed No. 23 near Branch, Ark.

Location.--Lat 35°21'22", long 93°59'00", in NE¼SW¼ sec.21, T.8 N., R.28 W., in upstream slope of earth dam on Kings Creek, three-quarters of a mile upstream from mouth, and 3.9 miles northwest of Branch.

Drainage area.--4.49 sq mi.

Gage.--Recording and concrete drop inlet. Datum of gage is 400.00 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).

Stage-discharge relation.--Reservoir outflow defined by current-meter measurements. Peak reservoir inflow computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir at time of peak discharge.

Remarks.--Only annual peak inflow is shown (average for 5-minute intervals).

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 18, 1956	---	496	1963	Nov. 7, 1962	---	106
1957	Apr. 4, 1957	---	1,560	1964	May 11, 1964	---	970
1958	July 13, 1958	---	1,620	1965	May 26, 1965	---	789
1959	Mar. 21, 1959	---	384				
1960	Nov. 4, 1959	---	2,520	1966	Feb. 9, 1966	---	809
				1967	May 6, 1967	---	169
1961	Dec. 10, 1960	---	519	1968	May 13, 1968	---	1,940
1962	Nov. 22, 1961	---	675				

2555. Hurricane Creek near Branch, Ark.

Location.--Lat 35°21', long 93°56', on line between and near south edge of secs.23 and 24, T.8 N., R.28 W., on downstream side of bridge on State Highway 41, 1½ miles upstream from Perry Creek, 3.2 miles northeast of Branch, and at mile 9.0.

Drainage area.--17.2 sq mi.

Gage.--Recording. Datum of gage is 379.87 ft above mean sea level, datum of 1929 (Soil Conservation Service bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and by indirect measurement at 2,840 cfs.

Bankfull stage.--6 ft.

Remarks.--Peak flows are materially affected by four floodwater-detention reservoirs that have a total capacity of 3,011 acre-ft below the flood spillway crests, of which 2,737 acre-ft is flood-detention capacity and 274 acre-ft is sediment-storage capacity. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	9.88	2,840	1962	Nov. 22, 1961	8.09	484
				1963	Mar. 16, 1963	4.93	120
1956	Feb. 17, 1956	8.14	700	1964	May 11, 1964	8.55	985
1957	Apr. 3, 1957	8.78	1,240	1965	May 26, 1965	8.32	790
1958	July 12, 1958	8.31	790				
1959	July 19, 1959	7.78	512	1966	Feb. 9, 1966	7.92	560
1960	Nov. 4, 1959	9.69	2,460	1967	Apr. 23, 1967	6.01	173
				1968	May 13, 1968	9.02	1,410
1961	May 5, 1961	7.74	375				

2560. 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., on downstream side of bridge on State Highway 23, 1.0 mile upstream from Garner Creek, 3.2 miles north of Caulksville, and at mile 4.

Drainage area.--53.0 sq mi.

Gage.--Recording. Datum of gage is 352.60 ft above mean sea level, datum of 1929 (Soil Conservation Service bench mark). Prior to July 1, 1957, at datum 2.00 ft higher. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 6,300 cfs. Affected at times by backwater from Sixmile Creek.

Bankfull stage.--8 ft.

Remarks.--Peak flows materially affected by seven floodwater-detention reservoirs that have a total capacity of 5,004 acre-ft below flood-spillway crests, of which 4,555 acre-ft is flood-detention capacity and 449 acre-ft is sediment-storage capacity. Major channel improvements made in 1957. Only annual peaks are shown.

Peak stages and discharges of Hurricane Creek near Caulksville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 20, 1955	15.32	5,400	1962	Nov. 22, 1961	12.62	2,800
				1963	Mar. 16, 1963	4.37	436
1956	Feb. 17, 1956	13.65	1,980	1964	May 11, 1964	13.52	3,610
1957	Apr. 3, 1957	14.54	6,740	1965	May 26, 1965	13.40	3,380
1958	May 9, 1958	11.62	2,660				
1959	July 22, 1959	9.74	1,680	1966	Feb. 9, 1966	13.14	3,080
1960	Nov. 4, 1959	15.71	9,050	1967	May 6, 1967	8.29	928
				1968	May 14, 1968	14.15	4,250
1961	May 6, 1961	11.97	2,370				

2565. Spadra Creek at Clarksville, Ark.

Location.--Lat 35°28',06", long 93°27'46", in NE¼ sec.5, T.9 N., R.23 W., on right bank at Clarksville, 1,000 ft downstream from bridge on U.S. Highway 64, and at mile 6.2.

Drainage area.--61.1 sq mi.

Gage.--Recording. Datum of gage is 351.99 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1961, at datum 1.00 ft higher. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs.

Bankfull stage.--10 ft.

Remarks.--Gage heights since 1952 represent water surface in gage well and are slightly lower than outside water surface because of drawdown. Major channel improvements made during 1960. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	December 1927	a15.7	14,500	1958	May 9, 1958	11.15	6,880
1949	Jan 24, 1949	a15.5	14,000	1959	May 22, 1959	8.20	3,000
					June 9, 1959	8.44	3,180
1953	Nov. 25, 1952	8.23	3,820		June 12, 1959	8.78	3,570
	Mar. 14, 1953	7.82	3,390				
	Mar. 17, 1953	10.84	7,160	1960	Nov. 4, 1959	8.49	3,270
	Apr. 24, 1953	7.75	3,390		May 6, 1960	9.26	4,100
	Apr. 29, 1953	10.26	6,460				
				1961	May 5, 1961	6.77	4,540
1954	Jan. 20, 1954	11.7	7,600				
	Feb. 15, 1954	8.0	3,500	1962	Nov. 22, 1961	5.92	2,930
	May 2, 1954	7.99	3,600				
				1963	Mar. 16, 1963	3.51	852
1955	Feb. 19, 1955	9.91	5,550				
	Mar. 20, 1955	11.32	7,130	1964	May 11, 1964	8.03	5,320
1956	Feb. 17, 1956	7.64	3,120	1965	Feb. 9, 1965	5.61	2,300
1957	Apr. 3, 1957	15.58	15,300	1966	Feb. 9, 1966	10.36	8,280
	Apr. 27, 1957	10.30	6,390				
	Apr. 29, 1957	7.83	3,420	1967	July 5, 1967	6.14	2,850
	May 24, 1957	8.13	3,740				
	June 13, 1957	15.38	14,700	1968	Jan. 29, 1968	8.50	3,790
					Mar. 20, 1968	10.22	5,730
1958	May 2, 1958	8.96	4,100		May 13, 1968	12.43	9,130

a Annual peak only.

2570. Big Piney Creek near Dover, Ark.
(Published as "Piney Creek" prior to 1968)

Location.--Lat 35°32'58", long 93°09'30", in SW¼NE¼ sec.6, T.10 N., R.20 W., on left bank 7.2 miles downstream from Indian Creek, 10.4 miles north of Dover, and at mile 28.0.

Drainage area.--274 sq mi.

Gage.--Recording. Datum of gage is 487.66 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 16,000 cfs and extended by logarithmic plotting.

Remarks.--Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Jan. 24, 1949	a25.6	80,000	1958	Aug. 1, 1958	12.80	14,500
1951	Feb. 20, 1951	14.95	17,600	1959	Nov. 16, 1958	13.75	17,200
					Apr. 19, 1959	12.08	12,700
1952	Nov. 23, 1951	12.64	14,000		June 12, 1959	12.22	12,900
	Mar. 10, 1952	12.78	14,500				
	Apr. 12, 1952	13.34	15,800	1960	Oct. 5, 1959	9.70	7,320
	May 23, 1952	11.95	12,400		Nov. 4, 1959	12.66	14,200
					May 6, 1960	14.10	18,100
1953	Nov. 25, 1952	12.46	13,700		May 20, 1960	12.62	14,000
	Mar. 14, 1953	13.34	15,800				
	Mar. 17, 1953	17.04	28,500	1961	Dec. 6, 1960	10.47	8,940
	Apr. 24, 1953	11.56	11,400		Dec. 11, 1960	10.41	8,720
	Apr. 29, 1953	11.18	10,500		Mar. 6, 1961	9.71	7,320
	May 12, 1953	13.08	15,300		May 6, 1961	17.21	29,200
					May 19, 1961	12.60	14,000
1954	Jan. 20, 1954	11.15	10,500				
	Apr. 16, 1954	10.98	10,000	1962	Nov. 22, 1961	10.09	8,120
	May 2, 1954	16.03	24,700				
				1963	Mar. 16, 1963	7.69	4,390
1955	Feb. 20, 1955	15.62	23,200				
	Mar. 20, 1955	17.06	28,900	1964	Mar. 9, 1964	12.27	13,200
	Apr. 21, 1955	11.37	11,000		Apr. 5, 1964	15.78	23,900
					May 11, 1964	16.02	24,700
1956	Feb. 1, 1956	12.44	13,400				
	Feb. 17, 1956	11.28	10,700	1965	Feb. 9, 1965	9.75	7,520
	May 15, 1956	10.68	9,380				
				1966	Jan. 2, 1966	12.50	13,700
1957	Apr. 3, 1957	20.37	44,000		Feb. 9, 1966	25.27	77,400
	Apr. 27, 1957	11.02	10,100		Apr. 23, 1966	12.30	13,200
	Apr. 30, 1957	10.18	8,280				
	May 13, 1957	11.85	12,000	1967	May 14, 1967	10.08	8,080
	May 23, 1957	10.45	8,830				
	June 10, 1957	9.70	7,320	1968	Oct. 30, 1967	9.65	7,230
	June 13, 1957	13.60	16,600		Jan. 29, 1968	10.49	8,920
					Feb. 1, 1968	10.39	8,700
1958	Mar. 8, 1958	10.65	9,160		Mar. 20, 1968	16.38	26,100
	Mar. 13, 1958	9.62	7,140		Apr. 3, 1968	10.43	8,790
	May 3, 1958	9.58	7,140		May 14, 1968	13.29	15,800
	May 9, 1958	10.30	8,520				

a Annual peak only.

2570.6. Mikes Creek tributary near Ozone, Ark.

Location.--Lat 35°37'25", long 93°26'02", in NE¼SE¼ sec.9, T.11 N., R.23 W., on right bank 5 ft upstream from culvert on State Highway 21, 0.1 mile upstream from mouth, and 1.4 miles southeast of Ozone.

Drainage area.--0.19 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements at 24 cfs, 52 cfs, and 77 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	May 10, 1964	4.15	52	1967	July 5, 1967	2.93	25
1965	June 13, 1965	4.29	55	1968	Apr. 19, 1968	3.89	47
				1969	Jan. 29, 1969	4.08	51
1966	Feb. 9, 1966	5.23	77				

2571. Minnow Creek tributary near Hagarville, Ark.

Location.--Lat 35°30'11", long 93°21'56", in SE¼SE¼ sec.19, T.10 N., R.22 W., on left bank 15 ft upstream from culvert on State Highway 123, 0.2 mile upstream from mouth, and 2.6 miles southwest of Hagarville.

Drainage area.--0.20 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since June 1969.

Stage-discharge relation.--Defined by culvert measurements at 44 cfs, 54 cfs, 87 cfs, and 157 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	1962	(a)	----------	1966	Feb. 9, 1966	4.95	87
1963	June 16, 1963	3.76	36	1967	July 5, 1967	5.08	94
1964	May 10, 1964	4.18	54	1968	May 13, 1968	6.32	157
1965	Nov. 19, 1964	3.68	33	1969	Dec. 28, 1968	4.06	48

a Peak stage did not reach bottom of gage.

2575. Illinois Bayou near Scottsville, Ark.

Location.--Lat 35°27'58", long 93°02'28", in SW¼ sec.32, T.10 N., R.19 W., on downstream side of bridge on county road, 1¾ miles north of Scottsville, 3 miles downstream from North Fork Illinois Bayou, and at mile 28.6.

Drainage area.--241 sq mi.

Gage.--Nonrecording prior to Mar. 25, 1948; recording thereafter. Datum of gage is 447.54 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 cfs and extended by logarithmic plotting.

Bankfull stage.--16 ft.

Remarks.--Base for partial-duration series, 7,000 cfs.

Peak stages and discharges of Illinois Bayou near Scottsville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	May 10, 1943	a24.6	77,000	1957	Aug. 13, 1957	16.80	21,100
1948	Jan. 1, 1948	15.0	18,600	1958	Nov. 13, 1957	13.32	10,900
					Nov. 18, 1957	12.86	9,920
1949	Dec. 15, 1948	10.96	7,000		Mar. 23, 1958	12.34	8,620
	Jan. 24, 1949	24.60	77,000		May 2, 1958	12.27	8,620
	Jan. 27, 1949	11.60	9,550		May 9, 1958	12.10	8,200
	Feb. 14, 1949	12.05	10,600				
				1959	Nov. 17, 1958	14.90	15,300
1950	Oct. 21, 1949	11.90	9,460		June 12, 1959	12.44	8,830
	Jan. 4, 1950	15.30	19,400				
	Jan. 13, 1950	14.80	17,800	1960	Nov. 4, 1959	17.70	24,000
	Feb. 1, 1950	11.28	8,100		Dec. 11, 1959	12.00	7,990
	Feb. 12, 1950	13.65	14,100		Dec. 27, 1959	12.84	9,700
	June 3, 1950	10.98	7,470		May 6, 1960	17.00	21,700
					May 20, 1960	13.45	11,100
1951	Feb. 15, 1951	11.56	8,760				
	Feb. 20, 1951	14.20	15,900	1961	Dec. 6, 1960	13.86	12,400
					Dec. 11, 1960	11.56	7,160
1952	Nov. 24, 1951	12.65	11,300		Mar. 5, 1961	12.62	9,260
	Mar. 10, 1952	14.08	15,600		Mar. 31, 1961	12.30	8,620
	Apr. 12, 1952	13.47	13,800		May 6, 1961	19.18	29,500
	Apr. 22, 1952	13.90	15,000				
	May 23, 1952	11.82	9,220	1962	Feb. 26, 1962	13.43	11,100
1953	Nov. 25, 1952	14.74	17,400	1963	Mar. 16, 1963	11.05	6,000
	Mar. 14, 1953	11.56	8,760				
	Mar. 18, 1953	14.76	17,800	1964	Mar. 9, 1964	16.55	20,500
	Apr. 24, 1953	11.60	8,760		Apr. 5, 1964	13.00	10,200
					May 11, 1964	14.70	14,700
1954	May 2, 1954	16.48	23,500				
				1965	Mar. 29, 1965	12.10	8,200
1955	Feb. 20, 1955	---------	15,000				
	Mar. 20, 1955	14.75	17,300	1966	Feb. 9, 1967	18.14	25,300
	Apr. 21, 1955	14.66	17,000		Apr. 24, 1967	13.63	11,600
1956	Feb. 2, 1956	12.70	10,700	1967	May 14, 1967	11.27	6,510
	Feb. 17, 1956	12.84	11,000				
				1968	Jan. 29, 1968	12.20	8,410
1957	Apr. 3, 1957	17.90	24,600		Mar. 20, 1968	17.22	22,400
	May 24, 1957	16.20	19,200		May 14, 1968	17.21	22,400
	June 13, 1957	11.60	7,160				

a Annual peak only.

2577. McCoy Creek near Dover, Ark.

Location.--Lat 35°25'04", long 93°05'09", in SE¼NE¼ sec.23, T.9 N., R.20 W., on right wingwall 2 ft downstream from bridge on State Highway 27, 0.6 mile upstream from small tributary, and 2 miles northeast of Dover.

Drainage area.--7.05 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 430 cfs and by contracted-opening measurement at 4,750 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of McCoy Creek near Dover, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	7.05	1,080	1966	Feb. 9, 1966	6.4	690
1962	Feb. 25, 1962	6.30	750	1967	May 14, 1967	5.39	430
1963	1963	(a)	----------	1968	May 13, 1968	11.79	4,750
1964	Apr. 3, 1964	8.61	1,950	1969	Dec. 27, 1968	7.93	1,550
1965	Jan. 9, 1965	5.34	420				

a Peak stage did not reach bottom of gage.

2580. Arkansas River at Dardanelle, Ark.

Location.--Lat 35°13'34", long 93°08'58", in SW¼ sec.29, T.7 N., R.20 W., on downstream side of bridge on State Highway 7 at Dardanelle, 1 mile upstream from Whig Creek, 2 miles downstream from Dardanelle Dam, 4.7 miles downstream from Illinois Bayou, and at mile 255.8.

Drainage area.--153,666 sq mi, of which about 131,425 sq mi contributes directly to surface runoff.

Gage.--Nonrecording prior to Jan. 11, 1939; recording thereafter. Datum of gage is 290.16 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined prior to 1937. Defined by current-meter measurements since that date.

Bankfull stage.--22 ft.

Remarks.--Gage-height record prior to 1939 furnished by U.S. Weather Bureau. Peak discharges affected by storage reservoirs and power development since March 1940. Regulated by Dardanelle Dam since 1964. Base for partial-duration series, 130,000 cfs. Only annual peaks are shown prior to 1938 and subsequent to 1958.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1887	May 5, 1987	12.6	----------	1900	July 7, 1900	11.3	----------
1888	May 22, 1888	16.1	----------	1901	Apr. 19, 1901	15.5	----------
1889	Mar. 26, 1889	19.0	----------	1902	June 2, 1902	17.3	----------
1890	Apr. 27, 1890	20.00	----------	1903	May 31, 1903	22.8	----------
1891	Apr. 22, 1891	18.0	----------	1904	June 9, 1904	28.0	----------
1892	May 18, 1892	27.5	----------	1905	May 30-31,1905	21.2	----------
1893	May 2, 1893	24.0	----------	1906	May 4, 1906	19.0	----------
1894	Mar. 21, 1894	17.5	----------	1907	May 11, 1907	18.8	----------
1895	Aug. 2, 1895	17.5	----------	1908	May 29, 1908	27.2	----------
1896	Dec. 26, 1895	23.5	----------	1909	Dec. 2, 1908	24.9	----------
1897	Mar. 20, 1897	17.4	----------	1910	Jan.20, May 17	12.0	----------
1898	May 10, 1898	28.9	----------	1911	Aug. 9, 1911	18.4	----------
1899	May 10, 1899	23.1	----------	1912	May 3, 1912	24.3	----------

Peak stages and discharges of Arkansas River at Dardanelle, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Mar. 29, 1913	14.4	----------
1914	(a)	16.2	----------
1915	May 30, 1915	26.9	----------
1916	Jan. 31, 1916	29.8	----------
1917	June 11, 1917	14.4	----------
1918	May 13, 1918	20.3	----------
1919	Nov.11-12, 1918	17.9	----------
1920	Mar. 29, 1920	20.9	----------
1921	Mar. 26, 1921	20.6	----------
1922	Apr. 13, 1922	25.2	----------
1923	June 17, 1923	26.5	----------
1924	Dec. 16, 1923	22.0	----------
1925	May 1, 1925	13.0	----------
1926	Oct. 17, 1925	12.1	----------
1927	Apr. 19, 1927	33.0	----------
1928	Dec. 14, 1927	24.5	----------
1929	May 18, 1929	27.6	----------
1930	May 11, 1930	24.3	----------
1931	Feb. 10, 1931	14.2	----------
1932	Jan. 25, 1932	20.2	----------
1933	May 18, 1933	25.1	----------
1934	Apr. 8, 1934	15.5	----------
1935	June 21, 1935	29.5	----------
1936	Dec. 8, 1935	18.5	----------
1937	Jan. 18, 1937	19.4	----------
1938	Feb.19-20,1938	29.55	396,000
	Apr. 1, 1938	22.8	201,000
	May 26, 1938	22.8	205,000
	June 14, 1938	20.2	157,000
1939	Apr. 17, 1939	19.00	142,000
1940	Sept. 7, 1940	b16.65	103,000
1941	Apr. 23, 1941	27.16	295,000
	June 14, 1941	23.94	233,000
1942	Oct. 9, 1941	b22.70	203,000
	Oct. 19, 1941	b23.30	213,000
	Nov. 5, 1941	c31.92	433,000
	Apr. 13, 1942	25.06	246,000
	May 1, 1942	c28.65	316,000
	June 27, 1942	c23.55	200,000
1943	Dec. 28, 1942	c21.24	182,000
	May 13-14,1943	33.30	683,000
	May 25, 1943	33.60	682,000
	June 9, 1943	22.06	147,000
1944	Mar. 21, 1944	21.88	164,000
	Apr. 14, 1944	23.37	191,000
	May 4, 1944	26.29	245,000
	June 15-16,1944	19.60	132,000
1945	Feb. 22, 1945	21.10	170,000
	Feb. 27, 1945	21.24	172,000
	Mar. 5, 1945	23.18	201,000
	Mar. 21, 1945	28.45	307,000
	Mar. 31, 1945	27.09	265,000
	Apr. 19, 1945	33.15	579,000
	June 11, 1945	29.46	335,000
1946	Oct. 4, 1945	27.63	285,000
	Jan. 9, 1946	19.71	148,000
	Feb. 21, 1946	18.53	132,000
	May 25, 1946	21.64	175,000
1947	Nov. 10, 1946	20.00	160,000
	Dec. 13, 1946	26.56	303,000
	Apr. 18, 1947	24.02	224,000
	May 1, 1947	23.82	220,000
	May 15, 1947	18.90	146,000
	May 21, 1947	24.90	246,000
	June 3, 1947	20.23	163,000
1948	June 27, 1948	c27.07	300,000
	July 21, 1948	19.37	153,000
	Aug. 18, 1948	18.93	146,000
1949	Jan. 25, 1949	c25.70	294,000
	Feb. 17, 1949	23.51	235,000
	May 3, 1949	19.13	143,000
	May 22, 1949	b26.97	303,000
	June 15, 1949	22.00	195,000
1950	Feb. 13, 1950	17.94	137,000
	May 14, 1950	c29.20	382,000
	July 24, 1950	c23.68	215,000
	Aug. 5, 1950	24.22	221,000
	Sept. 18, 1950	c21.64	175,000
1951	Feb. 22, 1951	21.20	174,000
	May 23, 1951	19.70	148,000
	June 14, 1951	18.73	135,000
	July 7, 1951	25.06	224,000
	July 20, 1951	25.14	227,000
1952	Apr. 24, 1952	19.88	145,000

Peak stages and discharges of Arkansas River at Dardanelle, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Mar. 18, 1953	19.33	137,000	1960	Oct. 9, 1959	27.90	390,000
1954	May 4, 1954	c22.64	194,000	1961	May 12, 1961	25.07	271,000
1955	Mar. 21, 1955	17.35	109,000	1962	Nov. 23, 1961	18.29	154,000
1956	Oct. 9, 1955	16.50	113,000	1963	Oct. 6, 1962	10.72	62,600
1957	Apr. 4, 1957	22.10	204,000	1964	Apr. 6, 1964	14.44	96,700
	Apr. 28, 1957	24.77	244,000				
	May 30, 1957	33.42	471,000	1965	Apr. 11, 1965	17.40	127,000
1958	Mar. 27, 1958	18.56	139,000	1966	Feb. 10, 1966	21.92	209,000
	May 10, 1958	19.46	152,000				
	June 27, 1958	18.93	156,000	1967	July 5, 1967	14.93	88,300
	July 16, 1958	18.97	154,000				
				1968	Mar. 21, 1968	24.15	203,000
1959	July 29, 1959	19.36	157,000				

a Dec. 7, 1913, May 7, 1914.
b Occurred on following day.
c Occurred at different time than peak discharge.

2582. Pack Saddle Creek tributary near Waldron, Ark.

Loction.--Lat 34°58'18", long 94°05'42", in SE¼SE¼ sec.29, T.4 N., R.29 W., on left bank 15 ft upstream from culvert on U.S. Highway 71, 0.4 mile upstream from small tributary, 0.5 mile upstream from mouth, and 5.2 miles north of Waldron.

Drainage area.--0.92 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since June 1969.

Stage-discharge relation.--Defined by current-meter measurements below 260 cfs and by culvert measurement at 689 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	a5.79	244	1966	Apr. 23, 1966	5.14	188
1962	Nov. 22, 1961	4.34	123	1967	Apr. 13, 1967	4.10	110
1963	Oct. 20, 1962	4.05	102	1968	May 13, 1968	9.42	689
1964	Mar. 9, 1964	3.85	89	1969	July 26, 1969	8.95	622
1965	Feb. 9, 1965	5.04	180				

a Higher peak may have occurred before gage was installed.

2585. Petit Jean River near Booneville, Ark.
(Published as Petit Jean "Creek" prior to 1966)

Location.--Lat 35°06'25", long 93°55'25", in NW¼NW¼ sec.18, T.5 N., R.27 W., on right bank at downstream side of bridge on State Highway 23, 0.5 mile downstream from Fletcher Creek, 2¾ miles south of Booneville, and at mile 102.3.

Drainage area.--241 sq mi.

Gage.--Nonrecording prior to May 24, 1939; recording thereafter. Datum of gage is 423.39 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 21,000 cfs and extended by slope-area and contracted-opening measurements made by Corps of Engineers.

Bankfull stage.--19 ft.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 19, 1939	19.5	8,250
	Feb. 25, 1939	19.6	8,350
	Mar. 5, 1939	13.3	4,120
	Apr. 6, 1939	17.2	6,540
	Apr. 16, 1939	23.42	43,200
1940	Apr. 29, 1940	10.45	2,580
1941	Jan. 1, 1941	18.81	7,640
1942	Oct. 31, 1941	15.33	5,320
	Jan. 30, 1942	16.53	5,320
	Apr. 8, 1942	19.43	7,360
	May 6, 1942	14.19	4,250
	May 20, 1942	18.35	6,530
1943	Dec. 27, 1942	15.35	4,790
	May 10, 1943	22.59	32,300
	May 16, 1943	18.10	6,290
1944	Feb. 28, 1944	15.95	5,270
	Mar. 16, 1944	16.46	5,520
	Mar. 19, 1944	14.78	4,700
	May 2, 1944	17.12	5,930
	June 13, 1944	16.78	5,690
1945	Feb. 17, 1945	15.78	5,000
	Feb. 21, 1945	21.16	16,100
	Feb. 27, 1945	20.42	10,800
	Mar. 3, 1945	17.45	6,030
	Mar. 12, 1945	19.74	8,850
	Mar. 19, 1945	20.92	13,600
	Mar. 30, 1945	21.38	18,000
	Apr. 13, 1945	16.61	5,460
	May 12, 1945	16.98	5,730
	May 15, 1945	21.61	20,100
	June 11, 1945	20.55	11,800
	Sept. 12, 1945	15.52	4,850
	Sept. 27, 1945	15.31	4,750
1946	Jan. 8, 1946	18.20	6,750
	Feb. 13, 1946	18.56	7,170
	Apr. 16, 1946	16.48	5,400
	Apr. 24, 1946	19.58	8,650
	Apr. 29, 1946	14.45	4,380
	May 3, 1946	17.71	6,270
	May 23, 1946	16.03	5,100
1947	Nov. 10, 1946	13.75	4,070
	Nov. 26, 1946	14.04	4,160
	Dec. 10, 1946	21.24	16,400
	Apr. 10, 1947	16.70	5,520
1948	Dec. 31, 1947	20.92	14,500
	Feb. 5, 1948	13.95	4,160
	Feb. 25, 1948	13.98	4,160
	Mar. 1, 1948	17.17	5,880
	Apr. 11, 1948	18.43	7,100
1949	Jan. 25, 1949	22.40	29,800
	Feb. 14, 1949	19.85	9,700
	June 14, 1949	18.10	6,650
1950	Jan. 4, 1950	20.24	11,100
	Jan. 13, 1950	20.58	12,900
	Feb. 1, 1950	19.05	8,000
	Feb. 12, 1950	21.40	18,100
	May 7, 1950	20.68	13,400
	May 12, 1950	17.43	6,280
	July 22, 1950	17.62	6,440
	Sept. 16, 1950	18.51	7,250
1951	Feb. 15, 1951	19.43	8,290
	Feb. 18, 1951	17.32	5,950
1952	Oct. 31, 1951	19.35	8,700
	Mar. 10, 1952	18.68	7,520
	Apr. 12, 1952	20.49	11,500
	Apr. 22, 1952	18.90	8,340
1953	Nov. 25, 1952	19.88	10,000
	Mar. 14, 1953	19.91	10,000
	Mar. 17, 1953	20.99	15,100
	Mar. 31, 1953	13.20	4,430

Peak stages and discharges of Petit Jean River near Booneville, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Apr. 6, 1953	14.19	4,910	1961	Dec. 11, 1960	15.82	5,730
	Apr. 24, 1953	20.95	15,100		Mar. 7, 1961	12.75	4,240
	Apr. 29, 1953	19.66	9,400		Mar. 30, 1961	13.30	4,430
	May 13, 1953	19.42	8,770		May 6, 1961	21.38	18,100
					July 15, 1961	21.70	19,100
1954	Jan. 20, 1954	14.05	4,480				
	Feb. 16, 1954	13.48	4,260	1962	Nov. 22, 1961	20.32	11,100
	May 2, 1954	15.47	5,190		Dec. 9, 1961	14.52	5,060
					Feb. 23, 1962	14.21	4,910
1955	Feb. 20, 1955	16.38	5,660		Mar. 31, 1962	12.26	4,010
	Mar. 18, 1955	14.50	4,710				
	Mar. 20, 1955	20.58	12,900	1963	Nov. 7, 1962	9.04	2,510
1956	Feb. 17, 1956	16.72	6,240	1964	Mar. 9, 1964	15.86	5,780
					Apr. 5, 1964	13.34	4,470
1957	Feb. 5, 1957	14.46	4,770		May 11, 1964	13.11	4,380
	Apr. 3, 1957	20.94	13,700				
	Apr. 25, 1957	15.28	5,380	1965	Nov. 19, 1964	14.84	5,210
	Apr. 27, 1957	20.60	12,200		Jan. 9, 1965	12.76	4,240
	May 13, 1957	14.60	5,020		Feb. 9, 1965	20.06	10,700
	May 23, 1957	20.76	13,200		Feb. 24, 1965	12.66	4,190
	May 25, 1957	14.94	5,220				
	June 5, 1957	13.90	4,770	1966	Feb. 9, 1966	20.40	12,000
	Aug. 12, 1957	20.47	11,000		Apr. 24, 1966	16.00	5,840
	Aug. 15, 1957	16.32	5,900				
	Sept. 22, 1957	15.64	5,530	1967	Apr. 13, 1967	14.65	5,140
					Apr. 23, 1967	17.58	6,840
1958	Nov. 18, 1957	20.81	13,200		May 6, 1967	16.35	6,030
	Mar. 7, 1958	12.89	4,280				
	May 2, 1958	21.13	15,700	1968	Oct. 30, 1967	20.80	13,900
	May 9, 1958	19.22	8,470		Dec. 14, 1967	17.20	6,570
	June 26, 1958	19.02	8,210		Jan 29, 1968	13.15	4,400
					Mar. 12, 1968	14.32	4,970
1959	Mar. 21, 1959	10.44	3,130		Mar. 20, 1968	21.22	16,600
					Mar. 31, 1968	15.14	5,380
1960	Nov. 4, 1959	19.77	9,700		Apr. 3, 1968	20.20	11,100
	Dec. 17, 1959	13.17	4,430		May 8, 1968	12.92	4,290
	May 6, 1960	19.46	8,950		May 14, 1968	22.21	27,300
	May 20, 1960	21.14	15,700				

2595. Petit Jean River near Waveland, Ark.
(Published as "near Blue Mountain" prior to 1945, and as Petit Jean "Creek" prior to 1966)

Location.--Lat 35°06'17", long 93°37'51", in $SE\frac{1}{4}SW\frac{1}{4}$ sec.11, T.5 N., R.25 W., 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 sq mi (495 sq mi at former site).

Gage.--Recording. Prior to Oct. 1, 1943, at site $1\frac{3}{4}$ miles upstream at datum 9.54 ft higher. Datum of present gage is 339.70 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements at former site below 13,000 cfs and extended by velocity-area study and slope-area measurement at 62,600 cfs. Defined by current-meter measurements at present site.

Bankfull stage.--22 ft.

Remarks.--Flow regulated by Blue Mountain Reservoir since May 7, 1946 (capacity, 258,000 acre-ft). Base for partial-duration series, 5,000 cfs. Only annual peaks are shown subsequent to 1946.

Peak stages and discharges of Petit Jean River near Waveland, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 20, 1939	21.89	10,200
	Feb. 25, 1939	22.06	10,500
	Mar. 5, 1939	20.78	8,670
	Apr. 6, 1939	20.35	8,230
	Apr. 16, 1939	29.95	62,600
1940	Apr. 29, 1940	13.65	3,700
1941	Jan. 2, 1941	20.75	7,460
1942	Oct. 31, 1941	21.43	7,100
	Jan. 31, 1942	20.24	7,200
	Apr. 9, 1942	21.64	9,950
	May 20, 1942	20.07	7,600
1943	Dec. 28, 1942	18.3	6,560
	Apr. 12, 1943	17.2	5,890
	May 11, 1943	28.70	38,000
	May 17, 1943	19.0	7,050
1944	Feb. 9, 1944	23.48	5,570
	Feb. 17, 1944	27.12	9,260
	Feb. 28, 1944	27.63	10,200
	Mar. 16, 1944	27.22	9,440
	Mar. 20, 1944	27.20	9,440
	May 2, 1944	28.10	11,400
	June 14, 1944	23.88	5,810
1945	Feb. 18, 1945	25.07	6,700
	Feb. 21, 1945	30.70	21,800
	Feb. 28, 1945	30.07	18,100
	Mar. 3, 1945	28.33	11,800
	Mar. 7, 1945	23.60	5,620
	Mar. 13, 1945	28.06	11,400
	Mar. 20, 1945	29.77	16,600
	Mar. 25, 1945	25.31	6,880
	Mar. 30, 1945	32.23	37,100
	May 13, 1945	25.30	6,880
	May 16, 1945	31.18	25,800
	June 12, 1945	29.70	16,200
	Sept. 13, 1945	22.56	5,040
1946	Jan. 9, 1946	28.15	11,600
	Feb. 14, 1946	29.07	14,000
	Mar. 6, 1946	23.80	5,740
	Mar. 28, 1946	25.81	7,390
	Apr. 16, 1946	28.27	11,800
1946	Apr. 25, 1946	27.37	9,790
	May 3, 1946	27.07	9,230
1947	Dec. 13, 1946	27.63	9,050
1948	Jan. 2, 1948	27.25	8,580
1949	Jan. 24, 1949	24.27	5,900
1950	Feb. 12, 1950	21.67	4,860
1951	Feb. 25, 1951	15.63	2,500
1952	Apr. 22, 1952	19.42	3,800
1953	Mar. 17, 1953	24.58	6,310
1954	May 2, 1954	17.44	3,150
1955	Feb. 24, 1955	16.72	2,820
1956	Feb. 23, 1956	15.80	2,550
1957	Aug. 15, 1957	22.00	4,600
1958	Mar. 23, 1958	15.65	2,650
1959	Mar. 26, 1959	20.60	4,020
1960	May 20, 1960	22.05	4,600
1961	Dec. 16, 1960	14.72	2,400
1962	Dec. 13, 1961	14.51	2,350
1963	Mar. 7, 1963	11.25	1,470
1964	Mar. 9, 1964	12.05	1,670
1965	Feb. 20, 1965	15.76	2,700
1966	Apr. 23, 1966	19.10	3,740
1967	Apr. 16, 1967	15.62	2,650
1968	May 14, 1968	26.67	7,660

2600. Dutch Creek at Waltreak, Ark.

Location.--Lat 34°59'15", long 93°36'45", in SE¼NW¼ sec.24, T.4 N., R.25 W., on left bank a quarter of a mile north of Waltreak and at mile 21.0.

