# Floods of April–May 1958 in Louisiana and Adjacent States

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1660–A

*Prepared in cooperation with the States of Louisiana, Arkansas, Mississippi, Oklahoma, and Texas, and with agencies of the Federal Government*

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*By* RUFUS P. SMITH

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UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1964

UNITED STATES DEPARTMENT OF THE INTERIOR

STEWART L. UDALL, *Secretary*

GEOLOGICAL SURVEY

Thomas B. Nolan, *Director*

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402

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# FLOODS OF APRIL–MAY 1958 IN LOUISIANA AND ADJACENT STATES

By RUFUS P. SMITH

ABSTRACT

Heavy rains started on April 24 or 25, continued intermittently through May 3 or 4, and fell on an area 50 miles wide extending from Mt. Pleasant, Tex., eastward to the Mississippi River. The two periods of heaviest rainfall were April 24–26 and April 28–May 1; the maximum 24-hour rainfall recorded was 10.65 inches at El Dorado, Ark., on April 26.

Many streams reached the maximum discharge for the period of record. The stage or discharge, or both, exceeded the previous maxima at 39 stream-gaging stations. Cornie Bayou and Three Creek near Three Creeks, Ark., reached the highest stage since at least 1880. Boggy Creek near Daingerfield, Tex., reached the highest stage since 1900. Because the second storm period followed the first so closely, many streams had only a single flood peak.

Three lives were lost in Louisiana. Damage amounted to about $25 million, mostly to crops and agricultural land.

Flood-frequency studies indicate that at 19 locations the peak discharge during the floods of April–May 1958 had a recurrence interval well in excess of 50 years (2 percent probability of occurring in any one year). The peak discharge of Chemin a Haut Bayou near Beekman, La., was 7.6 times the discharge for a 50-year flood and 12.4 times the discharge of the mean annual flood.

The present report supplies hydrologic data needed for detailed planning of projects in which studies of flood volumes and discharge rates are essential parts. The report includes a general description of the floods; precipitation information; detailed streamflow records at 112 sites; crest stages along the lower Red River, the Ouachita River, and at several other locations; and flood-frequency relationships in parts of the flood area. The area covered in the report includes southern Arkansas, northern Louisiana, southeastern Oklahoma, northeastern Texas, and west-central Mississippi.

## INTRODUCTION

Northern Louisiana and southern Arkansas received extremely heavy rains in late April and early May 1958. The rains extended into southeastern Oklahoma, northeastern Texas, and west-central Mississippi and produced moderately high stages on streams in these areas. Of the 28 stream-gaging stations operated by the Geological Survey in northern Louisiana, 21 reached a maximum stage or discharge, or both, for the period of record. Stages on some eastern tributaries of the Ouachita River, however, were several feet lower than those during the historic Mississippi River flood of April–May 1927, when stages were affected by backwater.

This report was written to record and preserve data on flood volumes and peak discharge necessary for studies of floods of magnitudes

similar to those of April–May 1958. It supplements the data published in the annual series of reports on surface-water supply and contains more detailed information on streamflow, a discussion of the precipitation, a summary and comparison with past floods, tabulations

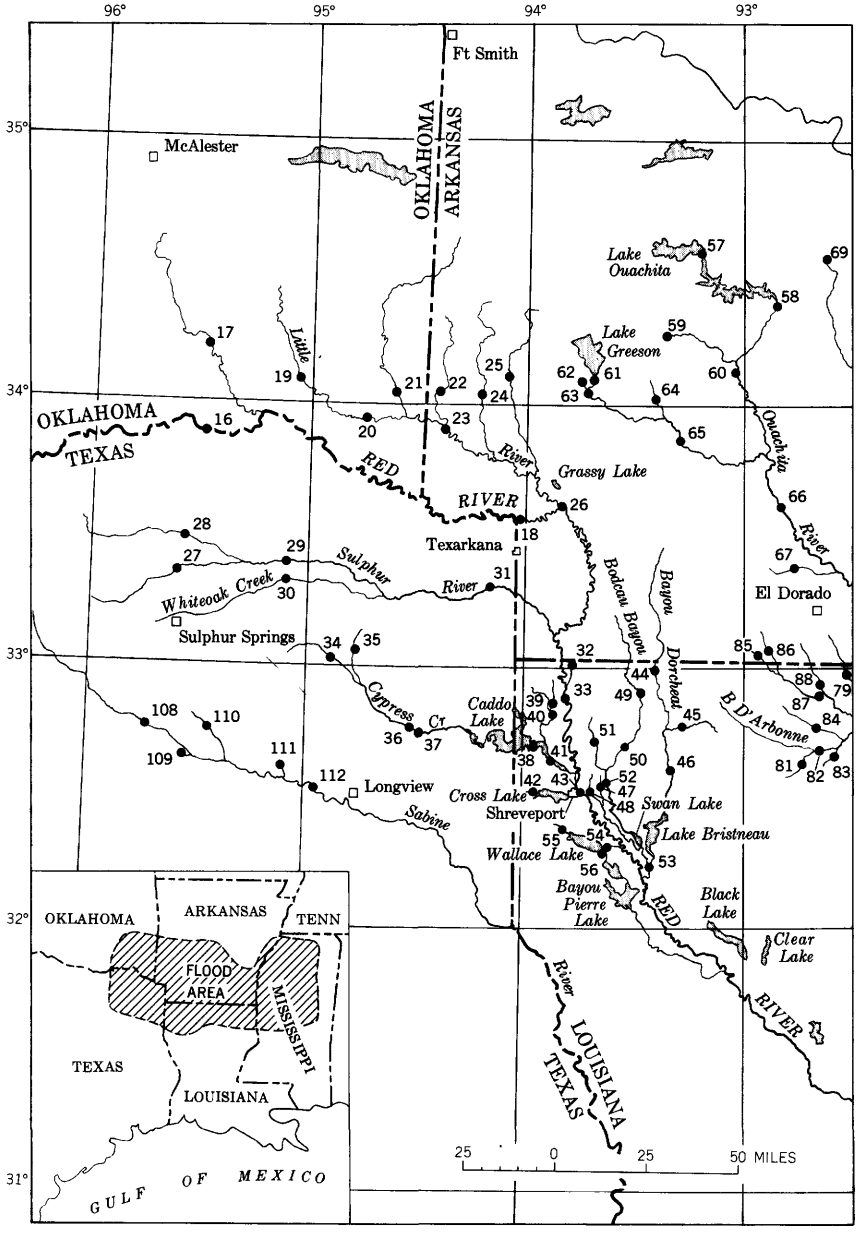
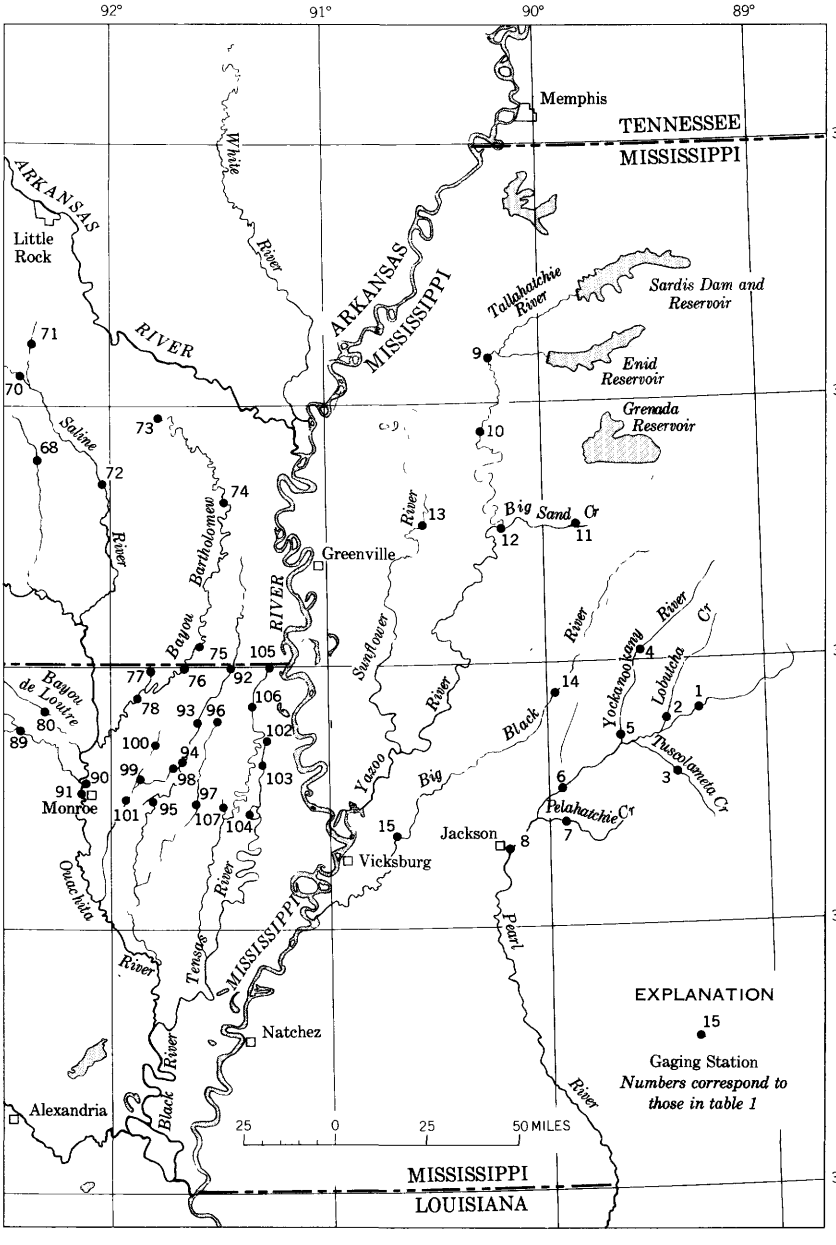



FIGURE 1.—Index map of area, showing

of crest stages on the Red and Ouachita Rivers and at a number of other locations, and other related data.

Figure 1 shows the area covered by this report and the location of the 112 sites for which flood data are presented.




location of flood determination points.

The investigation of surface-water resources in the area covered by this report is a continuous program of the Geological Survey in cooperation with the States of Louisiana, Arkansas, Mississippi, Texas, and Oklahoma, and with the U.S. Army Corps of Engineers and other Federal or local agencies. The U.S. Weather Bureau and several State, municipal, and private organizations furnished some data or information included in this report and appropriate acknowledgement is made in the text.

Data were collected and compiled in the district offices of the Surface Water Branch under supervision of the following district engineers: F. N. Hansen, Louisiana; J. L. Saunders, Arkansas; W. H. Robinson, Mississippi; Trigg Twitchell, Texas; and A. A. Fischback, Jr., Oklahoma. The compilation of the data and the assembly of the report were coordinated by H. F. Matthai, Flood Specialist.

## PRECIPITATION

Antecedent rainfall in the area covered by this report was much below normal in February 1958 and from near normal to much above normal during March. Storms on April 8–9, April 13–14, and April 19–20 brought light precipitation to most of the area, but this antecedent moisture had little effect on the flood runoff.

Excessively heavy rains began late on April 24 or early on April 25 and continued intermittently until May 3 or 4. The two periods of heaviest rainfall were April 24–26 and April 28–May 1. Weather Bureau records show that the greatest amount of rainfall during the 8-day period April 24–May 1 was 19.58 inches at Haynesville, La. Several of the larger amounts of rainfall are given in the following table.

| Location | Precipitation, in inches, for indicated dates | | |
|---|---|---|---|
| | April 24–27 | April 28–May 1 | April 24–May 1 |
| Haynesville, La | 11. 40 | 8. 18 | 19. 58 |
| Hamburg, Ark | 14. 76 | 4. 27 | 19. 03 |
| El Dorado, Ark | 14. 34 | 4. 10 | 18. 44 |
| Stamps, Ark | 13. 25 | 4. 88 | 18. 13 |
| Linden, Tex | 8. 31 | 8. 37 | 16. 68 |
| Daingerfield, 9S, Tex | 10. 02 | 6. 58 | 16. 60 |
| Rosedale, Miss | 5. 28 | 9. 93 | 15. 21 |

The maximum 24-hour rainfall reported was 10.65 inches at El Dorado, Ark., on April 26. Isohyetal maps based on Weather Bureau records for April 24–27 and April 24–May 1 are presented in figures 2 and 3. The heaviest precipitation occurred in an east-west belt about

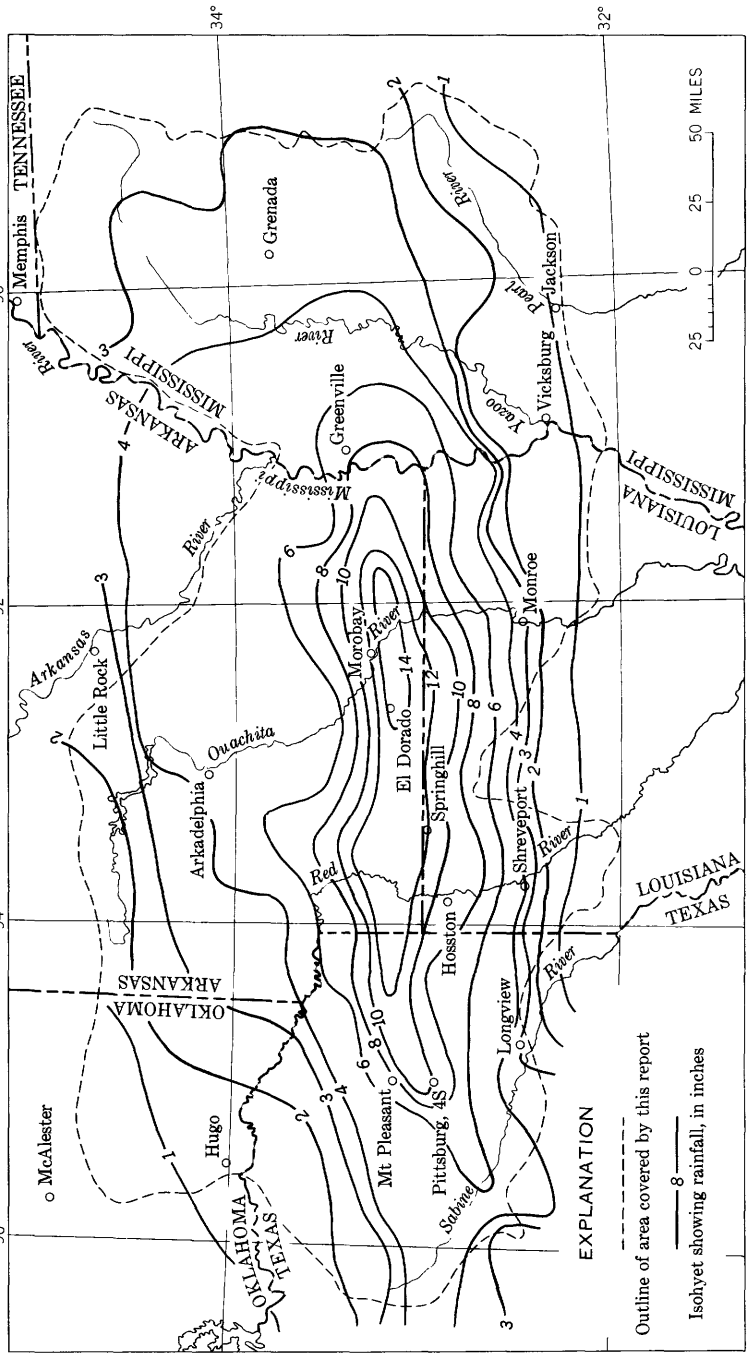



FIGURE 2.—Isohyetal map of rainfall during April 24–27, 1958.

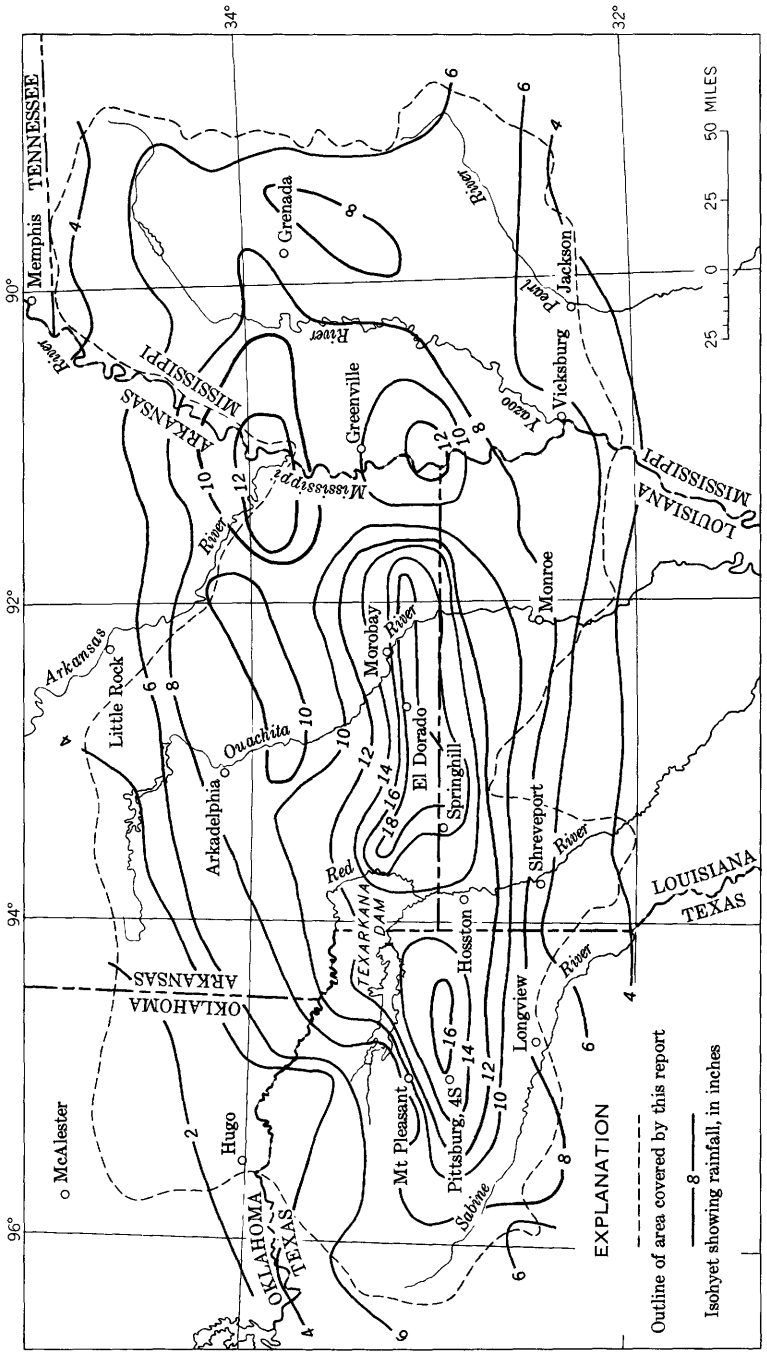



FIGURE 3.—Isohyetal map of rainfall during April 24–May 1, 1958.

50 miles wide extending from Mt. Pleasant, Tex., eastward to the Mississippi River.

Smaller amounts of rain fell on May 9, 18–20, 25, 27, and 28 from scattered storms. The maximum rainfall recorded in these periods was 8.08 inches during May 18–20 at Stevenson Fire Tower, about 30 miles north of Monroe, La. These storms had little or no effect on crest stages but did prolong the flood period.

The cumulative rainfall from April 24 to May 4 at selected Weather Bureau stations in Arkansas, Texas, and Louisiana is shown in figures 4–6. Figure 6 includes cumulative runoff for two streams in Louisiana.

## GENERAL FEATURES OF THE FLOODS

The heavy and intense rainfall started late on April 24 or early on April 25 and produced major flooding during the next 4 to 5 weeks. Although there were two distinct storm periods, the second followed the first so closely that the runoff pattern for most streams was similar to that for a single storm. Maximum stages on many streams occurred because the second storm came while the larger streams were still rising.

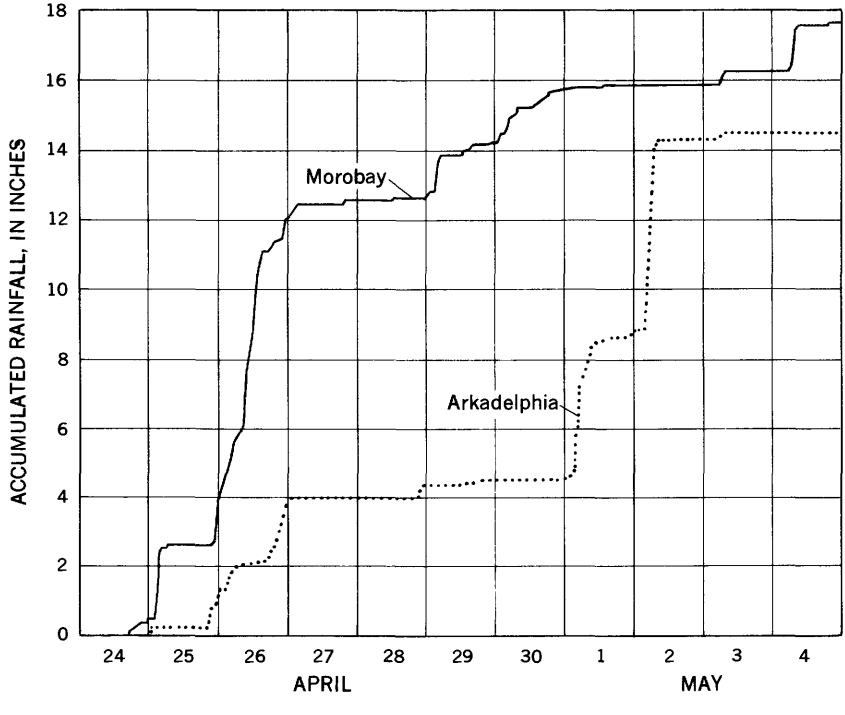



FIGURE 4.—Graphs of accumulated rainfall, April 24–May 4, 1958, at selected points in Arkansas.

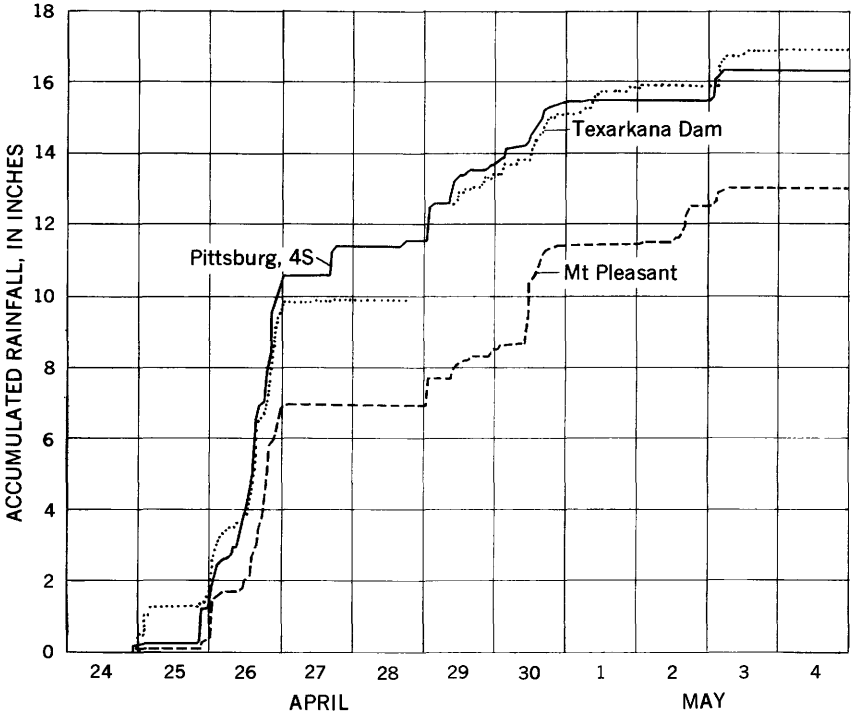



FIGURE 5.—Graphs of accumulated rainfall, April 24–May 4, 1958, at selected points in Texas.

The flood area includes the Sabine River basin upstream from Gladewater, Tex.; the Red River basin from the mouth of Muddy Boggy River in Oklahoma to Coushatta, La.; the Ouachita River basin upstream from Monroe, La., and that part of the basin in northeastern Louisiana north of U.S. Highway 80 between Monroe and Vicksburg, Miss.; the Yazoo River and Big Black River basins in Mississippi; and the Pearl River basin upstream from Jackson, Miss.

Floods in the Sabine River basin and most tributaries to the Red River in Texas were not outstanding, but at a few sites the previous maximum flood during the period of record was exceeded. For example, the maximum discharge during the period of record of 28,900 cfs (cubic feet per second) occurred on Boggy Creek near Daingerfield, Tex., on April 27, and the stage was 0.3 foot higher than any other known since 1900.

The contents of Lake O' the Pines on Cypress Creek near Jefferson, Tex., increased from 23,830 acre-feet on April 25 to 515,800 acre-feet on May 7, an increase of nearly 492,000 acre-feet in 12 days. This increase in contents plus 70,000 acre-feet released from Lake O' the Pines exceeded the previous maximum 12-day runoff (March 31–April 11,

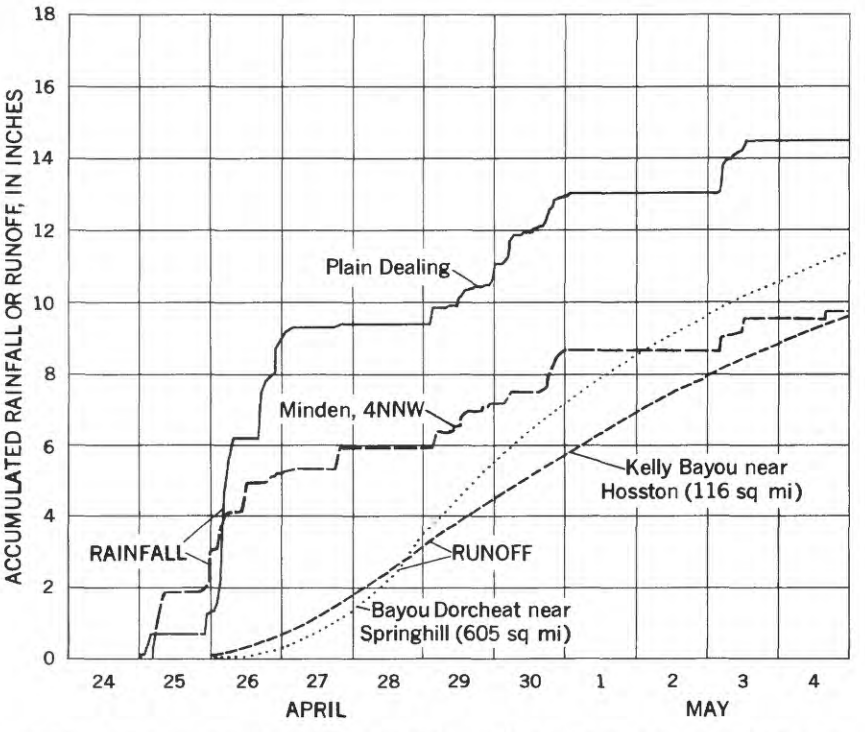



FIGURE 6.—Graphs of accumulated rainfall and runoff, April 24–May 4, 1958, at selected points in Louisiana.

