MAGNITUDE AND FREQUENCY OF FLOODS IN ARKANSAS

U.S. GEOLOGICAL SURVEY
Water-Resources Investigations Report 95-4224

Prepared in cooperation with the
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

MAGNITUDE AND FREQUENCY OF FLOODS IN ARKANSAS

by Scott A. Hodge and Gary D. Tasker

U.S. GEOLOGICAL SURVEY
Water-Resources Investigations Report 95-4224

Prepared in cooperation with the
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

Little Rock, Arkansas
1995

U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, *Secretary*

U.S. GEOLOGICAL SURVEY
GORDON P. EATON, *Director*

For additional information
write to:

District Chief
U.S. Geological Survey, WRD
401 Hardin Road
Little Rock, AR 72211

Copies of this report can be
purchased from:

U.S. Geological Survey
Earth Science Information Center
Open-File Reports Section
Box 25286, MS 517
Denver Federal Center
Denver, CO 80225

CONTENTS

ILLUSTRATIONS

TABLES

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
meter (m)	3.281	foot
centimeter (cm)	0.394	inch
cubic meter per second (m^3/s)	35.31	cubic foot per second
cubic meter per second (m^3/s)	22.78	million gallons per day
cubic meter per day (m^3/d)	2.642×10^{-5}	million gallons per day
millimeter (mm)	0.0394	inch
kilometer (km)	0.6215	mile
square kilometer (km^2)	0.3861	square mile
cubic meter (m^3)	8.11×10^{-4}	acre-foot

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 --a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

Previous reports concerning flood frequency in Arkansas have been published in inch-pound units. This report has been published in International System (SI) units at the request of the cooperator.

MAGNITUDE AND FREQUENCY OF FLOODS IN ARKANSAS

By Scott A. Hodge and Gary D. Tasker

ABSTRACT

Methods are presented for estimating the magnitude and frequency of peak discharges of streams in Arkansas. Regression analyses were developed in which a stream's physical and flood characteristics were related. Four sets of regional regression equations were derived to predict peak discharges with selected recurrence intervals of 2, 5, 10, 25, 50, 100, and 500 years on streams draining less than 7,770 square kilometers. The regression analyses indicate that size of drainage area, main channel slope, mean basin elevation, and the basin shape factor were the most significant basin characteristics that affect magnitude and frequency of floods.

The region of influence method is included in this report. This method is still being improved and is to be considered only as a second alternative to the standard method of producing regional regression equations. This method estimates unique regression equations for each recurrence interval for each ungaged site. The regression analyses indicate that size of drainage area, main channel slope, mean annual precipitation, mean basin elevation, and the basin shape factor were the most significant basin and climatic characteristics that affect magnitude and frequency of floods for this method. Certain recommendations on the use of this method are provided.

A method is described for estimating the magnitude and frequency of peak discharges of streams for urban areas in Arkansas. The method is from a nationwide U.S. Geological Survey flood frequency report which uses urban basin characteristics combined with rural discharges to estimate urban discharges.

Annual peak discharges from 204 gaging stations, with drainage areas less than 7,770 square kilometers and at least 10 years of unregulated record, were used in the analysis. These data provide the basis for this analysis and are published in the Appendix of this report as supplemental data.

Large rivers such as the Red, Arkansas, White, Black, St. Francis, Mississippi, and Ouachita Rivers have floodflow characteristics that differ from those of smaller tributary streams and were treated individually. Regional regression equations are not applicable to these large rivers. The magnitude and frequency of floods along these rivers are based on specific station data. This section is provided in the Appendix and has not been updated since the last Arkansas flood frequency report (1987b), but is included at the request of the cooperator.

INTRODUCTION

The magnitude and frequency of floods are primary factors in the design of bridges, culverts, streets, embankments, dams, levees, and other structures near streams. Information on flood magnitude and frequency is used in managing flood plains, planning subdivisions, and establishing flood insurance rates.

The Arkansas State Highway and Transportation Department (AHTD) is fully aware of the need for adequate flood peak data to design better drainage structures in Arkansas. Because of this need, the AHTD entered into a cooperative agreement with the U.S. Geological Survey (USGS) to update previous flood-frequency reports (1961, 1971, 1987b) by using data collected through 1993. This flood-frequency report differs from reports by Patterson (1961; 1971) and Neely (1987b) because of additional available data, new analysis techniques, and AHTD's need for 500-year flood values to be used in bridge scour analysis.

The purpose of this report is to provide a method of estimating the magnitude of floods with selected recurrence intervals of 2, 5, 10, 25, 50, 100, and 500 years for streams in Arkansas. Equations for streams that have drainage areas less than 7,770 km^2 were developed by log-linear multiple-regression techniques. Equations for urban areas are from the report by Sauer and others (1983). Flood frequency analysis using the region of influence method is included as a second alternative to the standard log-linear multiple-regression technique. Analysis was not performed on data for larger streams because of their high degree of regulation and necessary information already being available. However, the results from the analysis and the supplemental data used by Neely (1987a) pertaining to larger streams have been included at the cooperator's request.

The study area is Arkansas. However, data collected outside the State on streams that drain into and from Arkansas also are considered. A general location map of the study area is shown in figure 1.

Figure 1. Location of study area.

GENERAL SETTING

Arkansas has a diverse topography that contains portions of several physiographic provinces. These provinces are the Springfield-Salem Plateaus, Ouachita Mountains, West Gulf Coastal Plain, Boston Mountains, Arkansas Valley, and the Mississippi Alluvial Plain (fig. 2) (Fenneman, 1938). The Ozark Mountains, found in the Springfield-Salem and Boston Mountains Provinces, along with the Ouachita Mountains have elevations as high as 823 m above sea level. Streams in the Ozark Plateaus and the southern half of the Ouachita Mountains tend to have sustained flows during dry seasons, whereas streams in the Arkansas Valley and the northern half of the Ouachita Mountains generally go dry (Hunrichs, 1983). The Mississippi Alluvial Plain and the West Gulf Coastal Plain compose the southeastern part of the State; this is primarily an agricultural area and is relatively flat, with elevations that range from 17 to 152 m above sea level. The higher parts of the State are used mainly for raising cattle and poultry. These regions are shown in figure 2.

Climate in Arkansas is mild and moderately humid. Average annual precipitation ranges from about 101 to 148 cm. Monthly precipitation exhibits a pronounced seasonal pattern; May usually has the most precipitation and January and October the least. Runoff ranges from about 30 to 82 cm per year, depending on the precipitation pattern (Freiwald, 1985). Average annual evaporation from shallow lakes ranges from about 91 cm in the northeast to about 112 cm in the southwest (Farnsworth and others, 1982).

Figure 2. Physiographic provinces in Arkansas.

FLOOD DATA

Peak data for 204 gaging stations that have 10 or more years of unregulated record were used in preparing this report. Of these stations, three are in Missouri, three are in Oklahoma, and nine are in Louisiana. The remaining 189 stations are in Arkansas (fig. 3).

The flood data used in this report were, for the most part, collected by the U.S. Geological Survey and the U.S. Army Corps of Engineers. The flood data have been collected at two types of gaging stations: (1) continuous-record stations where records of daily stage are collected and daily discharge are computed, and (2) partial-record stations where only the maximum peak stage and discharge for each year are determined. Of the 204 gaging stations used, 97 are continuous-record stations and 107 are partial-record stations. Generally, the continuous-record gaging stations are on large streams and have been operated for relatively long periods. Only a small percentage of these continuous-record gaging stations have drainage areas that are less than 260 km^2. Most of the 107 partial-record gaging stations are crest-stage gaging stations. The crest-stage-gage program was started in 1960 to fill the need for flood data for small drainage basins. The drainage areas of these crest-stage gaging stations range from 0.3 to 130 km^2. Presently (1995), 65 crest-stage gages are in operation within the State.

Fourteen of the 204 gaging stations are on regulated streams. Data collected prior to regulation at these 14 stations were used in the flood-frequency analysis. A summary of the distribution of data and average length of record for each station is as follows:

Drainage area, in square kilometers	Number of stations	Average length of record, in years
Less than 2.6	36	25
2.6 to 13	38	24
13 to 25.9	13	22
25.9 to 130	24	25
130 to 259	8	34
259 to 1,300	53	36
1,300 to 2,590	12	46
2,590 to 5,180	17	38
5,180 to 7,770	3	54

The State was divided into four geographic regions. Analysis of covariance tests, using dummy variables (Myers, 1986) to represent subregions, indicated that there were significant differences in the regression models for the four subregions. These regions differ from those defined by Patterson (1971) and Neely (1987b), in that Patterson and Neely divided Arkansas into only two regions and the four new regions are bounded mainly by major river basin divides. The new division is helpful because a drainage basin of a smaller stream will not overlap two regions--a situation that only exists in the area where the Arkansas and White River Basins intersect the Mississippi Alluvial Plain. Region A (fig. 3) includes most of the Arkansas River Basin. Region B includes most of the Red and Ouachita River Basins. Region C includes most of the White River Basin and Crowleys Ridge. Region D includes most of the Mississippi Alluvial Plain in Arkansas, with the exception of Crowleys Ridge. The regional regression equations were developed separately for Regions A, B, C, and D. These equations are based on observed data from stations draining less than 7,770 km^2 and with slopes less than 70.3 m/km, and should not be used on streams with larger drainage areas and slopes.

Figure 3. Regional boundaries and locations of gaging stations.

MAGNITUDE AND FREQUENCY OF FLOODS AT GAGING STATIONS

A flood-frequency curve is the relation of flood-peak magnitude to probability of exceedance or recurrence interval. Probability of exceedance is the chance of a given flood magnitude being exceeded in any given year. A 5-year flood, for example, has the probability of 0.2 (20 percent chance) of being exceeded in any given year. Recurrence interval is the reciprocal of exceedance probability and is the average number of years between exceedances for a long period of record. A 5-year flood may be expected to be exceeded on average once in 5 years or, 20 times in 100 years. This does not mean floods occur at uniformly spaced intervals. In fact, a flood of this magnitude can be exceeded more than once in the same year, or it can occur in consecutive years.

The flood-frequency relation for a stream where gaging-station data are available can be estimated by fitting a theoretical distribution to the random sample of annual peak discharges (largest instantaneous discharge for each year). The Hydrology Subcommittee of the Interagency Advisory Committee on Water Data (1982) has recommended a uniform technique for determining floodflow frequencies by fitting the logarithms of the annual peak discharges to a Pearson Type III distribution and has described these calculations in detail. This procedure is accepted by most Federal and State agencies and is referred to as the log-Pearson Type III frequency distribution. Annual peak discharges for each gaging station used in this study were fitted to the log-Pearson Type III distribution. Peak discharges for recurrence intervals of 2, 5, 10, 25, 50, 100, and 500 years were computed for each station and are listed in tables 1 through 4. For stations where regulation began during the data collection period, discharge values are presented for the unregulated period.

MAGNITUDE AND FREQUENCY OF FLOODS AT UNGAGED SITES ON STREAMS DRAINING LESS THAN 7,770 SQUARE KILOMETERS

Flood-frequency relations can be estimated for ungaged sites with drainage areas smaller than 7,770 km^2 through the use of the equations presented in this section. The equations were developed by relating the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year floods to basin characteristics. Several basin characteristics were investigated such as contributing drainage area, main channel slope, main channel length, mean annual precipitation, percent forested area, mean basin elevation, and basin shape factor. However, the characteristics that were most significant are contributing drainage area, main channel slope, mean basin elevation, and basin shape factor. The basin and climatic characteristics and the equation development are described in the following paragraphs.

Basin Characteristics

The following are defined for use in this report:

1. Contributing Drainage Area (A). -- The contributing drainage area of the basin, in square kilometers.
2. Main Channel Slope (S). -- The slope, in meters per kilometer, computed between two points along the main channel -- one point at 10 percent of the channel length, and the other point at 85 percent of the channel length. Both points are measured from the gaged site (or point of intersection when computing discharges for ungaged sites).
3. Mean Basin Elevation (E). -- The average ground elevation, in meters above sea level, is measured from topographic maps by transparent grid sampling method (20 to 80 points sampled in basin).
4. Basin Shape Factor (SH). -- Computed by dividing the contributing drainage area by the square of the main channel length and is dimensionless.
5. Main Channel Length (L). -- The channel length, in kilometers, between the gaged site and the basin divide (used in computation of basin shape factor only).

Table 1. Discharge, for selected recurrence intervals, at gaging stations within Region A

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second), for recurrence interval (years)						
									2	5	10	25	50	100	500
07188900	Butler Creek tributary near Gravette, Ark.	2.49	20.6	109	354	0.24	3.2	21	3	8	14	22	29	36	56
									3	9	14	22	28	35	53
07191220	Spavinaw Creek near Sycamore, Okla.	344	3.79	109	366	.275	35.4	34	96	268	444	743	1,020	1,350	2,320
									108	296	479	763	1,010	1,300	2,140
07194890	Osage Creek at Cave Springs, Ark.	105	3.69	109	396	.247	20.6	21	41	117	199	347	493	674	1,250
									48	129	209	334	449	587	1,020
07195000	Osage Creek near Elm Springs, Ark.	337	3.20	109	387	.392	29.3	30	142	298	425	606	754	909	1,300
									150	320	461	656	810	970	1,370
07195200	Brush Creek tributary near Tontitown, Ark.	.96	20.3	109	390	.37	1.6	21	2	5	7	12	15	20	32
									2	5	7	11	14	18	28
07195450	Ballard Creek at Summers, Ark.	37.8	7.77	114	415	.282	11.6	24	50	114	164	232	284	336	451
									49	107	150	208	253	299	411
07195500	Illinois River near Watts, Okla.	1,640	1.61	114	424	.321	71.6	38	527	985	1,330	1,790	2,140	2,500	3,340
									542	1,040	1,430	1,940	2,340	2,730	3,670
07195800	Flint Creek at Springtown, Ark.	36.8	4.30	109	408	.369	10.0	33	20	56	98	177	260	368	747
									22	60	99	167	234	320	621
07196000	Flint Creek near Kansas, Okla.	285	3.67	112	363	.201	37.7	38	115	317	522	870	1,200	1,580	2,720
									122	325	519	828	1,110	1,430	2,400
07196900	Baron Fork at Dutch Mills, Ark.	119	7.62	117	402	.342	18.7	36	196	383	517	685	806	922	1,170
									188	355	468	612	722	831	1,080
[1]07247000	Poteau River at Cauthron, Ark.	526	1.85	114	253	.180	54.1	56(30)	324	565	740	973	1,150	1,330	1,770
07249300	James Fork near Midland, Ark.	114	8.81	107	308	.260	20.9	20	149	314	458	681	877	1,100	1,720
									143	286	401	573	723	893	1,380
07249400	James Fork near Hackett, Ark.	381	2.69	109	235	.203	43.3	36	184	317	419	564	682	809	1,140

Table 1. Discharge, for selected recurrence intervals, at gaging stations within Region A--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second), for recurrence interval (years)						
									2	5	10	25	50	100	500
									189	338	460	632	767	909	1,270
07249500	Cove Creek near Lee Creek, Ark.	91.4	7.01	117	427	0.197	21.6	44	131	267	392	594	779	998	1,660
									127	254	362	533	690	875	1,440
07249650	Mountain Fork near Evansville, Ark.	21.1	13.8	117	433	.290	8.50	20	37	70	95	130	158	186	255
									36	66	90	123	150	178	249
07249950	Webber Creek tributary near Cedarville, Ark.	.88	35.6	117	305	.402	1.50	32	1	3	4	7	11	14	27
									1	3	5	8	11	15	26
07250000	Lee Creek near Van Buren, Ark.	1,100	3.30	114	326	.151	85.6	52	691	1,210	1,610	2,140	2,560	2,990	4,060
									683	1,200	1,590	2,120	2,540	2,970	4,060
07252000	Mulberry River near Mulberry, Ark.	966	3.43	122	436	.136	84.3	55	568	1,030	1,360	1,780	2,090	2,390	3,070
									565	1,030	1,360	1,790	2,120	2,440	3,170
07252200	North Fork White Oak Creek tributary near Watalula, Ark.	1.19	60.2	117	280	.995	1.10	26	4	8	10	13	16	19	27
									4	7	10	14	17	20	29
07252500	Sixmile Creek Subwatershed No. 6 near Chismville, Ark.	11.0	10.6	104	219	.145	8.70	16	24	42	54	70	82	93	119
									23	39	51	67	80	93	125
07254000	Sixmile Creek Subwatershed No. 5 near Chismville, Ark.	7.15	11.4	102	195	.156	6.80	18	11	22	32	44	55	65	90
									11	22	32	45	55	66	92
07254500	Sixmile Creek Subwatershed No. 2 near Caulksville, Ark.	15.1	3.75	104	219	.043	18.7	16	25	41	53	68	80	92	120
									24	39	51	67	80	93	125
07255100	Sixmile Creek Subwatershed No. 23 near Branch, Ark.	11.6	1.48	102	140	.154	8.70	15	22	43	59	79	95	110	144
									21	38	49	64	76	88	118
07256000	Hurricane Creek near Caulksville, Ark.	137	4.51	102	155	.274	22.4	16	89	143	179	226	261	296	376

Table 1. Discharge, for selected recurrence intervals, at gaging stations within Region A--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second), for recurrence interval (years)						
									2	5	10	25	50	100	500
									93	164	223	304	365	425	566
07256500	Spadra Creek at Clarksville, Ark.	158	9.34	124	265	0.264	24.5	41	153	287	387	521	625	729	977
									151	284	385	522	629	738	1,000
07257000	Piney Creek near Dover, Ark.	710	3.22	124	430	.157	67.3	45	556	1,040	1,440	2,020	2,510	3,060	4,520
									545	1,000	1,370	1,890	2,330	2,820	4,160
07257060	Mikes Creek tributary near Ozone, Ark.	.49	70.3	127	533	.53	1.0	20	1	2	3	4	5	7	9
									1	3	4	6	7	9	12
07257100	Minnow Creek tributary near Hagerville, Ark.	.49	58.9	124	165	.13	1.9	23	1	3	4	5	6	7	10
07257200	Little Piney Creek near Lamar, Ark.	399	4.45	117	293	.133	54.7	15	266	320	349	379	399	417	452
									265	378	485	637	751	861	1,110
07257500	Illinois Bayou near Scottsville, Ark.	624	5.3	124	402	.207	54.9	47	500	909	1,250	1,750	2,180	2,670	4,000
									492	888	1,210	1,680	2,080	2,530	3,770
07257700	McCoy Creek near Dover, Ark.	18.3	15.6	124	268	.149	11.1	26	21	61	79	122	160	203	320
									21	51	77	116	149	186	287
07258200	Pack Saddle Creek tributary near Waldron, Ark.	2.38	11.1	109	247	.209	3.40	30	5	9	12	16	20	24	35
									5	9	12	17	21	25	36
07258500	Petit Jean River near Booneville, Ark.	624	1.86	112	204	.205	55.2	55	333	548	696	885	1,020	1,160	1,480
									333	557	720	933	1,090	1,250	1,610
07260000	Dutch Creek at Waltreak, Ark.	211	3.67	119	283	.097	46.5	48	188	302	382	489	572	656	861
									186	300	386	501	592	684	908
[1]07260500	Petit Jean River at Danville, Ark.	1,980	.560	117	219	.099	141	77(30)	429	834	1,170	1,680	2,120	2,600	3,930
07260630	Jake Creek nearChickalah, Ark.	4.79	7.35	119	163	.420	3.40	23	13	24	33	44	54	63	87

Table 1. Discharge, for selected recurrence intervals, at gaging stations within Region A--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second), for recurrence interval (years)						
									2	5	10	25	50	100	500
									12	22	29	39	48	56	78
07260673	West Fork Point Remove Creek near Hattieville, Ark.	575	2.27	122	210	0.234	49.6	15	155	327	495	781	1,060	1,400	2,500
									186	415	626	932	1,190	1,480	2,360
07260679	East Fork Point Remove Creek tributary near Saint Vincent, Ark.	0.23	35.6	119	113	.78	.50	27	1	2	2	2	3	3	4
									1	2	2	3	3	4	5
07261000	Cadron Creek near Guy, Ark.	438	1.4	127	219	.130	57.9	38	253	377	455	550	616	679	816
									253	388	487	615	708	799	997
07261050	Pine Mountain Creek tributary near Damascus, Ark.	.75	16.7	127	213	.35	1.5	23	2	5	7	10	12	15	22
									3	5	7	9	11	14	20
07261300	Tan-A-Hill Creek near Boles, Ark.	6.03	54.6	119	415	.228	5.10	22	12	28	43	67	90	139	254
									12	28	43	67	90	118	207
07261500	Fourche Lafave River near Gravelly, Ark.	1,060	2.08	117	317	.114	96.4	55	710	1,260	1,680	2,260	2,720	3,200	4,400
									699	1,230	1,630	2,180	2,610	3,070	4,230
07261800	Brogan Creek near Rover, Ark.	2.69	31.8	117	271	.352	2.80	31	7	13	18	26	33	41	63
									7	13	18	26	33	40	61
07263000	South Fourche La Fave River near Hollis, Ark.	544	2.29	122	253	.200	52.1	52	557	896	1,140	1,460	1,700	1,950	2,550
									542	859	1,080	1,380	1,620	1,860	2,470
07263100	Fourche La Fave River tributary near Perryville, Ark.	3.81	25.4	124	151	.177	4.60	32	10	16	21	27	31	35	45
									9	16	21	28	34	39	52
07263400	Little Maumelle River at Ferndale, Ark.	38.9	6.72	135	180	.295	11.5	24	66	134	188	267	330	398	570
									63	122	167	230	282	339	488
07263530	Fourche Creek at Red Gate, Ark.	83.9	3.90	130	168	.214	19.8	14	87	121	144	172	194	215	265
									84	128	164	215	255	295	389
07263910	Cypress Branch near Jacksonville, Ark.	6.16	6.29	127	99.0	.308	4.50	26	18	24	29	34	38	42	50
									17	23	28	34	40	45	58

[1] Station presently affected by regulation or diversion. Recurrence interval discharge values computed using data available for period prior to regulation (greater than or equal to 10 years). T-year values are not applicable for use but were used in computation of regional equations. 71 (26) equals 71 total years of peak data with 26 years of preregulation data (used).

Table 2. Discharge, for selected recurrence intervals, at gaging stations within Region B

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07338700	Twomile Creek near Hatfield Ark.	41.7	9.26	135	378	0.178	15.3	21	57	101	136	189	234	283	420
									61	111	154	218	270	327	477
[1]07339500	Rolling Fork near DeQueen, Ark.	471	3.52	132	256	.148	56.5	46(25)	434	831	1,180	1,730	2,220	2,800	4,490
07339800	Pepper Creek near DeQueen, Ark.	16.6	9.03	130	168	.156	10.3	26	29	69	103	155	199	246	366
									28	64	93	134	167	201	289
[1]07340000	Little River near Horatio, Ark.	6,890	.80	132	250	.127	233	65(40)	305	2,000	2,500	3,170	3,700	4,250	5,640
07340200	West Flat Creek near Foreman, Ark.	27.4	2.27	124	126	.231	10.9	22	45	75	96	122	141	159	200
									43	71	90	114	133	152	198
07340300	Cossatot River near Vandervoort, Ark.	232	5.66	135	381	.265	29.6	27	432	744	959	1,230	1,430	1,620	2,050
									425	732	944	1,220	1,430	1,640	2,140
[1]07340500	Cossatot River near DeQueen, Ark.	932	2.94	137	271	.125	86.4	56(36)	799	1,330	1,730	2,310	2,790	3,300	4,650
07340530	Mill Slough tributary near Locksburg, Ark.	1.66	11.5	127	120	.165	3.17	24	5	10	13	18	21	25	34
									5	9	12	16	19	22	29
[1]07341000	Saline River near Dierks, Ark.	313	4.07	140	232	.094	57.8	56(35)	272	501	685	952	1,170	1,420	2,050
07341100	Rock Creek near Dierks, Ark.	24.6	9.47	132	177	.231	10.3	24	59	128	184	264	329	396	562
									56	117	163	225	273	322	445
07341700	Caney Creek near Hope, Ark.	33.4	3.31	130	108	.373	9.46	20	60	102	135	184	226	271	397
									56	94	123	165	199	236	337

Table 2. Discharge, for selected recurrence intervals, at gaging stations within Region B--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07342350	Mckinney Bayou near Garland, Ark.	438	0.34	119	99.1	0.078	74.8	41	80	125	155	193	221	248	312
									83	133	170	221	261	301	398
07344320	Mill Creek tributary near Fouke, Ark.	3.70	6.88	117	89.9	.627	2.43	23	8	14	18	24	27	31	39
									7	14	18	24	29	34	46
07346800	East Fork Kelley Bayou tributary at Kiblah, La.	.34	20.6	117	79.2	.415	.900	20	1	1	2	2	3	4	6
									1	1	2	3	4	4	7
07347000	Kelly Bayou near Hosston, La.	300	.80	119	73.2	.157	43.8	25	40	58	70	85	98	110	141
									45	73	98	137	169	203	287
07348615	Bayou Dorcheat near Bussey, Ark.	593	.55	127	93.3	.200	54.4	12	120	250	363	533	681	845	1,290
									134	277	399	577	720	872	1,260
07348630	Barlow Branch tributary near McNeil, Ark.	.13	19.7	127	99.1	.64	.450	22	1	1	2	2	3	4	6
									1	1	2	2	3	4	6
07348700	Bayou Dorcheat near Springhill, La.	1,570	.66	127	88.4	.265	76.9	36	206	411	577	817	1,010	1,230	1,770
									222	450	643	930	1,160	1,410	2,030
07349430	Bodcau Creek at Stamps, Ark.	606	.67	127	97.5	.278	46.7	24	93	185	261	372	463	562	819
									108	223	325	480	606	740	1,080
[1]07349500	Bodcau Bayou near Sarepta, La.	1,410	.34	124	68.9	.112	112	57(23)	124	220	290	384	457	530	706
07355800	Lewis Creek tributary near Mena, Ark.	1.68	30.1	130	347	.156	3.28	33	6	8	11	14	16	19	26
									6	9	12	16	20	23	33

Table 2. Discharge, for selected recurrence intervals, at gaging stations within Region B--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07355900	Big Fork tributary at Big Fork, Ark.	0.41	34.9	142	366	0 .19	1.46	20	1	2	3	4	4	5	8
									1	3	4	6	7	9	14
07356000	Ouachita River near Mount Ida, Ark.	1,070	1.48	132	354	.104	101	52	649	1,070	1,370	1,780	2,100	2,440	3,260
									657	1,090	1,410	1,850	2,190	2,550	3,430
07356500	South Fork Ouachita River at Mount Ida, Ark.	166	2.92	135	253	.154	32.8	29	192	329	429	561	663	767	1,020
									189	324	421	552	653	757	1,010
07356700	Barnes Branch near Mt Ida, Ark.	4.79	15.6	135	232	.220	4.67	23	12	24	35	51	64	80	122
									12	24	34	49	61	74	110
[1]07357501	Ouachita River at Blakely Mountain Dam near Hot Springs, Ark.	2,860	.98	132	268	.082	187	58(16)	1,080	1,750	2,240	2,910	3,430	3,980	5,360
07357700	Glazypeau Creek at Mountain Valley, Ark.	9.95	13.7	142	247	.326	5.52	26	18	37	53	76	95	116	172
									19	39	56	80	101	123	180
[1]07359500	Ouachita River near Malvern, Ark.	4,110	.84	142	247	.058	267	73(30)	1,530	2,510	3,170	4,000	4,600	5,180	6,4890
07359520	Jackson Creek near Malvern, Ark.	7.77	13.7	140	162	.115	8.21	20	8	19	31	50	68	91	161
									8	19	29	45	60	76	124
07359700	Caddo River at Glenwood, Ark.	497	3.54	140	296	.197	50.2	35	597	1,080	1,440	1,940	2,340	2,760	3,790
									586	1,050	1,390	1,850	2,210	2,580	3,520
07359750	Little Sugarloaf Creek near Bonnerdale, Ark.	6.06	16.4	147	226	.443	3.70	22	23	47	66	94	116	140	199
									22	45	62	87	107	127	180

Table 2. Discharge, for selected recurrence intervals, at gaging stations within Region B--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07359800	Caddo River near Alpine, Ark.	808	2.33	142	265	0.127	79.7	33	734	1,120	1,380	1,700	1,940	2170	2,710
									715	1,090	1,340	1,670	1,920	2,170	2,770
07360150	Pearson Creek tributary near Dalark, Ark.	1.04	9.87	132	104	.443	1.53	21	2	5	8	12	17	24	45
									2	5	7	12	16	21	36
07360800	Muddy Fork Creek near Murfreesboro, Ark.	313	3.64	135	171	.274	33.8	41	310	531	702	945	1,140	1,360	1,920
									303	519	683	915	1,100	1,300	1,820
[1]07361000	Little Missouri River near Murfreesboro, Ark.	984	2.92	140	232	.127	88.0	45(17)	778	1,440	1,970	2,720	3,330	3,990	5,690
07361020	Prairie Creek tributary near Kirby, Ark.	.41	41.1	137	194	.48	.92	24	2	4	6	9	12	14	23
									2	4	6	9	12	14	22
07361180	South Fork Ozan Creek near Ozan, Ark.	45.8	3.0	132	122	.308	12.2	30	114	156	182	212	234	255	301
									107	145	169	199	222	245	304
07361200	Ozan Creek near McCaskill, Ark.	383	1.76	132	128	.237	40.2	41	208	359	476	638	769	908	1,260
									206	359	476	641	773	912	1,270
07361500	Antoine River at Antoine, Ark.	461	1.58	132	158	.145	56.3	45	357	541	666	827	948	1,070	1,350
									348	528	650	810	931	1,060	1,360
[1]07361600	Little Missouri River near Boughton, Ark.	2,770	1.45	137	165	.103	164	56(11)	926	1,670	2,220	2,980	3,570	4,180	5,670
07361680	Middle Caney Creek tributary near Rosston, Ark.	3.83	9.07	130	109	.598	2.53	26	6	13	18	26	33	40	59
									6	13	19	27	34	42	62

Table 2. Discharge, for selected recurrence intervals, at gaging stations within Region B--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07361780	Bradshaw Creek near Hollywood, Ark.	8.96	4.15	132	97.5	0.253	5.95	20	13	21	26	33	39	45	60
									13	20	26	34	40	47	66
07361800	Terre Noire Creek near Gurdon, Ark.	648	1.4	132	90.2	.121	73.2	41	480	679	814	988	1,120	1,250	1,570
									456	640	758	908	1,020	1,140	1,430
07362050	Ross Creek near Camden, Ark.	26.9	3.31	127	61.6	.262	10.1	21	11	26	39	60	80	101	163
									11	26	39	59	75	94	143
07362100	Smackover Creek near Smackover, Ark.	997	.75	127	70.1	.268	61.0	55	189	393	574	858	1,110	1,400	2,220
									192	397	578	855	1,090	1,360	2,110
07362330	Dunn Creek near Hampton, Ark.	35.2	2.12	127	57.0	.248	11.9	32	24	50	72	105	133	164	248
									23	47	67	96	119	144	211
07362450	Cooks Creek near Fordyce, Ark.	12.9	3.79	130	96.0	.554	4.83	20	19	37	50	69	84	99	136
									18	36	49	68	83	98	137
07362500	Moro Creek near Fordyce, Ark.	622	1.05	130	82.3	.237	51.2	43	139	276	380	523	634	748	1,020
									142	282	391	543	661	782	1,080
07363000	Saline River at Benton, Ark.	1,420	2.35	137	198	.179	89.1	57	866	1,410	1,780	2,260	2,610	2,960	3,770
									856	1,390	1,770	2,250	2,610	2,970	3,820
07363050	Holly Creek tributary near Benton, Ark.	3.73	8.90	135	105	.592	2.51	24	5	11	18	29	41	56	107
									5	12	18	29	40	52	92

Table 2. Discharge, for selected recurrence intervals, at gaging stations within Region B--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07363200	Saline River near Sheridan, Ark.	2,920	0.85	137	140	0 .076	196	56	694	1,140	1,470	1,910	2,260	2,620	3,500
									691	1,140	1,470	1,900	2,240	2,600	3,460
07363300	Hurricane Creek near Sheridan, Ark.	528	1.30	135	114	.120	66.3	34	201	406	563	776	941	1,110	1,500
									199	394	539	731	877	1,020	1,370
07363330	West Fork Big Creek at Sheridan, Ark.	12.6	4.20	135	88.4	.375	5.79	22	13	27	40	58	73	89	132
									13	27	38	55	69	84	122
07363430	East Fork Derrieusseaux Creek near Pine Bluff, Ark.	1.66	12.2	130	107	.423	1.98	21	3	7	11	17	23	29	49
									3	7	11	16	21	27	42
07363450	Varnell Creek near Rison, Ark.	.73	12.0	130	74.1	.44	1.29	23	1	3	5	7	9	11	17
									1	3	4	7	8	10	16
07363500	Saline River near Rye, Ark.	5,440	.46	132	110	.063	293	57	676	1,190	1,560	2,060	2,450	2,850	3,810
									680	1,190	1,570	2,080	2,470	2,860	3,810
07364030	L'aigle Creek tributary near Hermitage, Ark.	.930	9.15	132	51.8	.523	1.34	22	1	2	3	5	6	6	8
									1	2	3	5	6	7	10
07364070	Bear Creek near Strong, Ark.	14.6	2.88	132	50.3	.348	6.47	21	10	15	19	24	28	32	40
									9	16	20	27	32	38	52
07364260	Hanks Creek near Hamburg, Ark.	54.1	1.23	137	51.8	.237	15.1	22	19	36	48	64	76	88	116
									19	36	49	67	81	95	130

Table 2. Discharge, for selected recurrence intervals, at gaging stations within Region B--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07364300	Chemin-A-Haut Bayou near Beekman, La.	702	0.63	137	43.3	0 .366	43.8	24	138	294	426	618	778	949	1,390
									136	288	410	586	726	874	1,250
07364700	Bayou De Loutre near Laran, La.	365	.68	122	61.9	.260	37.5	22	70	158	248	412	579	793	1,540
									74	163	250	397	533	697	1,230
07365800	Cornie Bayou near Three Creeks, Ark.	466	.96	124	76.2	.268	41.7	38	136	322	506	819	1,120	1,480	2,620
									136	316	487	763	1,010	1,310	2,200
07365900	Three Creeks near Three Creeks, Ark.	130	1.17	122	74.7	.257	22.5	23	56	113	165	245	318	401	642
									55	112	160	232	294	362	552
07366000	Corney Bayou near Lillie, La.	1,200	.66	122	56.4	.213	75.0	43	168	325	464	685	885	1,120	1,810
									170	331	471	690	880	1,090	1,710
07366200	Little Corney Bayou near Lillie, La.	539	.70	122	61.3	.239	47.5	38	108	232	342	513	664	834	1,310
									109	233	340	502	639	790	1,200

[1]Station presently affected by regulation or diversion. Recurrence interval discharge values computed using data available for period prior to regulation (greater than or equal to 10 years). T-year values given are not applicable for use but were used in computation of regional equations. 71 (26) equals 71 total years of peak data with 26 years of preregulation data (used).

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07047820	Murray Creek near Jonesboro, Ark.	3.57	6.30	122	98	0.17	4.6	34	15	23	28	35	40	46	58
									14	22	27	34	39	44	56
07047880	Pope Creek tributary at Birdeye, Ark.	.210	37.9	124	113	.69	.50	23	1	2	3	4	6	7	11
									1	2	3	4	5	6	9
07047975	Dog Branch at St. Paul, Ark.	3.19	51.3	122	607	.327	3.10	21	6	11	15	21	26	31	44
									6	12	17	23	28	33	46
07047990	West Fork White River tributary near Greenland, Ark.	1.74	54.9	112	463	.283	2.50	27	5	11	17	25	32	39	58
									5	11	16	23	29	34	49
07048000	West Fork White River at Greenland, Ark.	215	5.20	114	521	.188	33.8	38	247	469	647	906	1,120	1,350	1,970
									241	450	610	832	1,010	1,190	1,680
07048600	White River near Fayetteville, Ark.	1,040	2.70	114	488	.193	73.4	30	683	1,210	1,620	2,170	2,620	3,080	4,240
									663	1,160	1,530	2,010	2,390	2,780	3,750
07048900	Whitener Branch tributary near Spring Valley, Ark.	2.77	19.9	109	421	.633	2.10	34	4	8	11	16	21	27	45
									5	9	12	18	23	29	45
07048940	War Eagle Creek near Witter, Ark.	58.0	8.10	122	585	.365	12.6	22	85	170	240	343	430	526	781
									83	161	221	304	370	438	616

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07049000	War Eagle Creek near Hindsville, Ark.	679	1.60	114	485	0.117	76.3	35	394	686	895	1,170	1,370	1,570	2,050
									389	677	881	1,150	1,350	1,560	2,040
07049500	Beaver Lake at Highway 12 Bridge near Rogers, Ark.	2,640	1.10	112	457	.121	148	13	780	1,530	2,120	2,940	3,590	4,270	5,930
									786	1,520	2,090	2,850	3,450	4,060	5,570
07050000	White River at Beaver, Ark.	3,210	.70	112	442	.062	227	37	847	1,370	1,760	2,310	2,760	3,230	4,470
									852	1,400	1,830	2,450	2,970	3,510	4,900
07050200	Maxwell Creek at Kingston, Ark.	7.12	26.7	114	497	.477	3.86	21	17	37	54	79	101	125	189
									17	35	50	70	86	103	147
07050400	Freeman Branch at Berryville, Ark.	1.89	24.4	109	415	.383	2.22	20	5.	9	12	16	18	21	28
									6	10	12	16	20	23	31
07050500	Kings River near Berryville, Ark.	1,360	1.30	109	469	.077	133	55	500	932	1,280	1,770	2,180	2,620	3,780
									501	933	1,280	1,760	2,170	2,590	3,680
07054400	Charley Creek near Omaha, Ark.	8.83	21.2	107	317	.224	6.28	21	33	57	76	105	129	156	232
									31	52	69	90	108	127	178

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07054450	East Sugarloaf Creek tributary near Lead Hill, Ark.	2.20	40.9	107	323	0.354	2.49	32	8	14	20	29	37	46	72
									8	14	20	27	34	41	61
07055550	Crooked Creek tributary near Dog Patch, Ark.	11.3	10.6	114	390	.302	6.12	26	17	31	43	61	78	96	148
									18	32	44	62	77	94	138
07055650	Smith Creek near Boxley, Ark.	21.6	26.0	119	579	.214	10.0	21	41	94	142	214	276	344	526
									40	88	128	182	225	270	387
07055800	Dry Branch near Vendor, Ark.	15.9	44.1	114	460	.327	6.97	22	31	64	93	136	173	213	323
									31	62	87	121	149	178	254
07056000	Buffalo River near St. Joe, Ark.	2,150	2.00	114	454	.089	155	54	1,060	1,910	2,530	3,360	4,000	4,650	6,190
									1,050	1,860	2,450	3,230	3,820	4,410	5,840
07057000	Buffalo River near Rush, Ark.	2,840	1.30	112	421	.065	209	40	1,090	2,020	2,740	3,780	4,630	5,530	7,870
									1,080	1,970	2,660	3,620	4,390	5,190	7,240
07057300	Dodd Creek tributary near Mountain Home, Ark.	1.97	22.4	109	259	.229	2.93	26	8	13	17	22	25	29	38
									8	13	16	21	25	28	37

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07059000	Norfork Lake near Henderson, Ark.	4,180	1.20	102	396	0.136	175	15	703	1,190	1,530	1,950	2,250	2,550	3,200
									764	1,370	1,860	2,560	3,150	3,740	5,180
07060600	Band Mill Creek near Brockwell, Ark.	3.24	16.2	112	225	.313	3.22	26	7	12	17	25	32	40	66
									7	13	18	26	32	40	60
07060670	Hughes Creek near Mountain View, Ark.	8.29	39.6	119	259	.392	4.60	21	24	37	46	59	69	80	107
									24	36	45	57	67	77	102
07060710	North Sylamore Creek near Fifty Six, Ark.	150	2.90	114	198	.234	25.3	28	122	290	436	652	830	1,020	1,500
									122	281	411	590	732	876	1,230
07060830	Wolf Bayou near Drasco, Ark.	.70	18.5	124	320	.36	1.4	21	2	3.	4	7	9	11	15
									2	4	6	8	10	12	16
07061100	Gibbs Creek at Sulphur Rock, Ark.	10.1	8.80	119	140	.290	5.90	25	23	41	55	75	92	109	154
									22	40	53	72	86	101	138
07068000	Current River at Doniphan, Mo.	5,280	0.90	112	305	.104	230	66	754	1,390	1,870	2,530	3,060	3,610	4,960
									775	1,440	1,970	2,730	3,350	4,000	5,600

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07068870	Fourche River tributary at Middlebrook, Ark.	0.49	30.5	117	139	0.411	1.09	21	4	6	7	9	10	11	14
									4	6	7	8	10	11	14
07068890	Fourche River above Pocahontas, Ark.	593	2.00	117	155	.168	59.4	15	441	817	1,100	1,480	1,780	2,090	2,830
									420	758	997	1,300	1,540	1,770	2,350
07069250	Brush Creek near Mammoth Spring, Ark.	1.24	29.6	112	209	.532	1.53	25	9	15	20	27	32	38	54
									8	14	18	24	28	32	44
07069290	Miller Creek near Salem, Ark.	5.91	14.7	112	240	.406	3.82	21	15	28	38	52	63	75	108
									15	27	36	49	59	69	94
07069500	Spring River at Imboden, Ark.	3,060	1.60	112	226	.136	150	57	742	1,390	1,930	2,750	3,470	4,270	6,500
									749	1,410	1,960	2,780	3,490	4,260	6,360
07071500	Eleven Point River near Bardley, Mo.	2,050	1.90	112	305	.125	128	71	265	571	815	1,150	1,420	1,690	2,340
									281	608	880	1,270	1,580	1,910	2,690
07072000	Eleven Point River near Ravenden Springs, Ark.	2,940	1.90	109	259	.86	185	63	335	630	897	1,330	1,730	2,210	3,700
									357	688	1,000	1,510	1,980	2,510	4,070

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07072200	Hubble Creek near Pocahontas, Ark.	3.44	9.60	119	143	0.23	3.9	25	17	23	27	32	36	39	47
									16	22	26	31	35	39	49
07073000	Strawberry River near Evening Shade, Ark.	562	1.10	112	226	.067	91.4	41	259	420	537	697	822	952	1,280
									260	429	557	736	883	1,030	1,410
07073500	Piney Fork at Evening Shade, Ark.	257	1.40	114	204	.088	54.1	55	133	242	332	468	585	717	1,090
									135	246	340	478	597	726	1,080
07074000	Strawberry River near Poughkeepsie, Ark.	1,230	1.10	114	207	.080	124	58	421	760	1,040	1,460	1,820	2,230	3,360
									424	768	1,050	1,480	1,840	2,230	3,300
07074200	Dry Branch tributary near Sidney, Ark.	3.16	11.6	114	198	.408	2.78	23	17	29	37	47	53	60	73
									16	27	34	41	47	52	64
07074250	Reeds Creek near Strawberry, Ark.	90.4	3.20	117	134	.171	23.0	21	84	164	232	336	428	533	831
									85	162	225	317	394	476	696
07074900	Trace Creek tributary near Marshall, Ark.	0.67	115	112	378	.294	1.5	26	3	5	6	8	9	11	14
									3	5	6	8	10	11	15

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07074950	Tick Creek near Leslie, Ark.	4.09	22.0	114	463	0.399	3.20	23	9	18	26	38	48	58	83
									9	18	26	37	45	53	74
07075000	Middle Fork of Little Red River at Shirley, Ark.	782	2.60	114	354	.075	102	55	635	1,190	1,650	2,350	2,940	3,620	5,480
									622	1,150	1,580	2,190	2,710	3,270	4,800
07075300	South Fork of Little Red River at Clinton, Ark.	383	4.00	127	351	.066	76.1	32	295	554	759	1,050	1,290	1,550	2,210
									289	537	726	984	1,190	1,400	1,950
07075500	South Fork of Little Red River near Clinton, Ark.	818	3.10	127	351	.175	68.4	23	629	985	1,220	1,520	1,740	1,950	2,440
									602	939	1,160	1,440	1,660	1,870	2,390
07075600	Choctaw Creek tributary near Choctaw, Ark.	3.52	19.5	127	208	.244	3.80	30	7	13	18	26	33	41	65
									7	14	19	27	34	41	61
07075800	Dill Branch tributary near Ida, Ark.	.67	37.5	127	252	.40	1.30	30	1	3	4	6	8	9	15
									2	3	5	7	8	10	15
[1]07076000	Little Red River near Heber Springs, Ark.	2,990	1.90	122	317	.105	169	67(35)	1,540	2,110	2,440	2,840	3,110	3,360	3,900
07076630	Key Branch near Searcy, Ark.	1.71	16.1	127	101	.528	1.80	33	7	11	13	15	16	18	21
									7	11	13	16	18	20	24

Table 3. Discharge, for selected recurrence intervals, at gaging stations within Region C--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge. km^2, square kilometers; m/km, meters per kilometer; cm, centimeters; m, meters; km, kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07076820	Gum Springs Creek near Higginson, Ark.	12.9	6.10	127	93.0	0.249	7.20	21	22	32	39	46	52	58	70
									23	34	42	53	63	72	95
07076850	Cypress Bayou near Beebe, Ark.	430	.50	127	101	.131	57.3	15	177	309	403	526	618	711	925
									187	336	453	615	748	880	1,200
07076870	Pigeon Roost Creek at Butlerville, Ark.	59.6	1.30	127	79.0	.283	14.5	33	61	114	156	217	269	324	471
									61	114	155	214	262	313	442
07077100	Big Creek near Boydsville, Ark.	33.1	3.90	119	129	.604	7.40	20	84	122	145	170	188	204	236
									79	114	135	160	179	197	242
07077200	Big Creek tributary near Boydsville, Ark.	4.09	7.70	119	137	.193	4.60	32	10	16	19	23	26	28	35
									10	16	20	25	29	33	42
07077340	Sugar Creek tributary near Walcott, Ark.	1.76	17.3	122	140	.333	2.30	24	8	13	16	20	24	27	34
									8	12	16	20	23	26	34

[1]Station presently affected by regulation or diversion. Recurrence interval discharge values computed using data available for period prior to regulation (greater than or equal to 10 years). T-year values given are not applicable for use but were used in computation of regional equations. 71 (26) equals 71 total years of peak data with 26 years of preregulation data (used).

Table 4. Discharge, for selected recurrence intervals, at gaging stations within Region D

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km; meters per kilometer; m, meters; km; kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07047200	Ditch No. 45 near Lepanto, Ark.	5.59	0.23	124	66	0.198	5.31	24	5	6	6	7	7	7	8
									5	6	6	7	7	7	8
07047600	Tyronza River near Tyronza, Ark.	751	.13	122	70	.096	88.5	54	136	180	207	239	262	285	335
									134	176	203	235	258	280	329
07047924	Crooked Bayou tributary at State Highway 149 at Hughes, Ark.	1.24	.80	127	61	.333	1.93	20	3	6	8	11	14	17	25
									3	5	7	10	13	15	23
07047942	L'Anguille River near Colt, Ark.	1,390	.16	124	75	.156	94.5	23	183	332	455	636	791	963	1,430
									180	319	430	593	731	886	1,310
07047950	L'Anguille River at Palestine, Ark.	2,040	.16	124	73	.123	129	54	252	378	458	553	619	682	819
									249	372	450	543	608	671	807
[1]07063000	Black River at Poplar Bluff, Mo.	3,220	1.18	112	274	.094	185	71(26)	374	788	1,160	1,750	2,280	2,890	4,660
[1]07064000	Black River near Corning, Ark.	4,530	.68	109	223	.053	291	79(34)	345	603	795	1,060	1,260	1,470	1,984
07074550	Village Creek near Okean, Ark.	16.2	.35	122	83	.272	7.72	21	6	14	22	34	46	59	101
									7	14	21	32	42	54	91
07074855	Cypress Creek tributary near Augusta, Ark.	14.3	.63	124	67	.154	9.65	20	9	14	17	22	25	29	38
									9	14	17	22	25	29	37
07077380	Cache River at Egypt, Ark.	1,820	.18	122	91	.133	117	56	124	163	189	223	249	275	338
									126	168	198	234	262	289	354

Table 4. Discharge, for selected recurrence intervals, at gaging stations within Region D--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km; meters per kilometer; m, meters; km; kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07077430	Willow Ditch near Egypt, Ark.	1.24	0.76	122	78	0.333	1.93	31	1	2	3	4	5	6	10
									1	2	3	4	5	6	9
07077500	Cache River at Patterson, Ark.	2,690	.16	122	79	.054	222	66	181	261	318	392	449	507	652
									181	262	318	391	448	506	649
07077680	Three Mile Creek near Amagon, Ark.	20.5	.25	124	70	.147	11.8	20	8	11	13	14	15	16	18
									8	12	13	15	16	17	19
07077700	Bayou Deview at Morton, Ark.	1,090	.44	124	73	.085	113	48	91	121	139	161	176	190	221
									93	127	148	174	192	209	244
07077860	Boat Gunwale Slash near Holly Grove, Ark.	25.9	.36	127	55	.192	11.6	22	10	13	15	18	19	20	23
									10	14	16	19	21	23	26
07077920	Big Creek at Goodwin, Ark.	80.5	.17	127	64	.103	28.0	33	16	22	26	30	32	34	39
									16	23	26	31	33	36	40
07077940	Spring Creek near Aubrey, Ark.	98.4	.27	127	61	.314	17.7	20	38	52	59	68	73	78	88
									37	51	60	69	75	81	92
07077950	Big Creek at Poplar Grove, Ark.	997	.13	127	59	.085	108	23	94	132	154	179	196	211	243
									94	133	156	182	200	216	249
07078000	Lagrue Bayou near Stuttgart, Ark.	453	.16	127	61	.087	72.1	19	68	113	144	182	211	238	301
									67	110	138	173	199	224	283
07078170	Little Lagrue Bayou tributary near Dewitt, Ark.	3.91	.63	127	59	.082	6.92	20	5	6	7	7	8	8	8
									5	6	7	7	8	8	9

Table 4. Discharge, for selected recurrence intervals, at gaging stations within Region D--Continued

[Numbers on line with station name are based on station data. Numbers on line below station name are values computed by weighting the regression discharge with station discharge; km^2, square kilometers; m/km; meters per kilometer; m, meters; km; kilometers]

Station identification number	Station name	Drainage area (km^2)	Main channel slope (m/km)	Mean annual precipitation (cm)	Mean basin elevation (m)	Basin shape factor	Main channel length (km)	Years of peak data	Discharge (cubic meters per second) for recurrence interval (years)						
									2	5	10	25	50	100	500
07078210	Tarleton Creek tributary at Ethel, Ark.	.52	3.47	127	56	0 .22	1.53	24	2	3	4	6	8	10	16
									2	3	4	6	8	9	15
07263860	Mile Branch near Tomberlin, Ark.	7.12	.66	127	65	.295	4.91	37	10	14	16	19	20	22	24
									10	14	16	18	20	22	24
07264000	Bayou Meto near Lonoke, Ark.	536	.25	127	91	.075	84.3	39	61	87	104	128	146	164	209
									62	88	107	131	149	167	212
07264100	White Oak Branch near Lonoke, Ark.	21.8	.99	127	72	.438	7.05	26	24	36	42	49	54	58	67
									24	35	41	49	54	59	69
07364110	Nevins Creek tributary near Pine Bluff, Ark.	1.94	6.93	130	81	.415	2.16	33	4	7	10	14	18	22	33
									4	8	10	15	18	22	33
07364120	Bayou Bartholomew near Star City, Ark.	557	.11	130	67	.032	131	43	49	69	80	94	103	112	129
									49	69	81	94	103	112	129
07364125	Cane Creek at Star City, Ark.	12.7	7.73	130	94	.533	4.88	22	29	44	53	63	70	77	91
									28	43	52	65	74	82	102
07364150	Bayou Bartholomew near McGehee, Ark.	1,490	.10	130	58	.021	269	54	93	127	147	170	186	200	230
									93	127	147	170	185	199	229
07364165	Upper Cutoff Creek near Monticello, Ark.	48.7	2.56	132	86	.418	10.8	21	26	46	62	89	112	139	218
									26	48	66	93	117	144	221
07364190	Bayou Bartholomew at Wilmot, Ark.	3,030	.08	132	55	.016	433	55	135	169	189	213	229	244	277
									135	169	190	214	230	246	279

Regression Analysis

After the discharge-frequency relations were defined and basin and climatic characteristics determined for gaging stations in each of the four regions (fig. 3), the peak discharge for each of seven different recurrence intervals (2, 5, 10, 25, 50, 100, and 500 years) was related to the basin and climatic characteristics using linear multiple-regression techniques. All 28 regression equations are linear equations based on logarithms (base 10) of the basin characteristic data and are of the form:

$$\log Q_T = b_0 + b_1 \log A + b_2 \log S + b_3 \log P + b_4 \log E + b_5 \log SH \quad (1)$$

or equivalently,

$$Q_T = a\,(A)^{b_1}\,(S)^{b_2}\,(P)^{b_3}\,(E)^{b_4}\,(SH)^{b_5} \quad (2)$$

where,

Q_T is the T-year discharge,
A, S, P, E, and SH are explanatory variables,
b_0, b_1,..,b_5 are regression parameters, and
a is a constant equal to 10^{b_0}.

Initially, all basin and climatic characteristics were used in each regression. Only stations with drainage basins smaller than 7,770 km^2 having predominantly natural flow and at least 10 years of record were used in the regression analysis. On regulated streams, the data collected prior to regulation were used if that period was of sufficient length.

Not all variables were used for the final equations. Variable selection for the final models were made by choosing the subset of explanatory variables (A, S, PR, E, and SH) that had the smallest Mallows' C_p from among all possible subset combinations (Montgomery and Peck, 1982; Myers, 1986). Regression coefficients for the final equations were estimated using the estimated generalized-least-squares (EGLS) regression techniques described in Tasker and Stedinger (1989). Stedinger and Tasker (1985) show that the EGLS regression technique for regional flood frequency regressions is an improvement over ordinary-least squares regression because the EGLS technique accounts for differences in sampling errors in the observed flow records due to differing record lengths and sample cross correlation of annual peak discharges between sites. For the 204 stations in and around Arkansas, record lengths ranged from 11 years to 66 years. Sample cross-correlation coefficients for annual peaks are a function of distance between sites and are approximated by the smoothed curve shown in figure 4.

Regression Analysis

After the discharge-frequency relations were defined and basin and climatic characteristics determined for gaging stations in each of the four regions (fig. 3), the peak discharge for each of seven different recurrence intervals (2, 5, 10, 25, 50, 100, and 500 years) was related to the basin and climatic characteristics using linear multiple-regression techniques. All 28 regression equations are linear equations based on logarithms (base 10) of the basin characteristic data and are of the form:

$$\log Q_T = b_0 + b_1 \log A + b_2 \log S + b_3 \log P + b_4 \log E + b_5 \log SH \quad (1)$$

or equivalently,

$$Q_T = a(A)^{b_1}(S)^{b_2}(P)^{b_3}(E)^{b_4}(SH)^{b_5} \quad (2)$$

where,

Q_T is the T-year discharge,
A, S, P, E, and SH are explanatory variables,
b_0, b_1,..,b_5 are regression parameters, and
a is a constant equal to 10^{b_0}.

Initially, all basin and climatic characteristics were used in each regression. Only stations with drainage basins smaller than 7,770 km^2 having predominantly natural flow and at least 10 years of record were used in the regression analysis. On regulated streams, the data collected prior to regulation were used if that period was of sufficient length.

Not all variables were used for the final equations. Variable selection for the final models were made by choosing the subset of explanatory variables (A, S, PR, E, and SH) that had the smallest Mallows' C_p from among all possible subset combinations (Montgomery and Peck, 1982; Myers, 1986). Regression coefficients for the final equations were estimated using the estimated generalized-least-squares (EGLS) regression techniques described in Tasker and Stedinger (1989). Stedinger and Tasker (1985) show that the EGLS regression technique for regional flood frequency regressions is an improvement over ordinary-least squares regression because the EGLS technique accounts for differences in sampling errors in the observed flow records due to differing record lengths and sample cross correlation of annual peak discharges between sites. For the 204 stations in and around Arkansas, record lengths ranged from 11 years to 66 years. Sample cross-correlation coefficients for annual peaks are a function of distance between sites and are approximated by the smoothed curve shown in figure 4.

Figure 4. Relation between cross-correlation coefficients of annual peaks and distance between sites in and around Arkansas. Plotted points are for pairs of sites with more than 50 years of concurrent data.

Peak Discharge Equations for Region A

The regression analysis indicated that contributing drainage area and main channel slope are the most significant characteristics for estimating flood magnitudes in Region A. The following equations were developed for rural streams by the linear multiple-regression technique using data from the 48 gaging stations in Region A (fig. 3) in and around Arkansas. Basin characteristics and log-Pearson results for these stations are listed in table 1.

Equations for estimating flood magnitude	Model standard error (logs)	Model standard error (percent)	Average standard error of prediction (percent)	Equivalent years of record	
$Q_2 = 1.88A^{0.795}S^{0.113}$	0.1677	40	42	4	(3)
$Q_5 = 3.26A^{0.802}S^{0.157}$	.1281	30	32	7	(4)
$Q_{10} = {}_{4.31A}{}^{0.804}S^{0.178}$	.1210	28	31	10	(5)
$Q_{25} = 5.74A^{0.804}S^{0.197}$	.1250	29	32	13	(6)
$Q_{50} = 6.89A^{0.808}S^{0.209}$	.1334	31	34	14	(7)
$Q_{100} = 8.05A^{0.803}S^{0.21}$	.1443	34	37	14	(8)
$Q_{500} = 10.9A^{0.803}S^{0.241}$	.1746	42	45	13	(9)

where,

Q_x is the estimated discharge for the indicated recurrence interval x, in cubic meters per second,
A is contributing drainage area, in square kilometers, and
S is channel slope, in meters per kilometer.

Peak Discharge Equations for Region B

The regression analysis indicated that contributing drainage area, mean basin elevation, and the basin shape factor are the most significant basin characteristics for estimating flood magnitudes in Region B. The following equations were developed for rural streams by the linear multiple-regression technique using data from the 65 gaging stations in Region B (fig. 3) in and around Arkansas. Basin characteristics and log-Pearson results for these stations are listed in table 2.

Equations for estimating flood magnitude	Model standard error (logs)	Model standard error (percent)	Average standard error of prediction, (percent)	Equivalent years of record	
$Q_2 = 0.041A^{0.745}E^{0.927}SH^{0.342}$	0.1658	40	42	4	(10)
$Q_5 = 0.113A^{0.735}E^{0.875}SH^{0.396}$	.1552	37	39	5	(11)
$Q_{10} = 0.182A^{0.729}E^{0.854}SH^{0.422}$	.1520	36	38	7	(12)
$Q_{25} = 0.288A^{0.723}E^{0.839}SH^{0.446}$	.1510	36	38	9	(13)
$Q_{50} = 0.377A^{0.718}E^{0.832}SH^{0.460}$	.1520	36	39	11	(14)
$Q_{100} = 0.471A^{0.715}E^{0.827}SH^{0.472}$	.1549	37	40	12	(15)
$Q_{500} = 0.714A^{0.708}E^{0.823}SH^{0.494}$	.1655	40	43	14	(16)

where,

Q_x is the estimated discharge for the indicated recurrence interval x, in cubic meters per second,
A is contributing drainage area, in square kilometers,
E is mean basin elevation, in meters, and
SH is the basin shape factor (contributing drainage area divided by the square of the channel length).

Peak Discharge Equations for Region C

The regression analysis indicated that contributing drainage area is the most significant basin characteristics for estimating flood magnitudes in Region C. The following equations were developed for rural streams by the linear multiple-regression technique using data from the 57 gaging stations in Region C (fig. 3) in and around Arkansas. Basin characteristics and log-Pearson results for these stations are listed in table 3.

Equations for estimating flood magnitude	Model standard error (logs)	Model standard error (percent)	Average standard error of prediction, (percent)	Equivalent years of record	
$Q_2 = 4.18A^{0.669}$	0.1712	41	42	3	(17)
$Q_5 = 7.23A^{0.676}$	.1539	37	38	5	(18)
$Q_{10} = 9.44A^{0.680}$	.1473	35	37	6	(19)
$Q_{25} = 12.3A^{0.684}$	.1425	34	36	9	(20)
$Q_{50} = 14.6A^{0.687}$	.1407	33	35	11	(21)
$Q_{100} = 16.7A^{0.690}$	.1407	33	35	12	(22)
$Q_{500} = 22.1A^{0.694}$	.1456	35	37	15	(23)

where,

Q is the estimated discharge for the indicated recurrence interval x, in cubic meters per second, and
A is contributing drainage area, in square kilometers.

Peak Discharge Equations for Region D

The regression analysis indicated that contributing drainage area, channel slope, and basin shape factor are the most significant basin characteristics for estimating flood magnitudes in Region D. The following equations were developed for rural streams by the linear multiple-regression technique using data from the 34 gaging stations in Region D (fig. 3) in and around Arkansas. Basin characteristics and log-Pearson results for these stations are listed in table 4.

Equations for estimating flood magnitude	Model standard error (logs)	Model standard error (percent)	Average standard error of prediction, (percent)	Equivalent years of record	
$Q_2 = 2.56A^{0.667}S^{0.211}SH^{0.208}$	0.1296	31	33	3	(24)
$Q_5 = 4.16A^{0.688}S^{0.289}SH^{0.252}$	.1217	29	31	4	(25)
$Q_{10} = 5.25A^{0.699}S^{0.334}SH^{0.270}$	.1281	30	33	4	(26)
$Q_{25} = 6.67A^{0.710}S^{0.385}SH^{0.286}$	.1432	34	37	4	(27)
$Q_{50} = 7.72A^{0.717}S^{0.418}SH^{0.295}$	.1575	38	41	4	(28)
$Q_{100} = 8.76A^{0.723}S^{0.448}SH^{0.302}$	.1726	41	45	4	(29)
$Q_{500} = 11.2A^{0.735}S^{0.510}SH^{0.316}$	.2100	51	56	4	(30)

where,

Q_x is the estimated discharge for the indicated recurrence interval x, in cubic meters per second,
A is contributing drainage area, in square kilometers,
S is channel slope, in meters per kilometer, and
SH is the basin shape factor (contributing drainage area divided by the square of the channel length).

Accuracy of Estimating Equations

The EGLS technique provides a means of estimating the uncertainty or error in a prediction at an ungaged site by partitioning the mean square error into two parts--the first part is the model error, and it is due to having an imperfect model and the second part is associated with sampling mean square error, MSE_s. The values for the standard error of the model, γ, are calculated in log (base 10) units. The standard error of the model can be transformed from log units to percent by the formula:

$$SE_{model}(\text{in percent}) = 100[e^{\{5.30189*\gamma 2\}} - 1]^{0.5} \quad (31)$$

The value for γ and SE_{model} for each regional equation are shown in equations 3 to 30. The MSE_s is the mean square error for a site because of estimating the true model parameters from observed flows at gaging stations in a region. The value of MSE_s at a specific site can be estimated as follows: denote the column vector of n logarithms of observed peak-discharge characteristics at n sites in a region by **Y.** For example,

$$\mathbf{Y}= \begin{bmatrix} \log Q_{50,\ 1} \\ \log Q_{50,\ 2} \\ -- \\ -- \\ \log Q_{50,\ n} \end{bmatrix},$$

where, $Q_{50,i}$ represents the observed 50-year peak at the *i*th gaging station in the region. Further, let **X** represent a (n by p) matrix of p-1 basin characteristics augmented by a column of ones at n gaging stations in a region and **B** represent a column vector of p regression coefficients. For example, in a region in which drainage area, A, slope, S, and shape, SH, were significant explanatory variables,

$$\mathbf{X}= \begin{bmatrix} 1 & \log(A_1) & \log(S_1) & \log(SH_1) \\ 1 & \log(A_2) & \log(S_2) & \log(SH_2) \\ - & - & - & - \\ 1 & \log(A_n) & \log(S_n) & \log(SH_n) \end{bmatrix} \quad \text{and } \mathbf{B}= \begin{bmatrix} a \\ b_1 \\ b_2 \\ b_4 \end{bmatrix}.$$

The linear model in equation 1 can be written as

$$Y=XB \tag{32}$$

The MSE_s for an ungaged site with basin characteristics given by the row vector $\mathbf{x}_0 = [1\ \log(A_0)\ \log(S_0)\ \log(SH_0)]$, for example, is calculated as

$$MSE_s=\mathbf{x}_0\{\mathbf{X}^T\Lambda^{-1}\mathbf{X}\}^{-1}\mathbf{x}_0^T \tag{33}$$

where Λ is the (n by n) covariance matrix associated with **Y**. The diagonal elements of Λ are model error variance, γ^2, plus the time sampling error for each site i, (i = 1,2,3,...n), which is estimated as a function of a regional estimate of the standard deviation of annual peaks at site i, the recurrence interval of the dependent variable and the number of years of record at site i. The off-diagonal elements of Λ are the sample covariance of the estimated T-year peaks at sites i and j. These off-diagonal elements are estimated as a function of a regional estimate of the standard deviation of annual peaks at sites i and j, the recurrence interval of the dependent variable and the number of concurrent years of record at sites i and j (Tasker and Stedinger, 1989). The (p by p) matrix $\{\mathbf{X}^T\Lambda^{-1}\mathbf{X}\}^{-1}$ for each equation (table 9) was calculated using data in inch-pound units. Therefore, to calculate MSE_s one must take the logarithms of A, S, and E in units of square miles, feet per mile, and feet, respectively. The mean square error of a prediction, in square log (base 10) units, at specific ungaged site can be estimated as

$$MSE_p = (\gamma^2 + MSE_s) \tag{34}$$

The standard error of a prediction, $SE_{prediction}$, in percent, can be calculated as

$$SE_{prediction}= 100\{e^{5.30189*(MSEp)} - 1\}^{0.5} \tag{35}$$

A single measure of the overall fit of the regression equations is the average $SE_{prediction}$. This statistic is slightly larger than the SE_{model} (see equations 3 to 30 for both statistics for each equation) because the $SE_{prediction}$ includes the average MSE_s term for all the gaging stations in a region.The equivalent years of record listed for equations 3 to 30 are an estimate of the number of years of actual streamflow record required at a site to achieve an accuracy equivalent to the standard error of prediction of the regional regression equation.

Another measure of uncertainty is the prediction interval of an estimate at an ungaged site. A 100(1-α) prediction interval for the true flow characteristic, Θ_{RI}, at an ungaged site can be computed by

$$(1/V)Q_{RI.} < \Theta_{RI} < (V)\, Q_{RI} \qquad (36)$$

where the value of V can be computed from the relation $\log_{10}(V) = t_{(\alpha/2,\ n-p)}\ (MSE_p)^{0.5}$, $t_{(a/2,\ n-p)}$ and is the critical value of the t-distribution for n-p degrees of freedom and is tabulated in many statistical texts, n is the number of observations used in the regression analysis, and p is the number of basin characteristics (explanatory variables) used in the regression plus one.

Example

The calculation of the standard error of a prediction and 90 percent prediction limits are illustrated by the following example. Suppose one wished to estimate the 50-year peak discharge at a 50-km^2 drainage-area site in region A with an average basin slope of 10 m/km. The estimate of Q_{50} is obtained from equation 7

$$Q_{50} = 6.89(50)^{0.803}(10)^{0.209} = 6.89(23.13)(1.618) = 258\ m^3/s.$$

Now from table 5, $\gamma^2 = 0.1334^2 = 0.0178$. In region A n=48 and p=3. From table 5, (37)

$$\{\mathbf{X}^T\Lambda^{-1}\mathbf{X}\}^{-1} = \begin{bmatrix} 0.037561 & -0.007189 & -0.017591 \\ -0.007189 & 0.001660 & 0.003253 \\ -0.017591 & 0.032253 & 0.008980 \end{bmatrix}$$

The vector $\mathbf{x}_0$ = [1 log(50*.3861) log(10*3.281/.6215)] = [1 1.2857 1.7226], where the factors 0.3861 and 3.281/0.6215 convert area and slope to inch-pound units. From equation 33 $MSE_s = \mathbf{x}_0\{\mathbf{X}^T\Lambda^{-1}\mathbf{X}\}^{-1}\mathbf{x}_0^T = 0.0023$. From equation 34, MSE_p =(0.0178+0.0023)=0.0201, and from equation 35,

$$SE_{prediction} = 100\{e^{5.318*0.0201} - 1\}^{0.5} = 33.6 \text{ percent.}$$

A 90 percent prediction interval (α=0.10) can be computed by setting $t_{.05,\ 46} = 1.68$ (from standard statistical texts) and $V = 10^{1.68*0.1418} = 1.731$. The 90 percent prediction interval (equation 36) is (258/1.73, 258*1.73) or (149, 446). There is a 90 percent chance that a prediction interval constructed in this way contains the true 50-year peak discharge at the site in region A and the discharge falls within the interval 149 to 446.

The computations needed to compute the standard error of prediction and prediction interval are of sufficient complexity to make a computer program desirable. Therefore, a FORTRAN program and related data files are given in the appendix of this report. In addition, a 3.5-inch diskette is included in the back pocket of this report with an executable file suitable for a 386 or higher IBM[1] compatible PC with a math coprocessor.

[1] Any use of trade, product, or firm names are for descriptive purposes only and does not imply endorsement by the U.S. Government.

Table 5. Matrix $\{\mathbf{X}^{T}\Lambda^{-1}\mathbf{X}\}^{-1}$ for equations 3 to 30

Table 5. Matrix $\{\mathbf{X}^{T}\Lambda^{-1}\mathbf{X}\}^{-1}$ for equations 3 to 30--Continued

The accuracy of estimating equations also can be evaluated by the equivalent years of record (EQ). The EQ are an estimate of the number of actual years of streamflow record required at a site to achieve an accuracy equivalent to the regional flood estimate from regression equations (Hardison, 1969). EQ are used in this report to weight the station log-Pearson Type III data with the log-linear multiple-regression flood-frequency estimate. This weighting procedure is intended to produce a flood-frequency relation at each site that is more realistic of the long-term relation than the log-Pearson Type III data or the log-linear multiple-regression flood-frequency data alone. This procedure for weighting the data is described in a later section of this report.

FLOOD MAGNITUDE AND FREQUENCY AT OR NEAR GAGED SITES ON STREAMS DRAINING LESS THAN 7,770 SQUARE KILOMETERS

Flood frequency at gaged sites draining less than 7,770 km^2 can be estimated by a combined use of the gaging station frequency curve and the regression equations. The recommended procedure is to compute the discharge for the desired recurrence interval as a weighted average of the station value and the regression equations. The weighted average is based on the length of record of the station data and the equivalent years of record for the regression equations. The weighted values are considered the most accurate estimates for design purposes at a site. The equation used to compute the weighted average is:

$$Q_x(w) = \frac{Q_x(s)N + Q_x(r)EQ}{N + EQ} \tag{38}$$

where,

$Q_x(w)$ is the weighted discharge for recurrence interval x,
$Q_x(s)$ is the station discharge for recurrence interval x,
$Q_x(r)$ is the regression equation discharge for recurrence interval x,
N is the number of years of station data used to compute $Q_x(s)$, and
EQ is the equivalent years of record for $Q_x(r)$.

An example of the computations is illustrated in the following table by using station 07073000, Strawberry River near Evening Shade. This site is in region C, therefore, the region C equations were used in the computations.

Recurrence interval x, in years	$Q_x(s)$ (m^3/s)	N (in years)	$Q_x(r)$ (m^3/s)	EQ (years)	$Q_x(w)$ (m^3/s)
2	259	41	289	3	261
5	420	41	522	5	431
10	537	41	700	6	558
25	697	41	935	9	740
50	822	41	1,130	11	887
100	952	41	1,320	12	1,040
500	1,280	41	1,790	15	1,420

Flood frequency at sites with drainage areas less than 7,770 km^2 that are relatively near a gaging station and on the same stream can be calculated by a combined use of the nearby station data and the linear multiple-regression equations. The following procedure is suggested for use if the site has a drainage area within 50 percent of the drainage area of the gaging station. The weighted value, $Q_x(w)$, and the regression equation value, $Q_x(r)$, for the gaged site should be computed as described in the preceding paragraphs.

The ratio,

$$R = \frac{Q_x(w)}{Q_x(r)} \tag{39}$$

is then calculated for the gaged site. This ratio represents the correction needed to adjust the regression value, $Q_x(r)$, to the weighted value, $Q_x(w)$, at the gaged site. The calculations for determining the correction factor (R'), for an ungaged site that is near a gaged site on the same stream, have been reduced to the equation:

$$R' = R - \frac{\Delta A(R-1)}{0.5Ag} \tag{40}$$

where,

R' is correction factor that is multiplied by the regression value, $Q_x(r)$, for the ungaged site,
ΔA is the difference between the drainage areas of the gaged and ungaged sites, and
Ag is the drainage area of the gaged site.

If the drainage area of the ungaged site is 50 percent more than or 50 percent less than that of the gaged site, that is, ΔA/Ag is greater than 0.5, the results of the regression equations should be used without adjustment.

The site for which flood-frequency calculations are desired may sometimes be between two gaged sites on the same stream. The 50-percent rule should be applied to determine which gage, if any, should be used to make the adjustment. If the ungaged site is within 50 percent of both gaged sites, correction factors should be computed using each gaged site. If both correction factors are greater than unity, the larger should be used. If both correction factors are less than unity, the smaller should be used. If one is greater than unity and one is less than unity, an average of both correction factors should be used.

The following example illustrates the calculations for determining a 100-year flood for an ungaged site that is between two gaging stations on the same stream. For this example, the gaged sites are station 07073000, Strawberry River near Evening Shade, Arkansas, and station 07074000, Strawberry River near Poughkeepsie, Arkansas; and the ungaged site is where the drainage area equals 777 km^2. Following are data and calculations needed for the gaged and ungaged sites, which are used to compute Q_{100} at the ungaged site. The drainage area of the ungaged site (777 km^2) is within 50 percent of the drainage areas at both gaged sites. Therefore, the station data for both gaged sites are used in the computations.

(1) Gaged site, 07073000, Strawberry River near Evening Shade:
Ag = 562 km^2,
N = 41 years,
EQ = 12 years,
$Q_{100}(s)$ = 952 m^3/s, from station data,
$Q_{100}(r)$ = 1,320 m^3/s, from regression equation 22,
$Q_{100}(w)$ = 1,040 m^3/s, from equation 38, and
$R = Q_{100}(w)/Q_{100}(r) = 1{,}040/1{,}320 = 0.788$, from equation 39.

(2) Gaged site, 07074000, Strawberry River near Poughkeepsie:
Ag = 1,230 km^2,
N = 58 years,
EQ = 12 years,
$Q_{100}(s)$ = 2,230 m^3/s, from station data,
$Q_{100}(r)$ = 2,260 m^3/s, from regression equation 22,
$Q_{100}(w)$ = 2,240 m^3/s, from equation 38, and
$R = Q_{100}(w)/Q_{100}(r) = 2,240/2,260 = 0.991$, from equation 39.

(3) Ungaged site:
Ag = 777 km^2,
$Q_{100}(r)$ = 1,650 m^3/s, from regression equation 22,
$\Delta A = 777 - 562 = 215$ km^2 using Evening Shade
$R' = 0.788 - 215/(0.5 \times 562) \times (0.788 - 1.00) = 0.950$ using Evening Shade
$\Delta A = 1,230 - 777 = 453$ km^2 using Poughkeepsie
$R' = 0.991 - 453/(0.5 \times 1,230) \times (0.991 - 1.00) = 0.998$ using Poughkeepsie.

Because R' is less than unity for both Evening Shade and Poughkeepsie, Evening Shade is used because its R' is the smaller of the two.

$Q_{100} = Q_{100}(r) \times R' = 1,650 \times 0.950 = 1,570$ m^3/s.

This is considered the best estimate for the 100-year peak discharge at the ungaged site on Strawberry River.

REGION OF INFLUENCE METHOD

In using the region of influence method (Tasker and Slade, 1994) unique regression models relating floods for each of the seven recurrence intervals are formulated for each ungaged site at which a flood estimate is desired. In this method the regression equations for a site are computed using data from a unique region called the region of influence by Burn (1990a, 1990b) and suggested by Acreman and Wiltshire (1987). The unique subset of gaging stations that make up the region of influence for each ungaged site is made up of the *N* nearest neighbors. In this method the nearness of two neighbors is not measured by the physical distance between the sites, but nearness is measured by a distance defined in terms of the basin characteristics. The distance between any two sites, indexed by *i* and *j*, is determined by the Euclidean distance metric:

$$d_{ij} = \left(\sum_{k=1}^{p} \left(\frac{x_{ik} - x_{jk}}{sd(X_k)} \right)^2 \right)^{1/2} \quad (41)$$

where,

d_{ij} is the distance between the watershed characteristics at sites *i* and *j*,
p is the number of watershed characteristics needed to calculate d_{ij},
X_k represents the *k*th watershed characteristic,
$sd(X_k)$ is the sample standard deviation for X_k, and
x_{ik} is the value of X_k at the *i*th site.

In this study, three characteristics were employed:

$X_{.,1}$ = log[DA],
$X_{.,2}$ = log[SL], and
$X_{.,3}$ = log[EL].

These three basin characteristics were chosen to define d_{ij} based on a study of how well different combinations of basin characteristics reduce the prediction errors based on observed residuals. The d_{ij}'s between the ungaged site i and all gaging stations j=1,2,...,n in a region is determined, and the N gaging stations with smallest d_{ij} make up the region of influence for site i. For this method to work, the value of N should be large enough to have enough degrees of freedom in the regression to estimate two or three basin characteristics. For this study a N value of 42 was chosen based on a study of observed residuals for several different values of N.

Not all basin characteristics (DA, SL, PR, EL, and SH) are used as explanatory variables for the final equations. Variable selection is made by selecting only variables with significance levels less than 0.10 in a stepbackward regression algorithm (Montgomery and Peck, 1982; Myers, 1986). Regression coefficients and significance levels for the final equations are estimated using the GLS regression techniques described in Stedinger and Tasker (1985) and Tasker and Stedinger (1989).

In this report, the region of influence method uses the same basin characteristics as the regional equations with the addition of mean-annual precipitation (P). The value of P can be taken directly from figure 5.

The region of influence method is still being improved and is to be considered only as a second alternative to the regional regression equations. The regional regression equations are the recommended procedure. The region of influence method along with the regional regression equations have been provided on the diskette in the inside back cover of this report.

Figure 5. Mean annual precipitation for Arkansas for the base period 1951-80 (from Freiwald, 1985).

Method Comparison

Based on RMSE computations between the region of influence method and the regression equations (table 6), the region of influence method was found to produce better overall results for regions A, B, and C, whereas the regression equations produced slightly better results for region D. The RMSE was computed separately for each recurrence interval, in each region, for each method, using the stations known frequency discharge and the equation:

$$\sqrt{\frac{\Sigma(\log P - \log R)^2}{N}} \tag{42}$$

where,

log P is the log base 10 of the station's frequency value,
logR is the log base 10 of the station's computed frequency value, (from each method), and
N is the number of stations in the region.

The results of these computations are shown in table 6.

Limitations

The following limitations should be recognized when using either the regression equations or the region of influence method.

1. Both methods should be used for rural areas of Arkansas and should not be used for urban areas.
2. Both methods should not be used where dams, flood-detention structures, and other anthropogenic works that have an effect on peak discharges. Under such conditions, stream-system studies involving reservoir and open-channel routing, may be required to evaluate flood frequency. These types of studies are beyond the scope of this report.
3. Both methods should be used only for streams with drainage areas smaller than 7,770 km^2 and main-channel slopes less than 70.3 m/km.

Software

A software packet is included with this report. It is a floppy disk that contains programs to run the regression equations and the region of influence method. These programs are for use on an IBM compatible PC, 386 or higher with a math coprocessor. The floppy disk in the back pocket of this report contains a program that will allow the user to compute flood frequency and magnitude estimates for 2-,
5-, 10-, 25-, 50-, 100-, and 500-year flood events.The program computes these estimates using the regional regression equations or the region of influence method, both of which are discussed in this report.

The program will run faster if the user copies the contents from the disk onto his hard drive and runs it from there. To run the executable file (ark.exe) type "ark" at the cursor and the user will be prompted for the necessary site information discussed in this report. This program requires 528K of RAM to run. Some PC's may not have enough memory available to run the program because of their configuration. If the program generates an error message that has to do with memory, the user may need to trim down the "autoexec.bat" and "config.sys" files on his hard drive. If the user's PC is networked with other machines the user may have to take his PC off the network to run this program. If all else fails, there are two files on the diskette named "autoexec.new" and "config.new" that can be copied to the user's hard drive as autoexec.bat and config.sys AFTER saving the original versions of these two files under another name.

Table 6. Root mean square error comparison results

Region	Recurrence interval	Region of Influence method (percent)	Regional regression equations method (percent)
A	Q_2	35.7	42.4
	Q_5	27.4	32.9
	Q_{10}	26.7	32.1
	Q25	28.2	34.6
	Q_{50}	31.0	37.8
	Q_{100}	34.5	41.7
	Q_{500}	45.5	51.7
B	Q_2	32.2	41.3
	Q_5	26.6	39.6
	Q_{10}	27.0	40.1
	Q25	29.6	41.6
	Q_{50}	26.7	43.4
	Q_{100}	34.8	45.6
	Q_{500}	42.2	51.9
C	Q_2	39.7	41.9
	Q_5	33.6	38.3
	Q_{10}	32.2	38.0
	Q_{25}	32.1	39.0
	Q_{50}	33.4	40.3
	Q_{100}	34.7	42.4
	Q_{500}	37.6	48.1

Region	Recurrence interval	Region of Influence method (percent)	Regional regression equations method (percent)
D	Q_2	41.2	29.8
	Q_5	37.4	27.9
	Q_{10}	37.4	29.7
	Q_{25}	41.3	33.8
	Q_{50}	43.6	37.6
	Q_{100}	45.6	41.7
	Q_{500}	55.4	52.1

To use the program, the user must choose between metric and inch-pound units and the prediction method desired. Next you will enter the necessary basin characteristics. The program will prompt the user for all needed information. After the last basin or climatic characteristic is entered, the program will output the predicted values to the screen. The region of influence method will have an output file with detailed information. This program is very user friendly and the user should have no problems with it. The FORTRAN code for this software is contained in the Appendix of this report.

FLOOD FREQUENCY FOR URBAN AREAS

Limited data for urban areas in Arkansas are available. Data presently (1995) are being collected for 11 urban streams across the State. However, only two of these stations have been in place long enough to have a suitable length of record for analysis. These data consist of peaks only and are not included in this report.

A nationwide flood frequency report (Sauer and others, 1983) that uses urban characteristics to adjust rural discharges to estimate urban discharges is available. Equations in the report were developed using all available U.S. Geological Survey urban data throughout the United States along with the respective rural discharge. The equations in the report should be applicable to urban Arkansas streams.

Three sets of equations are shown in the report by Sauer and others (1983) for computing urban discharges. Two sets of the equation use seven characteristics for estimating discharge and the other set uses three characteristics. Recent studies in the southeastern part of the Nation indicate that the three-parameter equations are biased for certain areas, whereas the seven-parameter equations are not biased. The seven- parameter equations are the most accurate available estimate of the urban flood frequency in Arkansas and are listed below. The following equations and definitions are excerpts from Sauer and others (1983)

	Average standard error of regression (in percent)

$$UQ_2 = 2.35A^{0.41}S^{0.17}(RI2+3)^{2.04}(ST+8)^{-0.65}(13-BDF)^{-0.32}IA^{0.15}RQ_2^{0.47} \quad \pm 38 \quad (43)$$

$$UQ_5 = 2.70A^{0.35}S^{0.16}(RI2+3)^{1.86}(ST+8)^{-0.59}(13-BDF)^{-0.31}IA^{0.11}RQ_5^{0.54} \quad \pm 37 \quad (44)$$

$$UQ_{10} = 2.99A^{0.32}S^{0.15}(RI2+3)^{1.75}(ST+8)^{-0.57}(13-BDF)^{-0.30}IA^{0.09}RQ_{10}^{0.58} \quad \pm 38 \quad (45)$$

$$UQ_{25} = 2.78A^{0.31}S^{0.15}(RI2+3)^{1.76}(ST+8)^{-0.55}(13-BDF)^{-0.29}IA^{0.07}RQ_{25}^{0.60} \quad \pm 40 \quad (46)$$

$$UQ_{50} = 2.67A^{0.29}S^{0.15}(RI2+3)^{1.74}(ST+8)^{-0.53}(13-BDF)^{-0.28}IA^{0.06}RQ_{50}^{0.62} \quad \pm 42 \quad (47)$$

$$UQ_{100} = 2.50A^{0.29}S^{0.15}(RI2+3)^{1.76}(ST+8)^{-0.52}(13-BDF)^{-0.28}IA^{0.06}RQ_{100}^{0.63} \quad \pm 42 \quad (48)$$

$$UQ_{500} = 2.27A^{0.29}S^{0.16}(RI2+3)^{1.86}(ST+8)^{-0.54}(13-BDF)^{-0.27}IA^{0.05}RQ_{500}^{0.63} \quad \pm 49 \quad (49)$$

NOTE: This section is taken from a previous report published in 1983. It was printed in inch-pound units. Therefore, the equations are presented here in the same units. For conversion to metric units, use the conversion factors presented at the beginning of this report.

where,

UQ_X is the peak discharge, in cubic feet per second, urban discharge for the urban watershed for the recurrence interval, x.

A is the contributing drainage area, in square miles.

S is the main channel slope, in feet per mile, measured between points which are 10 and 85 percent of the main channel length upstream from the study site. For sites where S is greater than 70 feet per mile, use 70 in the equations.

RI2 is rainfall intensity, in inches, for the 2-hour 2-year occurrence. The rainfall intensity for the 2-hour, 2-year occurrence is shown on figure 6 (Weather Bureau, 1961).

ST is basin storage, the percentage of the drainage basin occupied by lakes, reservoirs, swamps, and wetlands. In-channel storage of a temporary nature, resulting from detention ponds or roadway embankments, is not included in the computation of ST.

BDF is the basin development factor.

IA is the percentage of the drainage basin occupied by impervious surfaces, such as houses, buildings, streets, and parking lots.

RQ_X is the peak discharge, in cubic feet per second, for an equivalent rural drainage basin in the same hydrologic area as the urban basin, and for recurrence interval x.

Figure 6. Rainfall intensity for the 2-hour, 2-year occurrence (from Weather Bureau, 1961).

The basin development factor (BDF) describes the conditions of the drainage system. The following description of the BDF and how it is computed is a quotation from Sauer and others (1983).