Drainage area.--81.4 sq mi.

Gage.--Recording. Datum of gage is 371.48 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--17 ft.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges of Dutch Creek at Waltreak, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	----------	a19.5	14,600	1956	Feb. 17, 1956	11.39	3,530
1946	Jan. 9, 1946	10.80	3,140	1957	Apr. 3, 1957	15.04	7,270
	Feb. 13, 1946	17.42	11,400		Apr. 27, 1957	14.73	6,860
	Mar. 6, 1946	10.73	3,060		May 23, 1957	11.34	3,560
	May 25, 1956	14.30	6,360				
				1958	May 2, 1958	12.80	4,890
1947	Dec. 12, 1946	16.66	10,100				
				1959	Nov. 17, 1958	14.28	6,360
1948	Jan. 1, 1948	18.12	13,000		Mar. 26, 1959	14.88	7,130
	Feb. 25, 1948	12.28	4,400				
	Apr. 10, 1948	11.41	3,460	1960	Dec. 17, 1959	11.58	3,810
	Apr. 13, 1948	12.07	4,260		May 6, 1960	11.47	3,720
					May 20, 1960	19.36	14,300
1949	Jan. 24, 1949	18.45	13,700				
	Feb. 13, 1949	12.24	4,350	1961	Dec. 11, 1960	14.24	6,220
	Mar. 26, 1940	12.26	4,440				
				1962	Nov. 22, 1961	10.94	3,220
1950	Jan. 2, 1950	12.39	4,550				
	Jan. 13, 1950	16.50	9,950	1963	Mar. 19, 1963	11.36	3,640
	Feb. 1, 1950	14.00	6,310				
	Feb. 12, 1950	15.31	8,090	1964	Mar. 9, 1964	12.72	4,800
	May 7, 1950	15.94	8,980		May 2, 1964	11.21	3,470
	July 23, 1950	16.56	10,100		May 10, 1964	13.04	5,070
1951	Feb. 15, 1951	10.76	3,140	1965	Jan. 9, 1965	12.06	4,260
					Feb. 9, 1965	12.42	4,530
1952	Oct. 31, 1951	11.80	3,820		Mar. 29, 1965	11.59	3,810
	Mar. 10, 1952	11.90	3,900				
	Apr. 12, 1952	13.68	5,450	1966	Feb. 9, 1966	13.83	5,820
	Apr. 22, 1952	17.40	11,100		Apr. 24, 1966	14.90	6,920
					Apr. 26, 1966	11.88	4,080
1953	Nov. 25, 1952	16.56	9,160				
	Mar. 18, 1953	13.67	5,450	1967	May 6, 1967	11.52	3,740
	Apr. 29, 1953	11.57	3,670		July 29, 1967	11.97	4,140
	May 12, 1953	13.77	5,550				
				1968	Jan. 29, 1968	11.66	3,860
1954	May 2, 1954	16.46	9,700		Mar. 20, 1968	14.80	6,820
					May 9, 1968	11.49	3,720
1955	Mar. 21, 1955	12.81	4,620		May 14, 1968	17.58	10,300

a Annual peak only.

2605. Petit Jean River at Danville, Ark.
(Published as Petit Jean "Creek" prior to 1966)

Location.--Lat 35°04', long 93°24', in SE¼ sec.25, T.5 N., R.23 W., on left bank at downstream side of bridge on State Highway 10 at Danville, 1,800 ft upstream from Chicago, Rock Island and Pacific Railroad Co. bridge, 0.5 mile upstream from Spring Creek, and 0.6 mile downstream from Dutch Creek.

Drainage area.--764 sq mi.

Gage.--Nonrecording prior to July 13, 1939; recording gage and concrete control thereafter. Prior to Aug. 25, 1934, at site 1,800 ft downstream at datum 0.25 ft higher. Datum of present gage is 303.33 ft above mean sea level, datum of 1929. Since June 18, 1954, auxiliary water-stage recorder 2.2 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 cfs.

Bankfull stage.--20 ft.

Remarks.--Records prior to July 1937 computed by Corps of Engineers using gage heights furnished by U.S. Weather Bureau, reviewed by U.S. Geological Survey. Flow regulated by Blue Mountain Reservoir since May 7, 1946. Base for partial-duration series, 7,000 cfs. Only annual peaks are shown prior to 1938 and subsequent to 1946.

Peak stages and discharges of Petit Jean River at Danville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1917	June 3, 1917	21.7	6,290
1918	May 14, 1918	20.9	5,010
1919	Dec. 15, 1918	24.3	14,600
1920	Jan.24, Mar.26	24.8	17,700
1921	Apr. 28, 1921	24.7	17,000
1922	Nov. 20, 1921	24.0	15,800
1923	May 16, 1923	25.1	19,800
1924	Apr. 30, 1924	25.4	22,200
1925	Feb. 24, 1925	18.3	3,020
1926	Oct. 18, 1925	23.5	10,900
1927	Apr. 15, 1927	28.4	50,900
1928	Apr. 7, 1928	25.5	23,000
1929	Jan. 26, 1929	23.9	12,600
1930	May 11, 1930	26.3	30,200
1931	Feb. 24, 1931	21.4	5,770
1932	Feb. 18, 1932	24.4	15,200
1933	May 17, 1933	23.6	11,300
1934	Mar. 27, 1934	22.9	8,970
1935	June 18, 1935	30.2	58,300
1936	Dec. 9, 1935	23.3	9,560
1937	Jan. 23, 1937	24.3	13,000
1938	Nov. 12, 1937	23.0	8,650
	Jan. 25, 1938	27.12	28,000
	Feb. 18, 1938	29.30	45,400
	Mar. 31, 1938	23.04	8,650
	Apr. 17, 1938	22.9	8,350
1939	Feb. 21, 1939	23.40	10,000
	Feb. 27, 1939	23.81	11,400
	Apr. 7, 1939	22.64	7,450
	Apr. 17, 1939	31.82	70,800
1940	Apr. 30, 1940	a19.30	3,380
1941	Jan. 4, 1941	22.18	6,350
1942	Nov. 1, 1941	24.18	13,000
	Apr. 10, 1942	23.53	10,400
1943	May 12, 1943	28.12	35,500
1944	Feb. 18, 1944	23.26	9,700
	Mar. 1, 1944	23.39	10,000
	Mar. 21, 1944	23.22	9,350
	May 4, 1944	24.02	12,200
1945	Feb. 22, 1945	27.02	23,800
	Feb. 28, 1945	26.47	20,500
	Mar. 14, 1945	23.44	9,290
	Mar. 20, 1945	25.93	20,000
	Mar. 31, 1945	29.50	45,700
	May 17, 1945	27.47	29,700
	June 13, 1945	26.00	20,500
1946	Jan. 10, 1946	23.96	10,000
	Feb. 14, 1946	25.05	13,400
	Apr. 18, 1946	23.60	8,940
	May 26, 1946	23.32	8,190
1947	Dec. 13, 1946	24.99	13,400
1948	Jan. 1, 1948	25.05	13,400
1949	Jan. 25, 1949	27.85	27,000
1950	Jan. 14, 1950	25.43	15,000
1951	Feb. 16, 1951	22.07	5,730
1952	Apr. 23, 1952	25.12	14,200
1953	Mar. 18, 1953	b24.14	11,100
1954	May 3, 1954	24.35	11,200
1955	Mar. 22, 1955	21.66	5,190
1956	Feb. 19, 1956	22.10	5,730
1957	Apr. 4, 1957	25.53	16,300
1958	May 3, 1958	23.77	11,100
1959	Mar. 27, 1959	a21.54	5,310
1960	May 21, 1960	25.16	15,800
1961	Dec. 12, 1960	21.72	5,700
1962	Feb. 26, 1962	a20.21	3,820
1963	Mar. 20, 1963	16.84	2,850
1964	Mar. 10, 1964	21.77	5,250
1965	Jan. 10, 1965	20.48	3,830
1966	Apr. 25, 1966	21.47	7,830
1967	May 7, 1967	19.64	4,860
1968	May 14, 1968	25.18	20,000

a Occurred at different time than peak discharge.
b Occurred Nov. 26, 1952.

2606.3. Jake Creek near Chickalah, Ark.

Location.--Lat 35°07'45", long 93°20'21", in NW¼SE¼ sec.33, T.6 N., R.22 W., on left bank 30 ft upstream from culvert on State Highway 27, 0.6 mile northeast of Ranger, 1.6 miles upstream from small tributary, 2.2 miles upstream from mouth, and 4.2 miles southwest of Chickalah.

Drainage area.--1.60 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 75 cfs and by culvert measurements at 495 cfs and 717 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	7.56	495	1966	Feb. 9, 1966	6.88	375
1962	Feb. 23, 1962	4.84	98	1967	May 6, 1967	7.49	480
1963	Feb. 28, 1963	5.21	136	1968	Mar. 20, 1968	8.16	675
1964	Mar. 9, 1964	6.57	324	1969	June 24, 1969	8.78	815
1965	Mar. 29, 1965	7.31	450				

2608. Arkansas River near Morrilton, Ark.

Location.--Lat 35°07'36", long 92°43'54", in SW¼ sec.29, T.6 N., R.16 W., at bridge on State Highway 9, 1¾ miles southeast of Morrilton, 2 miles downstream from Point Remove Creek, and at mile 221.0.

Drainage area.--155,480 sq mi, of which about 133,239 sq mi contributes directly to surface runoff.

Gage.--Nonrecording. Datum of gage is 255.55 ft above mean sea level, datum of 1929. Prior to Jan. 1, 1948, at datum 10 ft higher. All stages for this report adjusted to present datum.

Bankfull stage.--30 ft.

Remarks.--Records furnished by U.S. Weather Bureau. Crest stages affected by storage reservoirs and power development since March 1940. Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 19, 1927	42.0	----------	1941	Apr. 24, 1941	33.4	----------
1928	June 25, 1928	32.4	----------	1942	Nov. 6, 1941	39.1	----------
1929	May 19, 1929	36.6	----------	1943	May 15, 1943	40.8	----------
1930	May 12, 1930	32.0	----------	1944	May 5, 1944	31.8	----------
				1945	Apr. 21, 1945	40.4	----------
1931	Feb. 10, 1931	21.9	----------				
1932	Jan.25-26,1932	29.8	----------	1946	Oct. 4, 1945	31.6	----------
1933	May 19, 1933	33.9	----------	1947	Dec. 14, 1946	31.1	----------
1934	Apr. 8, 1934	23.9	----------	1948	June 28-29, 1948	31.2	----------
1935	June 22, 1935	39.2	----------	1949	May 24, 1949	31.0	----------
				1950	May 15, 1950	33.7	----------
1936	Dec. 8, 1935	27.2	----------				
1937	Jan. 18, 1937	27.8	----------	1951	July 21, 1951	29.6	----------
1938	Feb. 21, 1938	38.0	----------	1952	Apr. 25, 1952	23.7	----------
1939	Apr. 17, 1939	26.4	----------	1953	Mar. 19, 1953	22.2	----------
1940	Sept. 9, 1940	23.0	----------	1954	Aug. 5, 1954	25.7	----------

Peak stages and discharges of Arkansas River near Morrilton, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 22, 1955	20.6	----------	1962	Nov. 24, 1961	23.8	----------
				1963	Oct. 6-7, 1962	17.7	----------
1956	Oct. 9, 1955	19.7	----------	1964	May 13, 1964	21.00	----------
1957	May 30, 1957	39.55	----------	1965	Apr. 11, 1965	25.18	----------
1958	May 10, 1958	24.4	----------				
1959	July 30, 1959	24.7	----------	1966	Feb. 11, 1966	25.94	----------
1960	Oct. 10, 1959	32.9	----------	1967	July 6, 1967	21.74	----------
				1968	Mar. 22, 1968	29.9	----------
1961	May 12, 1961	31.3	----------				

2610. Cadron Creek near Guy, Ark.
(Published as "North Fork Cadron Creek" prior to 1966)

Location.--Lat 35°17'56", long 92°24'10", in NW¼SE¼ sec.29, T.8 N., R.13 W., on downstream side of bridge on U.S. Highway 65, 4.3 miles southwest of Guy, 10.5 miles upstream from Cove Creek, and at mile 48.3.

Drainage area.--169 sq mi.

Gage.--Recording. Datum of gage is 371.68 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	13.58	6,010	1961	Apr. 1, 1961	14.54	6,980
					May 6, 1961	21.82	15,400
1956	Feb. 2, 1956	15.40	5,130		May 8, 1961	10.89	4,130
	Feb. 18, 1956	16.05	8,070				
				1962	Feb. 27, 1962	13.27	5,990
1957	Apr. 4, 1957	19.50	11,800				
	Apr. 27, 1957	14.69	7,140	1963	Mar. 11, 1963	10.11	3,570
	May 24, 1957	15.81	8,120				
	Aug. 14, 1957	24.95	18,600	1964	Mar. 10, 1964	18.78	10,700
	Aug. 17, 1957	15.49	7,850		Sept. 27, 1964	11.66	4,720
1958	Nov. 8, 1957	12.61	5,430	1965	Jan. 9, 1965	13.53	6,150
	Nov. 14, 1957	16.63	8,840		Feb. 12, 1965	11.89	4,880
	Nov. 18, 1957	17.86	10,100		Sept. 22, 1965	16.72	9,120
	Mar. 24, 1958	11.90	4,880				
	May 3, 1958	18.19	10,400	1966	Jan. 2, 1966	17.37	9,890
	May 9, 1958	12.07	5,030		Apr. 24, 1966	19.07	11,900
					Apr. 26, 1966	13.70	6,310
1959	Feb. 14, 1959	12.58	5,430				
	Mar. 21, 1959	12.22	5,110	1967	Dec. 28, 1966	9.79	3,360
1960	Dec. 11, 1959	11.49	4,580	1968	Mar. 21, 1968	13.24	5,460
	May 6, 1960	11.02	4,200		May 10, 1968	(a)	(a)
	June 27, 1960	14.14	6,640		May 14, 1968	23.68	16,900
	July 4, 1960	13.66	6,310				

a Not determined. Peak of May 14 was maximum for year.

2610.5. Pine Mountain Creek tributary near Damascus, Ark.

Location.--Lat 35°23'19", long 92°23'17", in NW¼SW¼ sec.28, T.9 N., R.13 W., on right wingwall 27 ft upstream from culvert on State Highway 124, just east of junction with U.S. Highway 65, 0.5 mile upstream from mouth, and 2.0 miles northeast of Damascus.

Drainage area.--0.29 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since July 1969.

Stage-discharge relation.--Defined by current-meter measurements below 41 cfs and by culvert measurements at 176 cfs and 270 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	10.22	270	1966	Apr. 23, 1966	7.54	82
1962	Feb. 26, 1962	6.93	39	1967	July 6, 1967	6.64	24
1963	Mar. 11, 1963	6.87	37	1968	Sept. 23, 1968	7.65	85
1964	Mar. 9, 1964	7.39	70	1969	Jan. 30, 1969	7.96	103
1965	Sept. 21, 1965	7.53	82				

2613. Tan-a-hill Creek near Boles, Ark.

Location.--Lat 34°43'49", long 94°04'43", in SW¼NW¼ sec.22, T.1 N., R.29 W., on left bank 35 ft upstream from culvert on U.S. Highway 71, just upstream from small tributary, 0.3 mile southwest of "Y" City, 0.5 mile upstream from mouth, and 3.8 miles southwest of Boles.

Drainage area.--2.33 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 130 cfs and by culvert measurements at 296 cfs, 590 cfs, 929 cfs, 1,050 cfs, and 1,660 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	May 20, 1960	12.3	1,660	1965	May 10, 1965	5.13	165
1961	Dec. 10, 1960	6.03	330	1966	Feb. 9, 1966	4.91	130
1962	Nov. 22, 1961	4.3	65	1967	May 6, 1967	5.73	250
1963	May 26, 1963	4.96	140	1968	May 13, 1968	7.26	590
1964	Mar. 9, 1964	5.85	296	1969	July 26, 1969	6.41	408

2615. Fourche La Fave River near Gravelly, Ark.

Location.--Lat 34°52'21", long 93°39'24", in NW¼NW¼ sec.34, T.3 N., R.25 W., on left bank at downstream side of bridge on State Highway 28, 1 mile downstream from Garner Creek, 1¾ miles east of Gravelly, 6.4 miles upstream from Gaffords Creek, and at mile 103.7.

Drainage area.--410 sq mi.

Gage.--Nonrecording prior to May 11, 1939; recording thereafter. Datum of gage is 410.50 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 47,000 cfs.

Bankfull stage.--24 ft.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Apr. 16, 1939	27.00	38,000
1940	Apr. 29, 1940	10.32	4,630
1941	May 9, 1941	9.35	3,970
1942	Oct. 31, 1941	25.87	29,100
	Apr. 9, 1942	17.48	14,100
	Apr. 28, 1942	18.58	15,800
1943	May 20, 1943	15.61	11,300
1944	Feb. 17, 1944	16.40	12,000
	Feb. 28, 1944	17.56	13,600
	Mar. 16, 1944	15.92	11,300
	May 2, 1944	20.03	17,000
1945	Dec. 7, 1944	15.10	10,200
	Feb. 21, 1945	26.90	36,800
	Feb. 27, 1945	23.88	23,100
	Mar. 3, 1945	18.69	14,800
	Mar. 12, 1945	16.15	11,500
	Mar. 19, 1945	21.89	19,500
	Mar. 29, 1945	27.01	38,000
	May 16, 1945	25.31	26,800
	June 11, 1945	19.90	16,400
1946	Jan. 9, 1946	20.86	18,000
	Feb. 14, 1946	24.77	25,200
	Apr. 30, 1946	17.01	12,500
	May 24, 1946	23.70	22,700
	May 31, 1946	21.92	19,500
1947	Nov. 26, 1946	15.64	10,800
	Dec. 12, 1946	25.75	28,800
1948	Jan. 1, 1948	27.37	39,800
	Feb. 25, 1948	18.00	13,800
1949	Jan. 24, 1949	28.86	54,000
	Feb. 14, 1949	15.47	10,700
	Mar. 26, 1949	16.90	12,400
	May 1, 1949	23.89	23,100
1950	Jan. 3, 1950	17.67	13,400
	Jan. 13, 1950	26.70	35,200
	Feb. 1, 1950	22.10	19,900
	Feb. 13, 1950	27.20	38,400
	May 7, 1950	21.80	19,400
	Sept. 16, 1950	16.51	11,900
1951	Feb. 15, 1951	15.77	11,000
1952	Nov. 1, 1951	19.85	17,100
	Mar. 11, 1952	16.43	12,300
	Apr. 12, 1952	23.27	23,700
	Apr. 22, 1952	26.99	37,700
1953	Nov. 25, 1952	22.73	22,400
	Mar. 18, 1953	17.19	13,400
	Apr. 29, 1953	20.83	18,800
	May 13, 1953	22.77	22,600
1954	May 2, 1954	26.20	33,400
1955	Mar. 21, 1955	17.60	13,900
1956	Feb. 18, 1956	16.59	12,600
1957	Apr. 4, 1957	22.39	21,800
	Apr. 25, 1957	16.68	12,700
	Apr. 27, 1957	21.58	20,200
	May 26, 1957	16.06	11,900
	June 13, 1957	18.44	15,000
1958	Mar. 7, 1958	14.90	10,400
	May 3, 1958	23.21	24,300
1959	Nov. 17, 1958	19.39	16,500
	Apr. 19, 1959	15.5	11,200
1960	Dec. 11, 1959	16.03	11,800
	Dec. 17, 1959	14.87	10,400
	May 6, 1960	16.53	12,500
	May 20, 1960	30.30	69,400
1961	Dec. 11, 1960	19.29	16,400
	May 6, 1961	18.37	15,000

Peak stages and discharges of Fourche La Fave River near Gravelly, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Nov. 23, 1961	17.10	13,200	1966	Feb. 10, 1966	23.20	23,400
					Apr. 24, 1966	20.56	18,500
1963	Mar. 19, 1963	16.98	13,100		Apr. 26, 1966	17.43	13,600
1964	Mar. 9, 1964	20.46	18,300	1967	May 6, 1967	18.86	15,700
1965	Nov. 19, 1964	15.96	11,800	1968	Oct. 31, 1967	17.30	13,500
	Feb. 10, 1965	19.85	17,100		Mar. 21, 1968	26.36	34,200
	Mar. 1, 1965	14.70	10,200		Apr. 4, 1968	19.00	15,900
	Sept. 22, 1965	16.03	11,800		May 14, 1968	26.95	37,400

2618. Brogan Creek near Rover, Ark.
(Published as "Fourche La Fave River tributary" prior to 1968)

Location.--Lat 34°54'27", long 92°24'05", in NW¼SE¼ sec.13, T.3 N., R.23 W., on right bank 35 ft upstream from culvert on State Highway 27, just downstream from small tributary, 0.3 mile upstream from small tributary, and 2.7 miles south of Rover.

Drainage area.--1.04 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 18 cfs and by culvert measurements at 239 cfs and 1,010 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	May 27, 1963	4.5	100	1966	Apr. 23, 1966	9.59	1,010
1964	Mar. 9, 1964	5.41	239	1967	May 19, 1967	5.67	270
1965	May 27, 1965	5.40	239	1968	May 13, 1968	6.39	380
				1969	Jan. 30, 1969	5.08	180

2625. Fourche La Fave River near Nimrod, Ark.

Location.--Lat 34°57'02", long 93°09'16, in NW¼SW¼ sec.32, T.4 N., R.20 W., on left bank 2,000 ft downstream from Nimrod Dam, 4.5 miles southwest of Nimrod, 9.8 miles upstream from South Fourche La Fave River, and at mile 62.2.

Drainage area.--684 sq mi.

Gage.--Nonrecording prior to Dec. 20, 1938, at site 1.1 miles downstream at datum 3.92 ft lower; recording thereafter. Dec. 21, 1938, to Aug. 26, 1946, at site 2.0 miles downstream at datum 9.72 ft lower. Datum of present gage is 305.25 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 34,000 cfs.

Historical data.--Flood in April 1927 reached a stage of 28.15 ft at site and datum of nonrecording gage, from information by Corps of Engineers. Flood in June 1935 reached a stage of 28.8 ft at present site and datum, from information by Corps of Engineers.

Remarks.--Records prior to 1938 furnished by Corps of Engineers and reviewed by Geological Survey. Flow completely regulated by Nimrod Reservoir since May 1942 (capacity, 336,000 acre-ft). Base for partial-duration series, 10,000 cfs. Only annual peaks are shown prior to 1937 and subsequent to 1941.

Peak stages and discharges of Fourche La Fave River near Nimrod, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1927	April 1927	28.15	32,800
1935	June 1935	30.9	39,000
1937	Dec. 7, 1936	14.7	10,000
	Jan. 10, 1937	15.2	10,600
	Jan. 23, 1937	22.8	21,800
	May 3, 1937	14.8	10,100
1938	Nov. 11, 1937	18.5	14,800
	Jan. 25, 1938	28.2	32,800
	Feb. 19, 1938	29.7	36,100
	Mar. 30, 1938	17.6	13,500
	Apr. 17, 1938	16.6	12,300
1939	Feb. 21, 1939	17.33	10,800
	Feb. 26, 1939	18.32	11,800
	Apr. 7, 1939	20.94	14,900
	Apr. 18, 1939	30.45	34,600
1940	June 11, 1940	10.80	4,910
1941	Feb. 4, 1941	9.35	3,680
1942	Apr. 29, 1942	18.21	10,700
1943	Dec. 30, 1942	15.86	9,900
1944	Apr. 25, 1944	13.21	7,180
1945	Apr. 1, 1945	26.19	20,000
1946	Feb. 14, 1946	15.93	9,380
1947	Dec. 20, 1946	10.36	7,210
1948	At times	9.74	6,170
1949	Feb. 6, 1949	10.38	7,480
1950	Feb. 21, 1950	10.31	7,030
1951	Mar. 5, 1951	9.79	5,830
1952	May 5,6, 1952	10.20	6,850
1953	May 25, 1953	10.09	6,680
1954	May 11, 1954	9.68	6,000
1955	Mar. 27, 1955	9.54	5,6[illegible]
1956	Feb. 13, 1956	9.68	5,830
1957	July 18,19,1957	9.72	5,830
1958	May 26,29,1958	9.70	5,930
1959	Nov. 20, 1958	9.54	5,540
1960	Dec. 14, 1959	9.53	5,540
1961	Mar. 16, 1961	9.42	5,570
1962	Mar. 7, 1962	9.18	5,140
1963	Mar.21-22,1963	8.32	4,260
1964	Mar. 17, 1964	9.11	5,140
1965	Feb. 16, 1965	8.92	4,920
1966	May 10, 1966	9.60	5,730
1967	May 12, 1967	8.96	4,990
1968	Dec. 27, 1967	9.43	5,500

2630. South Fourche La Fave River near Hollis, Ark.

Location.--Lat 34°54'41", long 93°03'21", in SE¼NE¼ sec.18, T.3 N., R.19 W., on left bank 0.8 mile upstream from Big Cove Creek, 4 miles northeast of Hollis, and at mile 5.6.

Drainage area.--210 sq mi.

Gage.--Recording. Datum of gage is 366.10 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 35,000 cfs and extended on basis of slope-area measurements at 47,000 cfs and 54,000 cfs.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 15,000 cfs prior to 1961, 9,000 cfs thereafter.

Peak stages and discharges of South Fourche La Fave River near Hollis, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Apr. 8, 1942	12.75	16,700	1957	Apr. 3, 1957	14.56	24,000
	Apr. 27, 1942	15.80	29,700		May 24, 1957	12.90	17,300
1943	Dec. 27, 1942	13.29	18,500		Aug. 13, 1957	13.62	19,800
1944	Apr. 23, 1944	18.51	47,000	1958	Apr. 29, 1958	12.48	16,100
					May 2, 1958	14.56	24,000
1945	Feb. 21, 1945	15.29	27,200	1959	Feb. 14, 1959	11.01	11,800
	Mar. 30, 1945	19.47	54,400	1960	May 20, 1960	15.11	26,300
1946	Mar. 28, 1946	14.16	22,200	1961	Dec. 11, 1960	10.78	11,200
1947	Dec. 12, 1946	13.96	21,300		Mar. 27, 1961	10.74	11,000
					Mar. 31, 1961	10.06	9,360
1948	Apr. 13, 1948	12.21	14,600	1962	Feb. 26, 1962	10.42	10,000
1949	Dec. 15, 1948	13.32	18,500	1963	July 16, 1963	15.63	28,700
	Jan. 24, 1949	16.04	30,700				
1950	Jan. 2, 1950	13.24	18,200	1964	Mar. 9, 1964	17.17	37,800
	Jan. 10, 1950	12.60	16,700		Apr. 5, 1964	11.23	12,400
	Feb. 1, 1950	12.28	15,600				
	Feb. 12, 1950	12.68	17,000	1965	Feb. 9, 1965	10.07	9,580
	Sept. 16, 1950	12.65	17,000		Mar. 1, 1965	10.79	11,500
					Sept. 22, 1965	13.19	19,000
1951	Feb. 15, 1951	11.38	12,300	1966	Apr. 24, 1966	17.23	37,800
1952	Apr. 22, 1952	13.22	18,300		Apr. 26, 1966	13.30	19,900
1953	Nov. 25, 1952	13.96	21,300	1967	May 6, 1967	9.97	9,300
	Dec. 4, 1952	15.51	28,200		May 31, 1967	11.66	14,600
	May 12, 1953	13.04	17,600		July 12, 1967	11.49	14,000
1954	May 2, 1954	16.30	32,400	1968	Mar. 20, 1968	12.16	16,200
1955	Mar. 20, 1955	13.38	19,100		Apr. 22, 1968	10.17	9,890
					May 11, 1968	12.14	16,100
1956	Jan. 29, 1956	12.75	17,000		May 14, 1968	13.79	21,400

2631. Fourche La Fave River tributary near Perryville, Ark.

Location.--Lat 35°01'14", long 92°46'06", in NW¼SW¼ sec.1, T.4 N., R.17 W., on right bank wingwall 25 ft upstream from culvert on State Highway 60, 1.6 miles upstream from mouth, and 2.2 miles northeast of Perryville.

Drainage area.--1.47 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 180 cfs and by culvert measurements at 461 cfs and 662 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	1962	(a)	----------	1966	Apr. 23, 1966	9.51	662
1963	1963	(a)	----------	1967	Sept. 7, 1967	6.55	100
1964	Mar. 9, 1964	8.42	461	1968	May 13, 1968	7.86	320
1965	Feb. 11, 1965	6.79	128	1969	Jan. 30, 1969	7.90	330

a Peak stage did not reach bottom of gage.

2634. Little Maumelle River at Ferndale, Ark.

Location.--Lat 34°46'48", long 92°33'15", in NW¼SE¼ sec.25, T.2 N., R.15 W., on downstream left bank 25 ft downstream from bridge on county road, 0.2 mile northeast of Ferndale, and 0.4 mile downstream from Ferndale Creek.

Drainage area.--15.0 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and by contracted-opening measurement at 9,430 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Mar. 11, 1963	7.88	630	1966	Apr. 23, 1966	12.19	4,300
1964	Mar. 9, 1964	11.43	3,600	1967	May 1, 1967	9.49	1,350
1965	Jan. 9, 1965	11.0	2,900	1968	May 13, 1968	10.88	2,500
				1969	Jan. 30, 1969	14.55	9,430

2635. Arkansas River at Little Rock, Ark.

Location.--Lat 34°44'58", long 92°16'10", in sec.3, T.1 N., R.12 W., on right bank 130 ft downstream from Main Street Bridge in Little Rock and at mile 165.5.

Drainage area.--158,090 sq mi, of which about 135,849 sq mi contributes directly to surface runoff.

Gage.--Nonrecording prior to Oct. 1, 1934; recording thereafter. Datum of gage is 223,61 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements since 1928 and by float or current-meter measurements made intermittently since 1885.

Bankfull stage.--23 ft.

Historical data.--Maximum stage known, 34.6 ft in June 1833. Flood in May 1844 reached a stage of 32.6 ft, authority of U.S. Weather Bureau.

Remarks.--Peak discharges affected by storage reservoirs and power development since March 1940. Gage-height record prior to 1928 and for 1932-33, furnished by U.S. Weather Bureau. Peak discharge for 1932-33 water years, from reports of Mississippi River Commission. Base for partial-duration series, 140,000 cfs. Only annual peaks are shown prior to 1928 and subsequent to 1958.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1833	June 1833	34.6	----------	1876	July 7, 1876	29.3	----------
1844	May 1844	32.6	----------	1877	June 13, 1877	30.5	----------
1873	Apr. 12, 1873	25.6	----------	1878	May 28, 1878	27.3	----------
1874	Apr. 24, 1874	26.0	----------	1879	Feb. 3, 1879	19.4	----------
1875	Aug. 5, 1875	24.8	----------	1880	Mar. 14, 1880	16.1	----------

Peak stages and discharges of Arkansas River at Little Rock, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1881	Feb. 20, 1881	18.6	----------	1911	Aug. 10, 1911	18.5	----------
1882	Feb. 25, 1882	25.1	----------	1912	May 4, 1912	24.0	----------
1883	Feb. 19, 1883	24.4	----------	1913	Apr. 13, 1913	17.4	----------
1884	Feb. 16, 1884	27.0	----------	1914	May 8, 1914	17.8	----------
1885	Apr. 27, 1885	26.6	----------	1915	June 1, 1915	25.4	----------
1886	Feb. 15, 1886	16.6	----------	1916	Feb. 2, 1916	27.3	----------
1887	May 6, 1887	16.5	----------	1917	June 12, 1917	15.0	----------
1888	May 23, 1888	18.4	----------	1918	May 14, 1918	18.9	----------
1889	Mar. 28, 1889	21.5	----------	1919	Nov. 13, 1918	16.9	----------
1890	Apr. 29, 1890	24.3	----------	1920	Mar. 30, 1920	20.6	----------
1891	Apr. 23, 1891	20.9	----------	1921	Apr. 30, 1921	20.8	----------
1892	May 20, 1892	27.9	----------	1922	Apr. 14, 1922	23.1	----------
1893	May 3, 1893	25.2	----------	1923	June 18, 1923	25.3	300,000
1894	May 22, 1894	22.6	----------	1924	May 3, 1924	21.0	----------
1895	Aug. 3, 1895	19.1	----------	1925	May 2, 1925	12.0	----------
1896	Dec. 29, 1895	23.5	----------	1926	Sept. 11, 1926	14.2	----------
1897	Mar. 21, 1897	21.4	----------	1927	Apr. 20, 1927	33.0	----------
1898	May 11, 1898	27.5	----------	1928	Oct. 7, 1927	20.9	220,000
					Dec. 15, 1927	20.0	200,000
1899	May 11, 1899	24.5	----------		Apr. 10, 1928	18.7	175,000
					Apr. 26, 1928	20.5	211,000
1900	Feb. 11, 1900	12.5	----------		June 16, 1928	19.6	192,000
					June 26-27, 1928	20.6	213,000
1901	Apr. 20, 1901	17.9	----------				
				1929	Apr. 13, 1929	17.9	160,000
1902	May 28, 1902	18.1	----------		Apr. 19, 1929	18.1	164,000
					Apr. 26, 1929	19.9	194,000
1903	June 3, 1903	24.8	----------		May 19, 1929	23.3	275,000
					June 8, 1929	18.1	163,000
1904	June 11, 1904	27.8	----------				
				1930	Feb. 8, 1930	17.4	152,000
1905	May 31, 1905	23.0	----------		May 12, 1930	21.3	221,000
1906	May 5, 1906	20.5	----------	1931	Feb. 11, 1931	13.0	97,000
1907	May 11, 1907	21.5	----------	1932	Jan. 20, 1932	18.5	206,000
					Jan. 26, 1932	19.5	233,000
1908	May 30, 1908	26.5	----------		Feb. 19, 1932	18.0	182,000
1909	May 29, 1909	23.5	----------	1933	Dec. 28, 1932	17.2	175,000
					May 19, 1933	22.7	277,000
1910	May 26, 1910	14.5	----------		Sept. 6, 1933	17.0	158,000

Peak stages and discharges of Arkansas River at Little Rock, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Apr. 9, 1934	15.52	127,000
1935	Mar. 15, 1935	20.04	208,000
	Mar. 27, 1935	21.22	207,000
	May 8, 1935	22.20	229,000
	May 22, 1935	21.71	218,000
	June 12, 1935	23.64	263,000
	June 22-23, 1935	28.18	422,000
1936	Dec. 9, 1935	18.00	144,000
1937	Jan. 18, 1937	18.74	170,000
	Feb. 3, 1937	17.60	152,000
1938	Jan.25-26,1938	15.16	142,000
	Feb. 21, 1938	a26.2	471,000
	Apr. 1, 1938	a21.60	244,000
	May 26, 1938	20.30	207,000
	June 15, 1938	17.24	148,000
1939	Apr. 18, 1939	18.12	181,000
1940	Sept. 9, 1940	11.87	92,300
1941	Apr. 24, 1941	b22.36	294,000
	June 15, 1941	b20.30	214,000
1942	Oct. 10, 1941	a19.65	202,000
	Oct. 20, 1941	a20.61	209,000
	Nov. 7, 1941	26.33	404,000
	Apr. 14, 1942	22.24	285,000
	May 2, 1942	24.86	312,000
	June 28, 1942	20.67	218,000
1943	Dec. 31, 1942	19.63	216,000
	May 16, 1943	28.34	484,000
	May 27, 1943	30.05	536,000
	June 10, 1943	19.03	164,000
1944	Mar. 22, 1944	18.94	196,000
	Apr. 15, 1944	19.52	194,000
	May 4, 1944	a22.35	282,000
	June 17, 1944	15.60	154,000
1945	Mar. 5, 1945	a19.90	242,000
	Mar. 23, 1945	24.00	323,000
	Apr. 1, 1945	24.05	314,000
	Apr. 21, 1945	b28.13	467,000
	May 17, 1945	18.90	176,000
	June 13, 1945	23.98	332,000
1946	Oct. 4, 1945	21.22	268,000
	Jan. 14, 1946	16.69	174,000
	Feb. 22, 1946	15.08	148,000
	May 26, 1946	17.31	192,000
1947	Nov. 11, 1946	14.41	145,000
	Dec. 13, 1946	a20.56	288,000
1947	Apr. 19, 1947	18.37	224,000
	May 2, 1947	18.90	224,000
	May 21, 1947	19.80	234,000
	June 5, 1947	16.03	162,000
1948	Mar. 4, 1948	14.34	142,000
	June 28, 1948	20.80	264,000
	July 23, 1948	15.63	151,000
	Aug. 19, 1948	15.36	140,000
1949	Jan. 26, 1949	20.28	301,000
	Feb. 17, 1949	19.09	228,000
	May 4, 1949	15.56	161,000
	May 23, 1949	a20.98	284,000
	June 16, 1949	18.45	199,000
1950	Jan. 15, 1950	15.41	158,000
	Feb. 14, 1950	15.25	164,000
	May 15, 1950	22.80	358,000
	July 25, 1950	18.88	222,000
	Aug. 6, 1950	19.50	222,000
	Sept. 19, 1950	17.67	175,000
1951	Feb. 22, 1951	17.37	189,000
	May 24, 1951	15.00	159,000
	July 8, 1951	b19.79	235,000
	July 22, 1951	b20.36	225,000
1952	Mar. 12, 1952	14.91	148,000
	Apr. 14, 1952	14.69	146,000
	Apr. 25, 1952	16.20	167,000
1953	Mar. 19, 1953	15.24	159,000
	Apr. 27, 1953	14.30	142,000
	May 16, 1953	14.61	150,000
1954	May 5, 1954	17.86	210,000
1955	Mar. 22, 1955	13.85	130,000
1956	Oct. 10, 1955	11.94	102,000
1957	Apr. 6, 1957	18.52	224,000
	Apr. 29, 1957	21.86	270,000
	May 31, 1957	27.87	460,000
1958	Mar. 28, 1958	16.03	158,000
	May 11, 1958	17.43	187,000
	June 28, 1958	15.08	154,000
	July 17, 1958	15.27	166,000
1959	July 30, 1959	15.00	151,000
1960	Oct. 10, 1959	23.85	350,000
1961	May 13, 1961	21.90	288,000
1962	Nov. 24, 1961	16.09	162,000

Peak stages and discharges of Arkansas River at Little Rock, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Oct. 7, 1962	7.80	65,500	1966	Apr. 27, 1966	16.50	148,000
1964	Apr. 7, 1964	12.76	106,000	1967	July 7, 1967	11.99	88,400
1965	Apr. 12, 1965	14.82	127,000	1968	May 16, 1968	19.87	202,000

a Occurred on following day.
b Occurred at different time than peak discharge.