1945) by 142,000 acre-feet. Computations based on rate-of-change in storage show that the maximum rate of inflow to the reservoir was 83,900 cfs from 2 to 3 a.m. on April 29. The previous maximum discharge of 57,100 cfs on April 1, 1945, at the gaging station in operation at this location from 1924 until storage began in the reservoir on Aug. 21, 1957, was the greatest flood since 1853. The maximum inflow to the reservoir during the floods of April–May 1958 greatly exceeded the historical maximum at the stream-gaging station. The records, however, are not entirely comparable because the peak discharge recorded at the stream-gaging station in 1945 represented the peak of a flood wave moving down a natural stream channel, whereas the peak rate of inflow into the reservoir represents inflow into the reservoir throughout its length. Consequently, the time of concentration of flood runoff into the reservoir is different from that of tributary contributions to a flood wave moving down a natural stream channel.

Several of the larger tributaries to the Red River and most of the small creeks in southeastern Oklahoma reached or exceeded flood stage. Lake Texoma on the Red River stored 335,700 acre-feet in the flood-control pool during May 2–7. Releases from storage in late

April and early May were primarily for power generation and reached a maximum daily flow of only 16,500 cfs on May 2. The stage of the Red River at Arthur City, Tex., on May 3 was 26.35 feet (discharge, 120,000 cfs), only 2.0 feet lower than that of the flood of June 1957, but 16.8 feet lower than that of the flood of May 28, 1908, the maximum known. Although peak discharges in this area were generally about half the previous maxima, runoff sustained the period of high water in the reaches downstream.

Record floods occurred in the area north of Shreveport, La. The 27.51-foot stage on April 29 on Black Bayou near Gilliam, La., exceeded by 1.78 feet the previous maximum of a 16-year record. Kelly Bayou and Paw Paw Bayou also reached new record heights. The auxiliary gage for Black Bayou near Gilliam, La., is near Oil City, La. (fig. 7).

The previous maximum stage of a 25-year record on Bayou Dorcheat near Minden, La., was exceeded by almost 2 feet. The peak stage was 24.90 feet on May 1, and water overtopped old U.S. Highway 80 by at least 2 feet.

South of U.S. Highway 80, Loggy Bayou near Ninock, La., reached the highest stage in 10 years on May 8. The maximum discharge of

FIGURE 7.—Black Bayou near Oil City, La., May 1, about 3 feet below crest. Photograph by Shreveport Times.

32,600 cfs occurred on May 4 and exceeded the previous maximum by 63 percent.

Storage in Lake Ouachita on the Ouachita River near Hot Springs, Ark., reached the flood-control pool level on April 30, and by May 7 the flood-control pool held 231,000 acre-feet. Lake Hamilton and Lake Catherine had little effect on stream flow. Regulation by Lake Ouachita reduced the maximum 24-hour inflow rate of 46,700 cfs into the lake to daily discharges below the lake of 55 cfs on May 2 and 25 cfs on May 3. The peak discharge on May 2 of Ouachita River near Malvern, Ark., was 55,200 cfs, equivalent to 120 cfs per sq mi (cubic feet per second per square mile) from the 457-square mile drainage area between Lake Ouachita and Malvern. The drainage area between Lake Ouachita and Arkadelphia, Ark., is 1,206 sq mi and produced a peak discharge at Arkadelphia on May 3 of 119,000 cfs, or 98.7 cfs per sq mi.

Smackover Creek near Smackover, Ark., reached a peak discharge on April 27 of 25,000 cfs, which was 52 percent greater than the previous maximum of a 20-year record.

The peak discharge, 26,800 cfs, of Moro Creek near Fordyce, Ark., was more than double the maximum during 1951–57 and 70 percent greater than the maximum discharge during the flood of January 1938.

The discharge of Bayou Bartholomew between Star City, Ark., and Beekman, La., exceeded that of previous floods of record. Stages were 1 to 2 feet higher than any previously recorded except at Wilmot, Ark., where the 1958 stage was slightly lower than that in January 1932, the maximum stage since 1925 (33 years of record). The 24.49-foot stage near McGehee, Ark., was the highest known since at least 1930.

The crest on Bayou de Loutre near DeLoutre, La., exceeded the previous maximum stage during 1948–57 by almost 8 feet.

Stages on Cornie Bayou and Three Creek near Three Creeks, Ark., were the highest since 1880. In north-central Louisiana, Corney Bayou near Lillie reached a stage of 25.2 feet, exceeding the maximum in 1940–57 by 7.0 feet.

Stages along the Boeuf River in northeastern Louisiana were nearly the same as previously recorded maxima. At Girard, La., however, the peak stage of 19.31 feet in 1958 exceeded the previous maximum during the 20 years of record by 0.51 foot but was far below the 29.5-foot stage reached during the historic Mississippi River flood of April–May 1927 which was affected by backwater.

Four flood-control reservoirs, Sardis, Enid, Arkabutla, and Grenada Reservoirs, were instrumental in keeping stages and discharges in most of the Yazoo River basin in Mississippi well below previous

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maxima. No water was released after April 26 for 8 to 29 days until flood runoff in the lower reaches had subsided.

Although the rainfall slackened rapidly east of the Mississippi River, the Sunflower River basin received enough water to produce the highest stage and discharge since 1935—28.31 feet and 9,300 cfs, respectively, at Sunflower, Miss.

The crest stage of 39.74 feet on Big Rock River near Bovina, Miss., was the highest since 1930 and was only slightly higher than that of the flood of April 1951. At a site 6 miles upstream the crest was about 3 feet lower than that of the floods of 1912 and January 1927.

Floods in the Pearl River basin upstream from Jackson, Miss., were not outstanding. Crest stages at the eight stream-gaging stations in the basin ranged from 1.4 to 6.3 feet lower than the maxima. Discharges were about ¼–½ as great as the maximum discharges during the periods of record except on Pearl River at Meeks Bridge, near Canton, Miss., where the peak discharge of 39,400 cfs was 68 percent of the Apr. 2, 1951, peak.

## FLOOD DAMAGE

Extensive damage occurred along the Red and Ouachita Rivers in Arkansas and Louisiana, in the Boeuf River-Tensas River basin in Louisiana, in the Sulphur River basin in Texas, and in the Yazoo River and the Big Black River basins in Mississippi. In contrast, no great damage was reported along the larger Red River tributaries in southeastern Oklahoma, although the high water temporarily closed several roads that traverse low areas.

The floods of April–May 1958 caused the loss of three lives in Louisiana. During the flood almost every highway in Louisiana north of U.S. Highway 80 (Shreveport to Monroe) and west of U.S. Highway 165 (north from Monroe) was closed at some point. Highways were overtopped to depths of 10 feet and for lengths of several thousand feet. Direct damage to State roads and bridges was estimated by the Louisiana Department of Highways to be almost $92,000.

The towns north of Shreveport, La., on the lowlands near Twelvemile Bayou and Black Bayou sustained heavy losses (fig. 8). Some people living on hills were isolated by the flood water for short periods of time.

Agricultural damage was high because the flood occurred when land was being prepared for planting or during planting. Lowlands were under water for several days, and considerable areas of newly plowed land on hillsides were seriously eroded. The Corps of Engineers estimates that approximately 2,476,000 acres, including about 467,000 acres of cleared land, were flooded in the Ouachita River basin in Arkansas and Louisiana.

FIGURE 8.—Aerial view of oil refinery near Oil City, La., on May 3, near crest of flood. Photograph by Shreveport Times.

The following summary lists approximate flood damages, as estimated by the Weather Bureau:

| | |
|---|---|
| Ouachita River and tributaries (southern Arkansas) | $2, 075, 000 |
| Black and Ouachita Rivers and Red River below Alexandria (Louisiana) | 2, 952, 000 |
| Little Sulphur and Sabine Rivers, Cypress Creek and Red River above Alexandria, La. (Arkansas, Texas, Louisiana) | 8, 381, 000 |
| Pearl River basin (Mississippi) | 1, 587, 000 |
| Big Sunflower River and tributaries (Mississippi) | 3, 954, 000 |
| Yazoo River basin headwater (Mississippi) | 1, 260, 000 |
| Yazoo River basin backwater (Mississippi) | 179, 000 |
| Big Black River basin (Mississippi) | 755, 000 |
| Total | $21, 143, 000 |

## MEASUREMENT OF FLOOD DISCHARGES

The operation of a stream-gaging station consists principally of the determination of stage and the measurement of discharge to develop a relation between stage and discharge, from which the discharge can be computed when the stage is known. The ideal stage-discharge relation, or rating curve, is defined by current-meter measurements over the entire range in stage experienced. When the curve must be extended above the highest current-meter measurement, any

of the following may permit a reasonable extension: indirect measurement of the flood discharge, logarithmic plotting, velocity-area studies, or the use of various measurable hydraulic factors. At some stations the slope of the water surface is not always the same for a given stage, and it is necessary to use slope as a factor in determining discharge. Varying slopes are caused by changing discharge or backwater or by a combination of these. When these conditions exist, a fall-stage-discharge rating curve is required, and an auxiliary gage is used to determine the slope or fall in a reach of channel.

Current-meter measurements were obtained at high stages at all stream-gaging stations in Louisiana, and many were made on the crest. Several measurements were made at stations where roads were overtopped and streams were several thousand feet wide. Boat equipment was used to obtain current-meter measurements in wide overflow areas.

## STAGES AND DISCHARGES AT STREAM-GAGING STATIONS

The data presented for each stream-gaging station generally consist of a description of the station, a table of daily discharges for April–May 1958, and a table of stages and discharges at sufficient intervals during the major flood periods to permit accurate definition of the flood hydrograph. At some stations, where only the stage is available, the daily mean stage or the stage at an indicated time on each day during the 2-month period is given.

The station description contains information concerning the location, drainage area, type and datum of the gage, the method used to determine the stage, the definition of the stage-discharge relation, the maximum stage and discharge during the flood period and for the period of gaging-station record before April 1958, historical data on maxima if available, and miscellaneous remarks on pertinent items. At stations where interchange of flow occurs between basins upstream, the drainage area figure is omitted or qualified.

Daily mean discharges at gaging stations for April–May 1958 follow the station description. Discharge records are given for 2 months to present not only the discharges of flood period but also those before and after the peak to show the relation of flood discharge to the discharges of the preceding and following periods. The monthly mean discharge and the volume of runoff in acre-feet, are given for some stations; and for some of these stations, the runoff, in inches, is included. In general, runoff, in inches, is computed only for stations in areas where the average annual rainfall exceeds 20 inches and where the flow is not regulated. Data for reservoirs show the elevation or gage height, in feet, and contents, in acre-feet, at an indicated time

each day and a summary of the change in contents during each month.

A tabulation of stages and discharges at indicated times follows the table of daily discharge. This detailed information is given for the period during which discharge was changing rapidly, whereas, for days of slowly changing discharge, the table of daily mean discharges furnishes sufficient information to define the discharge hydrograph adequately.

The stages at indicated times generally were obtained from records of continuous water-stage recorders. If the record was interrupted, the stage graph was completed on the basis of floodmarks or occasional gage readings and by comparison with the record at a nearby station. For stations at which the records of stage consisted only of one or more gage readings a day, a graph was drawn on the basis of the gage readings and floodmarks. Details regarding the gage-height record for each station are given in the station description.

Discharge hydrographs at selected gaging stations are shown in figures 9–11. Mass curves of cumulative rainfall and runoff in the Red River basin north of Shreveport, La., are shown in figure 6.

Streams south of U.S. Highway 80 and east of the Ouachita River were outside the area of heavy rainfall but were in flood from upstream runoff; however, records for stream-gaging stations in this area are not included in the present report. For gages operated by

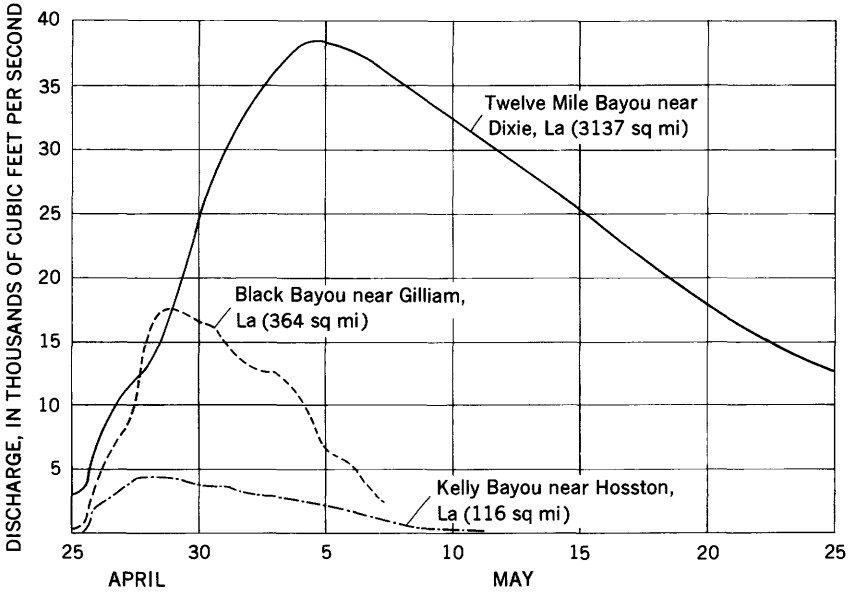


FIGURE 9.—Discharge hydrographs for selected Red River tributaries northwest of Shreveport, La.

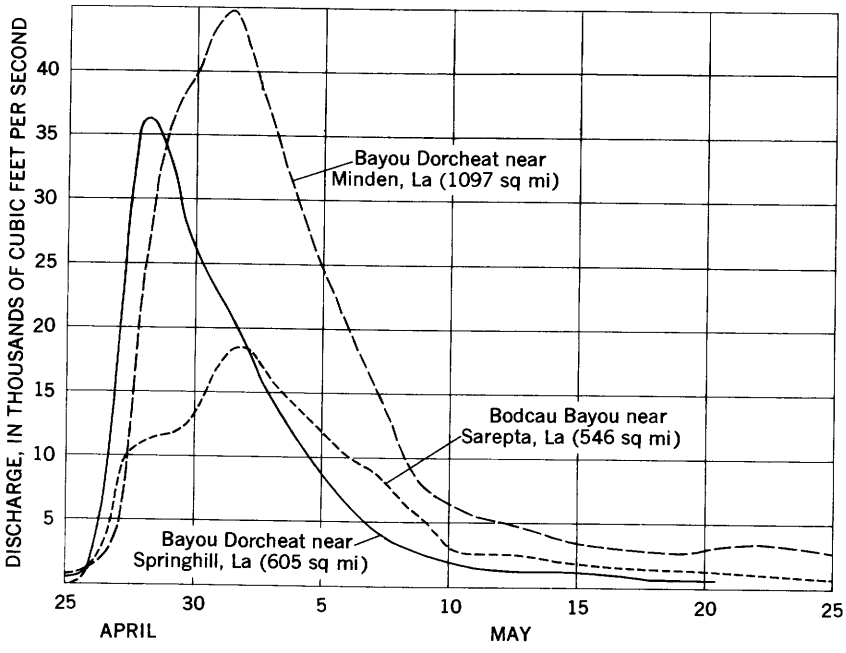


FIGURE 10.—Discharge hydrographs for selected Red River tributaries northeast of Shreveport, La.

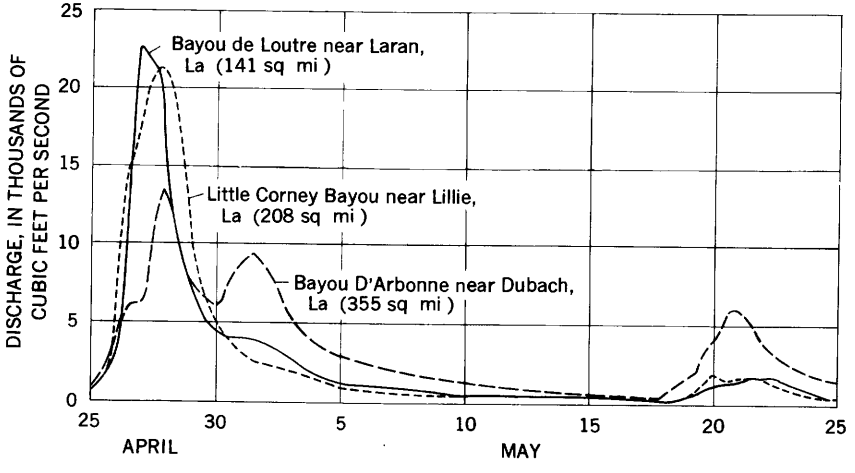


FIGURE 11.—Discharge hydrographs for selected Ouachita River tributaries in Louisiana.

the Corps of Engineers, records have been published in "Stages and Discharges of the Mississippi River and Tributaries in the Vicksburg District," Corps of Engineers, 1958.

## PEARL RIVER BASIN

### 1. PEARL RIVER AT EDINBURG, MISS.

Location.—Lat 32°47′, Long 89°20′, in SW¼ sec. 13, T. 11 N., R. 9 E., Choctaw meridian, on right bank 20 ft downstream from bridge on State Highway 16 at Edinburg, 1,100 ft downstream from Hooper Mill Creek, 3 miles upstream from Rice Creek, and 11¾ miles northeast of Carthage.

Drainage area.—898 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 341.67 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 11,600 cfs 6 a.m. May 5 (gage height, 24.58 ft).

1928 to March 1958: Discharge, 31,400 cfs Mar. 8, 1935 (gage height, 26.20 ft); gage height, 26.30 ft Feb. 16, 1950.

Maximum stage known, 29.0 ft in March 1902, from reports of U.S. Weather Bureau.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,930 | 8,180 | 11 | 1,060 | 4,640 | 21 | 1,700 | 682 |
| 2 | 1,780 | 11,000 | 12 | 972 | 3,880 | 22 | 1,750 | 524 |
| 3 | 1,620 | 11,300 | 13 | 852 | 3,150 | 23 | 1,720 | 413 |
| 4 | 1,470 | 11,000 | 14 | 795 | 2,590 | 24 | 1,500 | 332 |
| 5 | 1,320 | 11,300 | 15 | 1,060 | 2,140 | 25 | 1,540 | 277 |
| 6 | 1,210 | 10,200 | 16 | 1,230 | 1,780 | 26 | 1,600 | 235 |
| 7 | 1,080 | 9,150 | 17 | 1,300 | 1,520 | 27 | 2,080 | 202 |
| 8 | 932 | 7,680 | 18 | 1,230 | 1,260 | 28 | 2,200 | 171 |
| 9 | 892 | 6,590 | 19 | 1,160 | 1,040 | 29 | 3,320 | 148 |
| 10 | 1,040 | 5,530 | 20 | 1,060 | 872 | 30 | 5,530 | 130 |
| | | | | | | 31 | | 112 |
| Monthly mean discharge | | | | | | | 1,564 | 3,807 |
| Runoff | | | | | | inches | 1.94 | 4.89 |

### 2. LOBUTCHA CREEK NEAR CARTHAGE, MISS.

Location.—Lat 32°46′, long 89°28′, in NE¼ sec. 34, T. 11 N., R. 8 E., Choctaw meridian, near center of span on downstream side of bridge on State Highway 16, 3 miles upstream from mouth and 5 miles northeast of Carthage.

Drainage area.—313 sq mi.

Gage-height record.—Graph based on twice daily wire-weight gage readings and crest-stage indicator. Datum of gage is 334.98 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 7,460 cfs about 10 p.m. May 2 (gage-height, 16.21 ft).

1937 to March 1958: Discharge, 19,100 cfs Mar. 29, 1951 (gage-height, 18.00 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 505 | 4,360 | 11 | 453 | 1,070 | 21 | 479 | 229 |
| 2 | 417 | 5,980 | 12 | 453 | 990 | 22 | 870 | 189 |
| 3 | 362 | 5,080 | 13 | 453 | 825 | 23 | 840 | 160 |
| 4 | 320 | 3,380 | 14 | 406 | 626 | 24 | 710 | 133 |
| 5 | 290 | 3,140 | 15 | 441 | 466 | 25 | 654 | 116 |
| 6 | 260 | 3,260 | 16 | 668 | 313 | 26 | 954 | 108 |
| 7 | 240 | 2,450 | 17 | 738 | 229 | 27 | 1,330 | 93 |
| 8 | 210 | 1,790 | 18 | 626 | 189 | 28 | 1,710 | 86 |
| 9 | 210 | 1,380 | 19 | 544 | 179 | 29 | 3,260 | 79 |
| 10 | 330 | 1,230 | 20 | 384 | 209 | 30 | 4,160 | 73 |
| | | | | | | 31 | | 67 |
| Monthly mean discharge | | | | | | | 776 | 1,241 |
| Runoff | | | | | | inches | 2.77 | 4.57 |

### 3. TUSCOLAMETA CREEK AT WALNUT GROVE, MISS.

Location.—Lat 32°35′, long 89°28′, in NW¼ sec. 34, T. 9 N., R. 8 E., Choctaw meridian, on right bank at downstream side of bridge on State Highway 35, over north drainage canal, 0.4 mile southwest of Walnut Grove, 0.6 mile upstream from Gulf, Mobile and Ohio Railroad bridge, 7½ miles upstream from junction of north and south drainage canals, and 15½ miles upstream from mouth.

Drainage area.—411 sq mi (combined drainage area of all channels).

Gage-height record.—Water-stage recorder graph. Datum of gage is 332.70 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 8,400 cfs 11 a.m. May 1 (gage height, 16.69 ft).

1939 to March 1958: Discharge, 34,600 cfs Jan. 7, 1950 (gage height, 23.00 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 442 | 8,000 | 11 | 651 | 232 | 21 | 1,130 | 80 |
| 2 | 337 | 6,650 | 12 | 408 | 203 | 22 | 1,130 | 74 |
| 3 | 257 | 4,800 | 13 | 252 | 168 | 23 | 734 | 70 |
| 4 | 233 | 3,400 | 14 | 179 | 140 | 24 | 338 | 64 |
| 5 | 207 | 3,830 | 15 | 420 | 120 | 25 | 355 | 60 |
| 6 | 184 | 3,760 | 16 | 657 | 100 | 26 | 621 | 56 |
| 7 | 153 | 3,400 | 17 | 477 | 92 | 27 | 520 | 45 |
| 8 | 133 | 1,320 | 18 | 269 | 81 | 28 | 1,360 | 43 |
| 9 | 213 | 409 | 19 | 143 | 84 | 29 | 2,730 | 42 |
| 10 | 764 | 274 | 20 | 148 | 90 | 30 | 4,920 | 41 |
| | | | | | | 31 | | 39 |
| Monthly mean discharge | | | | | | | 680 | 1,218 |
| Runoff | | | | | | inches | 1.85 | 3.42 |

### 4. YOCKANOOKANY RIVER NEAR KOSCIUSKO, MISS.

Location.—Lat 33°02′, long 89°35′, in NE¼NE¼ sec. 33, T. 14 N., R. 7 E., Choctaw meridian, on left bank at downstream side of bridge on State Highway 35, 2 miles south of Kosciusko.

Drainage area.—314 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 374.34 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 4,780 cfs 5 a.m. May 2 (gage height, 14.32 ft).

1938 to March 1958: Discharge, 19,300 cfs Mar. 29, 1951 (gage height, 18.72 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 274 | 3,600 | 11 | 450 | 720 | 21 | 863 | 130 |
| 2 | 231 | 4,780 | 12 | 320 | 1,080 | 22 | 1,300 | 93 |
| 3 | 207 | 3,980 | 13 | 215 | 1,150 | 23 | 964 | 74 |
| 4 | 202 | 3,880 | 14 | 182 | 660 | 24 | 367 | 62 |
| 5 | 187 | 4,310 | 15 | 492 | 223 | 25 | 790 | 54 |
| 6 | 165 | 3,520 | 16 | 745 | 151 | 26 | 2,550 | 50 |
| 7 | 138 | 3,520 | 17 | 427 | 122 | 27 | 2,880 | 45 |
| 8 | 118 | 2,880 | 18 | 240 | 100 | 28 | 3,210 | 40 |
| 9 | 162 | 1,310 | 19 | 184 | 107 | 29 | 3,210 | 43 |
| 10 | 405 | 485 | 20 | 182 | 138 | 30 | 3,070 | 43 |
| | | | | | | 31 | | 36 |
| Monthly mean discharge | | | | | | | 824 | 1,206 |
| Runoff | | | | | | inches | 2.93 | 4.43 |

### 5. YOCKANOOKANY RIVER NEAR OFAHOMA, MISS.

Location.—Lat 32°42′, long 89°40′, in NE¼NW¼ sec. 22, T. 10 N., R. 6 E., Choctaw meridian, near center of main span on downstream side of bridge on State Highway 16, 1½ miles southeast of Ofahoma, 3 miles upstream from mouth, and 8½ miles southwest of Carthage.

Drainage area.—484 sq mi.

Gage-height record.—Graph based on once daily wire-weight gage readings and crest-stage indicator. Datum of gage is 311.15 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 9,220 cfs about 2 p.m. May 3 (gage height, 18.07 ft).