The most significant index of urbanization that results from this study is a basin development factor (BDF), which provides a measure of the efficiency of the drainage system. This parameter, which proved to be highly significant in the regression equations, can be easily determined from drainage maps and field inspections of the drainage basin. The basin is first divided into thirds. Then, within each third, four aspects of the drainage system are evaluated and each assigned a code as follows:

1. Channel improvements.-- If channel improvements such as straightening, enlarging deepening, and clearing are prevalent for the main drainage channels and principal tributaries (those that drain directly into the main channel), then a code of 1 is assigned. Any or all of these improvements would qualify for a code of 1. To be considered prevalent, at least 50 percent of the main drainage channels and principal tributaries must be improved to some degree over natural conditions. If channel improvements are not prevalent, then a code of zero is assigned.

2. Channel linings.--If more than 50 percent of the length of the main drainage channels and principal tributaries has been lined with an impervious material, such as concrete, then a code of 1 is assigned to this aspect. If less than 50 percent of these channels is lined, then a code of zero is assigned. The presence of channel linings would indicate the presence of channel improvements as well. Therefore, this is an added factor and indicates a more highly developed drainage system.

3. Storm drains, or storm sewers.--Storm drains are defined as enclosed drainage structures (usually pipes), frequently used on the second tributaries where the drainage is received directly from streets or parking lots. Many of these drains empty into open channels; however, in some basins the drains empty into channels enclosed as box or pipe culverts. When more than 50 percent of the secondary tributaries within a subarea (third) consists of storm drains, then a code of 1 is assigned to this aspect; if less than 50 percent of the secondary tributaries consists of storm drains, then a code of zero is assigned. It should be noted that if 50 percent or more of the main drainage channels and principal tributaries are enclosed, then the aspects of channel improvements and channel linings would also be assigned a code of one.

4. Curb-and-gutter streets.--If more than 50 percent of a subarea (third) is urbanized (covered by residential, commercial, and/or industrial development), and if more than 50 percent of the streets and highways in the subarea are constructed with curbs and gutters then a code of 1 would be assigned to this aspect. Otherwise, this aspect would be assigned a code of zero. Drainage from curb-and-gutter streets frequently empties into storm drains.

The above guidelines for determining the various drainage-system codes are not intended to be precise measurements. A certain amount of subjectivity will necessarily be involved. Field checking should be performed to obtain an accurate estimate. The BDF is the sum of the assigned codes; therefore, with three subareas (thirds) per basin, and four drainage aspects to which codes are assigned in each subarea, the maximum value for a fully developed drainage system would be 12. Conversely, if the drainage system were totally undeveloped, then a BDF of zero would result. Such a condition does not necessarily mean that the basin is unaffected by urbanization. In fact, a basin could be partially urbanized, have some impervious area, have some improvement of secondary tributaries, and still have an assigned BDF of zero.

The BDF is a fairly easy index to estimate for an existing urban basin. The 50-percent guideline will usually not be difficult to evaluate because many urban areas tend to use the same design criteria and, therefore, have similar drainage aspects throughout. Also, the BDF is convenient for projecting future development. Obviously, full development and maximum urban effects on peaks would occur when BDF = 12. Projections of full development or intermediate stages of development can usually be obtained from city engineers.

CONCLUSIONS

Methods are presented for estimating the magnitude and frequency of peak discharges in Arkansas. Flood data from 204 gaging stations were used to develop regression equations to estimate peak discharges with selected recurrence intervals of 2-, 5-, 10-, 25-, 50-, 100-, and 500-years on streams that drain less than 7,770 km^2. The State was divided into four regions to improve the accuracy of the regression equations. Region A includes most of the Arkansas River Basin in Arkansas. Region B includes most of the Red River Basin in Arkansas. Region C includes most of the White River Basin in Arkansas. Region D includes most of the Mississippi Alluvial Plain in Arkansas, with the exception of Crowleys Ridge, which is considered as part of Region C. Regression equations were developed separately for the four regions.

The regression analysis for Region A indicates that drainage area and main channel slope were the most significant basin characteristics that affect the magnitude and frequency of floods. The average standard error of prediction of these equations ranges from 31 to 45 percent. The regression analysis for Region B indicated that drainage area, mean basin elevation, and the basin shape factor were the most significant basin characteristics that affect the magnitude and frequency of floods. The average standard error of prediction of these equations ranged from 38 to 43 percent.The regression analysis for Region C indicated that drainage area was the most significant basin characteristic that affects the magnitude and frequency of floods. The average standard error of prediction of these equations ranged from 35 to 42 percent. The regression analysis for Region D indicated that drainage area, main channel slope, and basin shape factor were the most significant basin characteristics that affect the magnitude and frequency of floods. The average standard error of prediction of these equations ranged from 31 to 56 percent.

An alternate procedure, the region of influence method, is included in this report. The procedure is software based, and therefore requires the use of a PC to run the program. This method uses a significant parameter subset of contributing drainage area, main channel slope, mean annual precipitation, mean basin elevation, and the shape factor for estimating peak discharges with selected recurrence intervals of 2-, 5-, 10-, 25-, 50-, 100-, and 500-years on streams that drain less than 7,770 km^2. The region of influence method performs a regression analyses for each station entered, by selecting a 42 similar site subset of the same data used to compute the regression equations.

A method is described for estimating the magnitude and frequency of peak discharges on streams for urban areas in Arkansas. This method is based on a nationwide U.S. Geological Survey flood frequency report that uses urban characteristics to adjust rural discharge to estimate urban discharges.

APPENDIX 1

ANNUAL PEAK DISCHARGE AND STAGE DATA AT GAGING STATIONS

[The following raw data were used in the analysis of this report to produce the regional regression equations and as the data base for the region of influence method. These data are provided in inch-pound units. Any necessary conversions can be made using the conversion factors at the beginning of this report. Generally, only annual maximums are shown. A line in the water-column indicates a break in record; mi, mile, ft^3/s, cubic feet per second; mi^2, square miles; ft, feet; a, peak stage occurred on different day; e, gage height or discharge is an estimate; B, month or day of occurrence is unknown or not exact. Sea level is used instead of National Geodetic Vertical Datum of 1929]

07047200 Ditch No. 45 near Lepanto, Ark

Location.--Lat 35° 36'46", long 90° 22'30", in SW 1/4 SW 1/4 sec.32, T.12 N., R.7 E., on left upstream wingwall, 7 ft upstream from culvert on State Highway 14, 0.5 mi upstream from Ditch No. 45B, and 2.5 mi west of Lepanto.

Drainage area.--2.16 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from 1969 to 1974.

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

Remarks.--Only annual peaks are shown.

07047200 Ditch No. 45 near Lepanto, Ark

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	11-22-61	8.46	185	1974	04-22-74	8.84	220
1963	03-05-63	8.71	208	1975	03-28-75	8.49	188
1964	03-09-64	8.40	180	1976	03-29-76	8.06	148
1965	02-11-65	8.21	165	1977	02-03-77	7.93	136
1966	02-09-66	8.25	168	1978	05-07-78	8.65	203
1967	10-01-66	8.27	169	1979	12-08-78	8.37	178
1968	04-04-68	8.19	162	1980	12-24-79	7.15	94
1969	01-30-69	8.78	215	1981	06-06-81	8.67	204
1970	04-25-70	8.36	176	1982	04-16-82	7.70	117
1971	02-21-71	8.06	154	1983	12-03-82	7.81	126
1972	09-29-72	7.78	134	1984	03-05-84	7.90	143
1973	04-19-73	8.83	220	1985	10-21-84	6.84	85

07047600 Tyronza River near Tyronza, Arkansas

Location.--Lat 35° 30'18", long 90° 22'48", in SE 1/4 sec. 7, T.10 N., R.7 E., at bridge on U.S. Highway 63, 2 mi northwest of Tyronza and at mile 34.8.

Drainage area.--290 mi^2.

Gage.--Nonrecording prior to August 16, 1948; recording thereafter. Prior to January 1, 1953, datum of gage was at mean Gulf level, or 0.30 ft below sea level. Present datum of gage is 183.87 ft above sea level. 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.

07047600 Tyronza River near Tyronza, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	02-05-39	29.90	--	1952	03-12-52	28.68	3,860
1940	04-20-40	18.00	--	1953	05-20-53	31.45	5,240
1941	01-25-41	13.70	--	1954	01-17-54	28.50	3,370
1942	04-10-42	25.90	--	1955	04-14-55	29.10	4,470
1043	03-22-43	23.50	--	1956	01-31-56	29.42a	4,040
1944	02-19-44	25.88	--	1957	01-30-57	--	3,940
1945	04-03-45	29.60	--	1958	05-04-58	30.80a	4,510
1945	01-12-45	29.60		1959	02-17-59	29.53	3,950
1947	06-24-47	24.80	--	1960	12-13-59	--	2,680
1948	03-03-48	25.70	--	1961	02-23-61	--	3,830
1949	01-28-49	29.20a	4,040	1962	12-13-61	30.60a	4,720
1950	02-16-50	31.61	5,660	1963	05-29-63	27.98	4,130
1951	07-06-51	31.20a	4,080	1964	03-12-64	--	3,280

07047600 Tyronza River near Tyronza, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1965	02-13-65	30.58	4,010	1981	06-07-81	27.49	6,588
1966	02-11-66	29.89a	3,610	1982	01-23-82	23.60	4,452
1967	07-29-67	24.80	2,640	1983	05-15-83	27.41	6,713
1968	04-05-68	30.40	6,700	1984	05-08-84	24.50	6,003
1969	02-01-69	30.20	6,020	1985	10-24-84	26.60	7,178
1970	12-31-69	28.27	5,360	1986	03-13-86	24.96	5,990
1971	12-24-70	--	3,970	1987	03-01-87	26.00	7,889
1972	09-30-72	20.10	1,950	1988	11-27-87	30.86	11,091
1973	04-23-73	30.64a	4,790	1989	02-16-89	28.59	7,258
1974	06-10-74	28.59	4,520	1990	02-04-90	27.60	6,372
1980	03-18-80	24.56	5,088	1991	12-21-90	28.72	6,972

07047820 Murray Creek near Jonesboro, Arkansas

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

Drainage area.--1.38 mi^2.

Gage.--Crest-stage gage

Stage-discharge relation.--Defined by current-meter measurement below 51 ft^3/s and by culvert measurements below 1,330 ft^3/s.

Remarks.--Only annual peaks are shown.

07047820 Murray Creek near Jonesboro, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	08-20-60	13.90	1,300	1974	11-24-73	9.71	470
1961	05-06-61	8.46	292	1975	03-28-75	9.11	385
1962	06-01-62	9.25	413	1976	02-18-76	10.64	615
1963	03-05-63	7.50	173	1977	03-04-77	7.87	215
1964	03-09-64	11.20	620	1978	05-07-78	9.60	455
1965	02-10-65	9.96	530	1979	04-02-79	11.22	712
1966	04-23-66	11.92	845	1980	12-24-79	11.50	770
1967	06-30-67	9.74	470	1981	06-06-81	8.83	345
1968	05-16-68	13.21	1,160	1982	01-31-82	8.51	300
1969	11-28-68	9.93	500	1983	12-03-82	11.33	760
1970	09-18-70	11.17	710	1987	02-28-87	10.78	640
1971	10-08-70	8.21	260	1988	12-25-87	10.00	505
1972	12-09-71	7.85	212	1991	04-13-91	11.46	740
1973	05-27-73	14.20	1,330	1992	03-18-92	10.70	630

07047880 Pope Creek Tributary at Birdeye, Arkansas

Location.--Lat 35° 22’35”, long 90° 42’02”, in NE 1/4 SE 1/4 sc.30, T.9 N., R.4 E., on right bank 25 ft upstream from culvert on State Highway 42, 0.6 mi west of junction with State Highway 163, and 0.9 mi west of Birdeye.

Drainage area.--0.08 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 18 ft^3/s and by culvert measurements at 42 ft^3/s and 49 ft^3/s.

Remarks.--Only annual peaks are shown.

.

07047880 Pope Creek Tributary at Birdeye, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	10-13-62	4.14	49.0
1964	03-09-64	3.95	42.0
1965	12-04-64	3.57	28.0
1966	02-09-66	3.55	28.0
1967	07-30-67	3.87	38.0
1968	04-04-68	4.02	44.0
1969	01-30-69	3.95	42.0
1970	04-25-70	3.85	38.0
1971	04-20-71	4.06	46.0
1972	09-29-72	3.84	38.0
1973	04-19-73	5.05	90.0
1974	06-07-74	4.39	60.0
1975	09-12-75	5.00	88.0
1976	06-18-76	3.61	29.0
1977	09-25-77	3.54	27.0
1978	09-13-78	7.73	511
1979	04-02-79	4.61	70.0
1980	07-22-80	4.66	72.0
1981	05-30-81	4.04	45.0
1982	07-02-82	4.51	66.0
1983	05-15-83	6.12	144
1984	04-08-84	4.12	48.0
1985	10-23-84	4.10	48.0
1986	1986	3.204	18.0
1987	02-28-87	4.34	58.0
1988	12-27-87	4.12	48.0
1989	1989	3.194	19.0
1990	05-19-90	4.08	47.0
1992	09-22-92	4.15	49.0

07047924 Crooked Bayou Tributary at State Highway 149 at Hughes, Arkansas

Location.--Lat 34° 57’07”, long 90° 28’00”, in SW 1/4 SE 1/4 sec.16, T.4 N., R.6 E., on right bank 19 ft upstream from culvert on State Highway 149, 0.2 mi upstream from U.S. Highway 79, and 0.4 mi northeast of junction with State Highway 38 at Hughes.

Drainage area.--0.48 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 7 ft^3/s and by culvert measurements at 18 ft^3/s, 81 ft^3/s, 115 ft^3/s, and 167 ft^3/s.

Remarks.--Only annual peaks are shown.

07047924 Crooked Bayou Tributary at State Highway 149 at Hughes, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	03-11-63	--	110
1964	04-05-64	8.39	81
1965	05-27-65	9.24	167
1966	02-09-66	8.68	115
1967	08-03-67	7.92	46
1968	12-02-67	8.79	119
1969	11-28-68	8.16	62
1970	12-29-69	8.43	91
1971	05-25-71	7.88	44
1972	07-03-72	9.02	144
1973	04-19-73	10.23	284
1974	04-22-74	8.97	140
1975	03-13-75	9.47	195
1976	05-06-76	7.52	30
1977	03-03-77	7.66	35
1978	01-08-78	8.65	108
1979	09-21-79	9.57	205
1980	07-22-80	12.63	625
1981	05-26-81	9.21	166
1982	08-14-82	8.66	110

07047942 L’Anguille River near Colt, Arkansas

Location.--Lat 35° 08’40”, long 90° 52’42”, in NE 1/4 NW 1/4 sec.15, T.6 N., R.2 E., St. Francis County, near center of span on downstream side of bridge on State Highway 306, 1.1 mi downstream m from Lick Creek, 3.9 mi northwest of Colt, and at mile 52.8.

Drainage area.--535 mi^2.

Gage.--Water-stage recorder. Datum of gage is 192.52 ft above sea level.

Remarks.--Defined by current-meter measurements below 6,100 ft^3/s

.

07047942 L'Anguille River near Colt, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1971	12-26-70	13.42	2,520	1983	05-19-83	15.78	8,550
1972	12-13-71	12.54	1,730	1984	12-04-83	14.82	6,690
1973	04-23-73	15.75	11,400	1985	11-30-84	14.49	35,200
1974	06-08-74	15.61	10,800	1986	12-02-85	14.01	4,040
1975	03-15-75	14.55	7,080	1987	03-01-87	14.73	5,750
1976	06-27-76	13.77	4,120	1988	12-30-87	17.34	16,300
1977	09-29-77	13.34	3,550	1989	11-21-88	15.30	9,440
1978	09-17-78	15.21	8,440	1990	02-03-90	14.51	6,320
1979	12-09-78	15.81	12,000	1991	04-29-91	15.98	16,600
1980	03-20-80	13.90	4,280	1992	12-13-91	13.99	4,620
1981	06-06-81	14.00	4,680	1993	04-18-93	13.10	2,070
1982	04-19-82	14.52	5,570				

07047950 L'Anguille River at Palestine, Arkansas

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

Drainage area.--786 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 13,700 ft^3/s 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

07047950 L'Anguille River at Palestine, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1933	04-13-33	28.80	--	1957	04-06-57	--	10,900
1935	04-01-35	27.45	--	1958	11-20-57	27.65	15,300
1936	04-23-36	28.87	--	1959	02-18-59	25.10	10,200
1937	02-13-37	39.70	--	1960	06-29-60	23.65	4,300
1939	03-03-39	26.80	--	1961	03-11-61	26.951a	5,630
1943	06-08-43	26.08	--	1962	03-01-62	26.38	13,700
1944	05-07-44	25.20	--	1963	03-14-63	23.461a	4,610
1945	04-03-45	29.60	--	1964	03-12-64	25.41	9,980
1946	01-12-46	26.75	--	1965	02-15-65	24.89	8880
1947	05-26-47	22.90	--	1966	05-02-66	26.20	10,700
1948	03-03-48	25.40	--	1967	01-03-67	23.00	3,650
1949	01-29-49	26.60	13,500	1968	05-19-68	24.80	7,700
1950	01-14-50	30.92a	12,400	1969	02-02-69	26.44	13,800
1951	01-18-51	24.70	9,000	1970	05-02-70	25.30	8,620
1952	03-14-52	24.65a	6,430	1971	02-23-71	23.23	4,120
1953	05-20-53	27.55	15,600	1972	12-22-71	22.301a	2,700
1954	01-24-54	23.90	5,800	1973	04-25-73	29.92	15,500
1955	05-29-55	24.55	8,150	1974	06-10-74	28.471a	13,000
1956	02-20-56	25.70	11,000	1976	06-30-76	23.691a	4,360

07047950 L'Anguille River at Palestine, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1977	09-30-77	22.88	2,870
1978	09-20-78	25.20	9,550
1979	12-11-78	26.59	12,900
1980	03-25-80	24.44a	7,350
1981	06-09-81	24.48	663
1982	04-21-82	25.19	9,117
1983	05-19-83	29.19	22,803
1984	05-21-84	26.50	15,133
1985	12-02-84	24.30	4,565
1990	02-05-90	25.20	9,754
1991	04-30-91	27.05	15,800

07047975 Dog Branch at St. Paul, Arkansas

Location.--Lat 35° 49'35", long 93° 45'50", in NW 1/4 NW 1/4 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.--1.23 $mi^{2.}$

Gage.--Crest-stage age.

Stage-discharge relation.--Defined by current-meter measurements below 95 ft^3/s and by culvert measurement below 956 ft^3/s.

Remarks.--Only annual peaks are shown.

07047975 Dog Branch at St. Paul, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-19-61	8.50	370
1962	1962	--	170e
1963	1963	--	310e
1964	04-05-64	7.40	130
1965	07-03-65	7.11	900
1966	02-09-66	7.59	165
1967	09-15-67	7.04	820
1968	10-30-67	8.19	300
1969	01-29-69	7.57	160
1970	09-23-70	8.38	345
1971	05-23-71	8.67	410
1972	12-10-71	8.55	390
1973	04-22-73	10.60	956
1974	11-24-73	9.41	600
1975	11-03-74	8.15	290
1976	04-20-76	7.03	83.0
1977	03-28-77	8.07	275
1978	05-07-78	8.02	260
1979	05-04-79	8.00	257
1980	06-17-80	7.04	83.0
1981	05-12-81	7.07	85.0

07047990 West Fork White River Tributary near Greenland, Arkansas

Location.--Lat 35° ,58'20", long 94° 09'55", in SE 1/4 sec.16, T.15 N., R.30 W., on right bank 15 ft upstream from culvert on U.S. Highway 71, 0.5 mi upstream from mouth, and 1.5 mi south of Greenland.

Drainage area.--0.67 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 36 ft^3/s and by culvert measurements below 1,360 ft^3/s.

Remarks.--Only annual peaks are shown.

07047990 West Fork White River Tributary near Greenland, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	05-05-60	11.40	1,360
1961	05-07-61	7.70	640
1962	04-10-62	5.64	260
1963	03-05-63	3.60	15
1964	09-22-64	4.59	38
1965	01-22-65	4.34	24
1966	02-09-66	5.10	88
1967	07-05-67	4.97	72
1968	12-21-67	5.59	165
1969	01-29-69	5.36	127

07047990 West Fork White River Tributary near Greenland, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1970	03-03-70	5.52	155
1971	10-26-70	5.86	210
1972	04-21-72	5.65	175
1973	08-14-73	5.87	210
1974	11-24-73	11.09	1,130
1975	03-28-75	5.88	215
1976	04-20-76	5.85	208
1977	09-29-77	6.01	235
1978	03-24-78	6.11	255
1979	05-03-79	5.67	175
1980	03-29-80	4.58	36
1981	05-10-81	6.07	250
1982	07-30-82	5.75	200
1983	05-14-83	6.51	330
1984	05-07-84	5.40	135
1985	10-20-84	5.46	140
1986	11-19-85	6.17	274

07048000 West Fork White River at Greenland, Arkansas

Location.--Lat 35° 59', long 94° 10', in NW 1/4 sec.16, T.15 N., R.30 W., near left bank on upstream side of pier of bridge on old U.S. Highway 71, 1 mi south of Greenland, 5.5 mi upstream from small tributary, and 10.5 mi upstream from mouth.

Drainage area.--83.1 mi^2.

Gage.--Recording. Datum of gage is 1,233 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 ft^3/s and by contracted-opening measurement at 34,700 ft^3/s.

Bankfull stage.--9 ft.

Remarks.--Only annual peaks are shown.

07048000 West Fork White River at Greenland, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1946	05-24-46	13.713	23,400
1947	06-01-47	9.763	6,660
1948	08-14-48	12.103	18,600
1949	06-13-49	10.643	12,100
1950	05-11-50	9.713	9,900
1951	02-20-51	8.723	7,410
1952	05-23-52	7.603	5,700
1953	03-14-53	9.503	9,800
1954	05-02-54	5.983	3,270
1955	04-21-55	8.353	7,180
1956	05-15-56	10.003	10,800
1957	04-03-57	13.543	27,700
1958	07-12-58	9.753	9,420
1959	03-05-59	8.903	7,400
1960	05-06-60	14.503	34,700
1961	05-05-61	11.153	14,200
1962	04-11-62	6.153	2,740
1963	05-05-63	5.503	2,330
1964	04-05-64	7.633	4,940
1965	05-09-65	6.863	3,830
1966	02-09-66	12.963	24,200
1967	05-06-67	4.563	1,890
1968	10-30-67	8.903	7,400
1969	01-29-69	8.083	5,800
1970	04-30-70	6.123	3,530
1971	10-27-70	7.943	6,420
1972	12-10-71	10.643	11,900
1973	04-22-73	13.203	25,600
1974	11-24-73	14.303	33,300
1975	11-04-74	13.373	20,400
1976	04-20-76	9.973	9,830
1977	03-27-77	9.72	7,600
1978	05-07-78	10.52	8,920
1979	04-11-79	8.71	6,070
1980	05-18-80	5.06	1,850
1981	05-31-81	11.32	10,800
1982	05-13-82	12.94	17,900
1983	12-03-82	7.96	5,050

07048900 Whitener Branch Tributary near Spring Valley, Arkansas

Location.--Lat 36° 10'24", long 93° 54'59", in SE 1/4 NW 1/4 sec.1, T.17 N., R.28 W., on left bank 30 ft upstream from culvert on State Highway 68, 1.0 mi east of Spring Valley, and 1.3 mi upstream from mouth.

Drainage area.--1.07 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 138 ft^3/s and by culvert measurements at 686 ft^3/s and 1,410 ft^3/s.

Remarks.--Only annual peaks are shown.

07048900 Whitener Branch Tributary near Spring Valley, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	07-25-60	17.60	1,500
1961	05-07-61	11.46	686
1962	1962	--	140e
1963	05-26-63	6.27	153
1964	04-05-64	5.27	85
1965	1965	--	30e
1966	02-9-66	7.66	262
1967	07-5-67	4.88	60
1968	12-21-67	5.59	107
1969	01-29-69	5.48	100
1970	04-30-70	7.92	285
1971	05-23-71	6.13	145
1972	09-29-72	5.82	122
1973	03-10-73	5.29	82
1974	11-24-73	8.96	385
1975	09-19-75	6.04	140
1976	04-20-76	5.37	88
1977	08-01-77	6.35	162
1978	09-21-78	6.09	143
1979	05-03-79	6.20	150
1980	06-17-80	7.52	252
1981	06-30-81	6.16	148
1982	07-30-82	7.08	220
1985	08-05-85	6.10	140
1986	04-08-86	8.58	340
1987	03-30-87	7.99	287
1988	1988	5.19	72
1990	02-15-90	6.38	157
1991	1991	5.19	72
1992	09-10-92	5.72	115
1993	04-15-93	5.92	130

07048940 War Eagle Creek near Witter, Arkansas

Location.--35° 54'12", long 93° 42'06", in SE 1/4 SE 1/4 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 mi south of Witter.

Drainage area.--22.4 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 3,490 ft^3/s and by indirect measurements at 6,580 ft^3/s.

Remarks.--Only annual peaks are shown.

07048940 War Eagle Creek near Witter, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	18.81	13,300
1962	08-01-62	--	2,300e
1963	05-26-63	9.20	500
1964	03-09-64	11.52	1,800
1965	05-09-65	11.70	2,000
1966	04-23-66	13.63	4,200
1967	05-14-67	10.37	1,050
1968	10-30-67	12.59	2,900
1969	01-29-69	14.54	5,700
1970	04-30-70	10.75	1,280
1971	05-23-71	15.22	6,580
1972	12-10-71	14.00	4,730
1973	04-22-73	16.78	9,300
1974	11-24-73	17.29	10,300
1975	11-03-74	14.74	5,500
1976	04-20-76	11.43	1,750
1977	03-28-77	12.36	2,580
1978	03-24-78	14.56	5,500
1979	05-03-79	12.37	2,580
1980	06-18-80	10.34	1,040
1981	06-30-81	10.89	1,400
1982	01-30-82	12.40	2,660

07049000 War Eagle Creek near Hindsville, Arkansas

Location.--Lat 36° 12’02”, long 93° 51’16”, in SE 1/4 NE 1/4 sec. 28 T.18 N., R.27 W., on left bank 800 ft upstream from bridge on State Highway 45, 3.8 mi downstream from Clear Creek, 3.9 mi north of Hindsville, and at mile 22.4.

Drainage area.--262 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 42,800 ft^3/s.

Bankfull stage.--15 ft.

Remarks.--Only annual peaks are shown.

07049000 War Eagle Creek near Hindsville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1943	05-10-43	28.10	50,000	1970	05-01-70	15.26	10,200
1953	05-13-53	12.91	9,770	1971	10-09-70	14.58	9,210
1954	05-02-54	7.47	3,810	1972	12-10-71	18.80	16,200
1955	03-21-55	14.56	11,900	1973	04-22-73	22.83	24,600
1956	05-15-56	14.84	12,300	1974	11-25-73	24.05	27,900
1957	04-03-57	23.86	34,600	1975	11-04-74	18.45	15,600
1958	08-02-58	15.04	12,200	1976	06-25-76	10.18	4,160
1959	06-12-59	10.54	5,890	1977	03-28-77	17.29	13,400
1960	07-25-60	20.25	22,700	1985	02-23-85	22.88	24,700
1961	05-07-61	23.10	31,600	1986	11-19-85	28.49	49,000
1962	08-01-62	12.25	7,980	1987	03-18-87	16.44	12,000
1963	03-05-63	6.21	2,320	1988	12-26-87	17.70	14,200
1964	04-05-64	13.12	9,950	1989	02-14-89	19.70	18,000
1965	05-10-65	16.27	11,800	1990	05-03-90	25.33	33,600
1966	02-10-66	19.84	18,200	1991	04-18-91	18.06	14,800
1967	04-14-67	9.34	3,450	1992	10-29-91	16.91	12,000
1968	10-30-67	20.30	19,200	1993	01-04-93	14.02	8,430
1969	12-28-68	18.08	14,900				

07049500 Beaver Lake at Highway 12 Bridge near Rogers, Arkansas

Location.--Lat 36° 19’59”, long 94° 01’07”, in N 1/2 sec.12, T.19 N., R.29 W., on right bank at downstream side of pier of bridge on State Highway 12, 2.6 mi upstream from Prairie Creek, 5.5 mi east of Rogers, and at mile 643.2.

Drainage area.--1,020 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 67,000 ft^3/s.

Bankfull stage.--31 ft.

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

Remarks.--Only annual peaks are shown.

07049500 Beaver Lake at Highway 12 Bridge near Rogers, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1943	05-00-43	52.90	100,000	1958	08-03-58	22.08	20,100
1945	04-00-45	50.40	89,000	1959	03-06-59	20.34	17,400
1953	05-13-53	27.34	28,300	1960	05-07-60	39.13	51,400
1954	05-03-54	16.58	11,600	1961	05-08-61	40.60	53,600
1955	03-21-55	25.42	24,500	1962	11-23-61	17.95	12,300
1956	05-16-56	29.58	32,200	1963	03-06-63	9.80	4,470
1957	04-04-57	43.73	65,700				

07050000 White River at Beaver, Arkansas

Location.--Lat 36° 28'20", long 93° 45'55", in NE 1/4 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, 2 3/4 mi upstream from Leatherwood Creek, and at mile 595.5.

Drainage area.--1,238 mi^2.

Gage.--Nonrecurring. Datum of gage is 883.04 ft above sea level.

Stream-discharge relation.--Defined by current-meter measurements below 90,000 ft^3/s.

Bankfull stage.--30 ft.

Remarks.--Peaks for periods 1921-23 computed from plotted Empire District Electric Co. gage readings at site 1,500 ft upstream revised to read same as present gage.

07050000 White River at Beaver, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1898	1898	40.00	94,000	1940	04-13-40	16.00	18,400
1910	05-17-10	17.35	21,500	1941	04-20-41	26.30	39,500
1922	04-06-22	10.50	9,400	1942	11-01-41	20.50	27,200
1923	02-02-23	21.08	28,200	1943	05-12-43	42.33	105,000
1924	05-01-24	18.35	23,500	1944	06-16-44	22.30	31,300
1925	12-20-24	18.12	22,900	1945	04-16-45	40.90	98,200
1926	10-11-25	12.30	12,300	1946	05-26-46	32.50	61,400
1927	04-16-27	37.00	80,200	1947	12-12-46	20.97	28,300
1928	12-15-27	30.60	48,900	1948	08-16-48	24.52	36,800
1929	01-26-29	23.85	33,900	1949	02-16-49	28.50	48,000
1930	05-12-30	19.15	24,500	1950	05-12-50	31.95	59,500
1931	02-10-31	19.69	25,100	1951	02-20-51	27.75	45,900
1932	01-18-32	16.15	19,100	1952	04-14-52	19.10	24,100
1933	05-15-33	27.70	42,200	1953	05-14-53	21.65	27,100
1934	10-23-33	14.83	16,500	1954	05-04-54	13.80	12,100
1935	06-19-35	27.55	41,100	1955	03-22-55	20.20	23,900
1936	12-08-35	12.32	12,000	1956	05-17-56	23.70	31,800
1937	01-16-37	18.58	23,400	1957	04-05-57	33.50	61,600
1938	02-19-38	26.80	40,300	1958	08-03-58	16.72	17,700
1939	04-18-39	16.70	19,700				

07050200 Maxwell Creek at Kingston, Arkansas

Location.--Lat 36° 03'06", long 93° 31'03", in SW 1/4 NW 1/4 sec.15, T.16 N., R.24 W., on right bank 60 ft upstream from bridge on State Highway 21, 0.1 mi north of Kingston, and 0.4 mi upstream from mouth.

Drainage area.--2.75 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 12 ft^3/s and 60 ft^3/s, by slope-area measurement at 971 ft^3/s, and by contracted-opening measurement at 4,270 ft^3/s.

Remarks.--Only annual peaks are shown.

07050200 Maxwell Creek at Kingston, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	14.40	4,270	1966	01-01-66	6.65	850
1962	1962	--	235e	1967	06-29-67	5.08	215
1963	03-04-63	4.25	70	1968	03-20-68	6.87	971
1964	04-05-64	4.80	160	1969	01-29-69	6.35	660
1965	05-09-65	6.79	900	1970	09-23-70	7.02	1,000

07050200 Maxwell Creek at Kingston, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1971	05-23-71	6.45	720
1972	09-29-72	7.04	1,050
1973	04-22-73	8.60	1,750
1974	11-24-73	9.63	2,200
1975	03-28-75	6.11	570
1976.	06-24-76	5.71	410
1977	08-17-77	6.38	670
1978	07-15-78	5.91	480
1979	05-04-79	6.49	730
1980	06-17-80	5.33	290
1981	05-10-81	5.29	285

07050400 Freeman Branch at Berryville, Arkansas

Location.--Lat 36° 22'07", long 93° 33'30", in SE 1/4 NW 1/4 sec.29, T.20 N. R.24 W., on left bank 20 ft upstream from culvert on College Street, 0.5 mi east of State Highway 21 in Berryville, and 2.4 mi upstream from mouth.

Drainage area.--0.73, mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 3.6 ft^3/s and by culvert measurements at 128 ft^3/s, 160 ft^3/s, and 406 ft^3/s.

Remarks.--Only annual peaks are shown.

07050400 Freeman Branch at Berryville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	7.58	406
1962	04-22-62	5.27	185
1963	05-26-63	5.01	160
1964	04-05-64	4.55	126
1965	06-13-65	5.02	160
1966	02-09-66	6.02	252
1967	06-29-67	3.97	70
1968	05-13-68	7.20	368
1969	01-29-69	4.90	152
1970	04-30-70	4.79	142
1971	10-26-70	6.48	290
1972	12-10-71	4.80	61
1973	03-10-73	5.27	90
1974	04-21-74	7.56	260
1975	11-03-74	8.22	370
1976	07-03-76	8.52	476
1977	04-30-77	8.66	525
1978	03-24-78	5.21	85
1979	05-04-79	6.45	175
1980	06-18-80	6.57	185

07050500 Kings River near Berryville, Arkansas

Location.--Lat 36° 25'30", long 93° 37'20", in E 1/2 sec.3, T.20 N., R.25 W., on right bank at downstream side of highway bridge, 1 1/4 mi downstream from Bee Creek, 2 1/4 mi upstream from Clabber Creek, 5 1/4 mi northwest of Berryville, and at mile 35.1.

Drainage area.--527 mi^2.

Gage.--Nonrecording April 4 to July 11, 1939, and October 1, 1951, to October 22, 1952; recording July 12, 1939, to September 30, 1951, and since October 23, 1952. Prior to October 1, 1951, at site 5 mi upstream at datum 27.71 ft higher. Present datum is 963.10 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 ft^3/s.

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

Remarks.--Only annual peaks are shown.

07050500 Kings River near Berryville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-14-27	38.00	62,000
1939	04-17-39	17.00	19,000
1940	04-11-40	13.93	12,400
1941	04-19-41	20.18	25,600
1942	10-31-41	15.30	14,000
1943	05-10-43	30.20	59,000
1944	06-15-44	13.23	10,400
1945	04-14-45	26.90	50,000
1946	05-25-46	17.82	18,900
1947	12-12-46	15.64	15,500

07050500 Kings River near Berryville, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1948	01-01-48	9.55	6,210	1971	10-27-70	16.77	10,700
1949	02-14-49	20.65	26,200	1972	12-10-71	22.83	21,000
1950	05-10-50	24.32	39,400	1973	04-23-73	27.13	31,200
1951	02-18-51	20.40	25,900	1974	11-25-73	30.50	40,200
1952	03-11-52	18.24	13,700	1975	11-03-74	21.10	17,600
1953	05-13-53	17.50	12,800	1976	12-06-75	22.03	19,400
1954	05-03-54	7.01	2,760	1977	03-27-77	21.90	19,200
1955	05-21-55	17.07	12,300	1978	03-24-78	28.27	34,200
1956	05-15-56	20.50	17,900	1979	04-12-79	18.77	13,600
1957	04-04-57	33.28	46,300	1980	03-25-80	5.92	1,770
1958	03-24-58	13.83	8,780	1981	05-10-81	14.03	7,780
1959	06-12-59	16.84	12,100	1982	06-16-82	20.78	17,000
1960	07-26-60	30.41	40,000	1983	12-03-82	30.20	39,400
1961	05-07-61	35.98	55,900	1984	01-22-84	29.23	36,800
1962	04-11-62	12.24	6,890	1985	10-25-84	13.79	77,510
1963	03-05-63	8.84	3,720	1986	11-19-85	38.91	66,000
1964	04-06-64	15.01	9,630	1987	04-06-87	13.90	7,700
1965	05-10-65	16.90	11,500	1988	12-26-87	21.35	18,100
1966	02-10-66	25.34	26,500	1989	03-30-89	13.49	7,290
1967	04-14-67	10.42	5,340	1990	05-03-90	32.60	46,100
1968	03-21-68	21.56	18,500	1991	04-19-91	17.73	12,100
1969	12-28-68	24.67	25,000	1992	10-29-91	14.73	9,450
1970	09-23-70	18.52	13,200	1993	01-05-93	13.51	7,690

07054400 Charley Creek near Omaha, Arkansas

Location.--Lat 36° 27’24”, long 93° 04’46”, in NW 1/4 SW 1/4 sec.23, T.21 N., R.20 W., on right bank 44 ft upstream from culvert on State Highway 14, 0.1 mi upstream from Sidney Creek, 0.5 mi upstream from mouth, and 6.1 mi east of Omaha.

Drainage area.--3.41 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 3.1 ft^3/s, by slope-area measurements at 725 ft^3/s, and by culvert measurement at 2,740 ft^3/s and 4,850 ft^3/s.

Remarks.--Only annual peaks are shown.

07054400 Charley Creek near Omaha, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	1962	--	60e	1973	03-10-73	13.18	2,850
1963	06-19-63	12.95	2,740	1974	04-21-74	11.78	2,180
1964	03-09-64	7.92	480	1975	11-04-74	9.34	1,020
1965	06-24-65	10.07	1,280	1976	06-23-76	9.41	1,050
1966	02-09-66	8.84	775	1977	08-12-77	9.82	1,250
1967	06-30-67	8.79	760	1978	03-24-78	11.36	1,970
1968	10-30-67	8.58	690	1979	04-11-79	8.50	645
1969	11-02-68	10.42	1,440	1980	06-18-80	11.89	790
1970	04-19-70	9.43	1,050	1981	08-17-81	12.61	2,580
1971	10-26-70	8.55	660	1983	12-03-82	16.54	4,850
1972	12-10-71	8.96	840				

07054450 East Sugarloaf Creek Tributary near Lead Hill, Arkansas

Location.--Lat 36° 22’26”, long 92° 49’55”, in NW 1/4 NW 1/4 sec.19, T.20 N., R.17 W., on left upstream wingwall 40 ft upstream from culvert on State Highway 14, 0.2 mi upstream from mouth, and 5.0 mi southeast of Lead Hill.

Drainage area.--0.85 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 1 ft^3/s and by culvert measurements at 255 ft^3/s, 466 ft^3/s, 543 ft^3/s, and 2,480 ft^3/s.

Remarks.--Only annual peaks are shown.

07054450 East Sugarloaf Creek Tributary near Lead Hill, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	01-14-62	7.24	75	1978	03-24-78	7.91	275
1963	03-16-63	8.96	466	1979	04-11-79	7.68	235
1964	06-64	7.71	255	1980	06-23-80	7.08	140
1965	05-09-65	7.91	287	1981	05-10-81	6.46	62
1966	01-01-66	7.61	240	1982	06-27-82	7.76	248
1967	07-06-67	6.95	125	1983	12-03-82	9.03	485
1968	07-02-68	9.39	543	1984	03-04-84	7.57	227
1969	10-13-68	15.30	2,480	1985	02-24-85	7.36	179
1970	04-19-70	7.46	210	1986	11-19-85	9.11	470
1971	01-13-71	6.79	98	1987	05-24-87	7.55	210
1972	12-10-71	7.93	280	1988	12-28-87	8.39	360
1973	04-22-73	8.17	320	1989	11-20-88	8.80	430
1974	11-24-73	9.32	540	1990	05-03-90	8.88	450
1975	09-19-75	9.45	565	1991	03-21-91	7.00	130
1976	06-23-76	7.59	220	1992	07-05-92	10.74	820
1977	03-28-77	7.70	240	1993	03-31-93	8.33	348

07055550 Crooked Creek Tributary near Dogpatch, Arkansas

Location.--Lat 36° 09’01”, long 93° 07’23”, in SW 1/4 SW 1/4 sec.4, T.17 N. R.20 W., on right bank 28 ft upstream from culvert on State Highway 7, 0.4 mi upstream from small tributary, 1.1 mi upstream from mouth, and 2.0 mi north of Dogpatch.

Drainage area.--4.36 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from September 1968 to October 1974.

Stage-discharge relation.--Defined by culvert-measurements at 518 ft^3/s, 962 ft^3/s, and 2,980 ft^3/s.

Remarks.--Only annual peaks are shown.

07055550 Crooked Creek Tributary near Dogpatch, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	17.40	2,980	1972	12-10-71	9.83	1,110
1962	1962	--	250e	1973	04-22-73	11.42	1,500
1963	05-26-63	6.83	518	1974	11-24-73	14.53	2,390
1964	03-09-64	6.06	384	1975	03-28-75	5.60	310
1965	06-24-65	7.07	560	1976	06-23-76	6.57	470
1966	01-01-66	6.52	462	1977	09-29-77	7.15	575
1967	06-29-67	6.97	540	1978	03-24-78	7.48	635
1968	07-01-68	9.86	1,110	1979	04-11-79	5.05	220
1969	01-29-69	8.85	900	1980	09-23-80	5.74	335
1970	06-24-70	6.32	430	1981	08-17-81	10.74	1,320
1971	05-23-71	5.06	330	1982	01-31-82	4.07	54

07055550 Crooked Creek Tributary near Dogpatch, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1983	12-03-82	9.20	960
1984	03-04-84	8.92	900
1986	11-19-85	5.41	530

07055650 Smith Creek near Boxley, Arkansas

Location.--Lat 35° 56'50", long 93° 23'52", in SW 1/4 NW 1/4 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 mi south of Boxley.

Drainage area.--8.35 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from July 1969 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 266 ft^3/s and by slope-area measurements at 659 ft^3/s, 3,510 ft^3/s, 6,170 ft^3/s, and 6,790 ft^3/s.

Remarks.--Only annual peaks are shown.

07055650 Smith Creek near Boxley, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	06-16-63	5.40	140
1964	04-05-64	8.30	1,560
1965	04-02-65	5.83	260
1966	02-09-66	8.67	1,900
1967	05-14-67	5.96	300
1968	10-30-67	7.37	910
1969	01-29-69	11.06	3,510
1970	04-30-70	8.78	1,700
1971	10-26-70	7.76	975
1972	12-10-71	11.92	4,350
1973	04-22-73	14.75	6,170
1974	11-24-73	15.80	6,830
1975	11-04-74	7.13	1,650
1976	06-24-76	6.16	1,140
1977	03-28-77	5.87	970
1978	03-24-78	6.75	1,500
1979	05-04-79	6.44	1,320
1980	06-17-80	5.20	580
1981	05-10-81	5.99	1,040
1982	01-31-82	6.89	1,580
1983	12-03-82	13.74	7,200

07055800 Dry Branch near Vendor, Arkansas

Location.--Lat 35° 56'00", long 93° 06'46", in SW 1/4 SW 1/4 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 mi southwest of Vendor.

Drainage area.--6.15 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 65 ft^3/s and by indirect measurements at 1,200, 2,900, and 3,880 ft^3/s.

Remarks.--Only annual peaks are shown.

07055800 Dry Branch near Vendor, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	08-01-62	8.30	40
1963	05-26-63	9.00	200
1964	05-11-64	10.06	790
1965	07-02-65	9.36	350
1966	02-09-66	10.70	1,200
1967	06-30-67	11.58	1,830
1968	07-01-68	11.36	1,670
1969	01-29-69	13.10	2,900
1970	04-19-70	10.12	800
1971	10-26-70	9.95	720
1972	12-10-71	13.68	3,500
1973	04-22-73	12.40	2,400
1974	11-24-73	14.24	3,880
1975	11-04-74	9.65	530
1976	06-23-76	10.88	1,320
1977	03-28-77	9.79	700
1978	03-24-78	10.05	790
1979	04-11-79	9.91	690
1980	06-18-80	9.01	450
1981	08-17-81	11.80	1,980
1982	12-03-82	15.30	5,000

07056000 Buffalo River near St. Joe, Arkansas

Location.--Lat 35 °59’02”, long 92° 44’44”, in SW 1/4 SW 1/4 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 mi downstream from Mill Creek, 5.4 mi upstream from Bear Creek, 4.5 mi southeast of St. Joe, and at mile 58.3.

Drainage area.--829 mi2.

Gage.--Nonrecording prior to March 1, 1940; recording thereafter. Prior to October 1, 1939, at site 4.5 mi 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 sea level.

Stage-discharge relation.--Defined by current-meter measurements below 91,000 ft^3/s 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 U.S. Army 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. Only annual peaks are shown.

07056000 Buffalo River near St. Joe, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	08-00-15	50.50	142,000
1940	04-11-40	13.79	13,000
1941	01-01-41	13.70	12,800
1942	10-31-41	20.80	32,000
1943	05-10-43	39.70	96,900
1944	02-28-44	15.95	19,300
1945	04-15-45	41.00	100,000
1946	05-25-46	25.65	46,200
1947	12-12-46	22.92	37,500
1948	01-01-48	19.34	27,300
1949	01-24-49	38.80	91,100
1950	01-04-50	25.58	46,200
1951	02-20-51	27.57	50,900
1952	04-12-52	22.30	35,400
1953	03-18-53	20.63	29,400
1954	05-02-54	22.70	35,200
1955	03-21-55	25.11	42,200
1956	02-02-56	16.10	18,700
1957	04-04-57	31.30	62,600
1958	03-09-58	16.70	19,900
1959	04-19-59	20.11	24,900
1960	05-20-60	22.88	31,600
1961	05-06-61	28.66	53,300
1962	01-22-62	12.34	9,430
1963	03-17-63	9.15	4,820
1964	04-05-64	25.12	40,400
1965	04-03-65	14.70	13,800
1966	02-09-66	37.46	85,900
1967	05-15-67	13.85	10,900
1968	03-21-68	28.16	50,400
1969	01-30-69	35.45	74,900
1970	04-19-70	24.87	38,500
1971	10-27-70	16.11	14,700
1972	12-10-71	43.40	102,000
1973	04-22-73	38.26	79,300
1974	11-25-73	45.41	111,000
1975	02-23-75	19.23	20,500
1976	06-24-76	21.40	25,700
1977	03-28-77	29.15	47,000
1978	03-24-78	24.07	32,500
1979	04-12-79	23.73	32,200
1980	12-24-79	12.31	7,660
1981	08-17-81	20.32	23,100
1982	01-31-82	32.62	58,100
1983	12-03-82	53.75	158,000
1984	05-07-84	27.41	40,200
1985	02-23-85	38.47	80,700
1986	11-19-85	24.26	33,100
1987	02-16-87	18.45	19,200
1988	12-26-87	27.29	42,700
1989	02-14-89	25.33	36,500
1990	05-03-90	42.10	98,800
1991	04-14-91	21.45	26,000
1992	10-29-91	28.03	43,100
1993	01-04-93	31.84	55,700

07057000 Buffalo River near Rush, Arkansas

Location.--Lat 36° 07'02", long 92° 33'17", in SE 1/4 NE 1/4 sec.15, T.17 N., R.15 W., 06 mi upstream from Rush Creek, 1.4 mi southeast of Rush, and at mile 24.3.

Drainage area.--1,091 mi^2.

Gage.--Nonrecording prior to January 27, 1939, at site 0.6 mi downstream at present datum; recording thereafter at present site and datum. Datum of present gage is 451.98 ft above sea level (Corps of Engineers benchmark).

Stage-discharge relation.--Defined by current-meter measurements below 120,000 ft^3/s and by slope-area measurement at 164,000 ft^3/s.

Bankfull stage.--24 ft.

Remarks.--Discontinued at continuous record station in 1970.

07057000 Buffalo River near Rush, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	08-19-15	45.50	164,000
1927	04-14-27	35.90	110,000
1929	01-25-29	22.20	50,100
1930	05-11-30	22.70	51,800
1931	02-09-31	15.20	28,600
1932	02-17-32	10.00	15,200
1933	05-14-33	23.90	56,000
1934	03-26-34	12.38	22,600
1935	03-11-35	24.50	58,300
1936	12-07-35	9.70	13,500
1937	01-15-37	16.90	35,000
1938	02-18-38	26.40	65,800
1939	04-17-39	26.46	58,900
1940	04-12-40	9.98	14,000
1941	01-02-41	9.97	14,000
1942	10-31-41	18.33	32,300
1943	05-11-43	37.38	120,000
1944	02-29-44	12.96	20,200
1945	04-15-45	38.86	121,000
1946	02-14-46	20.90	44,000
1947	12-12-46	19.23	38,400
1948	01-01-48	15.00	25,600
1949	01-24-49	37.06	114,000
1950	01-04-50	21.66	46,700
1951	02-20-51	24.35	56,000
1952	03-11-52	20.08	41,300
1953	03-18-53	17.41	32,800
1954	05-02-54	18.83	37,200
1955	03-21-55	21.23	45,000
1956	02-18-56	13.70	22,000
1957	04-04-57	28.30	67,000
1958	03-09-58	13.14	21,300
1959	04-19-59	16.06	29,500
1960	05-21-60	19.42	38,200
1961	05-06-61	27.55	61,700
1962	01-23-62	8.24	9,570
1963	05-27-63	6.61	6,530
1964	04-06-64	21.70	41,200
1965	04-04-65	11.05	15,100
1966	02-10-66	32.99	93,600
1967	05-15-67	9.93	11,600
1968	03-21-68	25.77	56,400
1969	01-30-69	30.97	84,600
1970	04-19-70	22.87	48,500
1971	10-27-70	--	17,000e
1972	12-10-71	37.44	113,000
1973	04-22-73	--	93,000e
1974	11-25-73	40.45	130,000
1983	12-03-82	55.80	215,000

07057300 Dodd Creek Tributary near Mountain Home, Arkansas

Location.--Lat 36° 19'05", long 92° 24'01", in NE 1/4 SW 1/4 sec.17, T.19 N., R.13 W., on right bank 25 ft upstream from culvert on U.S. Highway 62, 0.4 mi upstream from small tributary, and 1.5 mi southwest of Mountain Home.

Drainage area.--0.76 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from September 1968 to November 1974.

Stage-discharge relation.--Defined by current-meter measurement at 263 ft^3/s and by culvert measurements at 223 ft^3/s and 449 ft^3/s.

Remarks.--

07057300 Dodd Creek Tributary near Mountain Home, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	11.50	449	1974	11-24-73	12.82	661
1962	1962	--	80e	1975	06-23-75	11.34	430
1963	05-26-63	11.27	408	1976	12-05-75	9.01	121
1964	08-15-64	11.70	483	1977	03-28-77	9.12	135
1965	04-03-65	9.86	223	1978	03-24-78	10.33	285
1966	02-09-66	9.85	222	1979	05-20-79	11.08	390
1967	04-14-67	9.31	165	1980	06-23-80	10.00	242
1968	03-20-68	9.64	198	1981	05-10-81	8.82	100
1969	01-29-69	12.08	543	1982	01-30-82	9.61	195
1970	04-30-70	10.59	325	1983	12-03-82	11.92	516
1971	01-13-71	8.77	95	1984	09-09-84	10.00	235
1972	12-10-71	11.62	470	1985	09-05-85	13.58	800
1973	04-22-73	9.57	190	1986	11-19-85	11.30	410

07059000 Norfork Lake near Henderson, Arkansas

Location.--Lat 36° 22' long 92° 14', in SE 1/4 NW 1/4 sec.26, T.20 N., R.12 W., 1/2 mi downstream from Bennetts Bayou, 1/2 mi east of Henderson, 8 1/4 mi northeast of Mountain Home, and 15 mi upstream from Norfork Dam.

Drainage area.--1,612 mi^2.

Gage.--Nonrecording prior to January 14, 1939; recording January 14, 1939, to June 25, 1943. Nonrecording gage was at site 1/4 mi downstream at datum 2.00 ft lower. Datum of last used gage was 432.67 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 36,000 ft^3/s. 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 Norfork Dam.

07059000 Norfork Lake near Henderson, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1910	07-10-10	7.20	--	1936	12-07-35	7.56	10,300
1915	08-00-15	29.50	--	1937	01-14-37	18.70	38,900
1929	01-24-29	17.00	33,700	1938	02-18-38	19.00	39,800
1930	01-13-30	12.20	20,600	1939	04-17-39	18.20	38,300
1931	10-07-30	10.40	16,000	1940	04-11-40	15.22	30,600
1932	01-23-32	6.72	7,930	1941	04-17-41	9.66	17,200
1933	05-14-33	14.60	26,900	1942	10-31-41	13.64	26,500
1934	04-06-34	5.70	6,000	1943	05-11-43	--	61,000
1935	03-11-35	22.20	50,400				

07060600 Band Mill Creek near Brockwell, Arkansas

Location.--Lat 36° 08’02”, long 91° 58’48”, in SE 1/4 SE 1/4 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 mi upstream from mouth, and 3.1 mi west of Brockwell.

Drainage area.--1.25 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements below 1,830 ft^3/s.

Remarks.--Only annual peaks are shown

07060600 Band Mill Creek near Brockwell, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	7.46	529	1973	04-22-73	6.16	365
1962	05-00-62	7.39	518	1974	11-24-73	6.09	350
1063	05-26-63	5.06	190	1975	09-20-75	12.65	1,830
1964	03-09-64	4.55	128	1976	06-24-76	5.71	290
1965	04-03-65	6.48	417	1977	03-28-77	5.42	245
1966	01-01-66	4.73	150	1978	11-02-77	4.63	135
1967	06-29-67	4.65	140	1979	05-04-79	4.75	150
1968	10-30-67	4.91	171	1980	05-16-80	4.85	165
1969	10-06-68	5.73	295	1981	08-17-81	4.82	160
1970	04-19-70	5.39	240	1982	01-31-82	4.79	155
1971	10-26-70	5.17	208	1983	12-03-82	8.09	730
1972	07-03-72	4.85	164				

07060670 Hughes Creek near Mountain View, Arkansas

Location.--Lat 35° 51’46”, long 92° 08’47”, in Ne 1/4 SE 1/4 sec.10 T.14 N., R.11 W., on right bank 45 ft upstream from bridge on State Highway 66, 1.5 mi upstream from Tubbs Creek, and 1.7 mi west of Mountain View.

Drainage area.--3.20 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current meter measurements below 75 ft^3/s and by contracted-opening measurements at 699 ft^3/s and 2,700 ft^3/s.

Remarks.--Only annual.peaks are shown. Published as Lick Fork tributary prior to 1969.

07060670 Hughes Creek near Mountain View, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	4.15	650	1972	07-03-72	9.51	1,720
1962	05-01-62	3.80	500	1973	04-22-73	8.61	1,380
1963	05-26-63	2.68	165	1974	11-24-73	7.89	1,110
1964	03-09-64	4.43	780	1975	03-29-75	8.97	1,530
1965	09-22-65	6.64	2,700	1976	05-28-76	5.86	540
1966	01-01-66	4.37	750	1977	03-28-77	7.35	930
1967	08-02-67	3.67	450	1978	11-02-77	5.81	525
1968	12-21-67	7.59	1,010	1979	04-02-79	7.50	975
1969	12-27-68	7.81	1,080	1980	05-23-80	5.89	545
1970	09-18-70	8.37	1,270	1981	04-23-81	5.66	490
1971	10-26-70	7.86	1,100				

07060710 North Sylamore Creek near Fifty Six, Arkansas

Location.--35 ° 59’43', long 92° 12’45”, in SW 1/4 NW 1/4 sec.25, T.16 N., R.12 W., Stone County, in right bank 30 ft upstream from bridge on Ozark National Forest Service road, 200 ft downstream from Gunner Creek, 2.7 mi north of Fifty Six, and 7.0 mi upstream from South Sylamore Creek.

Drainage area.--58.1 mi^2.

Gage.--Water-stage recorder and crest-stage gage. Datum of gage is 434.99 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 3,700 ft^3/s and extended by logarithmic plotting.

Remarks.--Only annual peaks are shown.

07060710 North Sylamore Creek near Fifty Six, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1966	04-23-66	16.35	14,900
1967	05-14-67	4.58	626
1968	03-20-68	10.74	5,590
1969	01-29-69	12.61	8,240
1970	04-25-70	10.06	4,770
1971	01-13-71	5.76	1,030
1972	12-10-71	9.88	4,570
1973	04-22-73	17.61	17,800
1975	02-22-75	11.31	6,300
1976	06-01-76	3.69	460
1977	03-27-77	13.17	8,990
1978	11-01-77	--	900
1979	03-03-79	10.48	5,240
1980	12-23-79	7.60	2,360
1981	03-29-81	3.86	564
1982	01-31-82	9.71	4,380
1983	12-03-82	20.60	25,200
1984	05-07-84	10.13	5,290
1985	03-30-85	13.65	9,800
1987	02-28-87	5.36	982
1988	04-02-88	8.47	3,140
1989	05-08-89	13.32	9,280
1990	05-03-90	12.64	9,050
1991	04-29-91	11.77	6,890
1992	12-02-91	6.02	1,310

07060830 Wolf Bayou near Drasco, Arkansas

Location.--Lat 35° 39’33’, long 91° 55’18”, in NW 1/4 SE 1/4 sec.23, T.12 N., R.9 W., on right bank 20 ft upstream from culvert on State Highway 25, 2.4 mi northeast of Drasco.

Drainage area.--0.27 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 25 ft^3/s and by culvert measurements at 47 ft^3/s, 103 ft^3/s, and 190 ft^3/s.

Remarks.--Only annual peaks are shown.

07060830 Wolf Bayou near Drasco, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	05-26-63	4.00	6
1964	09-27-64	5.15	47
1965	03-29-65	6.45	103
1966	04-23-66	5.92	80
1967	09-08-67	4.22	18
1968	05-13-68	6.97	131
1969	01-29-69	5.26	52
1970	04-19-70	5.30	52
1971	10-26-70	4.24	19
1972	07-03-72	5.51	62
1973	03-10-73	8.05	190
1974	11-24-73	6.20	92
1975	03-29-75	6.21	94
1976	02-17-76	4.61	25
1977	03-28-77	7.03	132
1978	05-07-78	4.75	29
1979	04-02-79	5.94	80
1980	12-24-79	4.77	30
1981	06-06-81	4.10	12
1982	01-31-82	6.51	108
1983	12-03-82	9.49	283

07061100 Gibbs Creek at Sulphur Rock, Arkansas

Location.--Lat 35° 45'32", long 91° 30'52", in SE 1/4 SW 1/4 sec.15, T.13 N., R.5 W., on right bank 38 ft upstream from culvert on State Highway 69, 0.4 mi upstream from small tributary, 0.8 mi downstream from Cooper Cane Creek, and 0.9 mi west of Sulphur Rock.

Drainage area.--3.90 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from November 1968 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 352 ft^3/s and by culvert measurements at 990 ft^3/s and 2,660 ft^3/s.

Remarks.--Only annual peaks are shown.

07061100 Gibbs Creek at Sulphur Rock, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	02-26-62	8.38	820	1973	03-10-73	8.10	1,770
1963	05-26-63	6.70	480	1975	03-29-75	11.37	1,750
1964	03-09-64	7.71	700	1976	02-17-76	11.29	1,740
1965	04-04-65	13.62	2,660	1977	03-28-77	11.61	1,850
1966	01-01-66	9.01	990	1978	08-30-78	7.04	480
1967	05-14-67	6.22	330	1979	04-02-79	11.15	1,680
1968	05-13-68	10.97	1,620	1980	12-24-79	6.59	380
1969	01-29-69	8.26	780	1981	05-27-81	5.78	215
1970	04-24-70	7.90	700	1982	05-22-82	6.44	350
1971	08-11-71	6.84	490	1983	12-03-82	11.41	1,780
1972	12-10-71	6.38	340	1984	10-22-83	9.21	1,050

07063000 Black River at Poplar Bluff, Missouri

Location.--Lat 36° 45'35", long 90° 23'15", in SW 1/4 NW 1/4 sec.2, T.24 N., R.6 E., 1,500 ft upstream from bridge on U.S. Highway 60 in Poplar Bluff, 4 3/4 miles downstream from Indian Creek, and at mile 211.2.

Drainage area.--1,245 mi^2.

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 September 30, 1940, at present site at datum 2.00 ft higher. Datum of present gage is 317.38 ft above sea level. Gage heights given herein converted to present site and datum.

Stage-discharge relation.--Defined by current-meter measurements below 44,000 ft^3/s; 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 October 1, 1936, and October 1, 1937, to September 30, 1939, computed from plotted U.S. Weather Bureau gage readings. Only annual peaks are shown.

07063000 Black River at Poplar Bluff, Missouri

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1904	03-00-04	---	100,000e	1934	03-27-34	10.00	2,880
1923	02-03-23	19.30	23,900	1935	03-12-35	21.10	40,200
1924	05-31-24	14.80	5,000	1936	04-06-36	12.60	3,796
1925	06-14-25	15.90	6,420	1937	01-16-37	19.66	27,300
1926	11-10-25	17.50	11,700	1938	02-20-38	19.42	24,800
1927	04-16-27	20.30	32,500	1939	04-19-39	19.40	24,800
1928	12-15-27	20.10	30,700	1940	04-21-40	17.80	10,300
1929	05-15-29	20.20	31,600	1941	04-19-41	13.60	4,880
1930	01-16-30	19.30	23,900	1942	11-03-41	17.38	8,520
1931	03-09-31	14.60	4,820	1943	05-12-43	20.77	52,600
1932	01-24-32	14.60	4,820	1944	04-25-44	17.40	8,520
1933	05-16-33	20.60	35,300	1945	06-10-45	20.80	50,800

07063000 Black River at Poplar Bluff, Missouri--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1946	05-26-46	20.02	32,600
1947	04-27-47	18.81	14,800
1987	03-01-87	8.58	309
1988	12-26-87	17.17	8,060
1989	02-14-89	16.45	7,300
1990	02-15-90	16.36	7,220
1991	04-15-91	18.31	10,400
1992	11-20-91	16.22	7,410

07064000 Black River near Corning, Arkansas

Location.--Lat 36° 24’07”, long 90° 32’29”, in SW 1/4 NE 1/4 sec.4, T.20 N., R.5 E., on left bank at downstream side of bridge on U.S. Highway 62, 2 1/4 miles east of Corning, 11.0 mi downstream from Cane Creek, and at mile 152.2.

Drainage area.--1,749 mi^2.

Gage.--Nonrecording prior to November 5, 1953; recording thereafter. Datum of gage is 272.90 ft above sea level (Corps of Engineers benchmark).

Stage-discharge relation.--Defined by current-meter measurements below 32,000 ft^3/s. Affected by variable slope

Bankfull stage.--10 ft.

Remarks.--Flow partly regulated since June 3, 1948, by Clearwater Reservoir 105 mi upstream. Peak stages prior to 1939 furnished by Corps of Engineers. Only annual peaks are shown.

07064000 Black River near Corning, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	1915	13.30	18,900
1916	1916	13.90	23,400
1919	12-22-18	11.80	8,330
1920	12-06-19	11.70	7,750
1921	05-01-21	12.40	12,300
1922	04-05-22	12.50	13,000
1923	05-21-23	12.50	13,000
1924	06-04-24	10.80	4,430
1925	06-17-25	9.60	3,100
1926	11-10-25	11.50	6,710
1927	04-18-27	14.40	27,200
1928	06-18-28	13.10	17,400
1929	05-19-29	12.70	14,400
1930	01-20-30	13.00	16,600
1931	03-10-31	11.20	5,480
1932	01-20-32	11.80	8,330
1933	05-19-33	13.80	22,600
1934	03-30-34	11.10	5,160
1935	03-15-35	14.20	25,600
1936	04-09-36	11.10	5,160
1937	01-19-37	14.10	24,900
1938	02-23-38	13.60	21,200
1939	04-22-39	13.15	18,000
1940	04-22-40	11.62	6,900
1941	01-07-41	9.00	2,800
1942	04-12-42	12.09	9,900
1943	05-15-43	15.20	30,800
1944	04-14-44	11.88	8,620
1945	06-13-45	16.92	48,600
1946	05-30-46	13.08	17,400
1947	05-01-47	12.03a	10,500
1948	01-08-48	12.19	11,200

07068000 Current River at Doniphan, Missouri

Location.--Lat 36° 37’25”, long 90° 50’55”, in NW 1/4 NW 1/4 sec. 27, t.23 N., R.2 E., 1/2 mi upstream from U.S. Highway 160, 1 mi west of Doniphan, 2 1/2 mi upstream from Briar Creek, and at mile 51.3.

Drainage area.--2,038 mi^2.

Gage.--Nonrecording prior to July 2, 1939, recording thereafter. Prior to May 22, 1928, at site 2,700 ft downstream at datum 0.06 ft higher; May 22, 1928, to September 30, 1929, at site 2,800 ft downstream at datum 0.07 ft lower; October 1, 1929, to September 30, 1932, at site 2,800 ft downstream at datum 1.07 ft lower; October 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 sea level.

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

Bankfull stage.--12 ft.

Remarks.--Peaks for 1919-21 computed from plotted Corps of Engineers gage readings.

07068000 Current River at Doniphan, Missouri

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1904	03-00-04	24.90	130,000
1915	08-00-15	--	105,000
1919	06-05-19	--	19,400
1920	03-27-20	--	19,700
1921	04-27-21	--	35,400
1922	04-01-22	--	22,000
1923	02-03-23	--	29,600
1924	05-31-24	--	8,300
1925	06-13-25	--	6,540
1926	10-18-25	--	10,300
1927	04-15-27	--	48,800
1928	06-14-28	--	43,000
1929	05-14-29	--	27,800
1930	01-15-30	--	25,500
1931	03-09-31	--	9,500
1932	01-24-32	--	8,300
1933	05-15-33	--	49,000
1934	09-16-34	--	6,210
1935	03-12-35	22.00	94,400
1936	11-11-35	7.45	7,400
1937	01-14-37	16.28	48,400
1938	02-19-38	15.72	43,100
1939	04-18-39	16.41	49,300
1940	04-20-40	9.02	12,500
1941	01-03-41	5.00	5,110
1942	11-02-41	9.89	15,400
1943	12-29-42	19.13	63,600
1944	04-24-44	11.70	20,300
1945	04-16-45	19.05	62,800
1946	08-16-46	17.46	50,600
1947	04-27-47	13.20	26,800
1948	01-02-48	11.50	20,600
1949	01-26-49	18.30	57,000
1950	05-11-50	18.20	56,200
1951	07-11-51	12.26	24,400
1952	03-12-52	11.73	22,200
1953	03-05-53	6.23	8,530
1954	05-03-54	6.68	9,530
1955	03-22-55	13.88	30,900
1956	05-16-56	17.17	49,000
1957	04-05-57	17.98	54,600
1958	03-25-58	15.72	39,600
1959	11-17-58	13.38	28,700
1960	12-29-59	11.63	21,900
1961	05-09-61	17.00	47,600
1962	03-22-62	10.50	18,600
1963	05-28-63	12.64	25,500
1964	03-10-64	13.71	30,100
1965	04-08-65	6.93	10,700
1966	02-11-66	19.27	65,300
1967	01-28-67	4.06	6,250
1968	12-23-67	12.35	26,000
1969	01-31-69	18.73	60,300
1970	04-21-70	9.22	16,700
1971	10-15-70	8.29	15,000
1972	04-23-72	13.33	25,200
1973	04-24-73	13.77	26,600
1974	11-27-73	16.51	38,600
1975	01-12-75	15.23	32,600
1976	07-05-76	9.81	16,000
1977	03-30-77	15.69	34,700
1978	03-26-78	12.55	22,900
1979	04-13-79	17.00	41,500
1980	04-01-80	4.45	5,620
1981	05-16-81	8.38	12,800
1982	01-31-82	14.46	31,600
1983	12-03-82	25.49	122,000
1984	03-21-84	11.24	26,300
1985	02-25-85	21.10	78,900
1986	11-20-85	24.88	85,900
1987	03-19-87	5.01	8,270
1988	12-27-87	11.24	26,500
1989	02-15-89	11.58	27,900
1990	05-05-90	12.22	30,500
1991	04-15-91	12.76	32,700
1992	04-21-92	15.03	42,900

07068870 Fourche River Tributary at Middlebrook, Arkansas

Location.--Lat 36° 27’46”, long 90° 55’26”, in NW 1/4 SW 1/4 sec.13, T.21 N., R.1 E., on left bank 20 ft upstream from culvert on State Highway 115, 0.3 mi north of Middlebrook, and 1.1 mi upstream from mouth.

Drainage area.--0.19 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 8 ft^3/s and by culvert measurements at 88 ft^3/s, 220 ft^3/s, and 330 ft^3/s.

Remarks.--Only annual peaks are shown.

07068870 Fourche River Tributary at Middlebrook, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	7.70	220	1972	09-24-72	6.40	100
1962	06-24-62	6.65	125	1973	04-22-73	8.69	330
1963	03-04-63	6.08	83	1974	04-22-74	8.30	287
1964	03-09-64	6.90	146	1975	03-28-75	6.83	140
1965	07-10-65	6.58	120	1976	05-28-76	8.36	293
1966	06-13-66	6.99	154	1977	03-28-77	6.82	139
1967	05-14-67	7.03	158	1978	08-30-78	6.19	86
1968	05-11-68	6.99	154	1979	12-03-78	6.90	146
1969	01-29-69	6.80	137	1980	03-17-80	5.33	18
1970	09-18-70	7.19	172	1981	08-16-81	6.11	79
1971	02-12-71	6.19	86				

07068890 Fourche River above Pocahontas, Arkansas

Location.--Lat 36° 20’21”, long 90° 56’33”, in NE 1/4 NW 1/4 sec.35, T.20 N., R.1 E., Randolph County, on right bank at upstream side of bridge on State Highway 115, 5.6 mi north of Pocahontas.

Drainage area.--229 mi^2.

Gage.--Recording 1965 to 1970; non-recording thereafter.

Stage-discharge relation.--Defined by current-meter measurements below 13,000 ft^3/s and extended by logarithmic plotting.

Remarks.--Discontinued in 1979.

07068890 Fourche River above Pocahontas, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1965	02-10-65	19.11	4,920	1973	04-23-73	23.70	27,600
1966	01-01-66	24.36	33,200	1974	05-15-74	22.72	20,800
1967	05-13-67	22.60	18,900	1975	03-28-75	23.95	29,600
1968	05-16-68	21.50	13,800	1976	06-24-76	22.35	18,600
1969	01-30-69	24.68	35,400	1977	03-28-77	25.40	42,600
1970	04-24-70	20.49	9,340	1978	04-11-78	19.48	5,940
1971	02-22-71	18.62	3,970	1979	02-23-79	21.59	14,200
1972	04-22-72	19.55	6,150				

07069250 Brush Creek near Mammoth Spring, Arkansas

Location.--Lat 36° 25'36", long 91° 29'27", in SE 1/4 SE 1/4 sec.34, T.21 N., R.5 W., on left bank 32 ft upstream from culvert on U.S. Highway 63, 1.3 mi upstream from mouth, and 5.5 mi southeast of Mammoth Spring.

Drainage area.--0.48 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements at 191 ft^3/s, 597 ft^3/s, 849 ft^3/s, and 960 ft^3/s,

Remarks.--Only annual peaks are shown.

07069250 Brush Creek near Mammoth Spring, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	12.30	597
1962	02-25-62	8.55	191
1963	03-04-63	9.60	286
1964	03-09-64	8.91	221
1965	04-03-65	12.32	600
1966	04-23-66	12.42	610
1967	05-13-67	10.85	420
1968	09-16-68	10.28	356
1969	01-29-69	8.67	200
1970	04-19-70	9.43	270
1971	08-22-71	8.14	160
1972	04-21-72	8.40	180
1973	04-22-73	15.05	960
1974	05-22-74	14.25	849
1975	03-28-75	7.57	120
1976	12-06-75	7.78	133
1977	03-28-77	11.68	520
1978	05-07-78	7.22	98
1979	04-02-79	13.00	682
1980	12-24-79	9.03	230
1981	05-10-81	8.50	187
1982	01-30-82	8.75	207
1983	12-03-82	12.22	586
1984	1984	--	1
1985	11-27-84	9.66	280
1986	1986	8.81	2,074B
1987	1987	8.81	2,074B
1988	1988	8.81	2,074B
1989	1989	8.81	2,074B
1990	1990	8.94	2,234B
1991	1991	8.94	2,234B
1992	1992	8.94	2,234B

07069290 Miller Creek near Salem, Arkansas

Location.--Lat 36° 20'13", long 91° 46'32", in SE 1/4 NW 1/4 sec.6, T.19 N., R.7 W., on left bank 34 ft upstream from culvert on U.S. Highway 62, 0.7 mi upstream from mouth, and 3.6 mi southeast of Salem.

Drainage area.--2.28 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from June 1969 to November 1974.

Stage-discharge relation.--Defined by current-meter measurement at 21 ft^3/s and by culvert measurements at 1,380 ft^3/s and 2,160 ft^3/s.

Remarks.--Only annual peaks are shown.

07069290 Miller Creek near Salem, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	10.70	2,160
1962	1962	--	7,002
1963	05-26-63	8.20	1,380
1964	03-09-64	5.32	450
1965	09-22-65	7.00	947
1966	01-01-66	6.32	725
1967	06-29-67	4.49	220
1968	12-14-67	5.16	400
1969	01-29-69	7.33	1,060
1970	12-29-69	4.73	260
1971	01-13-71	4.88	295
1972	12-10-71	4.54	210
1973	04-22-73	6.61	810
1974	05-14-74	6.57	800
1975	03-29-75	4.95	312
1976	06-23-76	6.39	740
1977	03-28-77	7.44	1,100
1978	11-03-77	4.72	258
1979	03-20-79	7.08	970
1980	12-24-79	4.72	258
1981	05-10-81	3.30	22

07069500 Spring River at Imboden, Arkansas

Location.--Lat 36° 12’19”, long 91° 10’19”, in SE 1/4 NE 1/4 sec.15, T.18 N., R.2 W., at bridge on U.S. Highway 62 at Imboden, 3.9 mi downstream from Janes Creek, 8.2 mi upstream from Eleven Point River, and at mile 12.1.

Drainage area.--1,183 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 75,000 ft^3/s and indirect measurement at 244,000 ft^3/s.

Bankfull stage.--16 ft.

Remarks.--Records for February 21, 1936, to July 17, 1937, furnished by Corps of Engineers and reviewed by Geological Survey.

07069500 Spring River at Imboden, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	08-00-15	32.10	125,000
1937	01-15-37	22.30	31,800
1938	02-18-38	23.97	42,200
1939	03-05-39	22.40	32,400
1940	04-12-40	17.86	13,100
1941	01-24-41	9.87	4,680
1942	04-08-42	23.10	36,600
1943	05-11-43	26.10	57,300
1944	04-11-44	19.13	16,100
1945	03-31-45	24.87	48,300
1946	02-14-46	22.16	31,600
1947	12-10-46	14.54	8,290
1948	01-01-48	19.10	16,100
1949	01-24-49	28.42	78,500
1950	01-04-50	25.08	49,800
1951	02-20-51	21.27	26,200
1952	11-24-51	22.43	32,400
1953	03-18-53	18.16	13,400
1954	05-03-54	17.82	12,500
1955	03-21-55	18.49	14,200
1956	02-18-56	16.50	10,600
1957	04-04-57	25.74	54,200
1958	05-05-58	22.10	30,600
1959	11-17-58	26.50	60,500
1960	05-07-60	16.07	10,200
1961	05-07-61	27.75	72,500
1962	02-26-62	19.34	16,800
1963	05-27-63	20.25	20,500
1964	03-09-64	26.16	58,100
1965	09-22-65	19.51	17,500
1966	01-02-66	26.15	58,100
1967	05-13-67	17.92	13,800
1968	05-16-68	21.80	26,700
1969	01-30-69	26.68	62,100
1970	04-24-70	19.40	18,700
1971	01-14-71	18.10	14,200
1972	12-10-71	25.17	26,300
1974	11-25-73	23.48	41,200
1975	03-29-75	23.76	40,700
1976	12-06-75	18.77	16,300
1977	03-28-77	28.78	82,700
1978	08-30-78	13.48	8,270
1979	04-12-79	21.73	29,200
1980	12-24-79	12.97	7,770
1981	02-10-81	5.70	1,840
1982	01-31-82	24.36	44,600
1983	12-03-82	38.12	244,000
1984	05-07-84	18.95	16,900
1985	11-27-84	24.94	51,000
1986	11-27-85	18.27	14,700
1987	02-28-87	16.06	11,100
1988	12-26-87	19.97	20,900
1989	02-14-89	22.42	32,900
1990	05-04-90	19.02	17,400
1991	04-14-91	23.68	40,200
1992	04-20-92	22.06	30,900
1993	01-05-93	21.43	29,200

07071500 Eleven Point River near Bardley, Missouri

Location.--Lat 36° 38’55”, long 91° 12’03”, in NE 1/4 SE 1/4 sec.17, T.23 N., R.2 W., at bridge on U.S. Highway 160, 7 mi southwest of Bardley and 7 1/2 mi upstream from Fredericks Fork.

Drainage area.--793 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 25,000 ft^3/s.

Bankfull stage.--12 ft.

Remarks.--Only annual peaks are shown.

07071500 Eleven Point River near Bardley, Missouri

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	08-20-15	10.60	10,800
1922	03-31-22	11.23	12,000
1923	03-16-23	7.37	5,420
1924	08-10-24	15.76	28,600
1925	06-13-25	10.35	10,400
1926	11-08-25	16.10	30,100
1927	04-14-27	7.41	5,420
1928	06-13-28	12.80	16,200
1929	01-25-29	8.30	6,720
1930	01-13-30	7.94	6,120
1931	08-06-31	12.81	16,200
1932	01-23-32	3.85	17,500
1933	04-16-33	15.56	27,700
1934	09-15-34	3.44	1,390
1935	03-12-35	10.46	10,400
1936	12-08-35	13.88	20,200
1937	01-14-37	8.45	6,870
1938	02-19-38	4.68	2,470
1939	04-17-39	13.19	17,500
1940	04-12-40	12.69	16,300
1941	04-04-41	11.76	13,100
1942	05-31-42	8.25	6,640
1943	05-11-43	8.72	7,370
1944	04-23-44	12.97	16,500
1945	03-31-45	7.89	6,100
1946	02-14-46	11.09	11,700
1947	12-12-46	4.52	1,940
1948	06-19-48	3.39	1,290
1949	01-24-49	11.32	12,200
1950	01-04-50	21.64	49,800
1951	02-21-51	9.56	7,820
1952	11-24-51	16.45	25,500
1953	04-18-53	12.10	12,700
1954	05-02-54	3.844	1,440
1955	03-21-55	9.95	8,760
1956	05-16-56	9.02	7,280
1957	04-04-57	8.40	6,360
1958	05-05-58	15.04	19,900
1959	11-17-58	14.33	18,100
1960	12-28-59	10.60	10,800
1961	05-07-61	11.23	12,000
1962	02-26-62	7.37	5,420
1963	06-17-63	15.76	28,600
1964	03-09-64	10.35	10,400
1965	04-16-65	16.10	30,100
1966	02-10-66	7.41	5,420
1967	05-19-67	12.80	16,200
1968	04-20-68	8.30	6,720
1969	01-30-69	7.94	6,120
1970	04-24-70	12.81	16,200
1971	01-14-71	3.85	17,500
1972	12-11-71	15.56	27,700
1973	04-23-73	3.44	1,390
1974	04-23-74	10.46	10,400
1975	09-12-75	13.88	20,200
1976	06-24-76	8.45	6,870
1977	03-28-77	4.68	2,470
1978	03-25-78	13.19	17,500
1979	04-12-79	12.69	16,300
1980	12-24-79	11.76	13,100
1981	05-14-81	8.25	6,640
1982	01-31-82	8.72	7,370
1983	12-03-82	12.97	16,500
1984	11-24-83	7.89	6,100
1985	12-22-84	11.09	11,700
1986	11-20-85	4.52	1,940
1987	03-19-87	3.39	1,290
1988	03-03-88	11.32	12,200
1989	02-14-89	21.64	49,800
1990	05-04-90	9.56	7,820
1991	04-14-91	16.45	25,500
1992	04-20-92	12.10	12,700

07072000 Eleven Point River near Ravenden Springs, Arkansas

Location.--Lat 36° 20’48”, long 91° 06’48”, in SE 1/4 SE 1/4 sec.30, T.20 N., R.1 W., on left bank at downstream side of bridge on State Highway 90, 0.9 mi downstream from Hincha Creek, 6.6 mi northeast of Ravenden Springs, and at mile 21.2.

Drainage area.--1,134 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 35,000 ft^3/s and indirect measurement at 162,000 ft^3/s.

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. Published as “near Eleven Point” prior to October 1949.

07072000 Eleven Point River near Ravenden Springs, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1930	01-14-30	13.01	9,460
1931	03-07-31	10.00	5,680
1932	01-17-32	11.65	7,160
1933	05-15-33	14.92	12,800
1936	04-06-36	11.60	7,160
1937	01-15-37	15.90	15,500
1938	03-29-38	15.60	14,600
1939	04-18-39	16.55	17,800
1940	04-12-40	11.38	6,770
1941	09-03-41	9.63	5,120
1942	06-01-42	18.04	23,000
1943	05-11-43	18.97	26,900
1944	04-23-44	14.03	10,800
1945	03-31-45	18.84	26,200
1946	02-14-46	15.81	15,200
1947	04-11-47	8.65	4,340
1948	01-01-48	12.30	7,960
1949	01-25-49	20.21	34,000
1950	01-05-50	17.22	19,800
1951	02-20-51	13.92	10,600
1952	03-12-52	14.43	11,600
1953	03-18-53	9.87	5,340
1954	05-03-54	12.30	7,960
1955	03-22-55	14.58	12,000
1956	02-18-56	8.99	4,640
1957	04-05-57	18.80	26,400
1958	05-05-58	16.24	16,400
1959	11-17-58	20.83	37,600
1960	12-29-59	9.04	4,640
1961	05-08-61	20.47	35,800
1962	02-27-62	13.12	9,180
1963	03-05-63	12.01	7,540
1964	03-10-64	20.05	31,000
1965	06-13-65	8.34	4,120
1966	04-24-66	17.27	20,200
1967	05-13-67	13.91	10,600
1968	05-16-68	15.98	14,500
1969	01-30-69	18.50	23,800
1970	04-25-70	14.80	12,000
1971	01-14-71	11.80	7,120
1972	12-12-71	13.80	10,400
1973	04-23-73	20.27	34,400
1974	05-15-74	16.77	18,300
1975	03-29-75	16.37	16,300
1976	12-06-75	13.52	9,530
1977	03-28-77	20.18	32,300
1978	03-26-78	10.20	5,520
1979	04-12-79	16.19	17,300
1980	03-30-80	7.77	3,670
1981	06-06-81	6.61	2,830
1982	01-31-82	17.61	20,300
1983	12-03-82	29.06	162,000
1984	11-24-83	11.28	6,480
1985	03-31-85	18.00	21,700
1986	04-09-86	14.13	10,600
1987	02-28-87	9.47	5,430
1988	03-30-88	13.04	8,970
1989	02-14-89	14.30	10,900
1990	05-05-90	11.08	6,860
1991	04-15-91	16.48	16,000
1992	11-20-91	16.77	18,100
1993	01-06-93	16.00	15,800

07072200 Hubble Creek near Pocahontas, Arkansas

Location.--Lat 36° 15'32", long 91° 02'02", in SE 1/4 SW 1/4 sec.25, T.19 N., R.1 W., on left bank 45 ft upstream from culvert on U.S. Highway 62, 3.4 mi west of Pocahontas, and 5.3 mi upstream from mouth.

Drainage area.--1.33 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 278 ft^3/s and by culvert measurements at 666 ft^3/s and 925 ft^3/s.

Remarks.--Only annual peaks are shown.

07072200 Hubble Creek near Pocahontas, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-14-61	9.70	666
1962	04-10-62	8.03	373
1963	03-04-63	7.33	260
1964	03-09-64	11.14	925
1965	07-10-65	8.68	490
1966	07-24-66	9.79	715
1967	05-14-67	9.13	600
1968	04-20-68	10.26	765
1969	01-29-69	10.08	735
1970	03-03-70	8.86	520
1971	02-12-71	8.40	440
1972	09-25-72	10.11	740
1973	04-22-73	10.59	825
1974	11-24-73	9.12	600
1975	03-28-75	12.37	1,150
1976	07-03-76	8.74	480
1977	03-28-77	12.40	1,160
1978	08-30-78	8.15	370
1979	12-03-78	11.85	1,050
1980	03-17-80	8.33	400
1981	08-16-81	9.34	600
1982	01-31-82	8.41	430
1983	12-03-82	10.15	745
1984	05-07-84	9.24	570
1985	10-20-84	8.27	400

07073000 Strawberry River near Evening Shade, Arkansas

Location.--Lat 36° 05'56", long 91° 36'30", in NE 1/4 NE 1/4 sec.27, T.17 N., R.6 W., at bridge on State Highway 11, 2 mi north of Evening Shade, 6.3 mi upstream from Piney Fork, and at mile 55.9.

Drainage area.--217 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 16,000 ft^3/s and extended above by logarithmic plotting.

Bankfull stage.--9 ft.

Remarks.--Prior to February 28, 1978, records furnished by Corps of Engineers and reviewed by Geological Survey. After February 28, 1978, gage operated by U.S. Geological Survey.

07073000 Strawberry River near Evening Shade, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	04-17-39	19.78	8,750
1940	04-11-40	15.42	4,650
1941	01-24-41	13.43	3,080
1942	04-08-42	19.18	8,120
1943	05-11-43	24.55	22,700
1944	05-03-44	18.50	7,290
1945	03-31-45	22.46	15,900
1946	03-06-46	21.07	12,000
1947	12-10-46	17.63	6,260
1948	06-18-48	17.33	5,960
1949	01-24-49	26.59	31,000
1950	01-04-50	21.82	13,800
1951	07-04-51	18.77	8,090
1952	11-24-51	20.36	10,900
1953	03-18-53	17.04	6,480
1954	05-03-54	15.38	4,940
1955	05-20-55	18.16	7,840
1956	06-25-56	15.86	5,410
1957	04-04-57	21.80	14,700
1958	05-05-58	22.02	15,200
1959	11-17-58	22.80	17,100
1960	05-20-60	16.10	5,910
1961	05-08-61	23.12	17,900
1962	02-26-62	15.70	5,480
1963	05-27-63	16.68	6,570
1964	03-09-64	21.37	13,900

07073000 Strawberry River near Evening Shade, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1965	09-22-65	19.46	10,400	1973	04-23-73	21.91	15,100
1966	01-02-66	22.97	17,600	1974	11-24-73	21.05	13,100
1967	06-30-67	17.85	8,000	1975	03-29-75	19.82	10,800
1968	02-01-68	16.70	6,570	1976	12-06-75	13.54	3,470
1969	01-30-69	22.84	17,200	1977	03-28-77	25.38	24,000
1970	04-24-70	15.07	4,850	1978	11-03-77	12.17	2,690
1971	01-14-71	14.54	4,330	1979	04-11-79	19.88	10,900
1972	12-10-71	17.27	7,250	1973	04-23-73	21.91	15,100

07073500 Piney Fork at Evening Shade, Arkansas

Location.--Lat 36° 04’50”, long 91° 36’39”, in SE 1/4 NE 1/4 sec.34, T.17 N., R.6 W., 20 ft upstream from bridge on U.S. Highway 167, 3/4 mi north of Evening Shade, and at mile 5.8.