2637. Arkansas River at Pine Bluff, Ark.

Location.--Lat 34°13'59", long 91°58'17", on right bank at Pine Bluff, Jefferson County, 1.4 miles downstream from Cassey Bayou, 6.1 miles upstream from Plum Bayou, and at mile 110.3.

Drainage area.--158,640 sq mi, of which about 136,399 sq mi contributes directly to surface runoff.

Gage.--Nonrecording. Datum of gage is 181.06 ft above mean sea level, datum of 1929, supplemental adjustment of 1946.

Stage-discharge relation.--Defined by current-meter measurements below 560,000 cfs.

Bankfull stage.--25 ft.

Remarks.--Gage-height records furnished by U.S. Weather Bureau. Peak discharge for 1938, 1940-43, 1948-53 calendar years, from reports of Mississippi River Commission. Peak discharge affected by storage reservoirs and power development since March 1940. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1892	May 22, 1892	29.6	----------	1926	Oct. 15, 1926	25.8	----------
				1927	Apr. 21, 1927	32.4	----------
1906	May 6-7, 1906	22.6	----------	1928	June 27, 1928	24.8	----------
1907	May 12, 1907	23.7	----------	1929	May 20, 1929	27.6	----------
1908	May 31, June 1	28.9	----------	1930	May 13, 1930	24.7	----------
1909	May 30, 1909	27.0	----------				
1910	May 26-27,1910	18.2	----------	1931	Dec. 1, 1931	17.6	----------
				1932	Jan. 27, 1932	23.5	----------
1911	Aug. 11, 1911	22.1	----------	1933	May 20, 1933	25.8	----------
1912	May 4, 1912	27.7	----------	1934	Apr. 10, 1934	19.0	----------
1913	Apr. 14, 1913	20.4	----------	1935	June 24, 1935	33.0	----------
1914	May 9, 1914	19.7	----------				
1915	June 2, 1915	26.9	----------	1936	Oct. 3, 1936	18.0	----------
				1937	Jan. 19, 1937	22.1	----------
1916	Feb. 3, 1916	29.6	----------	1938	Feb. 22, 1938	a31.7	476,000
1917	June 13, 1917	17.6	----------	1939	Apr. 19, 1939	20.9	----------
1918	May 15, 1918	20.9	----------	1940	Sept. 10, 1940	14.9	77,900
1919	Nov. 3-5, 1919	20.0	----------				
1920	Mar. 31, 1920	23.5	----------	1941	Nov. 8, 1941	b30.6	409,000
				1942	May 3, 1942	27.7	312,000
1921	May 1, 1921	23.9	----------	1943	May 28, 1943	33.78	553,000
1922	Apr. 16, 1922	26.0	----------	1944	May 6, 1944	25.3	----------
1923	June 19-20, 1923	27.7	----------	1945	Apr. 22, 1945	32.1	----------
1924	May 5, 1924	23.7	----------				
1925	Oct. 19, 1925	16.6	----------	1946	Dec. 15, 1946	21.7	----------

Peak stages and discharges of Arkansas River at Pine Bluff, Ark.--Continued

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1947	May 22, 1947	21.4	----------	1958	May 12, 1958	19.3	----------
1948	June 30, 1948	21.9	281,000	1959	Oct. 11, 1959	26.0	----------
1949	May 25, 1949	22.7	291,000	1960	May 24, 1960	23.0	----------
1950	May 16, 1950	24.1	340,000				
				1961	May 14, 1961	23.4	----------
1951	July 8, 1951	c21.9	230,000	1962	June 15, 1962	14.4	----------
1952	Apr. 26, 1952	19.4	164,000	1963	Mar. 20, 1963	9.0	----------
1953	Apr. 28, 1953	d17.6	141,000	1964	Apr. 8, 1964	13.7	----------
1954	May 6, 1954	19.9	----------	1965	Apr. 13, 1965	15.6	----------
1955	Mar. 23, 1955	15.7	----------				
				1966	Apr. 28, 1966	16.8	----------
1956	Feb. 20, 1956	12.4	----------	1967	July 8, 1967	13.2	----------
1957	May 31, 1957	30.85	----------				

a Occurred on following day.
b Occured Nov. 8-9, 1941.
c Occured July 22-23, 1951.
d Occurred May 17, 1953.

2638.6. Mile Branch near Tomberlin, Ark.
(Published as "Main Ditch Lateral No. 9 tributary" prior to 1964)

Location.--Lat 34°29'08", long 91°51'14", in NW¼NE¼ sec.3, T.3 S., R.8 W., on left bank 90 ft downstream from bridge on county road, 0.6 mile east of State Highway 31, and 2.3 miles southeast of Tomberlin.

Drainage area.--2.75 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since July 1969.

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs and extended above by logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	July 15, 1963	9.35	142	1966	Aug. 13, 1966	10.93	480
1964	Apr. 23, 1964	10.51	330	1967	Dec. 27, 1966	10.88	470
1965	June 7, 1965	10.91	470	1968	Dec. 2, 1967	10.97	490
				1969	Jan. 30, 1969	10.49	325

2639.1. Cypress Branch near Jacksonville, Ark.

Location.--Lat 34°54'28", long 92°10'55", in SE¼NE¼ sec.9, T.3 N., R.11 W., on left bank 47 ft upstream from culvert on State Highway 5, 1.0 mile upstream from mouth, and 5.0 miles northwest of Jacksonville.

Drainage area.--2.38 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 240 cfs and by culvert measurement at 1,280 cfs. Affected at times by backwater from Bayou Meto.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Cypress Branch near Jacksonville, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	July 1961	10.55	580	1966	Apr. 24, 1966	11.17	790
1962	Nov. 22, 1961	10.56	585	1967	July 12, 1967	10.51	555
1963	Mar. 4, 1963	10.43	540	1968	May 13, 1968	12.53	a800
1964	Nov. 22, 1963	12.06	1,280	1969	Jan. 30, 1969	15.84	a1,300
1965	Sept. 22, 1965	10.88	680				

a Affected by backwater; discharge estimated.

2640. Bayou Meto near Lonoke, Ark.
(Published by Corps of Engineers as "Big Bayou Meto")

Location.--Lat 34°44'10", long 91°54'58", in SW¼ sec.6, T.1 N., R.8 W., near left bank on downstream side of bridge on State Highway 31, 3 miles upstream from Brushy Slough, 3½ miles south of Lonoke, and at mile 6.4.

Drainage area.--207 sq mi.

Gage.--Recording. Prior to Feb. 10, 1955, at site 4¾ miles upstream at datum 6.97 ft higher. Datum of present gage is 199.11 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements at present site. Not adequately defined at former site.

Bankfull stage.--16 ft.

Remarks.--Gage-height records prior to 1955 furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	January 1937	a22.9	----------	1958	May 6, 1958	25.13	3,440
				1959	Feb. 19, 1959	25.08	3,280
1948	March 1948	20.2	----------	1960	Dec. 19, 1959	22.33	1,840
1949	Jan. 30, 1949	22.1	----------				
1950	Jan. 14, 1950	22.0	----------	1961	Apr. 5, 1961	23.03	2,050
				1962	Mar. 4, 1962	22.91	2,020
1951	Jan. 20, 1951	18.0	----------	1963	Mar. 12, 1963	16.50	966
1952	Apr. 18, 1952	16.8	----------	1964	Mar. 14, 1964	24.04	2,510
1953	May 19, 1953	19.7	----------	1965	Feb. 16, 1965	22.29	2,050
1954	May 7, 1954	21.3	----------				
1955	June 1, 1955	22.30	1,920	1966	Apr. 30, 1966	24.26	2,600
				1967	May 8, 1967	22.23	1,830
1956	Feb. 6, 1956	23.80	2,120	1968	May 17, 1968	26.55	4,700
1957	May 29, 1957	25.16	3,360				

a Site and datum used prior to 1955.

2641. White Oak Branch near Lonoke, Ark.

Location.--Lat 34°46'20", long 91°50'34", on west line of SW¼NW¼ sec.26, T.2 N., R.8 W., on left downstream wingwall of bridge on county road, 3.3 miles east of Lonoke, and 4.2 miles upstream from mouth.

Drainage area.--8.41 sq mi.

Gage.--Crest-stage gage. Datum of gage is 217.67 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of White Oak Branch near Lonoke, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 30, 1961	8.16	495	1966	Aug. 13, 1966	8.82	910
1962	Jan. 22, 1962	8.68	840	1967	Dec. 27, 1966	8.04	440
1963	Mar. 5, 1963	7.46	260	1968	May 13, 1968	8.97	1,020
1964	Apr. 4, 1964	9.34	1,500	1969	Jan. 30, 1969	9.14	1,160
1965	Feb. 11, 1965	8.94	1,010				

2645. Bayou Meto near Stuttgart, Ark.

Location.--Lat 34°27'15", long 91°36'58", in SE¼ sec.11, T.3 S., R.6 W., on downstream side of bridge on U.S. Highway 79, 5½ miles southwest of Stuttgart, and 8 miles upstream from Crooked Creek.

Drainage area.--574 sq mi. Combined area of Bayou Meto and Crooked Creek, 653 sq mi.

Gage.--Nonrecording. Prior to Oct. 1, 1936, at datum 5.00 ft higher. Present datum of gage is 169.94 ft above mean sea level, datum of 1929. All stages adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs.

Bankfull stage.--20 ft.

Remarks.--Diversions upstream from station for irrigation of about 1,300 acres do not seriously affect peak discharges. Stages for 1955-68 from reports of Corps of Engineers.

During flows above 600 cfs, Bayou Meto and Crooked Creek are interconnected upstream from station. Discharges tabulated below are for combined flows of Bayou Meto and Crooked Creek. Gage heights are for Bayou Meto. Only annual maximum daily discharges are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	July 5, 1936	15.00	a1,060	1953	May 23, 1953	22.56	4,410
1937	Jan. 26, 1937	25.50	a9,350	1954	Jan. 31, 1954	19.27	2,690
1938	Feb. 1, 1938	23.26	a4,850	1955	June 8-10,1955	19.47	2,500
1939	Feb. 16, 1939	23.54	5,180				
1940	Feb. 22, 1940	17.01	1,640	1956	Feb. 24, 1956	22.23	4,020
				1957	May 5,6, 1957	22.60	4,540
1941	Apr. 25, 1941	17.49	1,570	1958	May 12, 1958	23.55	5,340
1942	Apr. 29, 1942	21.59	3,200	1959	Mar. 1, 1959	20.00	3,090
1943	Mar.27,28,1943	20.04	2,530	1960	July 4, 1960	20.11	3,380
1944	Apr. 12, 1944	21.25	3,290				
1945	Apr. 7, 1945	22.86	4,410	1961	Apr. 16, 1961	20.51	3,420
				1962	Mar. 6,7, 1962	20.68	3,540
1946	Jan.20,21,1946	23.29	4,420	1963	Mar. 19, 1963	16.60	1,480
1947	June 4, 1947	16.57	1,420	1964	Apr. 30, 1964	22.17	3,590
1948	Mar. 8,9, 1948	22.82	4,500	1965	Mar. 1, 1965	20.01	2,670
1949	Feb. 6, 1949	23.67	5,280				
1950	Feb.18-20,1950	24.33	6,200	1966	May 7, 1966	21.83	3,680
				1967	May 15, 1967	19.4	2,630
1951	Jan. 20, 1951	20.38	3,080	1968	May 26, 1968	23.00	4,730
1952	Mar.14,15,1952	18.75	2,260				

a Flow for Crooked Creek estimated.

Note.--Peak stage frequently occurs on different date than maximum daily discharge.

2650. Crooked Creek near Humphrey, Ark.

Location.--Lat 34°25'35", long 91°40'04", in SE¼ sec.20, T.3 S., R.6 W., near center of span on downstream side of bridge on U.S. Highway 79, 100 ft upstream from St. Louis-Southwestern Railway bridge, 2 miles east of Humphrey, and at mile 5.8.

Drainage area.--79.2 sq mi.

Gage.--Nonrecording gage Oct. 1, 1938, to June 19, 1950, and since Sept. 30, 1954. Recording June 20, 1950, to Sept. 30, 1954. Datum of gage is 169.94 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs. Discharges for 1936-38 computed on basis of stage relation with Bayou Meto near Stuttgart.

Bankfull stage.--20 ft.

Remarks.--See Bayou Meto near Stuttgart.

MISSISSIPPI RIVER MAIN STEM

2654.5. Mississippi River near Arkansas City, Ark.

Location.--Lat 33°33'55", long 91°14'35", in sec.18, T.13 S., R.1 W., on right bank 3 miles southwest of Arkansas City, 28 miles downstream from Arkansas River, and at mile 554.1.

Drainage area.--1,130,600 sq mi, approximately.

Gage.--Nonrecording. Prior to Sept. 3, 1930, at site 4 miles upstream, Sept. 3, 1930, to Feb. 29, 1944, at site 1.9 miles upstream, and Mar. 1, 1944, to Oct. 31, 1948, at site 1.2 miles upstream, all at present datum. Datum of gage is 96.66 ft above mean sea level, datum of 1929, supplementary adjustment of 1941, or 96.75 ft above mean Gulf level.

Stage-discharge relation.--Defined by current-meter measurements. (Measurements made frequently since 1928 and occasionally since 1884.)

Bankfull stage.--44 ft.

Remarks.--Natural flow of stream affected by many reservoir and navigation dams. Records from publications of Mississippi River Commission and Vicksburg District, Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1880	Mar.20-27,1880	45.1	----------	1892	May 4, 1892	a50.0	1,742,000
				1893	May 27, 1893	a50.3	1,676,000
1881	May 16-18,1881	44.3	----------	1894	Feb. 24, 1894	40.5	----------
1882	Feb. 28, 1882	47.1	----------	1895	Apr. 1,2, 1895	32.2	----------
1883	Mar. 11, 1883	46.35	----------				
1884	Mar. 7-9, 1884	46.5	----------	1896	Apr. 19, 1896	40.0	----------
1885	May 7-9, 1885	42.6	----------	1897	Mar. 27, 1897	a51.9	1,646,000
				1898	Apr. 20, 1898	a51.2	1,497,000
1886	May 4,5, 1886	46.9	----------	1899	Apr.15-20,1899	48.6	----------
1887	Mar. 24, 1887	a46.65	1,480,000	1900	Mar. 25, 1900	39.3	933,000
1888	Apr.21,22,1888	45.38	----------				
1889	June 30,July 1	36.3	----------	1901	May 12,13,1901	43.3	1,090,000
1890	Mar. 19, 1890	a49.5	1,418,000	1902	Mar. 29, 1902	41.4	1,011,000
				1903	Mar. 16, 1903	a52.9	1,743,000
1891	Apr. 7, 1891	a48.2	1,425,000	1904	Apr. 20, 1904	a49.0	1,403,000

Peak stages and discharges of Mississippi River near Arkansas City, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	June 3, 1905	43.2	1,086,000	1937	Feb. 16, 1937	a53.86	2,159,000
				1938	Apr. 23, 1938	a37.4	1,201,000
1906	Apr. 19, 1906	a50.0	1,462,000	1939	Feb. 28, 1939	a39.0	1,435,000
1907	Feb. 4, 1907	a52.1	1,573,000	1940	May 7, 1940	a30.8	1,067,000
1908	June 2-4, 1908	49.9	1,449,000				
1909	Mar. 27, 1909	a50.1	1,520,000	1941	Apr. 29, 1941	25.3	821,000
1910	Mar. 23, 1910	43.13	1,083,000	1942	Apr. 18, 1942	a33.9	1,121,000
				1943	June 2, 1943	a44.2	1,688,000
1911	May 2, 1911	a48.03	1,281,000	1944	May 7, 1944	a42.2	1,614,000
1912	Apr. 16, 1912	a55.33	2,007,000	1945	Apr. 9, 1945	a46.3	1,922,000
1913	Apr. 26, 1913	a55.15	1,782,000				
1914	Apr.20-23,1914	43.24	1,087,000	1946	Jan. 25, 1946	a37.3	1,520,000
1915	Feb.24,25,1915	45.95	1,201,000	1947	May 3,4, 1947	a35.81	1,312,000
				1948	Apr.11,12,1948	a37.54	1,320,000
1916	Feb. 10, 1916	a56.4	1,889,000	1949	Feb. 14, 1949	a36.7	1,523,000
1917	Apr. 17, 1917	a52.11	1,591,000	1950	Feb.21,22,1950	a41.37	1,791,000
1918	Mar. 5-7, 1918	39.8	951,000				
1919	Apr. 5, 1919	a49.4	1,378,000	1951	Mar. 9, 1951	a33.57	1,330,000
1920	Apr. 12, 1920	a54.0	1,513,000	1952	Apr. 6, 1952	a35.91	1,374,000
				1953	May 25,26,1953	a29.57	997,000
1921	May 5,6, 1921	45.4	1,083,000	1954	May 7, 1954	20.21	697,000
1922	Apr.22-27,1922	58.0	1,725,000	1955	Apr. 6, 1955	34.71	1,315,000
1923	Mar. 31, 1923	a49.4	1,224,000				
1924	Jan.24-26,1924	45.05	1,070,000	1956	Mar. 3, 1956	28.87	1,120,000
1925	Mar. 7, 1925	37.6	834,000	1957	June 5, 1957	37.56	1,345,000
				1958	May 15, 1958	a33.85	1,192,000
1926	Apr.25-27,1926	41.9	965,000	1959	Feb. 28, 1959	a27.30	969,000
1927	Apr. 20, 1927	a60.4	b1,712,000	1960	Apr. 22, 1960	32.50	1,161,000
1928	July 3, 1928	a52.5	1,424,000				
1929	May 30, 1929	a58.8	1,788,000	1961	May 26, 1961	a42.00	1,652,000
1930	Jan.28,29,1930	47.78	1,141,000	1962	Mar. 18, 1962	a37.10	1,433,000
				1963	Apr. 1,2, 1963	a34.60	1,356,000
1931	Apr. 18, 1931	33.6	725,000	1964	Apr. 1, 1964	32.90	1,275,000
1932	Feb. 27, 1932	a53.45	1,448,000	1965	Apr. 21, 1965	a34.30	1,238,000
1933	June 5, 1933	a53.63	1,380,000				
1934	Apr. 12, 1934	a38.99	874,000	1966	May 11, 1966	a30.05	1,057,000
1935	Apr. 3-5, 1935	a51.75	1,460,000	1967	May 26, 1967	a30.14	1,047,000
				1968	June 10, 1968	a31.47	1,126,000
1936	Apr. 26, 1936	a41.3	1,289,000				

a Occurred on different day than peak discharge.
b About 2,472,000 cfs in May includes estimated flow through levee breaks.

Note.--Daily discharges computed since 1928. Peaks prior to 1928 are results of discharge measurements made during periods of maximum stage.

3370. Red River at Index, Ark.

Location.--Lat 33°33'07", long 94°02'28", in SW¼ sec.7, T.14 S., R.28 W., on downstream side of pier of bridge on U.S. Highway 71 at Index, 2¼ miles south of Ogden, 20.6 miles upstream from Little River, and at mile 485.3.

Drainage area.--48,030 sq mi, of which about 42,094 sq mi contributes directly to surface runoff.

Gage.--Nonrecording prior to Dec. 12, 1939, at present site or at Kansas City Southern Railway Co. bridge 1,100 ft upstream; recording at present site thereafter. Datum of gage is 246.87 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements since 1937.

Bankfull stage.--25 ft.

Remarks.--Considerable regulation since July 1942 by Lake Texoma, 241 miles upstream (capacity, 5,392,900 acre-ft). Prior to 1951, records computed by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 70,000 cfs. Only annual peaks are shown prior to 1937 and subsequent to 1958.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Apr. 19, 1918	24.5	----------	1939	Apr. 19, 1939	21.2	70,600
1919	Oct. 31, 1918	22.0	----------	1940	May 26, 1940	19.7	70,100
1920	May 21, 1920	27.6	----------	1941	Apr. 20, 1941	b20.29	74,000
					Apr. 26, 1941	24.27	108,000
1921	June 27, 1921	23.5	----------		May 10, 1941	23.36	94,100
					June 16, 1941	27.83	145,000
1922	May 15, 1922	26.3	----------				
				1942	Oct. 9, 1941	24.55	106,000
1923	Sept. 24, 1923	23.3	----------		Nov. 5, 1941	b25.90	128,000
					Apr. 14, 1942	28.33	145,000
1924	Dec. 18, 1923	27.0	----------		Apr. 23, 1942	25.33	107,000
					May 1, 1942	29.85	178,000
1925	May 1, 1925	20.5	----------				
				1943	May 16, 1943	b24.35	112,000
1926	Aug. 21, 1926	23.5	----------				
				1944	May 4, 1944	21.88	87,800
1927	Apr. 23, 1927	30.8	----------				
				1945	Feb. 24, 1945	23.25	105,000
1928	May 23, 1928	25.0	----------		Mar. 2, 1945	24.17	120,000
					May 20, 1945	22.63	110,000
1929	May 21, 1929	27.2	----------		Apr. 1, 1945	28.05	152,000
					June 14, 1945	23.90	101,000
1930	May 21, 1930	27.2	----------		June 22, 1945	c24.37	120,000
1931	Dec. 9, 1930	20.2	----------	1946	Oct. 11, 1945	20.80	76,400
1932	Feb. 21, 1932	27.4	----------	1947	Nov. 9, 1946	23.74	110,000
					Dec. 15, 1946	23.47	108,000
1933	May 29, 1933	24.7	----------		May 2, 1947	20.40	76,500
					June 4, 1947	20.50	74,700
1934	Mar. 4, 1934	20.5	----------				
				1948	May 13, 1948	21.40	84,000
1935	May 25, 1935	31.1	----------				
				1949	Jan. 29, 1949	24.56	112,000
1936	Dec. 9, 1935	a22.1	----------				
				1950	Jan. 16, 1950	20.98	78,800
1937	Oct. 1, 1936	24.00	88,100		Feb. 3, 1950	20.52	71,200
					Feb. 15, 1950	23.48	108,000
1938	Jan. 26, 1938	25.95	114,000		May 4, 1950	22.78	87,000
	Feb. 23, 1938	34.25	297,000		July 29, 1950	20.00	75,400
	Apr. 2, 1938	27.55	139,400		Sept. 18, 1950	21.23	74,000

Peak stages and discharges of Red River at Index, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	June 18, 1951	23.64	102,000	1959	July 29, 1959	17.00	48,400
1952	Apr. 25, 1952	24.50	112,000	1960	Oct. 16, 1959	18.43	61,000
1953	May 2, 1953	22.48	91,700	1961	Dec. 13, 1960	17.69	68,400
	May 17, 1953	20.50	76,400	1962	Nov. 26, 1961	e16.43	53,800
1954	May 13, 1954	20.50	76,200	1963	Nov. 29, 1962	b16.53	55,500
1955	Mar. 23, 1955	17.88	56,500	1964	Apr. 27, 1964	15.18	37,400
1956	Feb. 20, 1956	d15.94	41,800	1965	Feb. 12, 1965	19.25	69,000
1957	Apr. 30, 1957	26.92	128,000	1966	May 3, 1966	23.96	110,000
	May 16, 1957	24.03	86,000				
	May 29, 1957	26.75	132,000	1967	June 3, 1967	f18.14	53,600
	June 8, 1957	28.56	154,000				
1958	May 6, 1958	25.32	145,000	1968	May 19, 1968	b23.56	125,000

a Maximum crest stage. Maximum stage occurred Sept. 30 on rise that crested Oct. 1, 1936.
b Occurred on following day.
c Occurred on preceding day.
d Occurred Oct. 14, 1955.
e Occurred June 14, 1962.
f Occurred Apr. 24, 1967.

3387. Twomile Creek near Hatfield, Ark.

Location.--Lat 34°30'52", long 94°20'14", in NW¼NW¼ sec.8, T.3 S., R.31 W., on right bank 130 ft upstream from bridge on U.S. Highway 71, 0.5 mile upstream from small tributary, 1.5 miles dowmstream from Mill Creek, and 3.1 miles northeast of Hatfield.

Drainage area.--16.1 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 850 cfs and by contracted-opening measurement at 6,260 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Oct. 20, 1962	7.06	800	1966	Apr. 23, 1966	7.98	1,300
1964	Mar. 9, 1964	7.35	940	1967	May 6, 1967	7.69	1,120
1965	May 10, 1965	7.77	1,150	1968	May 13, 1968	11.89	6,260
				1969	Jan. 29, 1969	8.70	1,850

3395. Rolling Fork near DeQueen, Ark.

Location.--Lat 34°02'51", long 94°24'47", in SW¼SW¼ sec.21, T.8 S., R.32 W., near center of span on downstream side of pier 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.--181 sq mi.

Gage.--Nonrecording prior to Dec. 16, 1948; recording thereafter. Datum of gage is 318.24 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 41,000 cfs and contracted-opening measurement at 110,000 cfs.

Bankfull stage.--20 ft.

Remarks.--Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Aug. 27, 1947	25.6	a110,000	1957	May 26, 1957	15.92	6,700
1949	Jan. 24, 1949	20.16	19,200	1958	Apr. 27, 1958	16.73	8,200
	May 1, 1949	17.20	8,800		May 2, 1958	18.73	13,800
	June 14, 1949	18.96	14,100		Sept. 19, 1958	16.21	7,220
1950	Dec. 12, 1949	15.80	6,420	1959	Nov. 15, 1958	17.50	9,940
	Jan. 2, 1950	16.63	7,660		Nov. 17, 1958	20.83	25,000
	Jan. 13, 1950	21.04	23,700		Feb. 14, 1959	15.58	6,220
	Feb. 1, 1950	18.28	11,700		Mar. 5, 1959	15.60	6,860
	Feb. 12, 1950	20.52	20,800		May 24, 1959	16.96	8,800
	May 1, 1950	18.65	12,700				
	July 30, 1950	15.64	6,150	1960	Dec. 11, 1959	15.84	6,540
	Sept. 16, 1950	20.49	20,800		Dec. 16, 1959	16.42	7,600
	Sept. 20, 1950	17.56	9,720		May 20, 1960	15.50	6,070
1951	Jan. 14, 1951	16.01	6,700	1961	Dec. 6, 1960	17.68	9,940
	July 2, 1951	16.35	7,320		Dec. 10, 1960	18.96	14,000
					May 6, 1961	20.11	20,500
1952	Jan. 3, 1952	16.45	7,000				
	Apr. 12, 1952	18.80	14,000	1962	Nov. 22, 1961	16.95	8,800
	Apr. 22, 1952	18.80	14,000				
				1963	Mar. 11, 1963	15.44	5,920
1953	Nov. 25, 1952	19.86	19,200				
	Apr. 6, 1953	18.06	11,500	1964	Mar. 9, 1964	19.16	15,700
	Apr. 29, 1953	18.98	14,700		Apr. 24, 1964	19.21	17,100
	May 11, 1953	21.96	34,000				
	July 20, 1953	17.60	10,200	1965	Nov. 19, 1964	15.67	6,380
					Jan. 9, 1965	16.13	7,040
1954	Apr. 16, 1954	16.11	7,040		May 27, 1965	16.46	7,800
	May 2, 1954	15.94	6,700				
				1966	Feb. 9, 1966	18.10	11,600
1955	Oct. 1, 1954	16.54	7,220		Apr. 26, 1966	19.02	14,800
	Mar. 21, 1955	17.67	10,500		Aug. 14, 1966	19.46	17,100
	Apr. 21, 1955	17.11	9,020				
	May 27, 1955	18.75	14,000	1967	Apr. 14, 1967	16.02	6,900
					May 1, 1967	17.22	9,510
1956	Feb. 2, 1956	15.88	6,220		May 6, 1967	20.12	23,200
	Feb. 18, 1956	17.03	8,800		May 31, 1967	17.52	9,900
1957	Mar. 18, 1957	17.80	10,700	1968	Jan. 29, 1968	17.56	10,700
	Apr. 4, 1957	16.77	8,400		Mar. 12, 1968	15.31	6,430
	Apr. 23, 1957	16.97	8,800		Mar. 20, 1968	18.48	13,200
	Apr. 25, 1957	17.78	10,700		Apr. 2, 1968	16.77	8,980
	Apr. 27, 1957	18.38	12,600		May 13, 1968	23.34	52,000
	May 23, 1957	16.98	8,800		May 17, 1968	16.93	9,280

a Annual peak only.

3398. Pepper Creek near DeQueen, Ark.

Location.--Lat 34°02'44", long 94°18'13", on north line of NW¼NE¼ sec.28, T.8 S., R.31 W., on left bank 26 ft downstream from bridge on U.S. Highway 71, 0.7 mile upstream from mouth, 1.5 miles east of junction of U.S. Highways 70 and 71, and 2.3 miles east of DeQueen.

Drainage area.--6.43 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 5, 1961	a7.03	1,440	1966	Apr. 25, 1966	4.60	486
1962	1962	(b)	<170	1967	May 1, 1967	5.06	640
1963	Oct. 14, 1962	2.9	72	1968	May 13, 1968	9.39	6,240
1964	Apr. 23, 1964	5.00	610	1969	Jan. 29, 1969	6.87	2,050
1965	Feb. 9, 1965	3.73	230				

< Less than.
a Higher peak may have occurred before gage was installed.
b Peak stage did not reach bottom of gage.

3400. Little River near Horatio, Ark.

Location.--Lat 33°55'10", long 94°23'15", in NE¼ sec.10, T.10 S., R.32 W., 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.--2,674 sq mi.

Gage.--Nonrecording prior to Feb. 5, 1935; recording thereafter. Prior to Sept. 14, 1962, at site 50 ft upstream at same datum. Datum of gage is 272.89 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 93,000 cfs.

Bankfull stage.--26 ft.

Remarks.--Base for partial-duration series, 25,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	August 1915	38.0	a124,000	1934	Apr. 9, 1934	27.36	25,100
1930	May 20, 1930	36.0	a97,700	1935	Jan. 21, 1935	31.2	46,000
					May 6, 1935	34.80	82,100
1931	July 27, 1931	24.84	20,700		May 21, 1935	29.14	33,300
					June 19, 1935	33.56	68,200
1932	Jan. 6, 1932	31.5	48,400				
	Jan. 18, 1932	28.6	31,000	1936	Dec. 8, 1935	28.85	31,800
	Jan. 24, 1932	31.84	50,800				
	Feb. 18, 1932	31.3	46,800	1937	Jan. 11, 1937	28.15	26,700
1933	Jan. 1, 1933	27.2	24,800	1938	Jan. 25, 1938	36.93	110,000

Peak stages and discharges of Little River near Horatio, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Feb. 19, 1938	36.65	106,000
	Apr. 1, 1938	30.48	41,100
	Apr. 17, 1938	29.10	33,300
1939	Feb. 26, 1939	28.05	31,500
	Apr. 7, 1939	29.00	36,400
	Apr. 18, 1939	32.12	56,500
1940	May 19, 1940	28.50	28,200
	July 2, 1940	30.62	37,500
1941	Apr. 24, 1941	26.90	23,900
1942	Nov. 1, 1941	b27.58	25,400
	Apr. 9, 1942	31.77	50,800
1943	Dec. 28, 1942	26.45	24,700
1944	Mar. 1, 1944	28.16	29,200
	May 3, 1944	32.64	57,900
1945	Feb. 22, 1945	32.78	59,900
	Feb. 28, 1945	32.65	57,900
	Mar. 21, 1945	31.15	44,900
	Mar. 30, 1945	37.70	120,000
	May 17, 1945	30.80	41,700
	June 15, 1945	30.90	42,500
1946	Oct. 2, 1945	29.30	32,500
	Jan. 10, 1946	31.29	45,700
	Feb. 7, 1946	29.16	32,000
	Feb. 15, 1946	29.67	34,500
	May 26, 1946	31.74	49,300
1947	Nov. 8, 1946	28.25	28,000
	Dec. 14, 1946	31.82	50,200
	May 1, 1947	29.98	36,200
	May 14, 1947	32.00	52,000
	May 18, 1947	30.87	42,500
	Aug. 29, 1947	32.99	61,900
1948	Dec. 9, 1947	28.99	31,100
	Jan. 2, 1948	32.29	54,900
	Mar. 3, 1948	28.86	30,700
	May 13, 1948	29.36	33,000
1949	Jan. 27, 1949	35.58	97,900
	May 2, 1949	30.50	39,500
	June 15, 1949	30.47	39,500
1950	Jan. 5, 1950	29.25	32,000
	Jan. 14, 1950	32.66	59,700
	Feb. 2, 1960	31.42	46,600
	Feb. 13, 1950	34.06	82,500
	May 3, 1950	31.78	50,200
	July 31, 1950	28.65	29,500
	Sept. 17, 1950	32.80	60,800
1951	Feb. 21, 1951	29.48	33,500
	June 16, 1951	29.40	33,000
	July 4, 1951	31.47	47,500
1952	Apr. 13, 1952	31.84	53,300
	Apr. 23, 1952	34.26	83,900
1953	Nov. 26, 1952	27.46	26,400
	Apr. 7, 1953	28.12	29,500
	Apr. 30, 1953	32.02	55,700
	May 12, 1953	32.32	59,000
	July 24, 1953	28.73	31,800
1954	May 4, 1954	28.16	29,800
1955	Mar. 22, 1955	30.10	37,200
1956	Feb. 19, 1956	27.84	28,500
1957	Mar. 19, 1957	27.46	27,600
	Apr. 5, 1957	29.86	37,800
	Apr. 28, 1957	33.13	68,300
	May 15, 1957	28.35	30,500
	May 27, 1957	30.92	44,500
	June 6, 1957	28.50	30,900
1958	Mar. 9, 1958	26.48	25,200
	May 3,4, 1958	32.72	63,600
1959	Nov. 18, 1958	30.48	41,600
1960	Dec. 18, 1959	29.34	34,800
	May 22, 1960	31.99	55,500
1961	Dec. 12, 1960	30.76	43,700
	Apr. 1, 1961	27.35	27,400
	May 9, 1961	31.08	46,200
1962	Nov. 24, 1961	27.93	28,800
	Jan. 28, 1962	27.46	27,600
1963	Apr. 30, 1963	21.50	16,800
1964	Mar. 11, 1964	29.07	33,600
	Apr. 25, 1964	30.72	43,000
1965	Feb. 13, 1965	28.54	34,100
1966	Apr. 27, 1966	29.82	34,800
1967	May 7, 1967	24.09	28,100
	June 1, 1967	25.73	26,600
1968	Feb. 1, 1968	27.22	26,000
	Mar. 22, 1968	27.58	26,900
	Apr. 5, 1968	28.66	30,000
	May 14, 1968	33.22	69,900
	May 18, 1968	32.78	64,100

a Annual peak only.
b Occurred on following day.