1943 to March 1958: Discharge, 20,700 cfs Mar. 31, 1951 (gage height, 20.28 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 718 | 8,320 | 11 | 313 | 2,850 | 21 | 942 | 228 |
| 2 | 613 | 8,320 | 12 | 350 | 2,010 | 22 | 1,110 | 228 |
| 3 | 529 | 8,920 | 13 | 369 | 1,390 | 23 | 828 | 212 |
| 4 | 428 | 7,760 | 14 | 428 | 1,080 | 24 | 850 | 174 |
| 5 | 331 | 7,240 | 15 | 550 | 1,080 | 25 | 1,160 | 153 |
| 6 | 295 | 7,240 | 16 | 697 | 1,060 | 26 | 1,470 | 126 |
| 7 | 261 | 6,100 | 17 | 634 | 919 | 27 | 1,750 | 107 |
| 8 | 244 | 4,840 | 18 | 655 | 697 | 28 | 2,130 | 96 |
| 9 | 261 | 4,300 | 19 | 740 | 369 | 29 | 4,060 | 79 |
| 10 | 331 | 3,720 | 20 | 762 | 278 | 30 | 6,320 | 79 |
| | | | | | | 31 | | 79 |
| Monthly mean discharge | | | | | | | 1,004 | 2,582 |
| Runoff | | | | | | inches | 2.32 | 6.15 |

### 6. PEARL RIVER AT MEEKS BRIDGE, NEAR CANTON, MISS.

Location.—Lat 32°30'50", long 89°56'25", in NE¼ sec. 25, T. 8 N., R. 3 E., Choctaw meridian, near left bank on downstream side of Meeks bridge on State Highway 43, 3½ miles northwest of Goshen Springs, 5½ miles upstream from Mill Creek, 9 miles southeast of Canton, and 10 miles downstream from Fannegusha Creek.

Drainage area.—2,780 sq mi, approximately.

Gage-height record.—Water-stage recorder graph. Datum of gage is 270.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 39,400 cfs 6 a.m. May 6 (gage height, 25.00 ft).

1939 to March 1958: Discharge, 57,800 cfs Apr. 2, 1951 (gage height, 26.30 ft).

Flood in December 1932 reached a stage of 26.4 ft, from floodmarks.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 5,740 | 15,000 | 11 | 3,250 | 22,000 | 21 | 3,600 | 2,530 |
| 2 | 5,310 | 20,800 | 12 | 3,530 | 19,400 | 22 | 4,550 | 2,170 |
| 3 | 4,800 | 25,500 | 13 | 3,320 | 16,400 | 23 | 5,570 | 1,820 |
| 4 | 4,230 | 32,800 | 14 | 2,910 | 13,600 | 24 | 5,830 | 1,520 |
| 5 | 3,750 | 38,400 | 15 | 2,840 | 11,400 | 25 | 5,400 | 1,310 |
| 6 | 3,320 | 38,400 | 16 | 3,040 | 9,290 | 26 | 4,970 | 1,110 |
| 7 | 2,980 | 36,500 | 17 | 3,600 | 7,350 | 27 | 5,400 | 990 |
| 8 | 2,650 | 32,800 | 18 | 3,750 | 5,740 | 28 | 6,090 | 857 |
| 9 | 2,470 | 29,100 | 19 | 3,600 | 4,310 | 29 | 7,550 | 771 |
| 10 | 2,530 | 24,900 | 20 | 3,390 | 3,180 | 30 | 10,800 | 707 |
| | | | | | | 31 | | 845 |
| Monthly mean discharge | | | | | | | 4,359 | 13,590 |
| Runoff | | | | | | inches | 1.75 | 5.64 |

### 7. PELAHATCHIE CREEK NEAR FANNIN, MISS.

Location.—Lat 32°23'18", long 89°58'05", in SW¼SW¼ sec. 2, T. 6 N., R. 3 E., Choctaw meridian, near right bank 200 ft downstream from new bridge on State Highway 471, 2.2 miles downstream from Clark Creek, 2.2 miles south of Fannin, and 7.5 miles upstream from mouth.

Drainage area.—205 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 279.31 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 5,860 cfs 1:30 p.m. May 1 (gage height, 20.30 ft).

1951 to March 1958: Discharge, 13,500 cfs Apr. 13, 1955 (gage height, 22.08 ft).

Maximum stage known since at least 1880, about 23.7 ft in January 1950, from information by local residents.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 224 | 5,180 | 11 | 718 | 66 | 21 | 304 | 22 |
| 2 | 139 | 4,050 | 12 | 364 | 55 | 22 | 684 | 30 |
| 3 | 98 | 2,490 | 13 | 160 | 56 | 23 | 539 | 25 |
| 4 | 78 | 1,230 | 14 | 136 | 45 | 24 | 187 | 18 |
| 5 | 66 | 1,920 | 15 | 180 | 35 | 25 | 88 | 15 |
| 6 | 58 | 2,450 | 16 | 417 | 27 | 26 | 74 | 13 |
| 7 | 49 | 2,180 | 17 | 312 | 21 | 27 | 81 | 11 |
| 8 | 42 | 1,070 | 18 | 153 | 18 | 28 | 229 | 9.2 |
| 9 | 77 | 170 | 19 | 86 | 17 | 29 | 720 | 8.2 |
| 10 | 508 | 84 | 20 | 68 | 18 | 30 | 2,280 | 7.2 |
| | | | | | | 31 | | 6.3 |
| Monthly mean discharge | | | | | | | 304 | 689 |
| Runoff | | | | | | inches | 1.65 | 3.87 |

### 8. PEARL RIVER AT JACKSON, MISS.

Location.—Lt 32°17'20", long 90°10'45", in SE¼ sec. 10, T. 5 N., R. 1 E., Choctaw meridian, on left bank at downstream side of bridge on U.S. Highway 80 (old) at eastern city limits of Jackson, 0.2 mile upstream from Illinois Central Railroad bridge, a quarter of a mile upstream from Town Creek, and 4½ miles upstream from Richland Creek.

Drainage area.—3,100 sq mi, approximately.

Gage-height record.—Water-stage recorder graph. Datum of gage is 234.90 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 38,900 cfs 6 a.m. May 8 (gage height, 34.23 ft).

1901–13, 1928 to March 1958: Discharge, 80,800 cfs Apr. 1, 1902 (gage-height, 37.2 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 7,650 | 14,600 | 11 | 3,650 | 31,100 | 21 | 4,550 | 6,790 |
| 2 | 7,150 | 17,200 | 12 | 3,970 | 28,000 | 22 | 4,880 | 4,790 |
| 3 | 6,340 | 20,500 | 13 | 3,930 | 24,100 | 23 | 5,000 | 3,080 |
| 4 | 5,600 | 25,800 | 14 | 3,650 | 20,600 | 24 | 5,340 | 2,540 |
| 5 | 4,880 | 32,900 | 15 | 3,770 | 17,000 | 25 | 5,550 | 2,130 |
| 6 | 4,180 | 37,000 | 16 | 3,690 | 15,000 | 26 | 5,510 | 1,840 |
| 7 | 3,610 | 38,800 | 17 | 3,730 | 12,900 | 27 | 5,290 | 1,640 |
| 8 | 3,240 | 38,900 | 18 | 3,930 | 11,100 | 28 | 5,210 | 1,430 |
| 9 | 3,200 | 37,000 | 19 | 3,970 | 9,140 | 29 | 6,390 | 1,310 |
| 10 | 3,440 | 34,200 | 20 | 3,850 | 7,710 | 30 | 10,300 | 1,150 |
| | | | | | | 31 | | 1,070 |
| Monthly mean discharge | | | | | | | 4,848 | 16,170 |
| Runoff | | | | | | inches | 1.74 | 6.01 |

## YAZOO RIVER BASIN

### 9. TALLAHATCHIE RIVER NEAR LAMBERT, MISS.

Location.—Lat 34°10'50", long 90°12'55", in SW¼ sec. 29, T. 27 N., R. 1 E., Choctaw meridian, near center of span on downstream side of highway bridge, a quarter of a mile downstream from Coldwater River, 4 miles southeast of Lambert, and 24½ miles downstream from point of diversion of Panola-Quitman Floodway.

Drainage area.—1,980 sq mi, approximately (does not include 2,600 sq mi of upper Tallahatchie and Yocona Rivers, the entire flow of which is diverted 24½ miles upstream through Panola-Quitman Floodway).

Gage-height record.—Water-stage recorder graph. Datum of gage is 123.83 ft above mean sea level, datum of 1929 with 1941 Alluvial Valley and 1944 Birmingham-Corinth supplementary adjustments, U.S. Coast and Geodetic Survey (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 11,600 cfs 10 a.m. May 3 (gage-height, 30.54 ft).

1935 to March 1958: Discharge observed, 32,800 cfs Jan. 30, 1937 (gage-height, 35.54 ft).

A stage of 36.8 ft (from floodmarks) occurred in January 1932 (probably affected by levee breaks above).

Remarks.—No flow passed Arkabutla Dam on Coldwater River Apr. 27–May 4. Gates completely closed. Drainage area above Arkabutla Dam is 1,000 sq mi.

Cooperation.—Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 3,540 | 10,400 | 11 | 2,070 | 9,690 | 21 | 3,360 | 6,200 |
| 2 | 3,230 | 11,100 | 12 | 1,980 | 9,490 | 22 | 3,470 | 5,530 |
| 3 | 3,130 | 11,600 | 13 | 1,840 | 8,390 | 23 | 3,210 | 5,340 |
| 4 | 3,040 | 11,500 | 14 | 1,810 | 7,100 | 24 | 2,930 | 4,960 |
| 5 | 3,180 | 11,300 | 15 | 2,930 | 6,600 | 25 | 3,000 | 4,740 |
| 6 | 3,150 | 11,200 | 16 | 5,850 | 5,690 | 26 | 6,090 | 4,680 |
| 7 | 3,000 | 10,500 | 17 | 6,260 | 5,350 | 27 | 9,070 | 4,310 |
| 8 | 2,490 | 9,790 | 18 | 5,230 | 5,010 | 28 | 9,160 | 4,320 |
| 9 | 2,230 | 9,260 | 19 | 4,390 | 4,920 | 29 | 9,500 | 4,360 |
| 10 | 2,150 | 9,190 | 20 | 3,700 | 6,180 | 30 | 10,300 | 4,170 |
| | | | | | | 31 | | 4,140 |
| Monthly mean discharge | | | | | | | 4,176 | 7,323 |

### 10. TALLAHATCHIE RIVER AT SWAN LAKE, MISS.

Location.—Lat 33°52'55", long 90°16'45", in NE¼ sec. 10, T. 23 N., R. 1 W., Choctaw meridian, near center of span on downstream side of highway bridge, half a mile northeast of Swan Lake, 2 miles downstream from Cassidy Bayou, 17 miles downstream from point where Panola-Quitman Floodway empties into Tallahatchie River, and at mile 235.6.

Drainage area.—5,130 sq mi, approximately.

Gage-height record.—Water-stage recorder graph. Datum of gage is 113.38 ft above mean sea level, datum of 1929 with 1941 Alluvial Valley supplementary adjustment, U.S. Coast and Geodetic Survey.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 28,300 cfs 8 a.m. May 4; gage height, 30.40 ft 4 p.m. May 4.

1929 to March 1958: Discharge observed, 49,200 cfs Apr. 9, 1933; gage height, 37.0 ft, Jan. 15, 1932 (affected by break in levee).

Remarks.—No flow passed Arkabutla Dam on Coldwater River Apr. 27–May 4, Enid Dam on Yocona River Apr. 27–May 25, and Sardis Dam on Tallahatchie River Apr. 27–May 21. Total drainage area above dams is 3,105 sq mi.

Cooperation.—Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 10,800 | 21,600 | 11 | 6,560 | 18,800 | 21 | 9,330 | 10,600 |
| 2 | 10,200 | 27,900 | 12 | 6,410 | 17,800 | 22 | 9,070 | 10,200 |
| 3 | 9,380 | 28,000 | 13 | 6,190 | 16,900 | 23 | 8,720 | 9,740 |
| 4 | 8,810 | 28,300 | 14 | 6,090 | 15,500 | 24 | 8,230 | 9,440 |
| 5 | 8,580 | 27,300 | 15 | 7,850 | 14,700 | 25 | 8,100 | 9,140 |
| 6 | 8,450 | 25,200 | 16 | 9,430 | 13,400 | 26 | 12,100 | 8,720 |
| 7 | 8,080 | 23,400 | 17 | 9,710 | 12,200 | 27 | 14,100 | 8,560 |
| 8 | 7,470 | 21,700 | 18 | 9,930 | 11,600 | 28 | 15,500 | 8,500 |
| 9 | 7,000 | 20,300 | 19 | 10,200 | 11,000 | 29 | 17,400 | 8,960 |
| 10 | 6,660 | 19,000 | 20 | 9,570 | 10,800 | 30 | 18,600 | 8,830 |
| | | | | | | 31 | | 8,750 |
| Monthly mean discharge | | | | | | | 9,617 | 15,700 |

### 11. THOMPSON CREEK AT McCARLEY, MISS.

Location.—Lat 33°31'25", long 89°50'40", in SE¼ sec. 11, T. 19 N., R. 4 E., Choctaw meridian, on left bank at downstream side of highway bridge, 0.1 mile upstream from Columbus and Greenville Railway bridge, 0.4 mile upstream from mouth, and 0.6 mile west of McCarley.

Drainage area.—14.4 sq mi.

Gage-height record.—Water-stage recorder graph and twice-daily wire-weight gage readings. Datum of gage is 251.86 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 1,330 cfs 4:30 a.m. Apr. 29 (gage height, 8.80 ft).

1956 to March 1958: Discharge, 2,420 cfs Jan. 4, 1957 (gage height, 12.06 ft).

Flood of Apr. 1, 2, 1955, reached a stage of 14.05 ft and flood of Mar. 27, 1951, reached a stage of 12.96 ft from records furnished by U.S. Department of Agriculture, Soil Conservation Service.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 15 | 229 | 11 | 10 | 73 | 21 | 9.7 | 13 |
| 2 | 15 | 135 | 12 | 10 | 35 | 22 | 8.6 | 11 |
| 3 | 14 | 32 | 13 | 9.4 | 26 | 23 | 8.2 | 9.4 |
| 4 | 14 | 137 | 14 | 11 | 20 | 24 | 7.5 | 8.6 |
| 5 | 12 | 85 | 15 | 32 | 18 | 25 | 77 | 8.6 |
| 6 | 12 | 37 | 16 | 13 | 16 | 26 | 394 | 8.0 |
| 7 | 10 | 18 | 17 | 11 | 14 | 27 | 129 | 8.0 |
| 8 | 9.7 | 12 | 18 | 11 | 13 | 28 | 68 | 8.0 |
| 9 | 11 | 11 | 19 | 9.7 | 18 | 29 | 454 | 7.6 |
| 10 | 11 | 265 | 20 | 9.4 | 15 | 30 | 93 | 7.2 |
| | | | | | | 31 | | 7.2 |
| Monthly mean discharge | | | | | | | 50.0 | 42.1 |
| Runoff | | | | | | inches | 3.87 | 3.37 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 30* | | | *May 6* | | |
| 12 p.m. | 4.10 | 44 | 6 a.m. | 4.80 | 112 | 2 a.m. | 4.41 | 59 |
| *Apr. 25* | | | 12 m. | 4.67 | 91 | 4 | 4.37 | 63 |
| 12 m. | 4.33 | 69 | 6 p.m. | 4.48 | 66 | 6 | 4.27 | 43 |
| 12 p.m. | 4.72 | 127 | 12 p.m. | 4.42 | 59 | 12 m. | 4.16 | 32 |
| *Apr. 26* | | | *May 1* | | | 12 p.m. | 4.03 | 22 |
| 4 a.m. | 4.80 | 138 | 6 a.m. | 4.42 | 59 | *May 7* | | |
| 6 | 5.03 | 187 | 12 m. | 4.41 | 57 | 12 m. | 3.96 | 18 |
| 8 | 5.75 | 380 | 3 p.m. | 4.48 | 66 | 12 p.m. | 3.90 | 14 |
| 9 | 6.40 | 577 | 4 | 6.30 | 536 | *May 8* | | |
| 10 | 7.50 | 920 | 5 | 6.93 | 738 | 12 p.m. | 3.85 | 11 |
| 11 | 8.13 | 1,120 | 6 | 6.60 | 632 | *May 9* | | |
| 11:30 | 8.25 | 1,160 | 7 | 6.10 | 475 | 6 p.m. | 3.83 | 9.8 |
| 12 m. | 8.10 | 1,110 | 8 | 5.90 | 412 | 12 p.m. | 3.87 | 12 |
| 1 p.m. | 7.35 | 872 | 9 | 6.04 | 457 | *May 10* | | |
| 2 | 6.44 | 589 | 10 | 6.25 | 520 | 2 a.m. | 3.95 | 17 |
| 3 | 6.30 | 546 | 11 | 6.40 | 567 | 4 | 4.17 | 34 |
| 4 | 5.87 | 415 | 12 p.m. | 6.16 | 493 | 5 | 5.00 | 163 |
| 6 | 5.46 | 296 | *May 2* | | | 6 | 5.50 | 297 |
| 8 | 5.13 | 211 | 2 a.m. | 5.55 | 314 | 7 | 5.25 | 228 |
| 12 p.m. | 4.69 | 121 | 4 | 5.30 | 244 | 8 | 4.98 | 156 |
| *Apr. 27* | | | 8 | 4.85 | 108 | 10 | 4.67 | 96 |
| 6 a.m. | 4.38 | 70 | 12 m. | 4.62 | 87 | 12 m. | 4.52 | 75 |
| 12 m. | 4.20 | 50 | 6 p.m. | 4.44 | 63 | 2 p.m. | 4.40 | 60 |
| 4 p.m. | 4.30 | 61 | 12 p.m. | 4.32 | 50 | 3 | 4.37 | 56 |
| 5 | 5.70 | 365 | *May 3* | | | 4 | 4.40 | 60 |
| 6 | 5.55 | 322 | 12 m. | 4.11 | 28 | 5 | 7.60 | 952 |
| 8 | 5.30 | 252 | 12 p.m. | 4.03 | 22 | 6 | 8.56 | 1,260 |
| 10 | 5.12 | 209 | *May 4* | | | 7 | 7.70 | 984 |
| 12 p.m. | 4.92 | 166 | 9 a.m. | 4.00 | 20 | 8 | 6.54 | 622 |
| *Apr. 28* | | | 10 | 4.02 | 21 | 9 | 5.70 | 372 |
| 6 a.m. | 4.35 | 71 | 12 m. | 4.16 | 32 | 10 | 5.34 | 273 |
| 12 m. | 4.10 | 44 | 2 p.m. | 4.50 | 71 | 12 p.m. | 4.90 | 170 |
| 4 p.m. | 4.04 | 39 | 2:30 | 5.70 | 355 | *May 11* | | |
| 8 | 4.11 | 45 | 3 | 5.50 | 289 | 2 a.m. | 4.66 | 126 |
| 12 p.m. | 4.40 | 77 | 4 | 5.56 | 306 | 4 | 4.50 | 100 |
| *Apr. 29* | | | 5 | 5.50 | 289 | 12 m. | 4.20 | 60 |
| 1 a.m. | 4.53 | 90 | 6 | 5.70 | 358 | 12 p.m. | 4.00 | 40 |
| 2 | 5.90 | 424 | 7 | 5.76 | 376 | *May 12* | | |
| 3 | 7.82 | 1,020 | 8 | 5.71 | 358 | 12 m. | 3.93 | 34 |
| 4 | 8.65 | 1,290 | 9 | 5.42 | 266 | 12 p.m. | 3.88 | 31 |
| 4:30 | 8.80 | 1,330 | 10 | 5.35 | 244 | *May 13* | | |
| 5 | 8.70 | 1,300 | 12 p.m. | 5.16 | 192 | 12 p.m. | 3.76 | 22 |
| 6 | 8.00 | 1,080 | *May 5* | | | | | |
| 7 | 7.00 | 763 | 6 a.m. | 4.70 | 100 | | | |
| 8 | 6.37 | 560 | 12 m. | 4.45 | 66 | | | |
| 10 | 5.90 | 406 | 6 p.m. | 4.31 | 50 | | | |
| 12 m. | 5.70 | 346 | 9 | 4.35 | 54 | | | |
| 4 p.m. | 5.42 | 264 | 12 p.m. | 4.40 | 60 | | | |
| 8 | 5.20 | 202 | | | | | | |
| 12 p.m. | 5.00 | 156 | | | | | | |

### 12. YAZOO RIVER AT GREENWOOD, MISS.

Location.—Lat 33°31'17", long 90°11'03", in SW¼ sec. 10, T. 19 N., R. 1 E., Choctaw meridian, on left bank 110 ft downstream from bridge on U.S. Highway 49E and 82 (old) in Greenwood, 0.4 mile downstream from Palusha Bayou, 3 miles downstream from confluence of Tallahatchie and Yalobusha Rivers, and at mile 169.4.

Drainage area.—7,450 sq mi, approximately.

Gage-height record.—Water-stage recorder graph. Datum of gage is 92.07 ft above mean sea level, datum of 1929 with 1941 Alluvial Valley supplementary adjustment, U.S. Coast and Geodetic Survey.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 28,200 cfs May 10; gage-height, 34.15 ft 11:30 p.m. May 10.

1907–12, 1927 to March 1958: Discharge, 72,900 cfs Jan. 19, 1932, (gage-height, 40.10 ft).

Maximum stage known, 41.2 ft in 1882, caused by overflow from Mississippi River (discharge not determined), from reports of Mississippi River Commission.

Remarks.—No flow passed Arkabutla Dam on Coldwater River Apr. 27–May 4, Enid Dam on Yocona River Apr. 27–May 25, Sardis Dam on Tallahatchie River Apr. 27–May 21, and Grenada Dam on Yalobusha River Apr. 27–May 19. Gates completely closed. Total drainage area above dams is 4,425 sq mi.

Cooperation.—Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 15,200 | 23,000 | 11 | 9,920 | 28,000 | 21 | 11,500 | 18,400 |
| 2 | 14,700 | 24,300 | 12 | 9,550 | 27,000 | 22 | 11,400 | 17,900 |
| 3 | 14,000 | 25,100 | 13 | 9,180 | 26,300 | 23 | 11,300 | 17,400 |
| 4 | 13,400 | 26,000 | 14 | 8,950 | 25,400 | 24 | 11,000 | 16,800 |
| 5 | 12,800 | 27,500 | 15 | 8,930 | 24,600 | 25 | 11,700 | 16,200 |
| 6 | 12,200 | 27,700 | 16 | 10,300 | 23,600 | 26 | 15,700 | 15,700 |
| 7 | 11,700 | 27,700 | 17 | 11,200 | 22,500 | 27 | 18,200 | 15,100 |
| 8 | 11,200 | 27,400 | 18 | 11,300 | 21,300 | 28 | 19,200 | 14,500 |
| 9 | 10,800 | 27,200 | 19 | 11,500 | 20,400 | 29 | 21,000 | 14,100 |
| 10 | 10,300 | 27,800 | 20 | 11,600 | 19,300 | 30 | 22,000 | 13,800 |
| | | | | | | 31 | | 13,400 |
| Monthly mean discharge | | | | | | | 12,720 | 21,790 |

### 13. SUNFLOWER RIVER AT SUNFLOWER, MISS.

Location.—Lat 33°32'50", long 90°32'35", in NE¼ sec. 6, T. 19 N., R. 3 W., Choctaw meridian, near right bank on downstream side of highway bridge, half a mile northwest of Sunflower, 2½ miles downstream from Jones Bayou, and 19 miles upstream from Quiver River.

Drainage area.—767 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 92.95 ft above mean sea level, datum of 1929 with 1941 Alluvial Valley supplementary adjustment, U.S. Coast and Geodetic Survey (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 9,300 cfs 8 p.m. May 5 (gage height, 28.31 ft).

1935 to March 1958: Discharge observed, 7,700 cfs Jan. 15–17, 1946; gage height observed, 27.43 ft Jan. 16, 1946.

Cooperation.—Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,120 | 7,500 | 11 | 454 | 7,650 | 21 | 1,020 | 4,570 |
| 2 | 1,880 | 8,500 | 12 | 414 | 7,530 | 22 | 972 | 4,560 |
| 3 | 1,640 | 8,960 | 13 | 374 | 7,120 | 23 | 888 | 4,500 |
| 4 | 1,380 | 9,250 | 14 | 354 | 6,730 | 24 | 800 | 4,380 |
| 5 | 1,180 | 9,270 | 15 | 404 | 6,440 | 25 | 942 | 4,170 |
| 6 | 980 | 9,270 | 16 | 470 | 5,200 | 26 | 1,720 | 4,040 |
| 7 | 836 | 7,970 | 17 | 658 | 5,660 | 27 | 3,160 | 3,840 |
| 8 | 694 | 7,850 | 18 | 922 | 5,280 | 28 | 4,030 | 3,650 |
| 9 | 582 | 7,650 | 19 | 1,080 | 4,880 | 29 | 5,040 | 3,450 |
| 10 | 506 | 7,750 | 20 | 1,080 | 4,600 | 30 | 6,300 | 3,220 |
| | | | | | | 31 | | 2,980 |
| Monthly mean discharge | | | | | | | 1,429 | 6,078 |
| Runoff | | | | | | inches | 2.08 | 9.14 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 29* | | | *May 4** | | |
| 12 p.m. | 6.75 | 723 | 12 m. | 23.26 | 5,040 | 10 a.m. | 27.82 | 9,240 |
| *Apr. 25* | | | 12 p.m. | 24.15 | 5,710 | 12 m. | 28.04 | 9,260 |
| 2 a.m. | 6.73 | 720 | *Apr. 30* | | | 12 p.m. | 28.21 | 9,270 |
| 6 | 7.17 | 808 | 12 m. | 24.82 | 6,290 | *May 5* | | |
| 12 m. | 7.94 | 950 | 12 p.m. | 25.44 | 6,900 | 2 a.m. | 28.24 | 9,280 |
| 12 p.m. | 9.11 | 1,190 | *May 1** | | | 12 m. | 28.27 | 9,290 |
| *Apr. 26* | | | 12 m. | 26.00 | 7,480 | 8 p.m. | 28.31 | 9,300 |
| 12 m. | 11.40 | 1,630 | 12 p.m. | 26.60 | 8,030 | 12 p.m. | 28.30 | 9,270 |
| 12 p.m. | 15.36 | 2,450 | *May 2** | | | *May 6* | | |
| *Apr. 27* | | | 12 m. | 27.05 | 8,510 | 12 m. | 28.30 | 9,270 |
| 12 m. | 18.40 | 3,230 | 12 p.m. | 27.33 | 8,790 | 12 p.m. | 28.24 | 9,260 |
| 12 p.m. | 20.05 | 3,710 | *May 3** | | | *May 7** | | |
| *Apr. 28* | | | 12 m. | 27.53 | 8,950 | 12 m. | 28.19 | 8,050 |
| 12 m. | 21.06 | 4,030 | 12 p.m. | 27.72 | 9,150 | 12 p.m. | 28.12 | 8,000 |
| 12 p.m. | 22.00 | 4,360 | | | | | | |

*Daily means, cannot be computed precisely from figures shown.