Drainage area.--99.2 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 11,000 ft^3/s and indirect measurement at 50,400 ft^3/s.

Bankfull stage.--12 ft.

Remarks.--Prior to March 8, 1978, records furnished by Corps of Engineers and reviewed by Geological Survey. After March 8, 1978, gage operated by U.S. Geological Survey.

07073500 Piney Fork at Evening Shade, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	04-16-39	14.40	5,740	1964	03-09-64	19.20	10,400
1940	04-19-40	8.50	1,900	1965	09-22-65	16.50	7,300
1941	11-11-40	7.26	1,220	1966	04-23-66	17.40	8,240
1942	04-08-42	14.74	6,000	1967	06-30-67	8.64	1,610
1943	05-11-43	19.96	11,300	1968	03-21-68	13.84	4,970
1944	04-11-44	11.68	3,680	1969	12-28-68	18.75	9,800
1945	04-15-45	18.50	9,650	1970	09-19-70	15.56	6,430
1946	03-06-46	17.84	8,900	1971	01-14-71	6.66	812
1947	05-21-47	14.00	5,200	1972	12-10-71	11.35	4,020
1948	06-18-48	11.60	3,700	1973	04-23-73	17.45	8,350
1949	01-24-49	23.42	17,500	1974	12-04-73	14.12	5,500
1950	06-03-50	17.77	8,700	1975	03-29-75	17.79	8,690
1951	02-20-51	12.90	4,480	1976	07-04-76	8.05	1,760
1952	11-24-51	12.40	4,170	1977	03-28-77	18.85	9,800
1953	03-18-53	11.70	3,750	1978	11-03-77	7.19	1,300
1954	09-30-54	8.27	1,720	1979	02-23-79	15.84	6,900
1955	03-21-55	9.92	2,760	1980	09-03-80	12.02	4,060
1956	02-18-56	10.69	2,950	1981	05-30-81	12.22	4,180
1957	04-04-57	18.64	9,620	1982	01-31-82	13.07	4,770
1958	05-05-58	14.60	5,680	1983	12-03-82	30.32	50,400
1959	11-17-58	11.79	3,660	1984	05-07-84	12.16	4,150
1960	05-20-60	12.53	3,930	1985	11-27-84	17.59	8,490
1961	05-05-61	13.20	4,460	1986	11-27-85	11.29	3,620
1962	04-11-62	10.19	2,440	1987	02-28-87	10.55	3,180
1963	05-27-63	10.69	2,740	1988	12-26-87	9.21	2,380

07073500 Piney Fork at Evening Shade, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1989	02-15-89	16.57	5,860
1990	04-17-90	13.13	4,070
1991	04-14-91	16.24	5,970
1992	11-20-90	13.91	4,500
1993	01-04-93	15.22	5,290

07074000 Strawberry River near Poughkeepsie, Arkansas

Location.--Lat 36° 06'37", long 91° 26'59", in SE 1/4 NW 1/4 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, 2 1/2 mi northeast of Poughkeepsie, and at mile 35.9.

Drainage area.--473 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 27,000 ft^3/s and by slope-area measurement at 52,000 ft^3/s and 158,000 ft^3/s.

Bankfull stage.--20 ft.

Remarks.--From February 23, 1936, to March 1, 1978, records furnished by Corps of Engineers and reviewed by Geological Survey. After March 1, 1978, gage operated by U.S. Geological Survey.

07074000 Strawberry River near Poughkeepsie, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1936	10-25-36	18.30	14,600
1938	02-18-38	23.60	31,600
1939	04-16-39	19.50	17,600
1940	04-19-40	12.43	5,230
1941	01-24-41	10.90	3,850
1942	04-08-42	21.25	22,700
1943	05-11-43	24.60	32,900
1944	04-11-44	17.40	12,200
1945	06-11-45	22.62	26,500
1946	03-06-46	20.25	19,200
1947	12-10-46	16.94	10,100
1948	06-18-48	17.79	12,100
1949	01-24-49	29.30	52,000
1950	01-04-50	21.41	22,800
1951	02-20-51	19.56	17,400
1952	11-25-51	19.64	17,400
1953	03-18-53	18.07	12,900
1954	05-02-54	13.83	6,200
1955	05-20-55	17.77	12,100
1956	02-18-56	17.15	10,800
1957	04-04-57	24.36	32,700
1958	05-05-58	20.44	19,800
1959	11-18-58	19.30	16,500
1960	05-20-60	16.84	9,980
1961	05-07-61	22.24	25,200
1962	04-11-62	16.40	10,500
1963	05-27-63	14.77	8,180
1964	03-09-64	24.22	31,900
1965	09-22-65	19.06	16,100
1966	01-02-66	22.73	26,800
1967	06-30-67	17.14	11,800
1968	03-20-68	19.83	18,100
1969	12-27-68	22.28	25,500
1970	04-25-70	13.71	7,490
1971	01-14-71	10.59	4,900
1972	12-10-71	17.03	11,700
1973	04-23-73	22.77	27,100
1974	11-25-73	21.04	21,700
1975	03-28-75	22.54	26,300
1976	12-06-75	10.56	4,880
1977	03-28-77	24.27	32,300
1978	04-10-78	10.39	4,640
1979	02-23-79	20.76	20,900
1980	12-24-79	8.93	3,490
1981	05-31-81	9.96	4,280
1982	01-31-82	18.61	14,900
1983	12-03-82	35.90	158,000
1984	05-07-84	15.69	9,660
1985	11-27-84	22.40	25,900
1986	11-27-85	14.98	11,800
1987	02-28-87	13.54	9,640
1988	12-25-87	14.06	10,400
1989	02-15-89	19.28	20,600
1990	05-03-90	14.11	11,200
1991	04-14-91	18.76	19,400
1992	11-19-91	19.35	19,500
1993	01-04-93	19.22	19,300

07074200 Dry Branch Tributary near Sidney, Arkansas

Location.--Lat 36° 00’12”, long 91° 35’06”, in NW 1/4 SW 1/4 sec.25, T.16 N., R.6 W., on left bank 20 ft upstream from culvert on U.S. Highway 167, 0.8 mi upstream from mouth, and 4.2 mi east of Sidney.

Drainage area.--1.22 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements at 324 ft^3/s, 491 ft^3/s, 675 ft^3/s, and 1,000 ft^3/s.

Remarks.--Only annual peaks are shown.

07074200 Dry Branch Tributary near Sidney, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	10.50	675	1972	05-02-72	9.72	285
1962	1962	--	100e	1973	04-22-73	11.55	1,100
1963	05-26-63	8.66	324	1974	11-24-73	10.65	790
1964	03-09-64	9.39	491	1975	03-29-75	11.22	930
1965	05-10-65	9.78	540	1976	12-06-75	9.55	530
1966	04-23-66	11.50	1,000	1977	03-28-77	10.90	880
1967	09-08-67	11.57	1,100	1978	05-07-78	9.13	420
1968	05-10-68	8.95	390	1979	12-08-78	11.55	1,100
1969	03-23-69	11.51	995	1980	06-23-80	7.09	135
1970	09-24-70	10.34	720	1981	05-25-81	7.07	135
1971	08-22-71	10.25	695	1982	12-03-82	12.40	1,230

07074250 Reeds Creek near Strawberry, Arkansas

Location.--Lat 35° 58’58”, long 91° 20’12”, in SW 1/4 SW 1/4 sec.32, T.16 N., R.3 W., on left bank 20 ft downstream from bridge on State Highway 117, 0.2 mi downstream from small tributary, 0.4 mi upstream from small tributary and 1.4 mi northwest of Strawberry.

Drainage area.--34.9 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 3,410 ft^3/s and by indirect measurement at 18,500 ft^3/s.

Remarks.--Only annual peaks are shown.

07074250 Reeds Creek near Strawberry, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	05-26-63	12.30	1,450	1974	05-22-74	14.06	4,600
1964	03-09-64	13.65	3,600	1975	03-28-75	16.30	18,500
1965	05-10-65	13.15	2,570	1976	12-06-75	13.35	2,950
1966	01-01-66	14.35	5,500	1977	03-28-77	13.68	3,700
1967	07-06-67	12.82	2,010	1978	11-02-77	12.11	1,300
1968	05-13-68	13.41	3,060	1979	09-21-79	13.69	3,700
1969	12-27-68	14.94	7,200	1980	03-17-80	14.04	4,500
1970	09-18-70	12.26	1,400	1981	06-06-81	11.77	1,080
1971	10-08-70	13.01	2,300	1982	01-31-82	11.77	1,080
1972	05-01-72	11.28	850	1983	12-03-82	15.05	8,400
1973	04-19-73	14.52	5,900				

07074550 Village Creek near O'Kean, Arkansas

Location.--Lat 36° 10'45", long 90° 50'29", on south line SW 1/4 SW 1/4 sec.23, T.18 N., R.2 E., on left bank 10 ft upstream from bridge on State Highway 90, 0.5 mi downstream from small tributary, 0.6 mi upstream from small tributary, and 1.6 mi northwest of O'Kean.

Drainage area.--6.24 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 396 ft^3/s.

Remarks.--Only annual peaks are shown. Published as "Village Creek Main Ditch" prior to 1965.

07074550 Village Creek near O'Kean, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	8.25	360	1972	09-29-72	7.03	90
1962	02-26-62	7.62	185	1973	04-19-73	8.54	430
1963	05-26-63	6.69	54	1974	06-07-74	6.73	60
1964	03-09-64	8.42	420	1975	03-28-75	9.44	760
1965	07-09-65	9.61	870	1976	07-03-76	7.92	240
1966	01-02-66	10.00	1,600	1977	03-28-77	8.69	510
1967	05-13-67	7.39	145	1978	08-30-78	7.29	130
1968	05-10-68	7.85	242	1979	12-03-78	8.20	325
1969	01-29-69	8.73	450	1980	03-17-80	6.81	67
1970	03-03-70	6.99	86	1981	08-16-81	6.70	57
1971	02-12-71	7.29	130				

07074855 Cypress Creek Tributary near Augusta, Arkansas

Location.--Lat 35° 20'37", long 91° 20'38", in SE 1/4 SE 1/4 sec.6, T.8 N., R.3 W., Woodruff County, at culvert on State Highway 33, 4.4 mi north of Augusta.

Drainage area.--5.54 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 248 ft^3/s and by indirect measurement at 525 ft^3/s.

Remarks.--Only annual peaks are shown.

07074855 Cypress Creek Tributary near Augusta, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	02-26-62	5.08	145	1972	07-03-72	3.61	180
1963	03-05-63	4.46	131	1973	03-10-73	4.67	390
1964	07-12-64	6.07	748	1974	04-21-74	4.36	325
1965	06-24-65	4.96	460	1975	03-28-75	4.45	345
1966	01-02-66	4.55	370	1976	06-24-76	3.73	205
1967	08-03-67	4.04	260	1977	06-27-77	3.78	210
1968	05-13-68	4.40	335	1978	09-13-78	4.27	305
1969	01-30-69	6.04	740	1979	04-02-79	5.76	665
1970	04-25-70	5.41	575	1980	03-17-80	3.71	200
1971	12-22-70	4.06	265	1981	06-06-81	4.17	285

07074900 Trace Creek Tributary near Marshall, Arkansas

Location.--Lat 35° 52'14", long 92° 36'08", in NE 1/4 SW 1/4 sec.8, T.14 N., R.15 W., on left bank 21 ft upstream from culvert on U.S. Highway 65, 0.2 mi upstream from mouth, and 3.2 mi south of Marshall.

Drainage area.--0.26 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 6 ft^3/s and by culvert measurements at 85 ft^3/s and 208 ft^3/s.

Remarks.--Only annual peaks are shown

07074900 Trace Creek Tributary near Marshall, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	9.96	208	1974	11-24-73	10.50	208
1962	1962	--	20e	1975	03-28-75	8.23	73
1963	05-26-63	7.00	25	1976	04-19-76	8.97	117
1964	04-05-64	8.14	94	1977	03-28-77	9.44	145
1965	11-19-64	7.89	80	1978	08-30-78	10.40	203
1966	02-09-66	8.16	95	1979	05-12-79	9.71	162
1967	03-06-67	7.81	74	1980	05-17-80	8.21	72
1968	10-18-67	7.88	79	1981	05-10-81	7.87	50
1969	12-27-68	7.99	85	1982	01-30-82	7.46	25
1970	09-18-70	8.39	110	1983	12-03-82	11.89	288
1971	01-05-71	6.89	20	1984	05-10-84	8.39	107
1972	07-03-72	7.92	53	1985	02-23-85	9.10	153
1973	04-22-73	10.31	198	1986	11-19-85	8.05	88

07074950 Tick Creek near Leslie, Arkansas

Location.--Lat 35° 51'30", long 92° 26'24", in SW 1/4 NE 1/.4 sec.14, T.14 N., R.14 W., on left wingwall 25 ft upstream from culvert on State Highway 66, 1.5 mi east of Oxley, and 7.0 mi east of Leslie.

Drainage area.--1.58 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 148 ft^3/s and by culvert measurements at 806 ft^3/s and 915 ft^3/s.

Remarks.--Only annual peaks are shown.

07074950 Tick Creek near Leslie, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	8.74	915	1973	04-22-73	9.94	1,380
1962	01-00-62	6.09	72	1974	11-24-73	8.13	660
1963	05-26-63	5.70	40	1975	03-28-75	7.63	460
1964	04-05-64	7.24	320	1976	07-04-76	6.67	135
1965	09-22-65	7.09	250	1977	03-28-77	7.62	460
1966	04-23-66	7.39	350	1978	05-07-78	7.28	320
1967	03-06-67	6.68	140	1979	05-12-79	7.15	270
1968	10-18-67	7.39	350	1980	12-24-79	6.87	180
1969	12-27-68	8.06	625	1981	05-10-81	6.46	105
1970	09-18-70	7.19	280	1982	01-30-82	7.42	365
1971	01-03-71	5.99	50	1983	12-03-82	9.79	1,320
1972	12-10-71	8.09	640				

07075000 Middle Fork Little Red River at Shirley, Arkansas

Location.--Lat 35° 39', long 92° 18', in SW 1/4 sec.20, T.12 N., R.12 W., on right bank 1/2 mi downstream from Sugar Camp (or Weavers) Creek, 1 mi east of Shirley, and at mile 122.0.

Drainage area.--302 mi^2.

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 sea level. 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 ft^3/s and by indirect measurement at 241,000 ft^3/s.

Bankfull stage.--19 ft.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

07075000 Middle Fork Little Red River at Shirley, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1935	03-10-35	27.30	61,000
1939	04-17-39	19.50	16,800
1940	04-19-40	11.40	3,480
1941	01-01-41	14.22	7,770
1942	10-31-41	19.95	18,900
1943	05-11-43	27.15	60,700
1944	04-23-44	21.28	24,700
1945	03-30-45	24.60	43,200
1946	02-13-46	21.45	25,500
1947	12-10-46	19.58	19,000
1948	01-01-48	19.47	18,800
1949	01-24-49	31.00	101,000
1950	01-04-50	21.73	27,900
1951	02-20-51	19.73	20,000
1952	11-24-51	18.62	16,500
1953	11-25-52	21.26	27,900
1954	05-02-54	21.13	29,000
1955	03-21-55	20.25	22,800
1956	02-02-56	17.95	15,300
1957	08-13-57	26.03	51,700
1958	05-09-58	17.89	15,000
1959	11-17-58	23.42	37,200
1960	11-04-59	23.57	36,200
1961	05-06-61	23.45	35,100
1962	02-26-62	16.31	11,100
1963	03-17-63	13.10	5,460
1964	03-10-64	25.01	43,700
1965	09-22-65	14.56	7,980
1966	02-10-66	21.80	27,700
1967	05-14-67	13.97	6,850
1968	03-21-68	21.24	25,400
1969	01-30-69	22.07	28,800
1970	04-25-70	17.96	14,900
1971	10-14-70	15.48	9,560
1972	12-10-71	23.47	35,500
1973	04-22-73	25.70	47,600
1974	12-04-73	24.18	39,200
1975	03-28-75	22.85	32,400
1976	06-25-76	15.61	9,800
1977	03-28-77	26.23	48,300
1978	05-07-78	17.27	13,200
1979	03-03-79	21.16	26,900
1980	12-24-79	17.99	15,000
1981	03-29-81	13.25	5,700
1982	01-31-82	24.71	42,100
1983	12-03-82	37.53	241,000
1984	05-07-84	17.99	15,000
1985	03-30-85	23.24	34,300
1986	11-27-85	18.48	16,300
1987	02-16-87	16.50	11,600
1988	12-26-87	17.07	12,800
1989	02-15-89	23.16	33,900
1990	04-29-90	23.48	35,600
1991	04-29-91	19.82	20,200
1992	11-19-91	17.91	14,800
1993	01-04-93	23.58	36,100

07075300 South Fork Little Red River at Clinton, Arkansas

Location.--Lat 35° 35'29", long 92° 27'20", in SW 1/4 sec.14, T.11 N. R.14 W., on downstream side of bridge on U.S. Highway 65 at Clinton, 1/4 mi upstream from Archey Fork, and at mile 23.7.

Drainage area.--148 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 24,100 ft^3/a and indirect measurement at 67,900 ft^3/s.

Remarks.--Only annual peaks are shown.

07075300 South Fork Little Red River at Clinton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	02-26-62	16.19	6,910	1978	09-13-78	16.98	8,770
1963	03-17-63	10.50	1,560	1979	02-23-79	18.86	12,200
1964	03-09-64	24.00	24,300	1980	12-24-79	17.11	9,000
1965	03-29-65	14.34	4,720	1981	03-29-81	12.70	3,140
1966	02-10-66	19.00	10,600	1982	01-31-82	21.04	17,100
1967	04-14-67	12.30	2,930	1983	12-03-82	34.27	67,900
1968	05-14-68	19.50	14,200	1984	05-03-84	15.59	6,590
1969	01-30-69	21.35	18,200	1985	10-25-84	15.29	6,180
1970	04-26-70	18.87	12,800	1986	11-27-85	16.30	10,600
1971	10-27-70	16.07	7,720	1987	02-16-87	13.42	3,860
1972	12-10-71	21.66	18,900	1988	03-03-88	12.88	5,660
1973	04-23-73	19.35	13,800	1989	02-15-89	16.31	13,900
1974	12-04-73	23.20	22,400	1990	05-03-90	18.18	18,000
1975	03-28-75	21.53	18,600	1991	04-14-91	14.45	9,250
1976	06-25-76	13.79	4,300	1992	11-19-91	14.21	8,790
1977	03-28-77	26.43	32,700	1993	01-04-93	17.47	16,100

07075500 South Fork Little Red River near Clinton, Arkansas

Location.--Lat 35° 34', long 92° 23', in NE 1/4 sec.29, T.11 N., R.13 W., on left bank 1 3/4 mi downstream from Pedee Creek, 4 1/2 mi southeast of Clinton, and 6 mi downstream from Archey Fork.

Drainage area.--316 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 42,000 ft^3/s.

Bankfull stage.--20 ft.

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

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

07075500 South Fork Little Red River near Clinton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	04-17-39	21.10	31,300	1951	02-20-51	14.25	11,400
1940	05-01-40	10.67	5,770	1952	03-11-52	16.27	16,800
1941	05-07-41	11.40	6,820	1953	11-25-52	19.55	25,500
1942	10-31-41	18.40	20,800	1954	05-02-54	18.43	19,800
1943	05-11-43	24.27	43,800	1955	03-21-55	17.44	19,300
1944	04-23-44	21.01	30,900	1956	02-02-56	16.06	16,300
1945	03-30-45	23.36	43,100	1957	08-13-57	28.16	59,500
1946	02-13-46	20.10	27,300	1958	11-18-57	17.84	19,500
1947	12-12-46	18.00	20,700	1959	11-17-58	19.12	22,800
1948	01-01-48	16.24	16,600	1960	05-20-60	17.15	18,100
1949	01-24-49	26.55	54,900	1961	05-06-61	18.13	20,200
1950	01-04-50	17.83	19,400				

07075600 Choctaw Creek Tributary near Choctaw, Arkansas

Location.--Lat 35° 31’30”, long 92° 25’03”, in SE 1/4 SW 1/4 sec.6, T.10 N., R.13 W., on right bank 26 ft upstream from culvert on State Highway 330, 0.2 mi upstream from mouth, and 1.4 mi east of Choctaw.

Drainage area.--1.36 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 73 ft^3/s and by culvert measurements at 207 ft^3/s, 337 ft^3/s, and 1,760 ft^3/s.

Remarks.--Only annual peaks are shown.

07075600 Choctaw Creek Tributary near Choctaw, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1964	05-11-64	10.81	337	1979	04-02-79	12.84	518
1965	02-09-65	7.74	106	1980	06-19-80	7.93	105
1966	04-23-66	9.74	249	1981	06-07-81	7.92	103
1967	05-15-67	7.80	110	1982	01-31-82	9.58	237
1968	05-13-68	11.20	368	1983	12-03-82	19.07	1,760
1969	12-27-68	10.59	318	1984	05-08-84	8.01	130
1970	04-19-70	10.11	278	1985	09-04-85	14.68	710
1971	10-26-70	9.35	218	1986	11-27-85	8.47	160
1972	12-10-71	9.10	198	1987	02-16-87	8.02	135
1973	04-22-73	10.23	288	1988	06-30-88	9.01	193
1974	06-08-74	13.60	597	1989	02-15-89	10.30	287
1975	03-28-75	12.85	518	1990	01-19-90	8.66	175
1976	06-24-76	7.75	90	1991	05-25-91	12.76	515
1977	03-28-77	9.71	247	1992	11-20-91	10.85	340
1978	11-02-77	9.04	195	1993	12-15-92	14.10	660

07075800 Dill Branch Tributary near Ida, Arkansas

Location.--Lat 35° 32’36”, long 91° 57’25”, in E 1/2 sec.33, T.11 N., R.9 W., on left bank 9 ft upstream from culvert on State Highway 25, 0.3 mi upstream from mouth, and 3.5 mi southwest of Ida.

Drainage area.--0.26 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 43 ft^3/s and by culvert measurements at 32 ft^3/s, 52 ft^3/s, 79 ft^3/s, and 230 ft^3/s.

Remarks.--Only annual peaks are shown. Published as “Peter Creek tributary” prior to 1975.

07075800 Dill Branch Tributary near Ida, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1964	03-09-64	6.79	52	1975	03-28-75	8.65	155
1965	11-19-64	6.34	32	1976	06-24-76	6.55	42
1966	01-01-66	7.35	79	1977	03-28-77	7.33	78
1967	12-27-66	5.88	15	1978	05-07-78	6.17	25
1968	05-13-68	8.33	136	1979	04-02-79	9.96	230
1969	01-30-69	6.88	57	1980	05-16-80	5.98	17
1970	04-19-70	7.01	63	1981	05-26-81	5.82	11
1971	07-23-71	6.68	48	1982	01-31-82	6.56	42
1972	07-03-72	6.86	56	1983	12-03-82	9.61	215
1973	03-10-73	9.64	216	1984	1984	--	1
1974	11-24-73	8.12	123	1985	11-27-84	6.35	32

07075800 Dill Branch Tributary near Ida, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1986	11-27-85	6.35	32
1987	1987	5.50	10
1988	12-26-87	6.10	25
1989	02-15-89	6.96	58
1990	03-08-90	6.77	50
1991	12-21-90	6.89	58
1992	11-20-91	6.88	57
1993	01-04-93	6.31	32

07076000 Little Red River near Heber Springs, Arkansas

Location.--Lat 35° 31’02”, long 91° 59’50”, in NE 1/4 sec.7, T.10 N., R.9 W., on right bank 1,600 ft downstream from Greers Ferry Dam, 3 mi northeast of Heber Springs, and at mile 78.8.

Drainage area.--1,153 mi^2.

Gage.--Nonrecording prior to December 15, 1938, at site 2 1/4 mi upstream at datum 8.97 ft higher than present datum; recording thereafter. December 14, 1938, to September 30, 1960, at site 1 3/4 mi upstream at datum 10.03 ft higher than present datum. Datum of present gage is 261.78 ft above sea level.

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.

07076000 Little Red River near Heber Springs, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-00-27	44.00	78,900
1928	04-06-28	42.35	74,400
1929	02-26-29	29.10	41,100
1930	05-11-30	38.90	65,200
1931	10-08-30	24.45	28,500
1932	01-06-32	31.30	47,400
1933	05-16-33	38.00	62,900
1934	03-26-34	31.86	49,100
1935	05-05-35	42.00	73,300
1937	01-15-37	29.90	41,800
1938	02-18-38	41.90	73,100
1939	04-17-39	36.83	72,800
1940	05-01-40	17.55	17,300
1941	01-02-41	16.60	15,300
1942	04-09-42	32.37	57,900
1943	05-11-43	43.95	99,100
1944	04-23-44	33.08	53,600
1945	03-31-45	42.47	96,200
1946	02-14-46	33.90	58,800
1947	12-12-46	29.30	43,800
1948	01-01-48	27.66	39,600
1949	01-25-49	46.53	117,000
1950	01-05-50	32.51	53,700
1951	02-21-51	27.67	38,600
1952	03-11-52	28.18	40,100
1953	03-18-53	31.15	49,400
1954	05-03-54	29.76	45,000
1955	03-21-55	28.37	40,700
1956	02-18-56	28.37	40,700
1957	04-04-57	44.23	96,500
1958	05-03-58	30.85	48,200
1959	11-17-58	31.47	50,400
1960	05-21-60	31.75	49,900
1961	05-07-61	40.00	66,000

07076630 Key Branch near Searcy, Arkansas

Location.--Lat 35° 12’04”, long 91° 43’56”, on east line NE 1/4 SE 1/4 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 mi downstream from tributary, 1.0 mi upstream from tributary, and 1.2 mi northwest of Higginson.

Drainage area.--5.00 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from November 1967 to July 13, 1970.

Stage-discharge relation.--Defined by current-meter measurements below 1,100 ft^3/s and by contracted-opening measurements at 1,460 ft^3/s and 1,880 ft^3/s.

Remarks.--Only annual peaks are shown. Published as “Glade Creek” prior to 1964.

07076630 Key Branch near Searcy, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-06-61	5.77	244	1975	03-28-75	7.11	442
1962	09-09-62	6.34	338	1976	06-24-76	6.35	300
1963	03-04-63	5.49	204	1977	03-28-77	5.71	185
1964	03-09-64	5.88	262	1978	11-01-77	4.97	75
1965	09-11-65	5.46	195	1979	09-21-79	6.11	265
1966	08-20-66	7.07	457	1980	04-08-80	6.49	337
1967	05-31-67	5.37	125	1981	05-26-81	6.50	340
1968	05-10-68	6.86	415	1982	06-16-82	6.34	295
1969	01-30-69	6.86	415	1986	03-12-86	5.23	79
1970	08-09-70	5.70	200	1987	12-09-86	5.43	125
1971	04-23-71	5.65	173	1988	12-26-87	5.83	195
1972	05-01-72	6.48	335	1990	03-08-90	6.09	245
1973	03-10-73	6.54	348	1991	12-22-90	6.18	255
1974	11-24-73	7.79	573	1992	11-20-91	5.89	200

07076820 Gum Springs Creek near Higginson, Arkansas

Location.--Lat 35° 12’04”, long 91° 43’56”, on east line NE 1/4 SE 1/4 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 mi downstream from tributary, 1.0 mi upstream from tributary, and 1.2 mi northwest of Higginson.

Drainage area.--5.00 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from November 1967 to July 13, 1970.

Stage-discharge relation.--Defined by current-meter measurements below 1,100 ft^3/s and by contracted-opening measurements at 1,460 ft^3/a and 1,880 ft^3/s.

Remarks.--Only annual peaks are shown. Published as “Glade Creek” prior to 1964.

07076820 Gum Springs Creek near Higginson, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-06-61	9.51	765	1972	05-01-72	8.62	225
1962	09-09-62	11.38	1,460	1973	03-10-73	9.94	675
1963	03-05-63	9.10	600	1974	11-24-73	10.25	950
1964	03-09-64	11.01	1,050	1975	07-03-75	9.87	630
1965	09-11-65	9.60	730	1976	06-24-76	9.83	625
1966	08-13-66	11.08	1,100	1977	07-10-77	10.37	1,040
1967	05-07-67	9.45	675	1978	11-01-77	9.28	370
1968	05-10-68	11.24	1,150	1979	05-04-79	10.15	860
1969	01-30-69	11.77	1,880	1980	04-08-80	10.50	1,230
1970	04-25-70	10.82	950	1981	05-26-81	9.45	450
1971	08-22-71	9.27	370				

07076850 Cypress Bayou near Beebe, Arkansas

Location.--Lat 35° 01’30”, long 91° 52’23”, in SW 1/4 SW 1/4 sec.28. T.5 N., R.8 W., on downstream side of bridge on State Highway 31, 2.1 mi downstream from Mill Creek, and 3.2 mi south of Beebe.

Drainage area.--166 mi^2.

Gage.--Recording. Datum of gage is 194.54 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 ft^3/s.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown.

07076850 Cypress Bayou near Beebe, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	02-28-62	12.97	6,640	1970	04-27-70	12.13	3,550
1963	03-06-63	12.01	2,860	1971	02-14-71	11.46	1,270
1964	03-10-64	13.88	11,900	1972	05-02-72	12.68	4,780
1965	01-11-65	12.67	5,410	1973	04-24-73	13.08	7,080
1966	01-03-66	13.25	8,110	1974	06-08-74	13.94	9,260
1967	03-08-67	12.02	2,590	1975	03-29-75	14.04	9,700
1968	05-12-68	14.27	10,800	1976	06-26-76	12.94	5,610
1969	01-30-69	16.09	21,000				

07076870 Pigeon Roost Creek at Butlerville, Arkansas

Location.--Lat 34° 58’36”, long 91° 50’38”, in NW 1/4 NE 1/4 sec.15, T.4 N., R.8 W., near left bank on downstream side of bridge on State Highway 38, 0.1 mi upstream from small tributary, and 0.6 mi west of Butlerville.

Drainage area.--23.0 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07076870 Pigeon Roost Creek at Butlerville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-30-61	--	1,200e	1978	05-07-78	10.39	1,650
1962	01-22-62	10.47	1,950	1979	04-23-79	10.75	2,270
1963	05-06-63	8.71	228	1980	03-17-80	10.22	1,400
1964	03-09-64	11.84	5,000	1981	05-26-81	10.42	1,800
1965	02-11-65	11.12	3,300	1982	04-02-82	10.73	2,250
1966	04-26-66	10.19	1,500	1983	12-24-82	11.70	5,000
1967	03-07-67	10.33	1,700	1984	05-03-84	10.54	1,800
1968	05-14-68	10.81	2,600	1985	11-27-84	11.44	3,800
1969	01-30-69	12.30	7,400	1986	03-12-86	10.49	1,650
1970	12-29-69	10.59	2,000	1987	12-09-86	10.61	1,770
1971	12-22-70	10.13	1,300	1988	12-26-87	12.38	7,700
1972	12-09-71	9.10	410	1989	11-19-88	11.90	5,900
1973	04-22-73	11.42	4,000	1990	03-08-90	11.64	4,500
1974	04-21-74	12.62	8,800	1991	01-06-91	11.05	3,000
1975	09-20-75	10.22	1,400	1992	03-18-92	10.24	1,350
1976	03-08-76	9.85	960	1993	04-25-93	9.34	570
1977	06-27-77	9.70	825				

07077100 Big Creek near Boydsville, Arkansas

Location.--Lat 36° 22’12”, long 90° 19’50”, in SE 1/4 NW 1/4 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 mi south of Crockett, and 4.0 mi northeast of Boydsville.

Drainage area.--12.9 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 94 ft^3/s and by contracted-opening measurements at 1,840 ft^3/s and 3,260 ft^3/s.

Remarks.--Only annual peaks are shown.

07077100 Big Creek near Boydsville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	09-14-62	16.85	3,420	1972	05-01-72	15.55	2,820
1963	03-04-63	13.60	1,960	1973	04-19-73	19.14	5,700
1964	04-05-64	16.11	3,080	1974	12-04-73	12.85	1,700
1965	09-11-65	16.30	3,170	1975	03-28-75	18.14	4,180
1966	04-23-66	18.85	5,300	1976	06-24-76	17.68	3,800
1967	05-13-67	15.42	2,750	1977	09-25-77	15.27	2,700
1968	05-10-68	17.91	4,100	1978	07-11-78	14.32	2,270
1969	03-24-69	17.69	4,000	1979	12-03-78	18.59	4,950
1970	04-25-70	14.76	2,450	1980	08-14-80	14.13	2,250
1971	01-03-71	10.54	910	1981	06-06-81	11.03	1,050

07077200 Big Creek Tributary near Boydsville, Arkansas

Location.--Lat 36° 22’32”, long 90° 19’56”, in SE 1/4 SW 1/4 sec.9, T.20 N., R.7 E., on left bank 22 ft upstream from culvert on county road, 0.1 mi west of Crockett, 0.5 mi upstream from mouth, and 4.1 mi northeast of Boydsville.

Drainage area.--1.58 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 89 ft^3/s and by culvert measurements at 193 ft^3/s, 427 ft^3/s, and 735 ft^3/s.

Remarks.--Only annual peaks are shown.

07077200 Big Creek Tributary near Boydsville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	04-30-62	7.97	427	1977	03-28-77	5.94	163
1963	03-04-63	6.01	172	1978	05-07-78	6.54	240
1964	04-05-64	8.35	479	1979	12-03-78	9.44	785
1965	09-11-65	7.77	400	1980	03-17-80	6.92	290
1966	04-23-66	9.17	735	1981	06-06-81	5.93	160
1967	05-13-67	8.47	495	1982	01-31-82	6.99	295
1968	05-10-68	7.97	427	1983	12-03-82	9.32	653
1969	04-24-69	7.63	383	1984	05-08-84	9.65	730
1970	04-25-70	7.02	305	1985	10-21-84	7.41	350
1971	02-12-71	6.59	248	1989	02-15-89	7.53	355
1972	05-01-72	6.93	292	1990	02-03-90	6.75	260
1973	04-19-73	9.13	590	1991	04-04-91	9.17	660
1974	05-15-74	6.52	240	1992	03-09-92	5.77	128
1975	03-28-75	8.39	485	1993	01-04-93	8.06	450
1976	06-24-76	8.07	440				

07077340 Sugar Creek Tributary near Walcott, Arkansas

Location.--Lat 36° 04'26", long 90° 36'35", in NW 1/4 SW 1/4 sec.25, T.17 N., R.4 E., on left bank 45 ft upstream from culvert on State Highway 25, 1.0 mi upstream from mouth, 3.2 mi east of junction of State Highway 25 and 141, and 3.9 mi northeast of Walcott.

Drainage area.--0.68 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from November 1968 to November 6, 1974.

Stage-discharge relation.--Defined by culvert measurements at 205 ft^3/s, 369 ft^3/s, and 1,000 ft^3/s.

Remarks.--Only annual peaks are shown.

07077340 Sugar Creek Tributary near Walcott, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	03-04-63	6.67	205	1975	09-12-75	9.18	452
1964	03-09-64	8.39	369	1976	07-04-76	7.27	260
1965	07-10-65	9.76	510	1977	09-25-77	7.65	298
1966	01-02-66	8.06	338	1978	05-07-78	5.15	70
1967	07-05-67	8.19	350	1979	04-02-79	8.71	405
1968	04-19-68	8.69	402	1980	05-23-80	5.81	125
1969	04-09-69	6.87	225	1981	10-17-80	5.42	92
1970	04-23-70	5.85	130	1982	08-24-82	7.50	283
1971	02-21-71	7.80	312	1983	05-15-83	8.27	357
1972	05-01-72	6.03	145	1984	05-07-84	7.54	290
1973	04-19-73	13.62	1000	1985	11-27-84	6.44	180
1974	11-24-73	10.25	560	1986	11-27-85	6.93	227

07077380 Cache River at Egypt, Arkansas

Location.--Lat 35° 51'28", long 90° 56'00", in NW 1/4 SE 1/4 sec.12, T.14 N., R.1 E., on right bank on downstream side of bridge on State Highway 91, 1.0 mi southeast of Egypt, 2.2 mi northwest of Winesburg, and at mile 143.

Drainage area.--701 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 8,200 ft^3/s. Measurements made occasionally by Corps of Engineers prior to that date (maximum measured 7,720 ft^3/s).

Remarks.--Gage-height records prior to October 1, 1964, furnished by Corps of Engineers. After October 1, 1964, gage operated by U.S. Geological Survey. Only annual peaks are shown.

07077380 Cache River at Egypt, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1938	02-22-38	21.30	6,860	1964	03-15-64	20.64	6,210
1939	02-11-39	19.30	4,940	1965	02-12-65	17.87a	3,420
1940	04-20-40	15.70	2,800	1966	01-06-66	21.88	8,940
1953	03-19-53	18.80	5,360	1967	07-06-67	16.60	2,900
1954	02-21-54	15.00	2,820	1968	05-16-68	19.60	4,260
1955	03-22-55	17.30	3,890	1969	02-01-69	20.36	4,750
1956	02-19-56	18.40	4,840	1970	12-31-69	18.19	3,590
1957	05-15-57	19.30	5,490	1971	12-23-70	17.75	3,360
1958	11-23-57	21.10	8,060	1972	05-02-72	17.77	3,370
1959	02-16-59	16.70	3,930	1973	04-26-73	21.57	8,010
1960	05-22-60	16.30	3,500	1974	11-28-73	20.69	5,900
1961	05-17-61	17.29	4,230	1975	04-01-75	21.12	6,850
1962	03-06-62	19.13	4,780	1976	02-21-76	17.76	3,370
1963	03-11-63	15.90	3,280	1977	03-29-77	17.13	3,150

07077380 Cache River at Egypt, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1978	05-08-78	17.61	3,310
1979	04-05-79	21.23	7,620
1980	12-25-79	15.82	2,620
1981	02-11-81	16.35	3,390
1982	02-03-82	18.82	4,790
1983	12-30-82	19.44	5,270
1984	05-11-84	19.16	4,320
1985	05-25-85	16.86	128
1986	11-29-85	18.07	3,750
1987	03-02-87	18.68	4,060
1988	12-29-87	20.37	5,410
1990	02-04-90	19.01	4,240
1991	12-23-90	20.90	6,220
1992	11-02-91	18.03	3,730
1993	01-07-93	17.84	3,660

07077430 Willow Ditch near Egypt, Arkansas

Location.--Lat 35° 56’29”, long 90° 56’33”, in SW 1/4 SW 1/4 sec.12, T.15 N., R.1 E., on left bank 8 ft upstream from culvert on State Highway 91 and 5.1 mi north of Egypt.

Drainage area.--0.48 mi^2, approximately.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from June 1969 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 31 ft^3/s and by culvert measurements at 26 ft^3/s, 101 ft^3/s, and 157 ft^3/s.

Remarks.--Only annual peaks are shown.

07077430 Willow Ditch near Egypt, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	05-27-63	4.33	17
1964	03-09-64	6.19	101
1965	03-29-65	5.30	31
1966	01-01-66	6.26	157
1967	06-29-67	4.59	20
1968	05-13-68	5.42	33
1969	01-30-69	5.62	35
1970	09-18-70	5.56	34
1971	05-13-71	5.42	32
1972	04-30-72	4.87	25
1973	04-22-73	6.11	68
1974	11-24-73	4.86	24
1975	03-28-75	6.20	108
1976	05-28-76	5.02	27
1977	03-28-77	6.11	75
1978	08-30-78	5.31	31
1979	04-02-79	6.25	148
1980	03-17-80	3.83	12
1981	05-26-81	3.99	14
1982	08-15-82	5.02	27
1983	12-03-82	5.03	28
1984	12-03-83	4.61	22
1985	10-21-84	4.96	26
1986	11-27-85	4.93	24
1987	12-08-86	4.74	22
1988	12-26-87	5.58	34
1989	11-19-88	5.40	45
1992	12-21-91	6.37	112
1993	01-04-93	5.88	38

07077500 Cache River at Patterson, Arkansas

Location.--Lat 35° 16, 10", long 91° 14'15", in SE 1/4 sec.31, T.8 N., R.2 W., at bridge on U.S. Highway 64, 1 mi northwest of Patterson, 10.9 mi upstream from Maple Slough, and at mile 77.2.

Drainage area.--1,037 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 12,000 ft^3/s 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.

07077500 Cache River at Patterson, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1921	04-18-21	9.70	5,100
1922	04-01-22	10.30	6,600
1923	02-03-23	10.80	8,000
1924	06-06-24	9.70	5,100
1925	10-22-24	10.50	7,200
1926	02-01-26	9.90	5,600
1927	04-19-27	16.10	24,500
1928	06-27-28	11.80	12,100
1929	05-16-29	10.30	6,340
1930	01-15-30	11.50	10,800
1931	02-19-31	8.70	2,400
1937	01-24-37	13.20	13,200
1938	02-24-38	11.90	10,100
1939	02-07-39	10.90	7,320
1940	04-21-40	9.95	5,380
1941	02-03-41	8.70	2,820
1942	04-14-42	10.15a	6,200
1943	05-18-43	10.30	6,060
1944	04-13-44	9.70	4,760
1945	04-21-45	12.10	10,200
1946	05-27-46	10.30	6,020
1947	04-17-47	9.50	4,360
1948	03-06-48	9.85	5,560
1949	01-31-49	11.30	10,400
1950	02-15-50	11.65	11600
1951	02-22-51	9.30	53,701
1952	01-08-52	10.40	8,550
1953	03-24-53	10.65	8,640
1954	05-04-54	8.85a	3,880
1955	03-24-55	9.76	5,720
1956	02-19-56	10.98	9,250
1957	05-26-57	11.50	11,200
1958	11-22-57	12.00	10,900
1959	02-23-59	9.60	5,320
1960	05-28-60	8.80	4,810
1961	04-02-61	10.00	7,550
1962	03-02-62	10.25	7,690
1963	03-13-63	8.80	4,160
1964	03-13-64	10.28	7,460
1965	04-11-65	9.25	5,230
1966	01-14-66	11.06	9,210
1967	07-07-67	9.70a	3,290
1968	05-17-68	10.56	6,010
1969	02-01-69	12.06	10,200
1970	05-02-70	10.59	5,400
1971	12-29-70	10.02	3,930
1972	05-09-72	9.77	3,380
1973	05-03-73	11.62	8,340
1974	12-06-73	--	7,500
1975	03-30-75	--	8,600
1976	02-24-76	9.98	4,200
1977	04-03-77	9.80	3,400
1980	03-24-80	9.67	3,070
1981	06-07-81	10.50	5,260
1982	05-02-82	9.70	3,486
1983	12-28-82	11.50	7,239
1984	04-10-84	10.30	5,052
1985	10-24-84	11.00	6,144
1986	12-02-85	10.30	4,491
1987	03-09-87	10.20	3,648
1988	12-28-87	11.93	11,389
1989	02-21-89	11.49	8,663
1990	02-17-90	11.20	6,828
1991	01-11-91	12.52	10,367

07077680 Threemile Creek near Amagon, Arkansas

Location.--Lat 35° 33'42", long 91° 01'25", in NW 1/4 NE 1/4 sec.30, T.11 N., R.1 E., near right bank on downstream side of bridge on State Highway 14, 4.8 mi east of Amagon.

Drainage area.--7.93 mi^2, approximately.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07077680 Threemile Creek near Amagon, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-06-61	4.98	130	1971	07-24-71	4.48	375
1962	09-09-62	5.42	2,202	1972	09-29-72	3.63	295
1963	05-28-63	4.58	158	1973	11-01-72	4.19	345
1964	03-10-64	4.85	1,802	1974	11-24-73	4.52	375
1965	02-11-65	4.65	390	1975	03-28-75	4.98	420
1966	01-03-66	3.61	295	1976	06-18-76	3.37	112
1967	12-28-66	3.51	285	1977	06-27-77	3.94	325
1968	05-13-68	4.22	350	1978	09-13-78	4.17	345
1969	01-30-69	5.00	422	1979	04-02-79	4.48	375
1970	12-29-69	3.89	318	1980	07-22-80	3.51	285

07077700 Bayou DeView at Morton, Arkansas

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 mi west of Morton, and at mile 39.6

Drainage area.--422 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 4,900 ft^3/s and extended above by logarithmic plotting.

Bankfull stage.--16 ft.

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

07077700 Bayou DeView at Morton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1933	04-05-33	16.00	--	1952	01-13-52	17.53	4,100
1935	03-24-35	15.88	--	1953	05-20-53	17.68	3,940
1937	01-26-37	18.57	--	1954	01-21-54	17.33	2,700
1939	02-10-39	16.80	4,150	1955	03-28-55	17.49	2,820
1940	04-21-40	16.00	2,870	1956	02-25-56	17.92	6,340
1941	01-28-41	--	1,420	1957	05-29-57	17.80	3,450
1942	04-14-42	16.20a	3,480	1958	11-23-57	18.23	6,700
1943	03-20-43	16.00	2,790	1959	02-16-59	17.64	3,190
1944	04-13-44	16.70	3,710	1960	01-18-60	16.87	1,750
1945	06-21-45	16.60	3,800	1961	04-04-61	17.55a	2,690
1946	01-15-46	16.50	3,780	1962	03-05-62	17.93	3,190
1947	04-13-47	16.20	2,800	1963	03-09-63	17.49	2,610
1948	03-04-48	16.50	3,510	1964	03-17-64	17.96	4,180
1949	03-30-49	16.80a	4,430	1965	02-14-65	17.71	3,500
1950	01-17-50	17.16	5,300	1966	05-04-66	17.80a	3,750
1951	12-08-50	16.60a	3,060	1967	01-01-67	17.15	2,180

07077700 Bayou DeView at Morton, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1968	05-18-68	17.90	3,230	1974	06-11-74	18.05	2,830
1969	02-06-69	18.40	5,280	1975	03-30-75	18.08a	2,890
1970	05-02-70	17.99	3,370	1976	06-29-76	17.57a	2,490
1971	12-26-70	--	2,260	1977	03-06-77	17.38	1,700
1972	05-04-72	17.23a	1,460	1980	03-21-80	17.55a	2,070
1973	05-02-73	18.75	4,480				

07077860 Boat Gunwale Slash Tributary near Holly Grove, Arkansas

Location.--Lat 34° 36’18”, long 91° 10’12”, in SE 1/4 SW 1/4 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 mi northeast of Holly Grove.

Drainage area.--10.0 mi^2, approximately.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from November 1968 to November 1974.

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

Remarks.--Only annual peaks are shown.

07077860 Boat Gunwale Slash Tributary near Holly Grove, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	12-16-61	9.26	465	1973	12-10-72	9.86	540
1963	05-27-63	7.30	138	1974	11-27-73	9.23	420
1964	04-05-64	9.73	558	1975	03-13-75	9.32	435
1965	02-11-65	9.23	460	1976	03-08-76	8.14	225
1966	02-09-66	9.33	480	1977	10-25-76	9.10	330
1967	05-06-67	7.73	200	1978	01-25-78	9.24	350
1968	05-13-68	8.99	414	1979	12-04-78	10.04	402
1969	01-30-69	7.97	235	1980	03-17-80	10.20	420
1970	12-29-69	8.54	330	1981	05-26-81	9.54	365
1971	12-21-70	7.37	135	1982	02-09-82	8.63	285
1972	12-10-71	6.90	70	1983	04-08-83	9.33	349

07077920 Big Creek at Goodwin, Arkansas

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

Drainage area.--31.1 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07077920 Big Creek at Goodwin, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-31-61	8.78	310	1967	07-06-67	8.90	380
1962	02-27-62	9.83	910	1968	05-13-68	9.66	815
1963	04-29-63	7.59	88	1969	01-30-69	9.01	440
1964	04-24-64	9.39	660	1970	08-11-70	9.15	520
1965	02-11-65	9.51	730	1971	07-27-71	8.75	290
1966	04-26-66	9.62	790	1972	12-10-71	9.30	530

07077920 Big Creek at Goodwin, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1973	04-19-73	9.73	780
1974	06-07-74	9.47	620
1975	03-13-75	9.79	810
1976	03-29-76	8.67	240
1977	09-14-77	9.18	450
1978	01-25-78	9.58	690
1979	12-08-78	9.65	730
1980	03-17-80	9.25	490
1981	05-26-81	9.33	540
1982	05-25-82	9.07	390
1983	05-15-83	9.64	725
1984	05-03-84	9.63	750
1985	10-23-84	9.34	600
1986	02-04-86	9.61	750
1987	12-09-86	9.20	540
1988	12-25-87	10.35	1,250
1989	05-09-89	9.16	480
1990	02-03-90	9.34	590
1991	12-21-90	9.41	660
1992	10-30-91	8.85	350
1993	08-05-93	8.47	157

07077950 Big Creek at Poplar Grove, Arkansas

Location.--Lat 34° 33’20”, long 90° 50’44”, in sec.1 T.2 S., R.2 E., Phillips County, near right bank on downstream side of bridge on U.S. Highway 49, at Poplar Grove, 900 ft upstream from Crooked Creek, and 3.9 mi east of Marvel.

Drainage area.--448 mi^2, includes that of Crooked Creek. Area at site used prior to September 30, 1972, 459 mi^2.

Gage.--Water-stage recorder. Datum of gage is 143.00 ft above sea level. Auxiliary water-stage recorder 7.0 mi downstream at same datum. Prior to February 6, 1978, auxiliary water-stage recorder at site 8.7 downstream at same datum. October 1970 to September 1972, the downstream site was used as the base gage. The auxiliary gage was removed on December 28, 1981.

Stage-discharge relation.--Defined by current-meter measurements below 5,100 ft^3/s.

Remarks.--Only annual peaks are shown.

07077950 Big Creek at Poplar Grove, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1971	02-25-71	22.22a	1,130
1972	12-22-71	17.90a	808
1973	04-23-73	31.74	5,910
1974	05-16-74	30.42	4,000
1975	03-13-75	30.50	4,200
1976	03-10-76	28.06	2,430
1977	03-13-77	27.44	1,980
1978	05-13-78	29.69a	2,800
1979	03-03-79	30.37	3,750
1980	03-24-80	30.20	4,320
1981	06-08-81	29.53	3,160
1982	02-10-82	28.10	1,820
1983	05-21-83	31.18	5,050
1984	05-08-84	30.31	4,280
1985	04-28-85	29.93	3,450
1986	04-11-86	27.55	2,220
1987	03-04-87	29.57	3,250
1988	12-29-87	31.72	5,530
1989	02-21-89	30.39	4,700
1990	02-05-90	30.79	4,420
1991	04-15-91	31.05	4,710
1992	12-03-91	28.76	2,610
1993	04-16-93	27.63	1,890

07078000 LaGrue Bayou near Stuttgart, Arkansas

Location.--Lat 34° 31’55”, long 91° 21’20”, in NW 1/4 sec.17 T.2 S., R.3 W., on downstream side of bridge on State Highway 146, 7 1/2 mi downstream from small tributary, 11 mi east of Stuttgart, and 24 mi upstream from Little LaGrue Bayou.

Drainage area.--175 mi^2.

Gage.--Nonrecording prior to September 13, 1940: recording thereafter. Datum of gage is 175.14 ft above mean Gulf level (Corps of Engineers benchmark).

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

Bankfull stage.--10 ft.

Remarks.--Flow affected by diversions for irrigation of rice fields and return flow from irrigated areas. Peak discharge not seriously affected. Gage was discontinued September 30, 1954, due to backwater from local dam.

07078000 LaGrue Bayou near Stuttgart, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1936	07-05-36	11.40	1,210	1946	01-09-46	14.66	3,860
1937	01-24-37	16.90	6,580	1947	01-21-47	10.97	960
1938	01-25-38	14.74	3,860	1948	02-14-48	14.83	3,970
1939	02-04-39	14.95	4,210	1949	01-28-49	14.45	3,530
1940	02-22-40	10.71	850	1950	01-14-50	14.00	3,090
1941	04-25-41	9.44	592	1951	01-15-51	14.36	3,530
1942	04-13-42	13.28	2,340	1952	12-14-51	12.10	1,410
1943	03-16-43	12.94	1,930	1953	05-17-53	14.17	3,310
1944	03-31-44	12.63	1,740	1954	01-17-54	12.33	1,620
1945	01-01-45	14.22	3,310				

07078170 Little LaGrue Bayou Tributary near DeWitt, Arkansas

Location.--Lat 34° 19’58”, long 91° 24’06”, on east line of NE 1/4 NE 1/4 sec.26, T.4 S., R.4 W., on left bank 20 ft upstream from bridge on county road, 4.5 mi northwest of DeWitt.

Drainage area.--1.51 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 134 ft^3/s and extended above by logarithmic plotting.

Remarks.--Only annual peaks are shown.

07078170 Little LaGrue Bayou Tributary near DeWitt, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-30-61	8.60	167	1971	12-20-70	7.25	92.0
1962	11-22-61	8.86	183	1972	07-29-72	5.79	30.0
1963	04-28-63	8.77	177	1973	04-19-73	10.14	270
1964	04-05-64	9.25	210	1974	05-15-74	9.27	205
1965	03-29-65	8.99	192	1975	03-13-75	8.84	182
1966	02-09-66	8.78	178	1976	03-08-76	8.55	152
1967	05-06-67	8.25	145	1977	03-03-77	8.81	170
1968	05-13-68	9.58	234	1978	01-25-78	8.94	187
1969	01-30-69	8.83	180	1979	05-04-79	9.52	223
1970	03-03-70	8.88	185	1980	11-22-79	9.45	218

07078210 Tarleton Creek Tributary at Ethel, Arkansas

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

Drainage area.--0.20 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 46 ft^3/s and by culvert measurements at 39 ft^3/s, 61 ft^3/s, 107 ft^3/s, and 645 ft^3/s.

Remarks.--Only annual peaks are shown.

07078210 Tarleton Creek Tributary at Ethel, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	04-28-63	5.11	68	1975	03-13-75	4.35	41
1964	04-23-64	6.24	107	1976	03-08-76	4.60	61
1965	09-21-65	5.00	62	1977	03-03-77	4.68	54
1966	05-01-66	5.02	63	1978	01-25-78	4.54	49
1967	05-06-67	4.80	55	1979	12-03-78	7.12	121
1968	03-21-68	4.89	59	1980	03-17-80	5.62	84
1969	11-28-68	5.27	72	1981	05-17-81	6.95	118
1970	08-10-70	6.27	91	1982	04-20-82	4.28	75
1971	07-24-71	4.40	43	1983	10-07-82	4.10	68
1972	07-29-72	4.24	33	1984	12-03-83	4.64	53
1973	04-19-73	8.05	645	1985	10-07-84	5.27	73
1974	04-22-74	4.80	65	1986	06-11-86	3.56	18

07188900 Butler Creek Tributary near Gravette, Arkansas

Location.--Lat 36° 26'51", long 94° 26'36", in SW 1/4 SE 1/4 sec.36, T.21 N., R.33 W., on right bank 40 ft upstream from culvert on State Highway 59, 1.9 mi upstream from mouth, and 2.0 mi north of Gravette.

Drainage area.--0.96 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 10 ft^3/s, by slope-area measurement at 88 ft^3/s, and by culvert measurement at 562 ft^3/s.

Remarks.--Only annual peaks are shown.

07188900 Butler Creek Tributary near Gravette, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-19-61	6.85	562	1972	07-01-72	6.00	330
1962	1962	--	6e	1973	09-04-73	6.02	330
1963	03-04-63	4.69	52	1974	06-08-74	6.36	420
1964	06-17-64	4.20	17	1975	11-03-74	5.93	310
1965	04-02-65	4.78	58	1976	12-06-75	5.50	200
1966	02-09-66	4.71	53	1977	09-29-77	5.64	235
1967	06-28-67	3.58	2	1978	04-10-78	5.74	260
1968	03-19-68	4.40	29	1979	07-17-79	5.25	140
1969	01-29-69	4.67	50	1980	05-26-80	5.00	90
1970	04-30-70	5.98	320	1981	06-30-81	5.24	140
1971	10-26-70	4.43	13				

07191220 Spavinaw Creek near Sycamore, Oklahoma

Location.--Lat 36° 20'00", long 94° 38'30", in NE 1/4 NW 1/4 sec.4, T.21 N., R.25 E., 1.8 mi downstream from Cherokee Creek, 6.5 mi southeast of Sycamore, and at mile 35.0.

Drainage area.--133 mi^2 (128 mi^2 at former site).

Gage.--Recording. Prior to October 1, 1961, at site 1 mi upstream at datum of 880 ft above sea level (from topographic map). Datum of gage is 875 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,030 ft^3/s and by slope-area measurements at 18,100 ft^3/s and 39,800 ft^3/s.

Bankfull stage.--18 ft.

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

07191220 Spavinaw Creek near Sycamore, Oklahoma

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	05-06-60	--	7,530	1975	07-27-75	22.07	39,800
1961	05-19-61	15.61	15,000	1976	04-20-76	12.40	6,480
1962	07-10-62	5.74	595	1977	09-29-77	14.41	10,600
1963	10-07-62	8.66	1,940	1978	04-10-78	13.21	7,430
1964	06-17-64	7.25	1,210	1979	05-04-79	8.52	1,850
1965	04-15-65	11.76	4,910	1980	03-25-80	5.20	245
1966	02-10-66	8.78	2,020	1981	06-30-81	6.08	403
1967	04-14-67	4.25	242	1982	01-31-82	9.67	2,600
1968	02-01-68	9.62	2,580	1983	04-29-83	8.98	2,350
1969	01-30-69	11.39	4,470	1984	03-28-84	7.51	1,280
1970	04-30-70	14.95	12,000	1985	06-05-85	12.11	5,680
1971	10-27-70	6.96	1,020	1986	09-30-86	14.96	11,400
1972	07-03-72	8.45	1,820	1988	12-19-87	11.07	4,190
1973	03-10-73	12.32	5,670	1989	02-15-89	7.58	1,020
1974	06-08-74	17.54	19,100				

07194890 Osage Creek at Cave Springs, Arkansas

Location.--Lat 36° 15'56", long 94° 14'15", in SW 1/4 NW 1/4 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 mi west of Cave Springs, 0.6 mi upstream from Cave Springs Branch, and 2.1 mi upstream from Spring Creek.

Drainage area.--40.4 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 309 ft^3/s and by contracted-opening measurement at 5,420 ft^3/s.

Remarks.--Only annual peaks are shown.

07194890 Osage Creek at Cave Springs, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1950	05-10-50	10.60	12,700	1973	05-07-73	6.81	1,550
1963	10-07-62	7.40	2,500	1974	06-08-74	10.30	11,300
1964		--	150	1975	07-27-75	7.89	3,100
1965	04-13-65	6.70	1,450	1976	04-20-76	5.67	660
1966	02-09-66	6.42	1,200	1977	09-29-77	8.04	3,350
1967		--	210	1978	03-28-78	5.65	655
1968	07-01-68	7.11	1,900	1979	05-04-79	7.76	2,800
1969	01-29-69	8.83	5,420	1980	06-19-80	4.31	200
1970	04-30-70	6.85	1,600	1981	02-09-81	4.86	325
1971	10-26-70	7.41	2,550	1982	01-30-82	5.12	405
1972	12-09-71	5.97	835				

07195000 Osage Creek near Elm Springs, Arkansas

Location.--Lat 36° 13', long 94° 17', in sec.21, T.18 N., R.31 W., on left bank 1 mi downstream from Little Osage Creek and 3 1/4 mi northwest of Elm Springs.

Drainage area.--130 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 11,000 ft^3/s and slope-area measurements at 22,500 ft^3/s.

Remarks.--Only annual peaks are shown.

07195000 Osage Creek near Elm Springs, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1950	05-10-50	16.70	22,500	1965	04-06-65	11.11	6,140
1951	02-20-51	11.72	6,770	1966	02-09-66	9.34	3,270
1952	08-22-52	6.99	2,210	1967	06-11-67	4.52	684
1953	03-17-53	6.40	1,820	1968	07-01-68	12.76	8,360
1954	05-02-54	9.44	4,050	1969	01-29-69	15.37	13,900
1955	02-19-55	10.58	5,280	1970	04-30-70	10.55	5,480
1956	05-15-56	5.79	1,160	1971	10-27-70	10.91	5,910
1957	04-03-57	14.36	10,800	1972	07-13-72	9.13	3,880
1958	07-25-58	7.05	2,200	1973	03-10-73	9.72	4,520
1959	07-23-59	10.37	5,300	1974	06-08-74	16.62	22,200
1960	05-06-60	8.46	3,270	1975	07-27-75	14.65	11,600
1961	05-19-61	16.66	22,500	1976	04-20-76	10.74	5,710
1962	07-10-62	7.33	2,170	1977	09-29-77	13.26	9,090
1963	10-07-62	8.50	3,270	1978	03-24-78	8.89	3,650
1964	08-28-64	3.86	492	1979	04-11-79	12.60	8,140

07195200 Brush Creek Tributary near Tonitown, Arkansas

Location.--Lat 36° 10'38", long 94° 16'40", in NW 1/4 SW 1/4 sec.3 T.17 N., R.31 W., on right bank 14 ft upstream from culvert on State Highway 68, 1.6 mi upstream from mouth, and 2.2 mi west of Tonitown.

Drainage area.--0.37 mi^2.

Stage-discharge relation.--Defined by current-meter measurement at 11 ft^3/s and by culvert measurements at 100 ft^3/s, 131 ft^3/s, 193 ft^3/s, 264 ft^3/s, and 278 ft^3/s.

Remarks.--Only annual peaks are shown. Annual peaks greater than about 60 ft^3/s affected by storage.

07195200 Brush Creek Tributary near Tonitown, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-07-61	11.77	193	1971	10-26-70	8.63	108
1962		--	20e	1972	09-29-72	10.38	155
1963	05-05-63	5.10	8	1973	03-10-73	7.75	77
1964	09-22-64	5.49	16	1974	11-24-73	8.33	98
1966		--	10e	1975	09-19-75	9.88	143
1967	09-15-67	5.61	18	1976	04-20-76	7.88	63
1968	02-01-68	5.82	24	1977	09-29-77	11.57	188
1969	01-29-69	8.36	96	1978	03-28-78	5.53	17
1970	10-12-69	6.02	27	1979	05-04-79	8.17	93

07195450 Ballard Creek at Summers, Arkansas

Location.--Lat 35° 58'42", long 94° 29'56", in SW 1/4 SW 1/4 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 mi upstream from small tributary, and 0.4 mi west of Summers.

Drainage area.--14.6 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 122 ft^3/s and by slope-area measurement at 1,620 ft^3/s, and 4,750 ft^3/s.

Remarks.--Only annual peaks are shown.

07195450 Ballard Creek at Summers, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	04-27-63	3.40	144	1975	11-04-74	9.98	3,320
1964	09-22-64	4.79	455	1976	04-20-76	12.16	4,750
1965	04-15-65	4.70	425	1977	03-28-77	5.66	880
1966	02-09-66	6.35	1,150	1978	05-07-78	11.45	4,300
1967	05-14-67	4.12	275	1979	05-04-79	12.24	4,830
1968	02-01-68	7.17	1,620	1980	06-19-80	3.40	144
1969	01-29-69	9.89	3,280	1981	07-01-81	5.86	980
1970	09-23-70	8.13	2,200	1982	05-14-82	8.67	2,520
1971	10-26-70	9.70	3,140	1983	12-03-82	11.05	4,000
1972	07-13-72	9.32	2,900	1984	04-09-84	6.82	1,450
1973	04-22-73	8.39	2,350	1985	12-21-84	7.84	2,300
1974	05-30-74	10.40	3,600	1986	11-19-85	10.07	5,100

07195500 Illinois River near Watts, Oklahoma

Location.--Lat 36° 07'48", long 94° 34'12", in NE 1/4 sec.18, T.19 N., R.26 E., on downstream side of bridge on U.S. Highway 59, 1.5 mi north of Watts, 4.5 mi downstream from Cincinnati Creek, and at mile 106.2.

Drainage area.--635 mi^2.

Gage.--Recording. Datum of gage is 893.78 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 51,000 ft^3/s.

Bankfull stage.--13 ft.

Remarks.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

07195500 Illinois River near Watts, Oklahoma

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	05-15-56	13.05	8,650	1969	01-30-69	21.90	31,400
1957	04-03-57	24.73	49,000	1970	05-01-70	19.37	21,100
1958	07-12-58	18.25	18,200	1971	10-27-70	20.48	25,200
1959	07-23-59	15.46	12,600	1972	07-13-72	17.11	15,700
1960	07-25-60	25.96	68,000	1973	03-11-73	18.28	18,400
1961	05-07-61	24.32	51,600	1974	11-25-73	23.96	47,600
1962	08-01-62	12.97	8,630	1975	11-04-74	21.50	25,500
1963	10-08-62	9.69	4,770	1976	04-20-76	22.38	31,700
1964	05-11-64	8.98	4,100	1977	09-29-77	14.99	11,700
1965	04-06-65	14.57	11,100	1978	03-24-78	20.54	22,500
1966	02-09-66	20.54	26,800	1979	04-12-79	20.76	22,400
1967	04-14-67	8.21	3,430	1980	03-30-80	7.71	3,010
1968	02-02-68	17.35	16,800				

07195800 Flint Creek at Springtown, Arkansas

Location.--Lat 36° 15'20", long 94° 25'50", in NW 1/4 sec.7, T.18 N., R.32 W., 20 ft downstream from bridge on State Highway 12 and 0.8 mi southwest of Springtown.

Drainage area.--14.2 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 230 ft^3/s and by contracted-opening measurements at 1,850 ft^3/s, 6,730 ft^3/s, and 14,600 ft^3/s.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown.

07195800 Flint Creek at Springtown, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	08-14-61	14.75	6,730	1978	06-21-78	7.91	774
1962	07-10-62	6.23	330	1979	05-03-79	6.10	359
1963	07-08-63	6.25	310	1980	11-21-79	4.39	67
1964	08-21-64	4.93a	70	1981	08-03-81	5.00	153
1965	04-14-65	8.20	870	1982	01-30-82	6.83	505
1966	02-09-66	7.82	740	1983	12-03-82	5.50	240
1967	06-11-67	5.19	120	1984	03-19-84	5.70	277
1968	01-30-68	7.59	677	1985	12-21-84	10.50	1,970
1969	01-29-69	11.51	2,720	1986	09-30-86	10.39	1,900
1970	04-30-70	9.72	1,510	1987	10-01-86	7.87	762
1971	10-26-70	6.81	502	1988	03-29-88	8.65	1,130
1972	12-14-71	6.22	384	1989	02-15-89	5.83	268
1973	03-10-73	8.84	1,110	1990	05-03-90	12.99	4,040
1974	06-08-74	17.51	14,600	1991	04-13-91	7.51	605
1975	07-27-75	12.16	3,370	1992	06-06-92	6.26	285
1976	04-20-76	8.32	908	1993	12-14-92	10.13	1,740
1977	09-29-77	9.25	1,280				

07196000 Flint Creek near Kansas, Oklahoma

Location.--Lat 36° 11'54", long 94° 42'30", in SW 1/4 sec.24, T.20 N., R.24 E., on downstream side of bridge on Oklahoma State Highway 33, 6 mi southwest of Kansas, 6 mi downstream from Sugar Creek, and at mile 2.8.

Drainage area.--110 mi^2.

Gage.--Recording. Datum of gage is 854.59 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 3,910 ft^3/s, and contracted-opening measurement of 44,400 ft^3/s.

Bankfull stage.--17 ft.

Remarks.--Only annual peaks are shown.

07196000 Flint Creek near Kansas, Oklahoma

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	05-15-56	8.42	1,370	1963	10-07-62	7.68	680
1957	05-25-57	11.52	8,780	1964	04-05-64	7.58	580
1958	07-12-58	12.55	12,000	1965	04-06-65	9.07	3,040
1959	07-23-59	9.44	3,530	1966	02-09-66	8.98	2,930
1960	05-06-60	12.47	11,700	1967	06-25-67	8.05	1,210
1961	08-14-61	15.66	23,600	1968	02-01-68	9.32	3,980
1962	08-01-62	9.10	3,140	1969	01-29-69	14.20	17,500

07196000 Flint Creek near Kansas, Oklahoma--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1970	04-30-70	10.85	6,960
1971	10-27-70	8.76	2,430
1972	05-01-72	8.33	1,560
1973	03-10-73	11.40	8,520
1974	06-08-74	19.42	43,600
1975	11-04-74	13.70	16,000
1976	04-20-76	10.68	6,970
1979	05-03-79	8.44	1,790
1980	03-24-80	7.20	270

07196900 Baron Fork at Dutch Mills, Arkansas

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 3/4 mi downstream from Fly Creek, and 2 3/4 mi upstream from Arkansas-Oklahoma State line.

Drainage area.--46.0 mi^2.

Gage.--Recording. Datum of gage is 986.47 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 2,900 ft^3/s and by contracted-opening measurement at 12,900 ft^3/s.

Bankfull stage.--11 ft.

Remarks.--Only annual peaks are shown.

07196900 Baron Fork at Dutch Mills, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1958	07-12-58	12.80	14,800
1959	07-23-59	11.02	9,750
1960	05-05-60	12.12	12,800
1961	07-16-61	11.96	12,600
1962	11-02-61	5.96	1,850
1963	08-10-63	3.04	174
1964	05-11-64	6.30	1,950
1965	01-02-65	5.71	1,360
1966	02-09-66	8.89	5,950
1967	04-13-67	5.53	1,140
1968	07-01-68	8.75	4,620
1969	01-29-69	9.52	5,540
1970	05-10-70	7.51	2,610
1971	10-26-70	13.24	15,400
1972	07-13-72	13.74	17,100
1973	04-22-73	12.86	14,200
1974	09-20-74	13.48	16,200
1975	11-03-74	12.07	11,800
1976	04-20-76	12.80	14,000
1977	03-27-77	10.49	7,480
1978	06-18-78	10.04	6,550
1979	04-11-79	11.94	11,100
1980	05-18-80	4.72	644
1981	05-31-81	10.91	8,430
1982	01-30-82	8.17	3,380
1983	05-14-83	11.01	8,680
1984	03-19-84	7.55	2,630
1985	02-23-85	9.61	5,690
1986	11-18-85	14.81	20,900
1987	10-01-86	12.39	12,400
1988	12-25-87	8.61	5,170
1989	06-12-89	8.24	4,660
1990	04-16-90	12.79	14,000
1991	04-24-91	7.90	4,210
1992	08-04-92	11.41	10,900
1993	01-04-93	11.50	11,200

07247000 Poteau River at Cauthron, Arkansas

Location.--Lat 34° 55'08", long 94° 17'55", in SW 1/4 sec.16, T.3 N., R.31 W., on right bank at downstream side of highway bridge at Cauthron, 7.8 mi downstream from Jones Creek, and at mile 109.0.

Drainage area.--203 mi^2.

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

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.--Only annual peaks are shown.

07247000 Poteau River at Cauthron, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1935	06-00-35	27.40	--	1953	05-13-53	20.46	16,000
1939	04-16-39	22.50	24,400	1954	05-02-54	19.86	13,600
1940	04-29-40	10.71	2,810	1955	03-21-55	17.22	7,830
1941	12-16-40	10.57	2,760	1956	02-18-56	16.52	6,790
1942	10-31-41	18.87	10,500	1957	05-23-57	18.73	10,300
1943	05-11-43	21.74	19,000	1958	05-02-58	18.91	11,200
1944	02-28-44	17.09	7,580	1959	03-26-59	12.44	4,130
1945	05-15-45	22.39	23,800	1960	05-20-60	23.76	32,200
1946	02-13-46	18.30	9,350	1961	05-06-61	17.59	8,930
1947	12-10-46	21.18	17,400	1962	11-22-61	17.60	8,930
1948	01-01-48	21.08	17,000	1963	03-19-63	11.76	3,750
1949	01-24-49	23.34	31,000	1964	03-09-64	17.20	8,380
1950	02-12-50	22.78	27,800	1965	02-09-65	20.23	14,400
1951	02-15-51	15.08	5,770	1966	02-10-66	20.42	15,200
1952	04-22-52	18.69	10,900	1967	05-06-67	16.85	7,000

07249300 James Fork near Midland, Arkansas

Location.--Lat 35° 04'27", long 94° 20'20", in NW 1/4 NW 1/4 sec.32, T.5 N., R.31 W., on right bank on downstream side of bridge pier on State Highway 252, 1.6 mi southeast of Midland, 2.1 mi upstream from Prairie Creek, and 2.5 mi downstream from West Creek.

Drainage area.--44.0 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 ft^3/s and by contracted-opening measurement at 25,400 ft^3/s.

Remarks.--Only annual peaks are shown.

07249300 James Fork near Midland, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	11-07-62	6.09	2,450	1973	04-22-73	11.34	15,200
1964	09-27-64	8.17	5,800	1974	04-30-74	8.90	7,400
1965	11-19-64	8.07	5,700	1975	05-07-75	7.00	3,800
1966	05-18-66	6.25	2,650	1976	06-24-76	5.17	1,550
1967	05-06-67	6.89	3,500	1977	03-28-77	7.60	4,700
1968	05-14-68	13.49	25,400	1978	03-24-78	7.29	4,200
1969	12-28-68	11.47	15,700	1979	05-22-79	8.53	6,600
1970	04-17-70	8.90	7,500	1980	05-16-80	5.63	2,000
1971	10-23-70	4.32	920	1981	05-10-81	5.76	2,200
1972	12-09-71	12.15	18,800	1982	10-18-81	10.93	13,600

07249400 James Fork near Hackett, Arkansas

Location.--Lat 35° 09'45", Long 94° 24'25", in NW 1/4 NW 1/4 sec.34, T.6 N., R.32 W., on downstream side of bridge on State Highway 45, 1.7 mi south of Hackett, 2 mi downstream from Elder Branch, and 3.6 mi upstream from Arkansas-Oklahoma State line.

Drainage area.--147 mi^2.

Gage.--Recording. Datum of gage is 459.71 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 ft^3/s.

Bankfull stage.--20 ft.

Remarks.--Only annual peaks are shown.

07249400 James Fork near Hackett, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1958	05-02-58	21.40	10,300	1976	04-20-76	13.96	2,270
1959	03-21-59	14.68	2,180	1977	03-28-77	20.31	6,300
1960	05-19-60	21.30	9,700	1978	03-24-78	18.88	4,570
1961	07-15-61	21.84	13,600	1979	05-22-79	20.84	7,650
1962	11-21-61	20.69	6,900	1980	05-16-80	17.31	3,510
1963	11-07-62	13.19	1,780	1981	06-06-81	16.88	3,310
1964	03-09-64	17.66	3,580	1982	05-14-82	21.19	12,000
1965	05-27-65	19.78	5,540	1983	12-03-82	20.45	6,630
1966	02-09-66	18.51	3,910	1984	05-27-84	16.00	3,150
1967	04-23-67	17.43	3,540	1985	10-21-84	21.15	8,900
1968	05-14-68	23.00	30,000	1986	11-27-85	20.82	10,700
1969	12-28-68	22.04	15,400	1987	03-17-87	20.29	6,240
1970	04-17-70	20.80	7,250	1988	12-26-87	20.05	5,710
1971	10-24-70	15.39	2,660	1989	03-22-89	20.69	7,240
1972	12-10-71	22.24	17,500	1990	05-03-90	21.92	14,300
1973	04-23-73	22.11	16,100	1991	04-14-91	21.40	4,920
1974	04-30-74	20.63	6,690	1992	10-29-91	23.06	8,410
1975	05-07-75	20.18	5,870	1993	05-10-93	22.90	7,810

07249650 Mountain Fork Creek near Evansville, Arkansas

Location.--Lat 35° 42'23", long 94° 28'57", in NE 1/4 SE 1/4 sec.22, T.12 N., R.33 W., on right bank 100 ft upstream from bridge on State Highway 59, 0.5 mi upstream from Indian Creek, and 6.2 mi south of Evansville.

Drainage area.--8.15 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 346 ft^3/s and by contracted-opening measurement at 2,390 ft^3/s and 5,120 ft^3/s.

Remarks.--Only annual peaks are shown.

07249650 Mountain Fork Creek near Evansville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	11-22-61	6.40	600	1972	07-13-72	9.05	2,350
1963	04-27-63	5.80	345	1973	04-22-73	9.72	3,020
1964	04-05-64	5.72	310	1974	11-24-73	8.08	1,620
1965	04-14-65	6.97	910	1975	11-04-74	8.34	1,800
1966	02-09-66	8.74	2,390	1976	04-20-76	8.68	2,070
1967	07-05-67	6.43	625	1977	03-27-77	7.84	1,460
1968	07-02-68	7.71	1,380	1978	06-19-78	7.91	1,500
1969	01-29-69	6.38	600	1979	05-04-79	8.09	1,620
1970	09-23-70	9.84	3,150	1980	06-19-80	5.66	290
1971	10-26-70	11.41	5,120	1981	05-31-81	7.69	1,360

07249950 Webber Creek Tributary near Cedarville, Arkansas

Location.--Lat 35° 36'00", long 94° 22'49", in SE 1/4 SE 1/4 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 mi north of Cedarville.

Drainage area.--0.34 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 24 ft^3/s and by culvert measurements at 187 ft^3/s, 205 ft^3/s, and 274 ft^3/s.

Remarks.--Only annual peaks are shown.

07249950 Webber Creek Tributary near Cedarville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	11-22-61	--	10e
1963	04-27-63	5.90	18
1964	05-11-64	6.41	83
1965	05-26-65	7.07	187
1966	02-09-66	6.70	122
1967	05-06-67	5.54	3
1968	04-19-68	7.30	205
1969	12-27-68	5.97	24
1970	04-25-70	6.74	120
1971	10-26-70	7.71	274
1972	12-10-71	6.34	60
1973	11-13-72	6.03	29
1974	11-24-73	7.38	220
1975	02-22-75	5.62	8
1976	05-13-76	5.69	10
1977	03-27-77	5.79	14
1978	05-07-78	6.12	37
1979	05-21-79	5.53	3
1980	03-24-80	5.77	14
1981	05-31-81	5.53	3
1982	07-08-82	5.88	18
1986	04-08-86	6.65	103
1987	03-17-87	5.92	40
1988	04-02-88	5.89	18
1989	05-19-89	6.28	51
1990	05-03-90	6.81	127
1991	04-13-91	5.78	14
1992	1992	5.52	10
1993	12-15-92	5.83	19

07250000 Lee Creek near Van Buren, Arkansas

Location.--Lat 35° 29'40", long 94° 26'56", in SE 1/4 sec.21, T.12 N., R.27 E., Indian Meridian, on right bank 300 ft west of Arkansas-Oklahoma State line, 3.2 mi downstream from Webbers Creek, 6 3/4 mi northwest of Van Buren, and at mile 7.8.

Drainage area.--426 mi^2.

Gage.--Nonrecording prior to June 1937; recording thereafter. Datum of gage is 408.04 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 55,000 ft^3/s.

Bankfull stage.--17 ft.

Remarks.--Only annual peaks are shown.

07250000 Lee Creek near Van Buren, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1931	02-08-31	20.50	27,700
1932	01-16-32	18.10	23,200
1933	05-14-33	22.30	32,200
1934	09-02-34	13.30	13,700
1935	06-17-35	27.00	57,700
1936	12-06-35	14.80	15,100
1943	05-10-43	27.00	57,700
1945	04-15-45	35.00	112,000
1950	05-10-50	27.20	58,900
1951	07-02-51	19.46	25,000
1952	04-12-52	15.02	15,000
1953	03-18-53	17.24	19,500
1954	05-02-54	15.34	15,600
1955	02-20-55	18.54	22,500
1956	04-29-56	14.02	13,000
1957	04-03-57	29.37	73,200
1958	07-13-58	22.32	35,900
1959	03-05-59	16.70	21,100
1860	05-06-60	30.30	80,600
1961	05-05-61	21.38	32,700
1962	11-22-61	12.33	11,300
1963	04-27-63	7.89	5,200
1964	05-11-64	15.72	18,000
1965	05-09-65	11.17	9,440

07250000 Lee Creek near Van Buren, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1966	02-09-66	25.38	49,600
1967	05-06-67	11.25	9,520
1968	03-20-68	16.81	20,400
1969	12-27-68	16.32	19,300
1970	10-13-69	17.70	22,400
1971	10-27-70	20.57	30,000
1972	12-10-71	22.71	37,500
1973	04-22-73	23.89	42,600
1974	11-24-73	29.36	73,200
1975	11-04-74	20.50	29,800
1976	04-20-76	22.48	37,200
1977	03-27-77	20.54	30,200
1978	03-24-78	18.93	25,500
1979	04-11-79	15.61	17,800
1980	03-24-80	6.68	3,860
1981	05-31-81	14.37	15,200
1982	01-31-82	18.64	24,800
1983	12-03-82	12.88	12,300
1984	05-07-84	11.61	10,200
1985	03-30-85	20.01	28,400
1986	11-19-85	25.95	52,800
1987	10-01-86	21.71	34,300
1988	12-25-87	17.97	20,400
1989	02-13-89	20.07	28,600
1990	05-03-90	27.16	41,800
1991	04-14-91	12.46	10,600
1992	11-01-91	10.01	7,260

07252000 Mulberry River near Mulberry, Arkansas

Location.--Lat 35° 34’37”, long 94° 00’55”, in SE 1/4 SW 1/4 sec.31, T.11 N., R.28 W., on left bank 0.6 mi upstream from Mill Creek, 5.7 mi north of Mulberry, and at mile 11.3.

Drainage area.--373 mi^2.

Gage.--Nonrecording prior to April 19, 1940, at site 500 ft downstream; recording thereafter. Datum of gage is 432.75 ft above sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 39,000 ft^3/s and extended on basis of velocity-area study.

Bankfull stage.--18 ft.

Remarks.--Only annual peaks are shown.

07252000 Mulberry River near Mulberry, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	12-00-27	22.00	59,000
1939	04-17-39	11.20	12,600
1940	04-11-40	8.60	8,010
1941	01-24-41	8.32	7,110
1942	04-08-42	12.89	17,500
1943	05-10-43	18.23	40,100
1944	04-08-44	12.82	17,600
1945	04-15-45	19.70	47,800
1946	05-25-46	14.93	25,700
1947	05-20-47	15.40	27,600
1948	01-01-48	12.04	16,100
1949	01-24-49	18.61	42,100
1950	01-04-50	13.90	22,000
1951	02-18-51	14.55	24,500
1952	04-12-52	11.63	15,000
1953	03-18-53	15.17	26,800
1954	04-16-54	8.33	7,320
1955	03-21-55	13.28	19,000
1956	05-15-56	11.68	15,300
1957	04-03-57	15.70	28,800
1958	05-09-58	9.88	11,100
1959	11-15-58	7.06	5,240
1960	05-06-60	12.78	18,300
1961	05-19-61	15.61	28,400
1962	11-22-61	11.34	14,300
1963	10-16-62	5.03	2,530
1964	04-05-64	13.98	22,300
1965	02-09-65	7.78	6,420
1966	02-09-66	17.85	38,200
1967	05-14-67	8.48	7,640
1968	03-20-68	13.78	21,600
1969	01-30-69	17.93	38,800
1970	04-25-70	13.12	19,300
1971	05-11-71	11.02	13,600
1972	12-10-71	20.51	52,200
1973	04-22-73	17.68	37,600
1974	11-25-73	21.34	56,800
1975	11-10-74	9.28	9,540

07252000 Mulberry River near Mulberry, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1976	04-20-76	8.23	7,390
1977	03-28-77	14.77	25,200
1978	03-24-78	15.02	26,100
1979	07-28-79	10.00	11,200
1980	04-08-80	4.48	2,130
1981	06-06-81	7.00	5,250
1982	01-31-82	17.56	37,000
1983	12-03-82	23.66	70,200
1984	05-07-84	11.89	15,700
1985	02-23-85	21.90	59,700
1986	11-19-85	19.79	48,200
1987	03-17-87	13.06	19,300
1988	12-26-87	11.74	15,400
1989	02-13-89	13.63	21,100
1990	05-03-90	21.48	57,300
1991	04-18-91	9.14	9,250
1992	10-29-91	13.85	21,800
1993	01-04-93	18.06	39,400

07252200 North Fork White Oak Creek Tributary near Watalula, Arkansas

Location.--Lat 35° 35’43”, long 93° 50’50”, in SE 1/4 NE 1/4 sec.27, T.11 N., R.27 W., on left bank 42 ft upstream from culvert on State Highway 23, 2.2 mi northwest of Watalula, and 2.4 mi upstream from mouth.

Drainage area.--0.46 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 51 ft^3/s and by culvert measurements at 332 ft^3/s and 729 ft^3/s.

Remarks.--Only annual peaks are shown.

07252200 North Fork White Oak Creek Tributary near Watalula, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	6.30	125
1962	08-01-62	5.93	78
1963	10-13-62	6.51	156
1964	04-03-64	10.66	729
1965	05-09-65	6.46	148
1966	02-09-66	6.01	86
1967	09-17-67	5.69	51
1968	07-19-68	7.66	332
1969	01-29-69	6.04	90
1970	04-24-70	7.64	331
1971	05-24-71	6.36	135
1972	12-10-71	7.57	320
1973	04-22-73	6.75	195
1974	11-24-73	6.94	225
1975	09-20-75	5.84	65
1976	03-08-76	6.03	90
1977	07-02-77	6.48	152
1978	03-24-78	6.59	182
1979	07-28-79	6.50	155
1980	03-24-80	6.44	147
1981	06-16-81	6.80	200
1982	06-16-82	6.43	145
1983	12-03-82	7.17	257
1984	1984	--	1
1985	03-30-85	7.68	330
1986	11-19-85	6.70	177

07252500 Sixmile Creek subwatershed No. 6 near Chismville, Arkansas

Location.--Lat 35° 12’30”, long 93° 52’55”, in NW 1/4 sec.9, T.6 N., R.27 W., in upstream slope of earth dam on Sixmile Creek, 3.3 mi southeast of Chismville.

Drainage area.--4.23 mi^2.

Gage.--Recording and concrete drop inlet. Datum of gage is 576.67 ft above sea level (levels by Soil Conservation Service).

Stage-discharge relation.--Outflow defined by current-meter measurements and by critical -depth computations at 587 ft^3/s. 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).