3402. West Flat Creek near Foreman, Ark.

Location.--Lat 33°45'13", long 94°23'28", in NW¼SW¼ sec.2, T.12 S., R.32 W., on left bank 25 ft downstream from bridge on State Highway 41, 150 ft downstream from small tributary, 2.3 miles north of Foreman, and 3 miles upstream from East Flat Creek.

Drainage area.--10.6 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 370 cfs and by contracted-opening measurement at 2,500 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 23, 1962	9.46	397	1966	Apr. 24, 1966	11.07	1,050
1963	Oct. 14, 1962	10.77	740	1967	May 1, 1967	11.84	2,300
1964	Apr. 23, 1964	10.31	600	1968	May 17, 1968	11.93	2,500
1965	Feb. 10, 1965	11.92	2,500	1969	Jan. 30, 1969	12.40	3,400

3405. Cossatot River near DeQueen, Ark.

Location.--Lat 34°02'45", long 94°12'42", in NE¼NE¼ sec.29, T.8 S., R. 30 W., on downstream side of pier of bridge on U.S. Highway 71, just downstream from Hale Creek, 7 miles east of DeQueen, and at mile 33.5.

Drainage area.--361 sq mi.

Gage.--Nonrecording prior to Nov. 9, 1938; recording thereafter. Datum of gage is 335.48 feet above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 65,000 cfs and by contracted-opening measurement at 122,000 cfs.

Bankfull stage.--15 ft.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Jan. 24, 1938	19.70	36,300	1942	Apr. 8, 1942	18.42	27,000
	Feb. 17, 1938	19.40	34,000		Apr. 26, 1942	16.10	14,000
	Mar. 29, 1938	16.30	14,800		Sept. 9, 1942	18.56	28,400
	Apr. 16, 1938	17.10	18,900				
				1943	Dec. 27, 1942	14.30	9,520
1939	Feb. 25, 1939	15.86	13,000				
	Apr. 6, 1939	17.43	20,700	1944	Feb. 9, 1944	15.90	14,000
	Apr. 16, 1939	19.70	36,300		Mar. 16, 1944	16.66	17,400
					May 2, 1944	18.70	29,100
1940	Apr. 29, 1940	17.46	21,300				
	May 18, 1940	17.94	23,700	1945	Feb. 21, 1945	18.14	24,900
	July 1, 1940	16.98	18,300		Feb. 27, 1947	18.18	25,600
					Mar. 19, 1945	16.78	17,100
1941	July 14, 1941	15.08	10,100		Mar. 30, 1945	20.20	43,300

Peak stages and discharges of Cossatot River near DeQueen, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)
1945	May 16, 1945	15.25	11,300
1946	Jan. 5, 1946	15.19	11,300
	Jan. 9, 1946	17.37	20,400
	Feb. 6, 1946	16.83	17,100
	Feb. 14, 1946	15.78	13,000
	Mar. 6, 1946	14.87	10,700
	Apr. 30, 1946	16.74	16,600
	May 25, 1946	19.96	41,200
1947	Dec. 12, 1946	17.86	23,500
	Aug. 28, 1947	20.47	46,900
1948	Oct. 31, 1947	17.29	22,800
	Dec. 7, 1947	18.28	26,300
	Jan. 1, 1948	18.30	26,300
1949	Jan. 24, 1949	19.76	39,400
	Jan. 27, 1949	15.67	12,600
	May 1, 1949	16.29	14,800
1950	Dec. 12, 1949	15.56	12,300
	Jan. 3, 1950	16.40	15,200
	Jan. 10, 1950	15.80	13,000
	Jan. 13, 1950	18.97	31,700
	Feb. 1, 1950	17.48	21,000
	Feb. 12, 1950	19.36	35,400
	May 2, 1950	14.98	10,900
	Sept. 16, 1950	18.94	30,900
	Sept. 20, 1950	20.14	42,500
1951	Jan. 14, 1951	15.78	13,000
	July 3, 1951	16.49	15,600
1952	Jan. 3, 1952	15.10	11,300
	Mar. 22, 1952	14.54	10,100
	Apr. 12, 1952	17.94	23,500
	Apr. 22, 1952	18.00	24,200
1953	Nov. 25, 1952	19.02	31,700
	Dec. 4, 1952	15.54	12,100
	Mar. 18, 1953	14.94	10,800
	Apr. 6, 1953	16.97	18,000
	Apr. 24, 1953	14.52	10,100
	Apr. 29, 1953	17.37	20,200
	May 12, 1953	19.16	33,100
	July 21, 1953	14.74	10,400
1954	May 2, 1954	16.57	16,100
1955	Oct. 25, 1954	14.62	10,200
	Mar. 21, 1955	17.25	19,200
1956	Feb. 2, 1956	16.33	13,600
	Feb. 18, 1956	16.20	14,400
1957	Jan. 22, 1957	15.59	12,300
	Mar. 18, 1957	16.37	15,200
	Apr. 4, 1957	17.33	19,800
	Apr. 25, 1957	15.15	11,300
	Apr. 27, 1957	17.82	22,800
	May 26, 1957	15.30	11,600
1958	Nov. 13, 1957	16.46	16,500
	Mar. 7, 1958	14.48	10,300
	Apr. 27, 1958	15.55	13,000
	May 3, 1958	18.56	29,200
1959	Nov. 17, 1958	18.85	30,100
	Feb. 14, 1959	15.47	12,800
	Mar. 5, 1959	15.19	11,900
1960	Dec. 11, 1959	15.38	11,800
	Dec. 16, 1959	15.73	12,600
	May 20, 1960	19.12	32,600
1961	Dec. 6, 1960	17.67	22,400
	Dec. 11, 1960	17.67	22,400
	Feb. 18, 1961	14.63	10,900
	Mar. 13, 1961	14.45	10,500
	May 6, 1961	20.70	62,000
1962	Nov. 23, 1961	15.66	12,600
1963	Mar. 11, 1963	14.55	10,100
1964	Mar. 9, 1964	18.68	32,100
	Apr. 24, 1964	19.12	37,500
1965	Jan. 9, 1965	14.92	11,400
	Feb. 10, 1965	16.24	14,800
	May 27, 1965	15.46	12,800
	June 23, 1965	16.16	14,800
1966	Feb. 10, 1966	17.00	18,100
	Apr. 26, 1966	18.40	28,400
	May 1, 1966	15.32	12,300
	Aug. 14, 1966	17.11	18,600
1967	May 1, 1967	16.70	17,800
	May 6, 1967	18.70	32,500
	May 31, 1967	16.06	15,200
1968	Jan. 29, 1968	16.62	20,000
	Mar. 21, 1968	17.56	25,900
	Apr. 2, 1968	15.10	13,300
	Apr. 23, 1968	14.95	12,800
	May 9, 1968	14.08	10,200
	May 13, 1968	22.60	122,000
	May 17, 1968	14.6	11,700

3405.3. Mill Slough tributary near Lockesburg, Ark.

Location.--Lat 33°58'04", long 94°11'25", on south line of SW¼NW¼ sec.22, T.9 S., R.30 W., on left bank 15 ft upstream from culvert on State Highway 24, 1.3 miles west of Lockesburg.

Drainage area.--0.64 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 36 cfs and by culvert measurements at 177 cfs, 385 cfs, and 552 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	June 12, 1963	4.73	130	1966	Apr. 30, 1966	4.83	135
1964	Apr. 23, 1964	7.27	385	1967	Apr. 25, 1967	4.21	83
1965	Mar. 29, 1965	5.30	177	1968	May 17, 1968	8.44	552
				1969	May 7, 1969	6.08	268

3410. Saline River near Dierks, Ark.

Location.--Lat 34°05'45", long 94°05'04", in NW¼SW¼ sec.3, T.8 S., R.29 W., near left bank on downstream side of bridge on U.S. Highway 70, 3½ miles upstream from Holly Creek, 4 miles southwest of Dierks, and at mile 50.7.

Drainage area.--124 sq mi.

Gage.--Nonrecording prior to Aug. 10, 1940; recording thereafter. Prior to Aug. 31, 1951, at site 100 ft upstream at present datum. Datum of gage is 353.09 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 cfs.

Bankfull stage.--15 ft.

Remarks.--Records for the period 1938-50 computed by Corps of Engineers and reviewed by Geological Survey. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	1920	a21.9	42,000	1943	Dec. 27, 1942	12.04	3,940
1939	Apr. 16, 1939	17.10	12,000	1944	Mar. 16, 1944	14.38	6,280
	May 19, 1939	14.50	6,400		Apr. 10, 1944	14.34	6,150
					May 1, 1944	16.68	10,800
1940	Apr. 29, 1940	15.20	7,350				
	May 18, 1940	17.00	11,700	1945	Feb. 21, 1945	15.35	7,730
	July 2, 1940	14.70	6,670		Feb. 27, 1945	15.72	8,330
	July 21, 1940	13.85	5,500		Mar. 30, 1945	19.93	31,200
1941	Nov. 23, 1940	17.94	15,200	1946	Jan. 8, 1946	14.93	7,880
	July 14, 1941	18.75	20,100		Feb. 5, 1946	14.56	7,470
					Apr. 30, 1946	16.23	10,100
1942	Apr. 8, 1942	17.07	12,000		May 25, 1946	16.43	10,600
	Sept. 9, 1942	13.50	5,260				

Peak stages and discharges of Saline River near Dierks, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	May 17, 1947	13.97	5,830	1957	Mar. 17, 1957	14.25	6,490
	Aug. 28, 1947	15.00	7,160		Apr. 3, 1957	13.60	5,820
					Apr. 25, 1957	13.66	5,920
1948	Mar. 1, 1948	13.21	5,050		Apr. 27, 1957	13.38	5,620
					May 26, 1957	13.62	6,370
1949	Jan. 24, 1949	16.65	9,800				
	May 1, 1949	13.27	5,140	1958	Nov. 13, 1957	15.80	9,140
	June 15, 1949	13.21	5,050		Apr. 27, 1958	13.84	6,030
					May 1, 1958	14.70	7,160
1950	Jan. 10, 1950	14.03	5,830		May 3, 1958	13.30	5,820
	Jan. 13, 1950	13.83	5,620				
	Feb. 12, 1950	14.82	6,860	1959	Feb. 14, 1959	15.12	7,770
	May 2, 1950	13.72	5,520				
	May 6, 1950	13.79	5,620	1960	Dec. 16, 1959	14.36	6,740
	Sept. 16, 1950	15.32	7,610	1961	Dec. 6, 1960	14.52	6,870
	Sept. 20, 1950	14.30	6,180		Dec. 10, 1960	13.80	6,030
					Mar. 27, 1961	14.33	6,610
1951	Jan. 14, 1951	13.83	5,630		May 6, 1961	22.50	52,000
	July 1, 1951	13.08	5,090		July 23, 1961	17.46	13,400
1952	Mar. 21, 1952	13.50	5,720	1962	Nov. 22, 1961	12.88	5,110
	Apr. 12, 1952	14.90	7,520				
	Apr. 22, 1952	16.54	11,000	1963	Mar. 11, 1963	10.51	2,760
1953	Nov. 25, 1952	15.62	8,720	1964	Mar. 9, 1964	14.10	6,940
	Dec. 4, 1952	15.90	9,360		Apr. 22, 1964	12.69	5,170
	Apr. 6, 1953	14.07	6,330		Apr. 24, 1964	17.00	12,100
	Apr. 24, 1953	13.64	5,860				
	Apr. 29, 1953	16.78	11,500	1965	Jan. 9, 1965	12.56	4,840
	May 11, 1953	18.56	16,500				
	July 21, 1953	14.02	6,250	1966	Apr. 26, 1966	15.08	8,300
					Apr. 30, 1966	14.68	7,660
1954	May 2, 1954	11.15	3,640		Aug. 14, 1966	16.53	10,800
1955	Oct. 1, 1954	13.32	5,320	1967	May 1, 1967	16.30	10,600
	Oct. 12, 1954	13.50	5,720		May 6, 1967	17.22	12,600
	Mar. 20, 1955	16.82	11,600				
	July 17, 1955	13.76	5,920	1968	Mar. 20, 1968	13.45	6,040
	Sept. 23, 1955	17.23	12,600		May 9, 1968	12.89	5,380
					May 13, 1968	22.95	59,200
1956	Apr. 30, 1956	17.71	14,000		May 17, 1968	13.24	5,790

a Annual peak only.

3411. Rock Creek near Dierks, Ark.

Location.--Lat 34°06'46", long 94°02'25", in SW¼NE¼ sec.36, T.7 S., R.29 W., on left bank 130 ft upstream from bridge on U.S. Highway 70, 0.8 mile upstream from mouth, and 1.4 miles southwest of Dierks.

Drainage area.--9.48 sq mi.

Gage.--Crest-stage gage. Prior to June 29, 1969, at datum 10.0 ft lower. Gage heights adjusted to present datum.

State-discharge relation.--Defined by current-meter measurements below 2,200 cfs and by contracted-opening and flow-over-road measurement at 9,390 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Rock Creek near Dierks, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	July 23, 1961	12.6	9,390	1966	Apr. 25, 1966	7.53	2,100
				1967	May 1, 1967	9.25	3,700
1963	Oct. 14, 1962	3.7	323	1968	May 13, 1968	8.58	3,050
1964	Apr. 23, 1964	7.06	1,750	1969	Jan. 29, 1969	6.10	1,180
1965	June 14, 1965	6.99	1,720				

3412. Saline River near Lockesburg, Ark.

Location.--Lat 33°57'43", long 94°03'40", in NW¼SE¼ sec.23, T.9 S., R.29 W., 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.--260 sq mi.

Gage.--Recording. Datum of gage is 300.00 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 23,000 cfs and by contracted-opening measurement at 64,700 cfs.

Bankfull stage.--14 ft.

Remarks.--Base for partial-duration series, 5,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	Mar. 10, 1964	15.50	5,840	1967	May 6, 1967	16.97	15,600
	Apr. 23, 1964	16.93	15,500				
				1968	Mar. 12, 1968	15.93	7,970
1965	Feb. 10, 1965	15.56	6,040		Mar. 21, 1968	15.73	6,840
					May 11, 1968	15.95	8,090
1966	Apr. 26, 1966	16.39	11,200		May 14, 1968	20.86	64,700
	May 1, 1966	16.49	12,000		May 17, 1968	16.74	13,800
					May 26, 1968	15.49	5,800
1967	May 1, 1967	16.81	14,400		June 2, 1968	15.98	8,270

3415. Red River at Fulton, Ark.

Location.--Lat 33°37', long 93°49', in NE¼ sec.20, T.13 S., R.26 W., on downstream side of bridge on U.S. Highway 67 at Fulton, 0.3 mile downstream from Missouri-Pacific Railroad Co. bridge, 2½ miles downstream from Little River, and at mile 463.0.

Drainage area.--52,380 sq mi, of which about 46,444 sq mi contributes directly to surface runoff.

Gage.--Nonrecording. Prior to Oct. 16, 1942, on railroad bridge 0.3 mile upstream at same datum. Datum of gage is 224.94 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements. Considerable shifting occurs.

Bankfull stage.--28 ft.

Remarks.--Some regulation since July 1942 by Lake Texoma, 263 miles upstream (capacity, 5,392,900 acre-ft), and by Millwood Reservoir on Little River since August 1966 (capacity, 1,854,900 acre-ft). Discharges for October 1937 to September 1942 and since January 1946 are published by Mississippi River Commission. Discharges for this station are comparable to those for station at Garland.

Gage-height records from publications of U.S. Weather Bureau and Mississippi River Commission. Discharge records since 1949 furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges of Red River at Fulton, Ark.

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1876	July 17, 1976	35.8	----------	1929	May 23, 1929	31.1	----------
				1930	May 22, 1930	32.5	----------
1886	Apr. 21, 1886	20.9	----------				
1887	Dec. 12, 1987	27.5	----------	1931	Feb.17,27,1931	18.5	
1888	May 7, 1888	31.8	----------	1932	Jan.28,29,1932	31.6	----------
1890	May 3, 1890	34.0	----------	1933	May 30, 1933	24.4	----------
				1934	Mar. 5, 1934	21.3	----------
1891	Apr.27-28,1891	30.3	----------	1935	June 24, 1935	34.8	----------
1892	May 23-24,1892	34.8	----------				
1893	Mar. 13, 1893	26.8	----------	1936	Oct. 2, 1936	23.7	----------
1894	Mar. 24, 1894	32.9	----------	1937	Jan. 17, 1937	22.4	----------
1895	July 18, 1895	31.4	----------	1938	Feb. 24, 1938	36.4	----------
				1939	Apr.20,21,1939	24.0	----------
1896	Feb. 7, 1896	a20.5	----------	1940	May 31, 1940	24.6	----------
1897	Mar. 23, 1897	28.6	----------				
1898	May 11, 1898	27.9	----------	1941	June 17, 1941	29.6	----------
1899	Nov. 28, 1899	26.0	----------	1942	May 2, 1942	33.3	----------
1900	Nov. 4, 1900	23.0	----------	1943	May 17, 1943	26.0	----------
				1944	May 5, 1944	28.2	----------
1901	May 25, 1901	27.7	----------	1945	Apr. 2, 1945	37.4	----------
1902	Dec. 1, 1902	32.2	----------				
1903	Mar. 14, 1903	31.2	----------	1946	Dec. 17, 1946	27.34	----------
1904	June 13-14,1904	31.6	----------	1947	May 24, 1947	25.58	----------
1905	June 1-3, 1905	31.5	----------	1948	May 14, 1948	23.85	----------
				1949	Jan. 30, 1949	32.03	----------
1906	May 10, 1906	31.2	----------				
1907	June 4, 1907	31.4	----------	Water year			
1908	June 2, 1908	34.1	----------				
1909	June 21, 1909	20.6	----------				
1910	Apr. 19, 1910	22.6	----------	1950	Feb. 16, 1950	28.24	136,000
1911	Apr. 21, 1911	24.1	----------	1951	June 19, 1951	26.16	123,000
1912	Apr. 6, 1912	30.9	----------	1952	Apr. 26, 1952	28.22	150,000
1913	Dec. 12, 1913	33.2	----------	1953	May 17, 1953	b27.01	127,000
1914	May 9, 1914	31.5	----------	1954	May 14, 1954	21.65	86,000
1915	May 2, 1915	34.1	----------	1955	Mar. 24, 1955	20.54	83,100
1916	Feb. 4, 1916	32.2	----------	1956	Feb. 21, 1956	18.03	59,500
1917	May 1, 1917	19.9	----------	1957	June 9, 1957	31.12	228,000
1918	Apr. 21, 1918	28.1	----------	1958	May 6, 1958	29.47	214,000
1919	Oct. 26, 1919	29.8	----------	1959	July 30, 1959	16.66	54,900
1920	May 18-19,1920	33.6	----------	1960	May 27, 1960	19.65	78,600
1921	Apr. 30, 1921	26.6	----------	1961	Apr. 2, 1961	c20.00	87,700
1922	Apr. 9, 1922	28.5	----------	1962	Nov. 27, 1961	17.88	74,200
1923	Dec. 19, 1923	31.4	----------	1963	Nov. 30, 1962	16.32	54,900
1924	May 1-2, 1924	26.2	----------	1964	Apr. 28, 1964	19.85	83,000
1925	May 2, 1925	23.1	----------	1965	Feb. 12, 1965	19.96	86,000
1926	Dec. 25, 1926	27.5	----------	1966	May 3, 1966	25.57	137,000
1927	Apr. 24, 1927	35.0	----------	1967	June 3, 1967	19.68	70,500
1928	May 24, 1928	25.9	----------	1968	May 21, 1968	24.40	122,000

a Maximum crest stage; maximum stage of 21.8 ft observed Jan. 1, 1896, following crest of Dec. 30, 1895.
b Occurred on following day.
c Occurred Dec. 14, 1960.

3417. Caney Creek near Hope, Ark.

Location.--Lat 33°41'34", long 93°38'12", in SE¼NE¼ sec.24, T. 12 S., R.25 W., on right bank 115 ft upstream from bridge on State Highway 4, 0.1 mile southeast of junction of State Highways 4 and 73, 0.3 mile downstream from small tributary, and 3.1 miles northwest of Hope.

Drainage area.--12.9 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since September 1968.

Stage-discharge relation.--Defined by current-meter measurements below 910 cfs and by contracted-opening measurement at 5,410 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Apr. 28, 1963	10.51	1,500	1966	Apr. 30, 1966	12.80	5,410
1964	Mar. 4, 1964	11.03	2,020	1967	Apr. 26, 1967	11.56	2,750
1965	Feb. 11, 1965	10.30	1,330	1968	May 10, 1968	12.24	4,050
				1969	Jan. 30, 1969	11.35	2,450

3420. Red River at Garland, Ark.
(Published as "at Garland City" prior to 1935)

Location.--Lat 33°21', long 93°42', in SE¼ sec.17, T.16 S., R.25 W., on line between Miller and Lafayette Counties, at bridge on U.S. Highway 82 at Garland, at mile 424.0.

Drainage area.--52,630 sq mi, of which about 46,694 sq mi contributes directly to surface runoff.

Gage.--Nonrecording prior to Oct. 1, 1934, on railroad bridge 0.2 mile upstream at same datum; recording Oct. 1, 1934, to Sept. 30, 1949, at described site. Datum of gage is 203.08 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements. Considerable shifting occurs.

Bankfull stage.--30 ft.

Remarks.--Records prior to 1934 furnished by Mississippi River Commission or Corps of Engineers. Some regulation since July 1942 by Lake Texoma, 326 miles upstream. Base for partial-duration series, 75,000 cfs. Discharges for this station are comparable to those at Fulton. Only annual peaks are shown prior to 1935.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1885	----------	28.3	----------	1896	Dec. 31, 1895	24.6	----------
1890	Apr. 30, 1890	28.2	----------	1897	Mar. 24, 1897	27.6	----------
1891	Apr. 28, 1891	27.6	----------	1898	May 11, 1898	27.7	----------
1892	May 24-25,1892	28.4	----------	1899	July 26, 1899	24.6	----------
1893	Dec. 18, 1892	27.3	----------	1904	June 11, 1904	28.9	----------
1894	Mar. 24, 1894	28.5	----------	1905	May 31 - June 2	29.0	----------
1895	July 19, 1895	28.4	----------	1906	May 10, 1906	29.5	----------

Peak stages and discharges of Red River at Garland, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	June 5, 1907	30.5	----------	1934	Mar. 5, 1934	20.8	56,000
1908	Apr. 15, 1908	31.1	----------	1935	May 12, 1935	32.6	132,000
					May 27, 1935	33.6	138,000
1909	June 21, 1909	22.3	----------		June 25, 1935	34.37	143,000
1910	Apr. 20, 1910	24.8	----------	1936	Dec. 11, 1935	22.90	73,700
1911	Apr. 21, 1911	26.0	----------	1937	Oct. 2, 1936	22.95	74,200
1912	Apr. 6, 1912	30.9	----------	1938	Jan. 28, 1938	31.25	160,000
					Feb. 25, 1938	a35.97	327,000
1913	May 25, 1913	25.8	----------		Apr. 4, 1938	29.65	139,000
1914	Dec. 12, 1913	31.7	----------	1939	Apr. 20, 1939	22.9	85,000
1915	May 1, 1915	34.0	----------	1940	May 30, 1940	b22.91	86,900
1916	Feb. 4, 1916	30.3	----------	1941	Apr. 27, 1941	25.66	119,000
					May 10, 1941	25.56	99,000
1917	May 2, 1917	21.3	----------		June 17, 1941	b27.11	130,000
1918	Apr. 22, 1918	30.4	----------	1942	Oct. 9, 1941	b23.70	93,400
					Nov. 6, 1941	b24.80	110,000
1920	May 17, 1920	34.7	----------		Apr. 15, 1942	b31.10	175,000
					May 2, 1942	32.45	185,000
1921	Apr. 30, 1921	27.5	----------				
				1943	May 17, 1943	b24.25	112,000
1922	May 16-17,1922	29.6	----------		June 1, 1943	b20.99	76,000
1923	June 15, 1923	26.5	----------	1944	May 5, 1944	b25.58	122,000
1924	Dec.21-22,1923	30.8	----------	1945	Mar. 3, 1945	b28.72	150,000
					Mar. 25, 1945	26.73	118,000
1925	May 2, 1925	23.5	----------		Apr. 3, 1945	36.87	280,000
					June 23, 1945	27.10	130,000
1926	Aug. 22, 1926	23.4	----------				
				1946	Oct. 11, 1945	21.50	80,300
1927	Apr. 23, 1927	35.4	----------		Feb. 21, 1946	22.20	93,600
					June 3, 1946	20.98	79,600
1928	May 24, 1928	25.8	78,900				
				1947	Nov. 10, 1946	23.86	119,000
1929	May 24, 1929	30.2	105,000		Dec. 18, 1946	24.26	123,000
					May 3, 1947	21.17	85,500
1930	May 22-23,1930	32.5	119,000		May 25, 1947	22.50	97,000
1931	Dec. 10, 1930	21.85	57,100	1948	Mar. 4, 1948	19.77	78,400
					May 14, 1948	20.75	88,000
1932	Jan.28-30,1932	31.5	131,000				
				1949	Jan. 31, 1949	30.18	185,000
1933	May 30, 1933	24.42	80,000		Feb. 27, 1949	20.66	84,700
					June 16, 1949	19.35	76,400

a Occurred Feb. 24, 1938, just prior to levee break.
b Occurred on following day.

3423.5. McKinney Bayou near Texarkana, Ark.
(Published as "east of Texarkana" prior to 1962)

Location.--Lat 33°24'34", long 93°48'17", in NE¼ sec.32, T.15 S., R.26 W., 1,500 ft downstream from bridge on U.S. Highway 82, 1.3 miles downstream from Red Chute, 6.7 miles northwest of Garland, 13.6 miles east of Texarkana, and at mile 23.3.

Drainage area.--169 sq mi.

Gage.--Nonrecording prior to June 14, 1950; recording thereafter. At bridge on U.S. Highway 82 prior to May 25, 1961, at datum 215.05 ft above mean sea level. Datum of present gage is mean sea level.

Stage-discharge relation.--Not adequately defined.

Bankfull stage.--18 ft.

Remarks.--Gage-height records furnished by Corps of Engineers. Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	July 2, 1940	22.0	----------	1954	May 14, 1954	18.28	----------
				1955	Mar. 22, 1955	19.0	----------
1941	Apr. 25, 1941	a19.8	----------				
1942	Apr. 10, 1942	a20.3	----------	1956	May 4, 1956	16.98	----------
1943	Apr. 19, 1943	a16.0	----------	1957	Apr. 5, 1957	20.25	----------
1944	May 3-4, 1944	a20.3	----------	1958	Apr. 27, 1958	20.72	----------
1945	Apr. 2, 1945	21.3	----------	1959	Feb. 16, 1959	18.7	----------
				1960	Jan. 19, 1960	17.9	----------
1946	May 20, 1946	a20.4	----------				
1947	May 15, 1947	a16.6	----------	1961	Jan. 8-9, 1961	13.4	----------
1948	Mar. 23, 1948	a19.5	----------	1962	Feb. 27, 1962	224.79	----------
1949	Jan. 28, 1949	a19.8	----------	1963	Apr. 29, 1963	222.54	----------
1950	May 3-4, 1950	a20.45	----------	1964	Apr. 25, 1964	227.98	----------
				1965	Feb. 12, 1965	228.85	----------
1951	Feb. 17, 1951	17.18	----------				
1952	Apr. 13, 1952	19.37	----------	1966	Apr. 26, 1966	232.12	----------
1953	May 19, 1953	19.96	----------				

a 8 a.m. readings.

3443.2. Mill Creek tributary near Fouke, Ark.

Location.--Lat 33°17'53", long 93°54'58", in NW¼NE¼ sec.8, T.17 S., R.27 W., on left bank 15 ft upstream from culvert on U.S. Highway 71, 0.7 mile upstream from mouth, and 3.0 miles northwest of Fouke.

Drainage area.--1.43 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 41 cfs and by culvert measurement at 399 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Sept. 12, 1961	6.86	148	1966	Apr. 25, 1966	8.81	380
1962	Feb. 26, 1962	8.30	308	1967	May 4, 1967	7.24	185
1963	July 21, 1963	7.49	210	1968	May 10, 1968	8.59	353
1964	Apr. 24, 1964	8.92	399	1969	Apr. 13, 1969	7.75	242
1965	Jan. 8, 1965	7.73	240				

3443.5. Red River at Springbank, Ark.

Location.--Lat 33°05'29", long 93°51'38", in NW¼ sec.24, T.19 S., R.27 W., at ferry landing on State Highway 160 at Springbank, 0.5 mile downstream from Sulphur River, 2.6 miles east of Doddridge, and at mile 377.8.

Drainage area.--56,903 sq mi, of which about 50,967 sq mi contributes directly to surface runoff.

Gage.--Nonrecording. Datum of gage is 172.39 ft above mean sea level, datum of 1929. Prior to Jan. 1, 1919, at datum 8 ft higher. Peaks for this report referred to present datum.

Stage-discharge relation.--Not defined.

Bankfull stage.--37 ft.

Historical data.--Data for floods of 1866, 1879, 1892, and 1908, authority, Corps of Engineers (Red River Report, House Document 387).

Remarks.--Records furnished by U.S. Weather Bureau November 1904 to September 1905 and January 1909 to December 1943, and by Corps of Engineers since April 1945. Only annual peak stages are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1866	----------	41.7	----------	1936	Oct. 3, 1936	23.4	----------
				1937	Jan. 29, 1937	23.7	----------
1879	----------	39.1	----------	1938	Feb. 27, 1938	38.0	----------
				1939	Apr. 21, 1939	24.4	----------
1892	----------	43.7	----------				
				1941	May 11, 1941	29.8	----------
1905	June 1-3, 1905	40.8	----------	1942	May 4, 1942	34.7	----------
				1943	May 18, 1943	24.1	----------
1908	----------	43.0	----------	1945	Apr. 6, 1945	42.0	----------
1909	June 22, 1909	26.8	----------				
1910	Apr. 20, 1910	29.8	----------	1946	Feb. 22, 1946	26.3	----------
				1947	May 26, 1947	24.9	----------
1911	Apr. 24, 1911	29.9	----------	1948	Mar. 5-6, 1948	23.0	----------
1912	Apr. 13, 1912	36.6	----------	1949	Feb. 1, 1949	30.9	----------
1913	Dec. 18, 1913	36.8	----------	1950	Feb. 17, 1950	30.1	----------
1914	Apr. 8-9, 1914	39.5	----------				
1915	May 6, 1915	41.5	----------	1951	June 19-20,1951	26.4	----------
				1952	Apr. 27, 1952	29.0	----------
1916	Feb. 7, 1916	39.4	----------	1953	May 19, 1953	28.83	----------
1917	May 3, 1917	23.7	----------	1954	May 15, 1954	22.7	----------
1918	Apr. 24, 1918	33.3	----------	1955	May 25, 1955	22.3	----------
1919	Oct.29-30,1919	37.5	----------				
1920	May 23, 1920	41.4	----------	1956	Feb. 21, 1956	20.4	----------
				1957	May 2-4, 1957	31.6	----------
1921	May 1, 1921	29.4	----------	1958	May 8, 1958	26.5	----------
1922	May 4, 1922	32.7	----------				
1923	Dec.24-27,1923	34.0	----------	Water year			
1924	May 3, 1924	a25.9	----------				
1925	May 2, 1925	26.5	----------				
				1959	Mar.10-11,1959	15.5	----------
1926	Dec. 26, 1926	28.1	----------	1960	(b)	19.0	----------
1927	Apr.27-28,1927	40.2	----------				
1928	Apr. 28, 1928	26.9	----------	1961	Dec.14-15,1960	20.0	----------
1929	May 25, 1929	31.6	----------	1962	Jan. 30, 1962	17.4	----------
1930	May 24, 1930	37.7	----------	1963	May 2, 1963	16.6	----------
				1964	Apr. 28, 1964	19.7	----------
1931	Mar. 11, 1931	21.8	----------	1965	Feb. 13, 1965	20.7	----------
1932	Jan. 31, 1932	33.2	----------				
1933	May 31, 1933	24.4	----------	1966	May 4, 1966	24.1	----------
1934	Apr.10-11,1934	21.7	----------	1967	June 5, 1967	19.3	----------
1935	June 27, 1935	36.3	----------	1968	May 22, 1968	22.4	----------

a Maximum peak stage. Maximum stage of 28.8 ft on Jan. 1, 1924, following a crest of Dec. 24-27, 1923.
b Dec. 20, 1959, and May 28, 1960.

3444. Red River near Hosston, La.

Location.--Lat 32°53'35", long 93°49'20", in SW¼ sec.16, T.22 N., R.14 W., on downstream side of bridge on Louisiana State Highway 2, 1.8 miles downstream from Dry Bayou, and 3.2 miles east of Hosston.

Drainage area.--57,041 sq mi, of which about 51,105 sq mi contributes directly to surface runoff.