## BIG BLACK RIVER BASIN

### 14. BIG BLACK RIVER AT PICKENS, MISS.

Location.—Lat 32°52'45", long 89°58'05", in SW¼ sec. 14, T. 12 N., R. 3 E., Choctaw meridian, on right bank at downstream side of bridge on old U.S. Highway 51, half a mile southeast of Pickens, 6 miles downstream from Seneasha Creek, and 6 miles upstream from Cypress Creek.

Drainage area.—1,460 sq mi, approximately.

Gage-height record.—Water-stage recorder graph.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 37,800 cfs 2 p.m. May 2 (gage height, 20.15 ft).

1936 to March 1958: Discharge, 49,400 cfs Mar. 28, 1951 (gage height, 22.20 ft).

Maximum stage known, 23.7 ft Dec. 29, 1926. Flood of May 1930 reached a stage of about 23.5 ft and a flood in 1892 reached about the same stage as the floods of 1926 and 1930, from information by local residents.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,950 | 20,500 | 11 | 1,170 | 8,000 | 21 | 2,690 | 1,260 |
| 2 | 2,850 | 35,100 | 12 | 1,380 | 7,360 | 22 | 3,150 | 1,200 |
| 3 | 2,300 | 25,600 | 13 | 1,290 | 7,360 | 23 | 2,410 | 1,170 |
| 4 | 1,500 | 15,000 | 14 | 1,050 | 8,000 | 24 | 1,920 | 200 |
| 5 | 1,230 | 14,000 | 15 | 1,500 | 7,360 | 25 | 2,270 | 780 |
| 6 | 1,110 | 13,200 | 16 | 2,810 | 6,300 | 26 | 4,180 | 615 |
| 7 | 1,020 | 12,000 | 17 | 2,650 | 5,700 | 27 | 6,430 | 525 |
| 8 | 900 | 10,800 | 18 | 2,200 | 4,920 | 28 | 9,970 | 450 |
| 9 | 840 | 10,000 | 19 | 2,060 | 3,260 | 29 | 14,500 | 392 |
| 10 | 1,020 | 8,900 | 20 | 2,090 | 1,530 | 30 | 17,800 | 366 |
| | | | | | | 31 | | 342 |
| Monthly mean discharge | | | | | | | 3,308 | 7,522 |
| Runoff | | | | | | inches | 2.53 | 5.94 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 28* | | | *May 3* | | |
| 12 p.m. | 8.98 | 1,840 | 8 a.m. | 17.80 | 9,110 | 12 m. | 19.38 | 25,400 |
| *Apr. 25* | | | 4 p.m. | 18.28 | 10,800 | 12 p.m. | 18.92 | 17,600 |
| 4 a.m. | 8.99 | 1,850 | 12 p.m. | 18.49 | 11,900 | *May 4* | | |
| 12 m. | 9.40 | 1,990 | *Apr. 29* | | | 12 m. | 18.65 | 14,300 |
| 12 p.m. | 12.58 | 3,290 | 12 m. | 18.87 | 14,800 | 12 p.m. | 18.61 | 14,000 |
| *Apr. 26* | | | 12 p.m. | 19.05 | 16,500 | *May 5* | | |
| 3 a.m. | 13.05 | 3,520 | *Apr. 30* | | | 12 m. | 18.65 | 14,200 |
| 12 m. | 14.02 | 4,010 | 12 p.m. | 19.28 | 19,100 | 12 p.m. | 18.60 | 13,800 |
| 12 p.m. | 15.82 | 5,340 | *May 1* | | | *May 6* | | |
| *Apr. 27* | | | 6 p.m. | 19.34 | 19,400 | 12 p.m. | 18.44 | 12,500 |
| 4 a.m. | 16.20 | 5,830 | 12 p.m. | 19.84 | 29,200 | *May 7* | | |
| 4 p.m. | 16.61 | 6,460 | *May 2* | | | 12 p.m. | 18.28 | 11,500 |
| 12 p.m. | 17.46 | 8,120 | 4 a.m. | 19.95 | 33,800 | | | |
| | | | 2 p.m. | 20.15 | 37,800 | | | |
| | | | 12 p.m. | 19.84 | 34,000 | | | |

### 15. BIG BLACK RIVER NEAR BOVINA, MISS.

Location.—Lat 32°20′51″, long 90°41′48″, in NW¼SE¼ sec. 22, T. 16 N., R. 5 E., Washington meridian, on left bank at downstream side of bridge on U.S. Highway 80, 300 ft upstream from Clear Creek, 0.4 mile upstream from Illinois Central Railroad bridge, 2 miles east of Bovina, 12 miles upstream from Fourteenmile Creek, and at mile 61.7. Records include flow of Clear Creek.

Drainage area.—2,810 sq mi, approximately, includes that of Clear Creek.

Gage-height record.—Water-stage recorder graph. Datum of gage is 84.93 ft above mean sea level, datum of 1929, or 85.00 ft above mean Gulf level (levels by Corps of Engineers; Corps of Engineers bench mark).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958. Discharge, 52,500 cfs 6:30 p.m. May 5 (gage height, 39.74 ft).

1936 to March 1958: Discharge, 58,600 cfs Apr. 1, 1951 (gage height, 39.65 ft).

Previous maximum stage known since May 1930, that of Apr. 1, 1951.

Floods of 1912 and January 1927 reached a stage about 3 ft higher than that of May 5, 1958, at Askews Bridge, 6 miles upstream.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 4,620 | 13,900 | 11 | 2,000 | 23,700 | 21 | 3,560 | 7,700 |
| 2 | 4,220 | 18,400 | 12 | 2,160 | 20,800 | 22 | 3,720 | 7,200 |
| 3 | 4,040 | 35,900 | 13 | 2,040 | 18,100 | 23 | 4,400 | 6,250 |
| 4 | 3,900 | 48,200 | 14 | 1,880 | 16,300 | 24 | 4,800 | 4,080 |
| 5 | 3,680 | 51,800 | 15 | 2,200 | 14,200 | 25 | 4,850 | 2,520 |
| 6 | 2,920 | 50,400 | 16 | 2,520 | 12,700 | 26 | 4,710 | 2,160 |
| 7 | 2,000 | 46,200 | 17 | 2,960 | 11,400 | 27 | 4,870 | 1,520 |
| 8 | 1,520 | 40,600 | 18 | 3,440 | 10,300 | 28 | 6,680 | 1,140 |
| 9 | 1,480 | 35,200 | 19 | 3,680 | 9,250 | 29 | 8,330 | 996 |
| 10 | 1,880 | 28,500 | 20 | 3,600 | 8,300 | 30 | 10,500 | 928 |
| | | | | | | 31 | | 896 |
| Monthly mean discharge | | | | | | | 3,772 | 17,730 |
| Runoff | | | | | | inches | 1.50 | 7.27 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 26* | | | *Apr. 30* | | | *May 3*—Con. | | |
| 12 p.m. | 18.58 | 4,660 | 2 a.m. | 29.08 | 10,400 | 12 m. | 39.05 | 37,400 |
| *Apr. 27* | | | 8 a.m. | 29.29 | 10,500 | 12 p.m. | 39.42 | 45,400 |
| | | | 10 p.m. | 29.31 | 10,500 | | | |
| 4 p.m. | 18.88 | 4,790 | 12 p.m. | 29.76 | 10,900 | *May 4* | | |
| 12 p.m. | 20.47 | 5,510 | *May 1* | | | 12 p.m. | 39.67 | 50,900 |
| *Apr. 28* | | | 6 a.m. | 33.57 | 14,800 | | | |
| | | | 12 m. | 32.85 | 13,800 | *May 5* | | |
| 6 a.m. | 22.30 | 6,400 | 6 p.m. | 32.80 | 13,800 | | | |
| 12 m. | 23.18 | 6,840 | 12 p.m. | 34.22 | 15,700 | 6:30 p.m. | 39.74 | 52,500 |
| 6 p.m. | 23.70 | 7,100 | *May 2* | | | 12 p.m. | 39.72 | 52,000 |
| 12 p.m. | 23.97 | 7,240 | 6 a.m. | 34.51 | 16,200 | *May 6* | | |
| *Apr. 29* | | | 12 m. | 35.26 | 17,300 | | | |
| | | | 12 p.m. | 37.82 | 23,400 | 12 p.m. | 39.57 | 48,700 |
| 6 a.m. | 24.00 | 7,250 | | | | | | |
| 12 m. | 25.15 | 7,830 | *May 3* | | | *May 7* | | |
| 11 p.m. | 29.25 | 10,500 | | | | | | |
| 12 p.m. | 29.18 | 10,400 | 6 a.m. | 38.70 | 30,500 | 12 p.m. | 39.34 | 43,700 |

## RED RIVER BASIN

### 16. RED RIVER AT ARTHUR CITY, TEX.

Location.—Lat 33°53′, long 95°30′, in NW¼ sec. 11, T. 6 S., R. 17 E., near right bank on downstream side of pier of bridge on U.S. Highway 271 at Arthur City, Lamar County, 10.6 miles downstream from Muddy Boggy River, 26.0 miles upstream from Kiamichi River, and at mile 633.1.

Drainage area.—44,531 sq mi, of which 5,936 sq mi is probably noncontributing.

Gage-height record.—Water-stage recorder graph except Apr. 1–29, and May 3–31, when graphs were drawn on basis of at least twice-daily wire-weight gage readings. Datum of gage is 380.07 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 120,000 cfs 5 p.m. May 3 (gage height, 26.35 ft).

1905–11, 1936 to March 1958: Discharge, 400,000 cfs May 28, 1908 (gage height, 43.2 ft).

Maximum stage known, that of May 28, 1908.

Remarks.—Some regulation by Lake Texoma 92.8 miles above station.

Cooperation.—Records collected and computed by Corps of Engineers and reviewed by Geological Survey.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 9,450 | 35,300 | 11 | 4,950 | 39,900 | 21 | 7,210 | 8,660 |
| 2 | 8,170 | 56,700 | 12 | 4,230 | 46,300 | 22 | 11,300 | 8,440 |
| 3 | 7,690 | 110,000 | 13 | 2,720 | 38,400 | 23 | 14,400 | 8,000 |
| 4 | 8,170 | 82,000 | 14 | 1,630 | 30,600 | 24 | 14,400 | 9,560 |
| 5 | 7,210 | 48,800 | 15 | 2,150 | 23,400 | 25 | 12,100 | 9,800 |
| 6 | 5,830 | 35,400 | 16 | 3,630 | 13,800 | 26 | 9,970 | 8,880 |
| 7 | 4,330 | 31,800 | 17 | 4,330 | 12,800 | 27 | 11,800 | 6,950 |
| 8 | 2,720 | 28,000 | 18 | 5,830 | 11,300 | 28 | 11,800 | 8,660 |
| 9 | 3,350 | 28,000 | 19 | 6,270 | 9,800 | 29 | 12,100 | 8,000 |
| 10 | 4,840 | 39,100 | 20 | 6,050 | 8,880 | 30 | 24,900 | 5,950 |
| | | | | | | 31 | | 6,950 |
| Monthly mean discharge | | | | | | | 7,784 | 26,460 |
| Runoff (thousands of acre-feet) | | | | | | | 463.2 | 1,627 |

### 17. KIAMICHI RIVER NEAR BELZONI, OKLA.

Location.—Lat 34°12′, long 95°29′, in SE¼ sec. 14, T. 4 S., R. 17 E., near right bank on downstream side of bridge on State Highway 7, 1¾ miles northwest of Belzoni, 6.5 miles downstream from Cedar Creek, 10 miles upstream from Possum Creek, and at mile 47.7.

Drainage area.—1,423 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 389.91 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 55,200 cfs 4 a.m. May 3 (gage height, 40.78 ft).

1925 to March 1958: Discharge, 71,400 cfs Feb. 18, 1938 (gage height, 44.0 ft).

Maximum stage known, 44.2 ft in October 1915, from information by local residents.

Cooperation.—Records collected and computed by Corps of Engineers and reviewed by Geological Survey.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,570 | 2,710 | 11 | 1,300 | 3,840 | 21 | 9,010 | 337 |
| 2 | 2,050 | 34,700 | 12 | 1,270 | 2,380 | 22 | 6,790 | 301 |
| 3 | 2,710 | 50,000 | 13 | 1,150 | 1,660 | 23 | 4,040 | 260 |
| 4 | 2,500 | 39,600 | 14 | 1,450 | 1,270 | 24 | 2,380 | 232 |
| 5 | 2,310 | 28,900 | 15 | 2,440 | 970 | 25 | 1,720 | 213 |
| 6 | 1,720 | 10,700 | 16 | 2,440 | 820 | 26 | 1,450 | 204 |
| 7 | 1,450 | 3,940 | 17 | 1,860 | 738 | 27 | 2,500 | 187 |
| 8 | 1,120 | 2,310 | 18 | 1,450 | 666 | 28 | 2,310 | 175 |
| 9 | 1,090 | 1,660 | 19 | 1,210 | 505 | 29 | 2,180 | 167 |
| 10 | 1,540 | 3,900 | 20 | 3,100 | 396 | 30 | 1,860 | 172 |
| | | | | | | 31 | | 184 |
| Monthly mean discharge | | | | | | | 2,366 | 6,261 |
| Runoff (thousands of acre-feet) | | | | | | | 140.8 | 385 |
| Runoff (inches) | | | | | | | 1.85 | 5.07 |

### 18. RED RIVER AT INDEX, ARK.

Location.—Lat 33°33′05″, long 94°02′25″, in SW¼ sec. 7, T. 14 S., R. 28 W., near right bank on downstream side of pier of bridge on U.S. Highway 71 at Index, 2¼ miles south of Orden, 20.6 miles upstream from Little River, and at mile 485.3.

Drainage area.—48,030 sq mi of which 5,936 is probably noncontributing.

Gage-height record.—Water-stage recorder graph. Datum of gage is 246.87 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements. Discharge computed from loop curves at times.

Maxima.—April–May 1958: Discharge, 145,000 cfs 6 a.m. May 6 (gage height, 25.32 ft in gage well; 25.8 ft from outside gage).

1936 to March 1958: Discharge, 297,000 cfs Feb. 23, 1938 (gage height, 34.25 ft).

Remarks.—Some regulation by Lake Texoma 241 miles upstream (capacity, 5,530,300 acre-ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 14,800 | 54,700 | 11 | 7,430 | 45,500 | 21 | 8,330 | 13,000 |
| 2 | 16,400 | 74,500 | 12 | 8,330 | 46,000 | 22 | 8,560 | 11,300 |
| 3 | 14,800 | 98,000 | 13 | 9,040 | 50,200 | 23 | 12,400 | 10,500 |
| 4 | 13,300 | 125,000 | 14 | 8,800 | 51,700 | 24 | 19,300 | 9,650 |
| 5 | 12,700 | 140,000 | 15 | 8,100 | 41,300 | 25 | 22,400 | 9,200 |
| 6 | 12,100 | 143,000 | 16 | 7,430 | 35,700 | 26 | 24,600 | 9,400 |
| 7 | 11,800 | 110,000 | 17 | 7,430 | 27,500 | 27 | 31,200 | 10,500 |
| 8 | 10,400 | 80,500 | 18 | 7,870 | 20,000 | 28 | 37,900 | 10,200 |
| 9 | 8,800 | 66,000 | 19 | 8,100 | 17,500 | 29 | 39,300 | 8,500 |
| 10 | 7,650 | 51,500 | 20 | 8,330 | 15,300 | 30 | 41,400 | 8,100 |
| | | | | | | 31 | | 8,950 |
| Monthly mean discharge | | | | | | | 14,970 | 45,260 |
| Runoff | | | | | | thousands of acre-feet | 890.6 | 2,783 |

### 19. LITTLE RIVER NEAR WRIGHT CITY, OKLA.

Location.—Lat 34°04′, long 95°03′, on north edge of NW¼ sec. 6, T. 6 S., R. 22 E., on left bank on downstream side of bridge on State Highway 98, 1¾ miles upstream from White Oak Creek and 2 miles west of Wright City.

Drainage area.—645 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 346.76 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements. Rate of change in stage used as a factor in discharge computations at times. Backwater from return of overbank flow at times.

Maxima.—April–May 1958: Discharge, 44,600 cfs 9–10 p.m. May 2; gage height, 41.63 ft 11 p.m. May 2.

1929–31, 1944 to March 1958: Discharge, 75,400 cfs Sept. 16, 1950 (gage height, 45.77 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,350 | 2,560 | 11 | 1,340 | 1,670 | 21 | 4,150 | 218 |
| 2 | 1,080 | 27,400 | 12 | 1,110 | 1,090 | 22 | 2,470 | 174 |
| 3 | 1,380 | 29,000 | 13 | 940 | 818 | 23 | 1,630 | 158 |
| 4 | 1,460 | 7,870 | 14 | 1,110 | 642 | 24 | 1,210 | 140 |
| 5 | 1,410 | 4,300 | 15 | 1,570 | 520 | 25 | 933 | 134 |
| 6 | 1,270 | 2,890 | 16 | 1,460 | 421 | 26 | 953 | 118 |
| 7 | 975 | 1,970 | 17 | 1,180 | 347 | 27 | 2,730 | 104 |
| 8 | 796 | 1,340 | 18 | 975 | 292 | 28 | 2,210 | 104 |
| 9 | 1,320 | 1,130 | 19 | 828 | 254 | 29 | 1,810 | 101 |
| 10 | 1,520 | 2,110 | 20 | 1,370 | 220 | 30 | 1,600 | 90 |
| | | | | | | 31 | | 83 |
| Monthly mean discharge | | | | | | | 1,471 | 2,847 |
| Runoff | | | | | | thousands of acre-feet | 87.55 | 175.1 |
| Runoff | | | | | | inches | 2.55 | 5.09 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 8.22 | 840 |
| *Apr. 26* | | |
| 6 a.m. | 8.25 | 850 |
| 12 m. | 8.42 | 904 |
| 6 p.m. | 8.44 | 911 |
| 8 | 8.65 | 978 |
| 10 | 9.50 | 1,270 |
| 12 p.m. | 10.75 | 1,690 |
| *Apr. 27* | | |
| 1 a.m. | 11.35 | 1,900 |
| 2 | 12.04 | 2,160 |
| 3 | 12.60 | 2,380 |
| 4 | 13.05 | 2,560 |
| 5 | 13.38 | 2,700 |
| 6 | 13.64 | 2,810 |
| 7 | 13.82 | 2,880 |
| 8 | 13.93 | 2,930 |
| 9 | 13.98 | 2,950 |
| 10 | 13.99 | 2,960 |
| 11 | 13.99 | 2,960 |
| 12 m. | 13.97 | 2,950 |
| 4 p.m. | 13.82 | 2,880 |
| 8 | 13.62 | 2,800 |
| 12 p.m. | 13.23 | 2,640 |
| *Apr. 28* | | |
| 6 a.m. | 12.56 | 2,360 |
| 12 m. | 12.13 | 2,190 |
| 6 p.m. | 11.67 | 2,020 |
| 12 p.m. | 11.37 | 1,910 |
| *Apr. 29* | | |
| 6 a.m. | 11.17 | 1,840 |
| 12 m. | 10.97 | 1,770 |
| 6 p.m. | 11.00 | 1,780 |
| 12 p.m. | 10.98 | 1,770 |
| *Apr. 30* | | |
| 12 m. | 10.29 | 1,530 |
| 2 p.m. | 10.22 | 1,510 |
| 4 | 10.20 | 1,500 |
| 6 | 10.24 | 1,520 |
| 8 | 10.33 | 1,550 |
| 10 | 10.44 | 1,590 |
| 12 p.m. | 10.64 | 1,650 |
| *May 1* | | |
| 2 a.m. | 10.82 | 1,760 |
| 4 | 11.00 | 1,830 |
| 6 | 11.16 | 1,880 |
| 8 | 11.32 | 1,950 |
| 10 | 11.55 | 2,070 |
| 12 m. | 11.98 | 2,300 |
| 2 p.m. | 12.55 | 2,600 |
| 4 | 13.28 | 2,980 |
| 6 | 14.15 | 3,390 |
| 8 | 14.80 | 3,570 |
| 10 | 15.18 | 3,620 |
| 12 p.m. | 15.32 | 3,660 |
| *May 2* | | |
| 1 a.m. | 15.34 | 3,660 |
| 2 | 15.50 | 4,030 |
| 3 | 16.05 | 4,850 |
| 4 | 17.20 | 6,250 |
| 5 | 19.10 | 9,000 |
| 6 | 22.80 | 12,300 |
| 7 | 26.20 | 15,300 |
| 8 | 29.50 | 18,800 |
| 9 | 32.60 | 23,100 |
| 10 | 35.00 | 26,600 |
| 11 | 36.80 | 29,400 |
| 12 m. | 38.00 | 31,500 |
| 1 p.m. | 38.80 | 33,600 |
| 2 | 39.48 | 36,100 |
| 3 | 40.00 | 38,100 |
| 4 | 40.40 | 39,300 |
| 5 | 40.70 | 40,400 |
| 6 | 40.90 | 41,300 |
| 7 | 41.11 | 42,600 |
| 9 | 41.46 | 44,600 |
| 10 | 41.58 | 44,600 |
| 11 | 41.63 | 44,000 |
| 12 p.m. | 41.61 | 43,800 |
| *May 3* | | |
| 2 a.m. | 41.41 | 42,200 |
| 3 | 41.21 | 40,500 |
| 4 | 41.00 | 39,000 |
| 5 | 40.84 | 37,800 |
| 6 | 40.77 | 37,300 |
| 8 | 40.77 | 37,300 |
| 9 | 49.61 | 36,300 |
| 10 | 40.40 | 35,000 |
| 11 | 40.00 | 32,900 |
| 12 m. | 39.56 | 30,500 |
| 2 p.m. | 38.64 | 26,500 |
| *May 3*—Con. | | |
| 3 p.m. | 38.12 | 24,200 |
| 4 | 37.60 | 22,100 |
| 5 | 37.15 | 20,500 |
| 6 | 36.70 | 19,000 |
| 7 | 36.30 | 17,800 |
| 8 | 35.90 | 16,400 |
| 9 | 35.50 | 15,200 |
| 11 | 34.80 | 13,400 |
| 12 p.m. | 34.40 | 12,400 |
| *May 4* | | |
| 2 a.m. | 33.70 | 11,000 |
| 4 | 33.00 | 9,800 |
| 6 | 32.30 | 8,900 |
| 8 | 31.85 | 8,500 |
| 10 | 31.30 | 8,000 |
| 12 m. | 30.60 | 7,500 |
| 6 p.m. | 28.50 | 6,300 |
| 12 p.m. | 26.18 | 5,400 |
| *May 5* | | |
| 2 a.m. | 25.42 | 5,200 |
| 4 | 24.65 | 4,950 |
| 8 | 23.22 | 4,550 |
| 12 m. | 21.85 | 4,250 |
| 2 p.m. | 21.20 | 4,150 |
| 4 | 20.55 | 4,000 |
| 6 | 19.84 | 3,800 |
| 10 | 18.64 | 3,500 |
| 12 p.m. | 18.08 | 3,400 |
| *May 6* | | |
| 6 a.m. | 16.54 | 3,100 |
| 12 m. | 15.20 | 2,850 |
| 6 p.m. | 14.00 | 2,650 |
| 12 p.m. | 12.96 | 2,520 |
| *May 7* | | |
| 6 a.m. | 12.10 | 2,180 |
| 12 m. | 11.42 | 1,930 |
| 6 p.m. | 10.86 | 1,730 |
| 12 p.m. | 10.38 | 1,570 |
| *May 8* | | |
| 6 a.m. | 9.95 | 1,420 |
| 12 m. | 9.66 | 1,320 |
| 12 p.m. | 9.18 | 1,160 |

### 20. LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.

Location.—Lat 33°56′, long 94°45′, in SE¼ sec. 14, T. 7 S., R. 24 E., on left bank at downstream side of bridge on U.S. Highway 70, just downstream from Lukfata Creek, and 5 miles northeast of Idabel.

Drainage area.—1,226 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 312.08 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements. Rate of change in stage used as a factor in discharge computations at times. Backwater from return of overbank flow at times.

Maxima.—April–May 1958: Discharge, 40,700 cfs 9 a.m. May 4; gage height, 35.01 ft 11 a.m. May 4.

1946 to March 1958: Discharge, 76,000 cfs Jan. 26, 1949 (gage height, 39.22 ft).