07252500 Sixmile Creek subwatershed No. 6 near Chismville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	--	1,610	1963	03-16-63	--	197
1956	07-23-56	--	351	1964	05-11-64	--	1,050
1957	04-27-57	--	1,320	1965	05-26-65	--	944
1958	11-17-57	--	1,420	1966	02-09-66	--	735
1959	03-21-59	--	274	1967	08-04-67	--	470
1960	11-04-59	--	1,100	1968	05-13-68	--	1,930
1961	05-04-61	--	1,730	1969	12-21-68	--	1,500
1962	11-22-61	--	437	1970	04-17-70	--	666

07254000 Sixmile Creek subwatershed No. 5 near Chismville, Arkansas

Location.--Lat 35° 13’45”, long 93° 54’50”, in N 1/2 sec.6, T.6 N., R.27 W., in upstream slope of earth dam on Little Caney Creek. 1.7 mi northeast of Chismville.

Drainage area.--2.76 mi^2.

Gage.--Recording and concrete drop inlet. Datum of gage is 475.83 ft above sea level (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).

07254000 Sixmile Creek subwatershed No. 5 near Chismville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	--	783	1964	05-11-64	--	397
1956	02-17-56	--	147	1965	05-26-65	--	714
1957	04-03-57	--	832	1966	05-18-66	--	448
1958	07-12-58	--	705	1967	05-06-67	--	77
1959	03-21-59	--	75	1968	05-13-68	--	852
1960	05-05-60	--	646	1969	12-27-68	--	617
1961	05-05-61	--	1,070	1970	04-17-70	--	396
1962	11-22-61	--	145	1971	11-08-70	--	103
1963	10-14-62	--	78	1972	12-10-71	--	640

07254500 Sixmile Creek subwatershed No. 2near Caulksville, Arkansas

Location.--Lat 35° 15’49”, long 93° 49’52”, in SE 1/4 NE 1/4 sec.23, T.7 N., R.27 W., in upstream slope of earth dam on Shaver Creek, 3.2 mi southeast of Caulksville.

Drainage area.--5.81 mi^2.

Gage.--Recording and concrete drop inlet. Datum of gage is 490.00 ft above sea level (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).

07254500 Sixmile Creek subwatershed No. 2 near Caulksville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	--	1,790	1963	10-14-62	--	404
1956	02-17-56	--	266	1964	05-11-64	--	1,120
1957	04-27-57	--	1,280	1965	11-19-64	--	792
1958	05-02-58	--	1,010	1966	02-09-66	--	1,110
1959	06-11-59	--	813	1967	08-04-67	--	395
1960	11-04-59	--	755	1968	05-13-68	--	2,470
1961	05-05-61	--	1,740	1969	06-24-69	--	1,180
1962	11-22-61	--	353	1970	04-19-70	--	626

07255100 Sixmile Creek subwatershed No. 23 near Branch, Arkansas

Location.--Lat 35° 21’22”, long 93° 59’00”, in NE 1/4 SW 1/4 sec.21, T.8 N., R.28 W., in upstream slope of earth dam on Kings Creek, 3/4 mi upstream from mouth, and 3.9 mi northwest of Branch.

Drainage area.--4.49 mi^2.

Gage.--Recording and concrete drop inlet. Datum of gage is 400.00 ft above sea level (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 interval).

07255100 Sixmile Creek subwatershed No. 23 near Branch, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-18-56	--	496	1964	05-11-64	--	970
1957	04-04-57	--	1,560	1965	05-26-65	--	789
1958	07-13-58	--	1,620	1966	02-09-66	--	809
1959	03-21-59	--	384	1967	05-06-67	--	169
1960	11-04-59	--	2,520	1968	05-13-68	--	1,940
1961	12-10-60	--	519	1969	12-27-68	--	902
1962	11-22-61	--	675	1970	04-24-70	--	1,050
1963	11-07-62	--	106				

07256000 Hurricane Creek near Caulksville, Arkansas

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.f27 W., on downstream side of bridge on State Highway 23, 1.0 mi upstream from Garner Creek, 3.2 mi north of Caulksville, and at mile 4.

Drainage area.--53.0 mi^2.

Gage.--Recording. Datum of gage is 352.60 ft above sea level (Soil Conservation Service benchmark). 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 ft^3/s. 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.

07256000 Hurricane Creek near Caulksville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	15.32	5,400	1963	03-16-63	4.37	436
1956	02-17-56	13.65	1,980	1964	05-11-64	13.52	3,610
1957	04-03-57	14.54	6,740	1965	05-26-65	13.40	3,380
1958	05-09-58	11.62	2,660	1966	02-09-66	13.14	3,080
1959	07-22-59	9.74	1,680	1967	05-06-67	8.29	928
1960	11-04-59	15.71	9,050	1968	05-14-68	14.15	4,250
1961	05-06-61	11.97	2,370	1969	12-27-68	14.11	4,200
1962	11-22-61	12.62	2,800	1970	04-25-70	13.28	3,260

07256500 Spadra Creek at Clarksville, Arkansas

Location.--Lat 35° 28’06” long 93° 27’46”, in NE 1/4 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 mi^2.

Gage.--Recording. Datum of gage is 351.99 ft above sea level. Prior to October 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 ft^3/s.

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.

07256500 Spadra Creek at Clarksville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1926	12-00-26	15.70	14,500	1965	02-09-65	5.61	2,300
1949	01-24-49	15.50	14,000	1966	02-09-66	10.36	8,280
1953	03-17-53	10.84	7,160	1967	07-05-67	6.14	1,940
1954	01-20-54	11.70	7,600	1968	05-13-68	12.43	9,130
1955	03-20-55	11.32	7,130	1969	01-29-69	11.26	7,260
1956	02-17-56	7.64	3,120	1970	04-25-70	12.36	9,020
1957	04-03-57	15.58	15,300	1971	06-02-71	9.01	4,280
1958	05-09-58	11.15	6,880	1972	12-10-71	16.54	18,000
1959	06-12-59	8.78	3,570	1973	04-22-73	16.45	17,500
1960	05-06-60	9.26	4,100	1974	06-05-74	19.93	27,400
1961	05-05-61	6.77	4,540	1975	09-19-75	11.74	8,020
1962	11-22-61	5.92	2,930	1976	12-29-75	2.96	325
1963	03-16-63	3.51	852	1977	09-29-77	10.96	6,780
1964	05-11-64	8.03	5,320	1978	11-02-77	6.20	1,980

07256500 Spadra Creek at Clarksville, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1979	04-01-79	10.02	5,470
1980	05-17-80	8.13	3,460
1981	05-31-81	4.55	925
1982	01-31-82	4.95	1,140
1983	12-02-82	14.73	13,400
1984	05-07-84	8.57	3,850
1985	02-23-85	7.35	2,860
1986	11-19-85	7.90	3,280
1987	03-17-87	6.57	2,200
1988	12-25-87	9.88	8,000
1989	02-15-89	9.14	6,700
1990	05-03-90	14.62	11,500
1991	04-18-91	10.80	6,190
1992	10-29-91	14.59	13,700
1993	01-04-93	14.55	13,600

07257000 Big Piney Creek near Dover, Arkansas

Location.--Lat 35° 32’58”, long 93° 09’30”, in SW 1/4 NE 1/4 sec.6 T.10 N., R.20 W., on left bank 7.2 mi downstream from Indian Creek, 10.4 mi north of Dover, and at mile 28.0.

Drainage area.--274 mi^2.

Gage.--Recording. Datum of gage is 487.66 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 45,000 ft^3/s and by indirect measurement at 111,000 ft^3/s.

Remarks.--Only annual peaks are shown. Published as “Piney Creek” prior to 1968.

07257000 Big Piney Creek near Dover, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1949	01-24-49	25.60	55,800
1951	02-20-51	14.95	17,600
1952	04-12-52	13.34	15,800
1953	03-17-53	17.04	25,300
1954	05-02-54	16.03	24,700
1955	03-20-55	17.06	25,400
1956	02-01-56	12.44	13,400
1957	04-03-57	20.37	34,500
1958	08-01-58	12.80	14,500
1959	11-16-58	13.75	17,200
1960	05-06-60	14.10	18,100
1961	05-06-61	17.21	25,800
1962	11-22-61	10.09	8,120
1963	03-16-63	7.69	4,390
1964	05-11-64	16.02	24,700
1965	02-09-65	9.75	7,520
1966	02-09-66	25.27	54,000
1967	05-14-67	10.08	8,080
1968	03-20-68	16.38	23,600
1969	01-30-69	21.15	37,000
1970	04-25-70	15.07	21,400
1971	05-11-71	8.47	5,360
1972	12-10-71	28.70	74,600
1973	04-22-73	21.26	35,800
1974	11-25-73	26.11	57,600
1975	04-25-75	12.22	11,200
1976	06-23-76	9.35	6,480
1977	03-28-77	17.96	26,200
1978	03-24-78	12.61	12,000
1979	03-30-79	13.16	13,200
1980	05-17-80	14.78	17,200
1981	06-16-81	7.76	4,400
1982	01-30-82	19.15	29,900
1983	12-03-82	33.87	111,000
1984	05-07-84	16.19	21,000
1985	02-23-85	23.53	46,000
1986	04-08-86	13.13	13,200
1987	03-17-87	10.90	8,870
1987	12-25-87	14.95	17,600
1989	02-18-89	14.67	16,800
1990	05-03-90	26.12	59,300
1991	04-14-91	12.69	12,600
1992	10-29-91	19.20	29,800

07257060 Mikes Creek Tributary near Ozone, Arkansas

Location.--Lat 35° 37'25", long 93° 26'02", in NE 1/4 SE 1/4 sec.9, T.11 N., R.23 W., on right bank 5 ft upstream from culvert on State Highway 21, 0.1 mi upstream from mouth, and 1.4 mi southeast of Ozone.

Drainage area.--0.20 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by culvert measurements at 24 ft^3/s, 52 ft^3/s, 77 ft^3/s, and 122 ft^3/s.

Remarks.--Only annual peaks are shown.

07257060 Mikes Creek Tributary near Ozone, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1964	05-10-64	4.15	52	1974	06-05-74	10.98	166
1965	06-13-65	4.29	55	1975	03-28-75	2.99	24
1966	02-09-66	5.23	77	1976	03-09-76	2.43	13
1967	07-05-67	2.93	25	1977	09-29-77	5.01	72
1968	04-19-68	3.89	47	1978	03-24-78	3.33	32
1969	01-29-69	4.08	51	1979	03-30-79	3.65	40
1970	04-24-70	4.25	55	1980	05-16-80	3.89	47
1971	05-23-71	3.07	27	1981	06-16-81	3.24	30
1972	12-10-71	7.80	122	1982	03-14-82	2.86	21
1973	04-22-73	7.63	119	1983	12-03-82	9.05	141

07257100 Minnow Creek Tributary near Hagerville, Arkansas

Location.--Lat 35° 30'11", long 93° 21'56" in SE 1/4 SE 1/4 sec.19, T.10 N., R,22 W., on left bank 15 ft upstream from culvert on State Highway 123, 0.2 mi upstream from mouth, and 2.6 mi southwest of Hagerville.

Drainage area.--0.19 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from June 1969 to November 1974.

Stage-discharge relation.--Defined by culvert measurements below 176 ft^3/s.

Remarks.--Only annual peaks are shown.

07257100 Minnow Creek Tributary near Hagerville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	1962	--	10	1978	05-08-78	3.66	21
1963	06-16-63	3.76	36	1979	03-20-79	4.38	51
1964	05-10-64	4.18	54	1980	05-16-80	5.20	93
1965	11-19-64	3.68	33	1981	05-21-81	3.54	17
1966	02-09-66	4.95	87	1982	03-14-82	3.40	12
1967	07-05-67	5.08	94	1983	12-03-82	4.74	68
1968	05-13-68	6.32	157	1984	05-08-84	3.72	34
1969	12-28-68	4.06	48	1985	11-25-84	3.78	36
1970	04-24-70	6.62	176	1986	11-27-85	4.25	56
1971	05-23-71	4.21	27	1987	03-17-87	3.38	20
1972	12-10-71	5.53	102	1988	03-18-88	3.32	18
1973	04-22-73	6.22	150	1989	02-15-89	4.01	46
1974	06-05-74	6.00	140	1990	05-03-90	4.14	51
1975	11-10-74	3.97	32	1991	04-13-91	4.71	75
1976	03-09-76	3.59	19	1992	10-29-91	5.49	--
1977	09-29-77	4.92	78				

07257200 Little Piney Creek near Lamar, Arkansas

Location.--Lat 35° 26'54", long 93° 20'17", in SW 1/4 SE 1/4 sec.9, T.9 N., R.22 W., on left bank 600 ft upstream from State Highway 329 bridge, 3.0 mi east of Lamar.

Drainage area.--154 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07257200 Little Piney Creek near Lamar, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1979	04-01-79	12.81	8,970
1980	05-17-80	13.37	9,800
1981	05-31-81	6.40	1,820
1982	01-31-82	13.45	9,920
1983	12-03-82	15.35	13,300
1984	05-07-84	13.33	9,740
1985	02-23-85	14.45	11,600
1986	11-27-85	11.43	7,060
1987	03-17-87	10.50	5,900
1988	12-25-87	12.88	9,070
1989	02-15-89	13.70	10,300
1990	05-03-90	14.87	12,400
1991	04-13-91	11.60	7,280
1992	10-29-91	13.75	10,400
1993	01-04-93	13.15	9,460

07257500 Illinois Bayou near Scottsville, Arkansas

Location.--Lat 35° 27'58", long 93° 02'28", in SW 1/4 sec.32, T.10 N., R.19 W., on downstream side of bridge on county road, 1 1/4 mi north of Scottsville, 3 mi downstream from North Fork Illinois Bayou, and at mile 28.6.

Drainage area.--241 mi^2.

Gage.--Nonrecording prior to March 25, 1948, and after September 30, 1970; recording from March 25, 1948, to September 30, 1970. Datum of gage is 447.54 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 ft^3/s and contracted-opening measurement at 130,000 ft^3/s.

Remarks.--Only annual peaks are shown.

07257500 Illinois Bayou near Scottsville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1943	05-10-43	24.60	77,000
1948	01-01-48	15.00	18,600
1949	01-24-49	24.60	77,000
1950	01-04-50	15.30	19,400
1951	02-20-51	14.20	15,900
1952	03-10-52	14.08	15,600
1953	03-18-53	14.76	17,800
1954	05-02-54	16.48	23,500
1955	03-20-55	14.75	17,300
1956	02-17-56	12.84	11,000
1957	04-03-57	17.90	24,600
1958	11-13-57	13.32	10,900
1959	11-17-58	14.90	15,300
1960	11-04-59	17.70	24,000
1961	05-06-61	19.18	29,500
1962	02-26-62	13.43	11,100
1963	03-16-63	11.05	6,000
1964	03-09-64	16.55	20,500
1965	03-29-65	12.10	8,200
1966	02-09-66	18.14	25,300
1967	05-14-67	11.27	6,510
1968	03-20-68	17.22	22,400
1969	01-29-69	19.40	30,300
1970	04-19-70	18.00	25,000
1971	10-27-70	11.15	6,280
1972	12-10-71	20.45	35,000
1973	04-23-73	21.65	42,000
1974	11-25-73	19.80	32,000
1975	09-19-75	13.20	10,600
1976	06-23-76	10.10	4,190
1977	03-28-77	21.85	43,900
1978	03-24-78	13.68	7,320
1979	03-30-79	17.40	23,000
1980	12-23-79	15.50	17,100
1981	06-16-81	9.77	3,590
1982	01-30-82	17.72	24,000
1983	12-03-82	27.49	130,000
1984	05-07-84	14.14	13,100

07257500 Illinois Bayou near Scottsville, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1985	02-23-85	16.95	21,600
1986	04-08-86	15.41	16,800
1987	02-16-87	12.30	8,600
1988	03-03-88	13.25	10,800
1989	02-15-89	16.60	20,500
1990	05-30-90	17.79	24,300
1991	04-14-91	14.07	12,900
1992	10-29-91	14.96	15,500
1993	01-04-93	18.17	25,600

07257700 McCoy Creek near Dover, Arkansas

Location.--Lat 35° 25'04", long 93° 05'09", in SE 1/4 NE 1/4 sec.23, T.9 N., R.20 W., on right wingwall 2 ft downstream from bridge on State Highway 27, 0.6 mi upstream from small tributary, and 2 mi northeast of Dover.

Drainage area.--7.05 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 430 ft^3/s and by contracted-opening measurements at 4,750 ft^3/s.

Remarks.--Only annual peaks are shown.

07257700 McCoy Creek near Dover, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	7.05	1,080
1962	02-25-62	6.30	750
1963	1963	--	160e
1964	04-03-64	8.61	1,950
1965	01-09-65	5.34	420
1966	02-09-66	6.40	690
1967	05-14-67	5.39	430
1968	05-13-68	11.79	4,750
1969	12-27-68	7.93	1,550
1970	04-19-70	7.26	1,210
1971	10-13-70	4.73	220
1972	12-10-71	7.27	1,240
1973	04-22-73	7.75	1,400
1974	12-04-73	7.75	1,400
1975	03-28-75	8.14	1,640
1976	04-19-76	4.36	130
1977	03-28-77	10.05	3,060
1978	05-08-78	5.64	530
1979	03-30-79	6.01	675
1980	12-24-79	5.79	590
1981	05-26-81	4.39	132
1982	01-30-82	4.48	155
1983	12-03-82	11.14	4,100
1984	1984	--	1
1985	10-25-84	7.87	1,500
1986	1986	3.564	11

07258200 Pack Saddle Creek Tributary near Waldron, Arkansas

Location.--Lat 34° 58'18", long 94° 05'42", in SE 1/4 SE 1/4 sec.29, T.4 N., R.29 W on left bank 15 ft upstream from culvert on U.S. Highway 71, 0.4 mi upstream from small tributary, 0.5 mi upstream from mouth, and 5.2 mi north of Waldron.

Drainage area.--0.92 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from June 1969 to September 1973.

Stage-discharge relation.--Defined by current-meter measurements below 260 ft^3/s and by culvert measurement at 689 ft^3/s.

Remarks.--Only annual peaks are shown.

07258200 Pack Saddle Creek Tributary near Waldron, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	5.79	244
1962	11-22-61	4.34	123
1963	10-20-62	4.05	102
1964	03-09-64	3.85	89
1965	02-09-65	5.04	180
1966	04-23-66	5.14	188
1967	04-13-67	4.10	110
1968	05-13-68	9.42	689
1969	07-26-69	8.95	622
1970	04-19-70	3.87	90

07258200 Pack Saddle Creek Tributary near Waldron, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1971	01-03-71	3.30	52
1972	12-10-71	5.58	228
1973	04-22-73	6.99	370
1974	06-07-74	4.17	110
1975	05-08-75	6.29	290
1976	09-20-76	3.50	66
1977	03-28-77	5.29	200
1978	03-24-78	5.54	220
1979	11-16-78	5.81	245
1980	05-16-80	4.39	127
1981	07-30-81	4.66	150
1982	10-18-81	4.56	140
1983	12-03-82	5.70	238
1984	05-02-84	5.39	210
1985	10-21-84	9.42	689
1986	11-26-85	5.48	218
1987	03-17-87	4.59	143
1988	12-27-87	5.35	207
1989	02-03-89	4.28	119

07258500 Petit Jean River near Booneville, Arkansas

Location.--Lat 35° 06’25”, long 93° 55’25”, in NW 1/4 NW 1/4 sec.18, T.5 N., R.27 W., on right bank at downstream side of bridge on State Highway 23, 0.5 mi downstream from Fletcher Creek, 2 1/4 mi south of Booneville, and at mile 102.3.

Drainage area.--241 mi^2.

Gage.--Nonrecording prior to May 24, 1939; recording from May 24, 1939, to September 30, 1984. Datum of gage is 423.39 ft above sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 21,000 ft^3/s and extended by slope-area and contracted-opening measurements made by Corps of Engineers.

Bankfull stage.--19 ft.

Remarks.--Only annual peaks are shown. Published as Petit Jean “Creek” prior to 1966.

07258500 Petit Jean River near Booneville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	04-16-39	23.42	43,200
1940	04-29-40	10.45	2,580
1941	01-01-41	18.81	7,640
1942	04-08-42	19.43	7,360
1943	05-10-43	22.59	32,300
1944	05-02-44	17.12	5,930
1945	05-15-45	21.61	20,100
1946	04-24-46	19.58	8,650
1947	12-10-46	21.24	16,400
1948	12-31-47	20.92	14,500
1949	01-25-49	22.40	29,800
1950	02-12-50	21.40	18,100
1951	02-15-51	19.43	8,290
1952	04-12-52	20.49	11,500
1953	03-17-53	20.99	15,100
1954	05-02-54	15.47	5,190
1955	03-20-55	20.58	12,900
1956	02-17-56	16.72	6,240
1957	04-03-57	20.94	13,700
1958	05-02-58	21.13	15,700
1959	03-21-59	10.44	3,130
1960	05-20-60	21.14	15,700
1961	07-15-61	21.70	19,100
1962	11-22-61	20.32	11,100
1963	11-07-62	9.04	2,510
1964	03-09-64	15.86	5,780
1965	02-09-65	20.06	10,700
1966	02-09-66	20.40	12,000
1967	04-23-67	17.58	6,840
1968	05-14-68	22.21	27,300
1969	07-26-69	21.85	22,600
1970	04-17-70	20.59	11,800
1971	11-09-70	12.67	4,040
1972	12-10-71	22.48	30,800
1973	04-23-73	21.68	20,500
1974	04-30-74	20.81	12,800
1975	03-28-75	21.00	13,800
1976	03-09-76	14.52	5,030
1977	03-28-77	21.19	15,200
1978	03-24-78	16.76	6,340
1979	04-01-79	20.82	13,100
1980	05-16-80	17.24	6,600
1981	05-31-81	15.14	5,360
1982	01-31-82	21.00	15,000

07258500 Petit Jean River near Booneville, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1983	12-03-82	22.03	19,900
1984	05-03-84	15.61	5,620
1985	10-21-84	22.03	11,100
1986	11-27-85	21.46	16,900
1987	03-18-87	20.65	13,500
1988	12-26-87	21.22	15,900
1989	02-16-89	20.48	12,800
1990	05-03-90	22.09	20,700
1991	04-14-91	19.09	8,400
1992	10-29-91	19.99	11,000
1993	01-04-93	21.09	15,400

07260000 Dutch Creek at Waltreak, Arkansas

Location.--Lat 34° 59’15”, long 93° 36’45”, in SE 1/4 NW 1/4 sec.24, T.4 N., R.25 W., on left bank 1/4 mi north of Waltreak and at mile 21.0.
Drainage area.--81.4 mi^2.
Gage.--Crest-stage gage. Recording prior to September 1975. Datum of gage is 371.48 ft above sea level (levels by Corps of Engineers).
Stage-discharge relation.--Defined by current-meter measurements.
Bankfull stage.--17 ft.
Remarks.--Only annual peaks are shown.

07260000 Dutch Creek at Waltreak, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	1927	19.50	14,600
1946	02-13-46	17.42	11,400
1947	12-12-46	16.66	10,100
1948	01-01-48	18.12	13,000
1949	01-24-49	18.45	13,700
1950	07-23-50	16.56	10,100
1951	02-15-51	10.76	3,140
1952	04-22-52	17.40	11,100
1953	11-25-52	16.56	9,160
1954	05-02-54	16.46	9,700
1955	03-21-55	12.81	4,620
1956	02-17-56	11.39	3,530
1957	04-03-57	15.04	7,270
1958	05-02-58	12.80	4,890
1959	03-26-59	14.88	7,130
1960	05-20-60	19.36	14,300
1961	12-11-60	14.24	6,220
1962	11-22-61	10.94	3,220
1963	03-19-63	11.36	3,640
1964	05-10-64	13.04	5,070
1965	02-09-65	12.42	4,530
1966	04-24-66	14.90	6,920
1967	07-29-67	11.97	4,140
1968	05-14-68	17.58	10,300
1969	07-26-69	22.38	24,500
1970	04-19-70	16.07	8,200
1971	10-27-70	9.26	2,100
1972	12-10-71	19.16	13,700
1973	05-01-73	16.99	9,390
1974	06-07-74	16.44	8,650
1975	03-28-75	13.95	5,970
1976	03-09-76	6.61	770
1977	03-27-77	17.20	9,700
1978	05-08-78	9.39	2,260
1979	04-01-79	17.02	9,430
1980	05-16-80	10.69	3,130
1981	06-06-81	9.43	2,290
1982	01-30-82	11.25	3,560
1983	12-03-82	20.75	18,400
1984	05-02-84	12.12	4,280
1985	10-29-84	19.66	15,000
1986	11-27-85	18.12	11,300
1987	04-23-87	14.82	6,800
1988	12-26-87	13.10	5,160
1989	02-15-89	14.73	6,740
1990	05-03-90	11.55	3,800
1991	04-13-91	14.02	6,030
1992	10-29-91	12.97	5,040
1993	12-15-92	14.29	6,300

07260500 Petit Jean River at Danville, Arkansas

Location.--Lat 35° 03’33”, long 93° 23’44”, in NW 1/4 SE 1/4 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 mi upstream from Spring Creek, and 0.6 mi downstream from Dutch Creek.

Drainage area.--764 mi^2.

Gage.--Nonrecording prior to July 13, 1939; recording gage and concrete control thereafter. Prior to August 25, 1934, at site 1,800 ft downstream at datum 0.25 ft higher. Datum of present gage is 303.33 ft above sea level. Since June 18, 1954, auxiliary water-stage recorder 2.2 mi downstream.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 ft^3/s.

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. Published as Petit Jean “Creek” prior to 1965.

07260500 Petit Jean River at Danville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1917	06-03-17	21.70	6,290	1933	05-17-33	23.60	11,300
1918	05-14-18	20.90	5,010	1934	03-27-34	22.90	8,970
1919	12-15-18	24.30	14,600	1935	06-18-35	30.20	58,300
1920	01-24-20	24.80	17,700	1936	12-09-35	23.30	9,560
1921	04-28-21	24.70	17,000	1937	01-23-37	24.30	13,000
1922	11-20-21	24.00	15,800	1938	02-18-38	29.30	45,400
1923	05-16-23	25.10	19,800	1939	04-17-39	31.82	70,800
1924	04-30-24	25.40	22,200	1940	04-30-40	19.30	3,380
1925	02-24-25	18.30	3,020	1941	01-04-41	22.18	6,350
1926	10-18-25	23.50	10,900	1942	11-01-41	24.18	13,000
1927	04-15-27	28.40	50,900	1943	05-12-43	28.12	35,500
1928	04-07-28	25.50	23,000	1944	05-04-44	24.02	12,200
1929	01-26-29	23.90	12,600	1945	03-31-45	29.50	45,700
1930	05-11-30	26.30	30,200	1946	02-14-46	25.05	13,400
1931	02-24-31	21.40	5,770	1947	12-13-46	24.99	13,400
1932	02-18-32	24.40	15,200				

07260630 Jake Creek near Chickalah, Arkansas

Location.--Lat 35° 07’49”, long 93° 20’19”, in SW 1/4 SE 1/4 sec.33, T.6 N. R.22 W., on left bank 30 ft upstream from culvert on State Highway 27, 0.6 mi northeast of Ranger, 1.6 mi upstream from small tributary, 2.2 mi upstream from mouth, and 4.2 mi southwest of Chickalah.

Drainage area.--1.85 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 75 ft^3/s and by culvert measurements below 2,200 ft^3/s.

Remarks.--Only annual peaks are shown

07260630 Jake Creek near Chickalah, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	7.56	495	1969	06-24-69	8.78	815
1962	02-23-62	4.84	98	1970	04-19-70	7.18	425
1963	02-28-63	5.21	136	1971	06-01-71	6.73	355
1964	03-09-64	6.57	324	1972	12-09-71	8.60	765
1965	03-29-65	7.31	450	1973	03-10-73	9.72	997
1966	02-09-66	6.88	375	1974	10-12-73	10.20	1,070
1967	05-06-67	7.49	480	1975	03-28-75	7.63	505
1968	03-20-68	8.16	675	1976	06-25-76	5.18	102

07260630 Jake Creek near Chickalah, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1977	03-28-77	7.09	410
1978	05-08-78	7.29	445
1979	05-22-79	8.37	695
1980	12-24-79	5.50	140
1983	12-03-82	14.58	2,200

07260673 West Fork Point Remove Creek near Hattieville, Arkansas

Location.--Lat 35° 19’25”, long 92° 52’22”, in NE 1/4 SE 1/4 sec.23, T.8 N., R.18 W., on right bank about 300 ft upstream from State Highway 247 bridge, 0.4 mi downstream from Hackers Creek, 5.5 mi northwest of Hattieville.

Drainage area.--222 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07260673 West Fork Point Remove Creek near Hattieville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1979	04-01-79	21.00	11,500
1980	12-24-79	14.22	2,430
1981	03-29-81	11.16	1,590
1982	03-14-82	18.50	4,860
1983	12-03-82	26.62	64,100
1984	05-07-84	15.02	2,550
1985	10-20-84	20.40	7,460
1986	11-27-85	18.18	4,540
1987	02-28-87	15.10	2,600
1988	12-25-87	18.38	4,460
1989	02-15-89	20.51	8,300
1990	03-08-90	19.75	6,340
1991	04-13-91	20.20	7,370
1992	11-19-91	19.44	5,800
1993	12-15-92	19.78	6,390

07260679 East Fork Point Remove Creek Tributary near Saint Vincent, Arkansas

Location.--Lat 35° 16’10”, long 92° 43’59”, in NE 1/4 NE 1/4 sec.7, T.7 N., R.16 W., Conway County, at culvert on State Highway 213, 2.2 mi south of Saint Vincent.

Drainage area.--0.09 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07260679 East Fork Point Remove Creek Tributary near Saint Vincent, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1967	06-24-67	6.00	32
1968	03-20-68	7.69	82
1969	12-27-68	5.88	26
1970	04-19-70	6.42	42
1971	04-23-71	6.20	35
1972	12-10-71	6.03	30
1973	04-22-73	7.10	64
1974	06-05-74	6.44	41
1975	03-28-75	6.79	54
1976	05-15-76	5.66	16
1977	03-28-77	6.13	31
1978	03-08-78	6.75	50
1979	05-12-79	6.06	24
1980	06-18-80	5.57	13
1981	05-10-81	6.34	37
1982	01-30-82	5.84	21
1983	12-03-82	8.24	102
1984	1984	--	1
1985	03-30-85	6.75	51
1986	11-27-85	6.26	39
1987	02-18-87	5.85	28
1988	07-12-88	5.62	19
1989	02-15-89	6.13	34
1990	03-08-90	6.71	51
1991	04-27-91	6.99	60
1992	11-20-91	7.76	60
1993	01-05-93	7.08	62

07261000 Cadron Creek near Guy, Arkansas

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

Drainage area.--169 mi^2.

Gage.--Recording. Datum of gage is 371.68 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 18,000 ft^3/s.

Remarks.--Only annual peaks are shown. Published as "North Fork Cadron Creek" prior to 1966.

07261000 Cadron Creek near Guy, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-21-55	13.58	6,010	1975	03-29-75	23.49	16,600
1956	02-18-56	16.05	8,070	1976	06-25-76	15.58	7,750
1957	08-14-57	24.95	18,600	1977	03-28-77	20.46	13,000
1958	05-03-58	18.19	10,400	1978	05-08-78	16.05	8,180
1959	02-14-59	12.58	5,430	1979	04-01-79	23.24	16,300
1960	06-27-60	14.14	6,640	1980	12-24-79	7.36	1,870
1961	05-06-61	21.82	15,400	1981	06-01-81	8.42	2,460
1962	02-27-62	13.27	5,990	1982	01-31-82	16.65	8,780
1963	03-11-63	10.11	3,570	1983	12-04-82	29.29	24,200
1964	03-10-64	18.78	10,700	1984	02-12-84	10.91	4,010
1965	09-22-65	16.72	9,120	1985	11-27-84	17.84	10,000
1966	04-24-66	19.07	11,900	1986	11-27-85	16.90	9,710
1967	12-28-66	9.79	3,360	1987	02-28-87	15.49	8,080
1968	05-14-68	23.68	16,900	1988	12-26-87	15.25	8,140
1969	01-30-69	20.35	12,700	1989	02-15-89	19.24	11,800
1970	04-25-70	18.33	10,600	1990	03-08-90	14.73	7,810
1971	10-27-70	11.89	4,720	1991	04-14-91	16.86	9,840
1972	12-10-71	16.20	8,330	1992	04-20-92	13.28	6,350
1973	04-20-73	21.26	13,900	1993	01-05-93	14.53	7,440
1974	12-04-73	18.59	10,800				

07261050 Pine Mountain Creek Tributary near Damascus, Arkansas

Location.--Lat 35° 23'19", long 92° 23'17", in NW 1/4 SW 1/4 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 mi upstream from mouth, and 2.0 mi northeast of Damascus.

Drainage area.--0.29 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from July 1969 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 41 ft^3/s and by culvert measurements below 573 ft^3/s.

Remarks.--Only annual peaks are shown.

07261050 Pine Mountain Creek Tributary near Damascus, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	10.22	270	1969	01-30-69	7.96	103
1962	02-26-62	6.93	39	1970	04-19-70	8.99	175
1963	03-11-63	6.87	37	1971	10-27-70	7.23	60
1964	03-09-64	7.39	70	1972	12-09-71	8.05	110
1965	09-21-65	7.53	82	1973	04-19-73	9.64	223
1966	04-23-66	7.54	82	1974	11-24-73	8.41	135
1967	07-06-67	6.64	24	1975	03-28-75	8.02	108
1968	09-23-68	7.65	85	1976	06-24-76	9.09	182

07261050 Pine Mountain Creek Tributary near Damascus, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1977	09-25-77	8.13	115	1980	10-31-79	7.40	67
1978	05-08-78	7.84	95	1981	02-10-81	8.25	125
1979	05-30-79	7.57	83	1983	12-03-82	13.50	573

07261300 Tan-a-hill Creek near Boles, Arkansas

Location.--Lat 34° 43’49”, long 94° 04’43”, in SW 1/4 NW 1/4 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 mi southwest of “y” City, 0.5 mile upstream from mouth, and 3.8 mi southwest of Boles.

Drainage area.--2.33 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 130 ft^3/s and by culvert measurements below 2,420 ft^3/s.

Remarks.--Only annual peaks are shown.

07261300 Tan-a-hill Creek near Boles, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	05-20-60	12.30	1,660	1971	10-26-70	7.85	700
1961	12-10-60	6.03	330	1972	12-10-71	12.58	1,960
1962	11-22-61	4.30	65	1973	10-31-72	13.08	2,420
1963	05-26-63	4.96	140	1974	06-08-74	13.50	3,100
1964	03-09-64	5.85	296	1975	03-28-75	9.22	820
1965	05-10-65	5.13	165	1976	03-08-76	4.99	122
1966	02-09-66	4.91	130	1977	03-28-77	7.39	605
1967	05-06-67	5.73	250	1978	03-24-78	5.11	145
1968	05-13-68	7.26	590	1979	04-01-79	7.87	700
1969	07-26-69	6.41	408	1980	12-24-79	5.74	250
1970	04-19-70	5.81	285	1981	07-30-81	6.57	440

07261500 Fourche LaFave River near Gravelly, Arkansas

Location.--Lat 34° 52’21”, long 93° 39’24”, in NW 1/4 NW 1/4 sec.34, T.3 N., R.25 W., on left bank at downstream side of bridge on State Highway 28, 1 mi downstream from Garner Creek, 1 3/4 mi east of Gravelly, 6.4 mi upstream from Gaffords Creek, and at mile 103.7.

Drainage area.--410 mi^2.

Gage.--Nonrecording prior to May 11, 1939; recording thereafter. Datum of gage is 410.50 ft above sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 47,000 ft^3/s and indirect measurement at 162,000 ft^3/s,

Bankfull stage.--24 ft.

Remarks.--Only annual peaks are shown.

07261500 Fourche LaFave River near Gravelly, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	04-16-39	27.00	38,000	1947	12-12-46	25.75	28,800
1940	04-29-40	10.32	4,630	1948	01-01-48	27.37	39,800
1941	05-09-41	9.35	3,970	1949	01-24-49	28.86	54,000
1942	10-31-41	25.87	29,100	1950	02-13-50	27.20	38,400
1943	05-20-43	15.61	11,300	1951	02-15-51	15.77	11,000
1944	05-02-44	20.03	17,000	1952	04-22-52	26.99	37,700
1945	03-29-45	27.01	38,000	1953	05-13-53	22.77	22,600
1946	02-14-46	24.77	25,200	1954	05-02-54	26.20	33,400

07261500 Fourche LaFave River near Gravelly, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-21-55	17.60	13,900	1974	06-07-74	29.23	57,600
1956	02-18-56	16.59	12,600	1975	03-29-75	25.44	30,000
1957	04-04-57	22.39	21,800	1976	03-09-76	11.84	6,660
1958	05-03-58	23.21	24,300	1977	03-28-77	27.82	43,700
1959	11-17-58	19.39	16,500	1978	03-24-78	13.42	8,490
1960	05-20-60	30.30	69,400	1979	04-01-79	25.20	29,500
1961	12-11-60	19.29	16,400	1980	12-24-79	18.24	14,800
1962	11-23-61	17.10	13,200	1981	06-07-81	16.46	12,400
1963	03-19-63	16.98	13,100	1982	01-31-82	24.55	27,200
1964	03-09-64	20.46	18,300	1983	12-03-82	32.45	162,000
1965	02-10-65	19.85	17,100	1984	05-03-84	17.29	15,000
1966	02-10-66	23.20	23,400	1985	10-25-84	27.08	44,100
1967	05-06-67	18.86	15,700	1986	11-27-85	28.08	45,600
1968	05-14-68	26.95	37,400	1987	03-18-87	24.11	31,400
1969	07-26-69	30.30	69,400	1989	02-15-89	23.48	29,500
1970	04-19-70	22.18	21,400	1990	05-03-90	28.85	58,500
1971	10-27-70	15.46	11,100	1991	04-14-91	27.45	47,600
1972	12-10-71	30.10	67,200	1992	10-29-91	18.00	17,300
1973	10-31-72	27.65	42,100	1993	12-15-92	25.56	37,500

07261800 Brogan Creek near Rover, Arkansas

Location.--Lat 34° 54’27”, long 93° 24’05”, in NW 1/4 SE 1/4 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 mi upstream from small tributary, and 2.7 mi south of Rover.

Drainage area.--1.04 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 18 ft^3/s and by culvert measurements at 239 ft^3/s and 1,010 ft^3/s.

Remarks.--Only annual peaks are shown. Published as “Fourche Lafave River tributary” prior to 1968.

07261800 Brogan Creek near Rover, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	05-27-63	4.50	100	1979	03-30-79	5.71	270
1964	03-09-64	5.41	239	1980	04-25-80	4.16	65
1965	05-27-65	5.40	239	1981	06-16-81	4.73	135
1966	04-23-66	9.59	1,010	1982	03-15-82	4.73	135
1967	05-19-67	5.67	270	1983	12-03-82	10.65	1,260
1968	05-13-68	6.39	380	1984	02-12-84	4.48	98
1969	01-30-69	5.08	180	1985	10-25-84	7.16	510
1970	04-19-70	4.81	145	1986	11-27-85	5.77	280
1971	08-26-71	5.67	265	1987	03-18-87	5.22	213
1972	12-09-71	9.03	890	1988	12-26-87	5.09	194
1973	03-10-73	4.78	140	1989	02-15-89	6.35	360
1974	06-07-74	6.66	425	1990	05-03-90	5.70	275
1975	03-28-75	6.46	390	1991	04-14-91	4.99	185
1976	03-08-76	4.21	70	1992	10-29-91	8.17	700
1977	03-28-77	5.67	265	1993	05-09-93	5.73	280
1978	08-30-78	4.13	60				

07263000 South Fourche Lafave River near Hollis, Arkansas

Location.--Lat 34° 54’41”, long 93° 03’21”, in SE 1/4 NE 1/4 sec.18, T.3 N., R.19 W., on left bank 0.8 mi upstream from Big Cove Creek, 4 mi northeast of Hollis, and at mile 5.6.

Drainage area.--210 mi^2.

Gage.--Recording. Datum of gage is 366.10 ft above sea level (Corps of Engineers benchmark).

Stage-discharge relation.--Defined by current-meter measurements below 35,000 ft^3/s and extended on basis of slope-area measurements at 47,000 ft^3/s and 54,000 ft^3/s.

Remarks.--Prior to March 1, 1978, records furnished by Corps of Engineers and reviewed by Geological Survey.

07263000 South Fourche Lafave River near Hollis, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1942	04-27-42	15.80	29,700
1943	12-27-42	13.29	18,500
1944	04-23-44	18.51	47,000
1945	03-30-45	19.47	54,400
1946	03-28-46	14.16	22,200
1947	12-12-46	13.96	21,300
1948	04-13-48	12.21	14,600
1949	01-24-49	16.04	30,700
1950	01-02-50	13.24	18,200
1951	02-15-51	11.38	12,300
1952	04-22-52	13.22	18,300
1953	12-04-52	15.51	28,200
1954	05-02-54	16.30	32,400
1955	03-20-55	13.38	19,100
1956	01-29-56	12.75	17,000
1957	04-03-57	14.56	24,000
1958	05-02-58	14.56	24,000
1959	02-14-59	11.01	11,800
1960	05-20-60	15.11	26,300
1961	12-11-60	10.78	11,200
1962	02-26-62	10.42	10,000
1963	07-16-63	15.63	28,700
1964	03-09-64	17.17	37,800
1965	09-22-65	13.19	19,000
1966	04-24-66	17.23	37,800
1967	05-31-67	11.66	14,600
1968	05-14-68	13.79	21,400
1969	01-30-69	17.10	37,200
1970	04-19-70	12.47	17,200
1971	10-27-70	12.79	18,200
1972	12-10-71	16.74	35,000
1973	03-02-73	11.85	15,300
1974	06-07-74	15.58	28,600
1975	03-28-75	15.92	30,300
1976	12-29-75	9.00	6,800
1977	03-28-77	13.26	19,800
1978	11-01-77	7.49	4,070
1979	12-03-78	15.03	27,600
1980	12-24-79	9.58	8,080
1981	06-07-81	8.75	6,320
1982	03-14-82	11.17	12,500
1983	12-03-82	24.55	94,000
1984	09-23-84	10.95	11,800
1985	10-20-84	15.77	31,300
1986	11-27-85	15.81	31,500
1987	03-17-87	9.18	7,180
1988	12-26-87	11.46	13,400
1989	03-29-89	10.94	12,500
1990	05-02-90	11.47	13,400
1991	04-27-91	11.69	14,200
1992	11-19-91	13.23	19,700
1993	01-04-93	12.61	17,300

07263100 Fourche Lafave River Tributary near Perryville, Arkansas

Location.--Lat 35° 01'14", long 92° 46'06", in NW 1/4 SW 1/4 sec.1, T.4 N., R.17 W., on right bank wingwall 25 ft upstream from culvert on State Highway 60, 1.6 mi upstream from mouth, and 2.2 mi northeast of Perryville.

Drainage area.--1.47 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 180 ft^3/s and by culvert measurements at 461 ft^3/s, 662 ft^3/s, and 1,150 ft^3/s.

Remarks.--Only annual peaks are shown.

07263100 Fourche Lafave River Tributary near Perryville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	1962	--	80e	1978	05-08-78	7.19	185
1963	1963	--	180e	1979	11-16-78	8.45	445
1964	03-09-64	8.42	461	1980	04-08-80	7.95	340
1965	02-11-65	6.79	128	1981	05-26-81	6.94	150
1966	04-23-66	9.51	662	1982	04-03-82	8.20	390
1967	09-07-67	6.55	100	1983	12-03-82	11.45	1,150
1968	05-13-68	7.86	320	1984	05-03-84	7.37	220
1969	01-30-69	7.90	330	1985	03-21-85	9.61	720
1970	03-03-70	8.15	380	1986	11-27-85	9.51	690
1971	08-03-71	6.45	90	1987	05-24-87	6.95	145
1972	12-09-71	8.48	450	1988	12-25-87	8.34	390
1973	04-22-73	7.76	300	1989	11-19-88	8.64	470
1974	12-04-73	7.61	270	1990	05-03-90	9.36	630
1975	03-28-75	9.72	700	1991	12-21-90	8.50	390
1976	06-25-76	8.99	553	1992	11-20-91	9.22	620
1977	09-28-77	7.55	255	1993	12-15-92	8.55	400

07263400 Little Maumelle River at Ferndale, Arkansas

Location.--Lat 34° 46'48", long 92° 33'15", in NW 1/4 SE 1/4 sec.25, T.2 N., R.15 W., on downstream left bank 25 ft downstream from bridge on county road, 0.2 mi northeast of Ferndale, and 0.4 mi downstream from Ferndale Creek.

Drainage area.--15.0 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 ft^3/s and by contracted-opening measurement at 9,430 ft^3/s.

Remarks.--Only annual peaks are shown.

07263400 Little Maumelle River at Ferndale, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	03-11-63	7.88	630	1975	03-28-75	11.22	3,000
1964	03-09-64	11.43	3,600	1976	06-24-76	9.38	1,250
1965	01-09-65	11.00	2,900	1977	10-25-76	10.59	2,270
1966	04-23-66	12.19	4,300	1978	09-13-78	13.00	5,600
1967	05-01-67	9.49	1,350	1979	04-23-79	11.27	3,000
1968	05-13-68	10.88	2,500	1980	05-22-80	7.28	540
1969	01-30-69	14.55	9,430	1981	05-26-81	11.50	3,280
1970	12-29-69	9.67	1,420	1982	05-06-82	11.55	3,330
1971	10-26-70	12.66	5,000	1983	12-03-82	11.18	2,800
1972	12-09-71	7.44	500	1984	05-03-84	8.32	750
1973	03-10-73	15.01	10,800	1985	03-30-85	6.75	51
1974	04-21-74	12.34	4,500	1986	11-27-85	9.56	1,330

Fourche Creek at Red Gate, Arkansas

Location.--Lat 34° 38’53”, long 92° 26’20”, in NE 1/4 SE 1/4 sec.7,
T.1 S., R.13 W., 30 ft downstream from bridge on State Highway 5, 0.5 mi east of Red Gate.

Drainage area.--32.4 mi^2.

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

Remarks.--Only annual peaks are shown.

Fourche Creek at Red Gate, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1979	03-03-79	10.81	2,350	1987	11-07-86	10.40	2,070
1981	05-17-81	11.83	3,350	1988	12-25-87	9.78	1,530
1982	04-02-82	12.40	3,900	1989	02-14-89	11.23	2,800
1983	12-03-82	12.15	3,550	1990	03-08-90	13.57	5,900
1984	05-03-84	11.10	2,600	1991	12-21-90	12.71	4,300
1985	10-19-84	14.00	6,100	1992	03-18-92	11.19	2,080
1986	12-11-85	10.95	2,550	1993	12-15-92	12.24	3,070

07263860 Mile Branch near Tomberlin, Arkansas

Location.--Lat 34° 29’08”, long 91° 51’14”, in NW 1/4 NE 1/4 sec.3, T.3 S., R.8 W., on left bank 90 ft downstream from bridge on county road, 0.6 mi east of State Highway 31, and 2.3 mi southeast of Tomberlin,

Drainage area.--2.75 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from July 1969 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 200 ft^3/s and extended above by logarithmic plotting.

Remarks.--Only annual peaks are shown. Published as “Main Ditch Lateral No. 9 tributary” prior to 1964.

07263860 Mile Branch near Tomberlin, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	07-15-63	9.35	142	1972	12-09-71	9.66	107
1964	04-23-64	10.51	330	1973	04-19-73	10.97	490
1965	06-07-65	10.91	470	1974	11-24-73	10.90	475
1966	08-13-66	10.93	480	1975	01-10-75	10.91	475
1967	12-27-66	10.88	470	1976	03-08-76	10.53	355
1968	12-02-67	10.97	490	1977	10-25-76	10.51	350
1969	01-30-69	10.49	205	1978	08-29-78	10.63	380
1970	03-03-70	10.77	245	1979	12-08-78	11.16	570
1971	08-03-71	10.72	235				

07263910 Cypress Branch near Jacksonville, Arkansas

Location.--Lat 34° 54’28”, long 92° 10’55”, in SE 1/4 NE 1/4 sec.9, T.3 N., R.11 W., on left bank 47 ft upstream from culvert on State Highway 107, 1.0 mi upstream from mouth, and 5.0 mi northwest of Jacksonville.

Drainage area.--2.38 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 240 ft^3/s and by culvert measurement at 1,280 ft^3/s. Affected at times by backwater from Bayou Meto.

Remarks.--Only annual peaks are shown.

07263910 Cypress Branch near Jacksonville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	07-00-61	10.55	580	1974	04-21-74	11.20	810
1962	11-22-61	10.56	585	1975	03-28-75	10.08	440
1963	03-04-63	10.43	540	1976	06-18-76	9.95	410
1964	11-22-63	12.06	1,280	1977	09-14-77	10.41	525
1965	09-22-65	10.88	680	1978	11-03-77	11.15	790
1966	04-24-66	11.17	790	1979	04-23-79	10.03	425
1967	07-12-67	10.51	555	1980	12-24-79	10.09	441
1968	05-13-68	12.53	800e	1981	05-26-81	10.66	600
1969	01-30-69	15.84	1,300e	1982	04-02-82	10.71	620
1970	04-17-70	9.40	295	1983	05-15-83	11.30	855
1971	08-05-71	10.33	505	1984	04-03-84	10.16	470
1972	12-10-71	9.41	295	1985	03-21-85	11.37	860
1973	04-19-73	11.55	985	1986	11-27-85	11.24	840

07264000 Bayou Meto near Lonoke, Arkansas

Location.--Lat 34° 44’10”, long 91° 54’58”, in SW 1/4 sec.6, T.1 N., R.8 W., near left bank on downstream side of bridge on State Highway 31, 3 mi upstream from Brushy Slough, 3 1/2 mi south of Lonoke, and at mile 6.4.

Drainage area.--207 mi^2.

Gage.--Recording. Prior to February 10, 1955, at site 4.8 mi upstream at datum 6.97 ft higher. Datum of present gage is 199.11 ft above sea level.

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. Published by Corps of Engineers as “Big Bayou Meto.”

07264000 Bayou Meto near Lonoke, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1937	01-00-37	22.90	--	1958	05-06-58	25.13	3,440
1948	03-00-48	20.20	--	1959	02-19-59	25.08	3,280
1949	01-30-49	22.10	--	1960	12-19-59	22.33	1,840
1950	01-14-50	22.00	--	1961	04-05-61	23.03	2,050
1951	01-20-51	18.00	--	1962	03-04-62	22.91	2,020
1952	04-18-52	16.80	--	1963	03-12-63	16.50	966
1953	05-19-53	19.70	--	1964	03-14-64	24.04	2,510
1954	05-07-54	21.30	--	1965	02-16-65	22.29	2,050
1955	06-01-55	22.30	1,920	1966	04-30-66	24.26	2,600
1956	02-06-56	23.80	2,120	1967	05-08-67	22.23	1,830
1957	05-29-57	25.16	3,360	1968	05-17-68	26.55	4,700

07264000 Bayou Meto near Lonoke, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1969	02-04-69	25.86	3,920	1982	02-05-82	20.01	1,410
1970	01-04-70	22.55	2,100	1983	12-30-82	24.46	3,020
1971	12-27-70	17.12	1,140	1984	05-09-84	22.36	1,930
1972	12-15-71	17.97	1,130	1985	12-03-84	23.04	2,170
1973	04-26-73	25.75	4,090	1986	12-03-85	22.14	1,870
1974	11-30-73	25.32	3,710	1987	03-04-87	21.31	1,760
1975	04-02-75	22.62	2,020	1988	12-29-87	27.11	5,750
1976	03-13-76	18.31	1,200	1989	11-27-88	24.00	2,700
1977	03-09-77	19.38	1,380	1990	03-13-90	24.03	2,720
1978	01-29-78	20.67	1,680	1991	01-11-91	24.36	2,950
1979	12-12-78	22.94	2,130	1992	03-14-92	20.78	1,560
1980	04-15-80	21.86	1,800	1993	05-07-93	18.85	1,230
1981	06-07-81	21.69	1,940				

07264100 White Oak Branch near Lonoke, Arkansas

Location.--Lat 34° 46’20”, long 91° 50’34”, on west line of SW 1/4 NW 1/4 sec.26, T.2 N., R.8 W., on left downstream wingwall of bridge on county road, 3.3 mi east of Lonoke, and 4.2 mi upstream from mouth.

Drainage area.--8.41 mi^2.

Gage.--Crest-stage gage. Datum of gage is 217.67 ft above sea level.

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

Remarks.--Only annual peaks are shown.

07264100 White Oak Branch near Lonoke, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-30-61	8.16	495	1974	04-21-74	9.30	1,440
1962	01-22-62	8.68	840	1975	01-10-75	9.11	1,210
1963	03-05-63	7.46	260	1976	03-08-76	7.77	325
1964	04-04-64	9.34	1,500	1977	09-14-77	9.04	1,080
1965	02-11-65	8.94	1,010	1978	09-13-78	8.58	750
1966	08-13-66	8.82	910	1979	12-08-78	9.49	1,700
1967	12-27-66	8.04	440	1980	03-16-80	8.41	640
1968	05-13-68	8.97	1,020	1981	05-26-81	9.00	1,050
1969	01-30-69	9.14	1,160	1982	04-02-82	8.90	980
1970	12-29-69	8.39	630	1983	12-27-82	9.24	1,240
1971	05-12-71	7.59	285	1984	05-03-84	8.84	960
1972	12-10-71	8.92	990	1985	04-23-85	8.98	1,050
1973	04-19-73	8.92	990	1986	04-05-86	8.44	660

07338700 Twomile Creek near Hatfield, Arkansas

Location.--Lat 34° 30’52”, long 94° 20’14”, in NW 1/4 NW 1/4 sec.8, T.3 S., R.31 W., on right bank 130 ft upstream from bridge on U.S. Highway 71, 0.5 mi upstream from small tributary, 1.5 mi downstream from Mill Creek, and 3.1 mi northeast of Hatfield.

Drainage area.--15.9 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 850 ft^3/s and by contracted-opening measurement at 6,260 ft^3/s.

Remarks.--Only annual peaks are shown.;

07338700 Twomile Creek near Hatfield, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	10-20-62	7.06	800	1974	04-22-74	10.00	3,200
1964	03-09-64	7.35	940	1975	03-28-75	9.47	2,600
1965	05-10-65	7.77	1,150	1976	03-08-76	7.15	860
1966	04-23-66	7.98	1,300	1977	03-28-77	10.05	3,300
1967	05-06-67	7.69	1,120	1978	05-07-78	7.55	1,060
1968	05-13-68	11.89	6,260	1979	03-30-79	9.77	2,950
1969	01-29-69	8.70	1,850	1980	12-24-79	7.82	1,210
1970	03-03-70	9.09	2,200	1981	07-30-81	8.17	1,430
1971	10-26-70	9.35	2,450	1982	05-14-82	8.23	1,500
1972	12-10-71	12.44	6,110	1983	12-03-82	11.09	4,850
1973	10-31-72	11.69	5,900				

07339500 Rolling Fork near DeQueen, Arkansas

Location.--Lat 34° 02’51”, long 94° 24’47”, in SW 1/4 SW 1/4 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 mi west of DeQueen, 6 mi upstream from Rock Creek, and at mile 17.0.

Drainage area.--182 mi^2.

Gage.--Nonrecording prior to December 16, 1948; recording thereafter. Datum of gage is 318.24 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 41,000 ft^3/s and contracted-opening measurement at 110,000 ft^3/s.

Bankfull stage.--20 ft.

Remarks.--Only annual peaks are shown.

07339500 Rolling Fork near DeQueen, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1947	08-27-47	25.60	110,000	1961	05-06-61	20.11	20,500
1949	01-24-49	20.16	19,200	1962	11-22-61	16.95	8,800
1950	01-13-50	21.04	23,700	1963	03-11-63	15.44	5,920
1951	07-02-51	16.35	7,320	1964	04-24-64	19.21	17,100
1952	04-12-52	18.80	14,000	1965	05-27-65	16.46	7,800
1953	05-11-53	21.96	34,000	1966	08-14-66	19.46	17,100
1954	04-16-54	16.11	7,040	1967	05-06-67	20.12	23,200
1955	05-27-55	18.75	14,000	1968	05-13-68	23.34	54,500
1956	02-18-56	17.03	8,800	1969	01-30-69	21.74	32,100
1957	04-27-57	18.38	12,600	1970	03-03-70	18.26	12,100
1958	05-02-58	18.73	13,800	1971	10-27-70	11.98	3,160
1959	11-17-58	20.83	25,000	1972	12-10-71	24.23	71,000
1960	12-16-59	16.42	7,600	1973	10-31-72	19.83	18,800

07339800 Pepper Creek near DeQueen, Arkansas

Location.--Lat 34° 02'44", long 94° 18'13", on north line of NW 1/4 NE 1/4 sec.28, T.8 S., R.31 W., on left bank 26 ft downstream from bridge on U.S. Highway 71, 0.7 mi upstream from mouth, 1.5 mi east of junction of U.S. Highways 70 and 71, and 2.3 mi east of DeQueen.

Drainage area.--6.41 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07339800 Pepper Creek near DeQueen, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-05-61	7.03	1,440	1974	06-08-74	6.23	1,010
1962	1962	--	170e	1975	06-09-75	7.35	1,730
1963	10-14-62	2.90	72	1976	09-04-76	4.83	420
1964	04-23-64	5.00	610	1977	03-27-77	7.87	2,250
1965	02-09-65	3.73	230	1978	03-07-78	4.05	200
1966	04-25-66	4.60	486	1979	11-16-78	7.24	1,650
1967	05-01-67	5.06	640	1980	09-28-80	7.56	1,900
1968	05-13-68	9.39	6,240	1981	06-16-81	6.42	1,100
1969	01-29-69	6.87	2,050	1982	05-14-82	6.25	1,020
1970	04-19-70	4.00	450	1983	07-02-83	8.92	4,700
1971	07-24-71	4.02	310	1984	12-02-83	8.37	3,200
1972	12-10-71	6.77	1,700	1985	03-31-85	7.87	2,400
1973	04-23-73	6.26	1,020	1986	04-04-86	8.15	2,770

07340000 Little River near Horatio, Arkansas

Location.--Lat 33° 55'10", long 94° 23'15", in NE 1/4 sec.10, T.10 S., R.32 W., on downstream side of bridge on State Highway 41, 0.9 mi downstream from Rolling Fork, 2 mi southwest of Horatio, 28.5 mi upstream from Cossatot River, and at mile 72.0.

Drainage area.--2,662 mi^2.

Gage.--Nonrecording prior to February 5, 1935; recording thereafter. Prior to September 14, 1961, at site 50 ft upstream at same datum. Datum of gage is 272.89 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 93,000 ft^3/s.

Bankfull stage.--26 ft.

Remarks.--Base for partial-duration series, 25,000 ft^3/s.

07340000 Little River near Horatio, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	08-00-15	38.00	124,000	1942	04-09-42	31.77	50,800
1930	05-20-30	36.00	97,700	1943	12-28-42	26.45	24,700
1931	07-27-31	24.84	20,700	1944	05-03-44	32.64	57,900
1932	01-24-32	31.84	50,800	1945	03-30-45	37.70	120,000
1933	01-01-33	27.20	24,800	1946	05-26-46	31.74	49,300
1934	04-09-34	27.36	25,100	1947	08-29-47	32.99	61,900
1935	05-06-35	34.80	82,100	1948	01-02-48	32.29	54,900
1936	12-08-35	28.85	31,800	1949	01-27-49	35.58	97,900
1937	01-11-37	28.15	26,700	1950	02-13-50	34.06	82,500
1938	01-25-38	36.93	110,000	1951	07-04-51	31.47	47,500
1939	04-18-39	32.12	56,500	1952	04-23-52	34.26	83,900
1940	07-02-40	30.62	37,500	1953	05-12-53	32.32	59,000
1941	04-24-41	26.90	23,900	1954	05-04-54	28.16	29,800

07340000 Little River near Horatio, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-22-55	30.10	37,200
1956	02-19-56	27.84	28,500
1957	04-28-57	33.13	68,300
1958	05-03-58	32.72	63,600
1959	11-18-58	30.48	41,600
1960	05-22-60	31.99	55,500
1961	05-09-61	31.08	46,200
1962	11-24-61	27.93	28,800
1963	04-30-63	21.50	16,800
1964	04-25-64	30.72	43,000
1965	02-13-65	28.54	34,100
1966	04-27-66	29.82	34,800
1967	05-07-67	26.18a	28,100
1968	05-14-68	33.22	69,900

07340200 West Flat Creek near Foreman, Arkansas

Location.--Lat 33° 45’13”, long 94° 23’28”, in NW 1/4 SW 1/4 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 mi north of Foreman, and 3 mi upstream from East Flat Creek.

Drainage area.--10.7 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 370 ft^3/s and by contracted-opening measurement at 2,500 ft^3/s.

Remarks.--Only annual peaks are shown.

07340200 West Flat Creek near Foreman, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	02-23-62	9.46	397
1963	10-14-62	10.77	740
1964	04-23-64	10.31	600
1965	02-10-65	11.92	2,500
1966	04-24-66	11.07	1,050
1967	05-01-67	11.84	2,300
1968	05-17-68	11.93	2,500
1969	01-30-69	12.40	3,400
1970	04-25-70	11.02	1,130
1971	03-12-71	10.98	1,100
1972	12-10-71	12.07	2,800
1973	04-19-73	12.12	2,880
1974	10-12-73	11.51	1,750
1975	02-02-75	11.67	2,020
1976	03-08-76	10.72	900
1977	03-03-77	11.51	1,750
1978	03-07-78	9.75	460
1979	05-04-79	11.48	1,700
1980	04-13-80	12.06	2,800
1981	07-05-81	11.32	1,480
1983	12-02-82	12.97	3,800

07340300 Cossatot River near Vandervoort, Arkansas

Location.--Lat 34° 22’46”, long 94° 14’08”, in SE 1/4 NE 1/4 sec.30, T.4 S., R.30 W., Polk County, near left bank on downstream side of bridge on State Highway 246, 0.3 mi downstream from Brushy Creek, 3.2 mi upstream from Flat Creek, and 7.5 mi east of Vandervoort.

Drainage area.--89.6 mi^2.

Gage.--Water-stage recorder. Datum of gage is 771.88 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurement below 11,000 ft^3/s and extended to 32,000 ft^3/s by step-backwater computations.

Remarks.--Only annual peaks are shown.

07340300 Cossatot River near Vandervoort, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-06-61	23.00	48,000
1968	05-13-68	18.13	26,900
1969	01-30-69	15.58	18,600
1970	03-03-70	14.60	15,900
1971	10-27-70	16.08	20,100
1972	12-09-71	19.35	31,500
1973	10-31-72	17.18	23,500
1974	04-21-74	18.08	26,700
1975	11-23-74	18.05	26,600
1976	12-06-75	9.22	4,700

07340300 Cossatot River near Vandervoort, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1977	03-27-77	16.54	21,400	1986	11-27-85	14.15	14,500
1978	04-10-78	8.39	3,630	1987	03-17-87	17.04	23,000
1979	02-22-79	18.03	26,400	1988	12-25-87	12.54	10,700
1980	05-15-80	8.62	3,910	1989	11-19-88	11.18	7,870
1981	12-08-80	10.35	6,410	1990	01-19-90	13.00	11,700
1982	02-16-82	9.88	5,660	1991	04-13-91	14.14	14,500
1983	12-02-82	19.50	32,000	1992	03-18-92	14.78	16,300
1984	03-27-84	9.77	5,500	1993	01-04-93	14.55	15,600
1985	10-25-84	16.47	21,200				

07340500 Cossatot River near DeQueen, Arkansas

Location.--Lat 34° 02’45”, long 94° 12’42”, in NE 1/4 NE 1/4 sec.29, T.8 S., R.20 W., on downstream side of pier of bridge on U.S. Highway 71, just downstream from Hale Creek, 7 mi east of DeQueen, and at mile 33.5.

Drainage area.--360 mi^2.

Gage.--Nonrecording prior to November 9, 1938, and after October 1, 1980. Recording November 9, 1938 to September 30, 1980. Datum of gage is 335.48 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 65,000 ft^3/s and by contracted-opening measurements at 122,000 ft^3/s.

Bankfull stage.--15 ft.

Remarks.--Only annual peaks are shown.

07340500 Cossatot River near DeQueen, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1938	01-24-38	19.70	36,300	1956	02-18-56	16.20	14,400
1939	04-16-39	19.70	36,300	1957	04-27-57	17.82	22,800
1940	05-18-40	17.94	23,700	1958	05-03-58	18.56	29,200
1941	07-14-41	15.08	10,100	1959	11-17-58	18.85	30,100
1942	09-09-42	18.56	28,400	1960	05-20-60	19.12	32,600
1943	12-27-42	14.30	9,520	1961	05-06-61	20.70	62,000
1944	05-02-44	18.70	29,100	1962	11-23-61	15.66	12,600
1945	03-30-45	20.20	43,300	1963	03-11-63	14.55	10,100
1946	05-25-46	19.96	41,200	1964	04-24-64	19.12	37,500
1947	08-28-47	20.47	46,900	1965	02-10-65	16.24	14,800
1948	01-01-48	18.30	26,300	1966	04-26-66	18.40	28,400
1949	01-24-49	19.76	39,400	1967	05-06-67	18.70	32,500
1950	09-20-50	20.14	42,500	1968	05-13-68	22.60	122,000
1951	07-03-51	16.49	15,600	1969	01-30-69	20.82	74,800
1952	04-22-52	18.00	24,200	1970	03-03-70	18.07	30,700
1953	05-12-53	19.16	33,100	1971	10-27-70	15.29	13,900
1954	05-02-54	16.57	16,100	1972	12-10-71	21.88	103,000
1955	03-21-55	17.25	19,200	1973	04-23-73	19.06	39,100

07340530 Mill Slough Tributary near Lockesburg, Arkansas

Location.--Lat 33° 58'04", long 94° 11'25", on south line of SW 1/4 NW 1/4 sec.22, T.9 S., R.30 W., on left bank 15 ft upstream from culvert on State Highway 24, 1.3 mi west of Lockesburg.

Drainage area.--0.64 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 36 ft^3/s and by culvert measurements at 177 ft^3/s, 385 ft^3/s, and 552 ft^3/s.

Remarks.--Only annual peaks are shown

07340530 Mill Slough Tributary near Lockesburg, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	06-12-63	4.73	130	1975	06-09-75	6.53	300
1964	04-23-64	7.27	385	1976	05-27-76	4.12	75
1965	03-29-65	5.30	177	1977	03-03-77	4.89	140
1966	04-30-66	4.83	135	1978	05-03-78	3.65	45
1967	04-25-67	4.21	83	1979	05-04-79	6.80	332
1968	05-17-68	8.44	552	1980	09-28-80	4.15	78
1969	05-07-69	6.08	268	1981	07-05-81	5.59	205
1970	08-21-70	5.15	165	1982	05-14-82	6.01	246
1971	05-10-71	3.50	37	1983	12-26-82	9.76	719
1972	12-10-71	6.54	304	1984	05-03-84	6.62	310
1973	04-23-73	6.29	275	1985	10-25-84	4.30	94
1974	05-04-74	7.26	385	1986	12-11-85	4.91	143

07341000 Saline River near Dierks, Arkansas

Location.--Lat 34° 05'45", long 94° 05'04", in NW 1/4 SW 1/4 sec.3, T.8 S., R.29 W., near left bank on downstream side of bridge on U.S. Highway 70, 3 1/2 mi upstream from Holly Creek, 4 mi southwest of Dierks, and at mile 50.7.

Drainage area.--121 mi^2.

Gage.--Nonrecording prior to August 10, 1940, and after October 1, 1980. Recording from August 10, 1940, to September 30, 1980. Prior to August 31, 1951, at site 100 ft upstream at present datum. Datum of gage is 353.09 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 ft^3/s.

Bankfull stage.--15 ft.

Remarks.--Records for the period 1938-50 computed by Corps of Engineers and reviewed by Geological Survey.

07341000 Saline River near Dierks, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1920	1920	21.90	42,000	1952	04-22-52	16.54	11,000
1939	04-16-39	17.10	12,000	1953	05-11-53	18.56	16,500
1940	05-18-40	17.00	11,700	1954	05-02-54	11.15	3,640
1941	07-14-41	18.75	20,100	1955	09-23-55	17.23	12,600
1942	04-08-42	17.07	12,000	1956	04-30-56	17.71	14,000
1943	12-27-42	12.04	3,940	1957	03-17-57	14.25	6,490
1944	05-01-44	16.68	10,800	1958	11-13-57	15.80	9,140
1945	03-30-45	19.93	31,200	1959	02-14-59	15.12	7,770
1946	05-25-46	16.43	10,600	1960	12-16-59	14.36	6,740
1947	08-28-47	15.00	7,160	1961	05-06-61	22.50	52,000
1948	03-01-48	13.21	5,050	1962	11-22-61	12.88	5,110
1949	01-24-49	16.65	9,800	1963	03-11-63	10.51	2,760
1950	09-16-50	15.32	7,610	1964	04-24-64	17.00	12,100
1951	01-14-51	13.83	5,630	1965	01-09-65	12.56	4,840

07341000 Saline River near Dierks, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1966	08-14-66	16.53	10,800
1967	05-06-67	17.22	12,600
1968	05-13-68	22.95	59,200
1969	01-30-69	20.77	28,600
1970	04-26-70	13.89	6,650
1971	12-22-70	8.81	1,370
1972	12-10-71	20.24	24,400

07341100 Rock Creek near Dierks, Arkansas

Location.--Lat 34° 06'46", long 94° 02'25", in SW 1/4 NE 1/4 sec.36, T.7 S., R.29 W., on left bank 130 ft upstream from bridge on U.S. Highway 70, 0.8 mi upstream from mouth, and 1.4 mi southwest of Dierks.

Drainage area.--9.46 mi^2.

Gage.--Crest-stage gage. Prior to June 29, 1969, at datum 10.0 ft lower. Gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 ft^3/s and by contracted-opening and flow-over-road measurement at 9,390 ft^3/s.

Remarks.--Only annual peaks are shown.

07341100 Rock Creek near Dierks, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	07-23-61	12.60	9,390
1962		--	740e
1963	10-14-62	3.70	323
1964	04-23-64	7.06	1,750
1965	06-14-65	6.99	1,720
1966	04-25-66	7.53	2,100
1967	05-01-67	9.25	3,700
1968	05-13-68	8.58	3,050
1969	01-29-69	6.10	1,180
1970	04-25-70	6.47	1,400
1971	07-24-71	3.35	260
1972	12-10-71	9.15	3,500
1973	04-23-73	8.76	3,100
1974	06-07-74	11.05	6,200
1975	02-02-75	9.21	3,600
1976	03-08-76	6.18	1,200
1977	03-03-77	8.12	2,500
1978	03-07-78	3.76	340
1979	11-16-78	8.99	3,300
1980	09-28-80	8.34	2,700
1981	06-16-81	9.56	4,000
1982	06-16-82	5.34	820
1983	05-15-83	12.40	9,000

07341700 Caney Creek near Hope, Arkansas

Location.--Lat 33° 41'34", long 93° 38'12", in SE 1/4 NE 1/4 sec.24, T.12 S., R.25 W., on right bank 115 ft upstream from bridge on State HIghway 4, 0.1 mi southeast of junction of State Highways 4 and 73, 0.3 mi downstream from small tributary, and 3.1 mi northwest of Hope.

Drainage area.--12.9 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from September 1968 to October 1974.

Stage-discharge relation.--Defined by current-meter measurements below 910 ft^3/a and by contracted-opening measurement at 5,410 ft^3/s and 9,410 ft^3/s.

Remarks.--Only annual peaks are shown.

07341700 Caney Creek near Hope, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	04-28-63	10.51	1,500
1964	03-04-64	11.03	2,020
1965	02-11-65	10.30	1,330
1966	04-30-66	12.80	5,410
1967	04-26-67	11.56	2,750
1968	05-10-68	12.24	4,050
1969	01-30-69	11.35	2,450
1970	04-25-70	10.99	2,000
1971	07-24-71	12.02	3,570
1972	01-01-72	9.38	720
1973	04-23-73	12.12	3,800
1974	08-31-74	15.70	9,410

07341700 Caney Creek near Hope, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1975	06-09-75	11.27	2,350
1976	03-08-76	11.06	2,080
1977	03-03-77	10.39	1,400
1978	01-12-78	9.93	1,050
1979	04-23-79	11.33	2,450
1980	05-22-80	9.77	950
1981	06-16-81	10.48	1,490
1982	06-16-82	10.39	1,400

07342350 McKinney Bayou near Texarkana, Arkansas

Location.--Lat 33° 24’34”, long 93° 48’17”, in NE 1/4 sec.32, T.15 S., R.26 W., 1,500 ft downstream from bridge on U.S. Highway 82, 1.3 mi downstream from Red Chute, 6.7 mi northwest of Garland, 13.6 mi east of Texarkana, and at mile 23.3.

Drainage area.--169 mi^2.

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 sea level. Datum of present gage is sea level.

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

Bankfull stage.--18 ft.

Remarks.--Gage-height records furnished by Corps of Engineers. Only annual peak stages are shown.

07342350 McKinney Bayou near Texarkana, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1940	07-02-40	21.60	3,800
1941	04-25-41	19.80	1,900
1942	04-10-42	20.30	2,700
1943	04-19-43	16.00	950
1944	05-03-44	20.30	2,700
1945	04-02-45	21.30	3,500
1946	05-20-46	20.40	2,700
1947	05-15-47	16.60	1,080
1948	03-23-48	19.50	2,100
1949	01-28-49	19.80	2,300
1950	05-03-50	20.45	3,000
1951	02-17-51	17.18	1,200
1952	04-13-52	19.37	2,000
1953	05-19-53	19.96	2,400
1954	05-14-54	18.28	1,400
1955	03-22-55	19.00	1,800
1956	05-04-56	16.98	1,200
1957	04-05-57	20.25	2,600
1958	04-27-58	20.72	3,000
1959	02-16-59	18.70	1,600
1960	01-19-60	17.92	1,400
1961	1961	13.40	3,400e
1962	1962	224.79	3,600e
1963	04-29-63	222.54	2,200
1964	04-25-64	227.98	3,900
1965	02-12-65	228.85	4,800
1966	04-26-66	232.12	6,600
1967	1967	223.20	2,600e
1968	05-00-68	233.00	7,200e
1969	02-01-69	230.18	4,800
1970	08-22-70	230.71	5,100
1971	03-13-71	219.48	960
1972	01-04-72	223.03	1,600
1973	04-20-73	229.44	4,400
1974	06-10-74	230.96	5,200
1975	05-04-75	231.24	5,500
1976	06-20-76	231.51	5,600
1977	02-12-77	228.68	4,000
1978	1978	228.40	3,800e
1979	01-21-79	230.64	5,100
1980	01-23-80	228.85	4,000

07344320 Mill Creek Tributary near Fouke, Arkansas

Location.--Lat 33° 17’53”, long 93° 54’58”, in NW 1/4 NE 1/4 sec.8., T.17 S., R.27 W., on left bank 15 ft upstream from culvert on U.S. Highway 71, 0.7 mi upstream from mouth, and 3.0 mi northwest of Fouke.

Drainage area.--1.44 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 41 ft^3/s and by culvert measurements at 399 ft^3/s and 704 ft^3/s.

Remarks.--Only annual peaks are shown.

07344320 Mill Creek Tributary near Fouke, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	09-12-61	6.86	148	1973	03-24-73	7.77	190
1962	02-26-62	8.30	308	1974	12-03-73	10.65	570
1963	07-21-63	7.49	210	1975	06-09-75	10.56	558
1964	04-24-64	8.92	399	1976	06-18-76	7.54	167
1965	01-08-65	7.73	240	1977	03-28-77	8.07	225
1966	04-25-66	8.81	380	1978	08-29-78	6.33	67
1967	05-04-67	7.24	185	1979	01-20-79	8.65	298
1968	05-10-68	8.59	353	1980	05-16-80	9.91	468
1969	04-13-69	7.75	242	1981	05-16-81	8.41	267
1970	08-21-70	11.18	704	1982	06-16-82	10.06	482
1971	07-24-71	5.70	40	1983	12-03-82	11.64	780
1972	07-29-72	5.93	52				

07346800 East Fork Kelly Bayou Tributary at Kiblah, Arkansas

Location.--Lat 33° 02’57”, long 93° 53’44”, in NE 1/4 NW 1/4 sec.3, T.20 S., R.27 W., on right bank 10 ft upstream from culvert on U.S. Highway 71, 0.1 mi south of Kiblah, and 0.2 mi upstream from small lake.

Drainage area.--0.14 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from September 1968 to December 1974.

Stage-discharge relation.--Defined by current-meter measurements below 14 ft^3/s and by culvert measurements at 26 ft^3/s and 123 ft^3/s.

Remarks.--Only annual peaks are shown.

07346800 East Fork Kelly Bayou Tributary at Kiblah, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	07-14-61	6.33	11	1971	10-26-70	6.70	22
1962	11-22-61	6.82	26	1972	03-28-72	6.19	9
1963	07-21-63	6.97	32	1973	04-19-73	6.76	24
1964	04-24-64	6.54	17	1974	06-08-74	8.74	96
1965	02-11-65	6.29	10	1975	06-09-75	6.91	30
1966	04-25-66	9.46	123	1976	03-08-76	6.45	15
1967	05-21-67	5.77	2	1977	03-28-77	6.24	10
1968	12-09-67	5.94	4	1978	08-29-78	6.58	18
1969	03-18-69	6.42	14	1979	05-04-79	7.05	35
1970	04-25-70	6.61	19	1980	05-16-80	6.61	19

07347000 Kelly Bayou near Hosston, Louisiana

Location.--Lat 32° 51’25”, long 93° 52’20”, in SW 1/4 NE 1/4 sec.36, T.22 N., R.15 W., near center of span on downstream side of bridge on U.S. Highway 71, 0.4 mi downstream from Willow Lake lateral, 2.0 mi south of Hosston, and at mile 2.7.

Drainage area.--116 mi^2.

Gage.--Nonrecording prior to February 2, 1953; recording thereafter. Datum of gage is 165.53 ft above sea level, 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.--Only annual peaks are shown.

07347000 Kelly Bayou near Hosston, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1945	03-03-45	15.55	1,800	1958	04-28-58	22.72	4,460
1946	05-13-46	14.68	1,730	1959	02-14-59	12.16	1,070
1947	11-11-46	14.40	1,660	1960	03-02-60	13.42	1,560
1948	02-12-48	12.70	1,020	1961	12-08-60	14.44	1,510
1949	01-18-49	11.41	836	1962	11-22-61	13.82	1,600
1950	02-13-50	14.47	1,110	1963	04-28-63	12.48	1,280
1951	01-14-51	10.01	513	1964	04-24-64	17.22	2,780
1952	04-13-52	11.34	994	1965	02-12-65	13.97	1,430
1953	03-12-53	13.55	1,520	1966	04-27-66	20.94	2,320
1954	01-15-54	11.31	1,040	1967	05-31-67	11.70	1,080
1955	05-24-55	13.44	1,520	1968	09-15-68	12.23	1,210
1956	02-02-56	11.86	1,200	1969	03-18-69	16.11	2,070
1957	04-29-57	17.23	1,720				

07348615 Bayou Dorcheat near Bussey, Arkansas

Location.--Lat 33° 12’23”, long 93° 23’34”, State Highway 132 bridge, 4.8 mi northeast of Bussey.

Gage.--Automatic recorder and staff.

Remarks.--Records furnished by Corps of Engineers.

07348615 Bayou Dorcheat near Bussey, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1969	02-03-69	216.93	6,000	1975	02-03-75	217.23	7,400
1970	04-28-70	216.18	3,100	1976	03-30-76	216.80	5,400
1971	05-15-71	215.28	1,300	1977	03-30-77	216.10	2,400
1972	01-07-72	215.24	1,300	1978	05-15-78	215.15	1,200
1973	04-26-73	217.40	8,100	1979	04-24-79	217.22	7,200
1974	06-08-74	219.83	22,000	1980	04-15-80	216.82	5,500

07348630 Barlow Branch Tributary near McNeil, Arkansas

Location.--Lat 33° 18'43", long 93° 13'52", in NW 1/4 SE 1/4 sec.25, T.16 S., R.21 W., on right bank 10 ft upstream from culvert on U.S. Highway 79, 0.5 mi upstream from mouth, and 2.5 mi south of McNeil.

Drainage area.--0.05 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 6 ft^3/s and by culvert measurements at 41 ft^3/s, 58 ft^3/s, and 90 ft^3/s.

Remarks.--Only annual peaks are shown.

07348630 Barlow Branch Tributary near McNeil, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	07-16-61	7.20	58	1972	03-29-72	5.08	6
1962	11-22-61	6.63	41	1973	12-09-72	5.81	19
1963	10-08-62	5.40	11	1974	04-22-74	8.11	89
1964	04-24-64	8.17	90	1975	01-10-75	6.26	31
1965	01-09-65	6.13	28	1976	05-26-76	5.55	14
1966	04-30-66	5.88	21	1977	03-28-77	5.45	12
1967	05-04-67	5.42	11	1978	08-30-78	5.74	18
1968	05-17-68	7.41	64	1979	01-20-79	5.54	14
1969	03-18-69	5.52	13	1980	05-16-80	6.04	25
1970	04-30-70	6.02	24	1981	07-05-81	6.80	46
1971	11-08-70	5.40	11	1982	06-12-82	6.39	35

07348700 Bayou Dorcheat near Springhill, Louisiana

Location.--Lat 32° 59'40", long 93° 23'45", in NE 1/4 NE 1/4 sec.16, T.23 N., R.10 W., on downstream side of bridge on Louisiana State Highway 157, 0.4 mi downstream from Crooked Creek, 1.7 mi downstream from Arkansas-Louisiana State line, and 4 mi southeast of Springhill.

Drainage area.-- 605 mi^2.

Gage.--Recording. Datum of gage is 173.91 ft above sea level, supplementary adjustment of 1941.

Bankfull stage.--7.5 ft.

Remarks.--Only annual peaks are shown.

07348700 Bayou Dorcheat near Springhill, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1958	04-28-58	22.79	36,400	1976	03-11-76	15.44	9,060
1959	02-17-59	14.04	3,880	1977	04-01-77	13.54	3,450
1960	03-06-60	13.85	3,520	1978	05-16-78	12.59	1,880
1961	07-19-61	14.94	5,900	1979	04-25-79	15.54	10,200
1962	12-19-61	15.18	6,600	1980	04-16-80	14.96	8,160
1963	07-15-63	13.19	2,550	1981	05-20-81	14.57	4,950
1964	04-26-64	16.60	10,700	1982	06-21-82	13.36	2,340
1965	02-13-65	15.66	7,920	1983	12-29-82	16.68	10,500
1966	05-03-66	17.27	12,700	1984	02-16-84	13.34	2,580
1967	05-12-67	11.59	1,100	1985	10-25-84	15.63	9,140
1968	05-20-68	15.17	6,520	1986	12-15-85	15.20	7,550
1969	03-20-69	15.06	6,210	1987	12-11-86	15.78	9,670
1970	05-03-70	14.30	5,170	1988	12-30-87	16.38e	11,900
1971	05-18-71	11.93	1,280	1989	04-01-89	16.56	12,600
1972	01-08-72	13.29	2,960	1990	03-10-90	19.56	25,100
1973	04-26-73	17.68	19,200	1991	04-30-91	18.63	20,700
1974	06-10-74	20.81	30,500	1992	03-12-92	16.12	10,900
1975	02-04-75	17.07	15,600				

07349430 Bodcau Creek at Stamps, Arkansas

Location.--Lat 33° 22’00”, long 93° 31’20”, in NE 1/4 NW 1/4 sec.7, T.16 S., R.23 W., on downstream side of bridge on U.S. Highway 82, 0.2 mi upstream from Tatum Branch and 1 mi west of Stamps.

Drainage area.--234 mi^2.

Gage.--Nonrecording prior to June 3, 1959; recording thereafter. Datum of gage is 234.36 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 ft^3/s.

Bankfull stage.--14 ft.

Historical data.--Flood in 1945 is greatest known since at least 1890.

Remarks.--Only annual peaks are shown.

07349430 Bodcau Creek at Stamps, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	1927	--	17.50
1930	1930	--	17.30
1945	03-00-45	--	18.90
1958	04-27-58	15,000	15.80
1959	02-18-59	1,800	9.78
1960	12-20-59	1,760	9.75
1961	07-18-61	7,620	13.70
1962	02-25-62	5,370	12.26
1963	05-03-63	1,320	8.01
1964	04-25-64	3,120	10.93
1965	02-13-65	5,970	12.62
1966	04-27-66	11,600	15.31
1967	05-07-67	1,400	9.05
1968	05-13-68	3,930	11.65
1969	02-02-69	6,240	13.06
1970	04-28-70	3,550	11.36
1971	03-18-71	607	6.42
1972	01-08-72	886	8.18
1973	04-25-73	4,250	11.88
1974	09-02-74	5,930	12.90
1975	05-05-75	4,450	12.02
1976	03-10-76	3,400	11.24
1977	03-31-77	2,360	10.35
1978	01-29-78	986	8.53

07355800 Lewis Creek Tributary near Mena, Arkansas

Location.--Lat 34° 37’15”, long 94° 12’15”, on east line of NE 1/4 SW 1/4 sec.33, T.1 S., R.30 W., on right bank 22 ft upstream from culvert on U.S. Highway 71, 0.3 mi upstream from mouth, 2.5 mi north of junction of U.S. Highway 71 and State Highway 88, and 3.1 mi northeast of Mena.

Drainage area.--0.65 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from June 1969 to November 1974.

Stage-discharge relation.--Defined by current-meter measurement at 42 ft^3/s and by culvert measurements at 124 ft^3/s, 177 ft^3/s, 235 ft^3/s, and 559 ft^3/s.

Remarks.--Only annual peaks are shown.

07355800 Lewis Creek Tributary near Mena, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	07-23-61	3.00	120
1962	11-22-61	2.50	66
1963	06-16-63	2.20	38
1964	03-09-64	3.04	124
1965	11-18-64	3.02	122
1966	05-18-66	3.44	160
1967	07-06-67	3.86	225
1968	05-13-68	3.94	235
1969	11-29-68	2.91	118
1970	04-25-70	2.93	115
1971	10-26-70	3.94	235
1972	12-09-71	4.05	248
1973	10-31-72	6.19	559
1974	06-08-74	5.80	500
1975	03-28-75	4.32	282
1976	07-25-76	3.25	150
1977	03-28-77	3.86	224
1978	05-07-78	3.33	160
1979	03-30-79	5.00	375
1980	12-24-79	3.31	140
1981	07-01-81	4.12	260
1982	05-14-82	5.12	397
1983	12-03-82	4.13	262
1984	05-03-84	3.31	150
1985	10-25-84	4.51	296
1986	11-27-85	3.47	176

07355800 Lewis Creek Tributary near Mena, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1987	03-17-87	3.40	168	1991	10-08-90	6.23	560
1988	12-26-87	3.14	137	1992	10-29-91	3.82	212
1989	05-17-89	3.71	205	1993	05-10-93	3.16	134
1990	01-19-90	3.27	152				

07355900 Big Fork Tributary at Big Fork, Arkansas

Location.--Lat 34° 28’23”, long 93° 56’38”, in SE 1/4 NW 1/4 sec.23, T.3 S., R.28 W., on right bank 7 ft upstream from culvert on State Highway 8, 0.2 mi upstream from mouth, and 0.9 mi southeast of Big Fork.