Gage.--Recording prior to Feb. 20, 1962; nonrecording thereafter. Datum of gage is 161.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Some regulation by Lake Texoma (capacity, 5,392,900 acre-ft), by Texarkana Reservoir on Sulphur River (capacity, 2,654,300 acre-ft), and since August 1966 by Millwood Reservoir on Little River (capacity, 1,854,900 acre-ft). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 7, 1958	27.89	214,000	1964	Apr. 29, 1964	18.25	81,000
1959	July 31, 1959	15.05	47,000	1965	Feb. 13, 1965	18.70	86,000
1960	Dec. 20, 1959	17.63	75,000	1966	May 4, 1966	24.65	148,000
1961	Apr. 3, 1961	18.65	95,000	1967	June 4, 1967	18.20	74,000
1962	Nov. 28, 1961	17.12	70,000	1968	May 22, 1968	22.62	137,000
1963	Dec. 1, 1962	15.30	59,100				

3468. East Fork Kelly Bayou tributary at Kiblah, Ark.

Location.--Lat 33°02'57", long 93°53'44", in NE¼NW¼ sec.3, T.20 S., R.27 W., on right bank 10 ft upstream from culvert on U.S. Highway 71, 0.1 mile south of Kiblah, and 0.2 mile upstream from small lake.

Drainage area.--0.13 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since September 1968.

Stage-discharge relation.--Defined by current-meter measurements below 14 cfs and by culvert measurements at 26 cfs and 123 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	July 14, 1961	6.33	11	1966	Apr. 25, 1966	9.46	123
1962	Nov. 22, 1961	6.82	26	1967	May 21, 1967	5.77	2
1963	July 21, 1963	6.97	32	1968	Dec. 9, 1967	5.94	4
1964	Apr. 24, 1964	6.54	17	1969	Mar. 18, 1969	6.42	14
1965	Feb. 11, 1965	6.29	10				

3470. Kelly Bayou near Hosston, La.

Location.--Lat 32°51'25", long 93°52'20", in SW¼NE¼ sec.36, T.22 N., R.15 W., near center of span on downstream side of bridge on U.S. Highway 71, 0.4 mile downstream from Willow Lake lateral, 2.0 miles south of Hosston, and at mile 2.7.

Drainage area.--116 sq mi.

Gage.--Nonrecording prior to Feb. 2, 1953; recording thereafter. Datum of gage is 165.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1941. Recording gage for station on Black Bayou near Gilliam used as an auxiliary gage for this station.

Stage-discharge relation.--Defined by current-meter measurements; affected by fall.

Remarks.--Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Dec. 29, 1944	14.73	1,740	1953	Mar. 12, 1953	13.55	1,520
	Jan. 18, 1945	11.05	937		Apr. 24, 1953	10.24	837
	Feb. 20, 1945	9.85	758		Apr. 29, 1953	11.69	955
	Feb. 28, 1945	10.62	892		May 15, 1953	a14.53	1,340
	Mar. 3, 1945	15.55	1,800				
	Apr. 1, 1945	a16.20	1,600	1954	Jan. 15, 1954	11.31	1,040
	Apr. 24, 1945	10.32	804		May 12, 1954	9.50	714
1946	Nov. 12, 1945	10.24	814	1955	Mar. 21, 1955	11.07	1,050
	Jan. 9, 1946	a13.29	1,270		May 20, 1955	10.15	870
	Feb. 10, 1946	10.76	815		May 24, 1955	13.44	1,520
	Mar. 7, 1946	13.46	1,460				
	Mar. 15, 1946	10.21	768	1956	Feb. 2, 1956	11.86	1,200
	May 13, 1946	14.68	1,730				
	May 25, 1946	14.31	1,550	1957	Feb. 1, 1957	10.25	880
	May 31, 1946	a14.61	1,470		Apr. 4, 1957	11.64	1,040
					Apr. 29, 1957	17.18	1,720
1947	Nov. 5, 1946	11.18	966		June 5, 1957	12.62	1,070
	Nov. 11, 1946	14.40	1,660				
	Nov. 26, 1946	10.40	805	1958	Nov. 8, 1957	11.58	916
	Mar. 13, 1947	11.60	1,050		Nov. 15, 1957	a13.10	970
	Mar. 23, 1947	12.93	1,330		Jan. 22, 1958	11.96	921
	Apr. 11, 1947	10.33	786		Apr. 28, 1958	a22.72	4,460
	May 17, 1947	11.94	1,120		July 7, 1958	11.40	962
1948	Feb. 12, 1948	12.70	1,020	1959	Feb. 14, 1959	12.15	1,070
	Mar. 2, 1948	12.33	962		May 25, 1959	10.59	820
	Mar. 23, 1948	10.82	752				
	May 11, 1948	11.48	850	1960	Dec. 16, 1959	11.46	977
	May 26, 1948	12.57	1,000		Jan. 14, 1960	11.58	1,010
					Mar. 2, 1960	13.42	1,560
1949	Jan. 18, 1949	11.41	836				
	Jan. 27, 1949	10.97	780	1961	Dec. 8, 1960	14.44	1,510
	Apr. 26, 1949	11.30	822		June 25, 1961	11.34	853
					Sept. 13, 1961	10.77	860
1950	Jan. 16, 1950	13.73	967				
	Feb. 13, 1950	14.47	1,110	1962	Oct. 1, 1961	12.25	1,200
	May 2, 1950	14.16	1,100		Nov. 22, 1961	13.82	1,600
					Dec. 17, 1961	13.56	1,290
1951	Jan. 14, 1951	10.01	513		Jan. 14, 1962	13.38	1,500
					Jan. 26, 1962	13.01	1,230
1952	Feb. 20, 1952	10.29	809		Feb. 23, 1962	a12.38	1,250
	Apr. 13, 1952	11.34	994				

Peak stages and discharges of Kelly Bayou near Hosston, La.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Apr. 28, 1963	12.48	1,280	1966	Apr. 27, 1966	20.94	2,320
	July 16, 1963	11.07	925				
				1967	May 4, 1967	10.07	720
1964	Apr. 22, 1964	11.63	1,050		May 31, 1967	11.70	1,080
	Apr. 24, 1964	17.22	2,780				
				1968	Jan. 10, 1968	12.23	1,020
1965	Dec. 3, 1964	12.91	1,380		June 26, 1968	9.87	700
	Feb. 12, 1965	13.97	1,430		Sept. 15, 1968	12.23	1,210
	June 14, 1965	10.11	725				

a Occurred on different date.

3486.3. Barlow Branch tributary near McNeil, Ark.

Location.--Lat 33°18'43", long 93°13'52", in SW¼SE¼ sec.25, T.16 S., R.21 W., on right bank 10 ft upstream from culvert on U.S. Highway 79, 0.5 mile upstream from mouth, and 2.5 miles south of McNeil.

Drainage area.--0.05 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 6 cfs and by culvert measurements at 41 cfs, 58 cfs, and 90 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	July 16, 1961	7.20	58	1966	Apr. 30, 1966	5.88	21
1962	Nov. 22, 1961	6.63	41	1967	May 4, 1967	5.42	11
1963	Oct. 8, 1962	5.4	11	1968	May 17, 1968	7.41	64
1964	Apr. 24, 1964	8.17	90	1969	Mar. 18, 1969	5.52	13
1965	Jan. 9, 1965	6.13	28				

3487. Bayou Dorcheat near Springhill, La.

Location.--Lat 32°59'40", long 93°23'45", in NE¼NE¼ sec.16, T.23 N., R.10 W., on downstream side of bridge on Louisiana State Highway 157, 0.4 mile downstream from Crooked Creek, 1.7 miles downstream from Arkansas-Louisiana State line, and 4 miles southeast of Springhill.

Drainage area.--605 sq mi.

Gage.--Recording. Datum of gage is 173.91 ft above mean sea level datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--7.5 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Bayou Dorcheat near Springhill, La.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 28, 1958	22.79	36,400	1964	Apr. 26, 1964	16.60	10,700
1959	Feb. 17, 1959	14.04	3,880	1965	Feb. 13, 1965	15.66	7,920
1960	Mar. 6, 1960	13.85	3,520				
				1966	May 3, 1966	17.27	12,700
1961	July 19, 1961	14.94	5,900	1967	May 12, 1967	11.59	1,100
1962	Dec. 19, 1961	15.18	6,600	1968	May 20, 1968	15.17	6,520
1963	July 15, 1963	13.19	2,550				

3494.3. Bodcau Creek at Stamps, Ark.

Location.--Lat 33°22'00", long 93°31'20", in NW¼ sec.7, T.16 S., R.23 W., 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.--234 sq mi.

Gage.--Nonrecording prior to June 3, 1959; recording thereafter. Datum of gage is 234.36 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs.

Bankfull stage.--14 ft.

Historical data.--Flood in 1945 is greatest known since at least 1890.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	1927	a17.5	----------	1961	July 18, 1961	13.70	7,620
				1962	Feb. 25, 1962	12.26	5,370
1930	1930	17.3	----------	1963	May 3, 1963	8.01	1,320
				1964	Apr. 25, 1964	10.93	3,120
1945	March 1945	18.9	----------	1965	Feb. 13, 1965	12.62	5,970
1958	Apr. 27, 1958	15.8	15,000	1966	Apr. 27, 1966	15.31	11,600
1959	Feb. 18, 1959	9.78	1,800	1967	May 7, 1967	9.05	1,400
1960	Dec. 20, 1959	9.75	1,760	1968	May 13, 1968	11.65	3,930

a At railroad bridge 1 mile downstream.

3495. Bodcau Bayou near Sarepta, La.
(Published as "Bayou Bodcau" prior to October 1958)

Location.--Lat 32°54'15", long 93°28'55", in NW¼ sec.15, T.22 N., R.11 W., on left bank on downstream side of bridge on Louisiana State Highway 2, 2 miles west of Sarepta, and 9.5 miles upstream from Caney Creek.

Drainage area.--546 sq mi.

Gage.--Recording. Datum of gage is 173.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements. Rate of change in stage used as a factor.

Bankfull stage.--17 ft.

Historical data.--Flood in 1905 may have reached a stage of 27 ft, from information by local residents. Flood of May 22, 23, 1930, exceeded 25 ft.

Remarks.--Some regulation since 1960 by Lake Erling (usable capacity, 79,000 acre-ft), 15 miles upstream. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges of Bodcau Bayou near Sarepta, La.

Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 5, 1939	17.49	3,930
	Mar. 1, 1939	18.47	5,050
1940	July 6, 1940	22.16	12,600
1941	Dec. 29, 1940	18.50	5,450
	Mar. 10, 1941	17.36	4,140
	May 7, 1941	19.88	7,470
1942	Apr. 14, 1942	20.10	7,830
	May 1, 1942	20.82	9,170
	May 21, 1942	17.52	4,250
1943	Apr. 22, 1943	16.08	2,830
1944	Feb. 27, 1944	18.11	5,160
	Mar. 30, 1944	a18.46	5,810
	May 7, 1944	20.28	8,170
1945	Jan. 3, 1945	18.61	5,580
	Mar. 4, 1945	a19.82	7,820
	Apr. 3, 1945	a19.00	6,680
	June 19, 1945	17.08	3,880
1946	Jan. 11, 1946	19.87	7,990
	Feb. 11, 1946	17.32	3,900
	Mar. 17, 1946	16.85	3,480
	May 15, 1946	18.25	5,420
	May 21, 1946	a18.61	5,760
1947	May 19, 1947	16.16	2,830
1948	Feb. 15, 1948	17.71	4,360
	Mar. 29, 1948	18.00	4,740
1949	Jan. 29, 1949	18.70	5,700
	Feb. 2, 1949	18.34	5,140
1950	Jan. 16, 1950	20.36	8,340
	Feb. 14, 1950	19.66	7,170
	Feb. 18, 1950	19.72	7,170
	Mar. 20, 1950	17.07	3,680
	May 3, 1950	18.80	5,840
1951	Feb. 20, 1951	15.67	2,480
1952	Mar. 14, 1952	17.17	3,730
1953	Mar. 14, 1953	16.49	3,150
	Apr. 30, 1953	a19.05	6,020
	May 18, 1953	a19.04	5,950
1954	May 16, 1954	13.46	1,540
1955	Apr. 21, 1955	15.28	2,340
1956	Feb. 11, 1956	14.52	1,750
1957	Apr. 10, 1957	18.45	5,150
	Apr. 28, 1957	a20.49	8,890
	May 3, 1957	19.09	6,060
1958	Nov. 20, 1957	16.95	3,440
	May 2, 1958	25.14	18,600
1959	Feb. 16, 1959	15.09	2,040
1960	Mar. 5, 1960	16.73	3,170
1961	July 24, 1961	16.16	2,750
1962	Dec. 19, 1961	18.57	5,290
	Jan. 29, 1962	17.42	4,000
	Mar. 2, 1962	16.26	3,030
1963	July 16, 1963	a16.22	3,070
1964	Apr. 28, 1964	18.60	5,230
1965	Feb. 19, 1965	17.28	3,930
1966	May 2, 1966	22.39	10,900
1967	Feb.20,22,1967	9.52	727
1968	May 20, 1968	17.73	4,270

a Occurred on different date.

3558. Lewis Creek tributary near Mena, Ark.

Location.--Lat 34°37'15", long 94°12'15", on east line of NE¼SW¼ sec.33, T.1 S., R.30 W., on right bank 22 ft upstream from culvert on U.S. Highway 71, 0.3 mile upstream from mouth, 2.5 miles north of junction of U.S. Highway 71 and State Highway 88, and 3.1 miles northeast of Mena.

Drainage area.--0.64 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since June 1969.

Stage-discharge relation.--Defined by current-meter measurement at 42 cfs and by culvert measurements at 124 cfs, 177 cfs, and 235 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Lewis Creek tributary near Mena, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	July 23, 1961	a3.00	120	1966	May 18, 1966	3.44	160
1962	Nov. 22, 1961	2.5	84	1967	July 6, 1967	3.86	225
1963	June 16, 1963	2.2	69	1968	May 13, 1968	3.94	235
1964	Mar. 9, 1964	3.04	124	1969	Nov. 29, 1968	2.91	118
1965	Nov. 18, 1964	3.02	122				

a Higher peak may have occurred before gage was installed.

3559. Big Fork tributary at Big Fork, Ark.

Location.--Lat 34°28'23", long 93°57'38", in SE¼NW¼ sec.23, T.3 S., R.28 W., on right bank 7 ft upstream from culvert on State Highway 8, 0.2 mile upstream from mouth, and 0.9 mile southeast of Big Fork.

Drainage area.--0.16 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 19 cfs and by culvert measurements at 29 cfs, 44 cfs, and 66 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	Mar. 9, 1964	---------	>29	1967	May 6, 1967	7.06	34
1965	Feb. 9, 1965	6.26	17	1968	May 13, 1968	8.21	66
1966	Apr. 25, 1966	7.45	44	1969	Jan. 29, 1969	7.23	39

> Greater than.

3560. Ouachita River near Mount Ida, Ark.

Location.--Lat 34°36'36", long 93°41'50", in SE¼SW¼ sec.32, T.1 S., R.25 W., 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.--410 sq mi.

Gage.--Nonrecording prior to Dec. 3, 1941, and Mar. 1, 1945, to Apr. 1, 1946; recording during rest of period. Prior to Nov. 3, 1949, at site 350 ft downstream at same datum. Datum of present gage is 655.14 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--22 ft.

Remarks.--Records prior to Oct. 1, 1949, furnished by Corps of Engineers. Base for partial-duration series, 11,000 cfs. Only annual peaks are shown prior to 1950.

Peak stages and discharges of Ouachita River near Mount Ida, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Apr. 28, 1942	18.68	20,500
1943	Apr. 18, 1943	8.84	4,890
1944	May 3, 1944	17.30	17,700
1945	Mar. 30, 1945	27.80	48,500
1946	Jan. 9, 1946	20.00	20,400
1947	Dec. 12, 1946	19.20	18,600
1948	Jan. 1, 1948	25.65	39,800
1949	Jan. 25, 1949	30.80	54,800
1950	Jan. 13, 1950	24.80	31,300
	Feb. 1, 1950	19.00	18,800
	Feb. 12, 1950	24.84	31,300
	May 2, 1950	15.41	12,100
	Sept. 16, 1950	16.61	14,200
1951	July 3, 1951	21.70	24,400
1952	Nov. 1, 1951	14.92	11,800
	Apr. 1, 1952	16.01	13,100
	Apr. 13, 1952	20.14	21,000
	Apr. 23, 1952	24.26	30,200
1953	Nov. 26, 1952	21.66	23,600
	Apr. 30, 1953	17.65	16,000
	May 13, 1953	20.46	21,800
	July 22, 1953	17.84	16,400
1954	May 3, 1954	23.48	28,400
1955	Mar. 21, 1955	14.40	10,500
1956	Feb. 2, 1956	15.62	12,400
	Feb. 18, 1956	17.46	15,800
1957	Jan. 22, 1957	15.35	12,100
	Apr. 4, 1957	20.83	22,500
	Apr. 27, 1957	20.40	21,600
1958	May 3, 1958	22.04	25,100
	June 26, 1958	14.57	11,400
1959	Nov. 15, 1958	16.22	13,800
	Nov. 17, 1958	23.02	27,300
1960	May 7, 1960	16.81	14,800
	May 21, 1960	32.18	57,300
	July 25, 1960	18.90	18,600
1961	Dec. 7, 1960	17.55	16,100
	Dec. 11, 1960	19.08	19,000
1962	Nov. 23, 1961	17.19	15,400
1963	Mar. 11, 1963	10.38	5,790
1964	Mar. 10, 1964	22.15	24,000
1965	Feb. 10, 1965	15.59	12,400
1966	Feb. 10, 1966	19.29	18,300
	Apr. 26, 1966	21.86	23,300
1967	May 7, 1967	18.45	16,900
1968	Mar. 12, 1968	15.23	11,800
	Mar. 21, 1968	22.93	27,100
	Apr. 4, 1968	14.75	11,100
	Apr. 23, 1968	15.24	11,900
	May 14, 1968	28.40	40,100

3565. South Fork Ouachita River at Mount Ida, Ark.

Location.--Lat 34°33'36", long 93°38'16", in NE¼NE¼ sec.23, T.2 S., R.25 W., 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.--64 sq mi.

Gage.--Recording. Datum of gage is 612.05 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 18,000 cfs.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges of South Fork Ouachita River at Mount Ida, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Dec. 11, 1949	8.15	3,120	1958	Nov. 13, 1957	9.78	5,090
	Jan. 10, 1950	8.83	3,860		Nov. 18, 1957	8.54	3,550
	Jan. 13, 1950	10.00	6,120		May 2, 1958	9.92	5,970
	Feb. 1, 1950	9.18	4,520				
	Feb. 12, 1950	10.59	7,540	1959	Nov. 15, 1958	8.77	5,000
	Sept. 16, 1950	9.71	5,000		Feb. 14, 1959	7.52	3,490
1951	Feb. 20, 1951	8.75	3,860	1960	Dec. 16, 1959	7.17	3,380
	July 2, 1951	9.80	5,200		May 6, 1960	6.94	3,070
	Sept. 27, 1951	8.45	3,040		May 20, 1960	13.69	17,900
					July 24, 1960	7.28	3,480
1952	Nov. 24, 1951	8.44	3,040				
	Jan. 2, 1952	9.05	3,750	1961	Dec. 6, 1960	7.16	3,370
	Mar. 10, 1952	11.44	7,600		Dec. 10, 1960	8.17	5,230
	Mar. 21, 1952	9.16	4,010		Feb. 18, 1961	6.86	3,050
	Apr. 1, 1952	12.61	10,500		May 6, 1961	9.21	5,950
	Apr. 12, 1952	9.92	4,960				
	Apr. 22, 1952	8.94	3,620	1962	Nov. 22, 1961	7.20	3,370
1953	Nov. 25, 1952	13.24	10,800	1963	May 11, 1963	5.82	2,040
	Dec. 4, 1952	9.50	4,160				
	Mar. 18, 1953	9.50	4,160	1964	May 9, 1964	12.40	13,000
	Apr. 29, 1953	8.68	3,220				
	May 12, 1953	12.02	8,380	1965	Feb. 9, 1965	8.48	4,240
					Mar. 1, 1965	7.80	3,430
1954	May 2, 1954	10.60	6,320		Sept. 22, 1965	9.03	4,930
1955	Mar. 20, 1955	8.36	2,920	1966	Jan. 2, 1966	7.72	3,330
					Feb. 9, 1966	9.09	5,080
1956	Jan. 29, 1956	9.23	3,780		Apr. 24, 1966	9.45	6,250
	Feb. 2, 1956	10.52	5,640				
	Feb. 17, 1956	9.47	4,160	1967	May 1, 1967	7.42	3,300
					May 6, 1967	8.74	5,020
1957	Jan. 22, 1957	8.77	3,890		May 31, 1967	8.54	4,740
	Mar. 17, 1957	9.03	4,130				
	Apr. 3, 1957	10.38	5,870	1968	Mar. 20, 1968	10.60	7,650
	Apr. 27, 1957	8.13	3,110		Apr. 22, 1968	7.70	3,480
					May 13, 1968	15.00	20,000

3567. Barnes Branch near Mount Ida, Ark.

Location.--Lat 34°33'57", long 93°37'03", in SE¼SE¼ sec.13, T.2 S., R.25 W., on right bank 35 ft upstream from culvert on State Highway 27, 0.3 mile upstream from mouth, and 1.1 miles northeast of Mount Ida.

Drainage area.--1.85 sq mi.

Gage.--Crest-stage gage. Datum of gage is 602.86 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 61 cfs and by culvert measurements at 654 cfs, 675 cfs, and 1,000 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Barnes Branch near Mount Ida, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	May 6, 1961	11.62	654	1966	Apr. 23, 1966	11.24	465
1962	Nov. 22, 1961	a9.61	175	1967	May 31, 1967	10.39	275
1963	June 16, 1963	9.1	83	1968	May 13, 1968	12.22	760
1964	Mar. 9, 1964	10.73	350	1969	July 26, 1969	13.76	1,000
1965	Sept. 22, 1965	12.01	675				

a At downstream end of culvert.

3575.01. Ouachita River at Blakely Mountain Dam, near Hot Springs, Ark.
(Published as "near Mountain Pine," station 7-3570, prior to 1951)

Location.--Lat 34°34'17", long 93°11'23", 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.--1,105 sq mi (1,100 sq mi at site used prior to 1951).

Gage.--Recording. Prior to Oct. 1, 1950, at site 3.2 miles upstream at datum 404.16 ft above mean sea level. Oct. 1, 1950, to Mar. 17, 1952, at site 2,000 ft downstream at datum 395.92 ft above mean sea level. Mar. 18, 1952, to Aug. 29, 1955, at site 1,700 ft downstream at present datum. Datum of gage is at mean sea level. All datums based on 1929 adjustment.

Stage-discharge relation.--Defined by current-meter measurements below 92,000 cfs at site used prior to 1951. Since 1952, computed from flowmeter and estimated leakage.

Remarks.--Records since 1950 furnished by Corps of Engineers. Flow completely regulated since July 1952 by Lake Ouachita upstream from Blakely Mountain Dam. Base for partial-duration series, 25,000 cfs. Only annual peak discharges are shown since 1950.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	May 1923	37.0	a112,000	1945	Mar. 30, 1945	38.55	123,000
					May 16, 1945	18.48	26,500
1937	Jan. 23, 1937	22.38	39,100		June 12, 1945	20.60	32,900
1938	Jan. 24, 1938	26.8	57,400	1946	Jan. 9, 1946	21.55	36,200
	Feb. 18, 1938	32.2	83,200		Apr. 30, 1946	18.62	26,800
					May 25, 1946	23.10	41,800
1939	Apr. 17, 1939	34.54	94,900				
				1947	Dec. 12, 1946	18.76	27,400
1940	Apr. 29, 1940	13.36	13,700				
				1948	Jan. 2, 1948	20.54	32,600
1941	Nov. 23, 1940	20.10	31,300				
				1949	Jan. 26, 1949	29.28	69,100
1942	Apr. 9, 1942	21.12	34,500		May 1, 1949	20.99	34,200
	Apr. 28, 1942	23.90	44,900				
				1950	Jan. 10, 1950	19.31	28,900
1943	Dec. 27, 1942	18.46	26,500		Jan. 14, 1950	21.30	35,300
					Feb. 1, 1950	19.87	30,700
1944	Apr. 23, 1944	26.50	56,000		Feb. 13, 1950	23.69	44,100
	May 2, 1944	20.90	33,900		Sept. 15, 1950	b29.68	30,000
1945	Feb. 22, 1945	24.67	48,200	1951	Feb. 21, 1951	---------	21,400
	Feb. 28, 1945	23.36	42,900				
	Mar. 20, 1945	19.78	30,400	1952	Apr. 24, 1952	---------	33,100

Peak stages and discharges of Ouachita River at Blakely Mountain Dam near Hot Springs, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 18, 1953	---	10,900	1961	Jan. 11, 1961	---	6,070
1954	Oct. 9, 1953	---	805	1962	Mar. 14, 1962	---	6,250
1955	Aug. 30, 1955	---	c2,640	1963	Jan. 17, 1963	---	4,750
1956	Oct. 21, 1955	---	6,300	1964	Jan. 27, 1964	---	6,590
1957	May 30, 1957	---	9,020	1965	Sept. 15, 1965	---	7,200
1958	May 13, 1958	---	9,300	1966	May 12, 1966	---	c5,790
1959	Feb. 4, 1959	---	5,960	1967	Oct. 31, 1966	---	c3,250
1960	May 26, 1960	---	9,140	1968	June 13, 1968	---	c9,550

a Annual peak only.
b Backwater from Blakely Mountain Dam.
c Maximum daily.

3577. Glazypeau Creek at Mountain Valley, Ark.

Location.--Lat 34°37'30", long 93°03'09", in SE¼SE¼ sec.20, T.1 S., R.19 W., crest-stage gage on right wingwall 2 ft downstream from bridge, and recording gage on right bank 12 ft downstream from bridge on State Highway 7, just downstream from small triburary, 0.4 mile upstream from small tributary, and 0.5 mile southeast of Mountain Valley.

Drainage area.--4.3 sq mi, approximately.

Gage.--Recording and crest-stage gages. Recording rainfall gage since December 1967.

Stage-discharge relation.--Defined by current-meter measurements below 670 cfs and by contracted-opening measurements at 2,110 cfs and 2,120 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Dec. 10, 1960	9.84	400	1966	Apr. 23, 1966	10.41	580
1962	Feb. 26, 1962	10.36	560	1967	May 1, 1967	10.90	785
1963	July 16, 1963	12.41	2,110	1968	May 13, 1968	11.85	1,250
1964	Mar. 9, 1964	10.91	800	1969	Jan. 29, 1969	12.25	2,120
1965	Feb. 11, 1965	10.43	580				

3580. Ouachita River near Hot Springs, Ark.

Location.--Lat 34°26'20", long 93°04'10", in SW¼ sec.29, T.3 S., R.19 W., half a mile upstream from Fourche a Loup Creek and 5 miles south of Hot Springs.

Drainage area.--1,405 sq mi.

Gage.--Nonrecording. Datum of gage is 304.8 ft above mean sea level (unadjusted).

Stage-discharge relation.--Defined by current-meter measurements below 43,000 cfs and extended by veolocity-area study of main-channel flow and slope-area measurement of overflow.

Remarks.--Station discontinued Sept. 30, 1930, due to backwater from Carpenter Dam. Only annual peaks are shown.

Peak stages and discharges of Ouachita River near Hot Springs, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	May 16, 1923	43.9	143,000	1927	Apr. 21, 1927	42.4	134,000
1924	Dec. 13, 1923	18.08	23,400	1928	Apr. 6, 1928	27.36	59,000
1925	Feb. 23, 1925	14.62	13,500	1929	Dec. 17, 1928	23.25	41,600
				1930	May 18, 1930	29.0	66,000
1926	Jan. 21, 1926	27.10	57,600				

3595. Ouachita River near Malvern, Ark.
(Published as "at Remmel Dam, near Malvern" January 1926 to March 1937)

Location.--Lat 34°23'10", long 92°50'20", in NW¼ sec.16, T.4 S., R.17 W., 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.--1,562 sq mi.

Gage.--Nonrecording prior to 1925; recording thereafter. March 1903 to April 1904 at present site at datum 2.00 ft higher. January 1925 to March 1937 at site 5.8 miles upstream at datum 20.11 ft higher. Datum of present gage is 228.05 ft above mean sea level, datum of 1929. Gage height records for 1903-4 adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 120,000 cfs at present site and extended by logarithmic plotting. Defined by current-meter measurements below 44,000 cfs at Remmel Dam.

Remarks.--Flow regulated since 1925 by Lake Catherine (capacity, 13,950 acre-ft), since 1932 by Lake Hamilton (capacity, 70,560 acre-ft), and since July 1952 by Lake Ouachita (capacity, 2,768,000 acre-ft). Peaks not seriously affected prior to regulation by Lake Ouachita. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903	Mar. 10, 1903	24.0	66,500	1941	Nov. 23, 1940	13.72	16,500
1904	Mar. 18, 1904	20.0	39,500	1942	Apr. 8, 1942	21.77	56,000
				1943	May 31, 1943	14.76	19,200
1923	May 15, 1923	30.3	140,000	1944	Apr. 23, 1944	25.20	83,000
1924	Dec. 13, 1923	---------	a26,000	1945	Mar. 30, 1945	27.20	132,000
1925	Feb. 23, 1925	---------	a16,000				
				1946	May 23, 1946	24.90	80,000
1926	Jan. 21, 1926	24.3	60,900	1947	Dec. 12, 1946	18.60	35,100
1927	Apr. 21, 1927	35.7	138,000	1948	Jan. 2, 1948	18.80	36,100
1928	Apr. 6, 1928	24.43	60,000	1949	Jan. 26, 1949	24.89	90,700
1929	Dec. 17, 1928	21.72	48,100	1950	Feb. 13, 1950	21.72	57,100
1930	May 10, 1930	24.0	58,200				
				1951	July 3, 1951	20.70	49,800
1931	Oct. 7, 1930	20.22	41,600	1952	Apr. 23, 1952	18.40	38,600
1932	Jan. 5, 1932	26.0	67,400	1953	Dec. 4, 1952	20.90	54,400
1933	Dec. 30, 1932	27.55	74,400	1954	May 2, 1954	17.36	31,400
1934	Mar. 26, 1934	25.2	63,700	1955	May 27, 1955	14.36	20,000
1935	May 5, 1935	28.97	70,500				
				1956	Feb. 18, 1956	12.75	15,500
1936	Dec. 9, 1935	12.5	13,200	1957	Apr. 4, 1957	16.14	27,400
1937	Jan. 22, 1937	24.67	53,800	1958	May 2, 1958	21.16	55,200
1938	Feb. 18, 1938	26.74	103,000	1959	Feb 14, 1959	15.25	23,500
1939	Apr. 16, 1939	27.00	108,000	1960	June 27, 1960	12.71	16,000
1940	Apr. 30, 1940	15.82	22,000				

Peak stages and discharges of Ouachita River near Malvern, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 31, 1961	13.08	17,100	1965	Feb. 11, 1965	11.66	13,600
1962	Feb. 27, 1962	11.95	14,300				
1963	July 16, 1963	21.03	53,800	1966	Apr. 26, 1966	19.26	42,700
1964	Apr. 23, 1964	18.81	39,800	1967	May 6, 1967	15.23	22,400
				1968	May 14, 1968	26.02	110,000

a Discharge estimated on basis of records for Ouachita River near Hot Springs, Ark.

3595.2. Ouachita River tributary near Malvern, Ark.

Location.--Lat 34°22'01", long 92°52'01", in SW¼NE¼ sec.19, T.4 S., R.17 W., on left bank 40 ft upstream from culvert on State Highway 84, 0.7 mile upstream from mouth, and 3.2 miles west of Malvern.

Drainage area.--3.0 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 260 cfs and by culvert measurments at 482 cfs and 1,200 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 22, 1962	7.51	482	1966	Apr. 23, 1966	6.09	184
1963	Mar. 4, 1963	5.82	153	1967	May 6, 1967	6.61	260
1964	Apr. 23, 1964	7.75	555	1968	May 13, 1968	8.26	650
1965	Feb. 11, 1965	6.45	235	1969	Jan. 30, 1969	9.83	1,200

3597. Caddo River at Glenwood, Ark.

Location.--Lat 34°19'19", long 93°32'28", in SE¼NE¼ sec.10, T.5 S., R.24 W., on downstream side of bridge on U.S. Highway 70 and State Highway 27 at Glenwood, 700 ft downstream from Sweetwater Creek, and at mile 52.1.

Drainage area.--192 sq mi.

Gage.--Nonrecording prior to Nov. 26, 1946; recording thereafter. Datum of gage is 514.41 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 84,000 cfs since 1946.

Bankfull stage.--14 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges of Caddo River at Glenwood, Ark.

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1939	Apr. 16, 1939	15.6	----------	1954	May 2, 1954	16.9	19,000
1940	Nov. 23, 1940	13.1	----------	1955	Mar. 20, 1955	18.5	23,000
1941	Dec. 23, 1941	9.9	----------	1956	Feb. 2, 1956	16.4	14,500
1942	Apr. 8, 1942	14.4	----------	1957	Nov. 13, 1957	17.6	18,000
1943	May 20, 1943	12.1	----------	1958	Nov. 15, 1958	17.3	16,500
1944	May 1, 1944	14.2	----------	1959	Feb. 14, 1959	16.90	16,000
1945	Mar. 30, 1945	27.0	65,000	1960	May 20, 1960	17.6	17,500
1946	May 25, 1946	19.4	31,000	1961	May 6, 1961	27.95	61,600
1947	Apr. 30, 1947	11.7	9,500	1962	Feb. 26, 1962	12.09	6,200
1948	Mar. 1, 1948	13.6	14,000	1963	Mar. 11, 1963	11.60	5,500
1949	Jan. 24, 1949	22.4	42,000	1964	Mar. 9, 1964	19.35	22,500
1950	Feb. 12, 1950	15.9	20,000	1965	Jan. 9, 1965	19.70	23,500
1951	July 3, 1951	15.4	19,000	1966	Apr. 24, 1966	18.65	20,500
1952	Dec. 4, 1952	19.6	32,000	1967	May 6, 1967	18.80	21,000
1953	May 12, 1953	18.8	29,000	1968	May 13, 1968	31.40	88,000

3597.5. Little Sugarloaf Creek near Bonnerdale, Ark.

Location.--Lat 34°21'40", long 93°27'30", in NW¼SW¼ sec.27, T.4 S., R.23 W., on right bank 33 ft upstream from bridge on U.S. Highway 70, 3.2 miles upstream from mouth, and 4.7 miles southwest of Bonnerdale.

Drainage area.--2.34 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 850 cfs and by culvert measurement at 2,540 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 26, 1962	8.02	450	1966	Aug. 13, 1966	11.11	1,550
1963	June 16, 1963	6.29	126	1967	May 1, 1967	9.52	900
1964	Apr. 24, 1964	8.68	630	1968	May 13, 1968	13.11	2,540
1965	July 16, 1965	8.26	515	1969	Jan. 30, 1969	11.10	1,550

3598. Caddo River near Alpine, Ark.

Location.--Lat 34°16'00", long 93°21'45", in SW¼SE¼ sec.28, T.5 S., R.22 W., at Runyan Bridge on county road between Alpine and Bismarck, 7.1 miles downstream from Fork Creek, and at mile 33.8.

Drainage area.--312 sq mi.