Maximum stage known, 39.7 ft in February 1938, from information by local residents (discharge, 86,000 cfs).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 3,160 | 6,660 | 11 | 3,140 | 3,360 | 21 | 2,920 | 401 |
| 2 | 2,410 | 10,500 | 12 | 2,550 | 2,510 | 22 | 5,050 | 360 |
| 3 | 2,200 | 17,900 | 13 | 1,990 | 1,670 | 23 | 3,980 | 330 |
| 4 | 2,920 | 37,800 | 14 | 1,870 | 1,260 | 24 | 2,630 | 304 |
| 5 | 2,870 | 27,300 | 15 | 2,290 | 1,040 | 25 | 1,840 | 282 |
| 6 | 2,560 | 16,900 | 16 | 2,770 | 880 | 26 | 1,850 | 260 |
| 7 | 2,130 | 11,400 | 17 | 2,440 | 751 | 27 | 5,760 | 240 |
| 8 | 1,630 | 6,630 | 18 | 1,950 | 625 | 28 | 6,890 | 238 |
| 9 | 1,710 | 3,740 | 19 | 1,620 | 545 | 29 | 5,620 | 247 |
| 10 | 3,010 | 2,790 | 20 | 1,450 | 459 | 30 | 4,620 | 224 |
| | | | | | | 31 | | 202 |
| Monthly mean discharge | | | | | | | 2,928 | 5,091 |
| Runoff | | | | | | thousands of acre-feet | 174.2 | 313 |
| Runoff | | | | | | inches | 2.66 | 4.77 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 10.16 | 1,710 |
| *Apr. 26* | | |
| 2 a.m. | 10.36 | 1,810 |
| 4 | 10.38 | 1,820 |
| 6 | 10.32 | 1,790 |
| 8 | 10.20 | 1,730 |
| 12 m. | 10.14 | 1,700 |
| 2 p.m. | 10.08 | 1,670 |
| 4 | 10.06 | 1,660 |
| 6 | 10.08 | 1,670 |
| 7 | 10.16 | 1,710 |
| 8 | 10.45 | 1,850 |
| 9 | 10.95 | 2,100 |
| 10 | 11.60 | 2,440 |
| 11 | 12.30 | 2,820 |
| 12 p.m. | 12.76 | 3,060 |
| *Apr. 27* | | |
| 1 a.m. | 13.24 | 3,330 |
| 4 | 14.75 | 4,170 |
| 5 | 15.30 | 4,480 |
| 6 | 15.80 | 4,760 |
| 7 | 16.35 | 5,070 |
| 8 | 16.85 | 5,350 |
| 9 | 17.32 | 5,610 |
| 10 | 17.75 | 5,860 |
| 11 | 18.14 | 6,090 |
| 12 m. | 18.45 | 6,270 |
| 1 p.m. | 18.74 | 6,440 |
| 2 | 18.93 | 6,550 |
| 5 | 19.30 | 6,760 |
| 6 | 19.40 | 6,820 |
| 7 | 19.48 | 6,860 |
| 8 | 19.57 | 6,920 |
| 10 | 19.72 | 7,000 |
| 12 p.m. | 19.82 | 7,060 |
| *Apr. 28* | | |
| 4 a.m. | 19.93 | 7,130 |
| 8 | 19.93 | 7,130 |
| 12 m. | 19.73 | 7,010 |
| 4 p.m. | 19.42 | 6,830 |
| 12 p.m. | 18.55 | 6,320 |
| *Apr. 29* | | |
| 4 a.m. | 18.05 | 6,040 |
| 8 | 17.54 | 5,740 |
| 4 p.m. | 17.02 | 5,450 |
| 8 | 16.63 | 5,230 |
| 12 p.m. | 16.21 | 4,990 |
| *Apr. 30* | | |
| 8 a.m. | 15.38 | 4,530 |
| 12 m. | 15.08 | 4,360 |
| 4 p.m. | 15.38 | 4,530 |
| *Apr. 30*—Con. | | |
| 8 | 15.63 | 4,670 |
| 12 p.m. | 15.76 | 4,740 |
| *May 1* | | |
| 1 a.m. | 15.90 | 5,110 |
| 3 | 16.65 | 5,920 |
| 4 | 17.15 | 6,240 |
| 6 | 17.87 | 6,400 |
| 8 | 18.32 | 6,620 |
| 10 | 18.80 | 6,860 |
| 12 m. | 19.18 | 7,020 |
| 2 p.m. | 19.47 | 7,130 |
| 6 | 19.75 | 7,090 |
| 8 | 19.78 | 7,040 |
| 10 | 19.78 | 7,040 |
| 12 p.m. | 19.73 | 6,940 |
| *May 2* | | |
| 1 a.m. | 19.68 | 6,840 |
| 2 | 19.62 | 6,820 |
| 3 | 19.57 | 7,470 |
| 4 | 20.20 | 8,810 |
| 5 | 21.10 | 9,700 |
| 6 | 22.00 | 10,000 |
| 7 | 22.58 | 9,960 |
| 8 | 22.98 | 9,810 |
| 9 | 23.23 | 9,810 |
| 10 | 23.45 | 9,970 |
| 11 | 23.70 | 10,200 |
| 12 m. | 23.96 | 10,400 |
| 1 p.m. | 24.20 | 10,700 |
| 2 | 24.60 | 11,300 |
| 3 | 24.95 | 11,500 |
| 4 | 25.35 | 11,800 |
| 5 | 25.65 | 12,000 |
| 6 | 25.95 | 12,100 |
| 7 | 26.20 | 12,300 |
| 8 | 26.43 | 12,400 |
| 12 p.m. | 27.26 | 13,200 |
| *May 3* | | |
| 1 a.m. | 27.47 | 13,500 |
| 2 | 27.68 | 13,700 |
| 5 | 28.30 | 14,500 |
| 6 | 28.48 | 14,600 |
| 10 | 29.06 | 15,400 |
| 11 | 29.23 | 15,900 |
| 1 p.m. | 29.57 | 16,500 |
| 2 | 29.75 | 17,100 |
| 3 | 29.98 | 17,600 |
| 4 | 30.20 | 18,000 |
| 5 | 30.42 | 18,800 |
| 6 | 30.66 | 19,700 |
| 7 | 30.97 | 21,000 |
| 8 | 31.33 | 22,400 |
| 9 | 31.74 | 24,400 |
| 10 | 32.22 | 26,900 |
| 12 p.m. | 33.10 | 31,100 |
| *May 4* | | |
| 1 a.m. | 33.48 | 33,100 |
| 2 | 33.80 | 34,900 |
| 3 | 34.08 | 36,200 |
| 4 | 34.30 | 37,400 |
| 5 | 34.50 | 38,500 |
| 6 | 34.66 | 39,300 |
| 7 | 34.77 | 39,800 |
| 8 | 34.87 | 40,500 |
| 9 | 34.95 | 40,700 |
| 10 | 34.98 | 40,500 |
| 11 | 35.01 | 40,300 |
| 12 m. | 35.00 | 40,200 |
| 2 p.m. | 34.99 | 39,800 |
| 4 | 34.88 | 38,600 |
| 8 | 34.63 | 36,800 |
| 10 | 34.46 | 35,700 |
| 12 p.m. | 34.29 | 34,100 |
| *May 5* | | |
| 4 a.m. | 33.96 | 32,200 |
| 8 | 33.56 | 29,600 |
| 4 p.m. | 32.78 | 24,800 |
| 8 | 32.40 | 22,800 |
| 12 p.m. | 32.00 | 21,000 |
| *May 6* | | |
| 4 a.m. | 31.58 | 19,400 |
| 8 | 31.14 | 17,900 |
| 12 m. | 30.68 | 16,700 |
| 4 p.m. | 30.23 | 15,400 |
| 12 p.m. | 29.30 | 13,800 |
| *May 7* | | |
| 4 a.m. | 28.79 | 13,100 |
| 8 | 28.26 | 12,300 |
| 12 m. | 27.66 | 11,400 |
| 4 p.m. | 26.97 | 10,600 |
| 8 | 26.18 | 9,760 |
| 12 p.m. | 25.30 | 9,040 |
| *May 8* | | |
| 4 a.m. | 24.32 | 8,190 |
| 8 | 23.20 | 7,320 |
| 12 m. | 21.92 | 6,460 |
| 4 p.m. | 20.60 | 5,750 |
| 8 | 19.08 | 5,140 |
| 12 p.m. | 17.65 | 4,810 |
| *May 9* | | |
| 4 a.m. | 16.28 | 4,530 |
| 12 m. | 14.10 | 3,540 |
| 4 p.m. | 13.39 | 3,270 |
| 8 | 13.10 | 3,180 |
| 12 p.m. | 12.77 | 3,010 |

### 21. MOUNTAIN FORK RIVER NEAR EAGLETOWN, OKLA.

Location.—Lat 34°03′, long 94°37′, in SE¼ sec. 7, T. 6 S., R. 26 E., near center of span on downstream side of pier of bridge on U.S. Highway 70, 2 miles west of Eagletown and 8.9 miles upstream from mouth.

Drainage area.—787 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 333.87 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 41,300 cfs 5 a.m. May 3 (gage height, 18.52 ft).

1924–25, 1929 to March 1958: Discharge, 91,500 cfs Feb. 12, 1950, from rating curve extended above 65,000 cfs; maximum gage height, 25.80 ft Mar. 29, 1945.

Maximum stage known, 26.4 ft Aug. 18–19, 1915, from information by local residents (discharge, 92,500 cfs).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,850 | 4,120 | 11 | 2,660 | 3,770 | 21 | 4,990 | 408 |
| 2 | 1,540 | 18,100 | 12 | 2,130 | 2,580 | 22 | 3,850 | 347 |
| 3 | 1,410 | 36,800 | 13 | 1,740 | 1,890 | 23 | 2,760 | 300 |
| 4 | 2,490 | 13,700 | 14 | 1,580 | 1,430 | 24 | 2,100 | 261 |
| 5 | 2,160 | 6,170 | 15 | 2,320 | 1,090 | 25 | 1,680 | 240 |
| 6 | 1,890 | 4,000 | 16 | 2,700 | 1,000 | 26 | 1,720 | 228 |
| 7 | 1,530 | 2,820 | 17 | 2,250 | 1,230 | 27 | 8,020 | 231 |
| 8 | 1,250 | 2,140 | 18 | 1,850 | 756 | 28 | 6,190 | 243 |
| 9 | 1,560 | 2,310 | 19 | 1,520 | 579 | 29 | 3,830 | 205 |
| 10 | 2,940 | 4,790 | 20 | 1,390 | 478 | 30 | 2,890 | 268 |
| | | | | | | 31 | | 340 |
| Monthly mean discharge | | | | | | | 2,560 | 3,639 |
| Runoff | | | | | | thousands of acre-feet | 152.3 | 223.8 |
| Runoff | | | | | | inches | 3.63 | 5.33 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 4.77 | 1,580 |
| *Apr. 26* | | |
| 6 a.m. | 4.77 | 1,580 |
| 12 m. | 4.73 | 1,520 |
| 6 p.m. | 4.70 | 1,390 |
| 8 | 4.84 | 1,650 |
| 9 | 5.07 | 1,930 |
| 10 | 5.50 | 2,480 |
| 11 | 6.10 | 3,350 |
| 12 p.m. | 6.68 | 4,310 |
| *Apr. 27* | | |
| 1 a.m. | 7.04 | 4,960 |
| 2 | 7.40 | 5,650 |
| 3 | 7.90 | 6,600 |
| 4 | 8.26 | 7,280 |
| 5 | 8.49 | 7,720 |
| 6 | 8.61 | 7,950 |
| 7 | 8.60 | 7,930 |
| 8 | 8.51 | 7,740 |
| 9 | 8.33 | 7,410 |
| 10 | 8.18 | 7,120 |
| 11 | 8.12 | 7,010 |
| 12 m. | 8.20 | 7,160 |
| 1 p.m. | 8.42 | 7,580 |
| 2 | 8.70 | 8,010 |
| 3 | 8.96 | 8,620 |
| 4 | 9.20 | 9,180 |
| 5 | 9.37 | 9,590 |
| 6 | 9.49 | 9,880 |
| 7 | 9.53 | 9,970 |
| 8 | 9.52 | 9,950 |
| 9 | 9.46 | 9,800 |
| 10 | 9.36 | 9,560 |
| 11 | 9.20 | 9,180 |
| 12 p.m. | 9.04 | 8,800 |
| *Apr. 28* | | |
| 2 a.m. | 8.70 | 8,110 |
| 4 | 8.40 | 7,540 |
| 6 | 8.15 | 7,080 |
| 8 | 7.92 | 6,640 |
| 10 | 7.73 | 6,280 |
| 12 m. | 7.58 | 5,990 |
| 4 p.m. | 7.27 | 5,390 |
| 6 | 7.16 | 5,180 |
| 8 | 7.04 | 4,960 |
| 12 p.m. | 6.81 | 4,540 |
| *Apr. 29* | | |
| 6 a.m. | 6.57 | 4,120 |
| 12 m. | 6.38 | 3,800 |
| 6 p.m. | 6.20 | 3,510 |
| 12 p.m. | 6.02 | 3,230 |
| *Apr. 30* | | |
| 6 a.m. | 5.87 | 3,000 |
| 12 m. | 5.74 | 2,820 |
| 6 p.m. | 5.72 | 2,790 |
| 12 p.m. | 5.66 | 2,700 |
| *May 1* | | |
| 2 a.m. | 5.80 | 2,900 |
| 4 | 6.27 | 3,620 |
| 6 | 6.92 | 4,740 |
| 8 | 7.20 | 5,260 |
| 10 | 7.12 | 5,110 |
| 2 p.m. | 6.75 | 4,430 |
| 4 | 6.59 | 4,150 |
| 6 | 6.45 | 3,920 |
| 8 | 6.33 | 3,720 |
| 10 | 6.29 | 4,650 |
| 12 p.m. | 6.30 | 3,670 |
| *May 2* | | |
| 2 a.m. | 6.44 | 3,900 |
| 3 | 6.61 | 4,190 |
| 4 | 6.92 | 4,740 |
| 5 | 7.38 | 5,610 |
| 6 | 8.30 | 7,340 |
| 7 | 8.94 | 8,600 |
| 8 | 9.16 | 9,080 |
| 9 | 9.33 | 9,490 |
| 10 | 9.58 | 10,100 |
| 11 | 10.18 | 11,600 |
| 12 m. | 10.92 | 13,400 |
| 1 p.m. | 11.77 | 15,700 |
| 2 | 12.64 | 18,200 |
| 3 | 13.65 | 21,300 |
| 4 | 14.82 | 25,200 |
| 5 | 15.71 | 28,400 |
| 6 | 16.36 | 30,900 |
| 7 | 16.85 | 33,000 |
| 8 | 17.27 | 34,900 |
| 9 | 17.60 | 36,500 |
| 10 | 17.84 | 37,700 |
| 11 | 17.99 | 38,500 |
| 12 p.m. | 18.08 | 38,900 |
| *May 3* | | |
| 1 a.m. | 18.18 | 39,500 |
| 2 | 18.25 | 39,800 |
| 3 | 18.39 | 40,600 |
| 4 | 18.48 | 41,100 |
| 5 | 18.52 | 41,300 |
| 6 | 18.50 | 41,200 |
| 7 | 18.44 | 40,900 |
| 8 | 18.33 | 40,300 |
| 9 | 18.24 | 39,800 |
| 10 | 18.19 | 39,500 |
| 11 | 18.18 | 39,500 |
| 12 m. | 18.17 | 39,400 |
| *May 3*—Con. | | |
| 1 p.m. | 18.14 | 39,200 |
| 2 | 18.08 | 38,900 |
| 3 | 17.93 | 38,200 |
| 4 | 17.73 | 37,200 |
| 5 | 17.47 | 35,900 |
| 6 | 17.09 | 34,100 |
| 7 | 16.72 | 32,400 |
| 9 | 15.82 | 28,800 |
| 10 | 15.42 | 27,300 |
| 11 | 15.05 | 26,000 |
| 12 p.m. | 14.72 | 24,900 |
| *May 4* | | |
| 4 a.m. | 13.27 | 20,100 |
| 6 | 12.43 | 17,600 |
| 8 | 11.65 | 15,400 |
| 10 | 11.00 | 13,600 |
| 12 m. | 10.48 | 12,300 |
| 2 p.m. | 9.92 | 10,900 |
| 4 | 9.55 | 10,000 |
| 6 | 9.25 | 9,300 |
| 8 | 8.98 | 8,660 |
| 10 | 8.72 | 8,160 |
| 12 p.m. | 8.53 | 7,790 |
| *May 5* | | |
| 4 a.m. | 8.15 | 7,080 |
| 8 | 7.90 | 6,600 |
| 12 m. | 7.66 | 6,130 |
| 4 p.m. | 7.40 | 5,650 |
| 8 | 7.18 | 5,220 |
| 12 p.m. | 6.98 | 4,840 |
| *May 6* | | |
| 6 a.m. | 6.70 | 4,340 |
| 12 m. | 6.47 | 3,970 |
| 6 p.m. | 6.27 | 3,620 |
| 12 p.m. | 6.08 | 3,320 |
| *May 7* | | |
| 6 a.m. | 5.90 | 3,050 |
| 12 m. | 5.73 | 2,800 |
| 6 p.m. | 5.58 | 2,590 |
| 12 p.m. | 5.44 | 2,400 |
| *May 8* | | |
| 6 a.m. | 5.33 | 2,260 |
| 12 m. | 5.23 | 2,130 |
| 6 p.m. | 5.13 | 2,010 |
| 12 p.m. | 5.04 | 1,900 |

### 22. ROLLING FORK NEAR DeQUEEN, ARK.

Location.—Lat 34°03′, long 94°25′, in SW¼ sec. 21, T. 8 S., R. 32 W., near center of span on downstream side of pier of bridge on U.S. Highway 70, 4 miles west of DeQueen, 6 miles upstream from Rock Creek, and 17 miles upstream from mouth.

Drainage area.—181 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 318.24 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 13,800 cfs 8 p.m. May 2 (gage height, 18.73 ft).

1948 to March 1958: Discharge, 34,000 cfs May 11, 1953 (gage height, 21.96 ft).

Maximum stage known, 25.6 ft from floodmarks, Aug. 27, 1947 (discharge, 110,000 cfs from contracted-opening measurement of peak flow).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 310 | 3,240 | 11 | 357 | 1,040 | 21 | 567 | 76 |
| 2 | 263 | 7,500 | 12 | 273 | 609 | 22 | 476 | 66 |
| 3 | 294 | 8,100 | 13 | 223 | 401 | 23 | 355 | 59 |
| 4 | 231 | 2,360 | 14 | 252 | 273 | 24 | 275 | 52 |
| 5 | 194 | 1,110 | 15 | 316 | 203 | 25 | 220 | 46 |
| 6 | 169 | 695 | 16 | 357 | 155 | 26 | 382 | 42 |
| 7 | 146 | 480 | 17 | 308 | 127 | 27 | 4,800 | 37 |
| 8 | 127 | 350 | 18 | 261 | 106 | 28 | 1,800 | 35 |
| 9 | 182 | 583 | 19 | 226 | 97 | 29 | 982 | 31 |
| 10 | 387 | 1,770 | 20 | 229 | 86 | 30 | 726 | 28 |
| | | | | | | 31 | | 28 |
| Monthly mean discharge | | | | | | | 523 | 961 |
| Runoff, thousands of acre-feet | | | | | | | 31.12 | 59.08 |
| Runoff, inches | | | | | | | 3.22 | 6.12 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 4.34 | 209 |
| *Apr. 26* | | |
| 2 a.m. | 4.43 | 223 |
| 4 | 4.76 | 279 |
| 6 | 4.92 | 310 |
| 8 | 5.11 | 350 |
| 10 | 5.20 | 370 |
| 12 m. | 5.21 | 372 |
| 4 p.m. | 5.14 | 357 |
| 6 | 5.17 | 363 |
| 8 | 5.34 | 404 |
| 9 | 5.58 | 461 |
| 10 | 6.06 | 578 |
| 11 | 6.78 | 794 |
| 12 p.m. | 7.67 | 1,100 |
| *Apr. 27* | | |
| 1 a.m. | 8.91 | 1,580 |
| 2 | 10.13 | 2,120 |
| 3 | 11.09 | 2,540 |
| 4 | 12.00 | 2,990 |
| 5 | 13.00 | 3,500 |
| 6 | 14.10 | 4,340 |
| 8 | 16.06 | 6,970 |
| 9 | 16.57 | 8,140 |
| 10 | 16.73 | 8,260 |
| 11 | 16.66 | 8,120 |
| 12 m. | 16.45 | 7,700 |
| 2 p.m. | 15.72 | 6,410 |
| 3 | 15.33 | 5,820 |
| 4 | 14.93 | 5,260 |
| 5 | 14.53 | 4,770 |
| 6 | 14.13 | 4,370 |
| 7 | 13.73 | 4,020 |
| 8 | 13.33 | 3,710 |
| 9 | 12.96 | 3,480 |
| 10 | 12.58 | 3,280 |
| 11 | 12.23 | 3,100 |
| 12 p.m. | 11.88 | 2,930 |
| *Apr. 28* | | |
| 1 a.m. | 11.55 | 2,760 |
| 2 | 11.23 | 2,610 |
| 3 | 10.93 | 2,470 |
| 4 | 10.69 | 2,360 |
| 6 | 10.27 | 2,180 |
| 7 | 9.97 | 2,050 |
| 8 | 9.75 | 1,950 |
| 9 | 9.57 | 1,870 |
| 12 m. | 9.10 | 1,660 |
| 4 p.m. | 8.62 | 1,460 |
| 8 | 8.23 | 1,300 |
| 10 | 8.05 | 1,230 |
| 12 p.m. | 7.90 | 1,180 |
| *Apr. 29* | | |
| 4 a.m. | 7.64 | 1,080 |
| 8 | 7.40 | 1,000 |
| 12 m. | 7.27 | 956 |
| 4 p.m. | 7.28 | 959 |
| 8 | 7.10 | 898 |
| 12 p.m. | 6.87 | 822 |
| *Apr. 30* | | |
| 4 a.m. | 6.68 | 762 |
| 8 | 6.53 | 714 |
| 12 m. | 6.39 | 669 |
| 4 p.m. | 6.34 | 654 |
| 8 | 6.64 | 749 |
| 12 p.m. | 6.80 | 800 |
| *May 1* | | |
| 1 a.m. | 6.79 | 797 |
| 2 | 6.80 | 800 |
| 3 | 6.85 | 816 |
| 4 | 7.13 | 908 |
| 5 | 7.90 | 1,180 |
| 6 | 9.26 | 1,730 |
| 7 | 10.72 | 2,480 |
| 8 | 11.72 | 2,850 |
| 9 | 12.43 | 3,200 |
| 10 | 13.01 | 3,510 |
| 11 | 13.55 | 3,880 |
| 12 m. | 14.08 | 4,320 |
| 1 p.m. | 14.43 | 4,660 |
| 2 | 14.69 | 4,960 |
| 3 | 14.79 | 5,080 |
| 4 | 14.77 | 5,050 |
| 5 | 14.64 | 4,900 |
| 6 | 14.45 | 4,680 |
| 7 | 14.21 | 4,440 |
| 8 | 13.93 | 4,190 |
| 9 | 13.66 | 3,970 |
| 10 | 13.36 | 3,730 |
| 11 | 13.05 | 3,530 |
| 12 p.m. | 12.75 | 3,360 |
| *May 2* | | |
| 1 a.m. | 12.41 | 3,200 |
| 3 | 11.89 | 2,940 |
| 4 | 11.87 | 2,920 |
| 5 | 12.00 | 2,990 |
| 6 | 12.52 | 3,250 |
| 7 | 13.64 | 3,950 |
| 8 | 14.70 | 4,970 |
| 9 | 15.30 | 5,770 |
| 10 | 15.54 | 6,130 |
| 11 | 15.52 | 6,100 |
| 12 m. | 15.42 | 5,950 |
| 1 p.m. | 15.42 | 5,950 |
| 2 | 15.88 | 6,670 |
| 3 | 16.38 | 7,560 |
| 4 | 17.20 | 9,240 |
| 5 p.m. | 17.90 | 11,000 |
| *May 2*—Con. | | |
| 6 p.m. | 18.34 | 12,400 |
| 7 | 18.60 | 13,300 |
| 8 | 18.73 | 13,800 |
| 9 | 18.69 | 13,600 |
| 12 p.m. | 18.61 | 13,300 |
| *May 3* | | |
| 1 a.m. | 18.60 | 13,300 |
| 2 | 18.52 | 13,000 |
| 3 | 18.38 | 12,500 |
| 4 | 18.10 | 11,600 |
| 5 | 17.80 | 10,700 |
| 6 | 17.54 | 10,000 |
| 7 | 17.37 | 9,630 |
| 8 | 17.25 | 9,350 |
| 9 | 17.07 | 8,950 |
| 10 | 16.80 | 8,400 |
| 11 | 16.51 | 7,820 |
| 12 m. | 16.25 | 7,310 |
| 1 p.m. | 16.10 | 7,040 |
| 2 | 16.00 | 6,860 |
| 3 | 15.90 | 6,700 |
| 4 | 15.77 | 6,490 |
| 5 | 15.60 | 6,220 |
| 6 | 15.36 | 5,860 |
| 7 | 15.10 | 5,490 |
| 8 | 14.82 | 5,120 |
| 9 | 14.52 | 4,760 |
| 10 | 14.20 | 4,430 |
| 11 | 13.89 | 4,150 |
| 12 p.m. | 13.57 | 3,900 |
| *May 4* | | |
| 2 a.m. | 12.95 | 3,470 |
| 4 | 12.33 | 3,160 |
| 6 | 11.77 | 2,880 |
| 8 | 11.24 | 2,610 |
| 10 | 10.77 | 2,400 |
| 12 m. | 10.40 | 2,240 |
| 2 p.m. | 10.00 | 2,060 |
| 4 | 9.63 | 1,900 |
| 8 | 9.07 | 1,650 |
| 12 p.m. | 8.60 | 1,450 |
| *May 5* | | |
| 4 a.m. | 8.24 | 1,310 |
| 8 | 7.93 | 1,190 |
| 12 m. | 7.67 | 1,100 |
| 4 p.m. | 7.40 | 1,000 |
| 8 | 7.16 | 918 |
| 12 p.m. | 6.95 | 848 |
| *May 6* | | |
| 6 a.m. | 6.69 | 765 |
| 12 m. | 6.45 | 688 |
| 6 p.m. | 6.23 | 622 |
| 12 p.m. | 6.00 | 562 |

### 23. LITTLE RIVER NEAR HORATIO, ARK.

Location.—Lat 33°55'10", long 94°23'15", in NE¼ sec. 10, T. 10 S., R. 32 W., on left bank on downstream side of pier of bridge on State Highway 41, 0.9 mile downstream from Rolling Fork, 2 miles southwest of Horatio, and 28.5 miles upstream from Cossatot River.