Drainage area.--0.17 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 19 ft^3/s and by culvert measurements at 29 ft^3/s, 44 ft^3/s, 66 ft^3/s, and 225 ft^3/s.

Remarks.--Only annual peaks are shown.

07355900 Big Fork Tributary at Big Fork, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1964	03-09-64	6.87	29	1974	04-22-74	9.36	103
1965	02-09-65	6.26	17	1975	03-28-75	6.94	31
1966	04-25-66	7.45	44	1976	06-25-76	6.89	30
1967	05-06-67	7.06	34	1977	03-28-77	7.59	48
1968	05-13-68	8.21	66	1978	08-30-78	5.70	5
1969	01-29-69	7.23	39	1979	03-30-79	7.37	42
1970	03-03-70	6.59	23	1980	05-16-80	6.74	27
1971	10-26-70	7.02	33	1981	04-23-81	7.12	36
1972	12-09-71	9.05	92	1982	05-14-82	7.14	36
1973	11-06-72	7.01	33	1983	12-03-82	14.25	225

07356000 Ouachita River near Mount Ida, Arkansas

Location.--Lat 34° 36’36”, long 93° 41’50”, in SE 1/4 SW 1/4 sec.32, T.1 S., R.25 W., on right bank 350 ft upstream from bridge on U.S. Highway 270, 3.1 mi upstream from Fiddler’s Creek, 5.2 mi northwest of Mount Ida, and at mile 553.4.

Drainage area.--414 mi^2.

Gage.--Nonrecording prior to December 3, 1941, and March 1, 1945, to April 1, 1946; recording during rest of period. Prior to November 3, 1949, at site 350 ft downstream at same datum. Datum of present gage is 655.14 ft above sea level.

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

Bankfull stage.--22 ft.

Remarks.--Records prior to October 1, 1949, furnished by Corps of Engineers. Only annual peaks are shown.

07356000 Ouachita River near Mount Ida, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1942	04-28-42	18.68	20,500	1949	01-25-49	30.80	54,800
1943	04-18-43	8.84	4,890	1950	02-12-50	24.84	31,300
1944	05-03-44	17.30	17,700	1951	07-03-51	21.70	24,400
1945	03-30-45	27.80	48,500	1952	04-23-52	24.26	30,200
1946	01-09-46	20.00	20,400	1953	11-26-52	21.66	23,600
1947	12-12-46	19.20	18,600	1954	05-03-54	23.48	28,400
1948	01-01-48	25.65	39,800	1955	03-21-55	14.40	10,500

07356000 Ouachita River near Mount Ida, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-18-56	17.46	15,800	1975	03-29-75	21.52	23,000
1957	04-04-57	20.83	22,500	1976	03-09-76	13.25	8,930
1958	05-03-58	22.04	25,100	1977	03-28-77	26.77	37,400
1959	11-17-58	23.02	27,300	1978	03-08-78	11.86	7,160
1960	05-21-60	32.18	57,300	1979	03-20-79	19.52	21,500
1961	12-11-60	19.08	19,000	1980	12-24-79	13.97	11,600
1962	11-23-61	17.19	15,400	1981	12-09-80	15.27	13,900
1963	03-11-63	10.38	5,790	1982	03-14-82	16.91	16,400
1964	03-10-64	22.15	24,000	1983	12-03-82	39.78	102,000
1965	02-10-65	15.59	12,400	1984	12-03-83	13.17	10,400
1966	04-26-66	21.86	23,300	1985	10-25-84	25.57	36,000
1967	05-07-67	18.45	16,900	1986	11-27-85	22.48	28,200
1968	05-14-68	28.40	40,100	1987	03-17-87	22.00	27,000
1969	07-26-69	25.87	32,700	1988	12-26-87	23.02	29,500
1970	04-26-70	18.13	16,400	1989	02-15-89	15.07	13,400
1971	10-27-70	21.77	24,600	1990	05-03-90	20.75	24,100
1972	12-10-71	38.62	95,500	1991	10-08-90	23.50	30,600
1973	11-01-72	28.30	40,600	1992	11-30-91	17.14	18,100
1974	06-08-74	23.89	28,200	1993	12-15-92	22.18	28,200

07356500 South Fork Ouachita River at Mount Ida, Arkansas

Location.--Lat 34° 33’37”, long 93° 38’09”, in NE 1/4 NE 1/4 sec.23, T.2 S., R.25 W., on downstream side of bridge on U.S. Highway 270 at Mount Ida, 3.4 mi upstream from Williams Creek, and at mile 22.5.

Drainage area.--64 mi^2.

Stage-discharge relation.--Defined by current-meter measurements below 18,000 ft^3/s.

Remarks.--Records furnished by Corps of Engineers.

07356500 South Fork Ouachita River at Mount Ida, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1950	02-12-50	10.59	7,540	1965	09-22-65	9.03	4,930
1951	07-02-51	9.80	5,200	1966	04-24-66	9.45	6,250
1952	04-01-52	12.61	10,500	1967	05-06-67	8.74	5,020
1953	11-25-52	13.24	10,800	1968	05-13-68	15.00	20,000
1954	05-02-54	10.60	6,320	1969	07-26-69	13.70	15,700
1955	03-20-55	8.36	2,920	1970	04-19-70	8.32	4,230
1956	02-02-56	10.52	5,640	1971	10-27-70	11.00	8,410
1957	04-03-57	10.38	5,870	1972	12-10-71	14.70	19,000
1958	05-02-58	9.92	5,970	1973	10-30-72	13.17	14,000
1959	11-15-58	8.77	5,000	1974	05-22-74	12.65	12,500
1960	05-20-60	13.69	17,900	1975	03-28-75	8.65	4,660
1961	05-06-61	9.21	5,950	1976	03-08-76	5.30	1,400
1962	11-22-61	7.20	3,370	1977	03-28-77	9.70	6,160
1963	05-11-63	5.82	2,040	1978	05-07-78	3.80	574
1964	05-09-64	12.40	13,000				

07356700 Barnes Branch near Mount Ida, Arkansas

Location.--Lat 34° 33'57", long 93° 37'03", in SE 1/4 SE 1/4 sec.13, T.2 S., R.25 W., on right bank 35 ft upstream from culvert on State Highway 27, 0.3 mi upstream from mouth, and 1.1 mi northeast of Mount Ida.

Drainage area.--1.85 mi^2.

Gage.--Crest-stage gage. Datum of gage is 602.86 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 61 ft^3/s and by culvert measurements below 3,070 ft^3/s.

Remarks.--Only annual peaks are shown.

07356700 Barnes Branch near Mount Ida, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	05-06-61	11.62	175	1972	12-10-71	14.50	510
1962	11-22-61	9.61	83	1973	03-10-73	11.32	810
1963	06-16-63	9.10	350	1974	06-08-74	12.80	450
1964	03-09-64	10.73	675	1975	03-28-75	11.03	195
1965	09-22-65	12.01	465	1976	03-08-76	9.73	115
1966	04-23-66	11.24	275	1977	10-25-76	9.28	120
1967	05-31-67	10.39	760	1978	08-30-78	9.33	540
1968	05-13-68	12.22	1,000	1979	11-16-78	11.48	275
1969	07-26-69	13.76	315	1980	09-28-80	10.15	670
1970	04-19-70	10.36	475	1981	07-30-81	12.11	3,070
1971	10-26-70	11.14	1,140	1982	12-03-82	16.79	175

07357700 Glazypeau Creek at Mountain Valley, Arkansas

Location.--Lat 34° 37'33", long 93° 03'10", in SE 1/4 SE 1/4 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 tributary, 0.4 mi upstream from small tributary, and 0.3 mi southeast of Mountain Valley.

Drainage area.--3.84 mi^2, approximately.

Gage.--Recording and crest-stage gage. Recording rainfall gage from December 1967 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 670 ft^3/s and by contracted-opening measurements at 2,110 ft^3/s and 2,120 ft^3/s.

Remarks.--Only annual peaks are shown.

07357700 Glazypeau Creek at Mountain Valley, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	12-10-60	9.84	400	1974	04-21-74	12.02	1,920
1962	02-26-62	10.36	560	1975	03-28-75	10.60	640
1963	07-16-63	12.41	2,110	1976	03-08-76	8.28	138
1964	03-09-64	10.91	800	1977	03-03-77	10.49	600
1965	02-11-65	10.43	580	1978	05-01-78	9.45	322
1966	04-23-66	10.41	580	1979	04-02-79	11.65	1,400
1967	05-01-67	10.90	785	1980	04-25-80	9.02	248
1968	05-13-68	11.85	1,250	1981	02-01-81	8.25	125
1969	01-29-69	12.25	2,120	1982	06-28-82	10.34	560
1970	03-03-70	10.43	560	1983	12-03-82	12.29	1,960
1971	10-27-70	11.13	920	1984	12-03-83	8.69	207
1972	08-10-72	8.64	187	1985	10-19-84	12.69	2,800
1973	04-19-73	10.82	740	1986	06-11-86	10.11	452

07359520 Jackson Creek near Malvern, Arkansas

Location.--Lat 34° 22’01”, long 92° 52’01”, in SW 1/4 NE 1/4 sec.19, T.4 S., R.17 W., on left bank 40 ft upstream from culvert on State Highway 84, 0.7 mi upstream from mouth, and 3.2 mi west of Malvern.

Drainage area.--2.95 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 260 ft^3/s and by culvert measurements at 482 ft^3/s, 1,200 ft^3/s, and 1,590 ft^3/s.

Remarks.--Only annual peaks are shown. Prior to 1978 published as Ouachita River tributary near Malvern.

07359520 Jackson Creek near Malvern, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	01-22-62	7.51	482	1972	12-10-71	5.78	158
1963	03-04-63	5.82	153	1973	03-10-73	10.89	1,590
1964	04-23-64	7.75	555	1974	06-08-74	11.37	1,800
1965	02-11-65	6.45	235	1975	05-03-75	6.87	325
1966	04-23-66	6.09	184	1976	06-25-76	4.98	85
1967	05-06-67	6.61	260	1977	03-03-77	6.93	335
1968	05-13-68	8.26	650	1978	11-16-77	5.03	87
1969	01-30-69	9.83	1,200	1979	04-23-79	9.05	910
1970	03-03-70	6.20	212	1980	04-13-80	4.83	73
1971	08-04-71	4.42	48	1981	05-26-81	5.38	115

07359700 Caddo River at Glenwood, Arkansas

Location.--Lat 34° 19’19”, long 93° 32’28”, in SE 1/4 NE 1/4 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 mi^2.

Gage.--Nonrecording prior to November 26, 1946; recording thereafter. Datum of gage is 514.41 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 84,000 ft^3/s.

Bankfull stage.--14 ft.

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

07359700 Caddo River at Glenwood, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1945	03-30-45	27.00	65,000	1963	03-11-63	11.60	5,500
1946	05-25-46	19.40	31,000	1964	03-09-64	19.35	22,500
1947	04-30-47	11.70	9,500	1965	01-09-65	19.70	23,500
1948	03-01-48	13.60	14,000	1966	04-24-66	18.65	20,500
1949	01-24-49	22.40	42,000	1967	05-06-67	18.80	21,000
1950	02-12-50	15.90	20,000	1968	05-13-68	31.40	88,000
1951	07-03-51	15.40	19,000	1969	01-30-69	26.55	55,000
1952	04-01-52	17.20	24,000	1970	04-19-70	18.25	19,000
1953	12-04-52	19.60	32,000	1971	10-27-70	12.20	7,300
1954	05-02-54	16.90	19,000	1972	12-10-71	26.40	53,800
1955	03-20-55	18.50	23,000	1973	04-21-73	25.50	49,000
1956	02-02-56	16.40	14,500	1974	04-22-74	23.98	41,800
1957	04-03-57	16.80	15,500	1975	03-28-75	19.06	23,500
1958	11-13-57	17.60	18,000	1976	03-08-76	13.92	10,200
1959	11-15-58	17.30	16,500	1977	03-03-77	17.12	17,600
1960	05-20-60	17.60	17,500	1978	11-01-77	12.70	8,100
1961	05-06-61	27.95	61,600	1979	03-30-79	18.50	21,600
1962	02-26-62	12.09	6,200	1980	12-24-79	9.70	3,500

07359750 Little Sugarloaf Creek near Bonnerdale, Arkansas

Location.--Lat 34° 21’40”, long 93° 27’30”, in NW 1/4 SW 1/4 sec. 27, T.4 S., R.23 W., on right bank 33 ft upstream from bridge on U.S. Highway 70, 3.2 mi upstream from mouth, and 4.7 mi southwest of Bonnerdale.

Drainage area.--2.32 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 850 ft^3/s and by culvert measurement at 2,540 ft^3/s.

Remarks.--Only annual peaks are shown.

07359750 Little Sugarloaf Creek near Bonnerdale, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	02-26-62	8.02	450	1973	04-23-73	11.45	1,660
1963	06-16-63	6.29	126	1974	06-07-74	14.55	3,450
1964	04-24-64	8.68	630	1975	06-08-75	11.18	1,560
1965	07-16-65	8.26	515	1976	03-08-76	8.17	488
1966	08-13-66	11.11	1,550	1977	03-04-77	8.75	650
1967	05-01-67	9.52	900	1978	11-01-77	8.43	558
1968	05-13-68	13.11	2,540	1979	05-23-79	9.56	920
1969	01-30-69	11.10	1,550	1980	07-27-80	8.13	480
1970	04-19-70	7.49	330	1981	06-06-81	8.47	565
1971	02-12-71	6.15	112	1982	06-16-82	7.94	432
1972	09-17-72	11.91	1,860	1983	12-02-82	12.89	2,380

07359800 Caddo River near Alpine, Arkansas

Location.--Lat 34° 16’00”, long 93° 21’45”, in SW 1/4 SE 1/4 sec.28, T.5 S., R.22 W., at Runyan Bridge on county road between Alpine and Bismarck, 7.1 mi downstream from Fork Creek, and at mile 33.8.

Drainage area.--312 mi^2.

Gage.--Nonrecording prior to January 27, 1947; recording thereafter. Datum of gage is 394.85 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 38,000 ft^3/s.

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

07359800 Caddo River near Alpine, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	1927	22.00	43,000	1956	02-02-56	12.15	17,900
1939	04-16-39	20.30	37,700	1957	04-04-57	13.70	19,400
1940	04-29-40	7.86	8,150	1958	05-03-58	20.18	36,500
1941	11-23-40	20.60	39,400	1959	02-14-59	16.16	25,800
1942	04-08-42	19.40	36,200	1960	05-20-60	13.00	17,600
1945	03-30-45	30.20	64,200	1961	05-06-61	27.15	55,800
1947	04-30-47	10.00	12,500	1962	02-27-62	13.08	17,800
1948	03-02-48	12.39	18,300	1963	03-11-63	8.75	7,990
1949	01-24-49	23.50	46,900	1964	03-09-64	18.05	30,600
1950	02-12-50	15.75	26,900	1965	01-09-65	18.20	31,100
1951	07-03-51	13.66	20,800	1966	08-21-66	17.61	23,000
1952	04-23-52	15.97	27,400	1967	05-06-67	17.87	24,500
1953	12-04-52	19.95	37,800	1968	05-13-68	35.64	85,000
1954	05-02-54	13.80	21,900	1969	01-30-69	25.85	48,500
1955	03-21-55	16.25	27,900	1970	04-19-70	13.40	15,600

07360150 Pearson Creek Tributary near Dalark, Arkansas

Location.--Lat 34° 01’59”, long 92° 52’05”, in SE 1/4 NW 1/4 sec.17, T.8 S., R.17 W., on right bank 10 ft upstream from culvert on State Highway 8, 1.1 mi east of Dalark, and 1.7 mi upstream from mouth.

Drainage area.--0.42 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from September 1968 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 22 ft^3/s and by culvert measurements at 113 ft^3/s, 147 ft^3/s and 1,220 ft^3/s.

Remarks.--Only annual peaks are shown. Published as “Casa Massa Creek tributary” prior to 1965.

07360150 Pearson Creek Tributary near Dalark, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-30-61	3.25	27
1962	02-26-62	5.16	113
1963	10-07-62	3.92	53
1964	04-22-64	5.81	147
1965	02-10-65	5.40	125
1966	04-25-66	5.04	107
1967	04-25-67	4.62	85
1968	05-13-68	4.93	101
1969	01-30-69	3.67	43
1970	03-03-70	3.10	22
1971	07-24-71	4.74	92
1972	05-01-72	2.90	15
1973	04-19-73	9.61	1,220
1974	06-08-74	6.71	195
1975	05-03-75	3.74	46
1976	06-15-76	3.76	47
1977	03-28-77	4.94	102
1978	09-25-78	3.39	32
1979	05-04-79	6.65	192
1980	04-13-80	3.96	55
1981	07-28-81	4.63	85
1972	05-01-72	2.90	15

07360800 Muddy Fork Creek near Murfreesboro, Arkansas

Location.--Lat 34° 04’59”, long 93° 45’07”, in NE 1/4 sec.3, T.8 S., R.26 W., 3 mi northwest of Murfreesboro at mile 1.8.

Drainage area.--121 mi^2.

Stage-discharge relation.--Defined by current-meter measurements below 24,000 ft^3/s 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.

07360800 Muddy Fork Creek near Murfreesboro, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1940	05-18-40	13.25	6,200
1941	11-23-40	17.20	11,800
1942	04-08-42	18.30	13,500
1943	03-12-43	10.20	3,400
1944	05-01-44	16.60	10,900
1945	03-30-45	29.70	47,100
1946	02-05-46	14.60	8,560
1947	04-30-47	12.40	5,480
1948	03-02-48	13.40	6,680
1949	01-24-49	21.75	24,700
1950	09-16-50	18.10	13,200
1951	07-02-51	14.85	8,310
1952	04-22-52	19.44	15,800
1953	05-11-53	22.56	24,800
1954	05-02-54	13.40	6,620
1955	03-21-55	16.72	11,900
1956	04-30-56	15.18	9,470
1957	05-26-57	14.35	8,190
1958	05-02-58	26.28	35,100
1959	02-14-59	14.95	9,150
1960	06-27-60	14.05	8,000
1961	05-06-61	17.45	13,500
1962	02-26-62	13.50	6,800
1963	03-16-63	10.20	2,600
1964	03-09-64	12.93	5,800
1965	03-29-65	13.95	7,400
1966	08-21-66	15.80	11,000
1967	05-06-67	17.85	14,000
1968	05-13-68	21.35	22,000
1969	01-30-69	24.74	32,000
1970	04-26-70	14.96	9,200
1971	05-24-71	10.40	3,100

07360800 Muddy Fork Creek near Murfreesboro, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1972	12-10-71	15.72	10,300	1977	03-03-77	18.39	14,800
1973	04-19-73	18.95	16,000	1978	03-07-78	12.60	5,500
1974	06-08-74	25.70	33,200	1979	11-16-78	18.02	14,100
1975	02-01-75	19.08	16,400	1980	12-17-79	16.80	12,000
1976	03-08-76	15.49	10,000				

07361000 Little Missouri River near Murfreesboro, Arkansas

Location.--Lat 34° 03', long 93° 43', in SE 1/4 sec.13 T.8 S., R.26 W., on downstream side of bridge on State Highway 27, 1.9 mi downstream from Muddy Fork Creek, 2 mi southwest of Murfreesboro, 4.6 mi upstream from Prairie Creek, and at mile 24.1.

Drainage area.--380 mi^2.

Gage.--Nonrecording prior to September 30, 1931; recording thereafter. Datum of gage is 324.28 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 38,000 ft^3/s and extended on basis of contracted-opening measurement of 120,000 ft^3/s.

Bankfull stage.--17 ft.

Remarks.--Peak discharge materially regulated since November 1949 by Lake Greeson (capacity, 407,900 acre-ft, drainage area, 237 mi^2). Only annual peaks are shown.

07361000 Little Missouri River near Murfreesboro, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-00-27	21.00	--	1942	04-08-42	16.52	37,200
1928	04-21-28	7.75	8,740	1943	12-27-42	14.24	20,000
1929	12-17-28	12.52	21,600	1944	05-01-44	16.60	38,600
1930	05-03-30	14.00	26,000	1945	03-30-45	19.84	120,000
1931	02-13-31	6.80	6,290	1946	04-30-46	16.78	41,500
1938	01-24-38	17.50	54,300	1947	04-30-47	12.62	13,500
1939	04-16-39	14.73	21,800	1948	03-02-48	14.53	21,200
1940	05-18-40	13.49	16,800	1949	01-24-49	18.05	65,700
1941	11-23-40	17.03	44,800				

07361020 Prairie Creek Tributary near Kirby, Arkansas

Location.--Lat 34° 09'10", long 93° 37'53", in SE 1/4 sec.11, T.7 S., R.25 W., on right bank 19 ft upstream from culvert on State Highway 27, 0.3 mi upstream from mouth, and 6.6 mi south of Kirby.

Drainage area.--0.16 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 21 ft^3/s and by culvert measurements at 143 ft^3/s, 182 ft^3/s, and 306 ft^3/s.

Remarks.--Only annual peaks are shown.

07361020 Prairie Creek Tributary near Kirby, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	10-16-62	3.57	41	1970	06-01-70	3.83	57
1964	04-23-64	5.14	143	1971	08-02-71	4.06	70
1965	03-29-65	3.15	20	1972	12-09-71	3.08	16
1966	08-13-66	5.70	182	1973	04-19-73	4.86	123
1967	05-01-67	3.56	41	1974	06-08-74	7.27	303
1968	05-13-68	7.29	306	1975	02-03-75	4.36	90
1969	01-29-69	5.05	137	1976	06-24-76	3.75	52

07361020 Prairie Creek Tributary near Kirby, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1977	03-03-77	3.60	43	1982	06-16-82	3.70	49
1978	11-02-77	3.53	40	1983	05-15-83	6.21	215
1979	11-17-78	3.75	52	1984	12-03-83	3.41	32
1980	09-28-80	3.74	52	1985	02-24-85	3.60	43
1981	06-05-81	3.80	54	1986	04-04-86	6.88	265

07361180 South Fork Ozan Creek near Ozan, Arkansas

Location.--Lat 33° 49’15”, long 93° 42’28”, in SE 1/4 SW 1/4 sec.5, T.11 S., R.25 W., on right bank 39 ft upstream from bridge on State Highway 4, 0.4 mi upstream from Missouri Pacific Railroad Co. bridge, and 2.0 mi south of Ozan.

Drainage are.--17.7 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 1,600 ft^3/s and by field estimate at 5,200 ft^3/s and 8,360 ft^3/s.

Remarks.--Only annual peaks are shown.

07361180 South Fork Ozan Creek near Ozan, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	04-28-63	17.06	1,980	1978	08-30-78	17.78	2,150
1964	04-22-64	17.82	2,150	1979	03-03-79	23.10	4,640
1965	05-10-65	17.78	2,150	1980	04-13-80	20.79	3,420
1966	04-25-66	24.00	5,200	1981	12-09-80	19.29	2,700
1967	04-26-67	24.33	5,400	1982	10-17-81	22.39	4,230
1968	05-11-68	23.74	5,000	1983	12-03-82	23.73	5,000
1969	01-29-69	23.24	4,700	1984	05-03-84	24.00	6,200
1970	04-19-70	21.16	3,600	1985	02-24-85	21.60	3,800
1971	07-24-71	23.34	4,800	1986	12-11-85	22.06	4,000
1972	01-02-72	19.51	2,800	1987	03-18-87	18.30	2,270
1973	04-19-73	25.06	8,360	1988	12-26-87	21.04	3,500
1974	11-23-73	24.60	7,200	1989	03-29-89	21.99	4,000
1975	02-03-75	23.22	5,300	1990	03-08-90	23.72	5,000
1976	05-06-76	24.20	6,400	1991	10-08-90	20.31	3,100
1977	03-28-77	22.08	4,150				

07361200 Ozan Creek near McCaskill, Arkansas

Location.--Lat 33° 52’55”, long 93° 35’59”, in SE 1/4 NE 1/4 sec. 18, T.10 S., R.24 W., on downstream side of bridge on State Highway 24, 1.7 mi upstream from Haley Branch, 3.5 mi southeast of McCaskill, and at mile 14.5.

Drainage area.--148 mi^2.

Gage.--Nonrecording prior to 1948; recording thereafter. Datum of gage is 281.07 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 18,000ft^3/s.

Remarks.--Gage-height records and results of miscellaneous discharge measurements furnished by Corps of Engineers.

07361200 Ozan Creek near McCaskill, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1940	04-07-40	13.30	2,300	1943	03-12-43	16.70	13,000
1941	04-23-41	14.50	5,300	1944	05-02-44	16.40	11,800
1942	04-08-42	15.10	6,400	1945	03-30-45	19.90	30,000

07361200 Ozan Creek near McCaskill, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1946	02-06-46	14.50	5,000	1964	04-23-64	15.87	10,400
1947	05-13-47	17.96	19,000	1965	02-11-65	15.58	9,500
1948	03-22-48	14.50	4,400	1966	05-01-66	17.34	17,700
1949	01-25-49	16.40	12,000	1967	04-26-67	15.69	9,890
1950	02-13-50	15.42	7,600	1968	05-11-68	17.93	18,900
1951	01-13-51	14.83	5,000	1969	01-30-69	16.27	12,400
1952	04-12-52	15.02	5,300	1970	04-26-70	13.87	4,780
1953	05-11-53	18.08	20,000	1971	07-25-71	13.00	3,360
1954	05-02-54	13.88	2,800	1972	12-09-71	12.13	2,530
1955	03-23-55	15.23	6,800	1973	04-20-73	17.64	18,000
1956	02-18-56	14.17	3,500	1974	06-04-74	15.41	8,950
1957	04-03-57	16.10	10,000	1975	05-03-75	14.89	7,350
1958	05-01-58	16.95	14,000	1976	03-08-76	14.72	6,880
1959	02-14-59	14.80	6,000	1977	04-04-77	14.10	5,280
1960	01-14-60	15.05	7,000	1978	01-17-78	12.62	2,940
1961	03-27-61	15.20	7,600	1979	03-03-79	15.40	8,950
1962	02-23-62	15.30	8,450	1980	01-22-80	11.50	2,170
1963	04-29-63	12.43	2,420				

07361500 Antoine River at Antoine, Arkansas

Location.--Lat 34° 02’20”, long 93° 25’05”, in NW 1/4 NW 1/4 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 mi downstream from Brushy Creek, 1.9 mi downstream from Suck Creek, and at mile 8.5.

Drainage area.--178 mi^2.

Gage.--Recording., Prior to October 22, 1954, at site 75 ft upstream at same datum. Datum of gage is 229.33 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 28,000 ft^3/s.

Remarks.--Gage-height records prior to 1955 furnished by Corps of Engineers. Only annual peaks are shown.

07361500 Antoine River at Antoine, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1905	05-00-05	29.70	40,000	1965	02-11-65	20.91	9,150
1945	03-31-45	24.60	18,800	1966	08-21-66	24.02	16,600
1951	01-13-51	20.00	8,100	1967	05-06-67	22.08	11,400
1952	04-27-52	22.10	10,500	1968	05-14-68	27.60	28,400
1953	05-11-53	23.60	15,300	1969	01-30-69	25.20	21,000
1954	05-02-54	19.00	7,100	1970	03-03-70	21.51	10,600
1955	03-21-55	23.52	14,900	1971	07-28-71	16.66	4,960
1956	04-30-56	19.80	8,320	1972	12-09-71	18.54	6,390
1957	04-03-57	24.00	16,600	1973	04-19-73	26.84	27,400
1958	05-02-58	28.75	35,500	1974	06-08-74	24.05	16,800
1959	02-14-59	21.75	10,100	1975	02-01-75	22.43	12,200
1960	12-16-59	21.03	8,580	1976	03-08-76	21.64	10,400
1961	03-30-61	21.34	9,080	1977	03-03-77	23.19	14,100
1962	02-27-62	19.03	6,360	1978	03-07-78	15.69	4,280
1963	03-11-63	14.69	3,560	1979	11-16-78	24.28	15,300
1964	04-23-64	23.05	13,500	1980	09-28-80	22.30	11,900

07361500 Antoine River at Antoine, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1981	07-29-81	22.41	12,400	1988	12-26-87	24.87	18,900
1982	04-16-82	22.95	14,700	1989	11-26-88	23.35	14,500
1983	12-03-82	28.43	26,900	1990	03-08-90	26.62	25,200
1984	05-02-84	22.96	13,800	1991	04-13-91	22.37	12,000
1985	02-23-85	22.19	13,100	1992	11-19-91	22.50	12,300
1986	04-05-86	24.01	16,600	1993	12-15-92	20.93	9,190

07361600 Little Missouri River near Boughton, Arkansas

Location.--Lat 33° 52’32”, long 93° 18’16”, in NE 1/4 sec.13, T.10 S., R.22 W., on downstream side of bridge on U.S. Highway 67, 1.5 mi northeast of Boughton, 5.9 mi downstream from Howard Creek, 10.2 mi downstream from Antoine River, and at mile 46.8.

Drainage area.--1,068 mi^2.

Gage.--Nonrecording prior to March 19, 1947; recording thereafter. Datum of gage is 182.13 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 62,000 ft^3/s.

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 mi^2). Only annual peaks are shown.

07361600 Little Missouri River near Boughton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1938	02-19-38	23.55	57,000	1944	05-02-44	23.40	54,000
1939	04-18-39	21.28	22,600	1945	03-31-45	27.20	111,000
1940	05-02-40	17.05	7,350	1946	02-07-46	21.80	30,000
1941	04-25-41	20.50	17,400	1947	05-14-47	22.06	37,300
1942	04-09-42	23.35	54,000	1948	03-04-48	20.71	20,700
1943	03-14-43	21.40	25,000				

07361680 Middle Caney Creek Tributary near Rosston, Arkansas

Location.--Lat 33° 36’19”, long 93° 17’31”, in SW 1/4 SE 1/4 sec.17, T.13 S., R.21 W., on right bank 20 ft upstream from culvert on State Highway 19, 1.0 mi north of junction with State Highway 4, and 1.3 mi northwest of Rosston.

Drainage area.--1.48 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 67 ft^3/s and by culvert measurements at 309 ft^3/s, 680 ft^3/s, and 1,270 ft^3/s.

Remarks.--Only annual peaks are shown. Prior to 1965 published as Little Caney Creek near Rosston.

07361680 Middle Caney Creek Tributary near Rosston, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-26-61	8.98	232	1970	04-19-70	8.77	208
1962	10-01-61	13.70	1,270	1971	07-24-71	9.51	315
1963	07-08-63	6.99	48	1972	01-02-72	6.87	14
1964	04-22-64	7.76	98	1973	03-15-73	8.16	115
1965	02-11-65	8.01	122	1974	08-31-74	11.97	840
1966	04-30-66	10.94	680	1975	06-09-75	9.72	350
1967	12-27-66	8.64	190	1976	06-25-76	8.93	225
1968	05-17-68	8.51	175	1977	03-28-77	8.59	165
1969	01-29-69	9.03	240	1978	01-13-78	7.09	52

07361680 Middle Caney Creek Tributary near Rosston, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1979	04-23-79	10.74	545
1980	03-24-80	9.31	265
1981	05-17-81	9.46	300
1982	10-17-81	9.60	325
1983	12-03-82	10.68	535
1984	1984	--	1
1986	11-12-85	8.90	220

07361780 Bradshaw Creek near Hollywood, Arkansas

Location.--Lat 34° 06’02”, long 93° 12’24”, in NE 1/4 SE 1/4 sec.26, T.7 S., R.21 W., on left bank 25 ft downstream from bridge on State Highway 26, 0.7 mi upstream from small tributary, and 2.6 mi east of Hollywood.

Drainage area.--3.36 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown. Prior to 1971 published as Old Bradshaw Creek near Hollywood.

07361780 Bradshaw Creek near Hollywood, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	01-22-62	14.34	815
1963	04-28-63	10.28	360
1964	03-04-64	12.94	650
1965	02-11-65	11.12	455
1966	04-30-66	12.88	640
1967	04-25-67	10.51	385
1968	05-13-68	15.15	915
1969	01-30-69	11.03	435
1970	03-03-70	9.60	290
1971	07-24-71	8.56	200
1972	12-10-71	9.31	285
1973	04-19-73	16.28	1,060
1974	06-08-74	16.86	1,140
1975	05-03-75	11.37	470
1976	06-15-76	9.92	320
1977	03-28-77	10.19	360
1978	11-02-77	9.55	308
1979	04-23-79	15.55	965
1980	04-13-80	11.38	470
1981	07-01-81	8.92	257

07361800 Terre Noire Creek east of Gurdon, Arkansas

Location.--Lat 33° 54’50”, long 93° 02’11”, in SW 1/4 sec.27, T.9 S., R.19 W., on downstream side of highway bridge, 6 3/4 mi east of Gurdon, and at mile 13.6.

Drainage area.--250 mi^2.

Gage.--Nonrecording prior to November 3, 1949; recording thereafter. Prior to January 1, 1947, at datum 5 ft higher. Datum of present gage is 133.65 ft above sea level (levels by Corps of Engineers). All gage heights adjusted to present datum.

Stage-discharge relation.--Not adequately defined.

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

07361800 Terre Noire Creek east of Gurdon, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1940	04-29-40	17.70	6,800
1941	05-06-41	18.50	11,400
1942	04-09-42	21.90	33,500
1943	05-13-43	18.90	13,800
1944	05-02-44	20.50	24,000
1945	03-30-45	22.80	39,600
1946	01-09-46	19.20	15,600
1947	04-23-47	19.30	16,300
1948	03-22-48	18.00	8,500
1949	06-14-49	18.07	8,900
1950	02-13-50	19.54	17,800
1951	01-14-51	19.25	15,900
1952	04-13-52	18.76	13,000
1953	05-12-53	20.06	21,000
1954	05-02-54	17.94	8,200
1955	03-21-55	19.30	16,200

07361800 Terre Noire Creek east of Gurdon, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-09-56	18.08	9,000
1957	04-04-57	21.24	29,000
1958	05-03-58	22.85	40,000
1959	02-15-59	19.00	14,400
1960	12-17-59	19.32	16,300
1961	03-31-61	19.02	14,400
1962	02-27-62	19.43	17,000
1963	04-29-63	18.61	12,100
1964	04-29-64	19.48	17,400
1965	02-12-65	19.41	17,000
1966	05-01-66	21.31	29,400
1967	04-26-67	19.54	17,800
1968	05-14-68	22.42	37,000
1969	01-31-69	20.10	21,300
1970	03-04-70	19.28	16,200
1971	07-25-71	18.70	12,600
1972	12-10-71	19.00	14,400
1973	12-10-72	19.00	14,400
1974	04-23-74	19.30	16,300
1975	05-04-75	19.81	19,400
1976	03-09-76	20.43	23,400
1977	03-04-77	19.66	18,500
1978	03-14-78	19.40	16,800
1979	01-01-79	20.40	23,100
1980	12-13-79	19.60	18,000

07362100 Smackover Creek near Smackover, Arkansas

Location.--Lat 33° 22’33”, long 92° 46’37”, in NW 1/4 SE 1/4 sec.32, T.15 S., R.16 W., on downstream side of bridge on State Highway 7, 0.1 mi downstream from Camp Creek, 3.3 mi northwest of Smackover, and at mile 22.0.

Drainage area.--385 mi^2.

Gage.--Nonrecording prior to August 27, 1948; recording thereafter. Datum of gage is 97.56 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 31,000 ft^3/s. Measurements made occasionally prior to 1962, frequently thereafter.

Bankfull stage.--10 ft.

Remarks.--Gage-height records and miscellaneous discharge measurements furnished by Corps of Engineers. Only annual peaks are shown.

07362100 Smackover Creek near Smackover, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	02-04-39	18.70	12,200
1940	07-03-40	17.80	9,400
1941	05-07-41	15.50	4,700
1942	04-27-42	18.70	12,200
1943	03-28-43	14.50	3,500
1944	05-03-44	18.20	10,600
1945	04-03-45	19.80	16,500
1946	01-10-46	15.80	5,100
1947	04-13-47	15.20	4,200
1948	03-24-48	16.20	5,800
1949	01-28-49	16.80	7,000
1950	01-14-50	19.30	14,500
1951	02-09-51	13.20	2,300
1952	04-14-52	14.90	3,900
1953	05-01-53	17.00	7,400
1954	05-05-54	12.20	1,600
1955	03-24-55	13.10	2,200
1956	02-09-56	13.00	2,100
1957	04-29-57	19.60	16,000
1958	04-27-58	21.21	25,000
1959	06-09-59	14.90	3,810
1960	03-05-60	14.09	2,930
1961	07-17-61	18.65	11,300
1962	11-24-61	16.78	8,060
1963	05-01-63	9.69	722
1964	04-26-64	15.94	5,010
1965	02-13-65	18.25	10,300
1966	05-02-66	20.93	21,400
1967	06-02-67	12.12	1,450
1968	05-19-68	17.30	7,250
1969	03-20-69	15.41	4,540
1970	05-02-70	16.11	5,600
1971	07-25-71	15.10	4,080
1972	01-07-72	13.23	2,010
1973	12-11-72	17.95	9,100
1974	06-08-74	24.97	52,700
1975	02-03-75	18.25	10,800
1976	03-10-76	16.75	7,000
1977	03-30-77	12.55	1,760
1978	05-08-78	14.84	4,610

07362100 Smackover Creek near Smackover, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1979	04-24-79	17.70	10,000
1980	04-15-80	15.39	4,930
1981	05-19-81	14.59	3,720
1982	06-18-82	14.91	3,880
1983	12-28-82	19.08	13,500
1984	03-18-84	13.63	3,010
1985	10-24-84	16.97	8,430
1986	06-28-86	23.28	34,200
1987	12-10-86	18.00	8,830
1988	12-28-87	20.36	18,900
1989	07-02-89	16.76	6,980
1990	06-04-90	23.18	33,000
1991	04-29-91	22.66	29,300
1992	03-11-92	17.09	7,700
1993	06-22-93	15.16	4,470

07362330 Dunn Creek near Hampton, Arkansas

Location.--Lat 33° 32’05”, long 92° 30’55”, in SE 1/4 NW 1/4 sec.2, T.14 S., R.14 W., on left bank 35 ft downstream from bridge on State Highway 4, 0.7 mi upstream from mouth, and 2.8 mi west of Hampton.

Drainage area.--13.6 mi^2, approximately.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 270 ft^3/s and by contracted-opening measurement at 4,240 ft^3/s.

Remarks.--Only annual peaks are shown.

07362330 Dunn Creek near Hampton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	11-22-61	7.25	680
1963	04-28-63	5.63	240
1964	04-22-64	5.93	285
1965	02-10-65	7.40	760
1966	05-01-66	10.11	4,240
1967	04-26-67	5.07	165
1968	05-17-68	8.51	1,520
1969	03-24-69	7.03	590
1970	05-01-70	7.82	1,000
1971	07-24-71	8.83	1,900
1972	01-02-72	4.93	150
1973	04-24-73	9.88	3,650
1974	06-08-74	9.27	2,500
1975	05-03-75	7.99	1,120
1976	03-08-76	7.28	700
1977	01-14-77	6.54	430
1978	05-07-78	6.22	320
1979	01-20-79	8.57	1,600
1980	04-13-80	6.80	500
1981	05-17-81	7.86	1,020
1982	10-17-81	5.75	255
1983	12-03-82	9.59	2,950
1984	1984	--	1
1985	10-23-84	7.74	800
1986	12-11-85	7.14	600
1987	05-02-87	8.18	1,230
1988	12-26-87	7.93	1,070
1989	05-05-89	8.67	1,700
1990	03-08-90	9.51	2,800
1991	04-28-91	8.29	1,330
1992	10-31-91	7.02	590
1993	04-08-93	7.36	710

07362450 Cooks Creek near Fordyce, Arkansas

Location.--Lat 33° 50’33”, long 92° 28’09”, in NW 1/4 NE 1/4 sec.19, T.10 S., R.14 W., on left bank 16 ft downstream from bridge on State Highway 8, 0.3 mi downstream from small tributary, 1.0 mi upstream from small tributary, 1.0 mi upstream from small tributary, and 3.9 mi northwest of Fordyce.

Drainage area.--5.02 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 130 ft^3/s and by contracted-opening measurement at 1,950 ft^3/s.

Remarks.--Only annual peaks are shown.

07362450 Cooks Creek near Fordyce, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	01-26-62	9.31	510	1972	01-02-72	6.94	103
1963	03-16-63	8.40	280	1973	04-24-73	11.65	1,820
1964	04-21-64	9.73	610	1974	12-03-73	11.93	2,120
1965	02-11-65	10.95	1,200	1975	03-13-75	10.53	970
1966	04-24-66	11.09	1,340	1976	03-08-76	7.52	155
1967	05-31-67	10.35	910	1977	03-28-77	8.28	268
1968	05-13-68	11.78	1,950	1978	05-08-78	8.40	290
1969	03-23-69	9.20	470	1979	05-04-79	9.18	465
1970	03-03-70	10.95	1,200	1980	04-13-80	9.08	440
1971	07-24-71	10.57	990	1981	07-01-81	10.04	740

07362500 Moro Creek near Fordyce, Arkansas

Location.--Lat 33° 47’32”, long 92° 19’30”, in NW 1/4 NW 1/4 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 mi southeast of Fordyce, 12 mi upstream from White Water Creek, and at mile 38.2.

Drainage area.--240 mi^2.

Gage.--Crest-stage gage. Recording prior to September 30, 1983. Datum of gage is 160.63 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 19,000 ft^3/s.

Bankfull stage.--11 ft.

Remarks.--Only annual peaks are shown.

07362500 Moro Creek near Fordyce, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1938	01-00-38	15.10	15,800	1967	05-09-67	11.78	2,710
1952	04-15-52	11.88	3,290	1968	05-15-68	13.82	9,000
1953	05-14-53	12.55	5,340	1969	02-02-69	13.03	6,010
1954	05-04-54	10.94	1,760	1970	03-05-70	12.70	5,250
1955	03-23-55	12.27	4,360	1971	08-10-71	10.62	1,230
1956	02-22-56	10.22	1,060	1972	01-08-72	9.13	632
1957	04-05-57	14.35	11,100	1973	04-24-73	13.18	7,590
1958	05-02-58	16.47	26,800	1974	06-09-74	14.30	11,200
1959	02-17-59	11.76	2,710	1975	05-05-75	13.08	6,160
1960	03-18-60	11.02	1,650	1976	03-10-76	12.74	5,210
1961	02-22-61	11.53	2,350	1977	04-04-77	11.58	3,130
1962	02-25-62	12.65	4,870	1978	01-31-78	8.45	532
1963	07-18-63	13.56	7,870	1979	05-06-79	13.22	6,640
1964	04-27-64	12.26	4,070	1980	04-15-80	12.46	4,350
1965	02-13-65	12.73	5,160	1981	06-06-81	12.58	4,060
1966	05-01-66	13.56	7,870	1982	04-22-82	12.05	3,220

07362500 Moro Creek near Fordyce, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1983	12-28-82	15.95	18,200
1984	05-04-84	14.55	12,500
1985	10-24-84	13.61	8,110
1986	02-07-86	11.72	2,940
1987	03-02-87	13.12	6,300
1988	12-27-87	15.86	22,000
1989	02-16-89	13.35	7,110
1990	03-09-90	14.02	9,890
1991	04-30-91	14.87	14,300
1992	12-15-91	12.20	3,860
1993	05-05-93	10.89	1,270

07363000 Saline River at Benton, Arkansas

Location.--Lat 34° 34’05”, long 92° 36’40”, in SE 1/4 NE 1/4 sec.9, T.2 S., R.15 W., on left bank 3/4 mi west of Benton, 3 mi downstream from confluence of North Fork and Alum Fork, and at mile 198.1.

Drainage area.--550 mi^2.

Gage.--Nonrecording July 6, 1938, to July 29, 1948, and February 14, to March 24, 1950 and after September 30, 1979; recording during rest of period. Prior to June 15, 1951, at site 0.4 mi downstream at datum 3.00 ft lower. Datum of present gage is 260.91 ft above sea level.

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

Bankfull stage.--20 ft.

Historical data.--Flood in April 1972 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. Only annual peaks are shown.

07363000 Saline River at Benton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-00-27	30.50	110,000
1938	01-22-38	--	34,000
1939	04-17-39	--	67,000
1940	04-07-40	--	7,800
1941	05-09-41	--	7,800
1942	04-09-42	--	45,000
1943	03-12-43	--	17,300
1944	04-23-44	--	58,000
1945	03-30-45	--	59,000
1946	05-24-46	--	50,000
1947	04-11-47	--	8,800
1948	03-02-48	--	25,500
1949	01-25-49	--	32,000
1950	02-13-50	--	32,000
1951	02-21-51	22.60	21,500
1952	04-13-52	20.42	20,500
1953	12-04-52	25.28	49,500
1954	05-02-54	24.49	48,000
1955	05-27-55	23.16	38,800
1956	01-30-56	22.36	33,200
1957	04-04-57	22.68	35,200
1958	05-03-58	21.40	28,400
1959	02-14-59	23.47	41,100
1960	05-21-60	20.22	22,000
1961	03-27-61	19.09	18,500
1962	02-27-62	21.40	27,400
1963	03-11-63	12.96	7,510
1964	03-10-64	22.50	33,200
1965	01-10-65	20.36	24,000
1966	04-26-66	23.52	38,500
1967	05-02-67	19.36	20,200
1968	05-14-68	26.50	66,000
1969	01-30-69	29.68	100,000
1970	03-04-70	19.45	22,600
1971	10-27-70	23.74	42,100
1972	12-10-71	16.50	12,300
1973	03-10-73	23.57	43,000
1974	04-22-74	26.14	62,400
1975	03-29-75	21.32	29,300
1976	06-25-76	18.38	16,700
1977	03-04-77	21.03	27,800
1978	09-13-78	22.16	34,000
1979	03-03-79	22.15	34,700
1980	12-24-79	16.30	11,900
1981	05-17-81	15.87	11,200
1982	04-03-82	19.23	19,700

07363000 Saline River at Benton, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1983	12-04-82	26.37	64,700
1984	11-03-83	18.34	16,600
1985	10-19-84	24.93	52,500
1986	04-05-86	21.32	29,500
1987	02-28-87	20.23	23,800
1988	12-25-87	23.11	39,500
1989	11-19-88	24.67	50,600
1990	03-08-90	26.62	63,600
1991	04-29-91	20.02	22,900
1992	03-18-92	18.92	18,600
1993	12-15-92	21.39	29,800

07363050 Holly Creek Tributary near Benton, Arkansas

Location.--Lat 34° 32'04", long 92° 33'12", in SW 1/4 NW 1/4 sec.19, T.2 S., R.14 W., on right bank 25 ft upstream from culvert on State Highway 35, 0.7 mi upstream from mouth, and 2.8 mi southeast of Benton.

Drainage area.--1.44 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 460 ft^3/s and indirect measurement at 2,760 ft^3/s.

Remarks.--Only annual peaks are shown.

07363050 Holly Creek Tributary near Benton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	01-22-62	5.64	255
1963	06-20-63	3.68	64
1964	04-23-64	6.51	475
1965	02-11-65	5.20	170
1966	04-25-66	5.46	215
1967	05-06-67	4.62	115
1968	05-13-68	5.93	315
1969	01-30-69	6.53	480
1970	03-03-70	3.93	75
1971	08-03-71	4.19	90
1972	12-10-71	4.37	100
1973	04-22-73	7.00	667
1974	11-25-73	6.05	345
1975	02-03-75	4.57	112
1976	03-08-76	4.46	105
1977	03-03-77	4.44	105
1978	09-13-78	11.80	2,760
1979	11-17-78	4.13	87
1980	05-13-80	3.84	72
1981	07-01-81	5.22	183
1982	04-03-82	5.10	165
1983	12-03-82	6.63	515
1984	12-03-83	5.02	150
1985	10-19-84	6.11	355
1986	1986	3.41	52

07363200 Saline River near Sheridan, Arkansas

Location.--Lat 34° 06'56", long 92° 24'21", in NE 1/4 NW 1/4 sec.15, T.7 S., R.13 W., on downstream side of bridge on U.S. Highway 167, 1 mi upstream from Gamble Creek, 1.6 mi downstream from Lost Creek, 2.1 mi upstream from Hurricane Creek, 13 1/2 mi south of Sheridan, and at mile 131.4.

Drainage area.--1,123 mi^2.

Gage.--Nonrecording prior to November 23, 1948; recording thereafter. Datum of gage is 152.86 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 67,000 ft^3/s (1969). Not adequately defined prior to 1948.

Bankfull stage.--14 ft.

Remarks.--Records furnished by Corps of Engineers. Only annual peaks are shown. Published as "Saline River and Gamble Creek near Sheridan" prior to 1966.

07363200 Saline River near Sheridan, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1938	01-24-38	21.00	--
1939	04-19-39	19.40	--
1940	04-13-40	13.20	--
1941	04-26-41	14.70	--

07363200 Saline River near Sheridan, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1942	04-11-42	19.30	--
1943	03-18-43	15.20	--
1944	05-05-44	17.60	--
1945	04-02-45	19.80	--
1946	03-30-46	18.80	--
1947	04-14-47	15.10	--
1948	03-05-48	16.40	18,500
1949	01-28-49	20.10	61,000
1950	02-15-50	19.70	56,000
1951	01-16-51	16.80	22,000
1952	04-16-52	16.80	22,000
1953	12-07-52	17.30	27,000
1954	05-05-54	17.80	34,000
1955	03-24-55	16.90	23,000
1956	02-21-56	17.20	26,000
1957	04-06-57	18.30	40,000
1958	05-03-58	18.97	39,000
1959	02-17-59	18.95	38,000
1960	06-28-60	17.90	29,000
1961	04-01-61	17.51	26,000
1962	03-02-62	17.20	24,000
1963	03-17-63	14.78	7,200
1964	04-26-64	18.51	34,000
1965	02-15-65	16.98	22,000
1966	04-28-66	18.16	31,000
1967	05-06-67	16.27	17,000
1968	05-16-68	21.38	62,000
1969	02-01-69	22.40	71,000
1970	03-07-70	17.00	22,000
1971	11-01-70	15.51	10,000
1972	12-14-71	16.05	13,300
1973	04-25-73	20.45	48,400
1974	06-10-74	21.36	59,600
1975	03-31-75	17.52	22,800
1976	03-12-76	15.73	9,740
1977	03-07-77	16.92	19,400
1978	05-11-78	16.05	12,800
1979	04-05-79	17.44	22,200
1980	03-20-80	15.91	11,000
1981	06-09-81	15.21	6,700
1982	04-07-82	16.57	15,700
1983	12-06-82	19.43	38,900
1984	05-05-84	18.08	27,000
1985	10-22-84	18.58	31,100
1986	04-08-86	17.34	19,800
1987	03-04-87	17.15	20,000
1988	12-28-87	22.93	76,800
1989	11-23-88	18.54	8,540
1990	03-10-90	20.55	49,000
1991	05-01-91	17.44	20,500
1992	11-24-91	16.06	12,100
1993	12-19-92	16.33	14,400

07363300 Hurricane Creek near Sheridan, Arkansas

Location.--Lat 34° 19’10”, long 92° 20’40”, in NW 1/4 NE 1/4 sec.6, T.4 S., R.12 W., on downstream side of bridge on U.S. Highway 270, 2.8 mi downstream from Simpson Creek, 3.5 mi east of Sheridan, and at mile 16.9.

Drainage area.--204 mi^2.

Gage.--Recording. Datum of gage is 200.00 ft above sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 14,000 ft^3/s and by contracted-opening measurement at 52,300 ft^3/s.

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 mi downstream.

Remarks.--Only annual peaks are shown.

07363300 Hurricane Creek near Sheridan, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	06-27-60	18.55	52,300
1961	04-31-61	15.42	12,600
1962	02-27-62	15.23	11,300
1963	04-29-63	12.70	1,390
1964	04-24-64	15.93	18,100
1965	02-12-65	15.04	9,750
1966	04-26-66	14.74	7,580
1967	05-07-67	14.52	5,450
1968	05-14-68	16.03	15,700
1969	01-31-69	15.34	9,240
1970	03-04-70	14.27	4,410
1971	08-07-71	12.15	890

07363300 Hurricane Creek near Sheridan, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1972	12-11-71	13.60	1,990
1973	04-20-73	15.57	12,400
1974	06-09-74	15.78	14,000
1975	01-11-75	15.33	9,070
1976	03-09-76	14.41	4,240
1977	03-05-77	13.46	1,810
1978	09-14-78	15.54	10,500
1979	05-04-79	15.53	12,700
1980	03-17-80	14.87	6,680
1981	06-06-81	14.15	4,010
1982	04-04-82	14.36	5,620
1983	05-15-83	15.81	14,300
1984	05-03-84	16.12	12,200
1985	04-24-85	15.24	8,520
1986	12-14-85	13.06	2,470
1987	03-01-87	15.20	7,010
1988	12-27-87	16.83	20,000
1989	03-29-89	15.50	11,000
1990	03-08-90	16.74	17,800
1991	10-11-90	13.44	1,300
1992	03-10-92	14.57	4,430
1993	04-27-93	13.07	1,460

07363330 West Fork Big Creek at Sheridan, Arkansas

Location.--Lat 34° 19’13”, long 92° 23’43”, in NW 1/4 NE 1/4 sec.3, T.5 S., R.13 W., on right bank 60 ft upstream from bridge on U.S. Highway 167, 0.3 mi upstream from mouth, and 0.9 mi north of junction of U.S. Highways 167 and 270 in Sheridan.

Drainage area.--4.86 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 680 ft^3/s and by contracted-opening and flow-over-road measurement at 3,720 ft^3/s.

Remarks.--Only annual peaks are shown.

07363330 West Fork Big Creek at Sheridan, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	06-27-60	18.74	3,720
1961	1961	--	240e
1962	1962	--	400e
1963	04-27-63	12.85	305
1964	04-23-64	13.12	350
1965	02-11-65	14.22	730
1966	04-25-66	12.97	325
1967	05-06-67	13.79	565
1968	05-13-68	14.22	730
1969	01-30-69	13.22	390
1970	03-03-70	12.94	310
1971	08-03-71	10.36	57
1972	01-28-72	10.20	50
1973	04-19-73	15.70	1,420
1974	11-24-73	14.75	950
1975	02-02-75	14.34	700
1976	03-08-76	13.32	420
1977	03-03-77	12.10	185
1978	05-08-78	13.45	470
1979	04-03-79	15.57	1,100
1980	03-13-80	13.92	610
1981	07-01-81	12.34	220

07363430 East Fork Derrieusseaux Creek nearPine Bluff, Arkansas

Location.--Lat 34° 17’57”, long 92° 11’37”, in NW 1/4 NW 1/4 sec.10, T.5 S., R.11 W., on right bank 14 ft upstream from culvert on U.S. Highway 270, 0.3 mi upstream from small tributary, 1/2 mi east of Grant-Jefferson County line, 3.8 mi upstream from mouth, and 12 mi northwest of Pine Bluff.

Drainage area.--0.66 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 78 ft^3/s and by culvert measurements at 130 ft^3/s, 142 ft^3/s, 237 ft^3/s, and 1,020 ft^3/s.

Remarks.--Only annual peaks are shown.

07363430 East Fork Derrieusseaux Creek nearPine Bluff, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	1961	7.26	53	1972	1972	6.74	35
1962	1962	9.29	237	1973	1973	12.17	1,020
1963	1963	6.36	25	1974	1974	8.92	190
1964	1964	9.14	210	1975	1975	8.79	170
1965	1965	8.54	130	1976	1976	6.91	40
1966	1966	8.73	142	1977	1977	6.73	33
1967	1967	8.56	130	1978	1978	8.90	186
1968	1968	7.95	92	1979	1979	11.46	433
1969	1969	8.18	100	1980	1980	8.64	156
1970	1970	7.91	90	1981	1981	10.52	330
1971	1971	6.80	37	1972	1972	6.74	35

07363450 Varnell Creek near Rison, Arkansas

Location.--Lat 33° 56’12”, long 92° 10’31”, in NW 1/4 NE 1/4 sec.18, T.9 S., R.10 W., on right bank 13 ft upstream from culvert on State Highway 35 and 1.8 mi southeast of Rison.

Drainage area.--0.28 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 2.9 ft^3/s and by culvert measurements at 54 ft^3/s, 61 ft^3/s, 132 ft^3/s, and 159 ft^3/s.

Remarks.--Only annual peaks are shown. Prior to 1978 published as Saline River tributary near Rison.

07363450 Varnell Creek near Rison, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1965	04-21-64	5.52	32	1976	03-08-76	5.40	26
1965	02-11-65	6.03	54	1977	04-03-77	6.01	53
1966	04-24-66	6.17	61	1978	11-30-77	4.69	5
1967	05-06-67	4.96	10	1979	05-04-79	6.24	64
1968	05-13-68	7.93	159	1980	04-13-80	6.20	61
1969	03-23-69	5.57	33	1981	07-01-81	7.78	150
1970	05-01-70	7.20	114	1982	06-16-82	5.16	17
1971	08-03-71	4.88	9	1983	12-28-82	8.71	214
1972	09-22-72	4.85	8	1984	05-03-84	5.73	38
1973	04-19-73	7.09	108	1985	10-24-84	6.28	65
1974	08-31-74	8.14	173	1986	03-12-86	4.90	8
1975	03-13-75	6.34	68				

07363500 Saline River near Rye, Arkansas

Location.--Lat 33° 42’03”, long 92° 01’33”, in SW 1/4 NW 1/4 sec.3, T.12 S., R.9 W., on downstream side of bridge on State Highway 15, 3.6 mi southwest of Rye, 5 mi upstream from Hudgin Creek, and at mile 710.0.

Drainage area.--2,102 mi^2.

Gage.--Nonrecording prior to May 30, 1939; recording thereafter. Datum of gage is 97.06 ft above sea level.

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.--Only annual peaks are shown.

07363500 Saline River near Rye, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-00-27	30.50	73,000
1938	01-27-38	28.00	42,300
1939	04-23-39	26.50	31,400
1940	07-03-40	20.91	9,040
1941	04-28-41	21.60	9,050
1942	04-14-42	27.65	39,600
1943	03-16-43	22.29	10,100
1944	05-08-44	26.77	32,800
1945	05-05-45	28.43	47,600
1946	04-02-46	27.01	37,100
1947	06-26-47	21.94	10,700
1948	03-09-48	25.02	20,400
1949	01-31-49	29.19	57,400
1950	02-18-50	28.26	46,500
1951	01-21-51	25.10	21,000
1952	04-21-52	23.92	14,800
1953	05-19-53	27.16	36,100
1954	05-11-54	23.30	14,600
1955	03-29-55	24.30	17,600
1956	02-24-56	25.10	21,300
1957	05-03-57	27.00	37,000
1958	05-03-58	30.31	70,500
1959	02-21-59	25.68	24,000
1960	07-04-60	23.23	14,800
1961	04-04-61	26.56	33,800
1962	03-05-62	25.85	28,000
1963	03-22-63	18.84	6,970
1964	04-29-64	27.59	42,200
1965	02-19-65	24.95	22,800
1966	05-02-66	29.00	50,800
1967	05-12-67	24.74	19,000
1968	05-18-68	31.40	74,500
1969	02-05-69	29.20	53,800
1970	05-04-70	24.43	18,100
1971	07-25-71	15.15	4,220
1972	12-22-71	17.75	6,140
1973	04-25-73	29.31	53,800
1974	06-13-74	29.11	47,500
1975	04-05-75	25.04	20,900
1976	03-18-76	22.69	12,000
1977	04-07-77	23.42	14,100
1978	05-18-78	21.15	9,240
1979	05-10-79	25.51	22,300
1980	03-26-80	24.18	17,000
1981	06-09-81	23.07	13,000
1982	04-23-82	20.33	8,120
1983	12-31-82	27.51	41,000
1984	05-08-84	25.91	28,800
1985	10-26-84	26.88	37,300
1986	04-15-86	23.12	13,200
1987	03-07-87	24.61	18,900
1988	12-31-87	30.76	67,800
1989	02-22-89	26.71	35,200
1990	03-14-90	28.16	43,400
1991	05-04-91	26.06	28,300
1992	03-19-92	22.59	11,700
1993	04-10-93	19.30	7,390

07364030 L'Aigle Creek Tributary near Hermitage, Arkansas

Location.--Lat 33° 24'48", long 92° 12'33", in SE 1/4 NW 1/4 sec.14, T.15 S., R.11 W., on right bank 20 ft upstream from culvert on State Highway 15, 2.5 mi upstream from mouth, and 3.3 mi southwest of Hermitage.

Drainage area.--0.36 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 6 ft^3/s and by culvert measurement at 59 ft^3/s.

Remarks.--Only annual peaks are shown.

07364030 L'Aigle Creek Tributary near Hermitage, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	04-28-63	3.50	3
1964	04-05-64	4.55	54
1965	02-11-65	4.07	24
1966	05-01-66	4.64	59
1967	05-04-67	3.54	4
1968	03-22-68	4.16	30
1969	10-13-68	4.38	42
1970	03-03-70	5.23	95
1971	03-13-71	3.72	9
1972	01-02-72	3.99	20
1973	04-19-73	4.71	63
1974	04-21-74	4.62	57
1975	05-13-75	5.16	91
1976	03-08-76	4.28	37
1977	03-04-77	3.81	12
1978	07-27-78	4.63	58
1979	04-23-79	5.52	113
1980	11-22-79	4.39	44
1981	06-06-81	4.47	48
1982	06-16-82	3.71	9
1983	12-28-82	5.09	87
1984	12-03-83	4.53	53
1986	12-11-85	4.57	52
1987	12-09-86	4.25	40
1988	12-26-87	5.13	88
1990	03-08-90	5.54	115
1992	06-03-92	4.93	74

07364070 Bear Creek near Strong, Arkansas

Location.--Lat 33° 04'32", long 92° 19'33", in NE 1/4 SE 1/4 sec.10, T.19 S., R.12 W., on right bank 20 ft downstream from bridge on State Highway 129, 2.2 mi upstream from mouth, and 2.9 mi southeast of Strong.

Drainage area.--5.62 mi^2.

Gage.--Crest-stage gage.

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

Remarks.--Only annual peaks are shown.

07364070 Bear Creek near Strong, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	07-15-63	12.12	275
1964	04-05-64	12.65	340
1965	03-29-65	13.27	430
1966	02-09-66	13.28	430
1967	05-31-67	11.50	200
1968	01-08-68	12.37	300
1969	06-02-69	11.08	170
1970	05-01-70	12.34	300
1971	04-22-71	10.55	130
1972	01-02-72	12.42	305
1973	03-15-73	14.08	540
1974	06-08-74	15.27	890
1975	05-03-75	13.56	465
1976	03-08-76	12.84	360
1977	03-03-77	9.72	87
1978	05-07-78	13.12	400
1979	01-20-79	13.68	480
1980	01-22-80	12.83	360
1981	05-12-81	13.39	447
1982	06-17-82	10.67	138
1983	12-27-82	15.35	950

07364110 Nevins Creek Tributary near Pine Bluff, Arkansas

Location.--Lat 34° 10'08", long 92° 05'12", in NW 1/4 SE 1/4 sec.26, T.6 S., R.10 W., on right bank 20 ft upstream from culvert on U.S. Highway 79, 0.9 mi upstream from tributary, 1.9 mi southwest of Watson Chapel, 2.1 mi upstream from mouth, and 6 mi southwest of Pine Bluff.

Drainage area.--0.75 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from November 1967 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 67 ft^3/s and by culvert measurements below 600 ft^3/s.

Remarks.--Only annual peaks are shown.

07364110 Nevins Creek Tributary near Pine Bluff, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-30-61	5.47	122	1977	03-04-77	4.32	83
1962	02-23-62	5.76	140	1978	08-30-78	4.12	72
1963	04-28-63	4.35	84	1979	05-04-79	8.67	408
1964	04-26-64	5.62	160	1980	04-13-80	4.88	115
1965	03-29-65	5.35	142	1981	08-18-81	7.56	309
1966	04-24-66	4.60	95	1982	08-17-82	6.02	190
1967	05-06-67	4.98	119	1983	05-15-83	10.40	590
1968	05-14-68	6.56	231	1984	09-24-84	10.58	600
1969	01-30-69	4.30	80	1985	10-24-84	5.56	155
1970	03-03-70	5.78	173	1986	1986	3.34	34
1971	01-24-71	3.36	34	1987	02-28-87	5.19	130
1972	01-28-72	3.47	39	1988	12-25-87	5.19	125
1973	04-22-73	5.71	168	1989	07-19-89	6.99	255
1974	06-08-74	6.58	232	1991	04-29-91	9.37	470
1975	03-12-75	5.99	190	1992	04-29-92	3.78	56
1976	03-08-76	3.99	64				

07364120 Bayou Bartholomew near Star City, Arkansas

Location.--Lat 33° 57'38", long 91° 47'07", in SW 1/4 sec.1, T.9 S., R.7 W., on downstream side of bridge on State Highway 11, 3 1/2 miles northeast of Star City, 10.7 upstream from Deep Bayou, and at mile 285.7.

Drainage area.--215 mi^2.

Gage.--Nonrecording prior to July 13, 1948; recording thereafter. Datum of gage is 153.25 ft above sea level, 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.

07364120 Bayou Bartholomew near Star City, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1942	05-03-42	21.70	2,200	1953	05-18-53	24.00	2,860
1943	03-20-43	20.80	1,960	1954	01-23-54	15.40	740
1944	03-31-44	18.90	1,480	1955	03-27-55	19.10	1,520
1945	04-03-45	21.80	2,220	1956	02-13-56	18.40	1,360
1946	01-12-46	23.10	2,580	1957	02-08-57	21.50	2,140
1947	06-04-47	16.80	1,000	1958	05-02-58	26.29	4,000
1948	02-16-48	21.30	2,080	1959	02-19-59	17.02	1,010
1949	01-30-49	18.80	1,460	1960	03-18-60	17.02	1,010
1950	01-16-50	21.40	2,120	1961	04-04-61	21.11	2,130
1951	01-21-51	18.70	1,440	1962	12-20-61	21.15	2,160
1952	02-04-52	17.90	1,240	1963	05-08-63	14.60	536

07364120 Bayou Bartholomew near Star City, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1964	04-29-64	20.66	2,010	1969	02-05-69	21.33	2,190
1965	02-14-65	18.78	1,440	1970	03-06-70	19.19	1,560
1966	05-03-66	22.86	2,700	1978	05-10-78	15.20	720
1967	05-10-67	18.18	1,290	1979	01-23-79	20.40	1,920
1968	05-20-68	23.00	2,730	1980	03-31-80	21.00	2,100

07364125 Cane Creek at Star City, Arkansas

Location.--Lat 33°57'18", long 91°50'34", in SE 1/4 SE 1/4 sec.5, T.9 S., R.7 W., on left bank 25 ft downstream from bridge on State Highway 81, 0.9 mi north of junction of State Highways 11 and 81 in Start City, and 2.2 mi upstream from Dry Fork Creek.

Drainage area.--4.91 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 260 ft^3/s and by contracted-opening measurements at 1,650 ft^3/s and 2,890 ft^3/s.

Remarks.--Only annual peaks are shown.

07364125 Cane Creek at Star City, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	11-22-61	8.33	980	1973	04-19-73	11.34	2,890
1963	08-30-63	6.96	420	1974	06-08-74	9.03	1,180
1964	05-02-64	9.09	1,500	1975	03-13-75	9.26	1,300
1965	03-29-65	7.86	760	1976	03-08-76	7.79	740
1966	02-09-66	8.00	810	1977	03-27-77	8.57	1,150
1967	07-29-67	8.27	960	1978	11-30-77	6.37	275
1968	04-03-68	9.08	1,500	1979	04-23-79	9.71	1,600
1969	10-13-68	8.04	820	1980	04-13-80	8.80	1,300
1970	03-03-70	9.21	1,600	1981	06-06-81	9.06	1,480
1971	02-21-71	7.97	810	1982	08-17-82	8.08	850
1972	06-14-72	3.20	48	1983	12-28-82	8.29	975

07364150 Bayou Bartholomew near McGehee, Arkansas

Location.--Lat 33°37'40", long 91°26'45", in NE 1/4 SW 1/4 sec.30, T.12 S., R.3 W., on downstream side of bridge on State Highway 4, 2.7 mi west of McGehee, 17.5 mi downstream from Ables Creek, and at mile 200.5.

Drainage area.--592 mi^2.

Gage.--Nonrecording prior to September 7, 1949; recording thereafter. Datum of gage is 121.48 ft above sea level.

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.

07364150 Bayou Bartholomew near McGehee, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1930	1930	19.40	4,300	1942	05-10-42	15.50	3,120
1932	1932	22.40	5,600	1943	03-27-43	17.00	3,300
1939	02-28-39	19.40	4,550	1944	04-03-44	17.70	3,600
1940	07-15-40	11.10	1,480	1945	04-08-45	20.70	4,900
1941	03-13-41	12.40	2,140	1946	01-20-46	21.30	5,280

07364150 Bayou Bartholomew near McGehee, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1947	06-05-47	13.70	2,280
1948	02-22-48	19.00	4,300
1949	02-06-49	16.20	3,200
1950	01-21-50	20.00	4,720
1951	01-24-51	14.80	2,670
1952	02-09-52	14.80	2,670
1953	05-25-53	22.50	5,660
1954	02-01-54	12.00	1,530
1955	04-19-55	16.60	3,000
1956	02-14-56	17.30	3,420
1957	02-14-57	16.79	3,070
1958	05-11-58	24.49	6,870
1959	02-22-59	14.76	2,360
1960	03-20-60	14.59	2,290
1961	02-28-61	19.29	4,090
1962	12-24-61	18.19	3,620
1963	03-25-63	9.10	860
1964	03-04-64	17.60	3,380
1965	02-20-65	15.51	2,700
1966	05-12-66	17.01	3,230
1967	05-17-67	13.37	2,060
1968	05-26-68	20.21	4,120
1969	02-12-69	17.26	3,250
1970	03-22-70	17.97	3,530
1971	08-11-71	9.79a	1,150
1972	01-11-72	11.33	1,250
1973	05-03-73	23.36	5,520
1974	01-20-74	20.15	4,010
1975	03-23-75	19.12a	3,690
1976	03-16-76	16.16a	2,630
1977	04-10-77	15.39	2,390
1978	02-02-78	14.60a	2,150
1979	01-29-79	20.06a	3,940
1980	04-03-80	20.73	4,470
1981	06-14-81	14.41a	1,980
1982	04-27-82	16.51a	2,620
1983	01-02-83	22.24	4,460
1984	12-14-83	18.80	3,500
1985	10-31-84	19.57a	3,730
1986	11-06-85	15.32	2,200
1987	03-08-87	18.84	3,630
1988	01-07-88	20.80	4,600
1989	02-28-89	21.69	4,540
1990	02-11-90	24.35	6,740
1991	05-05-91	25.25	5,820
1992	12-10-91	19.29	3,900
1993	04-16-93	16.19	2,760

07364165 Upper Cutoff Creek near Monticello, Arkansas

Location.--Lat 33° 44’20”, long 91° 44’51”, in NW 1/4 SW 1/4 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 mi south of Coleman, and 8.0 mi north of Monticello.

Drainage area.--18.5 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 430 ft^3/s and by contracted-opening measurements at 4,720 ft^3/s (1970).

Remarks.--Only annual peaks are shown.

07364165 Upper Cutoff Creek near Monticello, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	05-27-63	5.60	90
1964	04-26-64	10.10	1,150
1965	02-11-65	9.30	750
1966	02-09-66	9.85	1,010
1967	05-06-67	9.25	730
1968	05-17-68	10.03	1,100
1969	10-13-68	9.39	800
1970	03-03-70	11.30	4,720
1971	05-13-71	8.37	430
1972	01-02-72	7.74	300
1973	12-09-72	10.63	1,900
1974	06-08-74	11.20	3,700
1975	03-13-75	9.60	890
1976	03-08-76	9.58	880
1977	03-27-77	9.60	890
1978	05-07-78	8.36	430
1979	04-23-79	9.28	745
1980	11-23-79	10.01	1,100
1981	05-17-81	9.02	640
1982	01-31-82	10.18	1,260
1983	12-28-82	9.88	1,030
1974	06-08-74	11.20	3,700

07364190 Bayou Bartholomew at Wilmot, Arkansas

Location.--Lat 33° 04'08", long 91° 34'42", in Sw 1/4 sec.1, T.19 S., R.5 W., on downstream side of bridge on State Highway 52, 0.9 mi northwest of Wilmot, 19.7 mi upstream from Overflow Creek, and at mile 98.7.

Drainage area.--1,170 mi^2.

Gage.--Nonrecording prior to November 28, 1949; recording thereafter. Prior to September 1943 at Smith's Ferry, 1 mi upstream at same datum. Datum of gage is 85.17 ft above sea level, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements, made occasionally since 1939, below 8,000 ft^3/s.

Bankfull stage.--25 ft.

Remarks.--Gage-height records and results of current-meter measurements furnished by Corps of Engineers. Only annual peaks are shown.

07364190 Bayou Bartholomew at Wilmot, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1926	11-16-25	23.80	5,950
1927	05-10-27	25.90	6,920
1928	05-03-28	18.90	3,890
1929	03-14-29	17.30	3,290
1930	05-27-30	24.90	6,440
1931	03-16-31	8.60	9,90
1932	01-12-32	26.30	7,100
1933	04-08-33	20.40	4,480
1934	03-13-34	18.00	3,550
1935	01-31-35	24.80	6,400
1936	07-17-36	8.80	1,020
1937	02-02-37	24.80	6,400
1938	01-08-38	19.60	4,160
1939	03-05-39	24.00	6,040
1940	07-17-40	18.90	3,890
1941	03-17-41	18.10	3,580
1942	04-19-42	20.00	4,330
1943	04-04-43	19.70	4,200
1944	04-09-44	24.70	6,360
1945	04-08-45	25.20	6,590
1946	02-14-46	25.30	6,640
1947	04-18-47	18.10	3,580
1948	03-11-48	23.90	6,000
1949	04-03-49	22.30	5,310
1950	04-02-50	25.00	6,500
1951	02-16-51	20.20	4,180
1952	02-22-52	18.60	3,580
1953	05-28-53	25.30	6,240
1954	05-13-54	17.70	3,440
1955	04-24-55	20.90	4,400
1956	04-23-56	20.80	4,360
1957	03-07-57	19.60	3,940
1958	05-23-58	26.16	8,000
1959	02-24-59	19.87	4,000
1960	03-25-60	18.83	3,620
1961	03-11-61	25.15	6,200
1962	12-26-61	24.00	5,700
1963	04-03-63	8.18	910
1964	05-09-64	20.65	4,300
1965	03-02-65	18.12	3,380
1966	02-14-66	21.37	4,580
1967	06-06-67	15.27	2,500
1968	06-04-68	22.16	4,900
1969	02-22-69	20.12	4,100
1970	03-30-70	23.60	5,500
1978	05-17-78	21.40	4,800
1979	04-23-79	24.20	6,080
1980	04-01-80	22.70	5,390

07364200 Bayou Bartholomew near Jones, Louisiana

Location.--Lat 32° 59’25”, long 91° 39’20”, in SE 1/4 SW 1/4 sec.9, T.23 N., R.8 E., on downstream side of bridge on Louisiana State Highway 834, 1 mi downstream from Arkansas-Louisiana State line, 1.6 mi northwest of Jones, and at mile 83.4.

Drainage area.--1,187 mi^2.

Gage.--Recording. Datum of gage is 79.21 ft above sea level, 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.

07364200 Bayou Bartholomew near Jones, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1958	05-05-58	28.24a	6,100	1977	04-17-77	17.75a	2,910
1959	10-04-58	24.26	5,350	1978	05-17-78	23.53a	4,240
1960	10-05-59	19.69	3,860	1979	04-22-79	25.73a	5,440
1963	04-06-63	8.86	885	1980	04-18-80	25.54	6,410
1964	05-12-64	21.54a	4,240	1981	07-02-81	13.06	1,860
1965	03-02-65	19.06	3,270	1982	05-09-82	15.77	2,670
1966	02-23-66	22.23	4,360	1983	01-02-83	28.45	6,710
1968	04-14-68	23.19	4,490	1984	12-26-83	22.90e	4,820
1969	03-22-69	21.00	4,200	1985	11-10-84	21.92	4,610
1970	03-29-70	24.00a	4,920	1986	11-12-85	17.82	2,860
1971	05-24-71	13.49	1,810	1987	03-12-87	25.74	5,990
1972	01-13-72	19.56	3,260	1988	01-26-88	23.42	5,010
1973	03-24-73	27.88a	6,260	1989	07-19-89	27.30	6,990
1974	01-30-74	26.58a	6,550	1990	02-25-90	27.16	6,910
1975	02-12-75	25.44	5,480	1991	05-05-91	29.16	7,530
1976	03-21-76	20.78	4,450	1992	03-20-92	24.51	5,800

07364260 Hanks Creek near Hamburg, Arkansas

Location.--Lat 33° 10’12”, long 91° 49’40”, in NW 1/4 SE 1/4 sec.4, T.18 S., R.7 W., on left bank 35 ft downstream from bridge on State Highway 52 and 4.3 mi southwest of Hamburg.

Drainage area.--20.9 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 520 ft^3/s and extended by logarithmic plotting.

Remarks.--Only annual peaks are shown.

07364260 Hanks Creek near Hamburg, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	12-16-61	9.34	710	1973	04-18-73	10.61	1,400
1963	03-11-63	5.27	45	1974	04-21-74	11.59	2,300
1964	04-24-64	8.97	530	1975	02-01-75	10.48	1,310
1965	02-11-65	7.74	250	1976	03-08-76	8.61	440
1966	02-10-66	10.46	1,300	1977	04-04-77	8.30	365
1967	02-20-67	8.45	395	1978	05-07-78	10.44	1,280
1968	01-09-68	9.37	700	1979	04-23-79	10.27	1,170
1969	03-23-69	8.48	405	1980	04-13-80	9.68	840
1970	12-29-69	8.73	480	1981	05-18-81	10.83	1,580
1971	03-13-71	6.65	110	1982	08-01-82	8.00	300
1972	01-02-72	9.66	830	1983	12-27-82	10.60	1,400

07364300 Chemin-a-Haut Bayou near Beekman, Louisiana

Location.--Lat 32° 58'55", long 91° 48'20", in SE 1/4 sec.13, T.23 N., R.6 E., on downstream side of bridge on Parish Road, 1 1/2 mi downstream from Arkansas-Louisiana State line, and 6 mi northeast of Beekman.

Drainage area.--271 mi^2.

Gage.--Recording. Nonrecording prior to October 1, 1966, at datum 9.5 ft higher. Datum of gage is 76.08 ft above sea level. All gage heights adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 26,500 ft^3/s.

Remarks.--Only annual peaks are shown.

07364300 Chemin-a-Haut Bayou near Beekman, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	04-07-56	21.26	3,890	1969	11-29-68	23.36a	6,160
1957	04-06-57	22.28	3,630	1970	05-03-70	21.95	2,820
1958	04-26-58	28.21	29,500	1971	05-14-71	18.72	1,260
1959	02-15-59	21.84	4,320	1972	01-05-72	21.93a	4,520
1960	03-04-60	18.99	1,400	1973	03-17-73	25.89	11,600e
1961	02-22-61	24.33a	11,200	1974	04-23-74	24.97a	14,700
1962	12-12-61	23.66a	5,340	1975	02-03-75	25.41	9,680e
1963	04-30-63	16.80	480e	1976	06-02-76	21.83	4,590
1965	04-01-65	19.80a	2,020	1977	03-05-77	18.81	1,150
1966	02-11-66	24.28	10,000	1978	05-09-78	26.17	14,400
1967	06-02-67	21.83	4,590	1979	04-24-79	24.45	7,780
1968	01-11-68	22.78	5,280				

07364500 Bayou Bartholomew near Beekman, Louisiana

Location.--Lat 32° 52'20", long 91° 52'04", in SW 1/4 SW 1/4 sec.21, T.22 N., R.6 E., near center of span on downstream side of bridge on Louisiana State Highway 139, 0.8 mi downstream from Bayou De Glaize, 4 mi south of Beekman, and at mile 49.2.

Drainage area.--1,645 mi^2.

Gage.--Nonrecording prior to August 17, 1955; recording thereafter. Datum of gage is 70.60 ft above sea level, 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. Only annual peaks are shown.

07364500 Bayou Bartholomew near Beekman, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-01-27	26.75	--	1942	04-12-42	21.29	6,860
1929	03-27-29	19.20	5,230	1943	04-04-43	16.86	4,610
1930	05-21-30	23.64	9,130	1944	03-31-44	25.33	8,780
1931	01-13-31	9.08	1,560	1945	04-05-45	26.45	9,890
1932	01-12-32	25.76	12,400	1946	02-12-46	27.23	10,400
1933	04-04-33	21.70	7,400	1947	04-13-47	20.80	6,700
1934	03-06-34	21.40	7,200	1948	02-16-48	23.34	7,380
1935	02-15-35	22.80	8,400	1949	03-29-49	23.35	7,800
1936	02-11-36	7.40	1,260	1950	02-16-50	25.76	9,380
1937	01-27-37	23.60	9,100	1951	02-11-51	20.50	6,560
1938	04-11-38	19.20	5,820	1952	02-02-52	17.32	4,760
1939	03-02-39	22.07	7,560	1953	05-20-53	25.09	8,540
1940	07-16-40	23.83	8,570	1954	05-06-54	20.30	5,680
1941	03-11-41	18.81	5,470	1955	03-24-55	22.48	7,510

07364500 Bayou Bartholomew near Beekman, Louisiana--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	04-09-56	18.14	5,030
1957	04-07-57	21.08	6,480
1958	05-02-58	28.30	14,700
1959	02-18-59	20.65a	6,300
1960	03-20-60	17.40	4,900
1961	04-02-61	25.20	9,100
1962	12-20-61	24.69	8,800
1963	03-18-63	7.43	1,230
1964	04-29-64	19.41	5,900
1965	02-14-65	17.21	4,800
1966	02-13-66	21.47	6,980
1967	06-04-67	18.94	5,650
1968	04-16-68	22.28	7,420
1969	12-02-68	20.96	6,700
1970	05-05-70	21.80	7,140
1971	05-24-71	15.06	3,780
1972	01-11-72	18.46	5,430
1973	03-18-73	26.79	10,400
1974	01-28-74	25.21	9,150
1975	02-06-75	25.96	9,670
1976	03-13-76	18.84	5,620
1977	04-25-77	15.44	3,950
1978	05-15-78	24.73	8,840
1979	04-26-79	25.70	9,490
1980	04-16-80	23.67	8,200

07364700 Bayou de Loutre near Laran, Louisiana

Location.--Lat 32° 57’20”, long 92° 30’00”, in NW 1/4 sec.29, T.23 N., R.1 W., on downstream side of bridge on parish road, 1 1/2 mi southwest of Laran, 1 1/2 mi downstream from Lion Creek, and 3 mi upstream from bridge on Louisiana State Highway 550.

Drainage area.--141 mi^2.

Gage.--Recording. Datum of gage is 112.34 ft above sea level.

Bankfull stage.--8.5 ft.

Remarks.--Only annual peaks are shown.

07364700 Bayou de Loutre near Laran, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-05-56	10.01	1,760
1957	04-30-57	11.10	2,700
1958	04-27-58	20.29	22,600
1959	06-10-59	13.63	5,000
1960	03-05-60	9.67	1,800
1961	07-17-61	16.00	10,800
1962	05-03-62	9.98	1,980
1963	05-02-63	7.46	900
1964	04-27-64	9.44	1,630
1965	04-01-65	9.84	1,880
1966	02-12-66	9.95	1,950
1967	05-08-67	8.80	1,250
1968	01-10-68	9.94	1,930
1969	02-04-69	11.31	2,850
1970	03-22-70	10.18	2,080
1971	08-06-71	8.30	1,040
1972	01-06-72	9.77	1,830
1973	03-17-73	11.29	2,830
1974	06-09-74	20.43	23,900
1975	02-03-75	13.32	4,800
1976	03-10-76	10.75	2,460
1977	03-29-77	6.73	702

07365800 Cornie Bayou near Three Creeks, Arkansas

Location.--Lat 33° 02’21”, long 92° 56’15”, in SW 1/4 NW 1/4 sec.36, T.19 S., R.18 W., at downstream side of bridge on State Highway 15, 4 1/2 mi downstream from Pidgeon Roost Creek, and 6 mi southwest of town of Three Creeks.

Drainage area.--180 mi^2.

Gage.--Nonrecording prior to October 29, 1959; recording thereafter.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 ft^3/s and by contracted-opening measurement at 35,800 ft^3/s.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown.

07365800 Cornie Bayou near Three Creeks, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-06-56	9.86	804	1974	06-08-74	17.50	65,000
1957	04-28-57	12.00	6,440	1975	02-03-75	11.85	7,220
1958	04-27-58	15.50	35,800	1976	03-09-76	12.31	8,620
1959	02-17-59	10.30	1,880	1977	03-30-77	9.89	1,100
1960	03-04-60	10.73	2,960	1978	05-08-78	10.92	3,530
1961	07-17-61	11.61	6,560	1979	04-24-79	12.05	8,430
1962	11-24-61	11.21	4,960	1980	01-23-80	11.29	4,920
1963	07-15-63	10.50	2,220	1981	05-19-81	12.44	8,390
1964	04-25-64	11.52	5,760	1982	06-18-82	10.76	1,420
1965	04-13-65	11.37	5,160	1983	12-28-82	11.63	4,960
1966	05-01-66	11.71	7,660	1984	02-14-84	10.86	2,740
1967	06-03-67	9.72	676	1985	11-27-84	11.92	6,710
1968	05-19-68	11.00	4,050	1986	06-29-86	10.88	3,360
1969	03-19-69	11.20	4,580	1987	12-10-86	11.71	6,580
1970	05-02-70	11.15	4,390	1990	03-09-90	14.57	25,600
1971	04-22-71	9.50	700	1991	04-28-91	13.59	17,500
1972	01-05-72	10.09	1,290	1992	02-12-92	11.43	5,200
1973	04-25-73	11.95	7,260	1993	06-21-93	13.19	14,000

07365900 Three Creeks near Three Creeks, Arkansas

Location.--Lat 33° 04’01”, long 92° 53’02”, in NE 1/4 NW 1/4 sec.20, T.19 S., R.17 W., on downstream side of bridge on State Highway 15, 2 1/4 mi southwest of town of Three Creeks, and 2 1/4 mi upstream from small tributary.