Gage.--Nonrecording prior to Jan. 27, 1947; recording thereafter. Datum of gage is 394.85 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 38,000 cfs.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges of Caddo River near Alpine, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	1927	22.0	43,000	1955	Mar. 21, 1955	16.25	27,900
1939	Apr. 16, 1939	20.3	37,700	1956	Feb. 2, 1956	12.15	17,900
1940	Apr. 29, 1940	7.86	8,150	1957	Apr. 4, 1957	13.70	19,400
				1958	May 3, 1958	20.18	36,500
1941	Nov. 23, 1940	20.6	39,400	1959	Feb. 14, 1959	16.16	25,800
1942	Apr. 8, 1942	19.4	36,200	1960	May 20, 1960	13.0	17,600
1945	Mar. 30, 1945	30.2	64,200				
				1961	May 6, 1961	27.15	55,800
1947	Apr. 30, 1947	10.0	12,500	1962	Feb. 27, 1962	13.08	17,800
1948	Mar. 2, 1948	12.39	18,300	1963	Mar. 11, 1963	8.75	7,990
1949	Jan. 24, 1949	23.50	46,900	1964	Mar. 9, 1964	18.05	30,600
1950	Feb. 12, 1950	15.75	26,900	1965	Jan. 9, 1965	18.20	31,100
1951	July 3, 1951	13.66	20,800	1966	Aug. 21, 1966	17.61	23,000
1952	Apr. 23, 1952	15.97	27,400	1967	May 6, 1967	17.87	24,500
1953	Dec. 4, 1952	19.95	37,800	1968	May 13, 1968	35.64	85,000
1954	May 2, 1954	13.80	21,900				

3600. Ouachita River at Arkadelphia, Ark.

Location.--Lat 34°07'16", long 93°02'46", in sec.17, T.7 S., R.19 W., at bridge on Stage Highway 7 at Arkadelphia, 5.4 miles downstream from Caddo River, and at mile 420.6.

Drainage area.--2,311 sq mi.

Gage.--Nonrecording prior to Mar. 31, 1946; recording thereafter. September 1905 to December 1906 at site 800 ft downstream at different datum. January 1914 to Sept. 28, 1934, at present site at datum 5.00 ft higher (adjusted to present datum). Datum of present gage is 160.30 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 161,000 cfs.

Bankfull stage.--17 ft.

Remarks.--All records except those for 1906 furnished by Corps of Engineers. Slight regulation since 1925 by Lake Catherine and since 1932 by Lake Hamilton. Considerable regulation since 1952 by Lake Ouachita. See remarks for Ouachita River near Malvern. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1906	May 4, 1906	20.6	33,800	1926	Dec. 22, 1926	27.8	----------
				1927	Apr. 21, 1927	29.2	133,000
1914	Apr. 29, 1914	26.2	----------	1928	Dec. 18, 1928	24.9	----------
1915	Aug. 22, 1915	26.3	----------				
				Water year			
1916	Jan. 28, 1916	23.2	----------				
1917	Mar. 4, 1917	20.8	----------				
1918	Dec. 14, 1918	23.8	----------	1929	Jan.26, May 15	19.1	26,600
1919	Oct. 12, 1919	25.7	----------	1930	Jan. 10, 1930	25.4	68,500
1920	May 12, 1920	27.9	----------				
				1931	Oct. 8, 1930	21.02	35,400
1921	Apr. 27, 1921	26.5	----------	1932	Jan. 5, 1932	26.72	89,100
1922	Apr. 1, 1922	22.8	----------	1933	Dec. 31, 1932	24.80	61,700
1923	May 15, 1923	28.3	----------	1934	Mar. 27, 1934	24.28	56,800
1924	May 1, 1924	15.3	----------	1935	May 6, 1935	26.97	94,000
1925	Oct.18, Nov. 8	19.0	----------				

Peak stages and discharges of Ouachita River at Arkadelphia, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Dec. 7, 1935	17.72	23,200	1953	Dec. 4, 1952	25.15	73,100
1937	Jan. 22, 1937	26.03	81,400	1954	May 3, 1954	23.30	45,200
1938	Feb. 19, 1938	28.97	133,000	1955	Mar. 21, 1955	23.90	51,100
1939	Apr. 17, 1939	28.87	131,000				
1940	May 1, 1940	17.40	20,800	1956	Feb. 18, 1956	20.60	31,700
				1957	Apr. 4, 1957	24.20	55,100
1941	Nov. 24, 1940	18.15	22,700	1958	May 3, 1958	27.65	119,000
1942	Apr. 9, 1942	26.75	94,700	1959	Feb. 15, 1959	24.00	52,300
1943	Apr. 19, 1943	18.49	22,000	1960	Dec. 17, 1959	20.90	29,000
1944	May 2, 1944	25.90	86,400				
1945	Mar. 30, 1945	30.3	170,000	1961	May 7, 1961	24.20	55,100
				1962	Feb. 28, 1962	21.65	33,600
1946	Apr. 30, 1946	27.83	122,000	1963	July 17, 1963	19.18	26,200
1947	Dec. 13, 1946	21.90	36,800	1964	Apr. 24, 1964	25.13	58,800
1948	Mar. 2, 1948	23.68	47,300	1965	Feb. 12, 1965	20.90	32,400
1949	Jan. 27, 1949	28.15	139,000				
1950	Feb. 13, 1950	25.92	76,600	1966	Apr. 26, 1966	a24.98	71,300
				1967	May 7, 1967	23.56	41,400
1951	July 3, 1951	26.20	81,100	1968	May 14, 1968	30.08	162,000
1952	Apr. 24, 1952	22.85	41,800				

a Occurred on following day.

Note.--Calendar year basis prior to 1929; water year thereafter.

3601.5. Pearson Creek tributary near Dalark, Ark.
(Published as "Casa Massa Creek tributary" prior to 1965)

Location.--Lat 34°01'59", long 92°52'05", in SE¼NW¼ sec.17, T.8 S., R.17 W., on right bank 10 ft upstream from culvert on State Highway 8, 1.1 miles east of Dalark, and 1.7 miles upstream from mouth.

Drainage area.--0.40 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since September 1968.

Stage-discharge relation.--Defined by current-meter measurements below 22 cfs and by culvert measurements at 113 cfs and 147 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 30, 1961	3.25	27	1966	Apr. 25, 1966	5.04	107
1962	Feb. 26, 1962	5.16	113	1967	Apr. 25, 1967	4.62	85
1963	Oct. 7, 1962	3.92	53	1968	May 13, 1968	4.93	101
1964	Apr. 22, 1964	5.81	147	1969	Jan. 30, 1969	3.67	43
1965	Feb. 10, 1965	5.40	125				

3605.01. Little Missouri River at Narrows Dam, near Murfreesboro, Ark.

Location.--Lat 34°08'51", long 93°43'04", 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.--237 sq mi.

Gage.--Recording. Prior to June 18, 1947, at damsite and June 18, 1947, to May 26, 1950, at site 2,700 ft downstream at datum 400.81 ft above mean sea level, datum of 1929. Datum of present gage is at mean sea level, datum of 1929. Levels by Corps of Engineers.

Stage-discharge relation.--Since 1949 discharge computed from flowmeter, estimated leakage, and flow over spillway crest.

Remarks.--Records furnished by Corps of Engineers. Flow completely regulated by Lake Greeson since 1949. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Apr. 30, 1946	21.10	32,300	1958	May 13,14,1958	---	3,550
1947	Apr. 30, 1947	10.39	8,780	1959	Mar. 6, 1959	---	a984
1948	Mar. 1, 1948	10.30	16,800	1960	Nov. 25, 1959	---	1,910
1949	Jan. 24, 1949	17.10	34,500				
1950	Jan. 13, 1950	---	4,670	1961	May 10,11,1961	---	3,700
				1962	Jan. 31, 1962	---	2,130
1951	Feb. 27, 1951	---	3,720	1963	Jan. 24, 1963	---	1,270
1952	Apr. 30, 1952	---	7,200	1964	May 5,6, 1964	---	a1,750
1953	May 25, 1953	---	5,120	1965	Nov. 2, 1964	---	2,120
1954	Sept. 7, 1954	---	1,920				
1955	Sept. 20, 1955	---	1,990	1966	May 12, 1966	---	a1,460
				1967	May 16, 1967	---	a3,320
1956	Aug. 29, 1956	---	1,970	1968	May 24, 1968	---	a3,440
1957	June 2, 1957	---	5,210				

a Maximum daily discharge.

3608. Muddy Fork Creek near Murfreesboro, Ark.

Location.--Lat 34°04'59", long 93°45'07", in NE¼ sec.3, T.8 S., R.26 W., 3 miles northwest of Murfreesboro at mile 1.8.

Drainage area.--121 sq mi.

Gage.--Nonrecording prior to Mar. 4, 1940; recording thereafter. Datum of gage is 337.29 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 24,000 cfs prior to 1950; not defined thereafter.

Bankfull stage.--15 ft.

Remarks.--Records furnished by Corps of Engineers. Peak discharge since 1959 estimated from previously defined stage-discharge relation. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	May 18, 1940	13.25	6,200	1945	Mar. 30, 1945	29.7	47,100
1941	Nov. 23, 1940	17.2	11,800				
1942	Apr. 8, 1942	18.3	13,500	1946	Feb. 5, 1946	14.6	8,560
1943	Mar. 12, 1943	10.2	3,400	1947	Apr. 30, 1947	12.40	5,480
1944	May 1, 1944	16.6	10,900	1948	Mar. 2, 1948	13.40	6,680

Peak stages and discharges of Muddy Fork Creek near Murfreesboro, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Jan. 24, 1949	21.75	24,700	1959	Feb. 14, 1959	14.95	9,150
1950	Sept. 16, 1950	18.1	13,200	1960	June 27, 1960	14.05	8,000
1951	July 2, 1951	14.85	8,310	1961	May 6, 1961	17.45	13,500
1952	Apr. 22, 1952	19.44	15,800	1962	Feb. 26, 1962	13.50	6,800
1953	May 11, 1953	22.56	24,800	1963	Mar. 16, 1963	10.20	2,600
1954	May 2, 1954	13.40	6,620	1964	Mar. 9, 1964	12.93	5,800
1955	Mar. 21, 1955	16.72	11,900	1965	Mar. 29, 1965	13.95	7,400
1956	Apr. 30, 1956	15.18	9,470	1966	Aug. 21, 1966	15.80	11,000
1957	May 26, 1957	14.35	8,190	1967	May 6, 1967	17.85	14,000
1958	May 2, 1958	26.28	35,100	1968	May 13, 1968	21.35	22,000

3610. Little Missouri River near Murfreesboro, Ark.

Location.--Lat 34°03', long 93°43', in SE¼ sec.13, T.8 S., R.26 W., on downstream side of bridge on State Highway 27, 1.9 miles downstream from Muddy Fork Creek, 2 miles southwest of Murfreesboro, 4.6 miles upstream from Prairie Creek, and at mile 24.1.

Drainage area.--380 sq mi.

Gage.--Nonrecording prior to Sept. 30, 1931; recording thereafter. Datum of gage is 324.28 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 38,000 cfs and extended on basis of contracted-opening measurement of 120,000 cfs.

Bankfull stage.--17 ft.

Remarks.--Peak discharge materially regulated since November 1949 by Lake Greeson (capacity, 407,900 acre-ft, drainage area, 237 sq mi). Base for partial-duration series, 15,000 cfs. Only annual peaks are shown prior to 1938 and subsequent to 1949.

Peak stages and discharges

Water year	Date nm	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	April 1927	21.0	----------	1943	Dec. 27, 1942	14.24	20,000
1928	Apr. 21, 1928	a7.75	8,740	1944	Apr. 23, 1944	12.69	15,000
					May 1, 1944	16.60	38,600
1929	Dec. 17, 1928	a12.52	21,600	1945	Dec. 6, 1944	13.11	15,200
1930	May 3, 1930	a14.00	26,000		Feb. 21, 1945	15.05	23,800
					Feb. 27, 1945	15.08	24,500
1931	Feb. 13, 1931	a6.80	6,290		Mar. 30, 1945	19.84	120,000
1938	Jan. 24, 1938	17.50	54,300	1946	Jan. 8, 1946	13.71	17,500
	Feb. 18, 1938	16.60	38,600		Feb. 5, 1946	15.12	24,500
	Mar. 29, 1938	15.60	28,000		Apr. 30, 1946	16.78	41,500
					May 25, 1946	14.36	20,700
1939	Apr. 16, 1939	14.73	21,800	1947	Apr. 30, 1947	12.62	13,500
1940	May 18, 1940	13.49	16,800	1948	Mar. 2, 1948	14.53	21,200
1941	Nov. 23, 1940	17.03	44,800	1949	Jan. 24, 1949	18.05	65,700
1942	Dec. 23, 1941	14.07	19,600		Mar. 9, 1949	14.83	21,900
	Apr. 8, 1942	16.52	37,200		Mar. 26, 1949	13.26	15,100
	Sept. 9, 1942	16.80	32,500				

Peak stages and discharges of Little Missouri River near Murfreesboro, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Sept. 16, 1950	13.74	16,600	1960	Dec. 16, 1959	10.28	9,270
1951	July 2, 1951	11.34	9,220	1961	May 6, 1961	12.28	13,000
1952	Apr. 22, 1952	14.19	17,600	1962	Feb. 27, 1962	9.69	8,250
1953	May 11, 1953	15.60	25,800	1963	Mar. 16, 1963	6.55	3,770
1954	May 2, 1954	9.10	6,080	1964	Apr. 23, 1964	14.52	21,200
1955	Mar. 21, 1955	12.55	13,300	1965	Mar. 29, 1965	9.83	8,410
1956	Apr. 30, 1956	10.15	8,180	1966	Aug. 21, 1966	10.48	9,630
1957	Apr. 3, 1957	10.75	9,020	1967	May 6, 1967	12.11	12,600
1958	May 2, 1958	15.74	30,300	1968	May 13, 1968	14.44	20,800
1959	Feb. 14, 1959	10.40	9,450				

a Maximum observed. Peak could be much higher.

3610.2. Prairie Creek tributary near Kirby, Ark.

Location.--Lat 34°09'10", long 93°37'53", in SE¼ sec.11, T.7 S., R.25 W., on right bank 19 ft upstream from culvert on State Highway 27, 0.3 mile upstream from mouth, and 6.6 miles south of Kirby.

Drainage area.--0.08 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 21 cfs and by culvert measurements at 143 cfs, 182 cfs, and 306 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Oct. 16, 1962	3.57	41	1966	Aug. 13, 1966	5.7	182
1964	Apr. 23, 1964	5.14	143	1967	May 1, 1967	3.56	41
1965	Mar. 29, 1965	3.15	20	1968	May 13, 1968	7.29	306
				1969	Jan. 29, 1969	5.05	137

3611.8. South Fork Ozan Creek near Ozan, Ark.

Location.--Lat 33°49'15", long 93°42'28", in SE¼SW¼ sec.5, T.11 S., R.25 W., on right bank 30 ft upstream from bridge on State Highway 4, 0.4 mile upstream from Missouri Pacific Railroad Co. bridge, and 2.0 miles south of Ozan.

Drainage area.--17.6 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and by field estimate at 5,200 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of South Fork Ozan Creek near Ozan, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Apr. 28, 1963	17.06	1,980	1966	Apr. 25, 1966	24.0	5,200
1964	Apr. 22, 1964	17.82	2,150	1967	Apr. 26, 1967	24.33	5,400
1965	May 10, 1965	17.78	2,150	1968	May 11, 1968	23.74	5,000
				1969	Jan. 29, 1969	23.24	4,700

3612. Ozan Creek near McCaskill, Ark.

Location.--Lat 33°52'55", long 93°35'59", in SE¼NE¼ sec.18, T.10 S., R.24 W., 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.--148 sq mi.

Gage.--Nonrecording prior to 1948; recording thereafter. Datum of gage is 281.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 18,000 cfs.

Remarks.--Gage-height records and results of miscellaneous discharge measurements furnished by Corps of Engineers. Base for partial-duration series, 4,000 cfs. Only annual peaks are shown prior to 1962.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 7, 1940	13.3	2,300	1957	Apr. 3, 1957	16.10	10,000
1941	Apr. 23, 1941	14.5	5,300	1958	May 1, 1958	16.95	14,000
1942	Apr. 8, 1942	15.1	6,400	1959	Feb. 14, 1959	14.80	6,000
1943	Mar. 12, 1943	16.7	13,000	1960	Jan. 14, 1960	15.05	7,000
1944	May 2, 1944	16.4	12,000	1961	Mar. 27, 1961	15.20	7,600
1945	Mar. 30, 1945	19.9	30,000	1962	Nov. 23, 1961	13.81	4,440
					Dec. 9, 1961	13.67	4,170
1946	Feb. 6, Mar. 6	14.5	5,000		Dec. 16, 1961	13.73	4,350
					Jan. 22, 1962	14.96	7,250
1947	May 13, 1947	17.96	19,000		Jan. 26, 1962	13.83	4,530
					Feb. 23, 1962	15.30	8,450
1948	Mar. 22, 1948	14.5	4,400		Feb. 27, 1962	14.42	5,650
1949	Jan. 25, 1949	16.4	12,000	1963	Mar. 11, 1963	---------	2,420
					Apr. 29, 1963	12.43	2,420
1950	Feb. 13, 1950	15.42	7,600	1964	Apr. 23, 1964	15.87	10,400
1951	Jan. 13, 1951	14.83	5,000	1965	Feb. 11, 1965	15.58	9,500
1952	Apr. 12, 1952	15.02	5,300	1966	Apr. 26, 1966	16.82	14,600
1953	May 11, 1953	18.08	20,000		May 1, 1966	17.34	17,700
1954	May 2, 1954	13.88	2,800	1967	Dec. 28, 1966	14.55	6,410
					Apr. 26, 1967	15.69	9,890
1955	Mar. 21, 1955	15.23	6,800	1968	May 11, 1968	17.93	18,900
1956	Feb. 18, 1956	14.17	3,500		May 14, 1968	15.16	6,820
					May 17, 1968	17.79	17,900

3615. Antoine River at Antoine, Ark.

Location.--Lat 34°02'20", long 93°25'05", in NW¼ sec.24, T.8 S., R.23 W., near right bank on downstream side of pier 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.--181 sq mi.

Gage.--Recording. Prior to Oct. 22, 1954, at site 75 ft upstream at same datum. Datum of gage is 229.33 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 28,000 cfs.

Remarks.--Gage-height records prior to 1955 furnished by Corps of Engineers. Base for partial-duration series, 6,000 cfs. Only annual peaks are shown prior to 1955.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	May 1905	a29.7	40,000	1960	Dec. 16, 1959	21.03	8,580
					Jan. 14, 1960	19.14	6,450
1945	Mar. 31, 1945	b24.6	18,800		June 27, 1960	19.73	7,010
1951	Jan. 13, 1951	20.0	8,100	1961	Dec. 11, 1960	19.70	7,010
					Mar. 27, 1961	20.08	7,420
1952	Apr. 27, 1952	22.1	10,500		Mar. 30, 1961	21.34	9,080
					May 6, 1961	20.46	7,880
1953	May 11, 1953	23.6	15,300				
				1962	Dec. 9, 1961	18.70	6,120
1954	May 2, 1954	19.0	7,100		Feb. 27, 1962	19.03	6,360
1955	Mar. 21, 1955	23.52	14,900	1963	Mar. 11, 1963	14.69	3,560
	May 27, 1955	19.87	8,000				
				1964	Mar. 9, 1964	19.92	7,790
1956	Feb. 2, 1956	18.03	6,540		Apr. 23, 1964	23.05	13,500
	Apr. 30, 1956	19.80	8,320		Apr. 26, 1964	18.88	6,710
1957	Mar. 18, 1957	17.77	6,000	1965	Feb. 11, 1965	20.91	9,150
	Apr. 3, 1957	24.00	16,600		Mar. 29, 1965	18.48	6,350
	Apr. 27, 1957	20.70	8,870				
	May 24, 1957	18.64	6,720	1966	Apr. 26, 1966	22.73	12,800
	May 26, 1957	19.80	7,900		Apr. 30, 1966	19.10	6,910
					Aug. 21, 1966	24.02	16,600
1958	Nov. 13, 1957	19.59	7,700				
	Jan. 20, 1958	19.44	7,500	1967	Dec. 28, 1966	18.64	6,480
	Apr. 27, 1958	21.24	9,510		May 1, 1967	18.50	6,350
	May 2, 1958	28.75	35,500		May 6, 1967	22.08	11,400
	July 5, 1958	19.20	7,000				
	Sept. 19, 1958	19.64	7,700	1968	May 10, 1968	22.70	12,800
					May 14, 1968	27.60	28,400
1959	Feb. 14, 1959	21.75	10,100		May 17, 1968	19.33	6,830

a From information by Arkansas Highway Department.
b From floodmark by Corps of Engineers.

3616. Little Missouri River near Boughton, Ark.

Location.--Lat 33°52'32", long 93°18'16", in NE¼ sec.13, T.10 S., R.22 W., 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.--1,068 sq mi.

Gage.--Nonrecording prior to Mar. 19, 1947; recording thereafter. Datum of gage is 182.13 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 62,000 cfs.

Bankfull stage.--20 ft.

Remarks.--Records furnished by Corps of Engineers. Peak discharge regulated to some extent since November 1949 by Lake Greeson (capacity, 407,900 acre-ft, drainage area, 237 sq mi). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	1905	a26.9	----------	1953	May 12, 1953	23.35	54,000
				1954	May 3, 1954	18.50	11,000
1938	Feb. 19, 1938	23.55	57,000	1955	Mar. 22, 1955	21.58	28,000
1939	Apr. 18, 1939	21.28	22,600				
1940	May 2, 1940	17.05	7,350	1956	May 3, 1956	19.72	14,700
				1957	Apr. 4, 1957	21.58	29,100
1941	Apr. 25, 1941	20.5	17,400	1958	May 3, 1958	24.22	66,000
1942	Apr. 9, 1942	23.35	54,000	1959	Feb. 16, 1959	20.90	24,100
1943	Mar.14, Apr.19	21.4	25,000	1960	Dec. 18, 1959	21.36	27,600
1944	May 2-3, 1944	23.4	54,000				
1945	Mar. 31, 1945	27.2	111,000	1961	Apr. 1, 1961	20.92	24,100
				1962	Feb. 28, 1962	20.92	24,100
1946	Feb. 7, 1946	21.8	30,000	1963	Mar. 17, 1963	15.82	8,080
1947	May 14, 1947	22.06	37,300	1964	Apr. 24, 1964	22.35	39,000
1948	Mar. 4, 1948	20.71	20,700	1965	Feb. 12, 1965	20.69	22,800
1949	Jan. 26, 1949	23.90	62,000				
1950	Feb. 13, 1950	22.18	36,500	1966	May 2, 1966	21.95	33,300
				1967	May 7, 1967	20.78	23,400
1951	Jan. 15, 1951	21.40	25,600	1968	May 15, 1968	23.29	52,500
1952	Apr. 24, 1952	21.28	24,700				

a From information by Corps of Engineers.

3616.8. Little Caney Creek near Rosston, Ark.

Location.--Lat 33°36'18", long 93°17'30", in SW¼SE¼ sec.17, T.13 S., R.21 W., on right bank 20 ft upstream from culvert on State Highway 19, 1.0 mile north of junction with State Highway 4, and 1.5 miles northwest of Rosston.

Drainage area.--1.5 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 67 cfs and by culvert measurements at 309 cfs, 680 cfs, and 1,270 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Little Caney Creek near Rosston, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 26, 1961	a8.98	232	1966	Apr. 30, 1966	10.94	680
1962	Oct. 1, 1961	13.7	1,270	1967	Dec. 27, 1966	8.64	190
1963	July 8, 1963	6.99	48	1968	May 17, 1968	8.51	175
1964	Apr. 22, 1964	7.76	98	1969	Jan. 29, 1969	9.03	240
1965	Feb. 11, 1965	8.01	122				

a Higher peak may have occurred before gage was installed.

3617.8. Old Bradshaw Creek near Hollywood, Ark.

Location.--Lat 34°06'02", long 92°12'24", in NE¼SE¼ sec.26, T.7 S., R.21 W., on left bank 25 ft downstream from bridge on State Highway 26, 0.7 mile upstream from small tributary, and 2.6 miles east of Hollywood.

Drainage area.--3.46 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 22, 1962	14.34	815	1966	Apr. 30, 1966	12.88	640
1963	Apr. 28, 1963	10.28	360	1967	Apr. 25, 1967	10.51	385
1964	Mar. 4, 1964	12.94	650	1968	May 13, 1968	15.15	915
1965	Feb. 11, 1965	11.12	455	1969	Jan. 30, 1969	11.03	435

3618. Terre Noire Creek east of Gurdon, Ark.

Location.--Lat 33°54'50", long 93°02'11", in SW¼ sec.27, T.9 S., R.19 W., on downstream side of highway bridge, 6¾ miles east of Gurdon, and at mile 13.6.

Drainage area.--250 sq mi.

Gage.--Nonrecording prior to Nov. 3, 1949; recording thereafter. Prior to Jan. 1, 1947, at datum 5 ft higher. Datum of present gage is 133.65 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). All gage heights adjusted to present datum.

Stage-discharge relation.--Not adequately defined.

Bankfull stage.--16 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peak stages are shown.

Peak stages and discharges of Terre Noire Creek east of Gurdon, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 29, 1940	16.7	----------	1955	Mar. 21, 1955	19.3	----------
1941	May 6, 1941	19.5	----------	1956	Feb. 9, 1956	18.08	----------
1942	Apr. 9, 1942	21.9	----------	1957	Apr. 4, 1957	21.24	----------
				1958	May 3, 1958	22.85	----------
1944	May 2, 1944	20.5	----------	1959	Feb. 15, 1959	19.0	----------
1945	Mar. 30, 1945	22.8	----------	1960	Dec. 17, 1959	19.32	----------
1947	May 13, 1947	19.1	----------	1961	Mar. 31, 1961	19.02	----------
1948	Mar. 22, 1948	18.0	----------	1962	Feb. 27, 1962	19.43	----------
1949	June 14, 1949	18.07	----------	1963	Apr. 29, 1963	18.61	----------
1950	Feb. 13, 1950	19.54	----------	1964	Apr. 24, 1964	19.48	----------
				1965	Feb. 12, 1965	19.41	
1951	Jan. 14, 1951	19.25	----------				
1952	Apr. 13, 1952	18.76	----------	1966	May 1, 1966	21.31	----------
1953	May 12, 1953	20.06	----------	1967	Apr. 26, 1967	19.54	----------
1954	May 2, 1954	17.94	----------	1968	May 14, 1968	22.42	----------

3620. Ouachita River at Camden, Ark.
(Published as "near Camden" August 1928 to September 1929)

Location.--Lat 33°35'47", long 92°49'05", in SE¼ sec.14, T.13 S., R.17 W., 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.--5,391 sq mi.

Gage.--Nonrecording prior to Oct. 28, 1947; recording thereafter. Datum of gage is 71.69 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements below 230,000 cfs.

Bankfull stage.--30 ft.

Remarks.--Records furnished by Corps of Engineers except for the period August 1928 to September 1929. Slight regulation by Lake Catherine since 1925, by Lake Hamilton since 1932, and by Lake Greeson since November 1949. Some regulation by Lake Ouachita since 1952. See remarks for Ouachita River near Malvern. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1882	May 12, 1882	46.0	----------	1896	Feb. 6-7, 1896	34.0	----------
				1897	Mar. 23, 1897	38.75	----------
1886	Nov. 27, 1886	26.8	----------	1898	Jan. 25, 1898	33.7	----------
1887	Dec. 13, 1887	35.7	----------	1899	Jan. 18, 1899	39.1	----------
1888	Jan. 18, 1888	34.2	----------	1900	Mar. 4, 1900	26.2	----------
1889	Jan. 21, 1889	37.7	----------				
1890	Apr. 7, 1890	38.5	----------	1901	Apr. 23, 1901	33.9	----------
1891	Feb. 5, 1891	35.6	----------	1902	Dec. 1, 1902	36.2	----------
1892	Dec. 17, 1892	38.0	----------	1903	Feb. 20, 1903	39.6	----------
1893	Jan. 6, 1893	34.8	----------	1904	June 12, 1904	33.6	----------
1894	Mar. 23, 1894	43.25	----------	1905	July 1, 1905	42.0	----------
1895	Mar. 18, 1895	30.7	----------				

Peak stages and discharges of Ouachita River at Camden, Ark.--Continued

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Jan. 27, May 8	35.2	----------	1936	Dec. 13, 1935	25.2	22,700
1907	Jan 6, 1907	42.9	----------	1937	Jan. 25, 1937	41.71	151,000
1908	May 19, 1908	36.1	----------	1938	Feb. 22, 1938	41.1	158,000
1909	Mar. 13, 1909	31.0	----------	1939	Apr. 21, 1939	37.71	102,000
1910	Apr. 17, 1910	33.1	----------	1940	July 4, 1940	a28.66	24,400
1911	Apr. 22, 1911	38.2	----------	1941	May 11, 1941	31.78	37,500
1912	Apr. 5, 1912	39.4	----------	1942	Apr. 12, 1942	40.17	124,000
1913	Apr. 14, 1913	37.1	----------	1943	Mar. 17, 1943	30.14	39,000
1914	Apr. 4, 1914	36.9	----------	1944	May 5, 1944	39.10	144,000
1915	Aug. 25, 1915	36.5	----------	1945	Apr. 3, 1945	44.82	243,000
1916	Feb. 1, 1916	39.0	----------	1946	May 29, 1946	b37.46	89,900
1917	Mar. 8, 1917	31.7	----------	1947	Nov.13, Dec.17	c29.71	33,500
1918	Apr. 23, 1918	35.5	----------	1948	Mar. 6, 1948	35.41	57,000
1919	Oct. 16, 1919	37.4	----------	1949	Jan. 30, 1949	44.15	185,000
1920	May 20, 1920	38.6	----------	1950	Feb. 17, 1950	39.63	110,000
1921	Apr. 30, 1921	38.8	----------	1951	Jan. 20, 1951	34.40	53,400
1922	Apr. 3, 1922	37.0	----------	1952	Apr. 18, 1952	35.45	58,400
1923	May 19, 1923	40.1	----------	1953	May 16, 1953	a38.82	126,000
1924	Mar. 24, 1924	26.5	----------	1954	May 6, 1954	28.78	32,900
1925	Nov. 11, 1925	29.7	----------	1955	Mar. 25, 1955	a34.51	58,200
1926	Dec. 26, 1926	39.1	----------	1956	Feb. 21, 1956	a29.28	32,000
1927	Apr. 24, 1927	41.8	----------	1957	May 1, 1957	38.92	98,900
				1958	May 5, 1958	43.87	181,000
Water year				1959	Feb. 19, 1959	33.15	51,600
				1960	Dec. 22, 1959	32.19	47,900
1928	Apr. 11, 1928	30.4	----------	1961	Apr. 4, 1961	36.10	65,700
1929	Dec. 22, 1928	35.41	62,400	1962	Mar. 3, 1962	35.32	60,700
1930	May 21, 1930	40.84	138,000	1963	Mar. 20, 1963	23.13	18,800
				1964	Apr. 27, 1964	a38.05	99,500
1931	Oct. 10, 1930	24.91	14,500	1965	Feb. 14, 1965	d34.92	72,800
1932	Jan. 9, 1932	38.42	102,000				
1933	Jan. 5, 1933	32.46	36,700	1966	Apr. 29, 1966	e39.29	109,000
1934	Mar. 31, 1934	33.32	38,800	1967	May 10, 1967	a33.91	60,700
1935	May 9, 1935	39.33	126,000	1968	May 17, 1968	43.08	183,000

a Occurred on following day.
b Occurred Jan. 13, 1946.
c Occurred Nov. 14, 1946.
d Occurred Feb. 16, 1965.
e Occurred Mar. 1, 1965.

Note.--Calendar year basis prior to 1928; water year thereafter.

3620.5. Ross Creek near Camden, Ark.

Location.--Lat 33°32'39", long 92°53'18", in E½ sec.6, T.14 S., R.17 W., on right bank 44 ft upstream from bridge on U.S. Highway 79, 1.7 miles upstream from mouth, and 4.2 miles southwest of Camden.

Drainage area.--10 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 410 cfs and by contracted-opening measurement at 3,200 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Ross Creek near Camden, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	July 16, 1961	a10.35	730	1966	Apr. 30, 1966	14.0	3,200
1962	Nov. 22, 1961	11.0	1,040	1967	Sept. 15, 1967	6.53	71
1963	Apr. 28, 1963	6.5	70	1968	May 17, 1968	9.96	570
1964	Apr. 22, 1964	8.68	186	1969	Mar. 24, 1969	9.42	400
1965	Feb. 11, 1965	10.44	780				

a Higher peak may have occurred before gage was installed.

3621. Smackover Creek near Smackover, Ark.

Location.--Lat 33°22'33", long 92°46'37", in NW¼SE¼ sec.32, T.15 S., R.16 W., 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.--377 sq mi.

Gage.--Nonrecording prior to Aug. 27, 1948; recording thereafter. Datum of gage is 97.56 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs. Measurements made occasionally prior to 1962, made frequently thereafter.

Bankfull stage.--10 ft.

Remarks.--Gage-height records and miscellaneous discharge measurements furnished by Corps of Engineers. Only annual peaks are shown prior to 1962.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 4, 1939	18.7	12,200	1952	Apr. 14, 1952	14.9	3,900
1940	July 3, 1940	17.8	9,400	1953	May 1, 1953	17.0	7,400
1941	May 7, 1941	15.5	4,700	1954	May 5, 1954	12.2	1,600
1942	Apr. 27, 1942	18.7	12,200	1955	Mar. 24, 1955	13.1	2,200
1943	Mar. 28, 1943	14.5	3,500	1956	Feb. 9, 1956	13.0	2,100
1944	May 3, 1944	18.2	10,600	1957	Apr. 29, 1957	19.6	16,000
1945	Apr. 3, 1945	19.8	16,500	1958	Apr. 27, 1958	21.21	25,000
1946	Jan. 10, 1946[a/]	15.8	5,100	1959	June 9, 1959	14.90	3,810
1947	Apr. 13, 1947	15.2	4,200	1960	Mar. 5, 1960	14.09	2,930
1948	Mar. 24, 1948	16.2	5,800	1961	July 17, 1961	18.65	11,300
1949	Jan. 28, 1949	16.8	7,000	1962	Nov. 24, 1961	16.78	8,060
					Dec. 13, 1961	14.61	3,810
1950	Jan. 14, 1950	19.3	14,500		Dec. 18, 1961	16.27	6,810
					Jan. 2, 1962	13.58	2,630
1951	Feb. 9, 1951	13.2	2,300		Jan. 17, 1962	14.29	3,390

Peak stages and discharges of Smackover Creek near Smackover, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 28, 1962	14.72	3,960	1966	Apr. 26, 1966	17.86	9,230
	May 1, 1962	14.89	4,260		May 2, 1966	20.93	21,400
1963	May 1, 1963	9.69	722	1967	June 2, 1967	12.12	1,450
1964	Apr. 26, 1964	15.94	5,010	1968	May 13, 1968	14.87	3,490
					May 19, 1968	17.30	7,250
1965	Feb. 13, 1965	18.25	10,300				

a And other dates.

3623.3. Dunn Creek near Hampton, Ark.

Location.--Lat 33°32'03", long 92°30'55", in SE¼NW¼ sec.2, T.14 S., R.14 W., on left bank 35 ft downstream from bridge on State Highway 4, 0.7 mile upstream from mouth, and 2.8 miles west of Hampton.

Drainage area.--7.0 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 270 cfs and by contracted-opening measurement at 4,240 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Nov. 22, 1961	7.25	680	1966	May 1, 1966	10.11	4,240
1963	Apr. 28, 1963	5.63	240	1967	Apr. 26, 1967	5.07	165
1964	Apr. 22, 1964	5.93	285	1968	May 17, 1968	8.51	1,520
1965	Feb. 10, 1965	7.40	760	1969	Mar. 24, 1969	7.03	590

3624. Ouachita River at lock and dam 8, Ark.

Location.--Lat 33°18'45", long 92°28'06", in NE¼ sec.29, T.16 S., R.13 W., 6½ miles west of Moro Bay, 10.9 miles upstream from Moro Creek, and at mile 297.9.