Drainage area.—2,674 sq mi.

Gage height record.—Water-stage recorder graph. Datum of gage is 272.89 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements. Rate of change in stage used as a factor in discharge computations at times. Backwater from return of overbank flow at times.

Maxima.—April–May 1958: Discharge, 63,600 cfs 12 p.m. May 3 to 1 a.m. May 4 (gage height, 32.72 ft).

1930 to March 1958: Discharge, 120,000 cfs Mar. 30, 1945 (gage height, 37.70 ft), from rating curve extended above 93,000 cfs.

Maximum stage known, 38 ft sometime in August 1915 (discharge, 124,000 cfs).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 6,260 | 20,500 | 11 | 6,720 | 10,700 | 21 | 5,280 | 1,100 |
| 2 | 5,140 | 30,000 | 12 | 5,890 | 7,940 | 22 | 4,990 | 959 |
| 3 | 4,550 | 55,300 | 13 | 4,770 | 5,480 | 23 | 8,180 | 828 |
| 4 | 5,040 | 59,800 | 14 | 4,470 | 3,980 | 24 | 6,300 | 740 |
| 5 | 5,820 | 50,000 | 15 | 5,150 | 3,070 | 25 | 4,630 | 665 |
| 6 | 4,970 | 42,300 | 16 | 5,960 | 2,390 | 26 | 5,230 | 615 |
| 7 | 4,440 | 31,000 | 17 | 5,720 | 2,300 | 27 | 16,700 | 576 |
| 8 | 3,720 | 22,300 | 18 | 4,830 | 1,880 | 28 | 23,400 | 581 |
| 9 | 3,520 | 14,100 | 19 | 4,020 | 1,500 | 29 | 19,000 | 563 |
| 10 | 5,280 | 11,200 | 20 | 3,580 | 1,270 | 30 | 15,000 | 550 |
| | | | | | | 31 | | 576 |
| Monthly mean discharge | | | | | | | 6,952 | 12,410 |
| Runoff | | | | | | thousands of acre-feet | 413.7 | 763.2 |
| Runoff | | | | | | inches | 2.90 | 5.35 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 10.41 | 4,120 |
| *Apr. 26* | | |
| 2 a.m. | 10.56 | 4,290 |
| 4 | 10.80 | 4,560 |
| 6 | 10.97 | 4,670 |
| 10 | 11.23 | 4,910 |
| 12 m. | 11.35 | 5,010 |
| 2 p.m. | 11.50 | 5,150 |
| 4 | 11.68 | 5,370 |
| 6 | 11.87 | 5,540 |
| 8 | 12.10 | 5,870 |
| 10 | 12.55 | 6,560 |
| 12 p.m. | 13.50 | 7,960 |
| *Apr. 27* | | |
| 1 a.m. | 14.04 | 8,650 |
| 2 | 14.62 | 9,400 |
| 3 | 15.17 | 10,200 |
| 5 | 16.20 | 11,400 |
| 6 | 16.75 | 12,400 |
| 7 | 17.24 | 12,900 |
| 8 | 17.74 | 13,700 |
| 9 | 18.24 | 14,600 |
| 12 m. | 19.80 | 17,600 |
| 1 p.m. | 20.34 | 18,400 |
| 4 | 21.68 | 20,500 |
| 5 | 22.05 | 21,800 |
| 6 | 22.40 | 21,300 |
| 7 | 22.72 | 21,600 |
| 10 | 23.60 | 22,800 |
| 11 | 23.86 | 23,300 |
| 12 p.m. | 24.14 | 23,400 |
| *Apr. 28* | | |
| 1 a.m. | 24.35 | 23,500 |
| 2 | 24.57 | 24,000 |
| 3 | 24.78 | 24,200 |
| 5 | 25.15 | 24,400 |
| 6 | 25.27 | 24,300 |
| 7 | 25.40 | 24,300 |
| 8 | 25.50 | 24,100 |
| 11 a.m. | 25.70 | 24,100 |
| 1 p.m. | 25.77 | 23,700 |
| 2 | 25.77 | 23,700 |
| 6 | 25.65 | 22,800 |
| 12 p.m. | 25.20 | 21,600 |
| *Apr. 29* | | |
| 6 a.m. | 24.50 | 20,000 |
| 12 m. | 23.75 | 18,800 |
| 6 p.m. | 23.10 | 18,000 |
| 12 p.m. | 22.38 | 16,800 |
| *Apr. 30* | | |
| 6 a.m. | 21.60 | 15,600 |
| 12 m. | 20.74 | 14,800 |
| 6 p.m. | 20.20 | 14,200 |
| 12 p.m. | 19.92 | 14,400 |
| *May 1* | | |
| 2 a.m. | 19.98 | 15,400 |
| 6 | 20.97 | 18,600 |
| 8 | 21.72 | 19,800 |
| 12 m. | 22.82 | 21,200 |
| 2 p.m. | 23.31 | 21,800 |
| 4 | 23.80 | 22,700 |
| 6 | 24.25 | 23,200 |
| 8 | 24.60 | 23,400 |
| 10 | 24.90 | 23,500 |
| 12 p.m. | 25.12 | 23,700 |
| *May 2* | | |
| 2 a.m. | 25.28 | 23,900 |
| 4 | 25.55 | 25,200 |
| 6 | 26.05 | 26,600 |
| 8 | 26.50 | 27,200 |
| 12 m. | 27.40 | 29,000 |
| 2 p.m. | 27.84 | 30,300 |
| 4 | 28.32 | 31,700 |
| 6 | 28.82 | 33,600 |
| 8 | 29.30 | 35,300 |
| 10 | 29.70 | 37,400 |
| 12 p.m. | 30.26 | 40,300 |
| *May 3* | | |
| 2 a.m. | 30.60 | 42,200 |
| 4 | 31.00 | 45,300 |
| 6 | 31.38 | 48,900 |
| 8 | 31.70 | 52,200 |
| 10 | 32.00 | 55,500 |
| 12 m. | 32.22 | 57,900 |
| 2 p.m. | 32.38 | 59,700 |
| 4 | 32.50 | 61,000 |
| 6 | 32.60 | 62,200 |
| 8 | 32.67 | 63,000 |
| 10 | 32.70 | 63,400 |
| 12 p.m. | 32.72 | 63,600 |
| *May 4* | | |
| 1 a.m. | 32.72 | 63,600 |
| 4 | 32.67 | 63,000 |
| 6 | 32.65 | 62,800 |
| 8 | 32.60 | 62,200 |
| 10 | 32.54 | 61,500 |
| 12 m. | 32.43 | 60,200 |
| 6 p.m. | 32.15 | 57,200 |
| 12 p.m. | 31.85 | 53,800 |
| *May 5* | | |
| 6 a.m. | 31.64 | 51,500 |
| 12 m. | 31.44 | 49,400 |
| 6 p.m. | 31.30 | 48,500 |
| 12 p.m. | 31.17 | 47,000 |
| *May 6* | | |
| 6 a.m. | 30.95 | 45,000 |
| 12 m. | 30.68 | 42,600 |
| 6 p.m. | 30.32 | 39,800 |
| 12 p.m. | 29.85 | 36,500 |
| *May 7* | | |
| 4 a.m. | 29.58 | 34,800 |
| 12 m. | 28.92 | 30,600 |
| 4 p.m. | 28.55 | 29,100 |
| 8 | 28.15 | 27,700 |
| 12 p.m. | 27.70 | 26,200 |
| *May 8* | | |
| 4 a.m. | 27.22 | 24,800 |
| 12 m. | 26.14 | 22,600 |
| 12 p.m. | 24.00 | 18,100 |
| *May 9* | | |
| 4 a.m. | 23.10 | 16,500 |
| 8 | 22.10 | 15,000 |
| 12 m. | 21.10 | 14,100 |
| 4 p.m. | 20.20 | 12,900 |
| 8 | 19.10 | 11,600 |
| 12 p.m. | 18.15 | 10,900 |
| *May 10* | | |
| 4 a.m. | 17.57 | 10,800 |
| 8 | 17.39 | 11,000 |
| 4 p.m. | 17.47 | 11,200 |
| 12 p.m. | 17.94 | 11,800 |
| *May 11* | | |
| 6 a.m. | 17.91 | 11,500 |
| 6 p.m. | 16.89 | 10,100 |
| 12 p.m. | 16.22 | 9,300 |
| *May 12* | | |
| 6 a.m. | 15.51 | 8,680 |
| 12 m. | 14.78 | 7,940 |
| 6 p.m. | 14.02 | 7,200 |
| 12 p.m. | 13.29 | 6,580 |
| *May 13* | | |
| 6 a.m. | 12.60 | 5,940 |
| 12 m. | 11.99 | 5,430 |
| 6 p.m. | 11.46 | 4,960 |
| 12 p.m. | 11.01 | 4,570 |
| *May 14* | | |
| 6 a.m. | 10.61 | 4,260 |
| 12 m. | 10.29 | 3,980 |
| 6 p.m. | 9.95 | 3,690 |
| 12 p.m. | 9.66 | 3,450 |

### 24. COSSATOT RIVER NEAR DeQUEEN, ARK.

Location.—Lat 34°03′, Long 94°13′, on south edge of SE¼ sec. 20, T. 8 S., R. 30 W., on downstream side of pier of bridge on U.S. Highway 71, just downstream from Hale Creek and 7 miles east of DeQueen.

Drainage area.—361 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 335.48 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 28,900 cfs 5 a.m. May 3 (gage height, 18.56 ft).

1938 to March 1958: Discharge, 46,900 cfs Aug. 28, 1947 (gage height, 20.47 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 581 | 5,830 | 11 | 821 | 2,060 | 21 | 1,330 | 176 |
| 2 | 519 | 11,000 | 12 | 685 | 1,250 | 22 | 1,000 | 147 |
| 3 | 535 | 19,700 | 13 | 574 | 843 | 23 | 764 | 123 |
| 4 | 574 | 6,080 | 14 | 613 | 635 | 24 | 620 | 109 |
| 5 | 519 | 2,520 | 15 | 816 | 483 | 25 | 507 | 98 |
| 6 | 448 | 1,510 | 16 | 920 | 373 | 26 | 839 | 93 |
| 7 | 373 | 1,030 | 17 | 794 | 299 | 27 | 8,720 | 93 |
| 8 | 314 | 790 | 18 | 677 | 244 | 28 | 4,100 | 86 |
| 9 | 412 | 1,200 | 19 | 578 | 223 | 29 | 2,030 | 81 |
| 10 | 856 | 3,180 | 20 | 554 | 214 | 30 | 1,410 | 81 |
| | | | | | | 31 | | 78 |
| Monthly mean discharge | | | | | | | 1,116 | 1,956 |
| Runoff | | | | | | thousands of acre-feet | 66.41 | 120.3 |
| Runoff | | | | | | inches | 3.45 | 6.25 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 5.67 | 513 |
| *Apr. 26* | | |
| 4 a.m. | 6.10 | 662 |
| 8 | 6.40 | 780 |
| 12 m | 6.43 | 794 |
| 6 p.m. | 6.40 | 780 |
| 8 | 6.54 | 843 |
| 9 | 6.80 | 970 |
| 10 | 7.21 | 1,200 |
| 11 | 7.94 | 1,660 |
| 12 p.m. | 8.80 | 2,320 |
| *Apr. 27* | | |
| 1 a.m. | 9.68 | 3,170 |
| 2 | 10.45 | 4,020 |
| 3 | 11.04 | 4,700 |
| 4 | 11.51 | 5,260 |
| 5 | 11.96 | 5,850 |
| 6 | 12.40 | 6,480 |
| 7 | 12.84 | 7,180 |
| 8 | 13.34 | 8,050 |
| 9 | 13.90 | 9,110 |
| 11 | 14.88 | 11,100 |
| 12 m. | 15.24 | 12,000 |
| 1 p.m. | 15.45 | 12,600 |
| 2 | 15.55 | 12,900 |
| 3 | 15.51 | 12,800 |
| 4 | 15.36 | 12,400 |
| 6 | 14.81 | 11,000 |
| 7 | 14.45 | 10,200 |
| 9 | 13.74 | 8,810 |
| 10 | 13.40 | 8,160 |
| 11 | 13.05 | 7,540 |
| 12 p.m. | 12.73 | 7,000 |
| *Apr. 28* | | |
| 1 a.m. | 12.44 | 6,540 |
| 2 | 12.16 | 6,120 |
| 3 | 11.90 | 5,770 |
| 4 | 11.66 | 5,460 |
| 5 | 11.44 | 5,180 |
| 6 | 11.22 | 4,910 |
| 7 | 11.03 | 4,690 |
| 8 | 10.87 | 4,490 |
| 9 | 10.71 | 4,300 |
| 10 | 10.56 | 4,140 |
| 12 m. | 10.28 | 3,830 |
| 2 p.m. | 10.06 | 3,590 |
| 4 | 9.78 | 3,280 |
| 6 | 9.58 | 3,060 |
| 8 | 9.40 | 2,880 |
| 10 | 9.23 | 2,710 |
| 12 p.m. | 9.08 | 2,570 |
| *Apr. 29* | | |
| 4 a.m. | 8.80 | 2,320 |
| *Apr. 29*—Con. | | |
| 8 | 8.54 | 2,110 |
| 12 m. | 8.36 | 1,960 |
| 4 p.m. | 8.28 | 1,900 |
| 8 | 8.12 | 1,780 |
| 12 p.m. | 7.90 | 1,630 |
| *Apr. 30* | | |
| 4 a.m. | 7.71 | 1,510 |
| 8 | 7.56 | 1,410 |
| 12 m. | 7.42 | 1,320 |
| 4 p.m. | 7.38 | 1,300 |
| 8 | 7.46 | 1,350 |
| 12 p.m. | 7.72 | 1,510 |
| *May 1* | | |
| 2 a.m. | 7.74 | 1,530 |
| 3 | 7.98 | 1,690 |
| 4 | 8.40 | 2,000 |
| 5 | 8.74 | 2,270 |
| 6 | 9.14 | 2,630 |
| 7 | 9.84 | 3,340 |
| 8 | 10.70 | 4,290 |
| 9 | 11.40 | 5,130 |
| 10 | 11.96 | 5,840 |
| 11 | 12.37 | 6,440 |
| 12 m. | 12.72 | 6,980 |
| 2 p.m. | 13.23 | 7,850 |
| 4 | 13.52 | 8,390 |
| 6 | 13.65 | 8,640 |
| 8 | 13.67 | 8,670 |
| 10 | 13.57 | 8,480 |
| 12 p.m. | 13.31 | 8,000 |
| *May 2* | | |
| 2 a.m. | 12.94 | 7,350 |
| 4 | 12.62 | 6,820 |
| 6 | 12.66 | 6,890 |
| 7 | 12.90 | 7,280 |
| 8 | 13.35 | 8,070 |
| 9 | 13.82 | 8,960 |
| 10 | 14.22 | 9,740 |
| 11 | 14.52 | 10,400 |
| 12 m. | 14.67 | 10,700 |
| 4 p.m. | 14.75 | 10,900 |
| 5 | 14.90 | 11,200 |
| 6 | 15.16 | 11,800 |
| 7 | 15.52 | 12,800 |
| 8 | 16.00 | 14,400 |
| 9 | 16.54 | 16,700 |
| 10 | 17.01 | 19,000 |
| 11 | 17.38 | 21,100 |
| 12 p.m. | 17.64 | 22,600 |
| *May 3* | | |
| 1 a.m. | 17.86 | 24,000 |
| 2 | 18.10 | 25,700 |
| 3 a.m. | 18.33 | 27,300 |
| *May 3*—Con. | | |
| 4 a.m. | 18.52 | 28,600 |
| 5 | 18.56 | 28,900 |
| 6 | 18.52 | 28,600 |
| 7 | 18.36 | 27,500 |
| 8 | 18.14 | 26,000 |
| 10 | 17.56 | 22,200 |
| 11 a.m. | 17.26 | 20,400 |
| 1 p.m. | 16.75 | 17,600 |
| 3 | 16.30 | 15,600 |
| 4 | 16.13 | 14,900 |
| 6 | 15.80 | 13,700 |
| 7 | 15.64 | 13,200 |
| 8 | 15.46 | 12,600 |
| 10 | 15.08 | 11,600 |
| 11 | 14.85 | 11,100 |
| 12 p.m. | 14.58 | 10,500 |
| *May 4* | | |
| 2 a.m. | 14.08 | 9,460 |
| 6 | 13.07 | 7,570 |
| 8 | 12.60 | 6,790 |
| 10 | 12.16 | 6,120 |
| 12 m. | 11.75 | 5,580 |
| 2 p.m. | 11.38 | 5,110 |
| 4 | 11.06 | 4,720 |
| 6 | 10.75 | 4,350 |
| 8 | 10.47 | 4,040 |
| 10 | 10.23 | 3,770 |
| 12 p.m. | 9.92 | 3,430 |
| *May 5* | | |
| 4 a.m. | 9.54 | 3,020 |
| 8 | 9.22 | 2,700 |
| 12 m. | 8.95 | 2,460 |
| 4 p.m. | 8.70 | 2,240 |
| 8 | 8.46 | 2,040 |
| 12 p.m. | 8.22 | 1,860 |
| *May 6* | | |
| 6 a.m. | 7.93 | 1,650 |
| 12 m. | 7.70 | 1,500 |
| 6 p.m. | 7.46 | 1,350 |
| 12 p.m. | 7.24 | 1,210 |
| *May 7* | | |
| 6 a.m. | 7.05 | 1,110 |
| 12 m. | 6.90 | 1,020 |
| 6 p.m. | 6.77 | 955 |
| 12 p.m. | 6.64 | 890 |
| *May 8* | | |
| 6 a.m. | 6.52 | 834 |
| 12 m. | 6.41 | 784 |
| 6 p.m. | 6.31 | 744 |
| 12 p.m. | 6.21 | 704 |

### 25. SALINE RIVER NEAR DIERKS, ARK.

Location.—Lat 34°06′, long 94°05′, in W½ sec. 3, T. 8 S., R. 29 W., near left bank on downstream side of pier of bridge on U.S. Highway 70, 3½ miles upstream from Holly Creek and 4 miles southwest of Dierks.

Drainage area.—124 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 353.09 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 7,160 cfs 11 a.m. May 1 (gage height, 14.71 ft).

1938 to March 1958: Discharge, 31,200 cfs Mar. 30, 1945 (gage height, 19.93 ft), from rating curve extended above 16,000 cfs by velocity-area studies.

Maximum stage known, 21.9 ft sometime in 1920, from information by local resident.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 191 | 3,950 | 11 | 233 | 620 | 21 | 284 | 36 |
| 2 | 162 | 4,550 | 12 | 200 | 421 | 22 | 226 | 27 |
| 3 | 211 | 4,250 | 13 | 168 | 294 | 23 | 188 | 24 |
| 4 | 182 | 1,620 | 14 | 304 | 214 | 24 | 162 | 21 |
| 5 | 150 | 899 | 15 | 545 | 158 | 25 | 143 | 20 |
| 6 | 124 | 597 | 16 | 409 | 105 | 26 | 524 | 22 |
| 7 | 103 | 418 | 17 | 311 | 82 | 27 | 3,410 | 18 |
| 8 | 90 | 321 | 18 | 245 | 60 | 28 | 1,170 | 17 |
| 9 | 168 | 642 | 19 | 208 | 49 | 29 | 716 | 17 |
| 10 | 214 | 1,010 | 20 | 251 | 42 | 30 | 542 | 17 |
| | | | | | | 31 | | 15 |
| Monthly mean discharge | | | | | | | 394 | 662 |
| Runoff | | | | | | thousands of acre-feet | 23.47 | 40.73 |
| Runoff | | | | | | inches | 3.55 | 6.16 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 29* | | | *May 2*—Con. | | |
| 12 p.m. | 5.82 | 143 | 6 a.m. | 7.36 | 761 | 12 m. | 14.07 | 6,700 |
| *Apr. 26* | | | 12 m. | 7.26 | 703 | 1 p.m. | 13.60 | 6,140 |
| | | | 6 p.m. | 7.21 | 676 | 2 | 12.97 | 5,490 |
| | | | 12 p.m. | 7.06 | 593 | 3 | 12.45 | 5,000 |
| 2 a.m. | 5.92 | 165 | *Apr. 30* | | | 4 | 12.00 | 4,590 |
| 4 | 6.03 | 194 | | | | 5 | 11.74 | 4,360 |
| 5 | 6.16 | 233 | | | | 6 | 11.77 | 4,380 |
| 6 | 6.63 | 397 | 6 a.m. | 6.95 | 535 | 7 | 12.23 | 4,800 |
| 7 | 6.78 | 457 | 12 m. | 6.86 | 492 | 8 | 12.59 | 5,120 |
| 9 | 6.78 | 457 | 6 p.m. | 6.92 | 520 | 9 | 12.70 | 5,220 |
| 12 m. | 6.86 | 492 | 12 p.m. | 7.16 | 648 | 10 | 12.67 | 5,190 |
| 6 p.m. | 6.71 | 429 | *May 1* | | | 12 p.m. | 12.64 | 5,170 |
| 7 | 6.71 | 429 | | | | *May 3* | | |
| 8 | 6.82 | 474 | | | | | | |
| 9 | 7.17 | 654 | 1 a.m. | 7.19 | 664 | 1 a.m. | 12.50 | 5,040 |
| 10 | 7.79 | 1,030 | 2 | 7.21 | 676 | 2 | 12.10 | 4,680 |
| 11 | 8.63 | 1,620 | 3 | 7.43 | 803 | 3 | 11.65 | 4,280 |
| 12 p.m. | 10.22 | 2,860 | 4 | 7.92 | 1,120 | 4 | 11.32 | 4,000 |
| *Apr. 27* | | | 5 | 8.70 | 1,680 | 5 | 11.23 | 3,920 |
| | | | 6 | 10.47 | 3,060 | 6 | 11.67 | 4,290 |
| | | | 7 | 12.17 | 4,470 | 7 | 12.12 | 4,700 |
| 1 a.m. | 11.57 | 3,950 | 8 | 13.57 | 5,790 | 8 | 12.54 | 5,080 |
| 2 | 12.65 | 4,900 | 9 | 14.37 | 6,700 | 9 | 12.90 | 5,420 |
| 3 | 13.45 | 5,670 | 10 | 14.70 | 7,150 | 10 | 13.25 | 5,770 |
| 4 | 13.81 | 6,040 | 11 | 14.71 | 7,160 | 11 | 13.30 | 5,820 |
| 5 | 13.77 | 6,000 | 12 m. | 14.67 | 7,110 | 12 m. | 13.12 | 5,640 |
| 6 | 13.35 | 5,570 | 1 p.m. | 14.40 | 6,740 | 1 p.m. | 12.72 | 5,240 |
| 7 | 12.57 | 5,000 | 2 | 13.87 | 6,110 | 2 | 12.19 | 4,760 |
| 8 | 12.12 | 4,430 | 3 | 13.22 | 5,440 | 3 | 11.70 | 4,320 |
| 9 | 11.62 | 4,000 | 4 | 12.60 | 4,860 | 4 | 11.20 | 3,900 |
| 10 | 11.15 | 3,600 | 5 | 12.00 | 4,320 | 5 | 10.87 | 3,620 |
| 11 | 10.75 | 3,280 | 6 | 11.50 | 3,900 | 6 | 10.61 | 3,410 |
| 12 m. | 10.45 | 3,040 | 7 | 11.07 | 3,540 | 7 | 10.33 | 3,090 |
| 1 p.m. | 10.22 | 2,860 | 8 | 10.72 | 3,260 | 8 | 10.12 | 3,020 |
| 2 | 10.04 | 2,710 | 9 | 10.43 | 3,020 | 9 | 9.84 | 2,790 |
| 3 | 9.79 | 2,510 | 10 | 10.20 | 2,840 | 10 | 9.70 | 2,680 |
| 4 | 9.61 | 2,370 | 11 | 9.92 | 2,620 | 11 | 9.57 | 2,580 |
| 5 | 9.48 | 2,260 | 12 p.m. | 9.73 | 2,460 | 12 p.m. | 9.43 | 2,460 |
| 6 | 9.29 | 2,120 | *May 2* | | | *May 4* | | |
| 7 | 9.14 | 2,000 | | | | | | |
| 8 | 9.03 | 1,920 | | | | | | |
| 10 | 8.80 | 1,750 | 2 a.m. | 9.42 | 2,220 | 2 a.m. | 9.20 | 2,120 |
| 12 p.m. | 8.62 | 1,620 | 4 | 9.30 | 2,120 | 4 | 9.00 | 1,980 |
| *Apr. 28* | | | 5 | 9.59 | 2,350 | 6 | 8.81 | 1,830 |
| | | | 6 | 10.47 | 3,140 | 12 m. | 8.43 | 1,550 |
| | | | 7 | 11.47 | 3,950 | 4 p.m. | 8.22 | 1,400 |
| 6 a.m. | 8.21 | 1,330 | 8 | 12.57 | 5,010 | 8 | 8.05 | 1,280 |
| 12 m. | 7.93 | 1,130 | 9 | 13.60 | 6,030 | 12 p.m. | 7.87 | 1,190 |
| 6 p.m. | 7.69 | 968 | 10 | 14.23 | 6,910 | | | |
| 12 p.m. | 7.52 | 858 | 11 a.m. | 14.27 | 6,970 | | | |

### 26. RED RIVER AT FULTON, ARK.

Location.—Lat 33°37′, long 93°49′, in NE¼ sec. 20, T. 13 S., R. 26 W., near left bank on downstream side of bridge on U.S. Highway 67 at Fulton, 0.3 mile downstream from Missouri Pacific Railroad bridge, 2½ miles downstream from Little River, and at mile 463.0.

Drainage area.—52,380 sq mi of which 5,936 sq mi is probably noncontributing.

Gage-height record.—Computed from twice daily wire-weight gage readings. Datum of gage is 224.94 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements. Discharge computed from loop curves at times.

Maxima.—April–May 1958: Discharge, 214,000 cfs 10:30 a.m. May 6; maximum gage height, 29.47 ft May 6.

1927 to March 1958: Discharge, 338,000 cfs Feb. 24, 1938; gage height, 37.4 ft Apr. 2, 1945.