Drainage area.--50.3 mi^2.

Gage.--Crest-stage gage. Recording prior to September 30, 1971. Datum of gage is 155.63 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 2,300 ft^3/s and by contracted-opening measurement at 11,300 ft^3/s.

Bankfull stage.--6 ft.

Remarks.--Only annual peaks are shown.

07365900 Three Creeks near Three Creeks, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-04-56	4.94	432	1964	04-25-64	6.18	2,500
1957	04-27-57	5.82	1,450	1965	02-12-65	5.66	1,650
1958	04-26-58	9.35	11,300	1966	05-01-66	5.78	1,740
1959	02-16-59	5.14	785	1967	06-01-67	5.48	1,190
1960	03-03-60	5.61	1,470	1968	09-16-68	5.73	1,690
1961	07-16-61	7.12	4,750	1969	03-19-69	6.22	2,720
1962	05-01-62	6.39	3,010	1970	03-04-70	6.49	3,320
1963	07-15-63	6.18	2,800	1971	03-14-71	5.05	510

07365900 Three Creeks near Three Creeks, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1972	01-03-72	5.46	1,150
1973	04-25-73	6.20	2,680
1974	06-08-74	12.13	24,100
1975	02-01-75	6.41	3,140
1976	03-09-76	6.41	3,140
1977	03-05-77	4.98	446
1978	05-09-78	7.52	5,800

07366000 Corney Bayou near Lillie, Louisiana

Location.--Lat 32° 53’15”, long 92° 39’25”, in NE 1/4 NE 1/4 sec.22, T.22 N., R.3 W., near left bank on downstream side of bridge on U.S. Highway 167, 2 mi upstream from Little Corney Bayou, and 3 mi south of Lillie.

Drainage area.--462 mi^2.

Gage.--Nonrecording prior to August 4, 1952; recording August 4, 1952, to September 30, 1957; crest-stage gage thereafter. Datum of gage is 84.08 ft above sea level, 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 mi upstream from station. Storage began in 1935. Published as “Cornie Bayou” prior to 1956.

07366000 Corney Bayou near Lillie, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1941	05-07-41	17.48	15,100
1942	04-11-42	16.48	10,300
1943	03-30-43	14.26	3,230
1944	03-31-44	16.78	11,000
1945	03-05-45	18.20	17,200
1946	02-12-46	15.82	7,210
1947	04-14-47	15.39	6,020
1948	02-15-48	15.30	5,740
1949	01-31-49	14.85	4,440
1950	01-17-50	15.54	6,440
1951	02-11-51	13.75	2,520
1952	02-15-52	15.16	5,470
1953	05-16-53	16.28	8,890
1954	05-06-54	12.90	1,700
1955	03-25-55	14.36	3,540
1956	02-09-56	13.43	2,320
1957	04-30-57	17.06	11,500
1958	04-27-58	25.20	48,200
1959	06-09-59	14.85	4,500
1960	03-05-60	14.82	4,420
1961	07-19-61	15.59	6,920
1962	12-17-61	15.65	7,140
1963	07-18-63	14.80	4,360
1964	04-28-64	15.70	7,320
1965	02-11-65	15.29	5,890
1966	04-21-66	15.14	5,390
1967	1967	11.50	1,080
1968	09-15-68	14.56	3,770
1969	05-29-69	15.40	6,260
1970	05-03-70	15.22	5,640
1971	05-07-71	12.31	1,410
1972	01-04-72	14.48	3,600
1973	03-17-73	16.23	9,290
1974	06-09-74	24.24	43,600
1975	02-03-75	17.80	15,500
1976	03-08-76	16.39	9,900
1977	03-28-77	11.66	1,130
1978	05-09-78	15.45	6,430
1979	05-04-79	16.38	9,860
1980	04-13-80	15.08	5,200
1981	05-20-81	15.86	7,900
1982	06-23-82	12.21	1,360
1983	12-28-82	16.07	8,700

07366200 Little Corney Bayou near Lillie, Louisiana

Location.--Lat 32° 55'40", long 92° 37'55", in SE 1/4 NW 1/4 sec.1, T.22 N., R.3 W., on downstream side of bridge on Louisiana State Highway 15, 1.4 mi east of Lillie, and 2 1/2 mi upstream from mouth.

Drainage area.--208 mi^2.

Gage.--Recording. Datum of gage is 91.48 ft above sea level, supplementary adjustment of 1941.

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

Bankfull stage.--3 ft.

Remarks.--Only annual peaks are shown.

07366200 Little Corney Bayou near Lillie, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-06-56	8.01	1,900	1975	02-03-75	10.26	6,550
1957	04-29-57	9.19	4,660	1976	03-10-76	9.16	4,300
1958	04-28-58	16.52	21,400	1977	02-13-77	6.25	490
1959	06-09-59	8.94	3,910	1978	05-09-78	9.91	5,810
1960	03-05-60	7.92	2,150	1979	01-21-79	10.75	5,800
1961	07-17-61	10.66	7,490	1980	01-24-80	8.74	2,240
1962	05-02-62	8.76	3,550	1981	05-20-81	11.21	6,900
1963	07-18-63	6.79	852	1982	06-22-82	6.43	479
1964	04-27-64	8.44	3,020	1983	12-28-82	10.72	6,370
1965	04-01-65	7.71	1,880	1984	03-05-84	9.18	3,150
1966	05-03-66	7.41	1,500	1985	11-29-84	9.56	3,820
1967	05-08-67	7.24	1,300	1986	06-29-86	11.08	7,750
1968	01-10-68	7.94	2,210	1987	11-25-86	9.38	4,120
1969	02-03-69	8.78	3,600	1988	12-29-87	9.04	2,880
1970	03-05-70	9.16	4,300	1989	07-02-89	9.79	4,870
1971	04-24-71	7.01	1,060	1990	03-10-90	10.53	6,420
1972	01-05-72	8.33	2,820	1991	04-29-91	17.07	20,200
1973	04-26-73	9.19	4,360	1992	02-14-92	17.07	20,200
1974	06-09-74	17.54	24,000				

07367658 Cypress Creek Canal No. 19 Tributary near Dumas, Arkansas

Location.--Lat 33° 51'47", long 91° 28'46", in SE 1/4 NW 1/4 sec.2, T.10 S., R.4 W., on left bank 22 ft upstream from culvert on U.S. Highway 65, 1.5 mi south of Dumas, and 1.6 mi upstream from mouth.

Drainage area.--0.94 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 15 ft^3/s and by culvert measurements at 149 ft^3/s, 208 ft^3/s, and 265 ft^3/s.

Remarks.--Only annual peaks are shown.

07367658 Cypress Creek Canal No. 19 Tributary near Dumas, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	03-30-61	7.61	168	1969	11-28-68	9.62	265
1962	05-30-62	8.82	185	1970	03-03-70	8.68	234
1963	06-21-63	8.05	130	1971	01-24-71	8.95	246
1964	05-02-64	9.08	208	1972	08-10-72	7.42	96
1965	09-11-65	7.99	110	1973	04-24-73	9.81	288
1966	02-09-66	8.59	220	1974	08-31-74	8.18	128
1967	10-04-66	8.37	133	1975	06-09-75	7.35	92
1968	02-02-68	8.19	140	1976	03-08-76	7.26	134

07367658 Cypress Creek Canal No. 19 Tributary near Dumas, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1977	04-03-77	7.49	150	1982	04-19-82	7.91	178
1978	07-08-78	6.62	93	1983	12-27-82	7.69	162
1979	05-28-79	8.03	135	1984	06-29-84	7.46	100
1980	09-28-80	7.14	127	1985	10-07-84	8.12	235
1981	09-01-81	8.29	208	1986	07-02-86	7.85	120

07367740 Camp Bayou near Parkdale, Arkansas

Location.--Lat 33° 06'55", long 91° 31'31", in SW 1/4 SW 1/4 sec.21, T.18 S., R.4 W., on right bank 22 ft upstream from culvert on State Highway 8, 0.3 mi upstream from small tributary, and 1.3 mi east of Parkdale.

Drainage area.--1.86 mi^2.

Gage.--Crest-stage gage. Supplementary dual-digital recorders from November 1968 to November 1974.

Stage-discharge relation.--Defined by current-meter measurements below 114 ft^3/s and by culvert measurements at 319 ft^3/s and 368 ft^3/s.

Remarks.--Only annual peaks are shown.

07367740 Camp Bayou near Parkdale, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1963	05-27-63	7.13	115	1975	03-13-75	9.18	351
1964	04-24-64	8.81	368	1976	03-08-76	8.33	215
1965	12-10-64	7.99	215	1977	03-04-77	8.25	210
1966	02-09-66	8.90	319	1978	05-08-78	8.86	280
1967	02-20-67	8.76	250	1979	04-10-79	8.78	250
1968	04-08-68	8.11	177	1980	09-28-80	8.46	212
1969	11-28-68	8.83	239	1981	05-18-81	8.58	244
1970	08-07-70	8.43	210	1982	01-03-82	6.25	44
1971	12-20-70	7.60	165	1983	12-27-82	7.39	137
1972	12-10-71	8.00	192	1984	12-03-83	8.58	260
1973	04-18-73	8.88	266	1985	10-07-84	8.12	235
1974	04-21-74	9.41	380				

APPENDIX 2

FLOOD MAGNITUDE AND FREQUENCY ON LARGE STREAMS IN ARKANSAS THROUGH 1984

The following information is the result of the flood frequency analysis of large rivers in Arkansas. This information was taken directly from the previous flood frequency report for Arkansas (Neely, 1987b) and provided here at the request of the cooperator.

FLOOD MAGNITUDE AND FREQUENCY ON LARGE RIVERS

NOTE: This section is taken directly from the previous flood frequency report for Arkansas (Neely 1986) at the request of the cooperator. No changes have been made in the data or the results.

Large rivers have floodflow characteristics differing from those of smaller tributary streams and were treated individually. The peak discharges for recurrence intervals of 2, 5, 10, 25, 50, and 100 years for all gaging stations on large streams and regulated streams are listed in table 2-1 . The peak discharge for regulated streams reflects the pattern of regulation. If the pattern of regulation changes, the discharges will change.

Mississippi River

The Mississippi River is one of the longest rivers in the world. Its drainage basin extends from New York to Montana and includes about 40 percent of the conterminous United States. A flood-frequency study of such a river is outside the scope of this report. Flood-frequency relations at three gaging stations are shown in figure 2-1 and can be used as a guide to estimate discharges at nearby places along the river.

St. Francis River

Regulation began April 1, 1941, by Wappapello Reservoir. The storage capacity of Wappapello Reservoir is 625,000 acre-ft. Downstream from the gaging station at Lake City (07040450), the flow separates into several channels. The flood frequency curves for St. Francis River, shown in figure 2-2, include the effect of regulation and is the combined discharge of all channels.

Black River

The regulation by Clearwater Reservoir (storage capacity 413,700 acre-ft) has only a slight effect on flood peaks of the Black River. Data collected prior to regulation at the gaging station near Corning (07064000) was used in developing the Region C frequency curves (formerly Region A in Neely's 1986 report). The flood frequency curves for the Black River are shown in figure 2-3.

Arkansas River

The flow of the Arkansas River is regulated by many locks, dams, and reservoirs. The flood frequency curves shown in figure 2-4 include the effect of regulation. The flood frequency curves for station 07250550, which are based on 15 years of record, were adjusted to the 45-year period at the two other stations.

White River

The flow of the White River is regulated by Beaver Lake, Table Rock Lake, Bull Shoals Lake, Norfork Lake, and Greers Ferry Lake. Upstream regulation begins at Beaver Lake near Eureka Springs where the drainage area is 1,192 square miles. The frequency curves on figure 2-5 show the effects of regulation. Upstream from Beaver Lake, the discharge frequency should be computed using the regression equations and the gaging station data shown in table 3.

Red River

The flow of the Red River is regulated by Lake Texoma, Pat Mayse Lake, Hugo Lake, Millwood Lake, and Wright Patman Lake. The flood frequency curves in figure 2-6 include the effects of regulation.

Ouachita River

The flow of the Ouachita River is regulated by Lake Catherine, Lake Hamilton, and Lake Ouachita. Upstream regulation begins with Lake Ouachita at Blakely Mountain Dam which has a drainage area of 1,105 square miles. The flood frequency curves in figure 2-7 include the effects of regulation. Upstream from Lake Ouachita, the discharge frequency should be computed using the regression equations and the gaging station data shown in table 2.

Table 2-1. Discharge, for selected reecurrence intervals, on large streams and regulated streams

[Numbers on line with station name are based on station data]

Station identification number	Station name	Drainage area	Years of record	Discharge (cubic feet per second, for recurrence interval (years)					
				2	5	10	25	50	100
7032000[a]	Mississippi River at Memphis, Tenn.	932,800	52	1,170	1,410	1,540	1,680	1,770	1,840
7040100	St. Francis River at St. Francis, Ark.	1,772	39	10,600	15,300	18,600	22,800	26,000	29,300
7040450	St. Francis River at Lake City, Ark.	2,374	39	14,100	20,500	24,900	30,700	35,100	39,700
7046600	Right Hand Chute of Little River at Rivervale, Ark.	2,106	36	14,900	24,500	30,900	38,800	44,600	50,100
7047000	St. Francis River floodway near Marked Tree, Ark.	0	36	19,200	32,000	40,500	51,000	58,500	65,700
7047500	St. Francis River at Marked Tree, Ark.	0	39	3,530	4,320	4,820	5,420	5,850	6,270
7047501[b]	St. Francis River and St. Francis River floodway near Marked Tree, Ark.	5,148	36	22,000	35,400	44,300	55,100	62,800	70,200
7047950	L'Anguille River at Palestine, Ark.	786	32	8,570	12,700	15,100	18,000	20,000	21,800
7047800	St. Francis River at Parkin, Ark.	0	49	10,000	13,500	15,700	18,400	20,400	22,200
7047900	St. Francis Bay at Riverfront. Ark.	0	46	21,100	33,000	40,900	50,500	57,400	64,100
7047902[c]	St. Francis River at Parkin and St. Francis Bay at Riverfront combined	6,475	42	26,700	39,500	47,700	57,600	64,700	71,500
7047970[a]	Mississippi River at Helena, Ark.	941,700	54	1,200	1,450	1,580	1,730	1,830	1,920
7049691	White River at Beaver Dam near Eureka Sprins, Ark.	1,192	19	6,320	9,720	12,400	16,100	19,200	22,600
7055000	White River near Flippin, Ark.	6,067	33	25,200	29,400	31,300	33,100	34,200	35,000
7060000	North Fork River at Norfork Dam near Norfork, Ark.	1,806	40	5,540	8,310	10,300	13,100	15,400	17,700
7060500	White River at Calico Rock, Ark.	9,978	42	62,900	115,000	158,000	224,000	282,000	348,000
7061000	White River at Batesville, Ark.	11,062	14	64,900	114,000	153,000	211,000	260,000	314,000
7064000	Black River near Corning, Ark.	1,749	36	11,800	20,000	25,900	33,700	39,600	45,500
7069000	Black River at Pocahontas, Ark.	4,845	48	23,400	39,200	51,500	69,400	84,200	100,000
7072500	Black River at Black Rock, Ark.	7,369	36	44,700	76,200	101,000	136,000	164,000	195,000
7074500	White River at Newport, Ark.	19,860	41	82,900	143,000	191,000	262,000	323,000	389,000
7076000	Little Red River near Heber Springs, Ark.	1,146	23	8,400	8,960	9,290	9,670	9,930	10,200
7077000	White River at DeValls Bluff, Ark.	23,483	41	87,500	125,000	149,000	177,000	198,000	217,000

Table 2-1. Discharge, for selected reecurrence intervals, on large streams and regulated streams--Continued

[Numbers on line with station name are based on station data]

Station identification number	Station name	Drainage area	Years of record	Discharge (cubic feet per second, for recurrence interval (years)					
				2	5	10	25	50	100
7077800	White River at Clarendon, Ark.	25,555	28	81,600	118,000	143,000	174,000	197,000	221,000
7247000	Poteau River at Cauthron, Ark.	203	12	8,510	12,000	14,400	17,400	19,600	21,800
7250550	Arkansas River at Dam No. 13 near Van Buren, Ark.	150,547	15	144,000	189,000	218,000	251,000	275,000	298,000
7250550[d]	Arkanss River at Dam No. 13 near Van Buren, Ark.	150,547	45	155,000	218,000	264,000	324,000	372,000	420,000
7251000	Frog Bayou near Mountainburg, Ark.	74.2	25	4,530	8,620	11,500	15,200	17,800	20,400
7251500	Frog Bayou at Rudy, Ark.	216	36	11,100	20,400	26,900	35,200	41,300	47,200
7253000	Sixmile Creek at Chismville, Ark.	24.1	16	1,090	2,130	2,900	3,910	4,680	5,440
7253500	Sixmile Creek near Branch, Ark.	36.7	16	2,150	3,800	4,980	6,520	7,660	8,810
7255000	Sixmile Creek at Caulksville, Ark.	104	16	4,940	7,830	9,810	12,300	14,200	16,100
7255500	Hurricane Creek near Branch, Ark.	17.2	16	748	1,440	1,970	2,700	3,270	3,850
7258000	Arkansas River at Dardanelle, Ark.	153,670	45	201,000	320,000	405,000	518,000	605,000	696,000
7259500	Petit Jean River near Waveland, Ark.	516	37	3,500	5,260	6,510	8,200	9,520	10,900
7260500	Petit Jean River at Danville, Ark.	764	37	8,650	15,900	21,900	30,700	38,300	46,700
7262500	Fourche LaFave River near Nimrod, Ark.	684	42	5,750	7,450	8,660	10,300	11,600	12,900
7263450	Arkansas River at Murray Dam at Little Rock, Ark.	158,030	45	203,000	306,000	373,000	458,000	521,000	582,000
7264500	Bayou Meto near Stuttgart, Ark.	574	45	1,930	2,790	3,410	4,250	4,900	5,600
7265000	Crooked Creek near Humphrey, Ark.	79.2	40	1,380	1,930	2,230	2,560	2,780	2,960
7265001	Bayou Meto and Crooked Creek near Stuttgart, Ark.	653	45	3,330	4,750	5,640	6,700	7,460	8,190
7265450[a]	Mississippi River near Arkansas City, Ark.	1,130,600	54	1,320	1,620	1,800	2,010	2,150	2,290
7337000	Red River at Index, Ark.	48,030	42	76,000	109,000	130,000	156,000	174,000	192,000
7339500	Rolling Fork near DeQueen, Ark.	182	11	3,460	5,440	6,830	8,640	10,000	11,400
7340000	Little River near Horatio, Ark.	2,674	16	27,700	41,900	51,500	63,700	72,800	81,800
7340500	Cossatot River near DeQueen, Ark.	361	10	8,020	14,000	18,600	24,800	29,800	35,000
7341000	Saline River near Dierks, Ark.	124	12	2,690	5,450	7,880	11,700	15,100	19,000
7341200	Saline River near Lockesburg, Ark.	260	11	10,000	19,300	27,400	40,200	51,800	65,200

Table 2-1. Discharge, for selected reecurrence intervals, on large streams and regulated streams--Continued

[Numbers on line with station name are based on station data]

Station identification number	Station name	Drainage area	Years of record	Discharge (cubic feet per second, for recurrence interval (years)					
				2	5	10	25	50	100
7341301	Little River at Millwood Dam near Ashdown, Ark.	4,119	18	33,500	50,100	63,100	75,600	86,200	96,900
7341500	Red River at Fulton, Ark.	52,380	31	90,100	131,000	159,000	195,000	223,000	251,000
7348500	Red River at Shreveport, La.	60,613	37	114,000	164,000	196,000	237,000	267,000	297,000
7357501	Ouachita River at Blakely Mountain Dam near Hot Springs, Ark.	1,105	31	6,590	8,610	9,730	11,000	11,800	12,500
7359500	Ouachita River near Malvern, Ark.	1,585	32	28,200	51,200	71,300	103,000	131,000	164,000
7359910	Caddo River at DeGray regulating dam near Arkadelphia, Ark.								
7360000	Ouachita River at Arkadelphia, Ark.	2,311	33	39,300	63,000	90,000	121,000	146,000	172,000
7360501	Little Missouri River at Narrows Dam near Murfreesboro, Ark.	237	34	2,600	3,740	4,530	5,560	6,360	7,170
7361000	Little Missouri River near Murfreesboro, Ark.	380	28	12,600	20,000	25,100	31,500	36,200	40,800
7361600	Little Missouri River near Boughton, Ark.	1,068	32	26,800	41,800	51,600	63,600	72,100	80,400
7362000	Ouachita River at Camden, Ark.	5,357	32	58,300	101,000	134,000	178,000	213,000	250,000
7364000	Saline River near Warren Ark.	2,476	13	19,400	34,800	46,600	62,900	75,900	89,600
7367661	Boeuf River near Lake Village, Ark.	355[e]	35	4,530	6,940	8,590	10,700	12,300	13,900
7367670	Wards Bayou tributary at Montrose, Ark.	3.24	23	262	383	464	567	643	719
7367680	Boeuf River near Eudora, Ark.	640[e]	42	9,260	12,700	15,000	17,700	19,700	21,600
7367700	Boeuf River near Arkansas-Louisiana State line	785[e]	35	11,700	15,300	17,400	19,800	21,400	22,800
7369680	Bayou Macon at Eudora, Ark.	485[e]	44	2,840	3,770	4,330	4,980	5,420	5,830
7369700	Bayou Macon near Kilbourne, Ark.	504[e]	11	2,800	4,120	4,930	5,880	6,530	7,140

[a] Discharge in thousands of cubic feet per second.
[b] St. Francis floodway near Marked Tree (07047000) and St. Francis River at Marked Tree (07047500) combined.
[c] St. Francis River at Parkin (07047800) and St. Francis Bay at Riverfront (07047900) combined.,
[d] Adjusted to 45-year period based on data at stations 07258000 and 07263450.
[e] Interchange of flow at high stages.

Figure 2-1. Flood magnitude and frequency curves for the Mississippi River.

Figure 2-2. Flood magnitude and frequency curves for the Saint Francis River.

Figure 2-3. Flood magnitude and frequency curves for the Black River.

Figure 2-4. Flood magnitude and frequency curves for the Arkansas River.

Figure 2-5. Flood magnitude and frequency curves for the White River.

Figure 2-6. Flood magnitude and frequency curves for the Red River.

Figure 2-7. Flood magnitude and frequency curves for the Ouachita River.

APPENDIX 3

ANNUAL PEAK DISCHARGE AND STAGE DATA AT GAGING STATIONS ON REGULATED STREAMS THROUGH 1984

The following table and data sets were used in the flood frequency analysis of regulated streams in Arkansas. This information was taken directly from the previous flood frequency report for Arkansas (Neely, 1987b) and provided here at the request of the cooperator.

07032000 Mississippi River at Memphis, Tennessee

Location.--Lat 35° 07’37”, long 90° 04’25”, on left bank 50 ft downstream from Harahan Bridge at Memphis, Shelby County, 1.3 mi downstream from Beale Street gage, 3.3 mi downstream from Wolf River, 70 mi upstream from St. Francis River, and at mile 734.8.

Drainage area.-932,800 mi^2.

Gage.--Nonrecording prior to April 16, 1934, at site 1.3 mi upstream (Beale Street gage) and April 16 to December 21, 1934, in present vicinity; recording thereafter. All gages at datum 183.91 ft above sea level, 184.21 ft above mean Gulf level (1912, Mississippi River Commission), and 190.86 ft on Memphis datum (1881, Mississippi River Commission). To adjust gage height, 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.(Measurements made frequently since 1932 and occasionally from 1882 to 1904).

Remarks.--Records furnished by Corps of Engineers. 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.

07032000 Mississippi River at Memphis, Tennessee

Water year	Date	Gage height (feet)	Discharge, in thousands (cubic foot per second)
1872	04-24-72	31.50	--
1873	03-03-73	32.50	--
1874	05-02-74	34.00	--
1875	08-15-75	33.05	--
1876	04-08-76	34.08	--
1877	04-29-77	32.05	--
1878	05-02-78	29.10	--
1879	01-29-79	28.10	--
1880	03-24-80	33.40	--
1881	04-27-81	33.30	--
1882	03-06-82	35.15	--
1883	03-06-83	34.75	--
1884	03-01-84	34.15	--
1885	01-28-85	29.25	--
1886	04-28-86	34.80	--
1887	03-09-87	35.30	--
1888	04-11-88	34.20	--
1889	06-26-89	26.60	--
1890	03-20-90	35.60	1,345
1891	03-10-91	34.90	1,289
1892	05-02-92	34.60	--
1893	05-15-93	35.20	--
1894	02-19-94	29.00	--
1895	01-23-95	24.05	--
1896	04-15-96	29.40	--
1897	03-20-97	37.66	--
1898	04-10-98	37.22	--
1899	04-01-99	35.20	--
1900	03-19-00	29.47	--
1901	05-06-01	32.12	--
1902	03-21-02	30.90	--
1903	03-20-03	40.10	--
1904	04-11-04	39.20	--
1905	03-21-05	28.93	--
1906	04-15-06	37.07	--
1907	02-03-07	40.30	--
1908	03-24-08	35.55	--
1909	03-22-09	38.60	--
1910	03-19-10	33.12	--
1911	04-25-11	36.42	--
1912	04-06-12	45.23	--
1913	04-09-13	46.55	--
1914	04-15-14	32.63	--
1915	02-17-15	36.08	--
1916	02-09-16	43.40	--
1917	04-10-17	40.38	--
1918	03-01-18	30.00	--
1919	03-29-19	37.30	--
1920	04-05-20	40.30	--
1921	04-08-21	29.90	--
1922	04-01-22	42.50	--
1923	03-27-23	36.30	--
1924	01-18-24	34.10	--
1925	03-03-25	29.00	--
1926	04-19-26	31.00	--
1927	04-23-27	45.80	1,744
1928	07-10-28	35.80	--
1929	05-22-29	41.50	--
1930	01-22-30	34.70	--
1931	04-15-31	24.40	--
1932	02-19-32	38.70	1,308
1933	04-09-33	40.40a	1,416
1934	03-19-34	29.98	839
1935	03-28-35	37.20	1,190
1936	04-21-36	39.33	1,340
1937	02-08-37	48.69a	1,980

07032000 Mississippi River at Memphis, Tennessee--Continued

Water year	Date	Gage height (feet)	Discharge, in thousands (cubic foot per second)
1938	04-20-38	32.97	971
1939	02-28-39	37.76	1,280
1940	05-06-40	31.70	962
1941	04-28-41	20.64	595
1942	03-27-42	30.20	987
1943	06-03-43	37.75	1,384
1944	05-05-44	37.11	1,289
1945	03-24-45	39.26a	1,446
1946	01-20-46	36.14a	1,410
1947	04-23-47	32.12	1,128
1948	04-08-48	36.49	1,310
1949	02-04-49	35.20	1,271
1950	01-24-50	40.50a	1,568
1951	03-03-51	35.32	1,217
1952	04-01-52	37.12	1,132
1953	05-24-53	25.93	843
1954	01-29-54	19.17	630
1955	04-01-55	35.47	1,247
1956	02-28-56	29.37a	1,012
1957	02-16-57	31.16	1,060
1958	07-31-58	29.88a	967
1959	02-26-59	27.90	884
1960	04-17-60	33.28	1,137
1961	05-20-61	40.18a	1,451
1962	03-21-62	36.84	1,281
1963	03-28-63	36.61a	1,311
1964	03-26-64	33.14	1,150
1965	04-12-65	32.99a	1,110
1966	02-21-66	27.69a	931
1967	05-24-67	29.77	1,010
1968	06-10-68	28.33	907
1969	02-15-69	33.66a	1,130
1970	05-11-70	33.26	1,145
1971	03-08-71	32.78	1,190
1972	05-03-72	32.78	1,150
1973	04-01-73	40.48a	1,630
1974	02-07-74	36.36	1,490
1975	04-07-75	40.32	1,780
1976	02-28-76	25.79a	860
1977	04-15-77	24.70	893
1978	04-02-78	34.21	1,350
1979	04-21-79	39.24	154
1980	04-03-80	31.99a	1,260
1981	05-26-81	24.90	953
1982	03-31-82	30.90	1,200
1983	05-18-83	39.20a	1,640
1984	05-21-84	38.70a	1,590

07040100 St. Francis River at St. Francis, Arkansas

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 mi^2.

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

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 April 1, 1941 (capacity at spillway crest, 625,000 acre-ft); flood records affected since that date. Only annual peaks are shown.

07040100 St. Francis River at St. Francis, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1916	02-00-16	23.16	--
1917	04-09-17	20.50	--
1918	05-18-18	22.10	--
1919	12-22-18	20.30	--
1920	05-25-20	22.60	--
1921	05-04-21	22.70	--
1922	04-06-22	23.60	--
1923	05-21-23	25.10	--
1924	06-06-24	18.30	--
1925	02-28-25	16.80	--
1926	11-14-25	22.90	--
1927	04-18-27	26.60	--
1928	06-26-28	26.70	--
1929	05-19-29	25.20	--
1930	01-18-30	26.50	33,100
1931	03-15-31	19.40	6,540

07040100 St. Francis River at St. Francis, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1932	01-23-32	21.60	11,200
1933	05-18-33	27.10	31,000
1934	04-03-34	18.50	5,350
1935	03-15-35	28.20	39,200
1936	04-13-36	--	4,400
1937	01-19-37	26.70	28,600
1938	04-04-38	23.60a	18,600
1939	04-23-39	22.70	14,900
1940	04-24-40	21.00a	9,720
1941	01-09-41	--	3,060
1942	04-15-42	20.20	8,930
1943	01-05-43	19.60	7,460
1944	04-12-44	19.60	7,600
1945	04-20-45	23.50	20,500
1946	05-28-46	21.65	13,000
1947	05-03-47	20.53a	8,950
1948	01-12-48	20.91a	9,560
1949	02-15-49	22.82	17,000
1950	01-14-50	23.42	20,000
1951	02-25-51	21.10	12,000
1952	11-30-51	21.17	11,700
1953	03-23-53	19.10	6,250
1954	06-19-54	17.25	5,210
1955	03-29-55	20.60	8,700
1956	02-26-56	18.65	6,330
1957	05-27-57	23.00	17,300
1958	03-29-58	21.85	12,900
1959	11-28-58	--	6,010
1960	12-28-59	18.50	6,140
1961	05-13-61	21.85	13,600
1962	03-04-62	20.83	9,540
1963	06-04-63	17.67a	4,940
1964	03-14-64	22.10	13,400
1965	04-15-65	18.72	6,200
1966	05-02-66	21.88	13,500
1967	05-15-67	18.51a	6,320
1968	03-27-68	20.60	10,100
1969	02-03-69	22.80	16,000
1970	05-01-70	21.25a	12,100
1971	02-23-71	19.52	6,370
1972	05-02-72	21.20	10,600
1973	05-02-73	22.37	14,500
1974	12-31-73	21.75a	15,400
1975	03-29-75	23.98	21,700
1976	02-18-76	20.76	8,190
1977	03-29-77	23.48	17,400
1978	03-14-78	22.35	12,900
1979	04-02-79	24.83	27,400
1980	03-31-80	20.36	6,760

07040450 St. Francis River at Lake City, Arkansas

Location.--Lat 35° 49’16”, long 90° 25’56”, in SE 1/4 sec.22, T.14 N., R.6 E., at bridge on State Highway 18 at Lake City, at mile 173.6.

Drainage are.--2,374 mi^2.

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

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 April 1, 1941 (capacity at spillway crest, 625,000 acre-ft). Only annual peaks are shown.

07040450 St. Francis River at Lake City, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1917	04-13-17	8.90	--
1918	05-14-18	9.20	--
1919	01-03-19	9.80	--
1920	06-02-20	9.10	--
1921	05-12-21	9.30	--
1922	04-12-22	9.60	--
1923	05-17-23	10.10	--
1924	01-01-24	7.70	--
1925	02-26-25	7.20	--
1926	10-27-25	9.10	--
1927	04-16-27	10.50	--
1928	06-24-28	10.70	--
1929	05-18-29	10.00	--
1930	01-15-30	11.10	--
1931	03-22-31	7.00	5,280
1932	01-19-32	10.50	15,400

07040450 St. Francis River at Lake City, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1933	05-25-33	10.90	16,800
1934	03-28-34	9.40	11,900
1935	03-23-35	12.00	20,900
1936	04-16-36	--	3,940
1937	01-22-37	13.30	36,700
1938	04-09-38	10.70	16,100
1939	03-15-39	10.10	14,000
1940	04-30-40	8.70	9,470
1941	01-16-41	--	3,100
1942	02-20-42	8.70	10,300
1943	05-17-43	7.50	7,080
1944	04-13-44	8.90	10,900
1945	04-24-45	11.90	21,300
1946	05-27-46	10.00	18,000
1947	05-10-47	8.10	9,260
1948	01-16-48	8.60	10,100
1949	01-31-49	11.24	19,400
1950	01-14-50	12.98a	25,700
1951	02-22-51	--	14,800
1952	01-05-52	10.90	18,600
1953	03-19-53	9.90	15,200
1954	05-04-54	6.95	5,730
1955	04-06-55	8.76	10,600
1956	02-19-56	10.25	15,500
1957	06-02-57	--	19,200
1958	11-20-57	12.95	24,200
1959	02-16-59	8.78	10,500
1960	05-22-60	7.90	7,940
1961	05-09-61	9.90	14,400
1962	02-28-62	10.88	18,300
1963	05-28-63	6.92	6,380
1964	03-11-64	10.96	17,700
1965	02-13-65	8.87	9,670
1966	01-03-66	12.20	22,500
1967	05-16-67	9.10	10,800
1968	04-05-68	9.91	13,300
1969	01-31-69	11.45	17,500
1970	05-03-70	10.31	13,800
1971	02-24-71	--	8,290
1972	05-02-72	10.04a	15,700
1973	04-21-73	12.79	30,400
1974	11-27-73	10.46	17,500
1975	03-30-75	12.38	25,800
1976	02-19-76	10.22	14,600
1977	04-04-77	9.57	13,400
1978	03-15-78	--	10,500
1979	04-02-79	14.37a	42,700
1980	04-14-80	7.76a	7,940

07046600 Right Hand Chute of Little River at Rivervale, Arkansas

Location.--Lat 35° 40’20”, long 90° 20’12”, in SW 1/4 sec.10, T.12 N., R.7 E., at floodway bridge at Rivervale.

Drainage area.--2,106 mi^2.

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

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

Bankfull stage.--8 ft.

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

07046600 Right Hand Chute of Little River at Rivervale, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	03-12-39	11.20	--
1940	04-28-40	7.85	--
1941	02-01-41	4.85	--
1942	04-18-42	8.45	--
1943	05-21-43	8.40	--
1944	04-20-44	10.00	--
1945	06-22-45	12.90	23,000
1946	01-18-46	9.65	11,000
1947	04-19-47	7.80	5,800
1948	04-05-48	9.45	8,030
1949	02-02-49	12.60	23,100
1950	02-20-50	13.57	29,200
1951	01-22-51	10.60	14,900
1952	01-10-52	11.82	20,600
1953	03-27-53	9.27a	8,540
1954	05-08-54	5.00	2,680
1955	03-29-55	8.70	6,340
1956	02-24-56	10.70	9,340

07046600 Right Hand Chute of Little River at Rivervale, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1957	05-29-57	12.93	23,700
1958	11-23-57	13.55	31,400
1959	02-22-59	8.30	6,330
1960	05-27-60	7.85	5,100
1961	05-14-61	11.30	18,600
1962	03-04-62	12.20	23,900
1963	03-13-63	8.06	5,870
1964	03-16-64	12.09	22,500
1965	02-16-65	11.21	16,400
1966	01-06-66	12.54	24,700
1967	05-19-67	11.27	19,000
1968	05-18-68	10.06	14,300
1969	02-03-69	12.80	29,500
1970	04-29-70	9.97	16,900
1971	02-27-71	9.73	14,100
1972	04-26-72	8.41	10,600
1973	04-23-73	12.70	32,400
1974	11-28-73	10.79	17,500
1975	04-02-75	12.75	33,800
1976	02-23-76	9.22	15,400
1977	04-04-77	7.74	8,320
1978	03-17-78	--	11,400
1979	04-06-79	13.28	35,600
1980	04-16-80	7.42a	8,450
1981	06-11-81	9.31	11,091
1982	02-05-82	9.50	10,990
1983	05-08-83	11.14	17,361
1984	05-12-84	9.90	14,637

07047000 St. Francis River floodway near Marked Tree, Arkansas

Location.--Lat 35°32’15”, long 90°29’05”, in SE 1/4 NE 1/4 sec.31, T.11 N., R.6 E., on downstream side of bridge on U.S. Highway 63, 3.6 mi west of Marked Tree.

Drainage area.--Indeterminate. Total drainage area of St. Francis River and St. Francis River floodway, 5,148 mi^2.

Gage.--Nonrecording. Prior to October 1, 1965, at site 4.8 mi upstream at datum 192.08 ft above sea level (Morgan Engineering Co. benchmark). Datum of present gage is 185.00 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 47,000 ft^3/s.

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).

07047000 St. Francis River floodway near Marked Tree, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1935	03-25-35	--	36,200
1936	04-23-36	--	3,400
1937	01-26-37	--	53,000
1938	03-02-38	--	22,200
1939	03-16-39	--	21,800
1940	05-02-40	--	12,600
1941	02-10-41	--	2,190
1942	04-21-42	--	12,100
1943	05-25-43	--	8,750
1944	04-22-44	--	16,800
1945	06-22-45	--	36,400
1946	06-04-46	--	16,000
1947	04-21-47	--	8,410
1948	04-04-48	--	12,700
1949	02-04-49	--	32,600
1950	01-19-50	--	46,800
1951	03-01-51	--	20,600
1952	01-11-52	--	25,700
1953	03-23-53	--	15,300
1954	05-06-54	--	4,570
1955	04-07-55	--	13,200
1956	02-25-56	--	17,500
1957	06-02-57	--	36,800
1958	11-23-57	--	45,700
1959	02-24-59	--	12,800
1960	05-28-60	--	8,420
1961	05-18-61	--	27,300
1962	03-04-62	--	34,000
1963	03-17-63	--	7,930
1964	03-17-64	--	30,100
1965	02-18-65	--	21,700
1966	01-09-66	27.82	20,000
1967	05-22-67	26.53	18,400
1968	05-21-68	26.36	21,100
1969	02-06-69	--	37,600
1970	04-30-70	25.80	19,700

07047500 St. Francis River at Marked Tree, Arkansas

Location.--Lat 35° 31’58”, long 90° 25’25”, in NE 1/4 SW 1/4 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 mi downstream from Little River, and 7 mi 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 mi^2.

Gage.--Nonrecording prior to January 18, 1935; recording thereafter. Auxiliary nonrecording gage from December 23, 1934, to February 18, 1941, and recording gage thereafter at site 3 mi upstream. All gages at datum 196.44 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 7,100 ft^3/s. 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 mi upstream from station, and returns to St. Francis River downstream from Marianna. Only annual maximum daily discharges are shown.

07047500 St. Francis River at Marked Tree, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1935	03-26-35	13.19a	4,150	1955	04-15-55	11.75	3,660
1936	04-25-36	4.70	1,580	1956	02-18-56	11.20a	3,130
1937	02-06-37	18.88	7,120	1957	04-04-57	11.40a	3,450
1938	05-08-38	9.39a	4,380	1958	11-18-57	13.94a	4,130
1939	07-03-39	8.14a	2,500	1959	02-14-59	11.83a	3,640
1940	05-03-40	8.13a	3,300	1960	03-16-60	8.49a	2,590
1941	02-06-41	7.46	2,950	1961	05-11-61	11.09	3,560
1942	03-11-42	9.00a	3,330	1962	02-27-62	13.91a	4,360
1943	03-21-43	9.78	3,680	1963	05-28-63	9.84	2,660
1944	04-11-44	11.03	3,970	1964	04-06-64	11.43	2,820
1945	04-03-45	14.58	4,540	1965	02-12-65	11.90	3,210
1946	02-27-46	12.85a	4,370	1966	01-08-66	11.96a	3,790
1947	04-16-47	8.95a	3,260	1967	05-20-67	8.92a	2,810
1948	03-03-48	9.04	4,450	1968	05-20-68	11.35a	3,200
1949	01-26-49	13.60a	4,650	1969	01-30-69	12.87a	3,860
1950	01-18-50	16.06a	5,110	1970	05-04-70	10.66a	2,950
1951	02-22-51	10.90	3,790	1971	12-24-70	10.85	2,930
1952	02-23-52	12.02a	4,380	1972	05-02-72	8.11	2,490
1953	05-18-53	12.50	3,940	1973	05-07-73	14.60a	4,250
1954	05-23-54	6.24a	2,210				

×07047501 St. Francis River floodway near Marked Tree (07047000) and St. Francis River at Marked Tree (07047500) combined

Remarks.--Discharges tabulated below are combined flows of St. Francis River floodway near Marked Tree and St. Francis River at Marked Tree.

07047501 St. Francis River floodway near Marked Tree (07047000) and St. Francis River at Marked Tree (07047500) combined

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1935	03-26-35	--	40,400	1943	05-25-43	--	11,700
1936	04-20-36	--	4,980	1944	04-22-44	--	19,700
1937	01-27-37	--	58,000	1945	06-22-45	--	40,400
1938	03-02-38	--	24,000	1946	06-04-46	--	19,100
1939	03-16-39	--	23,400	1947	04-21-47	--	11,500
1940	05-03-40	--	15,400	1948	04-04-48	--	15,600
1941	02-06-41	--	4,870	1949	02-04-49	--	36,700
1942	04-21-42	--	14,300	1950	01-19-50	--	51,800

07047501 St. Francis River floodway near Marked Tree (07047000) and St. Francis River at Marked Tree (07047500) combined--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1951	03-01-51	--	23,700	1961	05-18-61	--	30,000
1952	01-11-52	--	29,200	1962	03-05-62	--	37,500
1953	03-23-53	--	19,000	1963	03-17-63	--	9,830
1954	05-08-54	--	6,460	1964	03-20-64	--	31,800
1955	04-07-55	--	16,400	1965	02-18-65	--	23,800
1956	02-25-56	--	20,100	1966	01-09-66	--	23,500
1957	06-02-57	--	39,900	1967	05-21-67	--	20,800
1958	11-24-57	--	49,600	1968	05-21-68	--	24,000
1959	02-24-59	--	15,400	1969	02-06-69	--	41,000
1960	05-28-60	--	10,500	1970	05-04-70	--	21,600

07047950 L'Anguille River at Palestine, Arkansas

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

Drainage area.--786 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 13,700 ft^3/s 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.

07047950 L'Anguille River at Palestine, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1933	04-13-33	28.80	--	1960	06-29-60	23.65	4,300
1935	04-01-35	27.45	--	1961	03-11-61	26.95a	5,630
1936	04-23-36	28.87	--	1962	03-01-62	26.38	13,700
1937	02-13-37	39.70	--	1963	03-14-63	23.46a	4,610
1939	03-03-39	26.80	--	1964	03-12-64	25.41	9,980
1943	06-08-43	26.08	--	1965	02-15-65	24.89	8,880
1944	05-07-44	25.20	--	1966	05-02-66	26.20	10,700
1945	04-03-45	29.60	--	1967	01-03-67	23.00	3,650
1946	01-12-46	26.75	--	1968	05-19-68	24.80	7,700
1947	05-26-47	22.90	--	1969	02-02-69	26.44	13,800
1948	03-03-48	25.40	--	1970	05-02-70	25.30	8,620
1949	01-29-49	26.60	13,500	1971	02-23-71	23.23	4,120
1950	01-14-50	30.92a	12,400	1972	12-22-71	21.58	2,700
1951	01-18-51	24.70	9,000	1973	04-25-73	29.92	15,500
1952	03-14-52	24.65a	6,430	1974	06-10-74	--	13,000
1953	05-20-53	27.55	15,600	1975	03-30-75	27.08	10,600
1954	01-24-54	23.90	5,800	1976	06-30-76	23.69a	4,360
1955	05-29-55	24.55	8,150	1977	09-30-77	22.88	2,870
1956	02-20-56	25.70	11,000	1978	09-20-78	25.20	9,550
1957	04-06-57	--	10,900	1979	12-11-78	26.59	12,900
1958	11-20-57	27.65	15,300	1980	03-25-80	24.44a	7,350
1959	02-18-59	25.10	10,200	1981	06-09-81	24.48	6,363

07047950 L'Anguille River at Palestine, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1982	04-21-82	25.19	9,117
1983	05-19-83	29.19	22,803
1984	05-21-84	26.50	15,133

07047800 St. Francis River at Parkin, Arkansas

Location.--Lat 35° 16'23", long 90° 33'33", in NE 1/4 SE 1/4 sec.33, T.8 N., R.5 E., at bridge on U.S. Highway 64 at Parkin, 1.1 mi 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 mi^2.

Gage.--Nonrecording prior to September 10, 1948; recording thereafter. Prior to April 25, 1968, at site 1.8 mi upstream. Datum of gage is 175.30 ft above sea level, 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 are not comparable to stages experienced since 1928 due to levee construction.

Remarks.--The greater part of St. Francis River floodflow is diverted through St. Francis River floodway at Murray Lock and Dam, about 4 mi 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 River-front, returns to St. Francis River below Marianna.

07047800 St. Francis River at Parkin, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1930	01-31-30	27.19a	25,300
1931	03-29-31	--	8,080
1932	02-03-32	27.07	22,200
1933	04-04-33	26.60a	15,200
1934	03-31-34	21.18a	13,700
1935	01-23-35	29.10a	9,960
1936	05-03-36	20.90a	2,990
1937	02-02-37	34.20a	20,000
1938	02-22-38	22.70a	8,160
1939	02-05-39	25.56a	7,260
1940	04-21-40	16.79a	5,350
1941	01-27-41	7.92a	3,760
1942	04-12-42	18.60	7,750
1943	03-22-43	19.88a	7,320
1944	04-12-44	21.95a	9,850
1945	04-02-45	30.60a	12,300
1946	01-11-46	24.85a	12,800
1947	06-24-47	17.00a	10,600
1948	03-04-48	23.70a	8,900
1949	01-28-49	29.38a	10,600
1950	02-16-50	32.75a	11,100
1951	01-17-51	24.13a	9,950
1952	03-13-52	25.45a	9,960
1953	05-20-53	24.40	11,000
1954	01-18-54	14.40a	7,350
1955	04-15-55	24.85	9,870
1956	02-22-56	24.80a	10,000
1957	02-04-57	--	9,380
1958	10-19-57	31.22a	11,700
1959	02-20-59	23.30	9,870
1960	03-18-60	14.30	50,906
1961	02-23-61	25.65a	7,810
1962	02-28-62	27.36a	13,500
1963	05-28-63	14.85	8,520
1964	03-11-64	28.00a	11,500
1965	02-13-65	22.00a	11,000
1966	02-13-66	18.60	11,400
1967	01-01-67	15.90	8,850
1968	05-19-68	--	10,900
1969	02-02-69	21.23	11,800
1970	04-27-70	21.10	11,900
1971	12-25-70	--	9,100
1972	05-02-72	15.03	5,110
1973	04-25-73	27.36	15,800
1974	04-24-74	22.42	12,400
1975	03-31-75	23.46	10,600
1976	04-01-76	17.05	8,600
1977	03-05-77	14.43	5,960
1978	05-10-78	23.91	13,100

07047900 St. Francis Bay at Riverfront, Arkansas

Location.--Lat 35° 15’34”, long 90° 40’48”, in W 1/2 sec.4, T.7 N., R.4 E., at bridge on U.S. Highway 64 at Riverfront, 0.8 mi upstream from mouth, and 7 mi west of Parkin.

Drainage area.--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 mi^2.

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

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

Bankfull stage.--30 ft.

Remarks.--The greater part of St. Francis River floodflow is through St. Francis River floodway at Murray Lock and Dam, about 4 mi northwest of Marked Tree. Diverted flow, which is included in records for St. Francis River at Parkin, returns to St. Francis River below Marianna.

07047900 St. Francis Bay at Riverfront, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1935	03-28-35	33.20a	31,600	1958	11-29-57	35.78	38,400
1936	04-30-36	25.00a	5,240	1959	02-24-59	26.35	16,000
1937	02-02-37	38.20a	54,100	1960	05-30-60	16.90a	7,550
1938	03-06-38	27.20	22,300	1961	05-25-61	30.35	26,000
1939	03-23-39	29.85a	22,200	1962	03-11-62	31.42	31,600
1940	05-07-40	21.10	11,700	1963	03-20-63	18.58a	8,690
1941	02-14-41	9.51a	2,100	1964	03-23-64	--	26,100
1942	04-25-42	21.24a	12,700	1965	02-21-65	--	18,600
1943	05-28-43	23.85a	8,750	1966	01-12-66	29.56a	25,700
1944	04-27-44	26.17a	18,800	1967	05-25-67	24.50	19,700
1945	06-26-45	35.07a	37,900	1968	05-22-68	26.44	24,200
1946	05-28-46	28.83a	20,400	1969	02-10-69	34.18	35,300
1947	04-25-47	20.67a	8,890	1970	05-05-70	27.95	24,900
1948	04-15-48	27.65	16,400	1971	03-04-71	25.49	19,700
1949	02-09-49	34.02	32,800	1972	05-02-72	22.70	15,300
1950	01-21-50	37.00a	48,000	1973	04-28-73	39.03a	49,900
1951	03-06-51	28.70a	20,900	1974	12-05-73	--	24,500
1952	01-16-52	25.45	27,500	1975	04-11-75	37.27	40,600
1953	03-24-53	27.38a	18,700	1976	07-12-76	21.60	16,700e
1954	01-27-54	16.10a	5,640	1977	04-10-77	22.38	15,800
1955	04-14-55	28.00a	15,300	1978	03-23-78	25.50	21,300
1956	02-28-56	28.40a	19,700	1979	04-08-79	38.90	54,700
1957	06-09-57	--	32,900	1980	04-08-80	22.30	14,300

07047902 St. Francis River at Parkin (07047800) and St. Francis Bay at Riverfront (07047900) combined

Remarks.--Discharges tabulated are combined flows of St. Francis River at Parkin and St. Francis Bay at Riverfront and are published by Corps of Engineers as “St. Francis River Wittsburg.” Records furnished by Corps of Engineers. Only annual maximum daily discharges are shown.

07047902 St. Francis River at Parkin (07047800) and St. Francis Bay at Riverfront (07047900) combined

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1936	05-01-36	--	7,630	1941	01-26-41	--	5,340
1937	02-02-37	--	74,100	1942	04-12-42	--	17,800
1938	03-07-38	--	26,100	1943	06-01-43	--	11,700
1939	02-21-39	--	26,400	1944	04-24-44	--	22,700
1940	05-06-40	--	14,700	1945	06-27-45	--	44,500

07047902 St. Francis River at Parkin (07047800) and St. Francis Bay at Riverfront (07047900) combined--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1946	01-17-46	--	26,600
1947	05-22-47	--	14,300
1948	04-15-48	--	23,200
1949	02-08-49	--	37,600
1950	01-21-50	--	53,400
1951	01-23-51	--	24,700
1952	01-16-52	--	31,100
1953	03-24-53	--	28,000
1954	01-22-54	--	10,900
1955	04-15-55	--	24,900
1956	02-24-56	--	27,900
1957	06-05-57	--	37,400
1958	11-27-57	--	45,200
1959	02-19-59	--	24,500
1960	03-17-60	--	11,200
1961	05-25-61	--	28,500
1962	03-11-62	--	39,000
1963	05-29-63	--	15,800
1964	03-20-64	--	30,300
1965	04-07-65	--	23,300
1966	05-02-66	--	31,200
1967	05-24-67	--	23,000
1968	05-20-68	--	34,000
1969	02-08-69	--	41,000
1970	05-02-70	--	31,400
1971	03-04-71	--	23,600
1972	05-02-72	--	20,400
1973	04-28-73	--	62,600
1974	12-05-73	--	30,400
1975	04-11-75	--	43,200
1977	04-09-77	--	17,800
1978	12-13-78	--	41,500

07047970 Mississippi River at Helena, Arkansas

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

Drainage area.--941,700 mi^2, approximately.

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

Stage-discharge relation.--Defined by current-meter measurements below 2,014,000 ft^3/s. 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.

07047970 Mississippi River at Helena, Arkansas

Water year	Date	Gage height (feet)	Discharge, in thousands (cubic foot per second)
1828	1828	43.11	--
1844	1844	42.21	--
1849	1849	42.81	--
1850	05-01-50	42.81	--
1851	1851	39.81	--
1858	07-02-58	44.61	--
1859	03-22-59	43.61	--
1862	1862	46.40	--
1865	1865	44.40	--
1867	1867	45.82	--
1872	04-26-72	39.03	--
1873	03-06-73	40.00	--
1874	05-11-74	45.82	--
1875	04-12-75	42.40	--
1876	04-18-76	44.85	--
1877	04-30-77	41.80	--
1878	05-03-78	38.75	--
1879	01-31-79	37.25	--
1880	03-31-80	43.70	--
1881	05-14-81	43.74	--
1882	03-08-82	47.20a	1,558
1883	03-08-83	46.90	--
1884	03-06-84	47.00	--
1885	01-28-85	40.70a	1,021
1886	04-30-86	48.10	--
1887	03-21-87	46.40	--
1888	04-14-88	42.80	--
1889	06-28-89	34.10	--
1890	03-29-90	47.72	--
1891	03-21-91	44.70a	1,455

07047970 Mississippi River at Helena, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge, in thousands (cubic foot per second)
1892	05-11-92	45.73	1,326
1893	05-23-93	47.92a	1,594
1894	02-21-94	38.07	--
1895	03-30-95	31.30	--
1896	04-17-96	38.42	--
1897	04-04-97	51.75	--
1898	04-14-98	49.11a	1,405
1899	04-12-99	46.75	--
1900	03-21-00	38.25	--
1901	05-08-01	41.45	--
1902	03-23-02	39.58	--
1903	03-25-03	51.00a	1,558
1904	04-14-04	47.62	1,412
1905	05-29-05	37.77	--
1906	04-18-06	47.05	1,259
1907	02-03-07	50.39a	1,691
1908	03-23-08	45.20a	1,356
1909	03-23-09	47.65a	1,429
1910	03-21-10	40.70	--
1911	04-28-11	44.56	--
1912	04-23-12	54.20a	2,041
1913	04-22-13	55.20	1,805
1914	04-17-14	39.43	--
1915	02-20-15	43.55	--
1916	02-10-16	53.40a	1,565
1917	04-13-17	49.90	1,474
1918	03-02-18	37.49	--
1919	04-01-19	46.20	--
1920	04-05-20	50.10a	1,535
1921	04-09-21	38.65	--
1922	04-03-22	53.10a	1,612
1923	03-30-23	45.40	--
1924	01-21-24	42.20	--
1925	03-04-25	35.10	--
1926	04-23-26	38.30	--
1927	04-29-27	56.75a	1,756
1928	07-12-28	45.70	1,242
1929	05-27-29	52.62a	1,584
1930	01-25-30	43.86	1,133
1931	04-16-31	30.30	685
1932	02-20-32	49.20a	1,287
1933	04-12-33	50.62a	1,264
1934	03-18-34	36.77a	866
1935	03-28-35	48.94	1,192
1936	04-23-36	50.64	1,369
1937	02-12-37	60.21	1,968
1938	04-23-38	43.55	1,028
1939	03-27-39	48.20	1,309
1940	05-09-40	40.51	993
1941	04-29-41	27.00	587
1942	03-30-42	38.22	990
1943	06-07-43	46.89	1,298
1944	05-10-44	45.95a	1,361
1945	04-12-45	49.27a	1,442
1946	01-23-46	44.20	1,333
1947	04-25-47	40.38	1,103
1948	04-06-48	45.30a	1,296
1949	02-06-49	43.90a	1,284
1950	02-23-50	50.28	1,643
1951	03-05-51	43.35	1,176
1952	04-03-52	45.46	1,366
1953	05-25-53	34.97	866
1954	01-30-54	26.25	622
1955	04-04-55	44.12	1,298
1956	03-02-56	38.10	1,019
1957	02-17-57	39.05a	1,027
1958	05-16-58	39.02a	1,021
1959	02-27-59	35.70	895
1960	04-20-60	40.60	1,136
1961	05-23-61	48.00	1,541
1962	04-05-62	44.70a	1,308
1963	04-01-63	42.70	1,329
1964	03-26-64	39.73a	1,195
1965	04-13-65	40.64a	1,139
1966	02-25-66	35.30a	972
1967	05-25-67	37.00	1,022
1968	06-10-68	36.02a	942
1969	02-16-69	39.32a	1,171
1970	05-12-70	40.79	1,170
1971	03-08-71	--	1,230
1972	05-02-72	--	1,120
1973	04-06-73	50.18a	1,630
1974	02-08-74	--	1,500
1975	04-07-75	47.94a	1,790
1976	03-01-76	33.20	932
1977	04-15-77	32.27	892
1978	04-03-78	41.30a	1,282
1979	03-15-79	48.17a	1,656
1980	04-08-80	39.57	1,262

07049691 White River at Beaver Dam near Eureka Springs, Arkansas

Location.--Lat 36° 25’15”, long 93° 50’50”, in NW 1/4 NW 1/4 sec.10, T.20 N., R.27 W., Carroll County, at Beaver Dam, 6.0 mi west of Eureka Springs, and at mile 609.0.

Drainage area.--1,192 mi^2.

Period of record.--Water years 1946, 1950-53, October 1967 to current year.

07049691 White River at Beaver Dam near Eureka Springs, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1966	06-06-66	--	3,900
1967	11-30-66	--	2,940
1968	03-21-68	--	6,030
1969	04-04-69	--	5,900
1970	01-21-70	--	5,620
1971	02-09-71	--	7,510
1972	01-04-72	--	4,370
1973	04-23-73	--	25,900
1974	06-10-74	--	13,700
1975	03-29-75	--	5,510

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1976	11-24-75	--	5,830
1977	01-10-77	--	6,070
1978	05-09-78	--	8,060
1979	05-12-79	--	7,970
1980	08-20-80	--	3,450
1981	08-24-81	--	4,340
1982	01-11-82	--	7,200
1983	02-22-83	--	8,390
1984	05-03-84	--	8,350
1976	11-24-75	--	5,830

07055000 White River near Flippin, Arkansas

Location.--Lat 36° 18’35”, long 92° 33’28”, in NE 1/4 NW 1/4 sec.10, T.19 N., R.15 W., on right bank 1.4 mi upstream from Hightower Creek, 3.2 mi northeast of Flippin, 11.5 mi downstream from Bull Shoals Dam, 11.8 mi upstream from Crooked Creek, and at mile 406.7.

Drainage area.--6,081 mi^2.

Gage.--Nonrecording prior to December 21, 1938, at site 1.1 mi upstream at datum 1.52 ft higher; recording thereafter at present site and datum. Datum of present gage is 419.66 ft above sea level (Corps of Engineers benchmark).

Stage-discharge relation.--Defined by current-meter measurements below 217,000 ft^3/s.

Bankfull stage.--36 ft.

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

07055000 White River near Flippin, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-16-27	45.40	240,000
1929	05-09-29	23.80	70,400
1930	01-15-30	19.69	50,100
1931	08-07-31	17.30	38,800
1932	01-17-32	18.90	46,100
1933	05-16-33	32.30	116,000
1934	03-29-34	13.52	23,500
1935	03-12-35	38.10	164,000
1936	09-29-36	14.73	27,500
1937	01-17-37	21.54	58,900
1938	02-19-38	34.10	134,000
1939	07-03-39	20.61	56,600
1940	04-11-40	20.33	57,800
1941	04-21-41	29.60	115,000
1942	11-01-41	21.54	65,300
1943	05-12-43	39.06	201,000

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1944	03-23-44	15.58	37,900
1945	04-17-45	39.82	215,000
1946	05-28-46	22.90	74,000
1947	11-10-46	22.82	73,500
1948	06-19-48	20.57	62,200
1949	01-28-49	24.89	85,000
1950	05-13-50	36.82	178,000
1951	02-23-51	16.54	43,900
1952	04-25-52	11.70	21,500
1953	05-03-53	13.52	27,500
1954	04-22-54	8.06	10,500
1955	07-01-55	12.68	24,800
1956	09-12-56	8.32	11,100
1957	07-25-57	13.30	27,200
1958	10-03-57	12.30	24,400
1959	08-31-59	7.63	9,680

07055000 White River near Flippin, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	06-06-60	12.71	25,800
1961	08-11-61	11.73	21,500
1962	07-13-62	10.16	16,800
1963	07-24-63	10.66	18,300
1964	08-03-64	12.37	23,800
1965	08-26-65	12.81	25,100
1966	08-16-66	12.50	24,100
1967	07-10-67	12.81	26,100
1968	07-17-68	13.24	29,700
1969	12-14-68	13.16	29,300
1970	09-21-70	13.10	29,000
1971	09-27-71	13.61	31,300
1972	03-24-72	13.16	29,300
1973	02-07-73	13.11	29,100
1974	02-09-74	12.72	25,700
1975	01-09-75	13.55	29,400
1976	08-04-76	12.78	26,000
1977	05-24-77	13.32	28,300
1978	11-26-77	13.25	28,000
1979	08-29-79	12.65	25,400
1980	07-14-80	12.48	24,700
1981	01-12-81	11.92	22,500
1982	01-20-82	12.41	24,400
1983	08-26-83	13.14	27,500
1984	12-25-83	12.94	26,600

07060000 North Fork River at Norfork Dam near Norfork, Arkansas

Location.--Lat 36° 14’18”, long 92° 14’18”, in SE 1/4 SW 1/4 sec.2, T.18 N., R.12 W., at Norfork Dam, 3.9 mi northeast of Norfork.

Drainage area.--1,808 mi^2.

Gage.--Recording. Datum of gage is at sea level (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.

07060000 North Fork River at Norfork Dam near Norfork, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1945	04-16-45	--	21,000
1946	03-17-46	--	8,400
1947	05-18-47	--	4,260
1948	03-23-48	--	4,730
1949	02-00-49	--	11,200
1950	04-10-50	--	10,200
1951	07-31-51	--	5,450
1952	03-18-52	--	10,400
1953	05-28-53	--	8,780
1954	04-30-54	--	2,980
1955	09-16-55	--	2,600
1956	03-23-56	--	2,660
1957	08-15-57	--	5,900
1958	07-19-58	--	7,590
1959	12-01-58	--	4,040
1960	01-22-60	--	3,720
1961	04-03-61	--	6,060
1962	01-23-62	--	5,710
1963	09-18-63	--	2,780
1964	05-20-64	--	3,230
1965	06-03-65	--	3,480
1966	02-19-66	--	10,800
1967	07-10-67	--	3,070
1968	02-23-68	--	6,040
1969	03-11-69	--	6,140
1970	11-14-69	--	5,470
1971	12-18-70	--	5,580
1972	01-03-72	--	4,130
1973	05-15-73	--	8,620
1974	04-29-74	--	10,700
1975	02-11-75	--	5,400
1976	12-19-75	--	5,260
1977	10-22-76	--	4,770
1978	08-25-78	--	3,420
1979	05-01-79	--	6,880
1980	01-04-80	--	5,440
1981	08-31-81	--	3,280
1982	04-09-82	--	7,380
1983	01-19-83	--	6,990
1984	04-24-84	--	7,260

07060500 White River at Calico Rock, Arkansas

Location.--Lat 36° 06’58”, long 92° 08’35”, in SE 1/4 NE 1/4 sec.22, T.17 N., R.11 W., on left bank at Calico Rock, just upstream from Calico Creek, 3 1/4 mi downstream from Cataract Creek, 6 mi upstream from Piney Creek, and at mile 359.1.

Drainage area.--9,978 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 290,000 ft^3/s 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 and 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.

07060500 White River at Calico Rock, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1905	08-01-05	32.00	146,000
1906	03-27-06	35.00	166,000
1907	05-07-07	43.50	239,000
1908	05-15-08	31.60	143,000
1909	03-09-09	23.00	89,000
1910	06-10-10	15.30	45,800
1911	08-15-11	27.60	117,000
1912	04-27-12	28.70	123,000
1913	01-24-13	16.60	52,600
1914	04-29-14	20.60	74,600
1915	08-21-15	50.50	318,000
1916	01-31-16	52.90	350,000
1917	04-02-17	25.20	102,000
1918	05-12-18	37.00	182,000
1919	06-03-19	20.00	71,300
1920	03-26-20	32.60	150,000
1921	04-27-21	37.20	183,000
1922	04-11-22	16.60	52,600
1923	02-02-23	29.30	127,000
1924	06-12-24	28.00	119,000
1925	04-28-25	22.50	86,000
1926	10-09-25	19.00	65,800
1927	04-15-27	51.50	332,000
1928	12-14-27	41.50	220,000
1929	01-25-29	29.20	126,000
1930	05-11-30	24.20	96,200
1931	02-09-31	19.00	65,800
1932	01-23-32	18.80	64,700
1933	05-16-33	38.40	193,000
1934	03-27-34	15.20	45,300
1935	03-12-35	43.80	242,000
1936	09-29-36	15.50	46,800
1937	01-15-37	29.40	128,000
1938	02-19-38	44.50	250,000
1939	04-17-39	32.50	149,000
1940	04-12-40	24.05	95,000
1941	04-22-41	27.85	118,000
1942	11-01-41	28.40	122,000
1943	05-12-43	47.50	269,000
1944	02-29-44	16.23	48,900
1945	04-16-45	49.84	310,000
1946	05-16-46	25.61	110,000
1947	12-13-46	25.94	112,000
1948	06-20-48	18.49	65,400
1949	01-25-49	38.14	190,000
1950	05-13-50	39.25	211,000
1951	02-21-51	25.56	110,000
1952	03-11-52	18.66	66,600
1953	03-18-53	15.07	46,900
1954	05-03-54	14.25	42,400
1955	03-21-55	15.90	51,100
1956	02-18-56	12.27	33,400
1957	04-04-57	25.05	106,000
1958	05-10-58	13.73	40,000
1959	11-17-58	13.52	39,000
1960	05-21-60	17.26	58,600
1961	05-06-61	23.97	99,500
1962	01-23-62	10.30	24,800
1963	06-08-63	8.20	16,600
1964	03-10-64	15.97	51,600
1965	05-11-65	10.76	24,800
1966	02-10-66	23.30	92,400
1967	07-11-67	10.03	22,500
1968	03-21-68	21.14	79,100
1969	01-30-69	23.35	92,700
1970	04-20-70	18.25	62,200
1971	01-16-71	11.69	30,000
1972	12-11-71	25.25	99,800

07060500 White River at Calico Rock, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1973	04-23-73	27.82	109,000	1979	04-12-79	14.76	42,700
1974	11-25-73	29.69	121,000	1980	02-18-80	10.38	24,500
1975	03-28-75	18.51	59,700	1981	08-18-81	11.02	27,100
1976	06-25-76	11.88	30,500	1982	02-01-82	19.00	62,000
1977	03-29-77	19.97	66,700	1983	12-04-82	41.14	201,000
1978	03-25-78	16.85	52,100	1984	05-08-84	15.66	46,700

07061000 White River at Batesville, Arkansas

Location.--Lat 35°45'37", long 91°38'28", in NE 1/4 sec.21, T.13 N., R.6 W., on left bank at downstream side of bridge on State Highway 11 at Batesville, 0.3 mi upstream from Lock and Dam 1, 0.6 mi downstream from Polk Bayou, and at mile 300.1.

Drainage area.--11,062 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 290,000 ft^3/s and extended above by logarithmic plotting.

Bankfull stage.--16 ft.

Remarks.--Peak gage height for 1904-38 computed from graph based on Corps of Engineers readings. For regulation, see remarks for station at Calico Rock. Only annual peaks are shown.

07061000 White River at Batesville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1904	03-27-04	24.90	220,000	1929	01-26-29	20.40	134,000
1905	08-02-05	20.80	141,000	1930	05-12-30	18.40	105,000
1906	03-28-06	23.90	199,000	1931	02-09-31	16.20	81,100
1907	05-08-07	26.70	259,000	1932	01-24-32	15.90	77,500
1908	05-16-08	22.10	164,000	1933	05-17-33	24.90	220,000
1909	03-10-09	17.50	94,600	1934	03-26-34	15.00	66,400
1910	06-10-10	13.70	51,500	1935	03-13-35	27.00	266,000
1911	08-15-11	20.20	130,000	1936	12-08-35	13.70	51,500
1912	04-27-12	20.10	129,000	1937	01-16-37	20.40	134,000
1913	01-12-13	15.10	67,600	1938	02-19-38	27.40	260,000
1914	04-29-14	16.30	82,200	1939	04-18-39	21.65	165,000
1915	08-22-15	31.60	373,000	1940	04-12-40	16.66	93,600
1916	02-01-16	31.90	382,000	1941	04-22-41	19.24	114,000
1917	04-02-17	18.70	108,000	1942	11-02-41	20.00	122,000
1918	05-13-18	24.90	220,000	1943	05-12-43	28.01	281,000
1919	06-03-19	16.50	84,200	1944	03-01-44	13.96	54,800
1920	03-27-20	22.70	175,000	1945	04-16-45	29.43	324,000
1921	04-27-21	25.10	224,000	1946	02-14-46	18.52a	106,000
1922	03-31-22	15.70	74,900	1947	12-13-46	19.12	114,000
1923	02-03-23	21.50	153,000	1948	06-20-48	15.27	73,900
1924	06-13-24	19.50	120,000	1949	01-26-49	25.72	236,000
1925	04-29-25	16.80	87,200	1950	05-13-50	24.77	216,000
1926	10-17-25	16.60	85,200	1951	02-21-51	18.80	107,000
1927	04-15-27	31.40	369,000	1952	03-12-52	15.62	77,700
1928	12-15-27	26.00	244,000	1953	03-18-53	14.48	63,500

07061000 White River at Batesville, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1954	05-02-54	13.20	47,900
1955	03-22-55	14.14	58,500
1956	02-18-56	12.95	45,700
1957	04-04-57	19.82	124,000
1958	05-09-58	13.87	56,100
1979	04-01-79	15.77	76,000
1980	12-25-79	10.61	23,700
1981	08-19-81	10.45	22,400
1982	02-05-82	15.93	78,100
1983	12-03-82	29.27	312,000
1984	05-08-84	14.20	57,700

07064000 Black River near Corning, Arkansas

Location.--Lat 36° 24’07”, long 90° 32’29”, in SW 1/4 NE 1/4 sec.4, T.20 N., R.5 E., on left bank at downstream side of bridge on U.S. Highway 62, 2 1/4 mi east of Corning, 11.9 mi downstream from Cane Creek, and at mile 152.2.

Drainage area.--1,749 mi^2.

Gage.--Nonrecording prior to November 5, 1953; recording thereafter. Datum of gage is 272.90 ft above sea level (Corps of Engineers benchmark).

Stage-discharge relation.--Defined by current-meter measurements below 32,000 ft^3/s. Affected by variable slope.

Bankfull stage.--10 ft.

Remarks.--Flow partly regulated since June 3, 1948, by Clearwater Reservoir 105 mi upstream. Peak stages prior to 1939 furnished by Corps of Engineers. Only annual peaks are shown.

07064000 Black River near Corning, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	1915	13.30	18,900
1916	1916	13.90	23,400
1919	12-22-18	11.80	8,330
1920	12-06-19	11.70	7,750
1921	05-01-21	12.40	12,300
1922	04-05-22	12.50	13,000
1923	05-21-23	12.50	13,000
1924	06-04-24	10.80	4,430
1925	06-17-25	9.60	3,100
1926	11-10-25	11.50	6,710
1927	04-18-27	14.40	27,200
1928	06-18-28	13.10	17,400
1929	05-19-29	12.70	14,400
1930	01-20-30	13.00	16,600
1931	03-10-31	11.20	5,480
1932	01-20-32	11.80	8,330
1933	05-19-33	13.80	22,600
1934	03-30-34	11.10	5,160
1935	03-15-35	14.20	25,600
1936	04-09-36	11.10	5,160
1937	01-19-37	14.10	24,900
1938	02-23-38	13.60	21,200
1939	04-22-39	13.15	18,000
1940	04-22-40	11.62	6,900
1941	01-07-41	9.00	2,800
1967	05-17-67	12.27	8,940
1942	04-12-42	12.09	9,900
1943	05-15-43	15.20	30,800
1944	04-14-44	11.88	8,620
1945	06-13-45	16.92	48,600
1946	05-30-46	13.08	17,400
1947	05-01-47	12.03a	10,500
1948	01-08-48	12.19	11,200
1949	01-29-49	13.78	22,800
1950	01-08-50	13.15	18,600
1951	02-24-51	12.02	10,200
1952	11-28-51	2.27	12,000
1953	03-20-53	11.07	5,340
1954	03-28-54	8.76	2,630
1955	12-24-54	13.89	17,500
1956	02-21-56	11.60	7,210
1957	04-08-57	13.54	18,700
1958	03-28-58	13.03	15,000
1959	01-24-59	10.67	4,060
1960	05-23-60	11.47	6,150
1961	05-11-61	13.73	19,900
1962	03-01-62	12.92	14,000
1963	05-30-63	11.22	5,220
1964	03-13-64	15.23	32,500
1965	02-14-65	12.22	8,550
1966	01-05-66	13.54	17,300
1976	12-09-75	11.74	6,310

07064000 Black River near Corning, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1968	03-23-68	12.78	11,900
1969	02-02-69	14.10	22,100
1970	04-27-70	13.02	13,700
1971	01-17-71	11.80	6,550
1972	04-24-72	12.27	8,940
1973	04-24-73	14.00	22,600
1974	11-28-73	14.09	22,000
1975	03-30-75	14.70a	28,200
1977	03-31-77	15.53	28,000
1978	03-16-78	12.16	8,330
1979	04-03-79	13.73	19,500
1980	04-01-80	10.88	4,150
1981	06-10-81	10.72	3,930
1982	02-03-82	13.94	22,700
1983	12-07-82	14.82	23,400
1984	04-05-84	11.96	7,300

07069000 Black River at Pocahontas, Arkansas

Location.--Lat 36° 15’14”, long 90° 58’12”, in SW 1/4 SW 1/4 sec.27, T.19 N., R.1 E., at bridge on U.S. Highway 67 at Pocahontas, 2.2 mi downstream from Fourche River, 6.4 mi downstream from Current River, 18.1 mi upstream from Spring River, and at mile 90.1.

Drainage area.--4,845 mi^2.

Gage.--Nonrecording prior to July 23, 1940; recording July 24, 1940, to September 30, 1970; nonrecording thereafter. Prior to July 15, 1937, at site 0.3 mi upstream at present datum. Datum of gage is 241.81 ft above sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 56,000 ft^3/s.

Bankfull stage.--18 ft.

Remarks.--Records for January 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.

07069000 Black River at Pocahontas, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-17-27	25.90	80,000
1937	01-21-37	24.00	31,600
1938	02-25-38	21.92	30,100
1939	04-24-39	21.15	28,000
1940	04-24-40	17.85	15,000
1941	01-25-41	8.92	7,270
1942	04-16-42	19.60	18,600
1943	05-18-43	22.46	39,500
1944	04-26-44	19.07	17,300
1945	06-17-45	24.32	59,600
1946	05-29-46	21.66	30,300
1947	05-01-47	17.16	14,700
1948	01-05-48	17.51a	15,800
1949	01-29-49	24.07	53,800
1950	01-11-50	22.92	39,100
1951	02-25-51	20.83	23,600
1952	12-01-51	20.78	23,600
1953	03-24-53	17.37	14,500
1954	05-04-54	12.68	10,200
1955	03-26-55	18.38	16,200
1956	05-20-56	16.68	13,700
1957	05-29-57	23.34	42,800
1980	04-02-80	13.07	10,100
1958	03-29-58	22.13	32,400
1959	11-22-58	17.68	15,000
1960	05-22-60	15.57	12,600
1961	05-12-61	24.18	52,300
1962	03-05-62	18.02	15,500
1963	05-31-63	16.40a	13,800
1964	03-14-64	23.32	42,900
1965	04-10-65	15.11	12,000
1966	04-30-66	21.77	29,400
1967	05-16-67	18.46	15,800
1968	05-17-68	19.55	17,600
1969	02-03-69	24.18	53,500
1970	05-04-70	19.72	18,400
1971	01-15-71	14.61	11,300
1972	05-03-72	19.22	16,900
1973	04-25-73	25.00	66,000
1974	11-30-73	22.46	35,900
1975	04-01-75	23.65	47,800
1976	07-07-76	17.32	14,000
1977	04-01-77	24.21	53,800
1978	03-30-78	19.55	17,600
1979	04-03-79	22.42	35,500
1983	12-07-82	25.22	66,300

07069000 Black River at Pocahontas, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1981	05-18-81	12.10	9,340
1982	02-05-82	22.58	37,100
1984	04-11-84	18.34	15,400

07072500 Black River at Black Rock, Arkansas

Location.--Lat 36° 06’15”, long 91° 05’50”, in NW 1/4 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 mi downstream from Spring River, and at mile 68.3.

Drainage area.--7,369 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurement below 100,000 ft^3/s 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.

07072500 Black River at Black Rock, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1905	05-08-05	22.90	37,500
1906	01-23-06	24.50	51,700
1907	01-04-07	26.00	69,000
1908	05-07-08	23.40	41,400
1909	03-10-09	25.00	56,900
1910	04-18-10	17.00	19,300
1911	08-16-11	19.10	22,500
1912	04-28-12	23.50	42,200
1913	01-12-13	24.40	50,700
1914	04-30-14	21.60	28,800
1915	08-21-15	31.90	160,000
1916	01-31-16	26.50	75,600
1917	04-03-17	24.60	52,700
1918	05-14-18	25.90	67,800
1919	12-14-18	19.90	23,800
1920	03-27-20	21.10	26,800
1921	04-28-21	25.70	65,300
1922	04-09-22	23.40	41,400
1923	05-16-23	24.30	49,600
1924	05-30-24	14.30	15,800
1925	06-15-25	12.10	13,300
1926	10-18-25	20.80	26,000
1927	04-15-27	30.30	132,000
1928	06-14-28	26.20	71,700
1929	01-26-29	24.70	53,800
1930	01-15-30	23.60	43,000
1931	03-08-31	18.00	20,600
1932	01-18-32	19.60	23,300
1961	05-08-61	28.00	96,300
1933	05-22-33	23.10	38,900
1934	03-27-34	19.30	22,800
1935	03-12-35	26.70	78,300
1936	04-06-36	16.40	18,500
1937	01-16-37	26.20	71,700
1938	02-19-38	25.50	63,000
1939	04-18-39	24.80	54,800
1940	05-01-40	18.20	22,800
1941	01-25-41	10.00	11,800
1942	04-10-42	23.00	37,300
1943	05-12-43	26.20	68,200
1944	04-24-44	22.00	31,200
1945	03-31-45	27.20	87,400
1946	06-01-46	23.60	42,000
1947	04-11-47	16.00a	21,200
1948	01-02-48	19.80	29,500
1949	01-25-49	28.50	103,000
1950	01-05-50	25.90	67,800
1951	02-22-51	23.10	38,800
1952	11-27-51	23.30	40,600
1953	03-18-53	20.00a	30,100
1954	05-03-54	17.60a	24,900
1955	03-21-55	19.50a	26,200
1956	02-18-56	17.60a	25,700
1957	04-05-57	26.90	77,800
1958	05-06-58	24.50	50,200
1959	11-18-58	25.10	57,800
1960	05-20-60	18.40a	27,400
1973	04-24-73	29.24	105,000

07072500 Black River at Black Rock, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1962	02-26-62	21.70a	33,300
1963	05-27-63	19.30a	29,900
1964	03-10-64	27.80	90,800
1965	09-23-65	16.60	26,600
1966	01-02-66	26.80	75,100
1967	05-13-67	15.70	27,600
1968	05-17-68	23.80	40,700
1969	01-31-69	27.72	89,500
1970	04-26-70	23.04	35,700
1971	01-14-71	17.50	27,900
1972	05-02-72	21.16a	28,300
1974	12-05-73	25.93	61,600
1975	03-29-75	27.90	94,500
1976	12-06-75	19.43a	29,200
1977	03-29-77	28.10	109,000
1978	03-26-78	19.92	24,900
1979	03-04-79	25.61	63,400
1980	03-31-80	13.90	15,500
1981	05-18-81	9.66	10,600
1982	02-01-82	24.92	56,600
1983	12-04-82	31.51	190,000
1984	05-08-84	20.62	27,600

07074500 White River at Newport, Arkansas

Location.--Lat 35° 36’18”, long 91° 17’19”, in NE 1/4 NE 1/4 sec.10, T.11 N., R.3 W., at bridge on U.S. Highway 67 at Newport, 7.2 mi downstream from Black River, and at mile 257.6.

Drainage area.--19,860 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 341,000 ft^3/s at present site and below 162,000 ft^3/s 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 acre-ft. Only annual peaks are shown.

07074500 White River at Newport, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1886	05-12-86	24.00	66,500
1887	05-08-87	24.50	69,500
1888	05-23-88	26.10	80,900
1889	03-28-89	23.00	61,000
1890	03-14-90	33.00	235,000
1891	04-26-91	23.80	65,400
1892	05-21-92	29.60	132,000
1893	05-05-93	30.70	158,000
1894	05-11-94	28.00	102,000
1895	07-11-95	19.60	45,900
1896	12-24-95	28.80	116,000
1897	01-07-97	27.90	101,000
1898	05-08-98	32.10	199,000
1899	05-13-99	28.00	102,000
1900	03-03-00	18.50	41,800
1901	03-15-01	23.50	63,800
1902	03-02-02	18.10	40,400
1903	03-12-03	28.70	114,000
1922	04-14-22	26.20	81,800
1904	03-29-04	28.90	117,000
1905	05-26-05	28.20	105,000
1906	03-29-06	30.50	152,000
1907	05-11-07	30.70	158,000
1908	05-00-08	29.40	127,000
1909	03-14-09	26.00	80,000
1910	06-13-10	20.50	49,500
1911	08-17-11	24.80	71,300
1912	05-02-12	29.40	127,000
1913	01-26-13	26.00	80,000
1914	05-01-14	23.10	61,600
1915	08-24-15	33.90	280,000
1916	02-01-16	34.30	303,000
1917	04-06-17	24.90	71,900
1918	05-15-18	32.20	207,000
1919	06-05-19	23.40	63,200
1920	03-29-20	29.30	125,000
1921	04-30-21	31.30	174,000
1954	05-03-54	19.49a	48,000

07074500 White River at Newport, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1923	02-05-23	29.50	130,000
1924	06-14-24	25.40	75,500
1925	05-01-25	21.80	55,100
1926	10-19-25	26.10	80,900
1927	04-17-27	35.60	387,000
1928	06-15-28	33.10	172,000
1929	05-12-29	30.00	108,000
1930	01-17-30	30.30	112,000
1931	02-13-31	23.60	64,200
1932	01-26-32	26.70	86,300
1933	05-19-33	32.10	199,000
1934	03-29-34	25.70	77,800
1935	03-14-35	33.70	270,000
1936	12-09-35	18.00	40,000
1937	01-18-37	30.70	158,000
1938	02-20-38	33.40	259,000
1939	04-20-39	30.30	144,000
1940	04-14-40	24.40a	75,200
1941	04-23-41	27.25a	106,000
1942	11-05-41	28.10	102,000
1943	05-14-43	34.68	304,000
1944	03-03-44	23.00a	60,700
1945	04-17-45	35.90a	343,000
1946	05-30-46	30.00	125,000
1947	12-16-46	28.20	100,000
1948	06-21-48	23.30a	66,200
1949	01-28-49	34.00a	260,000
1950	05-15-50	32.10	194,000
1951	02-23-51	28.50	104,000
1952	04-15-52	25.60	75,200
1953	03-20-53	24.40	66,300
1955	03-22-55	21.70a	54,800
1956	02-19-56	22.10a	55,300
1957	04-06-57	28.25	101,000
1958	05-11-58	27.54	92,800
1959	11-17-58	20.40a	60,300
1960	05-22-60	24.87a	70,200
1961	05-09-61	30.16	130,000
1962	02-28-62	21.45	56,000
1963	05-28-63	13.42a	33,400
1964	03-13-64	27.46	99,000
1965	04-05-65	19.75a	50,900
1966	04-27-66	28.12	99,000
1967	05-17-67	16.16	37,900
1968	03-23-68	26.69	84,700
1969	02-01-69	30.00	125,000
1970	04-28-70	25.70	73,100
1971	01-21-71	18.83	43,000
1972	12-12-71	23.92a	65,800
1973	04-25-73	32.73	244,000
1974	11-28-73	30.15	138,000
1975	03-30-75	31.46	202,000
1976	06-25-76	16.70a	39,300
1977	03-30-77	29.12	123,000
1978	03-26-78	23.00	57,500
1979	04-03-79	29.58	125,000
1980	12-26-79	14.57	30,800
1981	02-13-81	9.24	19,400
1982	02-03-82	26.55	84,100
1983	12-05-82	34.00	330,000
1984	05-10-84	24.69	69,100

07076000 Little Red River near Heber Springs, Arkansas

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

Drainage area.--1,153 mi^2.

Gage.--Nonrecording prior to December 15, 1938, at site 2 1/4 mi upstream at datum 8.97 ft higher than present datum; recording thereafter. December 14, 1938, to September 30, 1960, at site 1 3/4 mi upstream at datum 10.03 ft higher than present datum. Datum of present gage is 261.78 ft above sea level.

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.