Drainage area.--6,569 sq mi.

Gage.--Nonrecording. Datum of gage is 56.07 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not defined.

Bankfull stage.--23 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peak stages are shown.

Peak stages and discharges of Ouachita River at lock and dam 8, Ark.

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1910	Apr. 20, 1910	29.7	----------	1940	July 8-9, 1940	27.8	----------
1911	Apr. 25, 1911	34.3	----------	1941	May 14-15,1941	28.0	----------
1912	Apr. 8, 1912	35.5	----------	1942	Apr. 16, 1942	34.6	----------
1913	Apr. 18, 1913	31.2	----------	1943	Mar. 23, 1943	28.1	----------
1914	Apr. 8, 1914	32.0	----------	1944	May 9, 1944	37.2	----------
1915	Feb. 10, 1915	30.7	----------	1945	Apr. 6, 1945	40.2	----------
1916	Feb. 5, 1916	35.7	----------	1946	Jan. 16, 1946	34.5	----------
1917	Mar.13-14,1917	27.4	----------	1947	May 25, 1947	26.7	----------
1918	Apr. 27, 1918	30.2	----------	1948	Mar. 10, 1948	31.7	----------
1919	Oct. 30, 1919	33.1	----------	1949	Feb. 2, 1949	39.0	----------
1920	May 22, 1920	34.7	----------	1950	Feb. 20, 1950	35.3	----------
1921	May 4, 1921	33.7	----------	1951	Mar. 1, 1951	29.7	----------
1922	Apr. 6, 1922	33.5	----------	1952	Apr.22-23,1952	30.6	----------
1923	May 22-23,1923	33.4	----------	1953	May 21, 1953	35.4	----------
1924	Jan. 1, 1924	26.1	----------	1954	May 10, 1954	27.0	----------
1925	Nov. 15, 1925	26.5	----------	1955	Mar. 31, 1955	29.2	----------
1926	Dec. 30, 1926	34.1	----------	1956	Feb.25-26,1956	27.2	----------
1927	Apr. 27, 1927	38.9	----------	1957	May 5, 1957	34.8	----------
1928	Dec. 27, 1928	29.6	----------	1958	May 8, 1958	39.4	----------
1929	Feb. 3, 1929	27.9	----------	1959	Feb. 24, 1959	28.6	----------
1930	May 23-24,1930	37.5	----------	1960	Dec. 27, 1959	27.1	----------
1931	Dec. 25, 1931	32.7	----------	1961	Apr. 7, 1961	32.1	----------
1932	Feb. 1, 1932	34.6	----------	1962	Mar. 7, 1962	30.9	----------
1933	Jan.10-11,1933	26.7	----------	1963	Mar. 22, 1963	23.1	----------
1934	Apr. 4, 1934	29.3	----------	1964	May 2,3, 1964	33.5	----------
1935	May 13, 1935	34.4	----------	1965	Feb. 19, 1965	30.6	----------
1936	Dec. 13, 1936	20.7	----------	1966	May 4, 1966	37.2	----------
1937	Jan. 28, 1937	38.2	----------	1967	May 15, 1967	30.0	----------
1938	Jan. 31, 1938	36.4	----------	1968	May 21, 1968	39.8	----------
1939	Apr. 25, 1939	32.5	----------				

3624.5. Cooks Creek near Fordyce, Ark.

Location.--Lat 33°50'33", long 92°28'09", in NW¼NE¼ sec.19, T.10 S., R.14 W., on left bank 16 ft downstream from bridge on State Highway 8, 0.3 mile downstream from small tributary, 1.0 mile upstream from small tributary, and 3.9 miles northwest of Fordyce.

Drainage area.--5.2 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 130 cfs and by contracted-opening measurement at 1,950 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 26, 1962	9.31	510	1966	Apr. 24, 1966	11.09	1,340
1963	Mar. 16, 1963	8.40	280	1967	May 31, 1967	10.35	910
1964	Apr. 21, 1964	9.73	610	1968	May 13, 1968	11.78	1,950
1965	Feb. 11, 1965	10.95	1,200	1969	Mar. 23, 1969	9.20	470

3625. Moro Creek near Fordyce, Ark.

Location.--Lat 33°47'32", long 92°19'30", in NW¼NW¼ sec.3, T.11 S., R.12 W., 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.--216 sq mi.

Gage.--Recording. Datum of gage is 160.63 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 19,000 cfs.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 2,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	January 1938	a15.1	15,800	1959	Feb. 17, 1959	11.76	2,710
1952	Apr. 15, 1952	11.88	3,290	1960	Mar. 18, 1960	11.02	1,650
1953	Mar. 22, 1953	12.20	4,230	1961	Feb. 22, 1961	11.53	2,350
	May 2, 1953	11.68	2,950				
	May 14, 1953	12.55	5,340	1962	Dec. 20, 1961	12.56	4,590
	May 18, 1953	12.54	5,340		Feb. 25, 1962	12.65	4,870
1954	May 4-5, 1954	10.94	1,760	1963	July 18, 1963	13.56	7,870
1955	Mar. 23, 1955	12.27	4,360	1964	Apr. 27, 1964	12.26	4,070
1956	Feb. 22, 1956	10.22	1,060	1965	Feb. 13, 1965	12.73	5,160
					Mar. 28, 1965	12.27	3,830
1957	Feb. 3, 1957	14.26	10,700				
	Apr. 5, 1957	14.35	11,100	1966	Apr. 27, 1966	13.32	6,930
	Apr. 29, 1957	13.38	7,440		May 1, 1966	13.56	7,870
1958	Apr. 28, 1958	13.26	6,790	1967	May 9, 1967	11.78	2,710
	May 2, 1958	16.47	26,800				
				1968	May 15, 1968	13.82	9,000

a Annual peak only, from information by Arkansas State Highway Department.

3630. Saline River at Benton, Ark.

Location.--Lat 34°34'05", long 92°36'40", in SE¼NE¼ sec.9, T.2 S., R.15 W., on left bank three-quarters of a mile west of Benton, 3 miles downstream from confluence of North Fork and Alum Fork, and at mile 198.1.

Drainage area.--569 sq mi.

Gage.--Nonrecording July 6, 1938, to July 29, 1948, and Feb. 14, to Mar. 24, 1950; recording during rest of period. Prior to June 15, 1951, at site 0.4 mile downstream at datum 3.00 ft lower. Datum of present gage is 260.91 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--20 ft.

Historical data.--Flood in April 1927 reached a stage of 32.0 ft at former site and datum, from information by Arkansas State Highway Department, or about 30.5 ft present site and datum.

Remarks.--Peaks prior to 1948 computed from graph based on once-daily or more frequent gage readings of U.S. Weather Bureau and will not necessarily agree with maximum in their publications. Gage-height records for 1948-51 furnished by Corps of Engineers. Base for partial-duration series, 14,000 cfs. Only annual peaks are shown prior to 1951.

Peak stages and discharges of Saline River at Benton, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)
1927	April 1927	32.0	110,000
1938	Jan. 22, 1938	23.52	34,000
1939	Apr. 17, 1939	27.5	67,000
1940	Apr. 7, 1940	15.4	7,800
1941	May 9, 1941	15.4	7,800
1942	Apr. 9, 1942	25.0	45,000
1943	Mar. 12, 1943	20.1	17,300
1944	Apr. 23, 1944	26.72	58,000
1945	Mar. 30, 1945	27.0	59,000
1946	May 24, 1946	26.2	50,000
1947	Apr. 11, 1947	16.4	8,800
1948	Mar. 2, 1948	23.0	25,500
1949	Jan. 25, 1949	24.50	32,000
1950	Feb. 13, 1950	24.50	32,000
1951	Jan. 15, 1951	20.27	14,700
	Feb. 21, 1951	22.60	21,500
	July 3, 1951	18.22	14,700
1952	Apr. 13, 1952	20.42	20,500
1953	Nov. 26, 1952	19.77	18,600
	Dec. 4, 1952	25.28	49,500
	Jan. 23, 1953	18.00	14,200
	Mar. 18, 1953	19.18	17,000
	May 12, 1953	19.22	18,100
1954	May 2, 1954	24.49	48,000
1955	Mar. 21, 1955	19.51	19.700
	May 27, 1955	23.16	38,800
1956	Jan. 30, 1956	22.36	33,200
1956	Feb. 2, 1956	21.43	27,400
	Feb. 9, 1956	17.44	14,100
	Feb. 18, 1956	20.77	24,400
1957	Jan. 23, 1957	18.23	16,000
	Apr. 4, 1957	22.68	35,200
	Apr. 28, 1957	18.58	17,100
	May 24, 1957	19.84	20,700
	May 26, 1957	18.34	16,300
1958	Nov. 14, 1957	18.70	17,900
	Jan. 21, 1958	17.8	15,500
	May 3, 1958	21.40	28,400
1959	Feb. 14, 1959	23.47	41,100
1960	Dec. 12, 1959	18.07	15,800
	Dec. 17, 1959	19.56	20,000
	May 21, 1960	20.22	22,000
1961	Mar. 27, 1961	19.09	18,500
	Mar. 31, 1961	17.88	15,800
1962	Jan. 22, 1962	18.48	16,800
	Feb. 27, 1962	21.40	27,400
1963	Mar. 11, 1963	12.96	7,510
1964	Mar. 10, 1964	22.50	33,200
	Apr. 23, 1964	20.69	25,400
1965	Jan. 10, 1965	20.36	24,000
	Feb. 12, 1965	19.60	21,000
	Sept. 23, 1965	18.51	17,100
1966	Feb. 10, 1966	17.93	15,300
	Apr. 26, 1966	23.52	38,500
	Aug. 22, 1966	18.96	18,800
1967	May 2, 1967	19.36	20,200
1968	Mar. 21, 1968	17.93	15,400
	May 11, 1968	21.28	29,000
	May 14, 1968	26.50	66,000

3630.5. Holly Creek tributary near Benton, Ark.

Location.--Lat 34°32'04", long 92°33'12", in SW¼NW¼ sec.19, T.2 S., R.14 W., on right bank 25 ft upstream from culvert on State Highway 35, 0.7 mile upstream from mouth, and 2.8 miles southeast of Benton.

Drainage area.--1.46 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Holly Creek tributary near Benton, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Jan. 22, 1962	5.64	255	1966	Apr. 25, 1966	5.46	215
1963	June 20, 1963	3.68	64	1967	May 6, 1967	4.62	115
1964	Apr. 23, 1964	6.51	475	1968	May 13, 1968	5.93	315
1965	Feb. 11, 1965	5.20	170	1969	Jan. 30, 1969	6.53	480

3632. Saline River near Sheridan, Ark.
(Published as "Saline River and Gamble Creek near Sheridan" prior to 1966)

Location.--Lat 34°06'56", long 92°24'21", in NE¼NW¼ sec.15, T.7 S., R.13 W., on downstream side of bridge on U.S. Highway 167, 1 mile upstream from Gamble Creek, 1.6 miles downstream from Lost Creek, 2.1 miles upstream from Hurricane Creek, 13½ miles south of Sheridan, and at mile 131.4.

Drainage area.--1,129 sq mi.

Gage.--Nonrecording prior to Nov. 23, 1948: recording thereafter. Datum of gage is 152.86 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 67,000 cfs (1969). Not adequately defined prior to 1948.

Bankfull stage.--14 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1938	Jan. 24, 1938	21.0	----------	1954	May 5, 1954	17.8	34,000
1939	Apr. 19, 1939	19.4	----------	1955	Mar. 24, 1955	16.9	23,000
1940	Apr. 13, 1940	13.2	----------				
				1956	Feb. 21, 1956	17.2	26,000
1941	Dec. 29, 1941	14.9	----------	1957	Apr. 6, 1957	18.3	40,000
1942	Apr. 11, 1942	19.3	----------	1958	May 3, 1958	18.97	a39,000
1943	Mar. 18, 1943	15.2	----------	1959	Feb. 17, 1959	18.95	38,000
1944	May 5, 1944	17.6	----------	1960	June 28, 1960	17.90	29,000
1945	Apr. 2, 1945	19.8	----------				
				1961	Apr. 1, 1961	17.51	26,000
1946	Mar. 30, 1946	18.8	----------	1962	Mar. 2, 1962	17.20	24,000
1947	Apr. 14, 1947	15.1	----------	1963	Mar. 17, 1963	14.78	7,200
1948	Mar. 5, 1948	16.4	18,500	1964	Apr. 26, 1964	18.51	34,000
1949	Jan. 28, 1949	20.1	61,000	1965	Feb. 15, 1965	16.98	22,000
1950	Feb. 15, 1950	19.7	56,000				
				1966	Apr. 28, 1966	18.16	31,000
1951	Jan. 16, 1951	16.8	22,000	1967	May 6, 1967	16.27	17,000
1952	Dec. 7, 1952	17.3	27,000	1968	May 16, 1968	21.38	62,000
1953	May 15, 1953	17.2	26,000	1969	Feb. 1, 1969	22.4	71,000

a Revised.

3633. Hurricane Creek near Sheridan, Ark.

Location.--Lat 34°19'10", long 92°20'40", in NW¼NE¼ sec.6, T.4 S., R.12 W., 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 sq mi.

Gage.--Recording. Datum of gage is 200.00 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs and by contracted-opening measurement at 52,300 cfs.

Bankfull stage.--12 ft.

Historical data.--Flood in 1960 is greatest known since at least 1939. According to local resident this flood was highest known since at least 1880 at site 8 miles downstream.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	June 27, 1960	18.55	a52,300	1964	Apr. 24, 1964	15.93	18,100
1961	Apr. 31, 1961	15.42	a12,600	1965	Feb. 12, 1965	15.04	9,750
					Mar. 30, 1965	14.78	7,860
1962	Jan. 23, 1962	14.36	5,740				
	Feb. 24, 1962	14.73	7,800	1966	Apr. 26, 1966	14.74	7,580
	Feb. 27, 1962	15.23	11,300				
				1967	May 7, 1967	14.52	5,450
1963	Apr. 29, 1963	12.70	1,390				
				1968	May 14, 1968	16.03	15,700

a Annual peak only.

3633.3. West Fork Big Creek at Sheridan, Ark.

Location.--Lat 34°19'13", long 92°23'43", in NW¼NE¼ sec.3, T.5 S., R.13 W., on right bank 60 ft upstream from bridge on U.S. Highway 167, 0.3 mile upstream from mouth, and 0.9 mile north of junction of U.S. Highways 167 and 270 in Sheridan.

Drainage area.--4.86 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 680 cfs and by contracted-opening and flow-over-road measurement at 3,720 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	June 27, 1960	18.74	3,720	1965	Feb. 11, 1965	14.22	730
				1966	Apr. 25, 1966	12.97	325
1963	Apr. 27, 1963	12.85	305	1967	May 6, 1967	13.79	565
1964	Apr. 23, 1964	13.12	350	1968	May 13, 1968	14.22	730
				1969	Jan. 30, 1969	13.22	390

3634. Hurricane Creek below Sheridan, Ark.
(Published by Corps of Engineers as "near" Sheridan)

Location.--Lat 34°13'30", long 92°21'45", in sec.1, T.6 S., R.13 W., on downstream side of bridge on State Highway 35, 5¾ miles southeast of Sheridan, and at mile 11.0.

Drainage area.--270 sq mi.

Gage.--Nonrecording prior to Nov. 29, 1948; recording thereafter. Datum of gage is 180.10 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Not adequately defined.

Bankfull stage.--11 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Jan. 22, 1938	14.7	----------	1955	May 28, 1955	15.0	----------
1939	Feb. 4, 1939	14.0	----------				
1940	June 23, 1940	10.6	----------	1956	Feb. 19, 1956	12.4	----------
				1957	Apr. 4, 1957	14.0	----------
1947	Apr. 12, 1947	14.7	----------	1958	May 3, 1958	14.48	----------
1948	Mar. 23, 1948	14.3	----------	1959	Feb. 16, 1959	13.55	----------
1949	Jan. 28, 1949	14.1	----------	1960	June 28, 1960	17.60	----------
1950	Feb. 13, 1950	15.4	----------				
				1961	Mar. 31, 1961	14.23	----------
1951	Jan. 14, 1951	14.2	----------	1962	Feb. 28, 1962	13.94	----------
1952	Apr. 14, 1952	12.2	----------	1963	Apr. 30, 1963	10.91	----------
1953	May 13, 1953	12.7	----------	1964	Apr. 24, 1964	14.85	----------
1954	May 5, 1954	11.5	----------				

3634.3. East Fork Derrieusseaux Creek near Pine Bluff, Ark.

Location.--Lat 34°17'57", long 92°11'37", in NW¼NW¼ sec.10, T.5 S., R.11 W., on right bank 14 ft upstream from culvert on U.S. Highway 270, 0.3 mile upstream from small tributary, 1.2 miles east of Grant-Jefferson County line, 3.8 miles upstream from mouth, and 12 miles northwest of Pine Bluff.

Drainage area.--0.64 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 65 cfs and by culvert measurements at 130 cfs, 142 cfs, and 237 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 30, 1961	7.26	53	1966	Aug. 21, 1966	8.73	142
1962	Feb. 27, 1962	9.29	237	1967	May 6, 1967	8.56	130
1963	June 20, 1963	6.36	25	1968	May 13, 1968	7.95	92
1964	Apr. 26, 1964	9.14	210	1969	Aug. 17, 1969	8.18	100
1965	Mar. 29, 1965	8.54	130				

3634.5. Saline River tributary near Rison, Ark.

Location.--Lat 33°56'12", long 92°10'31", in NW¼NE¼ sec.18, T.9 S., R.10 W., on right bank 13 ft upstream from culvert on State Highway 35 and 1.8 miles southeast of Rison.

Drainage area.--0.27 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 2.9 cfs and by culvert measurements at 54 cfs, 61 cfs, 132 cfs, and 159 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	Apr. 21, 1964	5.52	32	1967	May 6, 1967	4.96	10
1965	Feb. 11, 1965	6.03	54	1968	May 13, 1968	7.93	159
				1969	Mar. 23, 1969	5.57	33
1966	Apr. 24, 1966	6.17	61				

3635. Saline River near Rye, Ark.

Location.--Lat 33°42', long 92°02', on line between secs.3 and 4, T.12 S., R.9 W., on downstream side of bridge on State Highway 15, 4 miles southwest of Rye, 5 miles upstream from Hudgin Creek, and at mile 71.0.

Drainage area.--2,062 sq mi.

Gage.--Nonrecording prior to May 30, 1939; recording thereafter. Altitude of gage is 95 ft (by barometer).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--20 ft.

Historical data.--Flood in April 1927 is greatest known for the period 1927-38, from information by Arkansas State Highway Department.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	April 1927	30.5	a73,000	1941	Apr. 28, 1941	21.60	9,050
1938	Jan. 27, 1938	28.0	42,300	1942	Apr. 14, 1942	27.65	39,600
	Feb. 23, 1938	27.81	40,700		May 4, 1942	24.92	19,800
	Apr. 8, 1938	24.05	16,500				
				1943	Mar. 16, 1943	22.29	10,100
1939	Feb. 9, 1939	26.05	27,700				
	Feb. 17, 1939	24.90	21,200	1944	Mar. 29, 1944	24.20	16,100
	Mar. 5, 1939	23.60	15,500		May 8, 1944	26.77	32,800
	Apr. 16, 1939	22.50	12,100				
	Apr. 23, 1939	26.50	31,400	1945	Jan. 6, 1945	23.29	12,600
					Mar. 6, 1945	26.05	26,900
1940	July 3, 1940	20.91	9,040		Apr. 5, 1945	28.43	47,600

Peak stages and discharges of Saline River near Rye, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	May 21, 1945	25.95	26,900	1956	Feb. 11, 1956	24.32	17,600
	June 18, 1945	25.53	23,500		Feb. 24, 1956	25.10	21,300
1946	Jan. 14, 1946	26.91	36,100	1957	Feb. 6, 1957	24.29	17,600
	Feb. 14, 1946	24.62	20,400		Apr. 9, 1957	26.50	33,000
	Apr. 2, 1946	27.01	37,100		May 3, 1957	27.00	37,000
	May 8, 1946	22.91	13,300		June 3, 1957	23.66	16,700
	May 30, 1946	25.62	26,500				
				1958	Nov. 20, 1957	25.70	27,200
1947	June 26, 1947	21.94	10,700		Jan. 30, 1958	22.46	12,600
					May 3, 1958	30.31	70,500
1948	Feb. 19, 1948	23.75	14,400		May 21, 1958	22.23	11,800
	Mar. 9, 1948	25.02	20,400				
	Mar. 27, 1948	24.97	20,400	1959	Feb. 21, 1959	25.68	24,000
1949	Jan. 31, 1949	29.19	57,400	1960	Dec. 26, 1959	22.93	13,800
	Apr. 2, 1949	24.36	17,100		July 4, 1960	23.23	14,800
1950	Jan. 17, 1950	26.70	32,000	1961	Apr. 4, 1961	26.56	33,800
	Feb. 7, 1950	26.33	29,000				
	Feb. 18, 1950	28.26	46,500	1962	Dec. 22, 1961	23.06	12,900
	Mar. 16, 1950	22.93	11,500		Jan. 30, 1962	24.76	20,200
	Apr. 5, 1950	22.38	10,300		Mar. 5, 1962	25.85	28,000
	May 14, 1950	23.86	14,800				
				1963	Mar. 22, 1963	18.84	6,970
1951	Jan. 21, 1951	25.10	21,000				
	Mar. 2, 1951	22.32	10,100	1964	Mar. 18, 1964	23.69	16,700
					Apr. 29, 1964	27.59	42,200
1952	Apr. 21, 1952	23.92	14,800				
				1965	Feb. 19, 1965	24.95	22,800
1953	Mar. 25, 1953	24.96	20,800		Apr. 5, 1965	23.20	13,800
	May 5, 1953	23.72	15,300				
	May 19, 1953	27.16	36,100	1966	May 2, 1966	29.00	50,800
1954	May 11, 1954	23.30	14,600	1967	May 12, 1967	24.74	19,000
1955	Mar. 29, 1955	24.30	17,600	1968	Mar. 31, 1968	23.00	12,200
					May 18, 1968	31.40	74,500

a Annual peak only.

3640. Saline River near Warren, Ark.

Location.--Lat 33°35', long 92°01', in sec.15, T.13 S., R.9 W., at bridge on State Highway 4, 3 miles downstream from Cypress Creek, 3½ miles southeast of Warren, and at mile 58.0.

Drainage area.--2,476 sq mi.

Gage.--Nonrecording. Datum of gage is 86.02 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 60,000 cfs.

Bankfull stage.--22 ft.

Remarks.--Records since September 1929 furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges of Saline River near Warren, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 27, 1927	28,0	----------	1931	Apr. 3-6, 1931	12.00	4,270
1929	Mar.11-13,1929	20.22	11,900	1938	Jan. 28, 1938	25.72	57,100
1930	Mar. 19, 1930	25.90	61,500	1939	Feb. 10, 1939	24.39	32,200
				1940	July 3, 1940	22.49	16,400

3640.3. Eagle Creek tributary near Hermitage, Ark.

Location.--Lat 33°24'34", long 92°12'36", in SW¼ sec.14, T.15 S., R.11 W., on right bank 20 ft upstream from culvert on State Highway 15, 2.5 miles upstream from mouth, and 3.3 miles southwest of Hermitage.

Drainage area.--0.75 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 6 cfs and by culvert measurement at 59 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Apr. 28, 1963	3.5	3	1966	May 1, 1966	4.64	59
1964	Apr. 5, 1964	4.55	54	1967	May 4, 1967	3.54	4
1965	Feb. 11, 1965	4.07	24	1968	Mar. 22, 1968	4.16	30
				1969	Oct. 13, 1968	4.38	42

3640.7. Bear Creek near Strong, Ark.

Location.--Lat 33°04'32", long 92°19'33", in NE¼SE¼ sec.10, T.19 S., R.12 W., on right bank 20 ft downstream from bridge on State Highway 129, 2.2 miles upstream from mouth, and 2.9 miles southeast of Strong.

Drainage area.--6.0 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	July 15, 1963	12.12	275	1966	Feb. 9, 1966	13.28	430
1964	Apr. 5, 1964	12.65	340	1967	May 31, 1967	11.50	200
1965	Mar. 29, 1965	13.27	430	1968	Jan. 8, 1968	12.37	300
				1969	June 2, 1969	11.08	170

3640.8. Ouachita River at lock and dam 6, near Felsenthal, Ark.

Location.--Lat 33°01'56", long 92°05'17", in SW¼NE¼ sec.25, T.19 S., R.10 W., in upper pool of lock and dam 6, 2.5 miles upstream from Arkansas-Louisiana State line, 3.7 miles downstream from Missouri Pacific Railroad Co. bridge, 4.5 miles southeast of Felsenthal, and at mile 239.4.

Drainage area.--10,787 sq mi.

Gage.--Nonrecording. Datum of gage is 44.09 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Bankfull stage.--21 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peak stages are shown.

Peak stages and discharges

Calendar year	Date	Gage height (feet)	Discharge (cfs)	Calendar year	Date	Gage height (feet)	Discharge (cfs)
1912	Apr.16-18,1912	39.0	----------	1941	Mar.21-23,1941	25.5	----------
1913	Apr.24-26,1913	30.8	----------	1942	May 10-11,1942	32.8	----------
1914	Apr.15-16,1914	32.2	----------	1943	Apr. 7-10,1943	25.2	----------
1915	Mar.17-19,1915	29.7	----------	1944	May 15-16,1944	39.2	----------
				1945	Apr.11-12,1945	44.2	----------
1916	Feb.12-13,1916	35.0	----------				
1917	Mar.22-24,1917	23.1	----------	1946	Feb.22-24,1946	37.7	----------
1918	May 5-6, 1918	24.1	----------	1947	Apr.21-24,1947	25.2	----------
1919	Dec.16-17,1919	30.9	----------	1948	Apr. 3-5, 1948	33.5	----------
1920	May 29, 1920	34.5	----------	1949	Feb.10-12,1949	36.0	----------
				1950	Feb.25-26,1950	40.0	----------
1921	May 12-13,1921	32.8	----------				
1922	Apr.13-16,1922	35.0	----------	1951	Mar. 8-9, 1951	28.8	----------
1923	May 29-30,1923	32.2	----------	1952	May 5-7, 1952	29.2	----------
1924	Jan. 3-5, 1924	26.0	----------	1953	May 28-29,1953	39.4	----------
1925	Nov.20-22,1925	26.2	----------	1954	May 19, 1954	23.2	----------
				1955	Apr.20-23,1955	26.1	----------
1926	Apr.18-19,1926	26.2	----------				
1927	Apr. 30, May 1	43.0	----------	1956	Mar. 3-5, 1956	26.8	----------
1928	May 7-8, 1928	27.1	----------	1957	May 11-14,1957	35.8	----------
1929	Mar.23-24,1929	26.4	----------	1958	May 14-16,1958	43.0	----------
1930	May 30-31,1930	36.6	----------	1959	Mar. 6, 1959	25.6	----------
				1960	Mar.26-28,1960	26.2	----------
1931	Apr. 6-7, 1931	a19.9	----------				
1932	Feb. 3-4, 1932	42.7	----------	1961	Apr.16-18,1961	33.8	----------
1933	Apr.11-15,1933	26.2	----------	1962	Feb. 7-9, 1962	31.7	----------
1934	Apr.17-20,1934	29.0	----------	1963	Mar. 26, 1963	20.7	----------
1935	May 21, 1935	31.2	----------	1964	May 9-11, 1964	30.3	----------
				1965	Feb.28, Mar. 1	26.4	----------
1936	Feb. 5, 1936	18.5	----------				
1937	Feb. 4-5, 1937	38.8	----------	1966	May 12,13,1966	34.0	----------
1938	Mar. 4, 1938	34.8	----------	1967	May 23-25,1967	24.5	----------
1939	Mar.10-13,1939	34.6	----------	1968	May 30,31,1968	38.3	----------
1940	July 15, 1940	24.2	----------				

a Maximum crest stage. Maximum stage occurred Dec. 31 on rise that crested Feb. 3,4, 1932.

3641.1. Nevins Creek tributary near Pine Bluff, Ark.

Location.--Lat 34°10'08", long 92°05'12", in NW¼SE¼ sec.26, T.6 S., R.10 W., on right bank 20 ft upstream from culvert on U.S. Highway 79, 0.9 mile upstream from tributary, 1.9 miles southwest of Watson Chapel, 2.1 miles upstream from mouth, and 6 miles southwest of Pine Bluff.

Drainage area.--0.79 sq mi.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since November 1967.

Stage-discharge relation.--Defined by current-meter measurements below 67 cfs and by culvert measurements at 95 cfs, 119 cfs, 122 cfs, and 231 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Nevins Creek tributary near Pine Bluff, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 30, 1961	5.47	122	1966	Apr. 24, 1966	4.60	95
1962	Feb. 23, 1962	5.76	140	1967	May 6, 1967	4.98	119
1963	Apr. 28, 1963	4.35	84	1968	May 14, 1968	6.56	231
1964	Apr. 26, 1964	5.62	160	1969	Jan. 30, 1969	4.30	80
1965	Mar. 29, 1965	5.35	142				

3641.2. Bayou Bartholomew near Star City, Ark.

Location.--Lat 33°57'38", long 91°47'07", in SW¼ sec.1, T.9 S., R.7 W., on downstream side of bridge on State Highway 11, 3½ miles northeast of Star City, 10.7 miles upstream from Deep Bayou, and at mile 285.7.

Drainage area.--215 sq mi.

Gage.--Nonrecording prior to July 13, 1948; recording thereafter. Datum of gage is 153.25 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--28 ft.

Remarks.--Gage-height records and results of discharge measurements furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 3-4, 1942	21.7	2,200	1956	Feb. 10, 1956	18.4	1,360
1943	Mar. 20, 1943	20.8	1,960	1957	Feb. 8, 1957	21.5	2,140
1944	Mar. 31, 1944	18.9	1,480	1958	May 2, 1958	26.29	4,000
1945	Apr. 3-4, 1945	21.8	2,220	1959	Feb. 19, 1959	17.02	1,070
				1960	Mar. 18, 1960	17.02	1,070
1946	Jan. 12, 1946	23.1	2,580				
1947	June 4, 1947	16.8	1,000	1961	Apr. 4, 1961	21.11	2,040
1948	Feb. 16, 1948	21.3	2,080	1962	Dec. 20, 1961	21.15	2,050
1949	Jan. 30, 1949	18.8	1,460	1963	May 8, 1963	14.60	620
1950	Jan. 16, 1950	21.4	2,120	1964	Apr. 29, 1964	20.66	1,910
				1965	Feb. 14, 1965	18.78	1,440
1951	Jan. 21, 1951	18.7	1,440				
1952	Feb. 4, 1952	17.9	1,240	1966	May 3, 1966	22.86	2,540
1953	May 18, 1953	24.0	2,860	1967	May 10, 1967	18.18	1,320
1954	Jan. 23, 1954	15.4	740	1968	May 20, 1968	23.00	2,560
1955	Mar. 27, 1955	19.1	1,520				

3641.25. Cane Creek at Star City, Ark.

Location.--Lat 33°57'16", long 91°50'32", in SE¼SE¼ sec.5, T.9 S., R.7 W., on left bank 25 ft downstream from bridge on State Highway 81, 0.9 mile north of junction of State Highways 11 and 81 in Star City, and 2.2 miles upstream from Dry Fork Creek.

Drainage area.--4.9 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 260 cfs and by field estimate of 1,500 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Cane Creek at Star City, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Nov. 22, 1961	8.33	980	1966	Feb. 9, 1966	8.00	810
1963	Aug. 30, 1963	6.96	420	1967	July 29, 1967	8.27	960
1964	May 2, 1964	9.09	1,500	1968	Apr. 3, 1968	9.08	1,500
1965	Mar. 29, 1965	7.86	760	1969	Oct. 13, 1968	8.04	820

3641.5. Bayou Bartholomew near McGehee, Ark.

Location.--Lat 33°37'40", long 91°26'45", in NE¼SW¼ sec.30, T.12 S., R.3 W., 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.--592 sq mi.

Gage.--Nonrecording prior to Sept. 7, 1949; recording thereafter. Datum of gage is 121.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--20 ft.

Remarks.--Records prior to 1957 and gage-height records thereafter furnished by Corps of Engineers. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	1930	19.4	4,300	1952	Feb. 9, 1952	14.8	2,450
				1953	May 25, 1953	22.5	5,700
1932	1932	22.4	5,600	1954	Feb. 1, 1954	12.0	1,600
				1955	Apr. 19, 1955	16.6	3,150
1939	Feb. 28, 1939	19.4	4,300				
1940	July 15, 1940	11.1	1,350	1956	Feb. 14, 1956	17.3	3,450
				1957	Feb. 14, 1957	16.79	3,070
1941	Mar. 13, 1941	12.4	1,700	1958	May 11, 1958	24.49	6,870
1942	May 10-11,1942	15.5	2,700	1959	Feb. 22, 1959	14.76	a2,360
1943	Mar. 27, 1943	17.0	3,300	1960	Mar.20-21,1960	14.59	2,290
1944	Apr. 3-4, 1944	17.7	3,600				
1945	Apr. 8, 1945	20.7	4,900	1961	Feb.28, Mar. 1	19.29	4,090
				1962	Dec.24-25,1961	18.19	3,620
1946	Jan.20-21,1946	21.3	5,200	1963	Mar.24-26,1963	9.10	860
1947	June 5, 1947	13.7	2,100	1964	Mar. 3-5, 1964	17.60	3,380
1948	Feb. 22, 1948	20.0	4,600	1965	Feb. 20, 1965	15.51	2,700
1949	Feb. 6-7, 1949	16.2	3,000				
1950	Jan.21,23,1950	20.0	4,600	1966	May 11-12,1966	17.01	3,230
				1967	May 16-17,1967	13.37	2,060
1951	Jan.24-25,1951	14.8	2,450	1968	May 26, 1968	20.21	4,120

a Maximum peak discharge. Maximum discharge occurred Oct. 1, 1958, on recession of flood that crested Sept. 27, 1958.

3641.65. Upper Cutoff Creek near Monticello, Ark.

Location.--Lat 33°44'20", long 91°44'51", in NW¼SW¼ sec.20, T.11 S., R.6 W., on left bank 30 ft upstream from bridge on State Highway 83, 1.4 miles upstream from Rat Creek, 2.4 miles south of Coleman, and 8.0 miles north of Monticello.

Drainage area.--18 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 430 cfs and by contracted-opening measurement at 4,720 cfs (1970).

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	May 27, 1963	5.6	90	1966	Feb. 9, 1966	9.85	1,010
1964	Apr. 26, 1964	10.10	1,150	1967	May 6, 1967	9.25	730
1965	Feb. 11, 1965	9.30	750	1968	May 17, 1968	10.03	1,100
				1969	Oct. 13, 1968	9.39	800

3641.9. Bayou Bartholomew at Wilmot, Ark.

Location.--Lat 33°04'08", long 91°34'42", in SW¼ sec.1, T.19 S., R.5 W., on downstream side of bridge on State Highway 52, 0.9 mile northwest of Wilmot, 19.7 miles upstream from Overflow Creek, and at mile 98.7.

Drainage area.--1,170 sq mi.

Gage.--Nonrecording prior to Nov. 28, 1949; recording thereafter. Prior to September 1943 at Smith's Ferry, 1 mile upstream at same datum. Datum of gage is 85.17 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements, made occasionally since 1939, below 8,000 cfs.

Bankfull stage.--25 ft.