Remarks.—Some regulation by Lake Texoma, 261 miles upstream (capacity 5,530,300 acre-ft). Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 26,100 | 87,400 | 11 | 12,500 | 104,000 | 21 | 13,500 | 14,100 |
| 2 | 26,100 | 110,000 | 12 | 15,200 | 94,000 | 22 | 14,200 | 12,500 |
| 3 | 24,300 | 134,000 | 13 | 16,700 | 88,600 | 23 | 18,300 | 11,600 |
| 4 | 20,600 | 173,000 | 14 | 16,400 | 86,000 | 24 | 27,300 | 11,200 |
| 5 | 19,600 | 208,000 | 15 | 16,000 | 72,400 | 25 | 30,500 | 10,500 |
| 6 | 19,600 | 214,000 | 16 | 16,400 | 58,400 | 26 | 33,900 | 10,300 |
| 7 | 18,800 | 185,000 | 17 | 16,400 | 45,000 | 27 | 43,100 | 11,000 |
| 8 | 16,700 | 164,000 | 18 | 16,700 | 30,300 | 28 | 54,700 | 11,200 |
| 9 | 14,900 | 128,000 | 19 | 16,000 | 21,200 | 29 | 62,500 | 10,300 |
| 10 | 11,600 | 117,000 | 20 | 14,200 | 16,600 | 30 | 71,100 | 10,300 |
| | | | | | | 31 | | 9,760 |
| Monthly mean discharge | | | | | | | 24,130 | 72,890 |
| Runoff (thousands of acre-feet) | | | | | | | 1,436 | 4,482 |

### 27. SOUTH SULPHUR RIVER NEAR COOPER, TEX.

Location.—Lat 33°21′, long 95°36′, on left bank of cut channel at downstream side of pile bent of bridge on State Highway 154, 0.6 mile downstream from Big Creek, 1.0 mile upstream from Brushy Creek, and 5.7 miles southeast of Cooper, Delta County.

Drainage area.—527 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 374.91 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 17,400 cfs 4 p.m. May 1 (gage height, 20.93 ft).

1942 to March 1958: Discharge, 23,800 cfs Apr. 29, 1953 (gage height, 23.00 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 402 | 16,500 | 11 | 1,030 | 58 | 21 | 58 | 9.4 |
| 2 | 112 | 13,700 | 12 | 641 | 41 | 22 | 562 | 8.6 |
| 3 | 67 | 13,600 | 13 | 184 | 31 | 23 | 1,440 | 7.2 |
| 4 | 92 | 13,000 | 14 | 1,470 | 23 | 24 | 1,180 | 6.5 |
| 5 | 94 | 7,540 | 15 | 1,690 | 20 | 25 | 239 | 5.6 |
| 6 | 35 | 4,260 | 16 | 1,080 | 19 | 26 | 1,470 | 5.0 |
| 7 | 16 | 1,890 | 17 | 252 | 17 | 27 | 7,680 | 4.4 |
| 8 | 13 | 485 | 18 | 104 | 12 | 28 | 9,070 | 8.8 |
| 9 | 54 | 160 | 19 | 61 | 9.8 | 29 | 7,150 | 20 |
| 10 | 1,230 | 84 | 20 | 53 | 9.4 | 30 | 10,300 | 10 |
| | | | | | | 31 | | 14 |
| Monthly mean discharge | | | | | | | 1,594 | 2,308 |
| Runoff (thousands of acre-feet) | | | | | | | 94.87 | 141.9 |
| Runoff (inches) | | | | | | | 3.38 | 5.05 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 21* | | | *Apr. 26*—Con. | | | *May 3* | | |
| 12 p.m. | 2.25 | 56 | 3 p.m. | 12.93 | 1,550 | 12 m. | 19.87 | 13,900 |
| *Apr. 22* | | | 7 | 14.20 | 1,980 | 10 p.m. | 20.28 | 15,200 |
| 2 a.m. | 2.24 | 55 | 12 p.m. | 15.61 | 3,240 | 12 p.m. | 20.26 | 15,200 |
| 6 | 2.64 | 83 | *Apr. 27* | | | *May 4* | | |
| 8 | 4.50 | 213 | 6 a.m. | 17.17 | 6,280 | 12 m. | 19.72 | 13,300 |
| 10 | 6.70 | 378 | 6 p.m. | 18.47 | 9,700 | 12 p.m. | 18.74 | 10,300 |
| 2 p.m. | 9.37 | 767 | 12 p.m. | 18.72 | 10,300 | *May 5* | | |
| 12 p.m. | 11.59 | 1,220 | *Apr. 28* | | | 12 m. | 17.62 | 7,260 |
| *Apr. 23* | | | 2 a.m. | 18.73 | 10,300 | 12 p.m. | 16.82 | 5,340 |
| 12 m. | 12.68 | 1,500 | 12 m. | 18.41 | 9,420 | *May 6* | | |
| 10 p.m. | 12.93 | 1,550 | 12 p.m. | 17.47 | 7,000 | 12 m. | 16.24 | 4,230 |
| 12 p.m. | 12.92 | 1,550 | *Apr. 29* | | | 12 p.m. | 15.60 | 3,240 |
| *Apr. 24* | | | 7 a.m. | 17.35 | 6,760 | *May 7* | | |
| 6 a.m. | 12.75 | 1,520 | 1 p.m. | 17.38 | 6,760 | 6 a.m. | 15.02 | 2,580 |
| 12 m. | 11.88 | 1,300 | 12 p.m. | 17.96 | 8,300 | 12 m. | 13.79 | 1,820 |
| 6 p.m. | 10.05 | 880 | *Apr. 30* | | | 6 p.m. | 11.31 | 1,160 |
| 12 p.m. | 7.86 | 515 | 12 m. | 18.34 | 9,140 | 12 p.m. | 9.19 | 731 |
| *Apr. 25* | | | 12 p.m. | 20.08 | 14,600 | *May 8* | | |
| 6 am. | 5.70 | 298 | *May 1* | | | 12 m. | 7.40 | 448 |
| 12 m. | 4.20 | 192 | 12 m. | 20.84 | 17,000 | 12 p.m. | 5.91 | 314 |
| 9 p.m. | 3.30 | 129 | 4 p.m. | 20.93 | 17,400 | *May 9* | | |
| 12 p.m. | 3.30 | 129 | 12 p.m. | 20.78 | 17,000 | 6 a.m. | 4.14 | 185 |
| *Apr. 26* | | | *May 2* | | | 12 m. | 3.35 | 132 |
| 2 a.m. | 4.20 | 192 | 12 m. | 19.71 | 13,300 | 12 p.m. | 2.90 | 101 |
| 3 | 6.72 | 378 | 12 p.m. | 19.05 | 11,200 | | | |
| 4 | 8.77 | 661 | | | | | | |
| 6 | 11.05 | 1,090 | | | | | | |
| 12 m. | 12.74 | 1,500 | | | | | | |

### 28. NORTH SULPHUR RIVER NEAR COOPER, TEX.

Location.—Lat 33°28′, long 95°35′, near center of channel at downstream side of bridge on State Highway 24, 4.9 miles upstream from Auds Creek, 7.3 miles upstream from Click Creek, and 8.6 miles northeast of Cooper, Delta County.

Drainage area.—276 sq mi.

Gage-height record.—Water-stage recorder graph except Apr. 1–8, 11–13, May 3–31, for which graphs were drawn on basis of twice-daily wire-weight gage readings. Datum of gage is 381.42 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements below 30,000 cfs.

Maxima.—April–May 1958: Discharge, 39,500 cfs 4 a.m. May 2 (gage height, 22.35 ft).

1949 to March 1958: Discharge, 42,800 cfs Apr 29, 1953 (gage height, 25.86 ft).

Maximum stage since at least 1915, 26.6 ft May 2, 1944; flood in 1932 reached about same stage, from information by Corps of Engineers and local residents.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 62 | 5,620 | 11 | 98 | 23 | 21 | 72 | 10 |
| 2 | 52 | 19,100 | 12 | 62 | 21 | 22 | 548 | 9.6 |
| 3 | 48 | 8,980 | 13 | 57 | 20 | 23 | 79 | 9.1 |
| 4 | 43 | 394 | 14 | 1,010 | 17 | 24 | 47 | 8.9 |
| 5 | 52 | 104 | 15 | 156 | 16 | 25 | 39 | 9.3 |
| 6 | 39 | 181 | 16 | 59 | 15 | 26 | 3,370 | 9.3 |
| 7 | 25 | 49 | 17 | 41 | 14 | 27 | 3,390 | 9.6 |
| 8 | 22 | 35 | 18 | 39 | 12 | 28 | 482 | 506 |
| 9 | 322 | 29 | 19 | 41 | 12 | 29 | 9,370 | 29 |
| 10 | 757 | 26 | 20 | 61 | 11 | 30 | 8,080 | 12 |
| | | | | | | 31 | | 9.1 |
| Monthly mean discharge | | | | | | | 951 | 1,139 |
| Runoff | | | | | | thousands of acre-feet | 56.57 | 70.02 |
| Runoff | | | | | | inches | 3.84 | 4.76 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 29*—Con. | | | *May 2*—Con. | | |
| 12 p.m. | 0.02 | 64 | 11 a.m. | 12.95 | 16,700 | 8 a.m. | 21.15 | 36,500 |
| *Apr. 26* | | | 12 m. | 14.85 | 20,800 | 9 | 18.00 | 28,500 |
| | | | 1 p.m. | 15.50 | 22,300 | 10 | 13.10 | 17,000 |
| 1 a.m. | 2.15 | 640 | 2 | 14.80 | 20,800 | 11 | 10.40 | 11,000 |
| 2 | 4.59 | 2,690 | 3 | 13.40 | 17,600 | 12 m. | 7.80 | 6,730 |
| 4 | 3.62 | 1,750 | 4 | 11.60 | 13,600 | 1 p.m. | 6.60 | 5,060 |
| 5 | 3.15 | 1,390 | 6 | 8.75 | 8,260 | 2 | 5.00 | 3,110 |
| 6 | 2.80 | 1,110 | 8 | 6.60 | 5,060 | 3 | 6.50 | 4,930 |
| 8 | 2.13 | 628 | 10 | 5.58 | 3,800 | 4 | 12.95 | 16,700 |
| 12 m. | 1.61 | 368 | 11 | 5.63 | 3,800 | 6 | 15.80 | 23,000 |
| 4 p.m. | 1.31 | 277 | 12 p.m. | 5.13 | 3,220 | 8 | 14.00 | 19,000 |
| 5 | 1.58 | 358 | *Apr. 30* | | | 11 | 11.50 | 13,300 |
| 6 | 3.10 | 1,350 | | | | 12 p.m. | 11.90 | 14,200 |
| 7 | 7.10 | 5,740 | 3 a.m. | 3.98 | 2,110 | *May 3* | | |
| 8 | 9.60 | 9,560 | 5 | 3.43 | 1,630 | | | |
| 9 | 11.60 | 13,600 | 7 | 2.93 | 1,230 | 4 a.m. | 14.85 | 20,800 |
| 10 | 12.33 | 15,100 | 9 | 2.60 | 950 | 6 | 16.00 | 23,500 |
| 12 p.m. | 11.50 | 13,300 | 11 | 2.27 | 719 | 8 | 13.65 | 18,000 |
| *Apr. 27* | | | 12 m. | 2.37 | 789 | 9 | 11.20 | 12,600 |
| | | | 1 p.m. | 3.05 | 1,310 | 10 | 9.00 | 8,580 |
| 3 a.m. | 8.85 | 8,260 | 2 | 8.60 | 7,940 | 11 | 7.75 | 6,730 |
| 6 | 6.70 | 5,190 | 3 | 11.60 | 13,600 | 12 m. | 6.40 | 4,800 |
| 8 | 5.30 | 3,440 | 5 | 14.90 | 21,000 | 1 p.m. | 5.30 | 3,440 |
| 10 | 4.23 | 2,340 | 7 | 15.40 | 22,100 | 3 | 4.37 | 2,440 |
| 12 m. | 3.50 | 1,670 | 9 | 13.70 | 18,300 | 6 | 2.91 | 1,190 |
| 2 p.m. | 2.95 | 1,230 | 11 | 10.55 | 11,400 | 8 | 2.54 | 908 |
| 4 | 2.56 | 922 | 12 p.m. | 9.48 | 9,380 | 12 p.m. | 1.98 | 538 |
| 10 | 1.97 | 532 | *May 1* | | | *May 4* | | |
| 12 p.m. | 1.79 | 436 | | | | | | |
| *Apr. 28* | | | 3 a.m. | 12.75 | 16,200 | 10 a.m. | 1.13 | 231 |
| | | | 6 | 10.00 | 10,300 | 12 m. | 1.05 | 213 |
| 12 m. | 1.13 | 231 | 9 | 6.80 | 5,320 | 2 p.m. | 2.05 | 580 |
| 5 p.m. | 1.00 | 202 | 10 | 6.10 | 4,410 | 3 | 2.30 | 740 |
| 7 | 1.66 | 386 | 12 m. | 5.03 | 3,110 | 8 | 1.49 | 329 |
| 9:30 | 1.26 | 264 | 3 p.m. | 4.08 | 2,200 | 12 p.m. | .98 | 198 |
| 11 | 4.25 | 2,340 | 7 | 3.26 | 1,470 | *May 5* | | |
| 12 p.m. | 5.66 | 3,920 | 10 | 2.75 | 1,070 | | | |
| *Apr. 29* | | | 12 p.m. | 2.47 | 859 | 6 a.m. | 0.50 | 119 |
| | | | *May 2* | | | 12 m. | 0.25 | 88 |
| 3 a.m. | 5.35 | 3,560 | 1 a.m. | 2.36 | 782 | 12 p.m. | 0.04 | 66 |
| 4 | 8.70 | 8,100 | 2 | 5.00 | 3,110 | *May 6* | | |
| 5 | 9.24 | 8,900 | 3 | 21.00 | 36,000 | | | |
| 8 | 6.90 | 5,460 | 4 | 22.35 | 39,500 | 6 a.m. | 0.00 | 62 |
| 9 | 8.25 | 7,330 | 5 | 21.40 | 37,000 | | | |
| 10 a.m. | 10.60 | 11,400 | 7 a.m. | 22.30 | 39,200 | | | |

### 29. SULPHUR RIVER NEAR TALCO, TEX.

Location.—Lat 33°23'20", long 95°07'50", on right bank at downstream side of pier of bridge on U.S. Highway 271, about 150 ft downstream from Paris & Mt. Pleasant Railroad bridge, 2.4 miles northwest of Talco, Titus County, 3.0 miles downstream from Mustang Creek, and at mile 162.

Drainage area.—1,365 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 290.82 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 50,600 cfs 8 p.m. May 3 (gage height, 25.69 ft).

1956 to March 1958: Discharge, 44,900 cfs Nov. 6, 1957 (gage height, 24.60 ft).

Maximum stage since at least 1908, about 27½ ft in 1908 and 1914, from information by local resident. Flood of 1945 reached a stage of about 26½ ft, from information by local resident.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,380 | 33,400 | 11 | 1,650 | 1,700 | 21 | 240 | 48 |
| 2 | 785 | 38,500 | 12 | 1,200 | 1,340 | 22 | 421 | 36 |
| 3 | 340 | 47,000 | 13 | 844 | 1,150 | 23 | 767 | 29 |
| 4 | 230 | 41,400 | 14 | 1,490 | 1,020 | 24 | 1,170 | 27 |
| 5 | 200 | 26,000 | 15 | 3,960 | 899 | 25 | 1,170 | 23 |
| 6 | 250 | 18,800 | 16 | 3,080 | 690 | 26 | 2,760 | 20 |
| 7 | 170 | 13,000 | 17 | 1,740 | 525 | 27 | 12,600 | 18 |
| 8 | 120 | 8,420 | 18 | 623 | 450 | 28 | 15,700 | 18 |
| 9 | 100 | 4,670 | 19 | 320 | 380 | 29 | 14,600 | 230 |
| 10 | 896 | 2,600 | 20 | 250 | 170 | 30 | 25,800 | 185 |
| | | | | | | 31 | | 60 |
| Monthly mean discharge | | | | | | | 3,162 | 7,833 |
| Runoff | | | | | | thousands of acre-feet | 188.1 | 481.6 |
| Runoff | | | | | | inches | 2.58 | 6.62 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 21* | | | *Apr. 26* | | | *May 1* | | |
| 12 p.m. | 3.81 | 280 | 5 a.m. | 13.80 | 1,460 | 6 a.m. | 23.60 | 30,500 |
| | | | 12 m. | 16.15 | 2,120 | 12 m. | 23.80 | 32,700 |
| *Apr. 22* | | | 5 p.m. | 18.73 | 3,360 | 12 p.m. | 24.38 | 39,000 |
| | | | 8 | 20.23 | 4,790 | | | |
| 4 a.m. | 3.89 | 290 | 12 p.m. | 21.16 | 6,100 | *May 2* | | |
| 12 m. | 3.77 | 280 | | | | | | |
| 2 p.m. | 4.95 | 370 | *Apr. 27* | | | 5 a.m. | 24.39 | 39,000 |
| 4 | 6.50 | 525 | | | | 12 m. | 24.33 | 38,000 |
| 11 | 8.38 | 734 | 6 a.m. | 21.83 | 9,770 | 6 p.m. | 24.29 | 38,000 |
| 12 p.m. | 8.36 | 734 | 12 m. | 22.22 | 13,700 | 12 p.m. | 24.43 | 39,000 |
| | | | 12 p.m. | 22.48 | 17,200 | | | |
| *Apr. 23* | | | | | | *May 3* | | |
| | | | *Apr. 28* | | | | | |
| 8 a.m. | 7.77 | 668 | | | | 12 m. | 25.48 | 49,000 |
| 12 m. | 8.12 | 701 | 12 m. | 22.40 | 16,100 | 8 p.m. | 25.69 | 50,600 |
| 12 p.m. | 10.63 | 976 | 12 p.m. | 22.19 | 13,400 | 12 p.m. | 25.64 | 49,800 |
| *Apr. 24* | | | *Apr. 29* | | | *May 4* | | |
| 12 m. | 12.31 | 1,190 | 8 a.m. | 22.10 | 12,400 | 12 m. | 24.73 | 42,000 |
| 12 p.m. | 13.07 | 1,320 | 12 m. | 22.25 | 14,100 | 12 p.m. | 23.69 | 31,600 |
| | | | 12 p.m. | 22.55 | 18,200 | | | |
| *Apr. 25* | | | | | | *May 5* | | |
| | | | *Apr. 30* | | | | | |
| 2 a.m. | 13.09 | 1,320 | | | | 12 m. | 23.13 | 25,500 |
| 12 m. | 12.50 | 1,220 | 12 m. | 23.22 | 26,100 | 12 p.m. | 22.80 | 21,300 |
| 11:30 p.m. | 10.18 | 932 | 6 p.m. | 23.58 | 30,500 | | | |
| 12 p.m. | 10.27 | 943 | 12 p.m. | 23.63 | 30,500 | | | |

### 30. WHITEOAK CREEK NEAR TALCO, TEX.

Location.—Lat 33°19′, long 95°05′, near center of main channel on downstream side of bridge on U.S. Highway 271, 2 miles upstream from Ripley Creek, 2.7 miles south of Talco, Titus County, and 2.8 miles downstream from Lick Creek.

Drainage area.—494 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 286.45 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 26,600 cfs 6 a.m. Apr. 28 (gage height, 19.52 ft).

1949 to March 1958: Discharge, 23,300 cfs Feb. 3, 1950 (gage height 18.98 ft).

Maximum stage since at least 1870, about 25.3 ft Mar. 31, 1945, from information by local residents.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 996 | 19,200 | 11 | 781 | 124 | 21 | 106 | 34 |
| 2 | 1,020 | 16,800 | 12 | 868 | 83 | 22 | 100 | 28 |
| 3 | 837 | 13,900 | 13 | 555 | 64 | 23 | 100 | 24 |
| 4 | 315 | 12,500 | 14 | 614 | 54 | 24 | 136 | 22 |
| 5 | 112 | 8,240 | 15 | 1,050 | 46 | 25 | 267 | 21 |
| 6 | 73 | 4,830 | 16 | 1,350 | 40 | 26 | 1,360 | 20 |
| 7 | 58 | 3,250 | 17 | 1,400 | 36 | 27 | 14,500 | 18 |
| 8 | 50 | 2,250 | 18 | 1,190 | 33 | 28 | 23,700 | 18 |
| 9 | 46 | 1,190 | 19 | 604 | 32 | 29 | 14,500 | 17 |
| 10 | 486 | 354 | 20 | 177 | 39 | 30 | 13,000 | 17 |
| | | | | | | 31 | | 16 |
| Monthly mean discharge | | | | | | | 2,678 | 2,687 |
| Runoff | | | | | | thousands of acre-feet | 159.4 | 165.2 |
| Runoff | | | | | | inches | 6.05 | 6.27 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 23* | | | *Apr. 26*—Con. | | | *Apr. 28*—Con. | | |
| 12 p.m. | 5.59 | 100 | 12 p.m. | 16.57 | 3,740 | 6 p.m. | 18.99 | 21,600 |
| *Apr. 24* | | | *Apr. 27* | | | 8 | 18.76 | 19,200 |
| 12 m. | 6.00 | 124 | 5 a.m. | 17.43 | 7,120 | 12 p.m. | 18.65 | 18,200 |
| 12 p.m. | 7.05 | 195 | 10 | 17.94 | 11,400 | *Apr. 29* | | |
| *Apr. 25* | | | 12 m. | 18.25 | 14,400 | 3 a.m. | 18.50 | 16,800 |
| | | | 2 p.m. | 18.53 | 17,300 | 6 | 18.38 | 15,800 |
| 12 m. | 7.83 | 263 | 3 | 18.67 | 18,200 | 10 | 18.28 | 14,900 |
| 12 p.m. | 8.63 | 347 | 5 | 18.86 | 20,200 | 12 m. | 18.20 | 13,900 |
| *Apr. 26* | | | 6 | 18.96 | 21,100 | 12 p.m. | 18.02 | 12,000 |
| | | | 10 | 19.24 | 24,100 | *Apr. 30* | | |
| 3 a.m. | 9.51 | 455 | 12 p.m. | 19.34 | 24,600 | | | |
| 5 | 10.50 | 581 | *Apr. 28* | | | 6 a.m. | 17.96 | 11,600 |
| 7 | 11.55 | 736 | | | | 11 | 17.92 | 11,200 |
| 9 | 12.51 | 886 | 2 a.m. | 19.53 | 25,600 | 12 m. | 17.96 | 11,600 |
| 12 m. | 13.48 | 1,130 | 4 | 19.49 | 26,600 | 4 p.m. | 18.13 | 13,400 |
| 5 p.m. | 14.61 | 1,560 | 6 | 19.52 | 26,600 | 7 | 18.31 | 14,900 |
| 8 | 15.48 | 2,250 | 8 | 19.50 | 26,600 | 12 p.m. | 18.49 | 16,800 |
| 11 p.m. | 16.35 | 3,340 | 10 | 19.45 | 25,600 | | | |
| | | | 12 m. | 19.35 | 25,600 | | | |

### 31. TEXARKANA RESERVOIR NEAR TEXARKANA, TEX.

Location.—Lat 33°18'16", long 94°09'38", in intake structure of Texarkana Dam on the Sulphur River on U.S. Highway 59, 10 miles southwest of Texarkana, Bowie County.

Drainage area.—3,443 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is at mean sea level, datum of 1941 (levels by Corps of Engineers).

Maxima.—April–May 1958: Contents, 1,651,000 acre-ft 8 a.m. May 12 (elevation, 249.82 ft). Outflow, 10,810 cfs 7 a.m. May 9.

1953 to March 1958: Contents, 1,700,000 acre-ft June 12, 1957 (elevation, 250.36 ft). Outflow, 25,700 cfs May 26, 1957.

Remarks.—Reservoir is formed by 18,500-ft earth-fill dam, a 200-ft uncontrolled concrete spillway, and a mile-long dike. Flood-control outlet works consist of two 20-foot diameter conduits controlled by four 10- by 20-foot electrically driven broome-type gates, invert elevation, 200.0 ft. Flow over spillway is discharged into an outlet channel and thence to the Sulphur River. Sulphur River was blocked and storage began July 2, 1953: first passage of water through conduits began July 18, 1953; gates closed and impoundment of water began June 27, 1956. Dam completed in December 1957. Reservoir built for flood control and conservation. Storage capacity by monthly allocation is reserved for the cities of Texarkana, Texas and Arkansas, and varies from 200 acre-ft in February to a maximum of 13,400 acre-ft in April. Data for dam and reservoir are shown in following table:

| | *Elevation (feet)* | *Capacity (acre-ft)* |
|---|---|---|
| Top of dam | 286.0 | ---------- |
| Spillway crest | 259.5 | 2,654,300 |
| Top of conservation pool | 220.0 | 145,300 |
| Streambed | 180.0 | 0 |

Cooperation.—Records furnished by Corps of Engineers.