07076000 Little Red River near Heber Springs, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-00-27	44.00	78,900
1928	04-06-28	42.35	74,400
1929	02-26-29	29.10	41,100
1930	05-11-30	38.90	65,200
1931	10-08-30	24.45	28,500
1932	01-06-32	31.30	47,400
1933	05-16-33	38.00	62,900
1934	03-26-34	31.86	49,100
1935	05-05-35	42.00	73,300
1937	01-15-37	29.90	41,800
1938	02-18-38	41.90	73,100
1939	04-17-39	36.83	72,800
1940	05-01-40	17.55	17,300
1941	01-02-41	16.60	15,300
1942	04-09-42	32.37	57,900
1943	05-11-43	43.95	99,100
1944	04-23-44	33.08	53,600
1945	03-31-45	42.47	96,200
1946	02-14-46	33.90	58,800
1947	12-12-46	29.30	43,800
1948	01-01-48	27.66	39,600
1949	01-25-49	46.53	117,000
1950	01-05-50	32.51	53,700
1951	02-21-51	27.67	38,600
1952	03-11-52	28.18	40,100
1953	03-18-53	31.15	49,400
1954	05-03-54	29.76	45,000
1955	03-21-55	28.37	40,700
1956	02-18-56	28.37	40,700
1957	04-04-57	44.23	96,500
1958	05-03-58	30.85	48,200
1959	11-17-58	31.47	50,400
1960	05-21-60	31.75	49,900
1961	05-07-61	40.00	66,000
1962	12-10-61	16.20	8,000
1963	01-11-63	5.44	273
1964	04-02-64	15.54	7,350
1965	09-14-65	16.84	8,940
1966	07-12-66	16.38	8,430
1967	01-03-67	15.89	7,820
1968	12-22-67	16.34	8,360
1969	11-27-68	16.61	8,690
1970	01-12-70	16.67	8,770
1971	02-12-71	16.49	8,540
1972	01-07-72	16.27	8,270
1973	12-11-72	16.13	8,110
1974	09-30-74	16.21	8,200
1975	09-30-75	16.28	8,440
1976	10-08-75	16.51	8,710
1977	10-20-76	16.55	8,760
1978	01-16-78	16.33	8,450
1979	12-31-78	16.14	8,220
1980	09-08-80	16.20	8,290
1981	09-03-81	16.32	8,430
1982	01-12-82	16.38	8,510
1983	02-05-83	18.33	11,000
1984	09-11-84	16.35	8,470

07077000 White River at DeValls Bluff, Arkansas

Location.--Lat 34° 47’25”, long 91° 26’45”, in SE 1/4 sec.17, T.2 N., R.4 W., on downstream side of bridge on U.S. Highway 70, 1 mi northeast of DeValls Bluff, 7.5 mi downstream from Wattensaw Bayou, 24.1 mi upstream from Cache River, and at mile 125.3.

Drainage area.--23,483 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 220,000 ft^3/s.

Bankfull stage.--20 ft.

Historical data.--Maximum stage known, 34.6 ft April 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.

07077000 White River at DeValls Bluff, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-23-27	34.60	--	1951	03-03-51	25.07	94,900
1928	06-28-28	28.50	140,000	1952	12-08-51	24.02	82,000
1929	05-19-29	26.80	113,000	1953	03-25-53	24.02	82,000
1930	01-22-30	26.80	113,000	1954	05-07-54	22.08	58,100
1931	02-25-31	22.60	54,200	1955	03-27-55	22.42	58,000
1932	01-30-32	25.70	96,600	1956	02-24-56	24.17	77,400
1933	05-25-33	26.90	114,000	1957	05-04-57	27.47	117,000
1934	04-02-34	24.80	83,600	1958	05-15-58	26.06	101,000
1935	03-19-35	28.04	132,000	1959	02-19-59	21.92	53,600
1936	12-15-35	20.42	37,100	1960	05-29-60	22.78	62,000
1937	01-23-37	29.20	151,000	1961	05-15-61	27.40	126,000
1938	02-25-38	28.42a	134,000	1962	03-05-62	22.38	58,100
1939	04-27-39	26.08	102,000	1963	03-14-63	17.83	31,200
1940	04-25-40	23.10	60,100	1964	03-20-64	23.66	71,700
1941	05-01-41	22.22	56,900	1965	02-15-65	20.86	46,200
1942	04-19-42	24.60	86,100	1966	05-03-66	25.71	96,100
1943	05-19-43	27.98	131,000	1967	05-22-67	19.51	38,400
1944	05-08-44	23.06	63,300	1968	05-18-68	25.60	98,700
1945	04-03-45	30.30a	146,000	1969	02-06-69	28.12	132,000
1949	02-03-49	31.35	220,000	1970	05-04-70	24.51	79,300
1950	01-20-50	28.42	154,000	1951	03-03-51	25.07	94,900

07077800 White River at Clarendon, Arkansas

Location.--Lat 34° 41'08", long 91° 18'55", in W 1/2 sec.22, T.1 N., R.3 W., on St. Louis Southwestern Railroad bridge at Clarendon, 1.1 mi downstream from Cache River, and at mile 100.1.

Drainage area.--25,555 mi^2.

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

Stage-discharge relation.--Defined by current-meter measurements below 297,000 ft^3/s.

Bankfull stage.--23 ft.

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

07077800 White River at Clarendon, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-23-27	43.30	395,000	1936	12-18-35	23.00	34,200
1928	06-30-28	34.90	230,000	1937	01-27-37	35.75a	215,000
1929	05-24-29	31.30	156,000	1938	02-28-38	35.05a	203,000
1930	01-23-30	30.98	135,000	1939	04-28-39	30.75	119,000
1931	02-26-31	26.95	56,900	1940	04-28-40	27.75	67,800
1932	01-30-32	30.38	105,000	1941	05-03-41	26.10	50,400
1933	05-27-33	30.97	124,000	1942	04-22-42	29.28	94,200
1934	04-05-34	29.78a	106,000	1943	05-27-43	33.25a	147,000
1935	03-25-35	33.70	179,000	1944	05-09-44	27.80	69,800

07077800 White River at Clarendon, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1945	04-23-45	39.10a	299,000	1962	03-12-62	27.90	70,600
1946	06-04-46	31.40	132,000	1963	03-19-63	22.80a	35,200
1947	12-24-46	28.60	89,200	1964	03-22-64	28.60	84,000
1948	03-10-48	28.55a	75,400	1965	02-18-65	26.10	51,000
1949	02-04-49	35.32a	211,000	1966	05-05-66	30.30	107,000
1950	01-21-50	33.55a	157,000	1967	05-23-67	24.20	40,000
1951	03-06-51	29.95	104,000	1968	05-20-68	30.00	119,000
1952	01-15-52	28.85	83,500	1969	02-08-69	32.00	150,000
1953	03-28-53	29.31	92,100	1970	05-07-70	29.20	90,600
1954	05-11-54	26.07	54,700	1971	12-31-70	--	47,100
1955	04-02-55	27.00	62,200	1972	05-13-72	26.33	50,800
1956	02-26-56	29.05	80,700	1973	05-03-73	34.97	191,000
1957	05-06-57	31.20	120,000	1974	12-11-73	31.41	132,000
1958	05-16-58	30.50	115,400	1975	04-05-75	32.85	159,400
1959	02-21-59	26.60	58,700	1976	06-24-76	25.47	45,300
1960	06-02-60	27.55	64,600	1977	04-09-77	29.44	93,400
1961	05-17-61	31.00	129,000	1978	04-25-78	--	59,000

07247000 Poteau River at Cauthron, Arkansas

Location.--Lat 34° 55’08”, long 94° 17’55”, in Sw 1/4 sec.16, T.3 N., R.31 W., on right bank at downstream side of highway bridge at Cauthron, 7.8 mi downstream from Jones Creek, and at mile 109.0.

Drainage area.--203 mi^2.

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

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.--Only annual peaks are shown.

07247000 Poteau River at Cauthron, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1935	06-00-35	27.40	--	1953	05-13-53	20.46	16,000
1939	04-16-39	22.50	24,400	1954	05-02-54	19.86	13,600
1940	04-29-40	10.71	2,810	1955	03-21-55	17.22	7,830
1941	12-16-40	10.57	2,760	1956	02-18-56	16.52	6,790
1942	10-31-41	18.87	10,500	1957	05-23-57	18.73	10,300
1943	05-11-43	21.74	19,000	1958	05-02-58	18.91	11,200
1944	02-28-44	17.09	7,580	1959	03-26-59	12.44	4,130
1945	05-15-45	22.39	23,800	1960	05-20-60	23.76	32,200
1946	02-13-46	18.30	9,350	1961	05-06-61	17.59	8,930
1947	12-10-46	21.18	17,400	1962	11-22-61	17.60	8,930
1948	01-01-48	21.08	17,000	1963	03-19-63	11.76	3,750
1949	01-24-49	23.34	31,000	1964	03-09-64	17.20	8,380
1950	02-12-50	22.78	27,800	1965	02-09-65	20.23	14,400
1951	02-15-51	15.08	5,770	1966	02-10-66	20.42	15,200
1952	04-22-52	18.69	10,900	1967	05-06-67	16.85	7,000

07247000 Poteau River at Cauthron, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1968	05-14-68	21.75	22,000
1969	07-26-69	23.24	29,400
1970	04-19-70	17.54	7,960
1971	04-23-71	12.55	3,740
1972	12-10-71	21.82	22,300
1973	04-16-73	17.28	7,590
1974	06-07-74	21.24	19,400
1975	03-28-75	18.39	9,280
1976	03-08-76	12.48	3,810
1977	03-28-77	19.20	11,400
1978	03-24-78	15.63	5,740
1979	04-01-79	17.99	8,580
1980	12-24-79	16.56	6,670
1981	07-01-81	17.57	7,990
1982	01-31-82	17.55	7,960
1983	12-03-82	20.12	14,100
1984	05-03-84	17.19	7,760

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

Location.--Lat 35° 20’56”, long 94° 17’54”, in sec.28, T.8 N., R.31 W., Sebastian County, in Dam No. 13 control house on right bank and at mile 308.9.

Drainage area.--150,547 mi^2, of which 22,241 mi^2 is probably noncontributing.

Gage.--Water-stage and gate position recorder. Datum of gage is sea level (levels by Corps of Engineers). Prior to October 1, 1934, nonrecording gage, and October 1, 1934 to December 20, 1969, recording gage at site 7.9 mi upstream at datum 372.36 ft higher.

Remarks.--No estimated daily discharges. Water-discharge records fair. Beginning April 26, 1970, daily discharges computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs.

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

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1970	05-02-70	--	152,000
1971	10-27-70	--	136,000
1972	12-10-71	--	191,000
1973	04-23-73	--	212,000
1974	11-25-73	--	259,000
1975	11-11-74	--	211,000
1976	04-21-76	--	165,000
1977	03-28-77	--	118,000
1978	05-08-78	--	101,000
1979	06-12-79	--	108,000
1980	06-20-80	--	83,500
1981	05-30-81	--	52,700
1982	06-05-82	--	155,000
1983	05-15-83	--	135,000
1984	03-30-84	--	133,000

07251000 Frog Bayou near Mountainburg, Arkansas

Location.--Lat 35° 39’37”, long 94° 08’56”, in NW 1/4 NE 1/4 sec.2, T.11 N., R.30 W., on left bank above concrete weir in spillway of Fort Smith Dam, 3/4 mi upstream from Warloop Creek, 1 1/4 mi upstream from Howard Fork, 2 1/2 mi northeast of Mountainburg, and 3 mi downstream from Jones Fork.

Drainage area.--74.2 mi^2.

Gage.--Nonrecording gage and concrete control prior to August 28, 1939; recording thereafter. Datum of gage is 800.00 ft above sea level (levels by city of Fort Smith).

Stage-discharge relation.--Defined by current-meter measurements below 11,000 ft^3/s 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 January 1, 1956, by Lake Sheppard (capacity, 19,000 acre-ft). Only annual peaks are shown.

07251000 Frog Bayou near Mountainburg, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1937	01-14-37	26.60	2,400
1938	02-18-38	28.20	6,500
1939	02-19-39	26.55	2,190
1940	04-11-40	27.35	4,220
1941	04-19-41	26.58	2,310
1942	04-08-42	27.96	5,780
1943	05-10-43	29.84	12,000
1944	04-08-44	28.40	7,120
1945	04-15-45	31.06	17,300
1946	05-24-46	29.14	9,420
1947	11-09-46	28.12	6,210
1948	08-14-48	26.69	2,550
1949	01-24-49	28.21	6,500
1950	05-10-50	27.61	4,800
1951	07-02-51	28.48	7,440
1952	04-12-52	26.58	2,310
1953	04-29-53	27.09	3,510
1954	05-03-54	25.46	397
1955	02-19-55	27.32	4,010
1956	06-09-56	25.16	92
1957	05-23-57	30.28	13,700
1958	11-18-57	26.48	2,100
1959	05-11-59	26.42	1,980
1960	05-06-60	28.08	6,210
1961	05-05-61	27.89	5,630

07251500 Frog Bayou at Rudy, Arkansas

Location.--Lat 35° 31’25”, long 94° 16’30”, in SW 1/4 sec.23, T.10 N., R.31 W., on left bank at downstream side of bridge on State Highway 282 at Rudy, 0.5 mi downstream from Cedar Creek.

Drainage area.--216 mi^2.

Gage.--Recording prior to 1971, crest-stage gage thereafter. Datum of gage is 475.08 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 26,000 ft^3/s.

Bankfull stage.--10 ft.

Remarks.--Peak discharge affected to some extent by storage in Lake Fort Smith (capacity 10,000 acre-ft) and since January 1, 1956, by Lake Sheppard Springs (capacity, 19,000 acre-ft).

07251500 Frog Bayou at Rudy, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1945	04-15-45	18.50	39,500
1950	05-10-50	11.40	13,200
1951	07-02-51	11.77	14,700
1952	04-12-52	8.86	6,690
1953	03-17-53	10.22	9,250
1954	05-02-54	5.86	1,520
1955	02-19-55	11.34	12,600
1956	05-15-56	6.82	2,710
1957	05-23-57	18.04	36,200
1958	07-12-58	14.25	19,100
1959	05-11-59	8.07	4,650
1960	05-06-60	14.60	20,400
1961	05-05-61	13.60	17,300
1962	11-22-61	8.73	5,660
1963	04-27-63	6.20	2,140
1964	04-05-64	11.46	11,600
1965	05-10-65	9.72	7,550
1966	02-09-66	15.14	18,900
1967	04-30-67	8.47	5,240
1968	03-20-68	11.73	11,200
1969	12-27-68	10.57	8,840
1970	05-01-70	15.64	20,200
1971	10-26-70	15.26	19,300
1972	12-10-71	16.40	23,000
1973	04-22-73	14.50	17,500
1974	11-24-73	17.40	32,000
1975	11-04-74	11.23	10,200
1976	04-20-76	11.00	9,700
1977	03-27-77	13.20	14,400
1978	03-24-78	10.52	8,740
1979	04-11-79	10.11	7,920
1980	03-24-80	6.28	1,890
1981	06-10-81	8.90	5,620
1982	05-13-82	15.32	19,400
1983	12-03-82	12.58	13,100
1984	05-07-84	10.90	9,500

07253000 Sixmile Creek at Chismville, Arkansas

Location.--Lat 35° 13’15”, long 93° 56’20”, in E 1/2 sec.2, T.6 N., R.28 W., on downstream side of highway bridge at Chismville, 1/2 mi downstream from Rocky Creek, and at mile 25.6.

Drainage area.--24.1 mi^2.

Gage.--Recording. Datum of gage is 478.42 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 1,780 ft^3/s and by contracted-opening measurement at 2,810 ft^3/s.

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.

07253000 Sixmile Creek at Chismville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	10.74	2,810	1963	10-16-62	2.58	177
1956	02-17-56	3.07	218	1964	05-11-64	6.04	862
1957	04-13-57	10.05	1,850	1965	05-26-65	8.95	1,630
1958	07-12-58	9.47	1,650	1966	05-18-66	7.58	1,230
1959	06-01-59	5.77	680	1967	05-06-67	3.22	302
1960	05-06-60	8.78	1,440	1968	05-13-68	9.60	1,900
1961	05-05-61	10.62	2,670	1969	07-26-69	10.32	2,420
1962	11-22-61	4.75	602	1970	04-17-70	6.00	862

07253500 Sixmile Creek near Branch, Arkansas

Location.--Lat 35° 15’, long 93° 59’, in SE 1/4 sec.28, T.7 N., R.28 W., 1/2 mi downstream from Rattle Snake Creek, 1 mi upstream from Prairie Creek, 4 1/4 mi southwest of Branch, and at mile 21.5.

Drainage area.--36.7 mi^2.

Stage-discharge relation.--Defined by current-meter measurements below 3,700 ft^3/s and by slope-area measurement at 4,480 ft^3/s.

Bankfull stage.--8 ft.

Remarks.--Peaks 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.

07253500 Sixmile Creek near Branch, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	11.75	4,530	1963	10-14-62	8.88	2,350
1956	02-17-56	4.77	609	1964	05-11-64	6.85	1,480
1957	04-03-57	10.90	3,660	1965	05-26-65	10.10	3,040
1958	07-12-58	11.38	4,130	1966	02-09-66	8.07	2,000
1959	03-25-59	4.83	663	1967	06-30-67	4.54	672
1960	11-04-59	10.74	3,520	1968	05-13-68	11.81	4,540
1961	05-05-61	11.05	3,750	1969	07-26-69	10.20	3,110
1962	11-22-61	5.80	1,100	1970	04-19-70	5.81	1,100

07255000 Sixmile Creek at Caulksville, Arkansas

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 mi east of Caulksville, 1 3/4 mi downstream from Shaver Creek, and at mile 11.0.

Drainage area.--104 mi^2.

Gage.--Recording. Datum of gage is 356.16 ft above sea level. 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 ft^3/s.

Bankfull stage.--12 ft.

Remarks.--Peaks 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.

07255000 Sixmile Creek at Caulksville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	19.37	8,780	1963	10-14-62	13.17	3,680
1956	02-17-56	15.00	1,800	1964	05-11-64	14.54	4,280
1957	04-03-57	17.40	9,460	19i65	05-26-65	15.80	5,490
1958	05-02-58	15.85	6,180	1966	02-09-66	16.10	4,550
1959	06-01-59	9.74	2,380	1967	05-06-67	9.45	2,040
1960	11-04-59	16.88	6,380	1968	05-14-68	18.79	9,960
1961	05-06-61	17.79	10,100	1969	12-27-68	18.00	7,300
1962	11-22-61	12.66	3,490	1970	04-19-70	13.99	2,790

07255500 Hurricane Creek near Branch, Arkansas

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, 1 1/2 mi upstream from Perry Creek, 3.2 mi northeast of Branch, and at mile 9.0.

Drainage area.--17.2 mi^2.

Gage.--Recording. Datum of gage is 379.87 ft above sea level (Soil Conservation Service benchmark).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 ft^3/s and by indirect measurement at 2,840 ft^3/s.

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.

07255500 Hurricane Creek near Branch, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-20-55	9.88	2,840	1963	03-16-63	4.93	120
1956	02-17-56	8.14	700	1964	05-11-64	8.55	985
1957	04-03-57	8.78	1,240	1965	05-26-65	8.32	790
1958	07-12-58	8.31	790	1966	02-09-66	7.92	560
1959	07-19-59	7.78	512	1967	04-23-67	6.01	173
1960	11-04-59	9.69	2,460	1968	05-13-68	9.02	1,410
1961	05-05-61	7.74	375	1969	12-27-68	8.60	880
1962	11-22-61	8.09	484	1970	04-25-70	8.34	825

07258000 Arkansas River at Dardanelle, Arkansas

Location.--Lat 35° 13'34", long 93° 08'58", in SW 1/4 sec.29, T.7 N., R.20 W., on downstream side of bridge on State Highway 7 at Dardanelle, 1 mi upstream from Whig Creek, 2 mi downstream from Dardanelle Dam, 4.7 mi downstream from Illinois Bayou, and at mile 255.8.

Drainage area.--153,666 mi^2, of which about 22,241 mi^2 is probably noncontributing.

Gage.--Nonrecording prior to January 11, 1939; recording thereafter. Datum of gage is 290.16 ft above sea level.

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.

07258000 Arkansas River at Dardanelle, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1887	05-05-87	12.60	--
1888	05-22-88	16.10	--
1889	03-26-89	19.00	--
1890	04-27-90	20.00	--
1891	04-22-91	18.00	--
1892	05-18-92	27.50	--
1893	05-02-93	24.00	--
1894	03-21-94	17.50	--
1895	08-02-95	17.50	--
1896	12-26-95	23.50	--
1897	03-20-97	17.40	--
1898	05-10-98	28.90	--
1899	05-10-99	23.10	--
1900	07-07-00	11.30	--
1901	04-19-01	15.50	--
1902	06-02-02	17.30	--
1903	05-31-03	22.80	--
1904	06-09-04	28.00	--
1905	05-30-05	21.20	--
1906	05-04-06	19.00	--
1907	05-11-07	18.80	--
1908	05-29-08	27.20	--
1909	12-02-08	24.90	--
1910	01-20-10	12.00	--
1911	08-09-11	18.40	--
1912	05-03-12	24.30	--
1913	03-29-13	14.40	--
1914	12-07-13	16.20	--
1915	05-30-15	26.90	--
1916	01-31-16	29.80	--
1917	06-11-17	14.40	--
1918	05-13-18	20.30	--
1919	11-11-18	17.903	--
1920	03-29-20	20.90	--
1921	03-26-21	20.60	--
1922	04-13-22	25.20	--
1923	06-17-23	26.50	--
1924	12-16-23	22.00	--
1925	05-01-25	13.00	--
1926	10-17-25	12.10	--
1927	04-19-27	33.00	--
1928	12-14-27	24.50	--
1929	05-18-29	27.60	--
1930	05-11-30	24.30	--
1931	02-10-31	14.20	--
1932	01-25-32	20.20	--
1933	05-18-33	25.10	--
1934	04-08-34	15.50	--
1935	06-21-35	29.50	--
1936	12-08-35	18.50	--
1937	01-18-37	19.40	--
1938	02-19-38	29.55	396,000
1939	04-17-39	19.00	142,000
1940	09-07-40	16.65a	103,000
1941	04-23-41	27.16	295,000
1942	11-05-41	31.92	433,000
1943	05-13-43	33.30	683,000
1943	05-25-43	33.60	682,000
1944	05-04-44	26.29	245,000
1945	04-19-45	33.15	579,000
1946	10-04-45	27.63	285,000
1947	12-13-46	26.56	303,000
1948	06-27-48	27.07	300,000
1949	05-22-49	26.97a	303,000
1950	05-14-50	29.20	382,000
1951	07-20-51	25.14	227,000
1952	04-24-52	19.88	145,000
1953	03-18-53	19.33	137,000
1954	05-04-54	22.64	194,000
1955	03-21-55	17.35	109,000
1956	10-09-55	16.50	113,000
1957	05-30-57	33.42	471,000
1958	06-27-58	18.93	156,000
1959	07-29-59	19.36	157,000

07258000 Arkansas River at Dardanelle, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	10-09-59	27.90	390,000
1961	05-12-61	25.07	271,000
1962	11-23-61	18.29	154,000
1963	10-06-62	10.72	62,600
1964	04-06-64	14.44	96,700
1965	04-11-65	17.40	127,000
1966	02-10-66	21.92	209,000
1967	07-05-67	14.93	88,300
1968	03-21-68	24.15	203,000
1969	01-30-69	31.46	200,000
1970	04-26-70	--	235,000
1971	10-28-70	--	145,000
1972	12-10-71	--	298,000
1973	04-23-73	--	318,000
1974	11-25-73	38.34	302,000
1975	11-11-74	33.88	243,000
1976	04-23-76	24.91	141,000
1977	03-28-77	32.06	221,000
1978	05-08-78	24.63	138,000
1979	04-02-79	25.09	143,000
1980	06-21-80	16.58	75,300
1981	06-17-81	14.60	63,100
1982	01-31-82	29.63	192,000
1983	12-03-82	40.02	325,000
1984	04-12-84	24.70	139,000

07259500 Petit Jean River near Waveland, Arkansas

Location.--Lat 35××° 06’17”, long 93° 37’51”, in SE 1/4 SW 1/4 sec.11, T.5 N., R.25 W., on left bank 0.8 mi downstream from Rock Creek, 1.2 mi downstream from Cedar Creek, 1.3 mi south of Waveland, 1.4 mi downstream from Blue Mountain Dam, and at mile 73.0.

Drainage area.--516 mi^2 (495 mi^2 at former site).

Gage.--Crest-stage gage. Recording prior to September 30, 1980. Prior to October 1, 1943, at site 1 3/4 mi upstream at datum 9.54 ft higher. Datum of present gage is 339.70 ft above sea level (Corps of Engineers benchmark).

Stage-discharge relation.--Defined by current-meter measurements at former site below 13,000 ft^3/s and extended by velocity-area study and slope-area measurement at 62,600 ft^3/s. Defined by current-meter measurements at present site.

07259500 Petit Jean River near Waveland, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	04-16-39	29.95	62,600
1940	04-29-40	13.65	3,700
1941	01-02-41	20.75	7,460
1942	04-09-42	21.64	9,950
1943	05-11-43	28.70	38,000
1944	05-02-44	28.10	11,400
1945	03-30-45	32.23	37,100
1946	02-14-46	29.07	14,000
1947	12-13-46	27.63	9,050
1948	01-02-48	27.25	8,580
1949	01-24-49	24.27	5,900
1950	02-12-50	21.67	4,860
1951	02-25-51	15.63	2,500
1952	04-22-52	19.42	3,800
1953	03-17-53	24.58	6,310
1954	05-02-54	17.44	3,150
1955	02-24-55	16.72	2,820
1956	02-23-56	15.80	2,550
1957	08-15-57	22.00	4,600
1958	03-23-58	15.65	2,650
1959	03-26-59	20.60	4,020
1960	05-20-60	22.05	4,600
1961	12-16-60	14.72	2,400
1962	12-13-61	14.51	2,350
1963	03-07-63	11.25	1,470
1964	03-09-64	12.05	1,670
1965	02-20-65	15.76	2,700
1966	04-23-66	19.10	3,740
1967	04-16-67	15.62	2,650
1968	05-14-68	26.67	7,660
1969	12-27-68	23.34	5,550
1970	04-19-70	24.11	6,000
1971	11-01-70	11.57	1,560
1972	12-10-71	24.62	6,320
1973	04-23-73	24.85	6,480
1974	12-04-73	19.97	4,070
1975	03-28-75	18.69	3,590
1976	03-13-76	14.09	2,190
1977	03-27-77	20.39	4,230
1978	05-08-78	13.84	2,170

07259500 Petit Jean River near Waveland, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1979	04-01-79	18.23	3,680	1982	02-23-82	15.13	2,740
1980	05-22-80	13.05	2,120	1983	12-03-82	28.51	9,100
1981	06-12-81	14.29	2,490	1984	03-11-84	14.18	2,450

07260500 Petit Jean River at Danville, Arkansas

Location.--Lat 35° 03’33”, long 93° 23’44”, in NW 1/4 SE 1/4 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 mi upstream from Spring Creek, and 0.6 mi downstream from Dutch Creek.

Drainage area.--764 mi^2.

Gage.--Nonrecording prior to July 13, 1939; recording gage and concrete control thereafter. Prior to August 25, 1934, at site 1,800 ft downstream at datum 0.25 ft higher. Datum of present gage is 303.33 ft above sea level. Since June 18, 1954, auxiliary water-stage recorder 2.2 mi downstream.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 ft^3/s.

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. Published as Petit Jean “Creek” prior to 1965.

07260500 Petit Jean River at Danville, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1917	06-03-17	21.70	6,290	1944	05-04-44	24.02	12,200
1918	05-14-18	20.90	5,010	1945	03-31-45	29.50	45,700
1919	12-15-18	24.30	14,600	1946	02-14-46	25.05	13,400
1920	01-24-20	24.80	17,700	1947	12-13-46	24.99	13,400
1921	04-28-21	24.70	17,000	1948	01-01-48	25.05	13,400
1922	11-20-21	24.00	15,800	1949	01-25-49	27.85	27,000
1923	05-16-23	25.10	19,800	1950	01-14-50	25.43	15,000
1924	04-30-24	25.40	22,200	1951	02-16-51	22.07	5,730
1925	02-24-25	18.30	3,020	1952	04-23-52	25.12	14,200
1926	10-18-25	23.50	10,900	1953	03-18-53	24.14a	11,100
1927	04-15-27	28.40	50,900	1954	05-03-54	24.35	11,200
1928	04-07-28	25.50	23,000	1955	03-22-55	21.66	5,190
1929	01-26-29	23.90	12,600	1956	02-19-56	22.10	5,730
1930	05-11-30	26.30	30,200	1957	04-04-57	25.53	16,300
1931	02-24-31	21.40	5,770	1958	05-03-58	23.77	11,100
1932	02-18-32	24.40	15,200	1959	03-27-59	21.54	5,310
1933	05-17-33	23.60	11,300	1960	05-21-60	25.16	15,800
1934	03-27-34	22.90	8,970	1961	12-12-60	21.72	5,700
1935	06-18-35	30.20	58,300	1962	02-26-62	20.21	3,820
1936	12-09-35	23.30	9,560	1963	03-20-63	16.84	2,850
1937	01-23-37	24.30	13,000	1964	03-10-64	21.77	5,250
1938	02-18-38	29.30	45,400	1965	01-10-65	20.48	3,830
1939	04-17-39	31.82	70,800	1966	04-25-66	21.47	7,830
1940	04-30-40	19.30	3,380	1967	05-07-67	19.64	4,860
1941	01-04-41	22.18	6,350	1968	05-14-68	25.18	20,000
1942	11-01-41	24.18	13,000	1969	01-31-69	24.25	14,400
1943	05-12-43	28.12	35,500	1970	04-20-70	23.69	13,000

07260500 Petit Jean River at Danville, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1971	02-13-71	13.93	2,206
1972	12-10-71	26.37	27,500
1973	11-02-72	24.02	12,300
1974	12-05-73	22.73	8,200
1975	03-29-75	24.40	14,500
1976	03-09-76	15.57	2,390
1977	03-28-77	24.75	18,800
1978	05-09-78	22.15	7,250
1979	04-02-79	24.49	15,600
1980	05-16-80	18.09	3,560
1981	06-07-81	19.65	3,960
1982	03-15-82	20.31	4,780
1983	12-03-82	29.36	47,500
1984	05-04-84	21.87	6,340

07262500 Fourche Lafave River near Nimrod, Arkansas

Location.--Lat 34° 57'02", long 93° 09'16", in NW 1/4 SW 1/4 sec.32, T.4 N., R.20 W., on left bank 2,000 ft downstream from Nimrod Dam, 4.5 mi southwest of Nimrod, 9.8 mi upstream from South Fourche Lafave River, and at mile 62.2.

Drainage area.--684 mi^2.

Gage.--Nonrecording prior to December 20, 1938, at site 1.1 mi downstream at datum 3.92 ft lower; recording thereafter. December 21, 1938 to August 26, 1946, at site 2.0 mi downstream at datum 9.72 ft lower. Datum of present gage is 305.25 ft above sea level (Corps of Engineers benchmark).

Stage-discharge relation.--Defined by current-meter measurements below 34,000 ft^3/s.

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). Only annual peaks are shown.

07262500 Fourche Lafave River near Nimrod, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	07-00-27	--	32,800
1935	06-00-35	--	39,000
1937	01-23-37	22.80	21,800
1938	02-19-38	29.70	36,100
1939	04-18-39	30.45	34,600
1940	06-11-40	10.80	4,910
1941	02-04-41	9.35	3,680
1942	04-29-42	18.21	10,700
1943	12-30-42	15.86	9,900
1944	04-25-44	13.21	7,180
1945	04-01-45	26.19	20,000
1946	02-14-46	15.93	9,380
1947	12-20-46	10.36	7,210
1948	--	9.74	6,170
1949	02-06-49	10.38	7,480
1950	02-21-50	10.31	7,030
1951	03-05-51	9.79	5,830
1952	05-05-52	10.20	6,850
1953	05-25-53	10.09	6,680
1954	05-11-54	9.68	6,000
1955	03-27-55	9.54	5,670
1956	02-13-56	9.68	5,830
1957	07-18-57	9.72	5,830
1958	05-26-58	9.70	5,930
1959	11-20-58	9.54	5,540
1960	12-14-59	9.53	5,540
1961	03-16-61	9.42	5,570
1962	03-07-62	9.18	5,140
1963	03-21-63	8.32	4,260
1964	03-17-64	9.11	5,140
1965	02-16-65	8.92	4,920
1966	05-10-66	9.60	5,730
1967	05-12-67	8.96	4,990
1968	12-27-67	9.43	5,500
1969	01-03-69	9.08	5,120
1970	01-08-70	9.04	5,070
1971	11-02-70	7.57	3,500
1972	01-16-72	9.87	5,990
1973	04-25-73	12.36	9,420
1974	07-02-74	8.78	4,790
1975	04-16-75	9.07	5,110
1976	03-11-76	7.50	3,430
1977	04-11-77	9.44	5,510
1978	03-15-78	8.70	4,700
1979	06-08-79	9.68	5,780
1980	12-27-79	9.28	5,300

07262500 Fourche Lafave River near Nimrod, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1981	06-09-81	8.52	4,450	1983	12-03-82	10.03	6,200
1982	03-18-82	9.38	5,410	1984	12-08-83	9.29	5,310

07263450 Arkansas River at Murray Dam at Little Rock, Arkansas

Location.--Lat 34° 47’27”, long 92° 21’32”, in sec.23, T.2 N., R.13 W., Pulaski County, in Murray Dam control house on right bank and at mile 141.5.

Drainage area.--158,030 mi^2, of which 22,241 mi^2 is probably noncontributing.

Gage.--Water-stage and gate-position recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to October 1, 1934, nonrecording gage, October 1, 1934, to May 9, 1970, recording gage at site 6.2 mi downstream at datum 223.61 ft higher. September 20, 1968 to May 9, 1970, auxiliary water-stage recorder 5.5 mi upstream from former gage.

Remarks.--Beginning May 10, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs.

07263450 Arkansas River at Murray Dam at Little Rock, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1833	06-00-33	34.60	--	1901	04-20-01	17.90	--
1844	05-00-44	32.60	--	1902	05-28-02	18.10	--
1873	04-12-73	25.60	--	1903	06-03-03	24.80	--
1874	04-24-74	26.00	--	1904	06-11-04	27.80	--
1875	08-05-75	24.80	--	1905	05-31-05	23.00	--
1876	07-07-76	29.30	--	1906	05-05-06	20.50	--
1877	06-13-77	30.50	--	1907	05-11-07	21.50	--
1878	05-28-78	27.30	--	1908	05-30-08	26.50	--
1879	02-03-79	19.40	--	1909	05-29-09	23.50	--
1880	03-14-80	16.10	--	1910	05-26-10	14.50	--
1881	02-20-81	18.60	--	1911	08-10-11	18.50	--
1882	02-25-82	25.10	--	1912	05-04-12	24.00	--
1883	02-19-83	24.40	--	1913	04-13-13	17.40	--
1884	02-16-84	27.00	--	1914	05-08-14	17.80	--
1885	04-27-85	26.60	--	1915	06-01-15	25.40	--
1886	02-15-86	16.60	--	1916	02-02-16	27.30	--
1887	05-06-87	16.50	--	1917	06-12-17	15.00	--
1888	05-23-88	18.40	--	1918	05-14-18	18.90	--
1889	03-28-89	21.50	--	1919	11-13-18	16.90	--
1890	04-29-90	24.30	--	1920	03-30-20	20.60	--
1891	04-23-91	20.90	--	1921	04-30-21	20.80	--
1892	05-20-92	27.90	--	1922	04-14-22	23.10	--
1893	05-03-93	25.20	--	1923	06-18-23	25.30	300,000
1894	05-22-94	22.60	--	1924	05-03-24	21.00	--
1895	08-03-95	19.10	--	1925	05-02-25	12.00	--
1896	12-29-95	23.50	--	1926	09-11-26	14.20	--
1897	03-21-97	21.40	--	1927	04-20-27	33.00	--
1898	05-11-98	27.50	--	1928	10-07-27	20.90	220,000
1899	05-11-99	24.50	--	1929	05-19-29	23.30	275,000
1900	02-11-00	12.50	--	1930	05-12-30	21.30	221,000

07263450 Arkansas River at Murray Dam at Little Rock, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1931	02-11-31	13.00	97,000
1932	01-26-32	19.50	233,000
1933	05-19-33	22.70	277,000
1934	04-09-34	15.52	127,000
1935	06-22-35	28.18	422,000
1936	12-09-35	18.00	144,000
1937	01-18-37	18.74	170,000
1938	02-21-38	26.20a	471,000
1939	04-18-39	18.12	181,000
1940	09-09-40	11.87	92,300
1941	04-24-41	22.36	294,000
1942	11-07-41	26.33	404,000
1943	05-27-43	30.05	536,000
1944	05-04-44	22.35a	282,000
1945	04-21-45	28.13	467,000
1946	10-04-45	21.22	268,000
1947	12-13-46	20.56a	288,000
1948	06-28-48	20.80	264,000
1949	01-26-49	20.28	301,000
1950	05-15-50	22.80	358,000
1951	07-08-51	19.79	235,000
1952	04-25-52	16.20	167,000
1953	03-19-53	15.24	159,000
1954	05-05-54	17.86	210,000
1955	03-22-55	13.85	130,000
1956	10-10-55	11.94	102,000
1957	05-31-57	27.87	460,000
1958	05-11-58	17.43	187,000
1959	07-30-59	15.00	151,000
1960	10-10-59	23.85	350,000
1961	05-13-61	21.90	288,000
1962	11-24-61	16.09	162,000
1963	10-07-62	7.80	65,500
1964	04-07-64	12.76	106,000
1965	04-12-65	14.82	127,000
1966	04-27-66	16.50	148,000
1967	07-07-67	11.99	88,400
1968	05-16-68	19.87	202,000
1969	01-31-69	16.98	182,000
1970	04-27-70	--	223,000
1971	10-28-70	--	161,000
1972	12-12-71	--	247,000
1973	04-24-73	--	329,000
1974	11-27-73	--	304,000
1975	11-13-74	--	240,000
1976	04-23-76	--	149,000
1977	03-29-77	--	210,000
1978	05-09-78	--	159,000
1979	04-02-79	245.90	181,000
1980	04-08-80	--	79,800
1981	06-17-81	--	73,700
1982	02-01-82	--	176,000
1983	12-04-82	--	290,000
1984	04-10-84	--	171,000

07264500 Bayou Meto near Stuttgart, Arkansas

Location.--Lat 34° 27’15”, long 91° 36’58”, in SE 1/4 sec.11, T.3 S., R.6 W., on downstream side of bridge on U.S. Highway 79, 5 1/2 mi southwest of Stuttgart, and 8 mi upstream from Crooked Creek.

Drainage area.--574 mi^2. Combined area of Bayou Meto and Crooked Creek, 653 mi^2.

Gage.--Nonrecording. Prior to October 1, 1936, at datum 5.00 ft higher. Present datum of gage is 169.94 ft above sea level. All stages adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 ft^3/s.

Bankfull stage.--20 ft.

Remarks.--Diversions upstream from station for irrigation of about 1,300 acres do not seriously affect peak discharges. Stages after 1955 furnished by Corps of Engineers.

During flows above 600 ft^3/s, 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.

07264500 Bayou Meto near Stuttgart, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1936	07-05-36	15.00	857
1937	01-26-37	25.50	6,550
1938	02-01-38	23.26	3,050
1939	02-16-39	23.54	3,420
1940	02-22-40	17.01	1,060
1941	04-25-41	17.49	1,080

07264500 Bayou Meto near Stuttgart, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1942	04-29-42	21.59	2,100
1943	03-28-43	20.04	1,760
1944	04-12-44	21.25a	2,130
1945	04-07-45	22.86	2,800
1946	01-20-46	23.29	2,680
1947	01-22-47	16.57	1,010
1948	03-09-48	22.82	2,740
1949	02-05-49	23.67	3,400
1950	02-19-50	24.33	4,190
1951	01-21-51	20.38	1,770
1952	12-18-51	18.75a	1,440
1953	05-23-53	22.56	2,620
1954	01-29-54	19.27	1,510
1955	06-08-55	19.47	1,550
1956	02-24-56	22.23	2,420
1957	05-05-57	22.60	2,620
1958	05-12-58	23.55	3,300
1959	03-02-59	20.00	1,600
1960	07-05-60	20.11	1,620
1961	04-14-61	20.51	1,720
1962	03-07-62	20.60	1,750
1963	03-19-63	16.60	976
1964	04-30-64	22.20	1,640
1965	03-01-65	20.00	1,600
1966	05-06-66	21.85	2,020
1967	05-15-67	19.40	1,460
1968	05-26-68	23.00	2,860
1969	02-15-69	21.37	2,060
1970	01-12-70	18.93	1,410
1971	01-14-71	16.50	1,230
1972	12-21-71	17.30	1,350
1973	05-03-73	23.80	4,000
1974	12-10-73	22.60	2,450
1975	04-03-75	21.02	2,200
1976	03-10-76	17.76	1,430
1977	03-19-77	17.21	1,340
1978	01-31-78	19.20	1,700
1979	06-04-79	21.20	2,270
1980	04-13-80	20.90	2,150

07265000 Crooked Creek near Humphrey, Arkansas

Location.--Lat 34° 25’35”, long 91° 40’04”, in SE 1/4 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 mi east of Humphrey, and at mile 5.8.

Drainage area.--79.2 mi^2.

Gage.--Nonrecording gage October 1, 1938 to June 19, 1950, and since September 30, 1954. Recording July 20, 1950 to September 30, 1954. Datum of gage is 169.94 ft above sea level.

Bankfull stage.--20 ft.

Remarks.--See Bayou Meto near Stuttgart.

07265000 Crooked Creek near Humphrey, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	02-15-39	22.70	1,780
1940	02-22-40	16.20	585
1941	04-26-41	16.68	528
1942	04-29-42	20.46	1,100
1943	03-27-43	18.59	767
1944	04-05-44	20.04	1,180
1945	04-08-45	21.62	1,610
1946	01-20-46	22.05	1,740
1947	05-28-47	15.90	422
1948	03-06-48	21.84	1,760
1949	02-06-49	22.73	1,880
1950	02-18-50	23.51	2,010
1951	01-19-51	20.61	1,330
1952	03-15-52	18.52	883
1953	05-21-53	21.97	1,820
1954	01-31-54	19.51	1,250
1957	02-08-57	22.40	1,950
1958	05-10-58	22.82	2,080
1959	02-28-59	20.92	1,490
1960	07-04-60	21.82	1,760
1961	04-15-61	21.59	1,700
1962	03-06-62	21.95	1,820
1963	03-19-63	16.51	507
1964	04-30-64	22.40	1,950
1965	02-19-65	20.51	1,380
1966	05-06-66	21.15	1,580

07265000 Crooked Creek near Humphrey, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1967	05-12-67	19.86	1,270
1968	05-26-68	22.11	1,920
1969	02-12-69	21.34	1,670
1970	01-08-70	19.10	1,180
1971	08-07-71	15.80	690
1972	12-20-71	16.84	900
1973	05-03-73	22.07	2,370
1974	12-10-73	21.10	2,070
1975	03-31-75	20.32	1,830
1976	03-12-76	17.32	1,010
1977	03-16-77	15.86	700
1978	01-31-78	17.65	1,090
1979	06-06-79	21.10	2,070
1980	04-01-80	18.90	1,420

07265001 Bayou Meto near Stuttgart (07264500) and Crooked Creek near Humphrey (07265000) combined

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1936	07-05-36	--	1,060
1937	01-26-37	--	9,350
1938	02-01-38	--	4,850
1939	02-16-39	--	5,180
1940	02-22-40	--	1,640
1941	04-25-41	--	1,570
1942	04-29-42	--	3,200
1943	03-27-43	--	2,530
1944	04-12-44	--	3,290
1945	04-07-45	--	4,410
1946	01-20-46	--	4,420
1947	06-04-47	--	1,420
1948	03-08-48	--	4,500
1949	02-06-49	--	5,280
1950	02-18-50	--	6,200
1951	01-20-51	--	3,080
1952	03-14-52	--	2,260
1953	05-23-53	--	4,410
1954	01-31-54	--	2,690
1955	06-08-55	--	2,500
1956	02-24-56	--	4,020
1957	05-05-57	--	4,540
1958	05-12-58	--	5,340
1959	03-01-59	--	3,090
1960	07-04-60	--	3,380
1961	04-16-61	--	3,420
1962	03-06-62	--	3,540
1963	03-19-63	--	1,480
1964	04-30-64	--	3,590
1965	03-01-65	--	2,670
1966	05-07-66	--	3,680
1967	0515-67	--	2,630
1968	05-26-68	--	4,730
1969	02-15-69	--	3,730
1970	01-09-70	--	2,590
1971	01-14-71	16.50	1,920
1972	12-21-71	17.30	2,250
1973	05-03-73	23.80	6,370
1974	12-10-73	22.60	4,520
1975	04-03-75	21.02	4,030
1976	03-10-76	17.76	2,440
1977	03-19-77	17.21	2,040
1978	01-31-78	19.20	2,790
1979	06-04-79	21.20	4,340
1980	04-13-80	20.90	3,570
1959	03-01-59	--	3,090

07265450 Mississippi River near Arkansas City, Arkansas

Location.--Lat 33° 33’55”, long 91° 14’35”, in sec.18, T.13 S., R.1 W., on right bank 3 mi southwest of Arkansas City, 28 mi downstream from Arkansas River, and at mile 554.1.

Drainage area.--1,130,600 mi^2, approximately.

Gage.--Nonrecording. Prior to September 3, 1930, at site 4 mi upstream, September 3, 1930 to February 29, 1944, at site 1.9 mi upstream, and March 1, 1944 to October 31, 1948, at site 1.2 mi upstream, all at present datum. Datum of gage is 96.66 ft above sea level,. 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.--37 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.

07265450 Mississippi River near Arkansas City, Arkansas

Water year	Date	Gage height (feet)	Discharge, in thousands (cubic foot per second)
1887	03-24-87	46.65a	1,480
1890	03-19-90	49.50a	1,418
1891	04-07-91	48.20	1,425
1892	05-04-92	50.00a	1,742
1893	05-27-93	50.30a	1,676
1897	03-27-97	51.90a	1,646
1898	04-20-98	51.20	1,497
1900	03-25-00	39.30	933
1901	05-12-01	43.30	1,090
1902	03-29-02	41.40	1,011
1903	03-16-03	52.90a	1,743
1904	04-20-04	49.00	1,403
1905	06-03-05	43.20	1,086
1906	04-19-06	50.00a	1,462
1907	02-04-07	52.10a	1,573
1908	06-02-08	49.90	1,449
1909	03-27-09	50.10a	1,520
1910	03-23-10	43.13	1,083
1911	05-02-11	48.03	1,281
1912	04-16-12	55.33a	2,007
1913	04-26-13	55.15a	1,782
1914	04-20-14	43.24	1,087
1915	02-24-15	45.95	1,201
1916	02-10-16	56.40	1,889
1917	04-17-17	52.11	1,591
1918	03-05-18	39.80	951
1919	04-05-19	49.40	1,378
1920	04-12-20	54.00	1,513
1921	05-05-21	45.40	1,083
1922	04-22-22	58.00	1,725
1923	03-31-23	49.40a	1,224
1924	01-24-24	45.05	1,070
1925	03-07-25	37.60	834
1926	04-25-26	41.90	965
1927	05-00-27	60.40a	2,472e
1928	07-03-28	52.50a	1,424
1929	05-30-29	58.80	1,788
1930	01-28-30	47.78	1,141
1931	04-18-31	33.60	725
1932	02-27-32	53.45a	1,448
1933	06-05-33	53.63	1,380
1934	04-12-34	38.99	874
1935	04-03-35	51.75a	1,460
1936	04-26-36	41.30a	1,289
1937	02-16-37	53.86a	2,159
1938	04-23-38	37.40a	1,201
1939	02-28-39	39.00a	1,435
1940	05-07-40	30.80a	1,067
1941	04-29-41	25.30	8,21
1942	04-18-42	33.90a	1,121
1943	06-02-43	44.20a	1,688
1944	05-07-44	42.20a	1,614
1945	04-09-45	46.30	1,922
1946	01-25-46	37.30	1,520
1947	05-04-47	--	1,312
1948	04-11-48	37.54a	1,320
1949	02-14-49	36.70a	1,523
1950	02-21-50	41.37a	1,791
1951	03-09-51	33.57a	1,330
1952	04-06-52	35.91	1,374
1953	05-26-53	29.57	997
1954	05-07-54	20.21	697
1955	04-06-55	34.71	1,315
1956	03-03-56	28.87	1,120
1957	06-05-57	37.60	1,345
1958	05-15-58	33.85a	1,192
1959	02-28-59	27.30a	969
1960	04-22-60	32.50	1,161
1961	05-26-61	42.00a	1,652
1962	03-18-62	37.10a	1,433
1963	04-01-63	34.60a	1,356
1964	04-01-64	32.90	1,275
1965	04-21-65	34.30a	1,238
1966	05-11-66	30.05a	1,057
1967	05-26-67	30.14a	1,047
1968	06-10-68	31.47a	1,126
1969	02-17-69	34.67a	1,410
1970	03-13-70	36.70a	1,350
1971	03-09-71	32.71	1,263
1972	05-09-72	33.80	1,242
1973	05-12-73	47.62	1,880
1974	02-10-74	37.53	1,490
1975	04-09-75	42.75	1,841
1976	03-05-76	27.65	1,002
1977	04-17-77	27.78	949
1978	04-06-78	35.40	1,309
1979	04-23-79	42.90	1,811
1980	04-11-80	34.30	1,259

07337000 Red River at Index, Arkansas

Location.--Lat 33° 33’07”, long 94° 02’28”, in NW 1/4 SW 1/4 sec.7, T.14 S., R.28 W., on downstream side of pier of bridge on U.S. Highway 71 at Index, 2 1/4 mi south of Ogden, 20.6 mi upstream from Little River, and at mile 485.3.

Drainage area.--48,030 mi^2, of which about 42,094 mi^2 contributes directly to surface runoff.

Gage.--Nonrecording prior to December 12, 1939, and from December 12, 1939 to July 19, 1979, recording at site 500 ft downstream at present datum. Recording at present site thereafter. Datum of gage is 246.87 ft above sea level.

Sage-discharge relation.--Defined by current-meter measurements since 1937.

Bankfull stage.--25 ft.

Remarks.--Considerable regulation since July 1942 by Lake Taxoma, 241 mi upstream (capacity, 5,392,900 acre-ft). Prior to 1951, records computed by Corps of Engineers and reviewed by Geological Survey.

07337000 Red River at Index, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1918	04-19-18	24.50	--
1919	10-31-19	22.00	--
1920	05-21-20	27.60	--
1921	06-27-21	23.50	--
1922	05-15-22	26.30	--
1923	09-24-23	23.30	--
1924	12-18-23	27.00	--
1925	05-01-25	20.50	--
1926	08-21-26	23.50	--
1927	04-23-27	30.80	--
1928	05-23-28	25.00	--
1929	05-21-29	27.20	--
1930	05-21-30	27.20	--
1931	12-09-30	20.20	--
1932	02-21-32	27.40	--
1933	05-29-33	24.70	--
1934	03-04-34	20.50	--
1935	05-25-35	31.10	--
1936	12-09-35	22.10	--
1937	10-01-36	24.00	88,100
1938	02-23-38	34.25	297,000
1939	04-19-39	21.20	70,600
1940	05-26-40	19.70	70,100
1941	06-6-41	27.83	145,000
1942	05-01-42	29.85	178,000
1943	05-16-43	24.35a	112,000
1944	05-04-44	21.88	87,800
1945	04-01-45	28.05	152,000
1946	10-11-45	20.80	76,400
1947	11-09-46	23.74	110,000
1948	05-13-48	21.40	84,000
1949	01-29-49	24.56	112,000
1950	02-15-50	23.48	108,000
1951	06-18-51	23.64	102,000
1952	04-25-52	24.50	112,000
1953	05-02-53	22.48	91,700
1954	05-13-54	20.50	76,200
1955	03-23-55	17.88	56,500
1956	02-20-56	15.94a	41,800
1957	06-08-57	28.56	154,000
1958	05-06-58	25.32	145,000
1959	07-29-59	17.00	48,400
1960	10-16-59	18.43	61,000
1961	12-13-60	17.69	68,400
1962	11-26-61	16.43a	53,800
1963	11-29-62	16.53a	55,500
1964	04-27-64	15.18	37,400
1965	02-12-65	19.25	69,000
1966	05-03-66	23.96	110,000
1967	06-03-67	18.14a	53,600
1968	05-19-68	23.56a	125,000
1969	05-10-69	21.39	101,000
1970	04-28-70	18.48	64,100
1971	10-30-70	12.99	27,800
1972	12-14-71	25.62	142,000
1973	04-27-73	22.01	97,900
1974	11-29-73	18.65	68,200
1975	11-12-74	19.64	71,200
1976	04-24-76	14.96	40,800
1977	03-30-77	20.73	106,000
1978	06-12-78	12.77	29,700
1979	05-24-79	16.43	65,400
1980	06-07-80	13.93	38,000
1981	06-08-81	17.33	62,500
1982	05-16-82	22.20	115,000
1983	12-04-82	16.33	54,000
1984	05-05-84	14.34	40,100
1952	04-25-52	24.50	112,000

07339500 Rolling Fork near DeQueen, Arkansas

Location.--Lat 34° 02’51”, long 94° 24’47”, in SW 1/4 SW 1/4 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 mi west of DeQueen, 6 mi upstream from Rock Creek, and at mile 17.0.

Drainage area.--182 mi^2.

Gage.--Nonrecording prior to December 16, 1948; recording thereafter. Datum of gage is 318.24 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 41,000 ft^3/s and contracted-opening measurement at 110,000 ft^3/s.

Bankfull stage.--20 ft.

Remarks.--Only annual peaks are shown.

07339500 Rolling Fork near DeQueen, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1947	08-27-47	25.60	110,000	1967	05-06-67	20.12	23,200
1949	01-24-49	20.16	19,200	1968	05-13-68	23.34	54,500
1950	01-13-50	21.04	23,700	1969	01-30-69	21.74	32,100
1951	07-02-51	16.35	7,320	1970	03-03-70	18.26	12,100
1952	04-12-52	18.80	14,000	1971	10-27-70	11.98	3,160
1953	05-11-53	21.96	34,000	1972	12-10-71	24.23	71,000
1954	04-16-54	16.11	7,040	1973	10-31-72	19.83	18,800
1955	05-27-55	18.75	14,000	1974	06-09-74	14.50	4,820
1956	02-18-56	17.03	8,800	1975	02-01-75	14.50	5,480
1957	04-27-57	18.38	12,600	1976	03-09-76	12.18	3,560
1958	05-02-58	18.73	13,800	1977	03-27-77	16.12	7,650
1959	11-17-58	20.83	25,000	1978	05-05-78	8.58	1,570
1960	12-16-59	16.42	7,600	1979	04-11-79	10.35	2,590
1961	05-06-61	20.11	20,500	1980	04-16-80	8.70	1,750
1962	11-22-61	16.95	8,800	1981	06-16-81	9.88	2,260
1963	03-11-63	15.44	5,920	1982	05-17-82	14.89	6,320
1964	04-24-64	19.21	17,100	1983	07-02-83	13.32	4,750
1965	05-27-65	16.46	7,800	1984	12-06-83	9.30	2,010
1966	08-14-66	19.46	17,100				

07340000 Little River near Horatio, Arkansas

Location.--Lat 33° 55’10”, long 94° 23’15”, in NE 1/4 sec.10, T.10 S., R.32 W., on downstream side of bridge on State Highway 41, 0.9 mi downstream from Rolling Fork, 2 mi southwest of Horatio, 28.5 mi upstream from Cossatot River, and at mile 72.0.

Drainage area.--2,662 mi^2.

Gage.--Nonrecording prior to February 2, 1935; recording thereafter. Prior to September 14, 1961, at site 50 ft upstream at same datum. Datum of gage is 272.89 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 93,000 ft^3/s.

Bankfull stage.--26 ft.

Remarks.--Base for partial-duration series, 25,000 ft^3/s.

07340000 Little River near Horatio, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1915	08-00-15	38.00	124,000	1934	04-09-34	27.36	25,100
1930	05-20-30	36.00	97,700	1935	05-06-35	34.80	82,100
1931	07-27-31	24.84	20,700	1936	12-08-35	28.85	31,800
1932	01-24-32	31.84	50,800	1937	01-11-37	28.15	26,700
1933	01-01-33	27.20	24,800	1938	01-25-38	36.93	110,000

07340000 Little River near Horatio, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	04-18-39	32.12	56,500	1962	11-24-61	27.93	28,800
1940	07-02-40	30.62	37,500	1963	04-30-63	21.50	16,800
1941	04-24-41	26.90	23,900	1964	04-25-64	30.72	43,000
1942	04-09-42	31.77	50,800	1965	02-13-65	28.54	34,100
1943	12-28-42	26.45	24,700	1966	04-27-66	29.82	34,800
1944	05-03-44	32.64	57,900	1967	05-07-67	26.18a	28,100
1945	03-30-45	37.70	120,000	1968	05-14-68	33.22	69,900
1946	05-26-46	31.74	49,300	1969	01-30-69	32.33	59,600
1947	08-29-47	32.99	61,900	1970	03-04-70	25.99	27,900
1948	01-02-48	32.29	54,900	1971	10-30-70	16.16	10,300
1949	01-27-49	35.58	97,900	1972	12-10-71	32.84	65,100
1950	02-13-50	34.06	82,500	1973	04-24-73	29.19	37,000
1951	07-04-51	31.47	47,500	1974	05-05-74	27.35	30,200
1952	04-23-52	34.26	83,900	1975	02-02-75	28.41	29,200
1953	05-12-53	32.32	59,000	1976	04-21-76	18.07	12,800
1954	05-04-54	28.16	29,800	1977	03-28-77	29.90	35,400
1955	03-22-55	30.10	37,200	1978	05-06-78	19.79	14,900
1956	02-19-56	27.84	28,500	1979	03-31-79	27.79	27,400
1957	04-28-57	33.13	68,300	1980	09-30-80	23.60	20,000
1958	05-03-58	32.72	63,600	1981	06-06-81	23.28	19,600
1959	11-18-58	30.48	41,600	1982	05-14-82	26.95	25,500
1960	05-22-60	31.99	55,500	1983	07-03-83	31.25	46,000
1961	05-09-61	31.08	46,200	1984	05-03-84	28.69	27,900

07340500 Cossatot River near DeQueen, Arkansas

Location.--Lat 34° 02’45”, long 94° 12’42”, in NE 1/4 NE 1/4 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 mi east of DeQueen, and at mile 33.5.

Drainage area.--360 mi^2.

Gage.--Nonrecording prior to November 9, 1938, and after October 1, 1980. Recording November 9, 1938 to September 30, 1980. Datum of gage is 335.48 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 65,000 ft^3/s and by contracted-opening measurements at 122,000 ft^3/s.

Bankfull stage.--15 ft.

Remarks.--Only annual peaks are shown.

07340500 Cossatot River near DeQueen, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1938	01-24-38	19.70	36,300	1947	08-28-47	20.47	46,900
1939	04-16-39	19.70	36,300	1948	01-01-48	18.30	26,300
1940	05-18-40	17.94	23,700	1949	01-24-49	19.76	39,400
1941	07-14-41	15.08	10,100	1950	09-20-50	20.14	42,500
1942	09-09-42	18.56	28,400	1951	07-03-51	16.49	15,600
1943	12-27-42	14.30	9,520	1952	04-22-52	18.00	24,200
1944	05-02-44	18.70	29,100	1953	05-12-53	19.16	33,100
1945	03-30-45	20.20	43,300	1954	05-02-54	16.57	16,100
1946	05-25-46	19.96	41,200	1955	03-21-55	17.25	19,200

07340500 Cossatot River near DeQueen, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	02-18-56	16.20	14,400
1957	04-27-57	17.82	22,800
1958	05-03-58	18.56	29,200
1959	11-17-58	18.85	30,100
1960	05-20-60	19.12	32,600
1961	05-06-61	20.70	62,000
1962	11-23-61	15.66	12,600
1963	03-11-63	14.55	10,100
1964	04-24-64	19.12	37,500
1965	02-10-65	16.24	14,800
1966	04-26-66	18.40	28,400
1967	05-06-67	18.70	32,500
1968	05-13-68	22.60	122,000
1969	01-30-69	20.82	74,800
1970	03-03-70	18.07	30,700
1971	10-27-70	15.29	13,900
1972	12-10-71	21.88	103,000
1973	04-23-73	19.06	39,100
1974	10-13-73	18.05	26,500
1975	02-01-75	13.93	9,500
1976	03-08-76	10.53	4,060
1977	03-28-77	15.84	16,400
1978	03-07-78	9.24	2,900
1979	03-30-79	14.45	10,800
1980	09-28-80	13.78	9,230
1981	06-03-81	14.13	12,100
1982	06-16-82	10.29	4,210
1983	07-02-83	17.37	22,600
1984	05-03-84	10.26	4,240

07341000 Saline River near Dierks, Arkansas

Location.--Lat 34° 05’45”, long 94° 05’04”, in NW 1/4 SW 1/4 sec.3, T.8 S., R.29 W., near left bank on downstream side of bridge on U.S. Highway 70, 3 1/2 mi upstream from Holly Creek, 4 mi southwest of Dierks, and at mile 50.7.

Drainage area.--121 mi^2.

Gage.--Nonrecording prior to August 10, 1940, and after October 1, 1980. Recording from August 10, 1940 to September 30, 1980. Prior to August 31, 1951, at site 100 ft upstream at present datum. Datum of gage is 353.09 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 ft^3/s.

Bankfull stage.--15 ft.

Remarks.--Records for the period 1938-50 computed by Corps of Engineers and reviewed by Geological Survey.

07341000 Saline River near Dierks, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1920	1920	21.90	42,000
1939	04-16-39	17.10	12,000
1940	05-18-40	17.00	11,700
1941	07-14-41	18.75	20,100
1942	04-08-42	17.07	12,000
1943	12-27-42	12.04	3,940
1944	05-01-44	16.68	10,800
1945	03-30-45	19.93	31,200
1946	05-25-46	16.43	10,600
1947	08-28-47	15.00	7,160
1948	03-01-48	13.21	5,050
1949	01-24-49	16.65	9,800
1950	09-16-50	15.32	7,610
1951	01-14-51	13.83	5,630
1952	04-22-52	16.54	11,000
1953	05-11-53	18.56	16,500
1954	05-02-54	11.15	3,640
1955	09-23-55	17.23	12,600
1956	04-30-56	17.71	14,000
1957	03-17-57	14.25	6,490
1958	11-13-57	15.80	9,140
1959	02-14-59	15.12	7,770
1960	12-16-59	14.36	6,740
1961	05-06-61	22.50	52,000
1962	11-22-61	12.88	5,110
1963	03-11-63	10.51	2,760
1964	04-24-64	17.00	12,100
1965	01-09-65	12.56	4,840
1966	08-14-66	16.53	10,800
1967	05-06-67	17.22	12,600
1968	05-13-68	22.95	59,200
1969	01-30-69	20.77	28,600
1970	04-26-70	13.89	6,650
1971	12-22-70	8.81	1,370

07341000 Saline River near Dierks, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1972	12-10-71	20.24	24,400
1973	10-31-72	11.56	3,750
1974	06-08-74	14.08	6,910
1975	02-01-75	12.41	4,850
1976	03-16-76	8.21	1,220
1977	03-31-77	8.41	1,340
1978	03-13-78	7.96	1,080
1979	06-02-79	12.37	4,810
1980	09-27-80	8.79	1,500
1981	06-16-81	8.79	1,530
1982	06-28-82	11.76	4,140
1983	07-02-83	17.33	12,900
1984	12-06-83	8.19	1,150

07341200 Saline River near Lockesburg, Arkansas

Location.--Lat 33° 57’43”, long 94° 03’40”, in NW 1/4 SE 1/4 sec.23, T.9S. R.29 W., on downstream side of bridge on State Highway 24, 2 mi downstream from Brushy Creek, 6 mi east of Lockesburg, and at mile 30.

Drainage area.--256 mi^2.

Gage.--Recording. Datum of gage is 300.00 ft above sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 23,000 ft^3/s and by contracted-opening measurement at 64,700 ft^3/s.

Bankfull stage.--14 ft.

Remarks.--Only annual peaks are shown.

07341200 Saline River near Lockesburg, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1964	04-23-64	16.93	15,500
1965	02-10-65	15.56	6,040
1966	05-01-66	16.49	12,000
1967	05-06-67	16.97	15,600
1968	05-14-68	20.86	64,700
1969	01-30-69	20.42	58,100
1970	04-26-70	16.25	10,100
1971	02-22-71	10.82	1,370
1972	12-10-71	18.88	36,400
1973	04-24-73	16.24	9,380
1974	06-08-74	17.15	17,100
1975	02-02-75	16.85	14,200
1976	03-09-76	15.78	6,500
1977	03-04-77	16.52	9,940
1978	03-07-78	13.92	3,010
1979	11-16-78	16.63	10,700
1980	09-28-80	16.70	13,000
1981	06-04-81	16.20	8,400
1982	06-16-82	15.64	5,800
1983	12-03-82	20.52	59,600
1984	05-03-84	16.11	6,650

07341301 Little River at Millwood Dam near Ashdown, Arkansas

Location.--Lat 34° 41’28”, long 93° 57’53”, in Nw 1/4 sec.26, T.12 S., R.28 W., Little River County, at Millwood Dam, 9.2 mi east of Ashdown, 9.6 mi upstream from Hudson Creek, and at mile 16.0.

Drainage area.--4,119 mi^2.

Gage.--Recording. Datum of gage is sea level (levels by Corps of Engineers).

Stage-discharge relation.--Discharge computations based on gate openings and head and tailwater elevations at Millwood Dam.

Remarks.--Flow completely regulated since August 16, 1966, by Millwood Lake.

07341301 Little River at Millwood Dam near Ashdown, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1967	05-09-67	--	30,600
1968	05-26-68	--	62,700
1969	02-06-69	--	58,400
1970	03-06-70	--	34,200
1971	03-15-71	--	13,800
1972	12-23-71	--	62,800

07341301 Little River at Millwood Dam near Ashdown, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1973	05-13-73	--	67,300
1974	06-12-74	--	39,600
1975	02-08-75	--	40,300
1976	03-11-76	--	21,300
1977	04-03-77	--	34,500
1978	05-09-78	--	17,300
1979	04-05-79	--	36,300
1980	12-29-79	--	21,400
1981	06-4-81	--	21,000
1982	05-19-82	--	18,800
1983	12-06-82	--	55,000
1984	05-07-84	--	28,100

07341500 Red River at Fulton, Arkansas

Location.--Lat 33° 36’26”, long 93° 48’56”, in NE 1/4 SE 1/4 sec.20, T.13 S., R.26 W., on downstream side of bridge on U.S. Highway 67 at Fulton, 0.3 mi downstream from Missouri-Pacific Railroad Co. bridge, 2 1/2 mi downstream from Little River, and at mile 463.0.

Drainage area.--52,336 mi^2, of which about 5,936 mi^2 is probably noncontributing.

Gage.--Recording. Nonrecording prior to December 31, 1976. Prior to October 16, 1942, on railroad bridge 0.3 mi upstream at same datum. Datum of gage is 224.94 ft above sea level, 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 mi upstream (capacity 5,392,000 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.

07341500 Red River at Fulton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1950	02-16-50	28.20	136,000
1951	06-19-51	26.16	123,000
1952	04-26-52	28.22	150,000
1953	05-17-53	27.01a	127,000
1954	05-14-54	21.65	86,000
1955	03-24-55	20.54	83,100
1956	02-21-56	18.03	59,500
1957	06-09-57	31.12	228,000
1958	05-06-58	29.41	214,000
1959	07-30-59	16.66	54,900
1960	05-27-60	19.65	78,600
1961	04-02-61	20.00a	87,700
1962	11-27-61	17.88	74,200
1963	11-30-62	16.32	54,900
1964	04-28-64	19.85	83,000
1965	02-12-65	19.96	86,000
1966	05-03-66	25.57	137,000
1967	06-03-67	19.63	70,500
1968	05-21-68	24.40	122,000
1969	05-11-69	22.68	112,000
1970	04-29-70	20.00	94,000
1971	10-31-70	13.62	38,800
1972	12-14-71	25.10	165,000
1973	05-10-73	23.15	110,000
1974	12-06-73	21.60	96,000
1975	11-08-74	21.78	97,000
1976	04-25-76	15.60	46,200
1977	03-31-77	20.07	104,000
1978	03-28-78	14.76	49,000
1979	03-03-79	17.83	56,300
1980	06-08-80	14.07	43,600

07348500 Red River at Shreveport, Louisiana

Location.--Lat 32° 30’55”, long 93° 44’25”, in SE 1/4 SE 1/4 Sec. 30, T.18 N., R.13 W., Caddo Parish, on second pier from east bank, at Illinois Central Railroad Co. bridge at Shreveport, and 0.5 mi downstream from Cross Bayou.

Drainage area.--60,613 mi^2, of which 5,936 mi^2 above Denison Dam is noncontributing.

Gage.--Nonrecording prior to September 29, 1939; recording thereafter. Datum of gage is 131.48 ft above sea level, supplementary adjustments of 1941 (levels by Corps of Engineers). Prior to June 1, 1938, at datum 10 ft higher. All peaks shown are corrected to present datum.

Stage-discharge relation.--Variable; peak discharges based on occasional discharge measurements made 1872 to 1905, and loop curves defined by frequent discharge measurements since August 1928.

Remarks.--Regulation by Lake Texoma since October 1943 and Texarkana Reservoir since July 1953. Gage heights obtained, 1872 to 1929 from Mississippi River Commission, 1929 to 1931 from U.S. Weather Bureau, and 1932 to date from U.S. Corps of Engineers. Records reviewed by Geological Survey. Only annual peaks are shown.

07348500 Red River at Shreveport, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1849	08-00-49	45.90	--
1873	06-08-73	35.50	57,000
1874	04-29-74	37.90	88,000
1875	04-22-75	35.80	61,000
1876	07-28-76	41.90	160,000
1877	05-11-77	39.80	120,000
1878	01-31-78	38.40	97,000
1879	05-16-79	34.90	53,000
1880	04-04-80	33.20	42,000
1881	03-07-81	37.30	80,000
1882	02-21-82	41.40	150,000
1883	03-11-83	35.30	57,000
1884	05-14-84	42.70	177,000
1885	05-11-85	40.50	132,000
1886	04-29-86	28.30	31,000
1887	03-19-87	28.40	33,000
1888	05-19-88	40.30	129,000
1889	02-03-89	41.90	160,000
1890	05-08-90	44.70	221,000
1891	02-12-91	35.20	59,000
1892	05-28-92	45.60	242,000
1893	01-01-93	39.10	108,000
1894	04-02-94	44.40	215,000
1895	07-29-95	40.30	129,000
1896	02-25-96	27.50	35,000
1897	04-11-97	34.10	53,000
1898	05-21-98	25.00	30,000
1899	01-24-99	25.60	31,000
1900	05-08-00	25.00	30,000
1901	06-07-01	26.40	33,000
1902	06-14-02	27.60	35,000
1903	12-15-02	44.10	208,000
1904	06-24-04	38.50	98,000
1905	06-09-05	43.60	197,000
1906	01-02-06	32.60	54,000
1907	06-13-07	36.90	90,000
1908	06-15-08	45.10	256,000
1909	12-07-08	22.00	33,000
1910	04-21-10	23.86	40,000
1911	04-25-11	23.42	41,000
1912	04-14-12	29.30	68,000
1913	05-28-13	22.20	41,000
1914	04-10-14	32.93	102,000
1915	05-09-15	39.00	185,000
1916	02-10-16	35.50	140,000
1917	05-04-17	20.40	41,000
1918	04-25-18	26.90	77,000
1919	12-29-18	23.80	62,000
1920	05-26-20	36.20	178,000
1921	05-03-21	28.40	99,000
1922	05-05-22	34.30	132,000
1923	02-08-23	24.30	75,000
1924	12-26-23	30.40	133,000
1925	05-03-25	21.80	63,000
1926	07-30-26	23.20	75,000
1927	04-29-27	37.40	248,000
1928	04-29-28	25.10	95,000
1929	05-26-29	27.48	121,000
1930	05-26-30	35.91	243,000
1931	12-11-30	22.74	62,600
1932	02-03-32	31.79	168,000
1933	05-31-33	22.82	75,600
1934	04-11-34	21.78	71,400
1935	05-29-35	32.65	181,000
1936	12-12-35	22.32	86,400
1937	01-29-37	23.15	93,600
1938	03-01-38	35.50	211,000
1939	04-21-39	22.47	88,500
1940	07-08-40	22.04	95,600
1941	05-12-41	27.93	143,000

07348500 Red River at Shreveport, Louisiana--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1942	05-05-42	31.47	183,000	1962	01-31-62	18.86	84,100
1943	05-18-43	21.86	93,300	1963	12-01-62	17.00	59,700
1944	05-09-44	27.70	163,000	1964	04-29-64	21.65	100,000
1945	04-07-45	37.90	303,000	1965	02-14-65	21.78	96,200
1946	06-05-46	23.75	123,000	1966	05-04-66	29.60a	174,000
1947	11-11-46	21.67	131,000	1967	06-05-67	20.28	88,000
1948	03-06-48	20.00	99,500	1968	05-22-68	25.71	136,000
1949	02-01-49	25.80	171,000	1969	02-03-69	22.53	125,000
1950	02-18-50	26.20	163,000	1970	04-30-70	21.20	101,000
1951	06-20-51	22.15	111,000	1971	11-01-70	15.47	44,700
1952	04-28-52	25.45	154,000	1972	12-16-71	24.95	134,000
1953	05-20-53	27.32	173,000	1973	04-29-73	26.55	156,000
1954	05-16-54	20.53	94,700	1974	12-06-73	24.84	140,000
1955	03-26-55	20.15	92,400	1975	11-14-74	22.90	119,000
1956	02-22-56	16.72	62,200	1976	04-26-76	16.70	57,000
1957	05-03-57	33.91a	230,000	1977	04-01-77	21.70	106,000
1958	05-08-58	33.70	249,000	1978	03-30-78	--	73,000
1959	08-01-59	17.19	61,200	1979	04-04-79	22.52	99,000
1960	12-15-59	22.47	124,000	1980	02-01-80	17.08	47,100
1961	12-15-60	22.47	124,000				

07357501 Ouachita River at Blakely Mountain Dam near Hot Springs, Arkansas

Location.--Lat 34° 34’17”, long 93° 11’23”, in outlet of power tunnel at Blakely Mountain Dam, 2.3 mi upstream from Glazypeau Creek, 10 mi northwest of Hot Springs, and at mile 486.9.

Drainage area.--1,105 mi^2 (1,100 mi^2 at site used prior to 1951).

Gage.--Recording. Prior to October 1, 1950, at site 3.2 mi upstream at datum 404.16 ft above sea level. October 1, 1950 to March 17, 1952, at site 2,000 ft downstream at datum 395.92 ft above sea level. March 18, 1952 to August 29, 1955, at site 1,700 ft downstream at present datum. Datum of gage is at sea level. All datums based on 1929 adjustments.

Stage-discharge relation.--Defined by current-meter measurements below 92,000 ft^3/s at site used prior to 1951. Since 1952, computed from flow meter 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. Published as “near Mountain Pine” station 7-3570, prior to 1951.

07357501 Ouachita River at Blakely Mountain Dam near Hot Springs, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1923	05-00-23	37.00	112,000	1946	05-25-46	23.10	41,800
1937	01-23-37	22.38	39,100	1947	12-12-46	18.76	27,400
1938	02-18-38	32.20	83,200	1948	01-02-48	20.54	32,600
1939	04-17-39	34.54	94,900	1949	01-26-49	29.28	69,100
1940	04-29-40	13.36	13,700	1950	02-13-50	23.69	44,100
1941	11-23-40	20.10	31,300	1951	02-21-51	--	21,400
1942	04-28-42	23.90	44,900	1952	04-24-52	--	33,100
1943	12-27-42	18.46	26,500	1953	05-18-53	--	10,900
1944	04-23-44	26.50	56,000	1954	10-09-53	--	805
1945	03-30-45	38.55	123,000	1955	08-30-55	--	2,640

07357501 Ouachita River at Blakely Mountain Dam near Hot Springs, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1956	10-21-55	--	6,300
1957	05-30-57	--	9,020
1958	05-13-58	--	9,300
1959	02-04-59	--	5,960
1960	05-26-60	--	9,140-
1961	01-11-61	--	6,070-
1962	03-14-62	--	6,250
1963	01-17-63	--	4,750
1964	01-27-64	--	6,590
1965	09-15-65	--	7,200
1966	05-12-66	--	5,790
1967	10-31-66	--	3,250
1968	06-13-68	--	9,550
1969	02-15-69	--	6,750
1970	01-01-70	--	6,720
1971	03-03-71	--	6,810
1972	12-16-71	--	6,510
1973	06-10-73	--	6,750
1974	06-22-74	--	9,440
1975	12-04-74	--	6,650
1976	11-13-75	--	3,710
1977	04-08-77	--	6,540
1978	05-11-78	--	6,500
1979	03-21-79	--	6,360
1980	05-20-80	--	4,190
1981	06-15-81	--	6,540
1982	03-18-82	--	6,500
1983	12-19-82	--	12,400

07359500 Ouachita River near Malvern, Arkansas

Location.--Lat 34° 23’10”, long 92° 50’20”, in NW 1/4 sec.16, T.4 S., R.17 W., on downstream side of bridge on State Highway 84, 2 mi northwest of Malvern, 5.8 mi downstream from Remmel Dam, and at mile 450.1.

Drainage area.--1,585 mi^2.

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 mi upstream at datum 20.11 ft higher. Datum of present gage is 228.05 ft above sea level. Gage height records for 1903-04 adjusted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 120,000 ft^3/s at present site and extended by logarithmic plotting. Defined by current-meter measurements below 44,000 ft^3/s 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. Published as “at Remmel Dam near Malvern” January 1926 to March 1937.

07359500 Ouachita River near Malvern, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1903	03-10-03	24.00	66,500
1904	03-18-04	20.00	39,500
1923	05-15-23	30.30	140,000
1924	12-13-23	--	26,000e
1925	02-23-25	--	16,000e
1926	01-21-26	--	60,900
1927	04-21-27	--	138,000
1928	04-06-28	--	60,000
1929	12-17-28	--	48,100
1930	05-10-30	--	58,200
1931	10-07-30	--	41,600
1932	01-05-32	--	67,400
1933	12-30-32	--	74,400
1934	03-26-34	--	63,700
1935	05-05-35	--	70,500
1936	12-09-35	--	13,200
1937	01-22-37	--	53,800
1938	02-18-38	26.74	103,000
1939	04-16-39	27.00	108,000
1940	04-30-40	15.82	22,000
1941	11-23-40	13.72	16,500
1942	04-08-42	21.77	56,000
1943	05-31-43	14.76	19,200
1944	04-23-44	25.20	83,000
1945	03-30-45	27.20	132,000
1946	05-23-46	24.90	80,000
1947	12-12-46	18.60	35,100
1948	01-02-48	18.80	36,100
1949	01-26-49	24.89	90,700
1950	02-13-50	21.72	57,100
1951	07-03-51	20.70	49,800
1952	04-23-52	18.40	38,600

07359500 Ouachita River near Malvern, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1953	12-04-52	20.90	54,400
1954	05-02-54	17.36	31,400
1955	05-27-55	14.36	20,000
1956	02-18-56	12.75	15,500
1957	04-04-57	16.14	27,400
1958	05-02-58	21.16	55,200
1959	02-14-59	15.25	23,500
1960	06-27-60	12.71	16,000
1961	03-31-61	13.08	17,100
1962	02-27-62	11.95	14,300
1963	07-16-63	21.03	53,800
1964	04-23-64	18.81	39,800
1965	02-11-65	11.66	13,600
1966	04-26-66	19.26	42,700
1967	05-06-67	15.23	22,400
1968	05-14-68	26.02	11,0000
1969	01-30-69	24.11	84,200
1970	03-03-70	12.77	18,100
1971	10-27-70	10.02	12,200
1972	09-18-72	13.10	18,400
1973	04-23-73	25.10	95,800
1974	04-22-74	23.36	76,000
1975	03-29-75	15.65	26,000
1976	06-25-76	11.94	16,700
1977	03-03-77	19.64	45,200
1978	03-23-78	14.36	22,000
1979	11-16-78	17.02	31,500
1980	09-28-80	8.63	10,500
1981	06-03-81	11.42	15,600
1982	04-02-82	14.03	21,300
1983	12-03-82	27.06	125,000
1984	05-02-84	13.15	19,300

07359910 Caddo River at DeGray Regulating Dam near Caddo Valley, Arkansas

Location.--Lat 34° 10’38”, long 93° 06’00”, in NW 1/4 sec.36, T.6 S., R.2 W., 4.8 mi above mouth and 1 1/2 mi west of Caddo Valley.
Drainage area.--480 mi^2.
Gage.--Recording. In control house on left bank of river, 3 mi downstream from DeGray Dam. Datum of gage is sea level.
Stage-discharge relation.--Defined by current-meter measurements.
Remarks.--Records furnished by U.S. Corps of Engineers. Discharge regulated by DeGray Reservoir.

07359910 Caddo River at DeGray Regulating Dam near Caddo Valley, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1967	05-07-67	--	23,400
1968	05-14-68	--	44,300
1969	01-31-69	--	38,000
1970	05-20-70	--	4,160
1971	08-26-71	--	3,81
1972	09-18-72	--	4,020
1973	03-14-73	--	6,410
1974	06-08-74	--	6,820
1975	03-31-75	--	6,680
1976	06-25-76	--	5,490
1977	03-07-77	--	6,180
1978	05-07-78	--	6,240
1979	12-09-78	--	7,690
1980	05-29-80	--	4,010
1981	12-10-80	--	10,300
1982	04-04-82	--	4,250
1983	12-15-82	--	9,040

07360000 Ouachita River at Arkadelphia, Arkansas

Location.--Lat 34° 07’16”, long 93° 02’46”, in sec.17, T.7 S., R.19 W., at bridge on State Highway 7 at Arkadelphia, 5.4 mi downstream from Caddo River, and at mile 420.6.

Drainage area.--2,311 mi^2.

Gage.--Nonrecording prior to March 31, 1946; recording thereafter. September 1905 to December 1906 at site 800 ft downstream at different datum. January 1914 to September 28, 1934, at present site at datum 5.00 ft higher (adjusted at present datum). Datum of present gage is 160.30 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 161,000 ft^3/s.

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.

07360000 Ouachita River at Arkadelphia, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1906	05-04-06	20.60	33,800
1914	04-29-14	26.20	--
1915	08-22-15	26.30	--
1916	01-28-16	23.20	--
1917	03-04-17	20.80	--
1918	04-07-18	22.40	--
1919	12-14-18	23.60	--
1920	05-12-20	27.90	--
1921	04-27-21	26.50	--
1922	04-01-22	22.80	--
1923	05-15-23	28.30	--
1924	05-01-24	15.30	--
1925	02-24-25	15.00	--
1926	01-22-26	24.70	--
1927	04-21-27	29.20	133,000
1928	04-08-28	22.30	--
1929	01-26-29	19.10	26,600
1930	01-10-30	25.40	68,500
1931	10-08-30	21.02	35,400
1932	01-05-32	26.72	89,100
1933	12-31-32	24.80	61,700
1934	03-27-34	24.28	56,800
1935	05-06-35	26.97	94,000
1936	12-07-35	17.72	23,200
1937	01-22-37	26.03	81,400
1938	02-19-38	28.97	133,000
1939	04-17-39	28.87	131,000
1940	05-01-40	17.40	20,800
1941	11-24-40	18.15	22,700
1942	04-09-42	26.75	94,700
1943	04-19-43	18.49	22,000
1944	05-02-44	25.90	86,400
1945	03-30-45	30.30	170,000
1946	04-30-46	27.83	122,000
1947	12-13-46	21.90	36,800
1948	03-02-48	23.68	47,300
1949	01-27-49	28.15	139,000
1950	02-13-50	25.92	76,600
1951	07-03-51	26.20	81,100
1952	04-24-52	22.85	41,800
1953	12-04-52	25.15	73,100
1954	05-03-54	23.30	45,200
1955	03-21-55	23.90	51,100
1956	02-18-56	20.60	31,700
1957	04-04-57	24.20	55,100
1958	05-03-58	27.65	119,000
1959	02-15-59	24.00	52,300
1960	12-17-59	20.90	29,000
1961	05-07-61	24.20	55,100
1962	02-28-62	21.65	33,600
1963	07-17-63	19.18	26,200
1964	04-24-64	25.13	58,800
1965	02-12-65	20.90	32,400
1966	04-26-66	24.98a	71,300
1967	05-07-67	23.56	47,400
1968	05-14-68	30.08	162,000
1969	01-31-69	28.02	121,000
1970	03-04-70	18.79	24,200
1971	01-06-71	11.30	9,320
1972	09-19-72	15.77	16,100
1973	04-24-73	24.90	61,700
1974	06-08-74	27.02	56,500
1975	05-03-75	20.17	27,900
1976	06-25-76	17.22	27,600
1977	03-04-77	21.40	40,000
1978	05-10-78	--	18,400
1979	05-04-79	19.90	26,200
1980	04-14-80	12.20	12,200

07360000 Ouachita River at Arkadelphia, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1981	06-04-81	15.50	18,700
1982	04-03-82	15.60	17,200
1983	12-04-82	25.97	71,000
1984	05-03-84	21.10	--

07360501 Little Missouri River at Narrows Dam near Murfreesboro, Arkansas

Location.--Lat 34° 08'51", long 93° 43'04", in powerhouse at Narrows Dam, 6.5 mi northwest of Murfreesboro, 9.5 mi upstream from Muddy Fork Creek, and at mile 105.5.

Drainage area.--237 mi^2.

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 sea level. Datum of present gage is at sea level. 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.

07360501 Little Missouri River at Narrows Dam near Murfreesboro, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1946	04-30-46	21.10	32,300	1965	11-02-64	--	2,120
1947	04-30-47	10.39	8,780	1966	05-12-66	--	1,460
1948	03-01-48	10.30	16,800	1967	05-16-67	--	3,320
1949	01-24-49	17.10	34,500	1968	05-24-68	--	3,440
1950	01-13-50	--	4,670	1969	02-11-69	--	3,510
1951	02-27-51	--	3,720	1970	05-04-70	--	2,460
1952	04-30-52	--	7,200	1971	10-28-70	--	1,730
1953	05-25-53	--	5,120	1972	12-15-71	--	1,920
1954	09-07-54	--	1,920	1973	01-10-73	--	2,600
1955	09-20-55	--	1,990	1974	07-01-74	--	2,580
1956	08-29-56	--	1,970	1975	12-11-74	--	2,760
1957	06-02-57	--	5,210	1976	06-29-76	--	2,490
1958	05-13-58	--	3,550	1977	04-01-77	--	2,530
1959	03-06-59	--	9,841	1978	10-01-77	--	2,340
1960	11-25-59	--	1,910	1979	06-06-79	--	2,500
1961	05-10-61	--	3,700	1980	05-25-80	--	2,470
1962	01-31-62	--	2,130	1981	06-09-81	--	2,420
1963	01-24-63	--	1,270	1982	06-16-82	--	2,410
1964	05-05-64	--	1,750	1983	12-09-82	--	5,200

07361000 Little Missouri River near Murfreesboro, Arkansas

Location.--Lat 34° 03', long 93° 43', SE 1/4 sec.13, T.8 S., R.26 W., on downstream side of bridge on State Highway 27, 1.9 mi downstream from Muddy Fork Creek, 2 mi southwest of Murfreesboro, 4.6 mi upstream from Prairie Creek, and at mile 24.1.

Drainage area.--380 mi^2.

Gage.--Nonrecording prior to September 30, 1931; recording thereafter. Datum of gage is 324.28 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 38,000 ft^3/s and extended on basis of contracted-opening measurement of 120,000 ft^3/s.