Remarks.--Gage-height records and results of current-meter measurements furnished by Corps of Engineers, Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Nov.16-17,1925	23.8	5,950	1936	July 17-18,1936	8.8	1,020
1927	May 10-11,1927	25.9	6,920	1937	Feb. 2-8, 1937	24.8	6,400
1928	May 3-5, 1928	18.9	3,890	1938	Jan. 8, 1938	19.6	4,160
1929	Mar.14-15,1929	17.3	3,290	1939	Mar. 5-6, 1939	24.0	6,040
1930	May 27-28,1930	24.9	6,440	1940	July 17-20,1940	18.9	3,890
1931	Mar. 16-18, 21	8.6	990	1941	Mar. 17, 1941	18.1	3,580
1932	Jan. 12, 1932	26.3	7,100	1942	Apr.19-20,1942	20.0	4,330
1933	Apr.8-10, 1933	20.4	4,480	1943	Apr. 4-5, 1943	19.7	4,200
1934	Mar.13-16,1934	18.0	3,550	1944	Apr.9-11, 1944	24.7	6,360
1935	Jan. 31 - Feb.6	24.8	6,400	1945	Apr.8-15, 1945	25.2	6,590

Peak stages and discharges of Bayou Bartholomew at Wilmot, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Feb.14-22,1946	25.3	6,640	1958	May 23, 1958	26.16	8,000
1947	Apr. 18, 1947	18.1	3,580	1959	Feb. 24, 1959	19.87	4,000
1948	Mar.11-12,1948	23.9	6,000	1960	Mar. 25, 1960	18.83	3,620
1949	Apr. 3-5, 1949	22.3	5,310				
1950	Apr. 2-3, 1950	25.0	6,500	1961	Mar 11, 1961	25.15	6,200
				1962	Dec.25-28,1961	24.00	5,700
1951	Feb. 16, 1951	20.2	4,180	1963	Apr. 3, 1963	8.18	910
1952	Feb. 22, 1952	18.6	3,580	1964	May 9, 1964	20.65	4,300
1953	May 28-29,1953	25.3	6,240	1965	Mar. 2, 1965	18.12	3,380
1954	May 13, 1954	17.7	3,440				
1955	Apr.24-25,1955	20.9	4,400	1966	Feb. 14, 1966	21.37	4,580
				1967	June 6, 1967	15.27	2,500
1956	Apr.23-25,1956	20.8	4,360	1968	June 4, 1968	22.16	4,900
1957	Mar. 7, 1957	19.6	3,940				

3642. Bayou Bartholomew near Jones, La.

Location.--Lat 32°59'25", long 91°39'20", in SE¼SW¼ sec.9, T.23 N., R.8 E., on downstream side of bridge on Louisiana State Highway 834, 1 mile downstream from Arkansas-Louisiana State line, 1.6 miles northwest of Jones, and at mile 83.4.

Drainage area.--1,187 sq mi.

Gage.--Recording. Datum of gage is 79.21 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--8 ft.

Remarks.--During extreme floods, considerable flow bypasses station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 5, 1958	a28.24	b6,100	1964	May 12, 1964	a21.54	4,240
1959	Oct. 4,5, 1958	24.26	b5,350	1965	Mar. 2, 1965	19.06	3,270
1960	Mar. 24, 1960	19.69	3,860				
				1966	Feb.23,24,1966	22.23	4,360
1961	Mar.11-13,1961	25.72	b6,680	1967	June 6, 1967	17.22	2,500
1962	Dec.27,28,1961	a24.85	b6,250	1968	Apr. 14, 1968	23.19	4,490
1963	Apr. 6, 1963	8.86	885	1969	Feb.22,23,1969	21.0	b4,200

a Occurred on different day than maximum discharge.
b Maximum daily discharge.

3642.6. Hanks Creek near Hamburg, Ark.

Location.--Lat 33°10'06", long 91°49'42", in NW¼SE¼ sec.4, T.18 S., R.7 W., on left bank 35 ft downstream from bridge on U.S. Highway 82, 0.7 mile west of junction of U.S. Highway 82 and State Highway 81, and 4.5 miles southwest of Hamburg.

Drainage area.--14 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 520 cfs and extended by logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Dec. 16, 1961	9.34	710	1966	Feb. 10, 1966	10.46	1,300
1963	Mar. 11, 1963	5.27	45	1967	Feb. 20, 1967	8.45	395
1964	Apr. 24, 1964	8.97	530	1968	Jan. 9, 1968	9.37	700
1965	Feb. 11, 1965	7.74	250	1969	Mar. 23, 1969	8.48	405

3643. Chemin-a-Haut Bayou near Beekman, La.

Location.--Lat 32°58'55", long 91°48'20", in SE¼ sec.13, T.23 N., R.6 E., on downstream side of bridge on Parish road, 1½ miles downstream from Arkansas-Louisiana State line, and 6 miles northeast of Beekman.

Drainage area.--271 sq mi.

Gage.--Recording. Prior to Oct. 1, 1966, at datum 9.5 ft higher. Datum of gage is 76.08 ft above mean sea level. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 26,500 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Apr. 7, 1956	21.61	3,890	1963	Apr. 30, 1963	16.80	480
1957	Apr. 6, 1957	22.28	3,630	1964	Apr. 28, 1964	20.47	2,550
1958	Apr. 26, 1958	a28.21	29,500	1965	Apr. 1, 1965	c19.80	2,020
1959	Feb. 15, 1959	a21.84	4,320				
1960	Mar. 4, 1960	a18.99	1,400	1966	Feb. 11, 1966	24.28	10,000
				1967	June 2, 1967	21.83	4,590
1961	Feb. 22, 1961	a24.33	11,200	1968	Jan. 11, 1968	22.78	5,280
1962	Dec. 12, 1961	b23.66	5,340				

a Occurred on following day.
b Occurred Dec. 19, 1961.
c Occurred Feb. 13, 1965.

3645. Bayou Bartholomew near Beekman, La.

Location.--Lat 32°52'20", long 91°52'04", in NW¼NW¼ sec.28, T.22 N., R.6 E., near center of span on downstream side of bridge on Lousiana State Highway 139, 0.8 mile downstream from Bayou De Glaize, 4 miles south of Beekman, and at mile 49.2.

Drainage area.--1,645 sq mi.

Gage.--Nonrecording prior to Aug. 17, 1955; recording thereafter. Datum of gage is 70.60 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements. Considerable shifting has occurred at high stages.

Remarks.--Records furnished by Corps of Engineers September 1929 to October 1938. Base for partial-duration series, 4,500 cfs. Only annual peaks are shown 1927, 1932-38, and since 1958.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 1, 1927	a26.75	----------	1947	Jan. 23, 1947	17.50	4,960
					Mar. 17, 1947	17.41	4,910
1929	Mar. 27, 1929	19.20	5,230		Apr. 13, 1947	20.80	6,700
1930	Feb. 1, 1930	21.44	7,120	1948	Feb. 16, 1948	23.34	7,380
	May 21, 1930	23.64	9,130		Mar. 7, 1948	22.62	7,070
					Apr. 18, 1948	20.05	5,900
1931	Jan. 13, 1931	9.08	1,560				
				1949	Feb. 9, 1949	20.28	6,030
1932	Jan. 12, 1932	25.78	b12,400		Mar. 29, 1949	23.35	7,800
1933	Apr. 4, 1933	21.70	7,400	1950	Jan. 17, 1950	21.82	7,120
					Feb. 16, 1950	25.76	9,380
1934	Mar. 6, 1934	21.40	7,200		Mar. 17, 1950	22.71	7,620
					May 4, 1950	22.00	7,230
1935	Feb. 15, 1935	22,80	8,400		Sept. 4, 1950	18.23	5,140
1936	Feb.11-12,1936	7.40	1,260	1951	Jan. 7, 1951	18.32	c5,490
					Feb.11-12,1951	20.50	6,560
1937	Jan. 27, 1937	23.60	9,100		Apr. 1, 1951	17.22	c4,970
1938	Apr. 11, 1938	19.20	5,820	1952	Feb. 2, 1952	17.32	4,760
1939	Mar. 2-3, 1939	22.07	7,560	1953	Mar. 16, 1953	18.70	c5,060
	Apr. 10, 1939	19.96	6,290		May 20, 1953	25.09	8,540
1940	Apr. 22, 1940	19.06	c5,610	1954	May 6, 1954	20.30	5,680
	July 16, 1940	23.83	8,570				
				1955	Mar. 24, 1955	22.48	7,510
1941	Jan. 7, 1941	17.25	c4,750		Apr. 17, 1955	20.26	c6,420
	Mar. 11, 1941	18.81	5,470				
				1956	Feb.21-22,1956	18.05	c5,000
1942	Apr. 12, 1942	21.29	6,860		Mar. 17, 1956	17.77	c4,920
					Mar. 23, 1956	17.31	c4,720
1943	Apr. 4, 1943	16.86	4,610		Apr. 9, 1956	18.14	5,030
1944	Feb. 29, 1944	21.93	6,790	1957	Feb. 6, 1957	17.19	c4,680
	Mar. 31, 1944	25.33	8,780		Mar. 4, 1957	17.97	c5,000
	May 7, 1944	23.94	7,940		Apr. 7, 1957	21.08	6,480
					May 6, 1957	18.24	c4,980
1945	Jan. 4, 1945	21.50	7,080				
	Feb. 23, 1945	22.10	7,410	1958	Nov. 21, 1957	24.59	c8,500
	Apr. 5, 1945	26.45	9,890		Jan. 26, 1958	18.70	c5,250
					May 2, 1958	28.30	14,700
1946	Feb. 12, 1946	27.23	10,400		May 23, 1958	26.71	c10,300
					Sept. 23, 1958	23.92	c8,060

Peak stages and discharges of Bayou Bartholomew near Beekman, La.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 18, 1959	d20.65	6,300	1964	Apr. 29, 1964	19.41	5,900
1960	Mar. 20, 1960	17.40	4,900	1965	Feb. 14, 1965	17.21	4,800
1961	Apr. 2, 1961	25.20	9,100	1966	Feb. 13, 1966	21.44	6,980
1962	Dec. 20, 1961	24.69	8,800	1967	June 4, 1967	18.94	5,650
1963	Mar. 18, 1963	7.43	1,230	1968	Apr. 16, 1968	22.28	7,420

a Affected by Mississippi River overflow.
b Result of discharge measurement.
c Mean daily.
d Occurred Oct. 5, 1958.

3645.5. Cany Creek tributary near El Dorado, Ark.

Location.--Lat 33°11'22", long 92°36'28", in NE¼NW¼ sec.1, T.18 S., R.15 W., on right bank 8 ft upstream from culvert on U.S. Highway 82, 0.8 mile upstream from mouth, and 3.5 miles southeast of El Dorado.

Drainage area.--0.1 sq mi, approximately.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since August 1969.

Stage-discharge relation.--Defined by current-meter measurement at 17 cfs and by culvert measurements at 45 cfs, 93 cfs, and 140 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	July 16, 1961	9.43	140	1966	Aug. 12, 1966	7.15	44
1962	Dec. 31, 1961	7.34	51	1967	Oct. 17, 1966	6.85	34
1963	Apr. 28, 1963	7.29	50	1968	Sept. 16, 1968	8.76	110
1964	Apr. 24, 1964	7.91	74	1969	June 2, 1969	8.49	98
1965	Feb. 9, 1965	7.25	48				

3647. Bayou de Loutre near Laran, La.

Location.--Lat 32°57'20", long 92°30'00", in NW¼ sec.29, T.23 N., R.1 W., on downstream side of bridge on parish road, 1½ miles southwest of Laran, 1½ miles downstream from Lion Creek, and 3 miles upstream from bridge on Louisiana State Highway 550.

Drainage area.--141 sq mi.

Gage.--Recording. Datum of gage is 112.34 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs.

Bankfull stage.--8.5 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Bayou de Loutre near Laran, La.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 5, 1956	10.01	1,760	1962	Dec. 12, 1961	9.73	1,800
					Dec. 19, 1961	9.89	1,920
1957	Feb. 4, 1956	9.31	1,570		Jan. 3, 1962	8.45	1,210
	Apr. 5, 1956	8.38	1,150		Jan. 17, 1962	9.40	1,630
	Apr. 30, 1956	11.10	2,700		Jan. 25, 1962	9.28	1,580
					Apr. 2, 1962	8.46	1,240
1958	Oct. 26, 1957	8.48	1,140		May 3, 1962	9.98	1,980
	Nov. 10, 1957	11.37	2,920				
	Nov. 16, 1957	11.49	3,000	1963	May 2, 1963	7.46	900
	Jan. 23, 1958	9.19	1,520				
	Apr. 27, 1958	20.29	22,600	1964	Apr. 8, 1964	8.95	1,440
	May 21, 1958	9.70	8,000		Apr. 27, 1964	9.44	1,630
	Sept. 21, 1958	8.21	1,020				
				1965	Feb. 13, 1965	9.27	1,560
1959	Feb. 16, 1959	8.74	1,260		Apr. 1, 1965	9.84	1,880
	Mar. 8, 1959	8.24	1,050				
	Apr. 21, 1959	9.37	1,620	1966	Feb. 12, 1966	9.95	1,950
	June 10, 1959	13.63	5,000		Apr. 28, 1966	8.11	1,110
					May 3, 1966	9.44	1,650
1960	Mar. 5, 1960	9.67	1,800				
				1967	May 8, 1967	8.80	1,250
1961	Dec. 10, 1960	9.68	1,800				
	Jan. 1, 1961	9.03	1,410	1968	Jan. 10, 1968	9.94	1,930
	Feb. 23, 1961	10.92	2,560		Mar. 25, 1968	8.78	1,260
	Mar. 31, 1961	9.75	1,860		May 13, 1968	9.64	1,750
	July 17, 1961	16.00	10,800		May 20, 1968	9.11	1,440

3658. Cornie Bayou near Three Creeks, Ark.

Location.--Lat 33°02', long 92°56', in NW¼ sec.36, T.19 S., R.18 W., at downstream side of bridge on State Highway 15, 4½ miles downstream from Pidgeon Roost Creek, and 6 miles southwest of town of Three Creeks.

Drainage area.--180 sq mi, approximately.

Gage.--Nonrecording prior to Oct. 29, 1959; recording thereafter.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and by contracted-opening measurement at 35,800 cfs.

Bankfull stage.--10 ft.

Historical data.--Flood of Apr. 27, 1958, is greatest known since at least 1880, according to local residents.

Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 6, 1956	9.86	804	1958	Nov. 15, 1957	10.90	2,870
					Nov. 20, 1957	10.63	2,220
1957	Feb. 4, 1957	10.50	1,870		Jan. 23, 1958	10.46	1,760
	Apr. 3, 1957	10.50	1,870		Apr. 27, 1958	15.50	35,800
	Apr. 28, 1957	12.00	6,440		May 1, 1958	11.54	5,960
					June 27, 1958	10.92	3,600
1958	Nov. 10, 1957	10.30	1,470				

Peak stages and discharges of Cornie Bayou near Three Creeks, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 17, 1959	10.30	1,880	1962	May 2, 1962	10.75	3,290
	Apr. 21, 1959	10.20	1,660				
				1963	July 15, 1963	10.50	2,220
1960	Mar. 4, 1960	10.73	2,960				
				1964	Apr. 25, 1964	11.52	5,760
1961	Mar. 29, 1961	10.46	2,090				
	July 17, 1961	11.61	6,560	1965	Apr. 13, 1965	11.37	5,160
1962	Oct. 3, 1961	10.32	2,220	1966	Apr. 26, 1966	10.86	4,200
	Nov. 24, 1961	11.21	4,960		May 1, 1966	11.71	7,660
	Dec. 11, 1961	10.72	3,120				
	Dec. 18, 1961	11.14	4,770	1967	June 3, 1967	9.72	676
	Jan. 2, 1962	10.10	1,720				
	Jan. 17, 1962	10.39	2,220	1968	Apr. 15, 1968	10.30	1,720
	Jan. 28, 1962	10.59	2,800		May 13, 1968	10.27	1,700
	Feb. 2, 1962	10.18	1,840		May 19, 1968	11.00	4,050
	Apr. 1, 1962	10.32	2,090				

3659. Three Creek near Three Creeks, Ark.

Location.--Lat 33°04', long 92°53', in SE¼ sec.17, T.19 S., R.17 W., on downstream side of bridge on State Highway 15, 2¾ miles southwest of town of Three Creeks, and 2¾ miles upstream from small tributary.

Drainage area.--50.3 sq mi.

Gage.--Nonrecording prior to June 14, 1960; recording thereafter.

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs and by contracted-opening measurement at 11,300 cfs.

Bankfull stage.--6 ft.

Historical data.--Flood of Apr. 26, 1958, is the greatest known since at least 1880, according to information from local residents.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 4, 1956	4.94	432	1960	Mar. 3, 1960	5.61	1,470
1957	Apr. 2, 1957	5.42	900	1961	Feb. 21, 1961	5.23	945
	Apr. 27, 1957	5.82	1,450		Mar. 28, 1961	5.49	1,380
					July 16, 1961	7.12	4,750
1958	Nov. 14, 1957	5.73	1,380				
	Jan. 22, 1958	5.67	1,240	1962	Dec. 10, 1961	5.69	1,740
	Apr. 26, 1958	9.35	11,300		Dec. 17, 1961	5.68	1,740
	Apr. 30, 1958	6.20	2,700		Jan. 1, 1962	5.44	1,290
	May 20, 1958	5.22	950		Jan. 16, 1962	5.22	860
	June 27, 1958	6.00	2,300		Jan. 24, 1962	5.32	1,030
					Jan. 27, 1962	5.30	1,030
1959	Feb. 16, 1959	5.14	785		Apr. 1, 1962	5.32	1,030
	Apr. 20, 1959	5.03	650		May 1, 1962	6.39	3,010

Peak stages and discharges of Three Creek near Three Creeks, Ark.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	July 15, 1963	6.18	2,800	1966	May 1, 1966	5.78	1,740
1964	Apr. 7, 1964	5.04	650	1967	June 1, 1967	5.48	1,190
	Apr. 25, 1964	6.18	2,500				
				1968	Jan. 7, 1968	5.21	706
1965	Feb. 12, 1965	5.66	1,650		Jan. 10, 1968	5.46	1,150
	Mar. 29, 1965	5.19	860		Apr. 14, 1968	5.36	964
					May 18, 1968	5.68	1,590
1966	Feb. 11, 1966	5.39	1,120		Aug. 14, 1968	5.71	1,650
	Apr. 26, 1966	5.31	945		Sept. 16, 1968	5.73	1,690

3660. Corney Bayou near Lillie, La.
(Published as "Cornie Bayou" prior to 1956)

Location.--Lat 32°53'15", long 92°39'25", in NE¼NE¼ sec.22, T.22 N., R.3 W., near left bank on downstream side of bridge on U.S. Highway 167, 2 miles upstream from Little Corney Bayou, and 3 miles south of Lillie.

Drainage area.--462 sq mi.

Gage.--Nonrecording prior to Aug. 4, 1952; recording Aug. 4, 1952, to Sept. 30, 1957; crest-stage gage thereafter. Datum of gage is 84.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements. Minor high-water shifts have occurred.

Bankfull stage.--15 ft.

Historical data.--The flood in April 1958 was highest for at least 100 years, according to local residents.

Remarks.--Some regulation by Corney Lake (capacity, 8,000 acre-ft), about 6 miles upstream from station. Storage began in 1935. Base for partial-duration series, 4,000 cfs. Only annual peaks are shown subsequent to 1957.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Dec. 30, 1940	16.07	9,050	1945	Mar. 1, 1945	15.02	4,940
	Jan. 4, 1941	15.18	5,770		Mar. 5, 1945	18.20	17,200
	Mar. 10, 1941	14.84	4,550		Apr. 3, 1945	18.00	16,200
	Apr. 7, 1941	15.02	5,140				
	May 7, 1941	17.48	15,100	1946	Jan. 11, 1946	15.44	6,020
					Feb. 12, 1946	15.82	7,210
1942	Apr. 11, 1942	16.48	10,300		Mar. 30, 1946	15.25	5,470
	Apr. 29, 1942	15.42	6,330		May 16, 1946	15.42	6,020
					May 23, 1946	14.72	4,200
1943	Mar. 30, 1943	14.26	3,230				
				1947	Mar. 16, 1947	14.70	4,200
1944	Feb. 29, 1944	15.09	5,360		Apr. 14, 1947	15.39	6,020
	Mar. 31, 1944	16.78	11,000				
	May 4, 1944	16.27	9,000	1948	Feb. 15, 1948	15.30	5,740
1945	Jan. 4, 1945	16.23	8,590	1949	Jan. 31, 1949	14.85	4,440
	Feb. 24, 1945	14.84	4,440				

Peak stages and discharges of Corney Bayou near Lillie, La.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Jan. 17, 1950	15.54	6,440	1957	Apr. 30, 1957	17.06	11,500
	Feb. 16, 1950	15.22	5,470				
	Mar. 16, 1950	14.82	4,440	1958	Apr. 27, 1958	25.20	46,300
	May 4, 1950	15.24	5,600				
				1959	June 9, 1959	14.85	4,400
1951	Feb. 11, 1951	13.75	2,520				
				1960	Mar. 5, 1960	14.82	4,380
1952	Jan. 30, 1952	14.86	4,690				
	Feb. 15, 1952	15.16	5,470	1961	July 19, 1961	15.59	6,100
	Apr. 16, 1952	14.85	4,440				
				1962	Dec. 17, 1961	15.65	7,800
1953	Mar. 15, 1953	15.40	6,020				
	May 2, 1953	16.03	7,980	1963	July 18, 1963	14.80	5,660
	May 16, 1953	16.28	8,890				
				1964	Apr. 28, 1964	15.70	7,920
1954	May 6, 1954	12.90	1,700				
				1965	Feb. 11, 1965	15.29	6,800
1955	Mar. 25, 1955	14.36	3,540				
				1966	Apr. 21, 1966	15.14	6,400
1956	Feb. 9, 1956	13.43	2,320				
				1967	----------	---------	(a)
1957	Apr. 6, 1957	14.67	4,010				
				1968	Sept. 15, 1968	14.56	5,200

a Less than 1,100 cfs.

3662. Little Corney Bayou near Lillie, La.

Location.--Lat 32°55'40", long 92°37'55", in NW¼ sec.1, T.22 N., R.3 W., on downstream side of bridge on Louisiana State Highway 15, 1.4 miles east of Lillie, and 2½ miles upstream from mouth.

Drainage area.--208 sq mi.

Gage.--Recording. Datum of gage is 91.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 6, 1956	8.01	1,900	1959	Feb. 15, 1959	7.47	1,570
					Apr. 21, 1959	7.37	1,450
1957	Apr. 4, 1957	8.08	2,040		June 9, 1959	8.94	3,910
	Apr. 29, 1957	9.19	4,660				
				1960	Mar. 5, 1960	7.92	2,150
1958	Nov. 8, 1957	8.72	3,160				
	Nov. 14, 1957	8.53	3,280	1961	Dec. 9, 1960	7.60	1,740
	Nov. 16, 1957	8.70	3,460		Jan. 1, 1961	7.53	1,650
	Jan. 23, 1958	7.41	1,500		Feb. 23, 1961	7.96	2,220
	Apr. 28, 1958	16.52	21,400		Mar. 8, 1961	7.40	1,490
	May 20, 1958	7.85	2,080		Mar. 31, 1961	8.04	2,380
	June 28, 1958	7.55	1,680		July 17, 1961	10.66	7,490

Peak stages and discharges of Little Corney Bayou near Lillie, La.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Dec. 12, 1961	8.34	2,860	1965	Apr. 1, 1965	7.71	1,880
	Dec. 19, 1961	8.13	2,530				
	Jan. 3, 1962	7.23	1,290	1966	Feb. 13, 1966	7.16	1,220
	Jan. 29, 1962	7.58	1,710		Apr. 30, 1966	7.36	1,440
	May 2, 1962	8.76	3,550		May 3, 1966	7.41	1,500
1963	July 18, 1963	6.79	852	1967	May 8, 1967	7.24	1,300
1964	Apr. 27, 1964	8.44	3,020	1968	Jan. 10, 1968	7.94	2,210
					May 15, 1968	---------	1,500
1965	Feb. 14, 1965	---------	a1,400				

a Maximum daily.

3676.58. Cypress Creek Canal No. 19 tributary near Dumas, Ark.

Location.--Lat 33°51'47", long 91°28'46", in SE¼NW¼ sec.2, T.10 S., R.4 W., on left bank 22 ft upstream from culvert on U.S. Highway 65, 1.5 miles south of Dumas, and 1.6 miles upstream from mouth.

Drainage area.--0.6 sq mi, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 15 cfs and by culvert measurements at 149 cfs, 208 cfs, and 265 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Mar. 30, 1961	7.61	168	1966	Feb. 9, 1966	8.59	220
1962	May 30, 1962	8.82	185	1967	Oct. 4, 1966	8.37	133
1963	June 21, 1963	8.05	130	1968	Feb. 2, 1968	8.19	140
1964	May 2, 1964	9.08	208	1969	Nov. 28, 1968	9.62	265
1965	Sept. 11, 1965	7.99	110				

3676.65. Wards Bayou tributary at Montrose, Ark.

Location.--Lat 33°18'15", long 91°29'37", in SE¼SE¼ sec.15, T.16 S., R.4 W., on right bank 23 ft upstream from culvert on U.S. Highway 165, 0.4 mile north of junction of U.S. Highways 82 and 165 in Montrose.

Drainage area.--1.6 sq mi, approximately.

Gage.--Crest-stage gage. Supplementary type-A flood-hydrograph recorder since May 1964.

Stage-discharge relation.--Defined by current-meter measurements below 199 cfs and by culvert measurements at 227 cfs and 440 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Wards Bayou tributary at Montrose, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Feb. 20, 1961	6.77	227	1966	Feb. 9, 1966	7.11	274
1962	Dec. 9, 1961	6.46	185	1967	July 6, 1967	5.86	135
1963	June 21, 1963	6.64	209	1968	Jan. 9, 1968	6.52	220
1964	Apr. 24, 1964	5.96	120	1969	Nov. 28, 1968	7.47	440
1965	Feb. 11, 1965	6.24	156				

3676.8. Boeuf River near Eudora, Ark.

Location.--Lat 33°07'24", long 91°20'55", on line between secs.18 and 19, T.18 S., R.2 W., on downstream side of bridge on State Highway 8, 1.4 miles downstream from Canal No. 2, 5 miles west of Eudora, and at mile 205.7.

Drainage area.--640 sq mi. (See Remarks.)

Gage.--Nonrecording prior to May 3, 1951; recording thereafter. Datum of gage is 83.24 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--21 ft.

Remarks.--Gage-height records and current-meter measurements furnished by Corps of Engineers. Discharge computed from rating curves based on available measurements. Major channel improvements made during 1955. Interconnecting systems of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were arbitrarily determined. During extreme floods considerable flow bypasses station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Mar. 31, 1939	17.7	5,060	1954	May 3, 1954	20.03	7,870
1940	July 8, 1940	18.7	6,220	1955	Mar. 22, 1955	21.52	9,830
1941	Mar. 9, 1941	16.8	4,080	1956	Feb. 4, 1956	15.24	9,030
1942	Apr. 9, 1942	20.0	7,830	1957	Feb. 2, 1957	15.2	8,980
1943	Mar. 27, 1943	17.5	4,840	1958	Sept. 22, 1958	19.69	14,600
1944	Mar. 29, 1944	21.0	9,110	1959	Feb. 14, 1959	14.18	8,200
1945	Jan. 1, 1945	21.5	9,760	1960	Mar. 3, 1960	11.60	6,200
1946	Feb. 10, 1946	20.5	8,470	1961	Feb. 22, 1961	20.15	18,200
1947	Apr. 11, 1947	20.3	8,210	1962	Dec. 12, 1961	17.3	15,100
1948	Feb. 13, 1948	20.9	8,980	1963	Mar. 13, 1963	6.34	2,600
1949	Mar. 28, 1949	19.7	7,450	1964	Apr. 27, 1964	17.22	11,000
1950	Feb. 14, 1950	20.2	8,080	1965	Feb. 12, 1965	18.03	12,100
1951	Jan. 3, 1951	20.8	8,870	1966	Feb. 10, 1966	19.70	14,600
1952	Jan. 28, 1952	17.60	4,980	1967	Feb. 20, 1967	13.40	7,600
1953	May 17, 1953	19.26	6,940	1968	Jan. 10, 1968	17.42	11,300

3677. Boeuf River near Arkansas-Louisiana State line
(Published as "Boeuf River near Kilbourne, La." in Water-Supply Paper 1681)

Location.--Lat 32°58'25", long 91°26'25", in NE¼NE¼ sec.21, T.23 N., R.10 E., on downstream side of bridge on Louisiana State Highway 835, 2 miles downstream from Arkansas-Louisiana State line, and 8 miles west of Kilbourne, La., and at mile 190.1.

Drainage area.--785 sq mi. (See Remarks.)

Gage.--Nonrecording prior to Dec. 31, 1957; recording thereafter. At site 300 ft upstream at same datum prior to Oct. 2, 1961. Datum of gage is 74.11 ft above mean sea level, datum of 1929, supplemental adjustment of 1941 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs since 1958. Affected by slope.

Bankfull stage.--25 ft.

Remarks.--Gage-height records prior to 1958 furnished by Corps of Engineers. Interconnecting systems of bayous and ditches produce an interchange of flow under varying conditions; hence, the drainage limits were arbitrarily determined. During extreme floods, considerable flow bypasses station. Major channel improvements made during 1954 and 1955. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Apr. 13, 1947	22.7	----------	1958	May 6, 1958	22.56	14,700
1948	Feb.14-15,1948	22.8	----------	1959	Feb. 15, 1959	14.22	7,840
1949	Mar. 29, 1949	22.3	----------	1960	Mar. 3, 1960	14.27	7,630
1950	Feb.15-17,1950	22.4	----------	1961	Feb. 22, 1961	a22.64	16,200
1951	Jan. 5, 1951	22.6	----------	1962	Dec. 13, 1961	20.89	12,300
1952	Jan.30-31,1952	21.5	----------	1963	Mar. 12, 1963	7.21	3,180
1953	May 18-19,1953	22.3	----------	1964	Apr. 28, 1964	20.37	14,000
1954	May 4, 1954	22.7	----------	1965	Feb. 12, 1965	21.19	15,100
1955	Mar. 23, 1955	22.0	----------	1966	Feb. 11, 1966	b22.60	16,500
1956	Feb. 4, 1956	18.4	----------	1967	Feb. 21, 1967	17.12	8,070
1957	Feb. 2, 1957	18.1	----------	1968	Jan. 10, 1968	21.22	12,300

a Occurred on following day.
b Occurred Feb. 13, 1966.

3677.4. Camp Bayou near Parkdale, Ark.

Location.--Lat 33°06'55", long 91°31'31", in SW¼SW¼ sec.21, T.18 S., R.4 W., on right bank 22 ft upstream from culvert on State Highway 8, 0.3 mile upstream from small tributary, and 1.3 miles east of Parkdale.

Drainage area.--1.9 sq mi, approximately.

Gage.--Crest-stage gage. Supplementary dual-digital recorders since November 1968.

Stage-discharge relation.--Defined by current-meter measurements below 114 cfs and by culvert measurements at 319 cfs and 368 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Camp Bayou near Parkdale, Ark.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	May 27, 1963	7.13	115	1966	Feb. 9, 1966	8.90	319
1964	Apr. 24, 1964	8.81	368	1967	Feb. 20, 1967	8.76	250
1965	Dec. 10, 1964	7.99	215	1968	Apr. 8, 1968	8.11	177
				1969	Nov. 28, 1968	8.83	239

3696.8. Bayou Macon at Eudora, Ark.

Location.--Lat 33°06'09", long 91°15'08", on line between and near south edge of secs.25 and 30, T.18 S., R.12 E., on downstream side of bridge on U.S. Highway 65, 0.9 mile southeast of Eudora, and at mile 157.0.

Drainage area.--485 sq mi. (See Remarks.)

Gage.--Nonrecording prior to July 23, 1948; recording thereafter. Prior to July 17, 1952, at old U.S. Highway 65 bridge 0.2 mile upstream from and at same datum as present gage. Datum of gage is 80.92 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements. Affected by fall and shifts.

Bankfull stage.--18 ft.

Remarks.--Gage-height records and discharge measurements furnished by Corps of Engineers. Discharge computed from curves based on discharge measurements. Large diversions upstream from station for irrigation. Major channel improvements made in 1964. Interconnecting systems of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were arbitrarily determined. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	December 1931	26.2	3,570	1953	May 23-24,1953	24.9	3,680
				1954	May 4, 1954	19.0	2,260
1938	Apr. 8, 1938	19.0	2,260	1955	Mar. 22, 1955	22.0	2,750
1939	Feb. 28, 1939	20.4	2,600				
1940	July 9, 1940	17.4	1,830	1956	Feb. 21, 1956	21.4	2,620
				1957	Feb. 2, 1957	18.7	2,050
1941	Mar. 9, 1941	14.6	1,360	1958	May 22, 1958	27.43	5,100
1942	Apr. 10, 1942	23.0	2,620	1959	Feb. 16, 1959	17.13	a1,600
1943	Mar. 27, 1943	19.3	1,850	1960	Mar. 3, 1960	16.06	1,400
1944	Apr. 11, 1944	22.7	2,550				
1945	Apr. 11, 1945	24.1	2,910	1961	Feb. 26, 1961	24.40	2,900
				1962	Dec.18,19,1961	23.5	2,600
1946	Jan.23-25,1946	25.9	3,420	1963	Aug. 4, 1963	13.96	1,200
1947	Apr. 12, 1947	23.6	3,130	1964	May 3, 1964	17.96	2,300
1948	Feb. 14, 1948	23.5	3,110	1965	Feb. 12, 1965	14.27	2,800
1949	Feb. 5, 1949	22.4	2,790				
1950	Mar. 30, 1950	24.9	3,300	1966	Feb. 13, 1966	19.79	3,800
				1967	Feb. 21, 1967	10.36	----------
1951	Jan. 4, 1951	21.0	2,530	1968	Jan. 10, 1968	22.08	----------
1952	Jan. 29, 1952	18.0	1,930				

a Maximum peak discharge; maximum discharge occurred Oct. 1, 1958, following rise that crested Sept. 22, 1958.

3697. Bayou Macon near Kilbourne, La.

Location.--Lat 32°39'35", long 91°15'45", in SW¼SE¼ sec.8, T.23 N., R.12 E., on downstream side of bridge on Louisiana State Highway 585, three-quarters of a mile south of Arkansas-Louisiana State line, and 3 miles east of Kilbourne.

Drainage area.--504 sq mi. (See Remarks.)

Gage.--Recording. Datum of gage is 75.41 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark). Prior to Oct. 1, 1965, at datum 2.00 ft higher. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 4,700 cfs. Affected by fall.

Remarks.--Large diversions upstream from station for irrigation. Interconnecting systems of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were arbitrarily determined. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 5, 1958	26.35	4,740	1964	Apr. 27, 1964	13.63	2,910
1959	Feb. 16, 1959	17.13	a2,000	1965	Feb. 12, 1965	15.91	3,130
1960	Mar. 3, 1960	17.76	1,780				
				1966	Feb. 13, 1966	22.33	4,220
1961	Feb. 22, 1961	24.55	3,670	1967	Feb. 21, 1967	11.93	1,310
1962	Dec. 18, 1961	24.42	3,250	1968	Jan. 10, 1968	24.52	3,870
1963	Aug. 4, 1963	13.10	1,010				

a Maximum peak discharge; maximum discharge occurred Oct. 1, 1958, on rise that crested in September 1958.