Bankfull stage.--17 ft.

Remarks.--Peak discharge materially regulated since November 1949 by Lake Greeson (capacity 407,900 acre-ft, drainage area 237 mi^2). Only annual peaks are shown.

07361000 Little Missouri River near Murfreesboro, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-00-27	21.00	--
1928	04-21-28	7.75	8,740
1929	12-17-28	12.52	21,600
1930	05-03-30	14.00	26,000
1931	02-13-31	6.80	6,290
1938	01-24-38	17.50	54,300
1939	04-16-39	14.73	21,800
1940	05-18-40	13.49	16,800
1941	11-23-40	17.03	44,800
1942	04-08-42	16.52	37,200
1943	12-27-42	14.24	20,000
1944	05-01-44	16.60	38,600
1945	03-30-45	19.84	120,000
1946	04-30-46	16.78	41,500
1947	04-30-47	12.62	13,500
1948	03-02-48	14.53	21,200
1949	01-24-49	18.05	65,700
1950	09-16-50	13.74	16,600
1951	07-02-51	11.34	9,220
1952	04-22-52	14.19	17,600
1953	05-11-53	15.60	25,800
1954	05-02-54	9.10	6,080
1955	03-21-55	12.55	13,300
1956	04-30-56	10.15	8,180
1957	04-03-57	10.75	9,020
1958	05-02-58	15.74	30,300
1959	02-14-59	10.40	9,450
1960	12-16-59	10.28	9,270
1961	05-06-61	12.28	13,000
1962	02-27-62	9.69	8,250
1963	03-16-63	6.55	3,770
1964	04-23-64	14.52	21,200
1965	03-29-65	9.83	8,410
1966	08-21-66	10.48	9,630
1967	05-06-67	12.11	12,600
1968	05-13-68	14.44	20,800
1969	01-30-69	15.80	31,200
1970	04-26-70	10.89	9,970
1971	12-15-70	5.99	2,880
1972	12-10-71	10.21	9,110
1973	04-19-73	13.05	14,900
1974	06-08-74	16.32	31,900
1975	02-01-75	13.00	17,800
1976	03-08-76	11.00	10,800
1977	03-03-77	12.63	16,300

07361600 Little Missouri River near Boughton, Arkansas

Location.--Lat 33° 52’32”, long 93° 18’16”, in NE 1/4 sec.13, T.10 S., R.22 W., on downstream side of bridge on U.S. Highway 67, 1.5 mi northeast of Boughton, 5.9 mi downstream from Howard Creek, 10.2 mi downstream from Antoine River, and at mile 46.8.

Drainage area.--1,068 mi^2.

Gage. --Nonrecording prior to March 19, 1947; recording thereafter. Datum of gage is 182.13 ft above sea level.

Stage-discharge relation.--Defined by current-meter measurements below 62,000 ft^3/s.

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 mi^2). Only annual peaks are shown.

07361600 Little Missouri River near Boughton, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1938	02-19-38	23.55	57,000
1939	04-18-39	21.28	22,600
1940	05-02-40	17.05	7,350
1941	04-25-41	20.50	17,400
1942	04-09-42	23.35	54,000
1943	03-14-43	21.40	25,000
1944	05-02-44	23.40	54,000
1945	03-31-45	27.20	111,000
1946	02-07-46	21.80	30,000
1947	05-14-47	22.06	37,300
1948	03-04-48	20.71	20,700
1949	01-26-49	23.90	62,000
1950	02-13-50	22.18	36,500
1951	01-15-51	21.40	25,600

07361600 Little Missouri River near Boughton, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1952	04-24-52	21.28	24,700
1953	05-12-53	23.35	54,000
1954	05-03-54	18.50	11,000
1955	03-22-55	21.58	28,000
1956	05-03-56	19.72	14,700
1957	04-04-57	21.58	29,100
1958	05-03-58	24.22	66,000
1959	02-16-59	20.90	24,100
1960	12-18-59	21.36	27,600
1961	04-01-61	20.92	24,100
1962	02-28-62	20.92	24,100
1963	03-17-63	15.82	8,080
1964	04-24-64	22.35	39,000
1965	02-12-65	20.69	22,800
1966	05-02-66	21.95	33,300
1967	05-07-67	20.78	23,400
1968	05-15-68	23.29	52,500
1969	01-31-69	22.80	45,000
1970	03-04-70	19.80	17,400
1971	07-25-71	11.58	5,080
1972	12-11-71	16.62	10,800
1973	04-20-73	22.79	45,000
1974	06-09-74	22.60	45,500
1975	02-03-75	21.16	33,000
1976	03-10-76	20.64	29,400
1977	03-04-77	20.03	26,500
1978	01-26-78	15.34	9,630
1979	05-05-79	21.30	31,700
1980	04-15-80	17.30	11,800

07362000 Ouachita River at Camden, Arkansas

Location.--Lat 33° 35’47”, long 92° 49’05”, in SE 1/4 sec.14, T.13 S., R.17 W., at bridge on U.S. Highway 79 at Camden, 3.4 mi downstream from Ecore Fabre Bayou, 6.2 mi upstream from Two Bayou Creek, and at mile 354.1.

Drainage area.--5,357 mi^2.

Gage.--Nonrecording prior to October 28, 1947; recording thereafter. Datum of gage is 71.69 ft above sea level, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements below 230,000 ft^3/s.

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.

07362000 Ouachita River at Camden, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1929	12-22-28	35.41	62,400
1930	05-21-30	40.84	138,000
1931	10-10-30	24.91	14,500
1932	01-09-32	38.42	102,000
1933	01-05-33	32.46	36,700
1934	03-31-34	33.32	38,800
1935	05-09-35	39.33	126,000
1936	12-13-35	25.20	22,700
1937	01-25-37	41.71	151,000
1938	02-22-38	41.10	158,000
1939	04-21-39	37.71	102,000
1940	07-04-40	28.66a	24,400
1941	05-11-41	31.78	37,500
1942	04-12-42	40.17	124,000
1943	03-17-43	30.14	39,000
1959	02-19-59	33.15	51,600
1944	05-05-44	39.10	144,000
1945	04-03-45	44.82	243,000
1946	05-29-46	37.46a	89,900
1947	11-13-46	29.71a	33,500
1948	03-06-48	35.41	57,000
1949	01-30-49	44.15	185,000
1950	02-17-50	39.63	110,000
1951	01-20-51	34.40	53,400
1952	04-18-52	35.45	58,400
1953	05-16-53	38.82a	126,000
1954	05-06-54	28.78	32,900
1955	03-25-55	34.51a	58,200
1956	02-21-56	29.28a	32,000
1957	05-01-57	38.92	98,900
1958	05-05-58	43.87	181,000
1972	12-12-71	23.79	22,200

07362000 Ouachita River at Camden, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1960	12-22-59	32.19	47,900
1961	04-04-61	36.10	65,700
1962	03-03-62	35.32	60,700
1963	03-20-63	23.13	18,800
1964	04-27-64	38.05a	99,500
1965	02-14-65	34.92a	72,800
1966	04-29-66	39.29a	109,000
1967	05-10-67	33.91a	60,700
1968	05-17-68	43.08	183,000
1969	02-03-69	39.15	141,000
1970	03-08-70	33.05	39,600
1971	08-09-71	18.69	13,200
1973	04-23-73	38.50	119,000
1974	06-12-74	39.59	138,000
1975	02-07-75	34.85	52,000
1976	03-13-76	32.15	39,600
1977	04-02-77	30.89	36,600
1978	01-28-78	26.24	26,000
1979	05-07-79	35.39	69,400
1980	04-17-80	30.74	37,100
1981	06-10-81	30.81a	37,200
1982	04-06-82	25.63	24,100
1983	12-07-82	38.06	95,700
1984	05-07-84	35.43a	64,600

07364000 Saline River near Warren, Arkansas

Location.--Lat 33° 35', long 92° 01', in sec.15, T.13 S., R.9 W., at bridge on State Highway 4, 3 mi downstream from Cypress Creek, 3 1/2 mi southeast of Warren, and at mile 58.0.

Drainage area.--2,476 mi^2.

Gage.--Nonrecording. Datum of gage is 86.02 ft above sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 60,000 ft^3/s.

Bankfull stage.--22 ft.

Remarks.--Records since September 1929 furnished by Corps of Engineers. Only annual peaks are shown.

07364000 Saline River near Warren, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1927	04-27-27	28.00	--
1929	03-11-29	20.22	11,900
1930	03-19-30	25.90	61,500
1931	04-03-31	12.00	4,270
1938	01-28-38	25.72	57,100
1939	02-10-39	24.39	32,200
1940	07-03-40	22.49	16,400
1975	04-06-75	26.22	19,200
1976	03-11-76	23.58	14,900
1977	04-08-77	24.70	16,700
1978	05-19-78	21.60	11,900
1979	05-11-79	26.90	20,400
1980	04-20-80	26.40	19,500
1981	06-09-81	24.60	--
1982	04-23-82	22.00	--
1983	01-01-83	28.80	--
1984	05-09-84	27.20	--

07367661 Boeuf River near Lake Village, Arkansas

Location.--Lat 33° 18'35", long 91° 21'56", in NW 1/4 sec.13, T.16 S., R.3 W., at bridge on U.S. Highway 82, 5 mi west of Lake Village.

Drainage area.--355 mi^2.

Gage.--Recording. Datum of gage is 94.24 ft above sea level.

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

Remarks.--Only annual peaks are shown.

07367661 Boeuf River near Lake Village, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1946	06-01-46	15.70	1,790	1966	02-13-66	18.48	7,600
1947	04-11-47	19.22	2,640	1967	05-08-67	10.06	3,100
1948	02-12-48	22.80	3,580	1968	05-18-68	15.77	6,560
1949	03-30-49	18.47	2,430	1969	02-03-69	14.80	6,000
1950	03-13-50	21.60	3,260	1970	12-31-69	16.02	6,720
1951	01-03-51	19.80	2,780	1971	05-13-71	15.30	6,280
1952	01-28-52	16.96	2,040	1972	01-04-72	15.53	6,440
1953	05-18-53	18.44	2,430	1973	03-16-73	20.90	9,940
1954	05-03-54	17.18	2,100	1974	01-11-74	16.84	7,240
1955	03-22-55	21.69	3,280	1975	03-14-75	18.61	8,400
1956	02-04-56	20.00	2,840	1976	03-10-76	13.70	5,300
1957	02-01-57	10.90	4,160	1977	04-05-77	12.45	4,520
1958	09-21-58	16.50	7,920	1978	05-08-78	17.06	7,400
1959	02-15-59	10.23	3,720	1979	12-06-78	22.10	10,800
1960	03-03-60	9.89	3,480	1980	03-21-80	14.80	5,900
1961	02-22-61	18.46	8,360	1981	09-04-81	10.00	--
1962	01-28-62	10.67	3,440	1982	04-21-82	13.60	--
1963	07-29-63	7.10	1,640	1983	12-28-82	21.30	--
1964	04-27-64	15.21	6,240	1984	12-04-83	18.50	--
1965	02-12-65	15.17	6,200				

07367670 Wards Bayou Tributary at Montrose, Arkansas

Location.--Lat 33° 18’15”, long 91° 29’37”, in SE 1/4 SE 1/4 sec.15, T.16 S., R.4 W., at culvert on U.S. Highway 165, 0.4 mi north of Junction of U.S. Highway 165 and 82 in Montrose.

Drainage area.--3.24 mi^2.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 199 ft^3/s and by culvert measurements at 227 ft^3/s and 440 ft^3/s.

Remarks.--Only annual peaks are shown.

07367670 Wards Bayou Tributary at Montrose, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1961	02-20-61	6.77	227	1973	04-18-73	7.42	425
1962	12-09-61	6.46	185	1974	04-21-74	7.87	570
1963	06-21-63	6.64	209	1975	03-13-75	7.18	360
1964	04-24-64	5.96	120	1976	07-04-76	6.90	290
1965	02-11-65	6.24	156	1977	03-04-77	6.94	300
1966	02-09-66	7.11	274	1978	05-08-78	7.65	500
1967	07-06-67	5.86	135	1979	01-20-79	7.06	330
1968	01-09-68	6.52	220	1980	09-28-80	6.59	233
1969	11-28-68	7.47	440	1981	05-18-81	6.51	220
1970	05-01-70	7.12	340	1982	08-19-82	5.75	120
1971	05-13-71	6.01	150	1983	12-27-82	7.68	485
1972	01-02-72	6.92	295				

07367680 Boeuf River near Eudora, Arkansas

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 mi downstream from Canal No. 2, 5 mi west of Eudora, and at mile 205.7.

Drainage area.--640 mi^2 (See Remark).

Gage.--Nonrecording prior to May 3, 1951; recording thereafter. Datum of gage is 83.24 ft above sea level, 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.

07367680 Boeuf River near Eudora, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1939	03-31-39	17.70	5,060	1962	12-12-61	17.30	15,100
1940	07-08-40	18.70	6,220	1963	03-13-63	6.34	2,600
1941	03-09-41	16.80	4,080	1964	04-27-64	17.22	11,000
1942	04-09-42	20.00	4,830	1965	02-12-65	18.03	12,100
1943	03-27-43	17.50	4,840	1966	02-10-66	19.70	18600
1944	03-29-44	21.00	9,110	1967	02-20-67	13.40	7,600
1945	01-01-45	21.50	9,760	1968	01-10-68	17.42	11,300
1946	02-10-46	20.50	8,470	1969	07-27-69	11.66	6,300
1947	04-11-47	20.30	8,210	1970	12-31-69	16.73	10,500
1948	02-13-48	20.90	8,980	1971	05-13-71	17.59	11,500
1949	03-28-49	19.70	7,450	1972	01-04-72	18.22	12,300
1950	02-14-50	20.20	8,080	1973	03-16-73	21.00	16,700
1951	01-03-51	20.80	8,870	1974	04-22-74	18.46	12,700
1952	01-28-52	17.60	4,980	1975	03-14-75	19.82	14,800
1953	05-17-53	19.26	6,940	1976	03-10-76	14.26	8,200
1954	05-03-54	20.03	7,870	1977	03-04-77	16.04	9,750
1955	03-22-55	21.52	9,830	1978	05-08-78	17.76	11,700
1956	02-04-56	15.24	9,030	1979	01-21-79	19.02	17,500
1957	02-02-57	15.20	8,980	1980	03-21-80	17.50	11,400
1958	09-22-58	19.69	14,600	1981	05-19-81	11.70	--
1959	02-14-59	14.18	8,200	1982	04-20-82	11.20	--
1960	03-03-60	11.60	6,200	1983	12-29-82	21.60	--
1961	02-22-61	20.15	18,200	1984	12-04-83	19.20	--

07367700 Boeuf River near Arkansas-Louisiana State line

Location.--Lat 32° 58'25", long 91° 26'25", in NE 1/4 Ne 1/4 sec.21, T.23 N., R.10 E., on downstream side of bridge on Louisiana State Highway 835, 2 mi downstream from Arkansas-Louisiana State line, and 8 mi west of Kilbourne, La., and at mile 190.1.

Drainage area.--785 mi^2. (See Remarks).

Gage.--Nonrecording prior to December 31, 1957; recording thereafter. At site 300 ft upstream at same datum prior to October 21, 1961. Datum of gage is 74.11 ft above sea level, supplemental adjustment of 1941 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 14,000 ft^3/s 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 chemical improvements made during 1954 and 1955. Only annual peaks are shown. Published as "Boeuf River near Kilbourne, La." in Water-Supply Paper 1681.

07367700 Boeuf River near Arkansas-Louisiana State line

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1947	04-13-47	24.70	--
1948	02-14-48	24.80	--
1949	03-29-49	24.30	--
1950	02-16-50	24.40	--
1951	01-05-51	24.60	--
1952	01-30-52	23.50	--
1953	05-18-53	24.30	--
1954	05-04-54	24.70	--
1955	03-23-55	24.00	--
1956	02-04-56	20.40	--
1957	02-02-57	20.10	--
1958	05-06-58	24.56	14,700
1959	02-15-59	16.22	7,840
1960	03-03-60	16.27	7,630
1961	02-22-61	24.64a	16,200
1962	12-18-61	22.89	12,300
1963	03-12-63	9.21	3,180
1964	04-28-64	22.37	14,000
1965	02-12-65	23.19	15,100
1966	02-11-66	24.60a	16,500
1967	02-21-67	19.12	8,070
1968	01-10-68	23.22a	12,300
1969	12-02-68	23.27	--
1970	12-31-69	22.02	--
1971	05-14-71	22.91	--
1972	01-05-72	23.50	--
1973	03-17-73	25.41	--
1974	04-24-74	23.38	--
1975	03-15-75	24.63	--
1976	02-22-76	20.43	--
1977	03-05-77	22.25	--
1978	05-09-78	24.22	--
1979	01-22-79	24.23	--
1980	04-15-80	23.18	--
1981	05-19-81	18.18	--
1982	04-21-82	15.73	--
1983	12-29-82	26.07	--
1984	12-06-83	25.06	--

07369680 Bayou Macon at Eudora, Arkansas

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 mi southeast of Eudora, and at mile 157.0.

Drainage area.--485 mi^2 (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 mi upstream from and at same datum as present gage. Datum of gage is 80.92 ft above sea level, supplementary adjustment of 1941.

Stage-discharge relation.--Defined by current-meter measurements. Affected by fall and shifts.

Bankfull stage.--18 ft.

Remarks.--Gage-heights 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.

07369680 Bayou Macon at Eudora, Arkansas

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1931	12-00-31	26.20	3,570
1938	04-08-38	19.00	2,260
1939	02-28-39	20.40	2,600
1940	07-09-40	17.40	1,830
1941	03-09-41	14.60	1,360
1942	04-10-42	23.00	2,620
1943	03-27-43	19.30	1,850
1944	04-11-44	22.70	2,550
1945	04-11-45	24.10	2,910
1946	01-23-46	25.90	3,420
1947	04-12-47	23.60	3,130
1948	02-14-48	23.50	3,110
1949	02-05-49	22.40	2,790
1950	03-30-50	24.90	3,300
1951	01-04-51	21.00	2,530
1952	01-29-52	18.00	1,930
1953	05-23-53	24.90	3,680
1954	05-04-54	19.00	2,260

07369680 Bayou Macon at Eudora, Arkansas--Continued

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1955	03-22-55	22.00	2,750	1970	03-23-70	18.50	3,000
1956	02-21-56	21.40	2,620	1971	05-14-71	21.52	3,940
1957	02-02-57	18.70	2,050	1972	01-05-72	20.90	3,750
1958	05-22-58	27.43	5,100	1973	03-20-73	25.85	5,630
1959	02-16-59	17.13	1,600	1974	06-20-74	22.40	4,250
1960	03-03-60	16.06	1,400	1975	02-05-75	22.80	4,400
1961	02-26-61	24.40	2,900	1976	02-22-76	16.40	2,500
1962	12-18-61	23.50	2,600	1977	03-04-77	18.09	2,900
1963	08-4-63	13.96	1,200	1978	05-09-78	21.21	3,920
1964	05-03-64	17.96	2,300	1979	04-12-79	21.10	3,880
1965	02-12-65	14.27	2,800	1980	03-21-80	20.90	3,820
1966	02-13-66	19.79	3,800	1981	09-08-81	12.90	--
1967	02-21-67	10.36	1,600	1982	04-23-82	14.50	--
1968	01-10-68	22.08	4,140	1983	12-31-82	24.80	--
1969	12-02-68	21.40	3,900	1984	12-04-83	22.60	--

07369700 Bayou Macon near Kilbourne, Louisiana

Location.--Lat 32° 39’35”, long 91° 15’45”, in Sw 1/4 SE 1/4 sec.8 T.23 N., R.12 E., on downstream side of bridge on Louisiana State Highway 585, 3/4 mi south of Arkansas-Louisiana State line, and 3 mi east of Kilbourne.

Drainage area.--504 mi^2 (See Remarks).

Gage.--Recording. Datum of gage is 75.41 ft above sea level (Corps of Engineers benchmarks). Prior to October 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 ft^3/s. 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.

07369700 Bayou Macon near Kilbourne, Louisiana

Water year	Date	Gage height (feet)	Discharge (cubic foot per second)	Water year	Date	Gage height (feet)	Discharge (cubic foot per second)
1958	05-05-58	26.35	4,740	1971	05-14-71	21.95	--
1959	10-01-58	22.95	2,710	1972	01-05-72	23.32	--
1960	03-03-60	17.76	1,780	1973	03-17-73	26.73	--
1961	02-22-61	24.55	3,670	1974	06-08-74	24.39	--
1962	12-18-61	24.42	3,250	1975	03-14-75	24.84	--
1963	08-04-63	13.10	1,010	1976	02-21-76	18.86	--
1964	04-27-64	13.63	2,910	1977	03-04-77	21.02	--
1965	02-12-65	15.91	3,130	1978	05-08-78	23.50	--
1966	02-13-66	22.33	4,220	1979	01-21-79	22.43	--
1967	02-21-67	11.93	1,310	1980	04-14-80	22.56	--
1968	01-10-68	24.52	3,870	1981	09-08-81	13.26	--
1969	12-02-68	24.13	--	1983	12-28-82	25.22	4,080
1970	04-27-70	20.68	--	1984	12-04-83	23.95	--

APPENDIX 4

FORTRAN CODE

The following pages contain the FORTRAN code for the software packet included in this report.

```
**********************************************************************
c
c Program to estimate flood frequency in Arkansas
c
 REAL AK, ele, rho, sda, sdbeta, sel, sha, sig, spr, ss, ssh, ssl,
 & sum, tbeta, tsave, years, ysave, yhat
 INTEGER i, iout, isave, istep, j, jpeak, nest
 INCLUDE 'ark.cmn'
 REAL dist(204), da(204), sl(204), pr(204), el(204), sh(204),
 & peak(204,7), sd(204), rhoc(204,204), mcon(204,204), id(204)
c & xsave(50,10), uvsav(7)
 REAL d, s, p, WLS
 INTEGER indx(204)
c CHARACTER*8 ylabsv(7)
 CHARACTER*32 vout
 CHARACTER*3 method
 CHARACTER*1 iansw
 EXTERNAL WLS
c
 PRINT *, ' This program computes estimates of T-year floods'
 PRINT *, ' for ungaged sites in Arkansas based on either a '
 PRINT *, ' Regional Regression Equation (RRE) method or '
 PRINT *, ' a Region Of Influence (ROI) method. (see the '
 PRINT *, ' report " Magnitude and Frequency of Floods in '
 PRINT *, ' Arkansas - 1995" by Hodge and Tasker USGS Water '
 PRINT *, ' Resources Investigations Report 95-___). '
 PRINT *, '* No warranty, expressed or implied, is made by the'
 PRINT *, '* USGS as to the accuracy and functioning of the '
 PRINT *, '* program and related program material.'
 PRINT *, ' BETA TEST VERSION 03/28/95 '
 PRINT *, ' ++++++++++++++++++++++++++++++++++++++++++++++++++'
c
 PRINT *, ' ENTER name of output file '
 READ (*,9005) vout
 OPEN (16,file=vout)
 PRINT *, ' Work in Metric or English units? (ENTER M or E)'
 READ (*,*) units
 10 PRINT *, ' Use regional regression equations or region of'
 PRINT *, ' influence method? (ENTER RRE or ROI)'
 READ (*,*) method
 IF (method.EQ.'RRE' .OR. method.EQ.'rre') THEN
 CALL RRE
 STOP
 ENDIF
 IF (method.NE.'ROI' .AND. method.NE.'roi') THEN
 PRINT *, ' Wrong answer. Try again.'
```

```
 GOTO 10
 ENDIF
c
 OPEN (10,file='arkansas.dat')
 OPEN (12,file='arkansas.rho')
 OPEN (13,file='arkansas.rec')
 AK(1) = 0.0
 AK(2) = 0.84162
 AK(3) = 1.28155
 AK(4) = 1.75069
 AK(5) = 2.05375
 AK(6) = 2.32635
 AK(7) = 2.87816
 Xlab(1) = 'log(DA) '
 Xlab(2) = 'log(SL) '
 Xlab(3) = 'log(PR) '
 Xlab(4) = 'log(EL) '
 Xlab(5) = 'log(SH) '
 Xlab(6) = 'constant'
 Pklab(1) = ' TWO '
 Pklab(2) = ' FIVE '
 Pklab(3) = ' TEN '
 Pklab(4) = ' 25 '
 Pklab(5) = ' FIFTY '
 Pklab(6) = ' 100 '
 Pklab(7) = ' 500 '
c
c read in estimation data
c
 nest = 0
 DO 30 i = 1, 204
 READ (10,9010,end=40) id(i), peak(i,1), peak(i,2), peak(i,3),
 & peak(i,4), peak(i,5), peak(i,6), peak(i,7)
 & , da(i), sl(i), pr(i), el(i), sh(i), sd(i)
 READ (13,9015) (mcon(i,j),j=1,i)
 READ (12,9015) (rhoc(i,j),j=1,i)
 nest = nest + 1
 DO 20 j = 1, i
 mcon(j,i) = mcon(i,j)
 rhoc(j,i) = rhoc(i,j)
 20 CONTINUE
 30 CONTINUE
c
c Initialize and read in ungaged site information
c
 40 sda = 1.2410
```

```
 ssl = .6981
 spr = .0340
 ssh = .3113
 sel = .3091
 Nsites = 42
 PRINT *, ‘ ENTER indentifer for ungaged site’
 READ (*,9005) Siteid
 IF (units.EQ.’M’ .OR. units.EQ.’m’) THEN
 PRINT *, ‘ ENTER watershed characteristics for site’
 PRINT *, ‘ Drainage area (sq. km) =’
 READ (*,*) Area
 PRINT *, ‘ Basin slope (m/km)=’
 READ (*,*) Slope
 PRINT *, ‘ Mean annual precip. (cm)=’
 READ (*,*) Precip
 PRINT *, ‘ Mean basin elevation (m)=’
 READ (*,*) Elev
 PRINT *, ‘ Basin shape factor (A/L**2)=’
 READ (*,*) Shape
c
 ELSE
 PRINT *, ‘ ENTER watershed characteristics for site’
 PRINT *, ‘ Drainage area (sq. mi.) =’
 READ (*,*) Area
 PRINT *, ‘ Basin slope (ft./mi.)=’
 READ (*,*) Slope
 PRINT *, ‘ Mean annual precip. (inches)=’
 READ (*,*) Precip
 PRINT *, ‘ Mean basin elevation (feet)=’
 READ (*,*) Elev
 PRINT *, ‘ Basin shape factor (A/L**2)=’
 READ (*,*) Shape
 ENDIF
c
c Tranform to logs
c
 IF (units.EQ.’M’ .OR. units.EQ.’m’) THEN
 WRITE (*,9020) Siteid, Area, Slope, Precip, Elev, Shape
 ELSE
 WRITE (*,9025) Siteid, Area, Slope, Precip, Elev, Shape
 ENDIF
 d = ALOG10(Area)
 s = ALOG10(Slope)
 p = ALOG10(Precip)
 ele = ALOG10(Elev)
 sha = ALOG10(Shape)
```

```
c
c Compute distances
c
 DO 50 i = 1, nest
 IF (units.EQ.'M' .OR. units.EQ.'m') THEN
 dist(i) = SQRT(((d-.413299-da(i))/sda)**2+((s+.722635-sl(i))/
 & ssl)**2+((ele+.515985-el(i))/sel)**2)
 ELSE
 dist(i) = SQRT(((d-da(i))/sda)**2+((s-sl(i))/ssl)
 & **2+((ele-el(i))/sel)**2)
 ENDIF
 50 CONTINUE
c
c Rank distances
c
 CALL INDEXX(nest,dist,indx)
c
c Select closest nsites stations for regression
c loop through dependent variables and do regression
c
 ysav=0.0
 DO 170 jpeak = 1, 7
 Ne = 6
 Uv(1) = 1.0
 Uv(2) = d
 Uv(3) = s
 Uv(4) = p
 Uv(5) = sha
 Uv(6) = ele
 DO 60 j = 1, 5
 Ylab(j) = Xlab(j)
 60 CONTINUE
 DO 70 i = 1, Nsites
 X(i,1) = 1.0
 Xt(1,i) = 1.0
 Y(i,1) = peak(indx(i),jpeak)
 X(i,2) = da(indx(i))
 X(i,3) = sl(indx(i))
 X(i,4) = pr(indx(i))
 X(i,5) = sh(indx(i))
 X(i,6) = el(indx(i))
 IF (units.EQ.'M' .OR. units.EQ.'m') THEN
c convert x's to metric
 X(i,2) = X(i,2) + .413299
 X(i,3) = X(i,3) - .722635
 X(i,4) = X(i,4) + .404834
```

```
 X(i,6) = X(i,6) - .515985
c convert y to metric
 Y(i,1) = Y(i,1) - 1.547955
 ENDIF
 Xt(2,i) = X(i,2)
 Xt(3,i) = X(i,3)
 Xt(4,i) = X(i,4)
 Xt(5,i) = X(i,5)
 Xt(6,i) = X(i,6)
 Stano(i) = id(indx(i))
 70 CONTINUE
 sum = 0.0
 ss = 0.0
 sig = 0.0
c
c compute regional average standard deviation
c and time sampling error, sta(i), for each site
c
 DO 80 i = 1, Nsites
 sig = sig + sd(indx(i))
 sum = sum + Y(i,1)
 ss = ss + Y(i,1)**2
 80 CONTINUE
 sig = sig/Nsites
 Yvar = (ss-sum**2/Nsites)/(Nsites-1.)
 Atse = 0.0
 Atscov = 0.0
 DO 100 i = 1, Nsites
 DO 90 j = 1, i
 years = mcon(indx(i),indx(j))
 & /(mcon(indx(i),indx(i))*mcon(indx(j),indx(j)))
 rho = rhoc(indx(i),indx(j))
 Cov(i,j) = rho*sig**2*(1.+rho*.5*AK(jpeak)**2)*years
 Cov(j,i) = Cov(i,j)
 IF (i.EQ.j) THEN
 Sta(i) = Cov(i,i)
 Atse = Atse + Sta(i)
 ELSE
 Atscov = Atscov + Cov(i,j)
 ENDIF
 90 CONTINUE
 100 CONTINUE
c
c do stepbackward regression
c
 istep = 0
```

```
 110 CALL SECANT(WLS)
 istep = istep + 1
 CALL OUTPUT(istep,jpeak,yhat)
c
c compute t and do step-backward drop of all variables with t<1
c
 tsave = 2.0
 isave = 100
 DO 120 i = 2, Ne
 sdbeta = SQRT(Xtxinv(i,i))
 tbeta = ABS(Bhat(i,1)/sdbeta)
 IF (tbeta.LT.1.7 .AND. tbeta.LT.tsave) THEN
 tsave = tbeta
 isave = i
 ENDIF
 120 CONTINUE
 IF (isave.EQ.Ne) THEN
 Ne = Ne - 1
 GOTO 110
 ENDIF
 IF (isave.LT.Ne) THEN
 Ne = Ne - 1
 DO 130 j = isave, Ne
 Ylab(j-1) = Ylab(j)
 130 CONTINUE
 DO 150 i = 1, Nsites
 DO 140 j = isave, Ne
 X(i,j) = X(i,j+1)
 Xt(j,i) = X(i,j)
 140 CONTINUE
 150 CONTINUE
 DO 160 j = isave, Ne
 Uv(j) = Uv(j+1)
 160 CONTINUE
 GOTO 110
 ENDIF
c
c check to see if predicted value is greater than previous prediction
c
 if(yhat.lt.ysav)then
 print *, ‘ CAUTION: Predicted T-year flow is smaller’
 print *, ‘ than T-year flow with lower recurrence ‘
 print *, ‘ interval. See output. ‘
 end if
c
c output final model
```

```
c
 iout = 99
 CALL OUTPUT(iout,jpeak,yhat)
 ysav=yhat
 170 CONTINUE
 PRINT *, ‘ Do you want to try another site? (y or n)’
 READ (*,*) iansw
 IF (iansw.EQ.’y’ .OR. iansw.EQ.’Y’) GOTO 40
 STOP
 9005 FORMAT (a32)
 9010 FORMAT (f10.0,13F10.5)
 9015 FORMAT (20F4.0)
 9020 FORMAT (//,’ Flood frequency estimates for’,/,1x,a32,/,’ area=’,
 & f10.2,’ : slope=’,f7.2,’ precip’,f6.1,’ elev’,f5.0,
 & ‘ shape’,f7.2,/,
 & ‘ RI DISCHARGE SE(%) EQ. YRS. 90%’,
 & ‘ PRED. INTERVAL’,/,t12,’ (cms)’)
 9025 FORMAT (//,’ Flood frequency estimates for’,/,1x,a32,/,’ area=’,
 & f10.2,’ : slope=’,f7.2,’ precip’,f5.1,’ elev’,f5.0,
 & ‘ shape’,f7.2,/,
 & ‘ RI DISCHARGE SE(%) EQ. YRS. 90%’,
 & ‘ PRED. INTERVAL’,/,t12,’ (cfs)’)
 END
c Subroutine INDEXX indexs an array ARRIN of length N, outputs the
c array INDX such that ARRIN(INDX(J)) is in ascending order for
c J=1,2,..,N. The input quantities ARRIN and N are not changed
c (ref. Numerical Recipes, p. 233)
c
 SUBROUTINE INDEXX(N,ARRIN,INDX)
 REAL ARRIN(204), q
 INTEGER i, INDX(204), indxt, ir, j, l, N
C
 DO 10 j = 1, N
 INDX(j) = j
 10 CONTINUE
 l = N/2 + 1
 ir = N
 20 IF (l.GT.1) THEN
 l = l - 1
 indxt = INDX(l)
 q = ARRIN(indxt)
 ELSE
 indxt = INDX(ir)
 q = ARRIN(indxt)
 INDX(ir) = INDX(1)
 ir = ir - 1
```

```
 IF (ir.EQ.1) THEN
 INDX(1) = indxt
 RETURN
 ENDIF
 ENDIF
 i = l
 j = l + l
 30 IF (j.LE.ir) THEN
 IF (j.LT.ir) THEN
 IF (ARRIN(INDX(j)).LT.ARRIN(INDX(j+1))) j = j + 1
 ENDIF
 IF (q.LT.ARRIN(INDX(j))) THEN
 INDX(i) = INDX(j)
 i = j
 j = j + j
 ELSE
 j = ir + 1
 ENDIF
 GOTO 30
 ENDIF
 INDX(i) = indxt
 GOTO 20
 END
c
c function computes regression coefficients and weighted SSE
c
 REAL FUNCTION WLS(GAMA2)
 INCLUDE 'ark.cmn'
 REAL GAMA2, det, xtx(10,10), work(10,50), work2(10,50),
 & work1(1,50)
 INTEGER k
c
c
c compute weighting matrix, wt
c
 DO 10 k = 1, Nsites
 Cov(k,k) = GAMA2 + Sta(k)
 10 CONTINUE
 CALL INVERT(Nsites,50,det,Wt,Cov)
c
c compute weighted xtx
c
 CALL MLTPLY(work,Xt,Wt,Ne,Nsites,Nsites,10,10,50)
 CALL MLTPLY(xtx,work,X,Ne,Nsites,Ne,10,10,50)
c
c compute regression coefficients
```

```
c
 CALL INVERT(Ne,10,det,Xtxinv,xtx)
 CALL MLTPLY(work,Xtxinv,Xt,Ne,Ne,Nsites,10,10,10)
 CALL MLTPLY(work2,work,Wt,Ne,Nsites,Nsites,10,10,50)
 CALL MLTPLY(Bhat,work2,Y,Ne,Nsites,1,10,10,50)
c
c compute sum of errors
c
 CALL MLTPLY(E,X,Bhat,Nsites,Ne,1,50,50,10)
 DO 20 k = 1, Nsites
 E(k,1) = Y(k,1) - E(k,1)
 Et(1,k) = E(k,1)
 20 CONTINUE
 CALL MLTPLY(work1,Et,Wt,1,Nsites,Nsites,1,1,50)
 CALL MLTPLY(C1,work1,E,1,Nsites,1,1,1,50)
c
 WLS = (Nsites-Ne)/C1(1,1) - 1.
 RETURN
 END
c
c
 SUBROUTINE SECANT(FX)
 REAL f1, f2, f3, fnew, FX, x1, x2, x3, xnew
 INTEGER i, j
 INCLUDE 'ark.cmn'
 EXTERNAL FX
 x1 = 0.0
 x3 = 0.0
 x2 = Yvar*2.
 f2 = FX(x2)
 f1 = FX(x1)
 IF (f1.LT.0.) THEN
c
c midpoint serch for good starting point
c
 DO 10 j = 1, 3
 xnew = (x1+x2)/2.
 fnew = FX(xnew)
 IF (fnew.LT.0.) THEN
 x1 = xnew
 fnew = fnew
 ELSE
 x2 = xnew
 f2 = fnew
 ENDIF
 10 CONTINUE
```

```
c
c search for gama sq using secant serch
c
 DO 20 i = 1, 30
 x3 = x1 - f1*(x2-x1)/(f2-f1)
 IF (x3.LT.0.) THEN
 x3 = AMIN1(x2,x1)/2.
 f3 = FX(x3)
 ELSE
 f3 = FX(x3)
 ENDIF
 IF (ABS(f3).LT..0001) GOTO 30
 IF (ABS(f1).LT.ABS(f2)) THEN
 x2 = x3
 f2 = f3
 ELSE
 x1 = x3
 f1 = f3
 ENDIF
 20 CONTINUE
 ENDIF
 30 Gamasq = x3
 RETURN
 END
C================================================== STUTP =======
 FUNCTION STUTP(X,N)
 REAL a, b, GAUSCF, rhpi, STUTP, t, X, y, z
 INTEGER j, N, nn
C
C STUDENT T PROBABILITY
C STUTP = PROB( STUDENT T WITH N DEG FR .LT. X )
C
C NOTE - PROB(ABS(T).GT.X) = 2.*STUTP(-X,N) (FOR X .GT. 0.)
C
C SUBPGM USED - GAUSCF
C
C REF - G.W. HILL, ACM ALGOR 395, OCTOBER 1970.
C
C USGS - WK 12/79.
C
C
 DATA rhpi/.63661977/
C
 STUTP = .5
 IF (N.LT.1) RETURN
C
```

```
 nn = N
 z = 1.
 t = X**2
 y = t/nn
 b = 1.0 + y
C
 IF (.NOT.(nn.GE.20.AND.t.LT.nn.OR.nn.GT.200)) THEN
C ( OR IF NN NON-INTEGER)
C
 IF (nn.LT.20 .AND. t.LT.4.) THEN
C
C -- NESTED SUMMATION OF COSINE SERIES
 y = SQRT(y)
 a = y
 IF (nn.EQ.1) a = 0.
 ELSE
C
C -- TAIL SERIES FOR LARGE T
 a = SQRT(b)
 y = a*nn
 j = 0
 10 j = j + 2
 IF (a.EQ.z) THEN
 nn = nn + 2
 z = 0.
 y = 0.
 a = -a
 ELSE
 z = a
 y = y*(j-1)/(b*j)
 a = a + y/(nn+j)
 GOTO 10
 ENDIF
 ENDIF
 20 nn = nn - 2
 IF (nn.LE.1) THEN
 IF (nn.EQ.0) a = a/SQRT(b)
 IF (nn.NE.0) a = (ATAN(y)+a/b)*rhpi
 STUTP = 0.5*(z-a)
 IF (X.GT.0.) STUTP = 1. - STUTP
 RETURN
 ELSE
 a = (nn-1)/(b*nn)*a + y
 GOTO 20
 ENDIF
 ENDIF
```

```
C
C -- ASYMPTOTIC SERIES FOR LARGE OR NONINTEGER N
 IF (y.GT.1E-6) y = ALOG(b)
 a = nn - 0.5
 b = 48.*a**2
 y = a*y
 y = (((((-0.4*y-3.3)*y-24.)*y-85.5)/(0.8*y**2+100.+b)+y+3.)/b+1.)
 & *SQRT(y)
 STUTP = GAUSCF(-y)
 IF (X.GT.0.) STUTP = 1. - STUTP
 RETURN
C
 END
 SUBROUTINE INVERT(N,NDIM,DET,COVINV,COV)
c IMPLICIT REAL*8 (A-H,O-Z)
 INTEGER i, im, j, k, N, NDIM
 REAL DET, detl, sum, temp, COVINV(NDIM,NDIM), COV(NDIM,NDIM),
 & b(50,50), a(50,50)
C ---------------------------------------------------------------
C COV IS AN N*N MATRIX
C SUBROUTINE COMPUTES DETERMINANT OF COV THEN REPLACES COV WITH ITS
C INVERSE
C B IS THE LOWER TRIANGULAR DECOMPOSITION OF COV
C ---------------------------------------------------------------
c COMMON /PSTAR/ PINV(75,75)
C
 IF (N.EQ.2) THEN
 DET = COV(1,1)*COV(2,2) - COV(1,2)**2
 temp = COV(1,1)/DET
 COVINV(1,1) = COV(2,2)/DET
 COVINV(2,2) = temp
 COVINV(1,2) = -COV(1,2)/DET
 COVINV(2,1) = COVINV(1,2)
 ELSE
C
c WRITE(*,9)((B(I,J),J=1,N), I=1,N)
 CALL DECOMP(N,NDIM,COV,b)
 detl = b(1,1)
 DO 10 i = 2, N
 detl = detl*b(i,i)
 10 CONTINUE
 DET = detl**2
c IF ( DET.EQ.0.0 ) THEN
c WRITE (6,9010)
C STOP
c ENDIF
```

```
C
 a(1,1) = 1./b(1,1)
 a(2,2) = 1./b(2,2)
 a(2,1) = -b(2,1)*a(1,1)*a(2,2)
C
 DO 40 i = 3, N
 a(i,i) = 1./b(i,i)
 im = i - 1
 DO 30 k = 1, im
 sum = 0.
 DO 20 j = k, im
 sum = sum + b(i,j)*a(j,k)
 20 CONTINUE
 a(i,k) = -sum*a(i,i)
 30 CONTINUE
 40 CONTINUE
C
 DO 70 i = 1, N
 DO 60 j = 1, i
 sum = 0.
 DO 50 k = i, N
 sum = sum + a(k,i)*a(k,j)
 50 CONTINUE
 COVINV(i,j) = sum
 COVINV(j,i) = sum
 60 CONTINUE
 70 CONTINUE
 ENDIF
 RETURN
 9005 FORMAT (1X,' PROCESSING STOPPED -- SINGULAR MATRIX')
 END
 SUBROUTINE DECOMP(N,NDIM,XLAM,B)
c IMPLICIT REAL*8 (A-H,O-Z)
 INTEGER is, ism, js, jsm, ks, N, NDIM
 REAL XLAM(NDIM,NDIM), B(50,50), bh, bn
C ---------------------------------------------------------------
C CHOLESKY DECOMPOSITION BB-TRANSPOSE = XLAM
C ---------------------------------------------------------------
 IF (XLAM(1,1).LE.0. .OR. XLAM(2,2).LE.0.) WRITE (*,9005) N, NDIM,
 & XLAM(1,1), XLAM(2,1), XLAM(2,2), XLAM(1,2)
 B(1,1) = SQRT(XLAM(1,1))
 B(1,2) = 0.
 B(2,1) = XLAM(2,1)/B(1,1)
C WRITE(1,9010)B(2,2)
 B(2,2) = SQRT(XLAM(2,2)-B(2,1)**2)
CC WRITE(6,9015) NDIM, B(1,1),B(2,1),B(2,2)
```

```
 IF (N.LE.2) RETURN
C
 DO 30 is = 3, N
 B(is,1) = XLAM(is,1)/B(1,1)
 bn = XLAM(is,is) - B(is,1)**2
 ism = is - 1
 DO 20 js = 2, ism
 jsm = js - 1
 bh = XLAM(is,js)
 DO 10 ks = 1, jsm
 bh = bh - B(is,ks)*B(js,ks)
 10 CONTINUE
 B(is,js) = bh/B(js,js)
 bn = bn - B(is,js)**2
 20 CONTINUE
 IF (bn.LE.0.) WRITE (1,9010) bn
 B(is,is) = SQRT(AMAX1(bn,0.00))
 30 CONTINUE
 RETURN
 9005 FORMAT (‘ IN DECOMP/ N, NDIM,XLAM 1-1,2-1,2-2,1-2 = ‘,2I5,/,
 & 4G13.4,/,’ COVARIANCE MATRIX NOT POSITIVE DEFINITE’)
 9010 FORMAT (1X,’ COVARIANCE MATRIX NOT POSITIVE DEFINITE BN=’,F10.3)
 END
C###gausex.spg processed by SPAG 3.023 at 12:04 on 8 Feb 1995
C================================================
C================================================ GAUSEX ======
 FUNCTION GAUSEX(EXPROB)
 REAL ax, c0, c1, c2, CUMPRB, d, d1, d2, d3, EXPROB, GAUSEX, p, pr,
 & t, xlim, XX
C
C GAUSSIAN PROBABILITY FUNCTIONS W.KIRBY JUNE 71
C GAUSEX=VALUE EXCEEDED WITH PROB EXPROB
C GAUSAB=VALUE (NOT EXCEEDED) WITH PROBCUMPROB
C GAUSCF=CUMULATIVE PROBABILITY FUNCTION
C GAUSDY=DENSITY FUNCTION
C SUBPGMS USED -- NONE
C
C GAUSCF MODIFIED 740906 WK -- REPLACED ERF FCN REF BY RATIONAL APPRX N
C ALSO REMOVED DOUBLE PRECISION FROM GAUSEX AND GAUSAB.
C 76-05-04 WK -- TRAP UNDERFLOWS IN EXP IN GUASCF AND DY.
C
C
 DATA xlim/18.3/
 DATA c0, c1, c2/2.51551700, .8028530000, .0103280000/
 DATA d1, d2, d3/1.432788000, .1892690000, .0013080000/
C
```

```
 p = EXPROB
 10 IF (p.GE.1.0) THEN
 GAUSEX = -10.
 ELSEIF (p.GT.0.) THEN
 pr = p
 IF (p.GT..5) pr = 1.00 - pr
 t = SQRT(-2.00*ALOG(pr))
 GAUSEX = t - (c0+t*(c1+t*c2))/(1.0+t*(d1+t*(d2+t*d3)))
 IF (p.GT..5) GAUSEX = -GAUSEX
 ELSE
 GAUSEX = +10.
 ENDIF
 RETURN
C
 ENTRY GAUSAB(CUMPRB)
 GAUSAB = 0.
 p = 1. - CUMPRB
 GOTO 10
C
 ENTRY GAUSCF(XX)
 ax = ABS(XX)
 GAUSCF = 1.
 IF (ax.LE.xlim) THEN
 t = 1.0/(1.0+.2316419*ax)
 d = 0.3989423*EXP(-XX*XX*.5)
 GAUSCF = 1. -
 & d*t*((((1.330274*t-1.821256)*t+1.781478)*t-0.3565638)
 & *t+0.3193815)
 ENDIF
 IF (XX.LT.0) GAUSCF = 1. - GAUSCF
 RETURN
C
 ENTRY GAUSDY(XX)
 GAUSDY = 0.
 IF (ABS(XX).GT.xlim) RETURN
 GAUSDY = .3989423*EXP(-.500*XX*XX)
 RETURN
 END
c
c
 SUBROUTINE MLTPLY(PROD,X,Y,K1,K2,K3,N1,N2,N3)
c IMPLICIT REAL*8 (A-H,O-Z)
 INTEGER i, j, k, K1, K2, K3, N1, N2, N3
 REAL PROD(N1,K3), X(N2,K2), Y(N3,K3), sum
C -------------------------------------------------------------
C X IS K1*K2 MATRIX
```

```
C Y IS K2*K3 MATRIX
C PROD = X*Y IS A K1*K3 MATRIX
C ------------------------------------------------------------
 DO 30 i = 1, K1
 DO 20 k = 1, K3
 sum = 0.
 DO 10 j = 1, K2
 sum = sum + X(i,j)*Y(j,k)
 10 CONTINUE
 PROD(i,k) = sum
 20 CONTINUE
 30 CONTINUE
 RETURN
 END
c subroutine outputs results to screen and file
c
 SUBROUTINE OUTPUT(IOUT,IPK,PRU)
 REAL AK, arhoc, sig
 REAL eqyrs, cl90, cookd, cu90, delres, errmod, hatdig, hmax, pred,
 & press, pru, prx, pv4, resid, samerr, sdbeta, sepc, sepu,
 & smod, hat(50,50), hats(50,50)
 REAL ssam, stdres, STUTP, sum, tbeta, test1, test2, tstat, tv4,
 & varres, vpu, work1(50,1), work3(10,50), work2(10,1), xo(1,10)
 & , xot(10,1), ccc(1,1)
 INTEGER i, IOUT, IPK, iu, j, l, ndf
 INCLUDE 'ark.cmn'
C
C
 pru = 0.0
 DO 30 iu = 1, Ne
 pru = pru + Bhat(iu,1)*Uv(iu)
 30 CONTINUE
 IF (IOUT.GT.0) THEN
 WRITE (16,9005) Siteid, Pklab(IPK)
c WRITE (*,9005) Pklab(IPK)
C
C WRITE BETAS
C
c WRITE (*,9010) IOUT
 IF (IOUT.LT.99) WRITE (16,9010) IOUT
 WRITE (16,9015)
c WRITE (*,9015)
 sdbeta = SQRT(Xtxinv(1,1))
 tbeta = Bhat(1,1)/sdbeta
c WRITE (*,9020) Bhat(1,1), sdbeta, tbeta
 WRITE (16,9020) Bhat(1,1), sdbeta, tbeta
```

```
 DO 10 i = 2, Ne
 sdbeta = SQRT(Xtxinv(i,i))
 tbeta = Bhat(i,1)/sdbeta
 ndf = Nsites - Ne
 tv4 = ABS(tbeta)
 pv4 = 2.0*STUTP(-tv4,ndf)
 IF (pv4.LT..0001) pv4 = .0001
 WRITE (16,9025) Ylab(i-1), Bhat(i,1), sdbeta, tbeta, pv4
c WRITE (*,9025) Ylab(i-1), Bhat(i,1), sdbeta, tbeta, pv4
 10 CONTINUE
 CALL MLTPLY(work1,X,Bhat,Nsites,Ne,1,50,50,10)
C
C WRITE PREDICTED VALUES ETC.
C
 IF (IOUT.EQ.99) THEN
 WRITE (16,9030)
c WRITE (*,9030)
 smod = 0.
 ssam = 0.
 press = 0.0
 hmax = 0.0
 CALL MLTPLY(work3,Xtxinv,Xt,Ne,Ne,Nsites,10,10,10)
 CALL MLTPLY(hats,X,work3,Nsites,Ne,Nsites,50,50,10)
 CALL MLTPLY(hat,hats,Wt,Nsites,Nsites,Nsites,50,50,50)
 DO 20 i = 1, Nsites
 pred = work1(i,1)
 resid = Y(i,1) - work1(i,1)
 samerr = hats(i,i)
 IF (samerr.GT.hmax) hmax = samerr
 hatdig = hat(i,i)
 delres = resid/(1.0-hatdig)
 errmod = Gamasq
 varres = Gamasq + Sta(i) - samerr
 stdres = resid/SQRT(varres)
 cookd = stdres**2*samerr/(Ne*(Gamasq+Sta(i)-samerr))
 test1 = 2.*Ne/Nsites
 test2 = 4./Nsites
c IF ( hatdig.GT.test1 .OR. cookd.GT.test2 ) THEN
 WRITE (16,9035) Stano(i), Y(i,1), pred, stdres, hatdig,
 & cookd
c WRITE (*,9035) Stano(i), Y(i,1), pred, stdres, hatdig,
c & cookd
c ENDIF
 ssam = ssam + samerr
 press = press + delres**2
 20 CONTINUE
```

```
C
C WRITE AVG SAMPLING ERROR AND MODEL ERROR
C
 ssam = ssam/Nsites
 smod = smod/Nsites
 press = press/Nsites
 Atse = Atse/Nsites
 Atscov = Atscov/(Nsites/2.0*(Nsites-1))
 arhoc = Atscov/Atse
 WRITE (16,9040) ssam, errmod, press, Atse, arhoc, hmax
c WRITE (*,9040) ssam, errmod, press, Atse,Arhoc, hmax
c
c Write out prediction for ungaged site
c
 DO 40 l = 1, Ne
c sum = 0.0
c DO 90 j = 1, Ne
c sum = sum + Xtxinv(l,j)*Uv(j)
c90 CONTINUE
c work2(l,1) = sum
 xo(1,l) = Uv(l)
 xot(l,1) = Uv(l)
 40 CONTINUE
c sum = 0.0
c DO 120 j = 1, Ne
c sum = sum + Uv(j)*work2(j,1)
 CALL MLTPLY(work2,Xtxinv,xot,Ne,Ne,1,10,10,10)
 CALL MLTPLY(ccc,xo,work2,1,Ne,1,1,1,10)
 sepu = ccc(1,1)
 vpu = Gamasq + sepu
 eqyrs = sig**2*(1.+AK(IPK)**2/2.)/vpu
c
c convert to cfs and percent error
c
 prx = 10**pru
 sepc = 100.*SQRT(EXP(vpu*5.302)-1.)
 tstat = SQRT(vpu)*1.65
 cu90 = 10**(tstat+pru)
 cl90 = 10**(pru-tstat)
 IF (units.EQ.'M' .OR. units.EQ.'m') THEN
 WRITE (16,9050) Siteid, Area, Slope, Precip, Elev, Shape,
 & Pklab(IPK), prx, sepc, eqyrs, cl90, cu90
 WRITE (*,9060) Pklab(IPK), prx, sepc, eqyrs, cl90, cu90
 ELSE
 WRITE (16,9045) Siteid, Area, Slope, Precip, Elev, Shape,
 & Pklab(IPK), prx, sepc, eqyrs, cl90, cu90
```

```
 WRITE (*,9055) Pklab(IPK), prx, sepc, eqyrs, cl90, cu90
 ENDIF
 IF (sepu.GT.hmax) WRITE (16,9065)
 IF ( sepu.GT.hmax ) then
 print *, ‘ WARNING: Prediction is an extrapolation beyond’
 print *, ‘ observed data. Check for errors in input basin’
 print *, ‘ characteristics. If no errors use results with’
 print *, ‘ caution.’
 END IF
c ENDFILE (16)
 ENDIF
 ENDIF
 RETURN
 9005 FORMAT (//,’ SUMMARY OF REGRESSION FOR’,1x,a32,/,1x,a8,’YR-PEAK’)
 9010 FORMAT (/,’ **** STEP’,i2,’****’)
 9015 FORMAT (/,’ REGRESSION COEFFICIENTS’,/,
 & ‘ VARIABLE COEFFICIENT STANDARD ERROR T FOR H0:BETA=0’
 & ,’ PROB>|T|’,/)
 9020 FORMAT (‘ CONSTANT’,5X,3F15.5)
 9025 FORMAT (2X,A8,5X,3F15.5,f15.4)
 9030 FORMAT (//,’ Residuals and influence statistics ‘,/,
 & ‘ id ‘,t15,’ obs’,t27,’ pred’,t39,’ std res’,t51,
 & ‘ leverage’,t62,’ cook D’,/)
 9035 FORMAT (1X,F10.0,10F12.5)
 9040 FORMAT (//,’ AVERAGE SAMPLING ERROR VARIANCE’,F10.4,/,
 & ‘ AVERAGE MODEL ERROR VARIANCE ‘,F10.4,/,
 & ‘ PRESS/N ‘,F10.4,/,
 & ‘ AVERAGE SQ. TIME-SAMPLING ERROR’,f10.4,/,
 & ‘ Average Cross Correlation ‘,f10.4,/,
 & ‘ H MAX ‘,f10.4)
 9045 FORMAT (//,t10,’ ********************************************’,/,
 & ‘ For ‘,a30,/,’ area=’,f10.2,’ : slope=’,f7.2,’ precip’,
 & f6.1,’ elev’,f5.0,’ shape’,f7.2,/,a8,’YEAR PEAK’,/,
 & ‘ PREDICTED(cfs) SE(%) EQ YRS 90% PRED INT’
 & ,/,f12.0,f12.0,f12.2,f12.0,f12.0,/,t10,
 & ‘ ********************************************’)
 9050 FORMAT (//,t10,’ ********************************************’,/,
 & ‘ For ‘,a30,/,’ area=’,f10.2,’ : slope=’,f7.2,’ precip’,
 & f6.1,’ elev’,f5.0,’ shape’,f7.2,/,a8,’YEAR PEAK’,/,
 & ‘ PREDICTED(cms) SE(%) EQ YRS 90% PRED INT’
 & ,/,f12.1,f12.0,f12.2,f12.1,f12.1,/,t10,
 & ‘ ********************************************’)
 9055 FORMAT (a8,f12.0,f12.0,f12.2,f12.0,f12.0)
 9060 FORMAT (a8,f12.1,f12.0,f12.2,f12.1,f12.1)
 9065 FORMAT (/,
 & ‘ WARNING: Prediction is outside range of observed data ‘
```

```
 & ,/)
 END
c
 SUBROUTINE RRE
 CHARACTER*32 Site
 COMMON /SS / Site
 CHARACTER*1 region, xansw
c
 10 PRINT *, ‘ ENTER site id’
 READ (5,9005) Site
 PRINT *, ‘ ENTER region where site is located (A,B,C,orD)’
 READ (*,*) region
 IF (region.EQ.’A’ .OR. region.EQ.’a’) CALL REGA
 IF (region.EQ.’B’ .OR. region.EQ.’b’) CALL REGB
 IF (region.EQ.’C’ .OR. region.EQ.’c’) CALL REGC
 IF (region.EQ.’D’ .OR. region.EQ.’d’) CALL REGD
 PRINT *, ‘ Do you want to enter another site? (y or n)’
 READ (*,*) xansw
 IF (xansw.EQ.’N’ .OR. xansw.EQ.’n’) RETURN
 GOTO 10
 9005 FORMAT (a32)
 END
c
c
c
 SUBROUTINE REGA
 INTEGER i, ip, iwarn, j
 REAL sepc
 CHARACTER*1 Units
 CHARACTER*32 Site
 COMMON /SS / Site
 COMMON /YY4 / Units
 INTEGER it
 REAL bs, v, vt, xtxi, temp, temp2, stut, area, slope, vmodel,
 & yhat, t, cu, cl, vpi, sig, samax, eqyrs, xt1, xt2, ak
c
 DIMENSION it(7), bs(3,7), v(1,3), vt(3,1), xt1(3,3,4), xtxi(3,3),
 & temp(1,3), temp2(1,1), ak(7), vmodel(7), samax(7),
 & xt2(3,3,3)
c
 DATA stut/1.68/, sig/.3180/
 DATA it/2, 5, 10, 25, 50, 100, 500/
 DATA samax/0.94838E-02, 0.63822E-02, 0.63180E-02, 0.72732E-02,
 & 0.84366E-02, 0.98643E-02, 0.13955E-01/
 DATA ak/0.0, 0.84162, 1.28155, 1.75069, 2.05375, 2.32635, 2.87816/
 DATA bs/2.06880, 0.79478, 0.11299, 2.27874, 0.80210, 0.15675,
```

```
 & 2.38478, 0.80377, 0.17784, 2.49631, 0.80365, 0.19740,
 & 2.56646, 0.80314, 0.20903, 2.62753, 0.80271, 0.21931,
 & 2.74368, 0.80252, 0.24068/
 DATA vmodel/0.28126E-01, 0.16411E-01, 0.14645E-01, 0.15633E-01,
 & 0.17797E-01, 0.20824E-01, 0.30478E-01/
 DATA xt1/0.43958E-01, -0.84934E-02, -0.20778E-01, -0.84934E-02,
 & 0.19881E-02, 0.38672E-02, -0.20778E-01, 0.38672E-02,
 & 0.10470E-01, 0.28758E-01, -0.55300E-02, -0.13505E-01,
 & -0.55300E-02, 0.12892E-02, 0.25086E-02, -0.13505E-01,
 & 0.25086E-02, 0.68686E-02, 0.28131E-01, -0.53942E-02,
 & -0.13171E-01, -0.53942E-02, 0.12524E-02, 0.24421E-02,
 & -0.13171E-01, 0.24421E-02, 0.67215E-02, 0.32287E-01,
 & -0.61810E-02, -0.15107E-01, -0.61810E-02, 0.14299E-02,
 & 0.27960E-02, -0.15107E-01, 0.27960E-02, 0.77168E-02/
 DATA xt2/0.37561E-01, -0.71885E-02, -0.17591E-01, -0.71885E-02,
 & 0.16605E-02, 0.32527E-02, -0.17591E-01, 0.32527E-02,
 & 0.89802E-02, 0.44122E-01, -0.84452E-02, -0.20693E-01,
 & -0.84452E-02, 0.19493E-02, 0.38241E-02, -0.20693E-01,
 & 0.38241E-02, 0.10554E-01, 0.63179E-01, -0.12103E-01,
 & -0.29736E-01, -0.12103E-01, 0.27925E-02, 0.54910E-02,
 & -0.29736E-01, 0.54910E-02, 0.15129E-01/
c
c
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 PRINT *, ' ENTER watershed characteristics for site'
 PRINT *, ' Drainage area (sq. km) ='
 READ (*,*) area
 PRINT *, ' Basin slope (m/km)='
 READ (*,*) slope
 WRITE (*,9005) Site, area, slope
 WRITE (16,9005) Site, area, slope
c
c convert to english
 area = area*.3861007
 slope = slope*5.28001
c precip=precip*.3937008
c elev=elev*3.28084
c
 ELSE
 PRINT *, ' ENTER watershed characteristics for site'
 PRINT *, ' Drainage area (sq. mi.) ='
 READ (*,*) area
 PRINT *, ' Basin slope (ft./mi.)='
 READ (*,*) slope
 WRITE (*,9010) Site, area, slope
 WRITE (16,9010) Site, area, slope
```

```
 ENDIF
 v(1,1) = 1.0
 v(1,2) = ALOG10(area)
 v(1,3) = ALOG10(slope)
 vt(1,1) = 1.0
 vt(2,1) = v(1,2)
 vt(3,1) = v(1,3)
 iwarn = 0
 DO 30 ip = 1, 7
 yhat = bs(1,ip) + bs(2,ip)*v(1,2) + bs(3,ip)*v(1,3)
 yhat = 10**yhat
 IF (Units.EQ.'M' .OR. Units.EQ.'m') yhat = yhat*.02831685
c
c Compute CI
c
 DO 20 i = 1, 3
 DO 10 j = 1, 3
 IF (ip.LE.4) THEN
 xtxi(i,j) = xt1(i,j,ip)
 ELSE
 xtxi(i,j) = xt2(i,j,ip-4)
 ENDIF
 10 CONTINUE
 20 CONTINUE
 CALL MLTPLY(temp,v,xtxi,1,3,3,1,1,3)
 CALL MLTPLY(temp2,temp,vt,1,3,1,1,1,3)
 vpi = vmodel(ip) + temp2(1,1)
 sepc = 100.*SQRT(EXP(vpi*5.302)-1.)
 t = 10**(stut*vpi**.5)
 eqyrs = sig**2*(1.+ak(ip)**2/2.)/vpi
 cu = yhat*t
 cl = yhat/t
 CALL ROUND(yhat)
 CALL ROUND(cu)
 CALL ROUND(cl)
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 WRITE (16,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 ELSE
 WRITE (16,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 ENDIF
 IF (temp2(1,1).GT.samax(ip)) iwarn = 1
 30 CONTINUE
 IF (iwarn.GT.0) WRITE (*,9015)
 IF (iwarn.GT.0) WRITE (16,9015)
```

```
 RETURN
 9005 FORMAT (//,' Flood frequency estimates for',/,1x,a32,/,
 & ' Region A: area=',f10.2,' : slope=',f7.2,/,
 & ' RI DISCHARGE SE(%) EQ. YRS. 90%',
 & ' PRED. INTERVAL',/,t12,' (cms)')
 9010 FORMAT (//,' Flood frequency estimates for',/,1x,a32,/,
 & ' Region A: area=',f10.2,' : slope=',f7.2,/,
 & ' RI DISCHARGE SE(%) EQ. YRS. 90%',
 & ' PRED. INTERVAL',/,t12,' (cfs)')
 9015 FORMAT (//,' WARNING -- Prediction beyond observed data')
 9020 FORMAT (2x,i4,f12.0,f12.0,f12.2,f12.0,f12.0)
 9025 FORMAT (2x,i4,f12.1,f12.0,f12.2,f12.1,f12.1)
 END
c
c
 SUBROUTINE REGB
 REAL elev, sepc, shape
 INTEGER i, ip, iwarn, j
 CHARACTER*1 Units
 CHARACTER*32 Site
 COMMON /SS / Site
 COMMON /YY4 / Units
 INTEGER it
 REAL bs, v, vt, xtxi, temp, temp2, stut, area, vmodel,
 & yhat, t, cu, cl, vpi, sig, samax, eqyrs, xt1, xt2, ak
c
 DIMENSION it(7), bs(4,7), v(1,4), vt(4,1), xt1(4,4,4), xtxi(4,4),
 & temp(1,4), temp2(1,1), ak(7), vmodel(7), samax(7),
 & xt2(4,4,3)
c
 DATA stut/1.68/, sig/.3092/
 DATA it/2, 5, 10, 25, 50, 100, 500/
c
 DATA samax/0.64669E-02, 0.63793E-02, 0.68051E-02, 0.76395E-02,
 & 0.84057E-02, 0.92608E-02, 0.11525E-01/
c
 DATA ak/0.0, 0.84162, 1.28155, 1.75069, 2.05375, 2.32635, 2.87816/
c
 DATA bs/ - 0.00728, 0.74484, 0.92724, 0.34165, 0.45464, 0.73483,
 & 0.87506, 0.39609, 0.66912, 0.72909, 0.85444, 0.42164,
 & 0.87278, 0.72268, 0.83865, 0.44589, 0.99113, 0.71850,
 & 0.83165, 0.45998, 1.08957, 0.71478, 0.82722, 0.47174,
 & 1.26840, 0.70763, 0.82292, 0.49360/
c
 DATA vmodel/0.27452E-01, 0.24150E-01, 0.23081E-01, 0.22754E-01,
 & 0.23142E-01, 0.23983E-01, 0.27407E-01/
```

```
c
 DATA xt1/0.71741E-01, -0.10264E-02, -0.27396E-01, -0.55925E-02,
 & -0.10264E-02, 0.66625E-03, 0.53591E-03, 0.22025E-02,
 & -0.27396E-01, 0.53591E-03, 0.11417E-01, 0.52948E-02,
 & -0.55925E-02, 0.22025E-02, 0.52948E-02, 0.16780E-01,
 & 0.68235E-01, -0.80566E-03, -0.26047E-01, -0.47717E-02,
 & -0.80566E-03, 0.62328E-03, 0.42576E-03, 0.20176E-02,
 & -0.26047E-01, 0.42576E-03, 0.10838E-01, 0.47109E-02,
 & -0.47717E-02, 0.20176E-02, 0.47109E-02, 0.15313E-01,
 & 0.71592E-01, -0.69766E-03, -0.27276E-01, -0.44413E-02,
 & -0.69766E-03, 0.63613E-03, 0.37304E-03, 0.20232E-02,
 & -0.27276E-01, 0.37304E-03, 0.11313E-01, 0.45948E-02,
 & -0.44413E-02, 0.20232E-02, 0.45948E-02, 0.15311E-01,
 & 0.79089E-01, -0.59322E-03, -0.30067E-01, -0.42279E-02,
 & -0.59322E-03, 0.68129E-03, 0.32433E-03, 0.21243E-02,
 & -0.30067E-01, 0.32433E-03, 0.12423E-01, 0.46561E-02,
 & -0.42279E-02, 0.21243E-02, 0.46561E-02, 0.16005E-01/
c
 DATA xt2/0.86212E-01, -0.53420E-03, -0.32741E-01, -0.41977E-02,
 & -0.53420E-03, 0.73047E-03, 0.29900E-03, 0.22517E-02,
 & -0.32741E-01, 0.29900E-03, 0.13500E-01, 0.48209E-02,
 & -0.41977E-02, 0.22517E-02, 0.48209E-02, 0.16906E-01,
 & 0.94265E-01, -0.48791E-03, -0.35780E-01, -0.42600E-02,
 & -0.48791E-03, 0.78990E-03, 0.28143E-03, 0.24146E-02,
 & -0.35780E-01, 0.28143E-03, 0.14733E-01, 0.50675E-02,
 & -0.42600E-02, 0.24146E-02, 0.50675E-02, 0.18066E-01, 0.11584,
 & -0.41745E-03, -0.43973E-01, -0.47028E-02, -0.41745E-03,
 & 0.96064E-03, 0.26468E-03, 0.29070E-02, -0.43973E-01,
 & 0.26468E-03, 0.18081E-01, 0.59015E-02, -0.47028E-02,
 & 0.29070E-02, 0.59015E-02, 0.21590E-01/
c
c
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 PRINT *, ' ENTER watershed characteristics for site'
 PRINT *, ' Drainage area (sq. km) ='
 READ (*,*) area
 PRINT *, ' Basin elevation (m)='
 READ (*,*) elev
 PRINT *, ' Basin shape factor='
 READ (*,*) shape
 WRITE (*,9005) Site, area, elev, shape
 WRITE (16,9005) Site, area, elev, shape
c
c convert to english
 area = area*.3861007
c slope=slope*5.28001
```

```
c precip=precip*.3937008
 elev = elev*3.28084
c
 ELSE
 PRINT *, ‘ ENTER watershed characteristics for site’
 PRINT *, ‘ Drainage area (sq. mi.) =’
 READ (*,*) area
 PRINT *, ‘ Basin elev (ft.)=’
 READ (*,*) elev
 PRINT *, ‘ Basin shape factor=’
 READ (*,*) shape
 WRITE (*,9010) Site, area, elev, shape
 WRITE (16,9010) Site, area, elev, shape
 ENDIF
 v(1,1) = 1.0
 v(1,2) = ALOG10(area)
 v(1,3) = ALOG10(elev)
 v(1,4) = ALOG10(shape)
 vt(1,1) = 1.0
 vt(2,1) = v(1,2)
 vt(3,1) = v(1,3)
 vt(4,1) = v(1,4)
 iwarn = 0
 DO 30 ip = 1, 7
 yhat = bs(1,ip) + bs(2,ip)*v(1,2) + bs(3,ip)*v(1,3) + bs(4,ip)
 & *v(1,4)
 yhat = 10**yhat
 IF (Units.EQ.’M’ .OR. Units.EQ.’m’) yhat = yhat*.02831685
c
c Compute CI
c
 DO 20 i = 1, 4
 DO 10 j = 1, 4
 IF (ip.LE.4) THEN
 xtxi(i,j) = xt1(i,j,ip)
 ELSE
 xtxi(i,j) = xt2(i,j,ip-4)
 ENDIF
 10 CONTINUE
 20 CONTINUE
 CALL MLTPLY(temp,v,xtxi,1,4,4,1,1,4)
 CALL MLTPLY(temp2,temp,vt,1,4,1,1,1,4)
 vpi = vmodel(ip) + temp2(1,1)
 sepc = 100.*SQRT(EXP(vpi*5.302)-1.)
 t = 10**(stut*vpi**.5)
 eqyrs = sig**2*(1.+ak(ip)**2/2.)/vpi
```

```
 cu = yhat*t
 cl = yhat/t
 CALL ROUND(yhat)
 CALL ROUND(cu)
 CALL ROUND(cl)
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 WRITE (16,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 ELSE
 WRITE (16,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 ENDIF
 IF (temp2(1,1).GT.samax(ip)) iwarn = 1
 30 CONTINUE
 IF (iwarn.GT.0) WRITE (*,9015)
 IF (iwarn.GT.0) WRITE (16,9015)
 RETURN
 9005 FORMAT (//,' Flood frequency estimates for',/,1x,a32,/,
 & ' Region B: area=',f10.2,' : elev =',f7.2,' : shape=',
 & f7.2,/,
 & ' RI DISCHARGE SE(%) EQ. YRS. 90%',
 & ' PRED. INTERVAL',/,t12,' (cms)')
 9010 FORMAT (//,' Flood frequency estimates for',/,1x,a32,/,
 & ' Region B: area=',f10.2,' : elev =',f7.2,' : shape=',
 & f7.2,/,
 & ' RI DISCHARGE SE(%) EQ. YRS. 90%',
 & ' PRED. INTERVAL',/,t12,' (cfs)')
 9015 FORMAT (//,' WARNING -- Prediction beyond observed data')
 9020 FORMAT (2x,i4,f12.0,f12.0,f12.2,f12.0,f12.0)
 9025 FORMAT (2x,i4,f12.1,f12.0,f12.2,f12.1,f12.1)
 END
c
c
 SUBROUTINE REGC
 INTEGER i, ip, iwarn, j
 REAL sepc
 CHARACTER*1 Units
 CHARACTER*32 Site
 COMMON /SS / Site
 COMMON /YY4 / Units
 INTEGER it
 REAL bs, v, vt, xtxi, temp, temp2, stut, area, vmodel,
 & yhat, t, cu, cl, vpi, sig, samax, eqyrs, xt1, xt2, ak
c
 DIMENSION it(7), bs(2,7), v(1,2), vt(2,1), xt1(2,2,4), xtxi(2,2),
 & temp(1,2), temp2(1,1), ak(7), vmodel(7), samax(7),
```

```
 & xt2(2,2,3)
c
 DATA stut/1.68/, sig/.2868/
 DATA it/2, 5, 10, 25, 50, 100, 500/
c
 DATA samax/0.38072E-02, 0.35144E-02, 0.36334E-02, 0.39245E-02,
 & 0.42008E-02, 0.45142E-02, 0.53730E-02/
c
 DATA ak/0.0, 0.84162, 1.28155, 1.75069, 2.05375, 2.32635, 2.87816/
c
 DATA bs/2.44505, 0.66926, 2.68623, 0.67584, 2.80419, 0.67970,
 & 2.92246, 0.68419, 2.99484, 0.68713, 3.05748, 0.68966,
 & 3.17832, 0.69401/
c
 DATA vmodel/0.29328E-01, 0.23652E-01, 0.21691E-01, 0.20272E-01,
 & 0.19808E-01, 0.19779E-01, 0.21189E-01/
c
 DATA xt1/0.21520E-02, -0.55105E-03, -0.55105E-03, 0.37088E-03,
 & 0.20390E-02, -0.49713E-03, -0.49713E-03, 0.31981E-03,
 & 0.21528E-02, -0.50282E-03, -0.50282E-03, 0.31368E-03,
 & 0.23786E-02, -0.52920E-03, -0.52920E-03, 0.31993E-03/
c
 DATA xt2/0.25786E-02, -0.55765E-03, -0.55765E-03, 0.33140E-03,
 & 0.27968E-02, -0.59216E-03, -0.59216E-03, 0.34758E-03,
 & 0.33659E-02, -0.69466E-03, -0.69466E-03, 0.40158E-03/
c
c
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 PRINT *, ' ENTER watershed characteristics for site'
 PRINT *, ' Drainage area (sq. km) ='
 READ (*,*) area
 WRITE (*,9005) Site, area
 WRITE (16,9005) Site, area
c
c convert to english
 area = area*.3861007
c slope=slope*5.28001
c precip=precip*.3937008
c elev=elev*3.28084
c
 ELSE
 PRINT *, ' ENTER watershed characteristics for site'
 PRINT *, ' Drainage area (sq. mi.) ='
 READ (*,*) area
 WRITE (*,9010) Site, area
 WRITE (16,9010) Site, area
```

```
 ENDIF
 v(1,1) = 1.0
 v(1,2) = ALOG10(area)
 vt(1,1) = 1.0
 vt(2,1) = v(1,2)
 iwarn = 0
 DO 30 ip = 1, 7
 yhat = bs(1,ip) + bs(2,ip)*v(1,2)
 yhat = 10**yhat
 IF (Units.EQ.'M' .OR. Units.EQ.'m') yhat = yhat*.02831685
c
c Compute CI
c
 DO 20 i = 1, 2
 DO 10 j = 1, 2
 IF (ip.LE.4) THEN
 xtxi(i,j) = xt1(i,j,ip)
 ELSE
 xtxi(i,j) = xt2(i,j,ip-4)
 ENDIF
 10 CONTINUE
 20 CONTINUE
 CALL MLTPLY(temp,v,xtxi,1,2,2,1,1,2)
 CALL MLTPLY(temp2,temp,vt,1,2,1,1,1,2)
 vpi = vmodel(ip) + temp2(1,1)
 sepc = 100.*SQRT(EXP(vpi*5.302)-1.)
 t = 10**(stut*vpi**.5)
 eqyrs = sig**2*(1.+ak(ip)**2/2.)/vpi
 cu = yhat*t
 cl = yhat/t
 CALL ROUND(yhat)
 CALL ROUND(cu)
 CALL ROUND(cl)
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 WRITE (16,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 ELSE
 WRITE (16,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 ENDIF
 IF (temp2(1,1).GT.samax(ip)) iwarn = 1
 30 CONTINUE
 IF (iwarn.GT.0) WRITE (*,9015)
 IF (iwarn.GT.0) WRITE (16,9015)
 RETURN
 9005 FORMAT (//,' Flood frequency estimates for',/,1x,a32,/,
```

```
 & ‘ Region C: area=’,f10.2,/,
 & ‘ RI DISCHARGE SE(%) EQ. YRS. 90%’,
 & ‘ PRED. INTERVAL’,/,t12,’ (cms)’)
 9010 FORMAT (//,’ Flood frequency estimates for’,/,1x,a32,/,
 & ‘ Region C: area=’,f10.2,/,
 & ‘ RI DISCHARGE SE(%) EQ. YRS. 90%’,
 & ‘ PRED. INTERVAL’,/,t12,’ (cfs)’)
 9015 FORMAT (//,’ WARNING -- Prediction beyond observed data’)
 9020 FORMAT (2x,i4,f12.0,f12.0,f12.2,f12.0,f12.0)
 9025 FORMAT (2x,i4,f12.1,f12.0,f12.2,f12.1,f12.1)
 END
c
c
 SUBROUTINE REGD
 INTEGER i, ip, iwarn, j
 REAL sepc, shape
 CHARACTER*1 Units
 CHARACTER*32 Site
 COMMON /SS / Site
 COMMON /YY4 / Units
 INTEGER it
 REAL bs, v, vt, xtxi, temp, temp2, stut, area, slope, vmodel,
 & yhat, t, cu, cl, vpi, sig, samax, eqyrs, xt1, xt2, ak
c
 DIMENSION it(7), bs(4,7), v(1,4), vt(4,1), xt1(4,4,4), xtxi(4,4),
 & temp(1,4), temp2(1,1), ak(7), vmodel(7), samax(7),
 & xt2(4,4,3)
c
 DATA stut/1.70/, sig/.1964/
 DATA it/2, 5, 10, 25, 50, 100, 500/
c
 DATA samax/0.64144E-02, 0.62542E-02, 0.72505E-02, 0.92476E-02,
 & 0.11101E-01, 0.13181E-01, 0.18735E-01/
c
 DATA ak/0.0, 0.84162, 1.28155, 1.75069, 2.05375, 2.32635, 2.87816/
c
 DATA bs/2.08085, 0.66711, 0.21132, 0.20841, 2.24414, 0.68830,
 & 0.28920, 0.25218, 2.31699, 0.69913, 0.33440, 0.27006,
 & 2.38703, 0.71031, 0.38469, 0.28593, 2.42901, 0.71730,
 & 0.41786, 0.29489, 2.46491, 0.72344, 0.44801, 0.30228,
 & 2.53290, 0.73544, 0.50967, 0.31569/
c
 DATA vmodel/0.16828E-01, 0.14776E-01, 0.16359E-01, 0.20537E-01,
 & 0.24799E-01, 0.29831E-01, 0.44068E-01/
c
 DATA xt1/0.93999E-02, -0.26700E-03, -0.48218E-02, 0.68313E-02,
```

```
 & -0.26700E-03, 0.83050E-03, 0.46865E-03, 0.13276E-02,
 & -0.48218E-02, 0.46865E-03, 0.47968E-02, -0.29897E-02,
 & 0.68313E-02, 0.13276E-02, -0.29897E-02, 0.84803E-02,
 & 0.85561E-02, -0.24462E-03, -0.43541E-02, 0.61836E-02,
 & -0.24462E-03, 0.75456E-03, 0.42541E-03, 0.12024E-02,
 & -0.43541E-02, 0.42541E-03, 0.44801E-02, -0.27184E-02,
 & 0.61836E-02, 0.12024E-02, -0.27184E-02, 0.76528E-02,
 & 0.96985E-02, -0.27568E-03, -0.49568E-02, 0.69997E-02,
 & -0.27568E-03, 0.85455E-03, 0.48133E-03, 0.13624E-02,
 & -0.49568E-02, 0.48133E-03, 0.51587E-02, -0.31018E-02,
 & 0.69997E-02, 0.13624E-02, -0.31018E-02, 0.86492E-02,
 & 0.12282E-01, -0.34491E-03, -0.63471E-02, 0.88849E-02,
 & -0.34491E-03, 0.10878E-02, 0.61047E-03, 0.17393E-02,
 & -0.63471E-02, 0.61047E-03, 0.66297E-02, -0.39767E-02,
 & 0.88849E-02, 0.17393E-02, -0.39767E-02, 0.10994E-01/
c
 DATA xt2/0.14772E-01, -0.41120E-03, -0.77027E-02, 0.10720E-01,
 & -0.41120E-03, 0.13169E-02, 0.73657E-03, 0.21108E-02,
 & -0.77027E-02, 0.73657E-03, 0.80380E-02, -0.48274E-02,
 & 0.10720E-01, 0.21108E-02, -0.48274E-02, 0.13297E-01,
 & 0.17621E-01, -0.48670E-03, -0.92666E-02, 0.12832E-01,
 & -0.48670E-03, 0.15822E-02, 0.88219E-03, 0.25423E-02,
 & -0.92666E-02, 0.88219E-03, 0.96486E-02, -0.58075E-02,
 & 0.12832E-01, 0.25423E-02, -0.58075E-02, 0.15964E-01,
 & 0.25389E-01, -0.69125E-03, -0.13578E-01, 0.18637E-01,
 & -0.69125E-03, 0.23178E-02, 0.12842E-02, 0.37424E-02,
 & -0.13578E-01, 0.12842E-02, 0.14046E-01, -0.85055E-02,
 & 0.18637E-01, 0.37424E-02, -0.85055E-02, 0.23349E-01/
c
c
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 PRINT *, ' ENTER watershed characteristics for site'
 PRINT *, ' Drainage area (sq. km) ='
 READ (*,*) area
 PRINT *, ' Basin slope (m/km)= '
 READ (*,*) slope
 PRINT *, ' Basin shape factor='
 READ (*,*) shape
 WRITE (*,9005) Site, area, slope, shape
 WRITE (16,9005) Site, area, slope, shape
c
c convert to english
 area = area*.3861007
 slope = slope*5.28001
c precip=precip*.3937008
c elev=elev*3.28084
```

```
c
 ELSE
 PRINT *, ‘ ENTER watershed characteristics for site’
 PRINT *, ‘ Drainage area (sq. mi.) =’
 READ (*,*) area
 PRINT *, ‘ Basin slope (ft/mi)=’
 READ (*,*) slope
 PRINT *, ‘ Basin shape factor=’
 READ (*,*) shape
 WRITE (*,9010) Site, area, slope, shape
 WRITE (16,9010) Site, area, slope, shape
 ENDIF
 v(1,1) = 1.0
 v(1,2) = ALOG10(area)
 v(1,3) = ALOG10(slope)
 v(1,4) = ALOG10(shape)
 vt(1,1) = 1.0
 vt(2,1) = v(1,2)
 vt(3,1) = v(1,3)
 vt(4,1) = v(1,4)
 iwarn = 0
 DO 30 ip = 1, 7
 yhat = bs(1,ip) + bs(2,ip)*v(1,2) + bs(3,ip)*v(1,3) + bs(4,ip)
 & *v(1,4)
 yhat = 10**yhat
 IF (Units.EQ.’M’ .OR. Units.EQ.’m’) yhat = yhat*.02831685
c
c Compute CI
c
 DO 20 i = 1, 4
 DO 10 j = 1, 4
 IF (ip.LE.4) THEN
 xtxi(i,j) = xt1(i,j,ip)
 ELSE
 xtxi(i,j) = xt2(i,j,ip-4)
 ENDIF
 10 CONTINUE
 20 CONTINUE
 CALL MLTPLY(temp,v,xtxi,1,4,4,1,1,4)
 CALL MLTPLY(temp2,temp,vt,1,4,1,1,1,4)
 vpi = vmodel(ip) + temp2(1,1)
 sepc = 100.*SQRT(EXP(vpi*5.302)-1.)
 t = 10**(stut*vpi**.5)
 eqyrs = sig**2*(1.+ak(ip)**2/2.)/vpi
 cu = yhat*t
 cl = yhat/t
```

```
 CALL ROUND(yhat)
 CALL ROUND(cu)
 CALL ROUND(cl)
 IF (Units.EQ.'M' .OR. Units.EQ.'m') THEN
 WRITE (16,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9025) it(ip), yhat, sepc, eqyrs, cl, cu
 ELSE
 WRITE (16,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 WRITE (*,9020) it(ip), yhat, sepc, eqyrs, cl, cu
 ENDIF
 IF (temp2(1,1).GT.samax(ip)) iwarn = 1
 30 CONTINUE
 IF (iwarn.GT.0) WRITE (*,9015)
 IF (iwarn.GT.0) WRITE (16,9015)
 RETURN
 9005 FORMAT (//,' Flood frequency estimates for',/,1x,a32,/,
 & ' Region D: area=',f10.2,' : slope=',f7.2,' : shape=',
 & f7.2,/,
 & ' RI DISCHARGE SE(%) EQ. YRS. 90%',
 & ' PRED. INTERVAL',/,t12,' (cms)')
 9010 FORMAT (//,' Flood frequency estimates for',/,1x,a32,/,
 & ' Region D: area=',f10.2,' : slope=',f7.2,' : shape=',
 & f7.2,/,
 & ' RI DISCHARGE SE(%) EQ. YRS. 90%',
 & ' PRED. INTERVAL',/,t12,' (cfs)')
 9015 FORMAT (//,' WARNING -- Prediction beyond observed data')
 9020 FORMAT (2x,i4,f12.0,f12.0,f12.2,f12.0,f12.0)
 9025 FORMAT (2x,i4,f12.1,f12.0,f12.2,f12.1,f12.1)
 END
c
c
 SUBROUTINE ROUND(X)
 REAL div, test, X
 INTEGER i, ix
c
c Subroutine rounds peaks to three significant figures
c for writing in table.
c
 DO 10 i = 3, 8
 test = 10**i
 div = 10**(i-2)
 IF (X.GT.test) THEN
 X = X/div
 ix = X + .5
 X = div*ix
 ENDIF
```

```
10 CONTINUE
RETURN
END
```

****