*Elevation, in feet, and contents, in acre-feet, at 7 a.m. of indicated day, 1958*

| Day | April | | May | | Day | April | | May | |
|---|---|---|---|---|---|---|---|---|---|
| | Elevation | Contents | Elevation | Contents | | Elevation | Contents | Elevation | Contents |
| 1 | 222.6 | 204,500 | 233.8 | 592,300 | 16 | 222.6 | 205,300 | 249.4 | 1,614,000 |
| 2 | 222.7 | 207,000 | 236.6 | 736,100 | 17 | 222.6 | 204,000 | 249.2 | 1,599,000 |
| 3 | 222.5 | 204,800 | 239.0 | 870,100 | 18 | 222.5 | 203,000 | 249.0 | 1,581,000 |
| 4 | 222.4 | 200,100 | 241.6 | 1,027,000 | 19 | 222.5 | 202,600 | 248.8 | 1,560,000 |
| 5 | 222.4 | 201,600 | 243.8 | 1,178,000 | 20 | 222.5 | 202,300 | 248.5 | 1,540,000 |
| 6 | 222.6 | 204,000 | 245.8 | 1,324,000 | 21 | 222.5 | 202,100 | 248.3 | 1,520,000 |
| 7 | 222.7 | 204,800 | 247.6 | 1,463,000 | 22 | 222.6 | 203,300 | 248.1 | 1,503,000 |
| 8 | 222.8 | 208,000 | 248.6 | 1,551,000 | 23 | 222.6 | 204,000 | 247.8 | 1,483,000 |
| 9 | 222.8 | 207,500 | 249.2 | 1,600,000 | 24 | 222.6 | 204,000 | 247.6 | 1,464,000 |
| 10 | 222.8 | 207,000 | 249.6 | 1,632,000 | 25 | 222.8 | 207,000 | 247.3 | 1,444,000 |
| 11 | 222.6 | 203,800 | 249.7 | 1,645,000 | 26 | 223.4 | 224,900 | 247.1 | 1,423,000 |
| 12 | 222.4 | 198,400 | 249.8 | 1,650,000 | 27 | 226.0 | 302,300 | 246.8 | 1,404,000 |
| 13 | 222.3 | 195,700 | 249.8 | 1,648,000 | 28 | 228.0 | 363,400 | 246.6 | 1,388,000 |
| 14 | 222.5 | 200,800 | 249.7 | 1,642,000 | 29 | 229.4 | 415,500 | 246.4 | 1,369,000 |
| 15 | 222.6 | 204,000 | 249.6 | 1,630,000 | 30 | 230.8 | 470,500 | 246.1 | 1,350,000 |
| | | | | | 31 | | | 245.9 | 1,332,000 |
| Change in contents, acre-feet | | | | | | | +267,500 | | +861,500 |

*Outflow, in cubic feet per second, at 7 a.m. of indicated day, 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 4,075 | 9,880 | 11 | 2,870 | 10,300 | 21 | 4,397 | 10,300 |
| 2 | 4,075 | 9,880 | 12 | 2,870 | 10,300 | 22 | 4,397 | 9,880 |
| 3 | 5,110 | 9,880 | 13 | 2,620 | 10,300 | 23 | 4,230 | 9,880 |
| 4 | 6,015 | 10,300 | 14 | 1,810 | 10,300 | 24 | 4,075 | 9,880 |
| 5 | 5,200 | 9,880 | 15 | 1,915 | 10,300 | 25 | 3,468 | 9,880 |
| 6 | 4,075 | 9,880 | 16 | 2,770 | 10,300 | 26 | 2,720 | 9,880 |
| 7 | 2,670 | 10,300 | 17 | 3,788 | 10,300 | 27 | 4,150 | 9,880 |
| 8 | 1,780 | 10,300 | 18 | 4,397 | 10,300 | 28 | 6,300 | 9,880 |
| 9 | 1,780 | 10,810 | 19 | 4,310 | 10,300 | 29 | 7,000 | 10,300 |
| 10 | 2,485 | 10,300 | 20 | 4,484 | 9,880 | 30 | 9,460 | 9,880 |
| | | | | | | 31 | | 10,300 |

### 32. POSTEN BAYOU NEAR WARDVIEW, LA.

[Stage Station]

Location.—Lat 33°00′25″, Long 93°46′30″, in NE¼NE¼ sec. 11, T. 23 N., R. 14 W., at bridge on parish road, 3 miles northeast of Wardview.

Gage-height record.—Water-stage recorder graph. Datum of gage is mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Elevation, 198.98 ft 10 a.m. May 1.
1956 to March 1958: Elevation, 196.70 ft Apr. 28, 1957.

Remarks.—Records furnished by Corps of Engineers.

*Elevation, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 187.0 | 198.97 | 11 | 185.9 | 193.7 | 21 | 185.9 | 187.1 |
| 2 | 186.6 | 198.87 | 12 | 185.9 | 192.3 | 22 | 185.9 | 186.6 |
| 3 | 186.4 | 198.7 | 13 | 185.9 | 190.5 | 23 | 185.9 | 186.2 |
| 4 | 186.2 | 198.5 | 14 | 186.0 | 188.2 | 24 | 185.9 | 186.1 |
| 5 | 186.1 | 198.2 | 15 | 186.1 | 186.9 | 25 | 185.9 | 185.9 |
| 6 | 186.0 | 197.7 | 16 | 186.2 | 186.6 | 26 | 193.7 | 186.1 |
| 7 | 185.9 | 197.1 | 17 | 186.1 | 186.4 | 27 | 198.2 | 185.8 |
| 8 | 185.8 | 196.3 | 18 | 186.0 | 186.2 | 28 | 198.5 | 185.8 |
| 9 | 185,8 | 195.4 | 19 | 185.9 | 186.3 | 29 | 198.6 | 185.8 |
| 10 | 185.9 | 194.7 | 20 | 185.9 | 187.4 | 30 | 198.8 | 185.8 |
| | | | | | | 31 | | 185.7 |

### 33. RED RIVER NEAR HOSSTON, LA.

Location.—Lat 32°53′35″, long 93°49′20″, in SW¼ sec. 16, T. 22 N., R. 14 W., in second pier from right abutment of bridge on State Highway 2, 1.8 miles downstream from Dry Bayou and 3.2 miles east of Hosston.

Drainage area.—57,041 sq mi, of which 5,936 sq mi above Denison Dam is noncontributing.

Gage-height record.—Water-stage recorder graph.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 214,000 cfs 5–6 p.m. May 7 (gage height, 27.89 ft).

Remarks.—Some regulation by Lake Texoma and Texarkana Reservoir. Station established Nov. 17, 1957.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 35,200 | 88,400 | 11 | 17,500 | 144,000 | 21 | 20,900 | 39,000 |
| 2 | 33,800 | 105,000 | 12 | 17,000 | 126,000 | 22 | 20,300 | 36,800 |
| 3 | 33,000 | 126,000 | 13 | 18,500 | 116,000 | 23 | 21,500 | 36,000 |
| 4 | 31,500 | 149,000 | 14 | 20,900 | 110,000 | 24 | 25,200 | 34,500 |
| 5 | 28,000 | 175,000 | 15 | 20,900 | 105,000 | 25 | 32,200 | 33,000 |
| 6 | 25,900 | 197,000 | 16 | 20,900 | 90,600 | 26 | 43,000 | 31,500 |
| 7 | 25,200 | 211,000 | 17 | 20,900 | 78,000 | 27 | 55,900 | 29,400 |
| 8 | 24,500 | 209,000 | 18 | 21,000 | 65,000 | 28 | 63,100 | 29,400 |
| 9 | 22,100 | 192,000 | 19 | 22,000 | 52,600 | 29 | 73,000 | 30,800 |
| 10 | 19,700 | 168,000 | 20 | 22,100 | 43,800 | 30 | 80,000 | 28,700 |
| | | | | | | 31 | | 25,900 |
| Monthly mean discharge | | | | | | | 30.520 | 93,750 |
| Runoff, thousands of acre-feet | | | | | | | 1,816 | 5,765 |
| Runoff, inches | | | | | | | .60 | 1.89 |

### 34. CYPRESS CREEK NEAR PITTSBURG, TEX.

Location.—Lat 33°01'10", long 94°52'40", near center of stream at downstream side of pile bent of bridge on State Highway 11, 1.800 ft upstream from Louisiana and Arkansas Railway bridge, and 5.2 miles east of Pittsburg, Camp County.

Drainage area.—366 sq mi.

Gage-height record.—Water-stage recorder graph except May 5–18. Datum of gage is 247.49 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements below 18,000 cfs. Discharge May 5–18 estimated on basis of weather records and records for Boggy Creek near Daingerfield.

Maxima.—April–May 1958: Discharge, 35,700 cfs 3:30 p.m. Apr. 27 (gage height, 24.80 ft).

1943 to March 1958: Discharge, 58,500 cfs Mar. 30, 1945 (gage height, 28.32 ft).

Maximum stage since at least 1895, that of Mar. 30, 1945; flood in January 1938 reached a stage of about 25 ft, from information by local resident.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 715 | 14,200 | 11 | 271 | 450 | 21 | 210 | 97 |
| 2 | 655 | 7,730 | 12 | 264 | 350 | 22 | 178 | 91 |
| 3 | 560 | 4,840 | 13 | 196 | 270 | 23 | 166 | 86 |
| 4 | 320 | 5,600 | 14 | 502 | 220 | 24 | 143 | 84 |
| 5 | 196 | 2,500 | 15 | 860 | 190 | 25 | 146 | 78 |
| 6 | 132 | 1,700 | 16 | 1,030 | 170 | 26 | 5,470 | 74 |
| 7 | 100 | 1,300 | 17 | 860 | 150 | 27 | 31,300 | 66 |
| 8 | 78 | 1,000 | 18 | 730 | 130 | 28 | 17,900 | 58 |
| 9 | 74 | 800 | 19 | 585 | 115 | 29 | 4,940 | 54 |
| 10 | 122 | 600 | 20 | 320 | 106 | 30 | 7,710 | 54 |
| | | | | | | 31 | | 49 |
| Monthly mean discharge | | | | | | | 2,558 | 1.394 |
| Runoff, thousands of acre-feet | | | | | | | 152.2 | 85.71 |
| Runoff, inches | | | | | | | 7.80 | 4.39 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 27*—Con. | | | *Apr. 30*—Con. | | |
| 12 p.m. | 8.57 | 186 | 6 p.m. | 24.73 | 35,300 | 12 p.m. | 18.15 | 12,000 |
| | | | 12 p.m. | 23.78 | 31,700 | *May 1* | | |
| *Apr. 26* | | | *Apr. 28* | | | 10 a.m. | 19.73 | 16,100 |
| 1 a.m. | 8.81 | 215 | 6 a.m. | 22.05 | 24,500 | 12 m. | 19.71 | 16,100 |
| 4 | 10.39 | 468 | 9 | 21.05 | 20,500 | 12 p.m. | 18.24 | 12,000 |
| 6 | 11.20 | 670 | 12 m. | 19.88 | 16,700 | *May 2* | | |
| 8 | 12.02 | 1,030 | 5 p.m. | 18.08 | 11,800 | 12 m. | 16.12 | 7,200 |
| 10 | 12.58 | 1,450 | 12 p.m. | 16.02 | 7,000 | 12 p.m. | 14.58 | 4,520 |
| 12 m. | 12.98 | 1,900 | *Apr. 29* | | | *May 3* | | |
| 2 p.m. | 13.65 | 2,940 | 12 m. | 14.51 | 4,350 | 9 a.m. | 14.32 | 4,010 |
| 4 | 15.50 | 6,100 | 9 p.m. | 14.33 | 4,100 | 12 m. | 14.34 | 4,100 |
| 6 | 17.53 | 10,200 | 12 p.m. | 14.39 | 4,180 | 12 p.m. | 15.93 | 6,820 |
| 9 | 19.38 | 15,200 | *Apr. 30* | | | *May 4* | | |
| 12 p.m. | 20.94 | 20,200 | 1:30 a.m. | 14.47 | 4,260 | 1 a.m. | 15.94 | 6,820 |
| *Apr. 27* | | | 2 | 14.61 | 4,520 | 12 m. | 15.34 | 5,740 |
| 6 a.m. | 23.00 | 28,500 | 4 | 15.00 | 5,200 | 12 p.m. | 14.32 | 4,010 |
| 12 m. | 24.55 | 34,900 | 12 m. | 16.16 | 7,400 | | | |
| 2 p.m. | 24.75 | 35,700 | | | | | | |
| 3:30 p.m. | 24.80 | 35,700 | | | | | | |

### 35. BOGGY CREEK NEAR DAINGERFIELD, TEX.

Location.—Lat 33°02'05", long 94°47'10", on right bank at downstream side of bridge on State Highway 11, a quarter of a mile upstream from Louisiana and Arkansas Railway bridge, 3.8 miles west of Daingerfield, Morris County, and 9 miles upstream from mouth.

Drainage area.—72 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 258.41 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements below 13,000 cfs.

Maxima.—April–May 1958: Discharge, 28,900 cfs 3 a.m. Apr. 27 (gage height, 17.80 ft).

1943 to March 1958: Discharge, 15,900 cfs Mar. 30, 1945 (gage height, 15.56 ft).

Maximum stage know since 1900, that of Apr. 27, 1958; flood in January 1938 (maximum stage known since 1900 and before Apr. 27, 1958) reached a stage of about 17½ ft, from information by local residents.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 142 | 3,640 | 11 | 120 | 139 | 21 | 76 | 23 |
| 2 | 88 | 895 | 12 | 118 | 115 | 22 | 82 | 21 |
| 3 | 70 | 1,020 | 13 | 72 | 72 | 23 | 82 | 18 |
| 4 | 58 | 963 | 14 | 182 | 52 | 24 | 71 | 16 |
| 5 | 49 | 472 | 15 | 472 | 43 | 25 | 113 | 15 |
| 6 | 42 | 269 | 16 | 310 | 36 | 26 | 7,560 | 14 |
| 7 | 35 | 185 | 17 | 167 | 32 | 27 | 18,300 | 12 |
| 8 | 30 | 128 | 18 | 98 | 29 | 28 | 1,660 | 22 |
| 9 | 34 | 100 | 19 | 78 | 27 | 29 | 1,100 | 18 |
| 10 | 64 | 92 | 20 | 74 | 25 | 30 | 3,350 | 17 |
| | | | | | | 31 | | 13 |
| Monthly mean discharge | | | | | | | 1,157 | 275 |
| Runoff | | | | | | thousands of acre-feet | 68.82 | 16.91 |
| Runoff | | | | | | inches | 17.93 | 4.41 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 23* | | | *Apr. 26*—Con. | | | *Apr. 30*—Con. | | |
| 12 p.m. | 6.72 | 78 | 4 p.m. | 13.85 | 9,000 | 12 m. | 12.08 | 3,600 |
| *Apr. 24* | | | 7 | 15.63 | 17,900 | 12 p.m. | 12.51 | 4,400 |
| 12 m. | 6.54 | 72 | 12 p.m. | 17.58 | 27,900 | *May 1* | | |
| 10 p.m. | 6.30 | 62 | *Apr. 27* | | | 5 a.m. | 13.02 | 5,750 |
| 12 p.m. | 6.40 | 66 | 3 a.m. | 17.80 | 28,900 | 12 m. | 12.22 | 3,800 |
| *Apr. 25* | | | 12 m. | 16.21 | 20,900 | 6 p.m. | 11.35 | 2,160 |
| 10 a.m. | 7.19 | 100 | 6 p.m. | 13.96 | 9,900 | 12 p.m. | 10.68 | 1,400 |
| 12 m. | 7.36 | 109 | 9 | 12.94 | 5,750 | *May 2* | | |
| 10 p.m. | 7.99 | 156 | 12 p.m. | 12.07 | 3,800 | 10 a.m. | 10.05 | 870 |
| 12 p.m. | 8.29 | 192 | *Apr. 28* | | | 12 m. | 9.95 | 810 |
| *Apr. 26* | | | 6 a.m. | 11.00 | 1,960 | 12 p.m. | 9.60 | 600 |
| 1 a.m. | 8.58 | 240 | 12 m. | 10.36 | 1,300 | *May 3* | | |
| 2 | 8.87 | 311 | 12 p.m. | 9.80 | 810 | 6 a.m. | 10.16 | 948 |
| 3 | 9.25 | 460 | *Apr. 29* | | | 12 m. | 10.37 | 1,100 |
| 8 | 9.95 | 810 | 12 m. | 10.20 | 1,060 | 12 p.m. | 10.43 | 1,180 |
| 10 | 10.55 | 1,260 | 12 p.m. | 10.77 | 1,450 | *May 4* | | |
| 12 m. | 11.12 | 1,840 | *Apr. 30* | | | 3 a.m. | 10.48 | 1,220 |
| 1 p.m. | 11.50 | 2,400 | 4 a.m. | 11.53 | 2,500 | 12 m. | 10.19 | 972 |
| 2 | 12.04 | 3,400 | | | | 12 p.m. | 9.66 | 636 |
| 3 p.m. | 13.12 | 6,100 | | | | | | |

### 36. LAKE O' THE PINES NEAR JEFFERSON, TEX.

Location.—Lat 32°45′, long 94°30′, in control structure of Ferrell's Bridge Dam on Cypress Creek, on Farm Road 726, 9.0 miles west of Jefferson, Marion County.

Drainage area.—850 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is mean sea level, datum of 1929, supplemental adjustment of 1941.

Maxima.—April–May 1958: Contents, 515,800 acre-ft 7 a.m. May 7 (elevation, 239.71 ft).

1957 to March 1958: Contents, 117,900 acre-ft Nov. 19, 1957.

Remarks.—Reservoir is formed by a 10,600-ft rolled earth-fill dam and a 200-ft concrete spillway. Flood-control outlet works consist of two 10-foot diameter conduits controlled by two 8.0- by 12.5-foot electrically driven broome-type gates, invert elevation 200.00 ft. Low-flow outlet works consist of one 14-inch pipe and valve, invert elevation, 202.5 ft. Flow over spillway is discharged into a 2,000-foot channel and thence into Cypress Creek. Coffer dam closure was made Aug. 21, 1957; water began flowing through conduits Sept. 25, 1957. Dam completed in December 1957. Reservoir built for flood control, conservation, and water supply. A total of 250,000 acre-ft of storage capacity is allocated to the Northeast Texas Municipal Water District for domestic and industrial use.

Data regarding the dam and reservoir are shown in the following table:

| | *Elevation (feet)* | *Capacity (acre-ft)* |
|---|---|---|
| Spillway crest | 249.5 | 842,100 |
| Top of conservation pool | 228.5 | 254,900 |
| Flood-control outlet works (inverts at intake) | 200.0 | 2,860 |

Releases from reservoir during flood period are shown in record for station Cypress Creek near Jefferson.

Cooperation.—Records furnished by Corps of Engineers.

*Elevation, in feet, and contents, in acre-feet, at 7 a.m. of indicated day, 1958*

| Day | April | | May | | Day | April | | May | |
|---|---|---|---|---|---|---|---|---|---|
| | Elevation | Contents | Elevation | Contents | | Elevation | Contents | Elevation | Contents |
| 1 | 208.6 | 24,460 | 234.2 | 372,700 | 18 | 207.6 | 20,080 | 238.7 | 486,500 |
| 2 | 208.6 | 24,700 | 236.0 | 416,500 | 19 | 207.7 | 20,500 | 238.3 | 477,200 |
| 3 | 208.6 | 24,700 | 237.9 | 465,900 | 20 | 207.9 | 21,740 | 238.0 | 468,800 |
| 4 | 208.6 | 24,700 | 238.8 | 490,400 | | | | | |
| 5 | 208.6 | 24,700 | 239.4 | 505,700 | 21 | 208.1 | 22,270 | 237.8 | 464,600 |
| | | | | | 22 | 208.3 | 23,240 | 237.6 | 459,400 |
| 6 | 208.6 | 24,600 | 239.7 | 514,100 | 23 | 208.4 | 23,730 | 237.4 | 453,400 |
| 7 | 208.6 | 24,460 | 239.7 | 515,800 | 24 | 208.4 | 23,970 | 237.2 | 447,700 |
| 8 | 208.4 | 23,730 | 239.6 | 513,600 | 25 | 208.4 | 23,830 | 237.0 | 442,200 |
| 9 | 208.3 | 23,050 | 239.6 | 511,300 | | | | | |
| 10 | 208.2 | 22,710 | 239.5 | 509,100 | 26 | 209.0 | 26,650 | 236.7 | 435,700 |
| | | | | | 27 | 211.6 | 42,340 | 236.5 | 429,200 |
| 11 | 207.9 | 21,480 | 239.3 | 505,400 | 28 | 218.2 | 101,600 | 236.2 | 422,800 |
| 12 | 207.7 | 20,500 | 239.3 | 504,000 | 29 | 227.2 | 230,900 | 236.1 | 420,200 |
| 13 | 207.5 | 19,700 | 239.3 | 504,000 | 30 | 232.0 | 324,800 | 235.9 | 413,700 |
| 14 | 207.5 | 19,530 | 239.3 | 504,000 | 31 | | | 235.6 | 404,700 |
| 15 | 207.5 | 19,530 | 239.3 | 503,400 | | | | | |
| 16 | 207.5 | 19,660 | 239.2 | 500,600 | Change in contents, acre-feet | | +299,370 | | +79,900 |
| 17 | 207.5 | 19,660 | 239.0 | 494,800 | | | | | |

### 37. CYPRESS CREEK NEAR JEFFERSON, TEX.

Location.—Lat 32°45′, long 94°29′, on downstream side of bridge, 1,500 ft downstream from Ferrell's Bridge Dam, 8 miles west of Jefferson, Marion County, and 14 miles upstream from Black Cypress Creek.

Drainage area.—850 sq mi (above Ferrell's Bridge Dam).

Gage-height record.—Water-stage recorder graph. Datum of gage is at mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 5,190 cfs 3 p.m. Apr. 29 (elevation, 201.30 ft).

1924 to March 1958: Discharge, 57,100 cfs Apr. 1, 1945 (elevation, 212.48 ft, at site 1,500 ft upstream).

Flood of Apr. 1, 1945, was greatest since at least 1853. Floods of May 1884 and July 1904 reached elevations of about 208 and 209 ft, respectively, at site 1,500 ft upstream, from information by local residents.

Remarks.—Flow regulated by Ferrell's Bridge Dam, 1,500 ft upstream.

Cooperation.—Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,160 | 3,240 | 11 | 1,080 | 3,130 | 21 | 964 | 3,670 |
| 2 | 1,160 | 3,040 | 12 | 1,030 | 2,110 | 22 | 1,030 | 3,130 |
| 3 | 1,160 | 3,040 | 13 | 985 | 1,270 | 23 | 1,080 | 2,960 |
| 4 | 1,160 | 3,240 | 14 | 943 | 964 | 24 | 1,100 | 2,960 |
| 5 | 1,130 | 3,240 | 15 | 964 | 880 | 25 | 1,100 | 2,960 |
| 6 | 1,160 | 3,240 | 16 | 922 | 1,210 | 26 | 1,160 | 3,240 |
| 7 | 1,160 | 3,240 | 17 | 901 | 2,560 | 27 | 1,700 | 3,350 |
| 8 | 1,130 | 3,240 | 18 | 820 | 3,810 | 28 | 2,270 | 3,350 |
| 9 | 1,100 | 3,130 | 19 | 880 | 4,360 | 29 | 3,950 | 3,450 |
| 10 | 1,100 | 3,130 | 20 | 922 | 4,500 | 30 | 3,950 | 3,350 |
| | | | | | | 31 | | 3,350 |
| Monthly mean discharge | | | | | | | 1,306 | 2,979 |
| Runoff | | | | | | thousands of acre-feet | 77.69 | 183.2 |

### 38. CADDO LAKE NEAR MOORINGSPORT, LA.

Location.—Lat 32°42'15", long 93°55'11", in SE¼SE¼ sec. 21, T. 20 N., R. 15 W., at south end of dam on Cypress Creek, 0.3 mile upstream from confluence with Black Bayou and 3 miles northeast of Mooringsport.

Drainage area.—2,744 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Contents, 783,300 acre-ft May 5 (elevation, 182.59 ft); 1921 to March 1958: Contents observed, 745,500 acre-ft Apr. 5, 1945 (elevation, 181.8 ft).

Remarks.—Records furnished by Corps of Engineers. Lake is formed by concrete gravity and earth dam. An uncontrolled concrete spillway is at elevation 168.40 ft (capacity, 170,000 acre-ft). At flood stages the dam is submerged.

*Elevation, in feet, and contents, in acre-feet, at 8 a.m. of indicated day, 1958*

| Day | April | | May | | Day | April | | May | |
|---|---|---|---|---|---|---|---|---|---|
| | Elevation | Contents | Elevation | Contents | | Elevation | Contents | Elevation | Contents |
| 1 | 169.4 | 206,500 | 179.3 | 619,800 | 19 | 169.2 | 198,700 | 174.9 | 422,500 |
| 2 | 169.4 | 206,100 | 180.8 | 692,800 | 20 | 169.2 | 198,700 | 174.4 | 400,600 |
| 3 | 169.5 | 205,800 | 181.8 | 740,400 | | | | | |
| 4 | 169.4 | 204,700 | 182.4 | 774,300 | 21 | 169.2 | 198,700 | 173.9 | 378,500 |
| 5 | 169.4 | 204,000 | 182.59 | 783,300 | 22 | 169.2 | 198,400 | 173.4 | 359,600 |
| | | | | | 23 | 169.2 | 198,700 | 172.9 | 339,900 |
| 6 | 169.4 | 203,700 | 182.5 | 779,600 | 24 | 169.2 | 198,700 | 172.5 | 321,600 |
| 7 | 169.3 | 201,600 | 182.2 | 764,800 | 25 | 169.2 | 200,100 | 172.0 | 302,800 |
| 8 | 169.1 | 196,600 | 181.8 | 743,000 | | | | | |
| 9 | 169.1 | 199,100 | 181.2 | 714,900 | 26 | 169.9 | 223,700 | 171.6 | 285,400 |
| 10 | 169.2 | 204,400 | 180.7 | 687,400 | 27 | 171.2 | 270,300 | 171.2 | 271,500 |
| | | | | | 28 | 172.7 | 329,500 | 170.8 | 256,700 |
| 11 | 169.4 | 202,300 | 180.1 | 656,800 | 29 | 174.8 | 415,400 | 170.4 | 244,000 |
| 12 | 169.3 | 200,100 | 179.4 | 625,500 | 30 | 177.2 | 519,800 | 170.2 | 234,300 |
| 13 | 169.2 | 199,100 | 178.8 | 594,200 | | | | | |
| 14 | 169.2 | 200,100 | 178.1 | 562,000 | 31 | | | 170.1 | 228,400 |
| 15 | 169.3 | 202,300 | 177.4 | 532,000 | | | | | |
| | | | | | Change in contents, acre-feet | | +312,900 | | −291,400 |
| 16 | 169.2 | 200,100 | 176.7 | 502,300 | | | | | |
| 17 | 169.2 | 199,100 | 176.1 | 474,900 | | | | | |
| 18 | 169.2 | 198,700 | 175.5 | 447,500 | | | | | |

### 39. KELLY BAYOU NEAR HOSSTON, LA.

Location.—Lat 32°51'25", long 93°52'20", in SW¼NE¼ sec. 36, T. 22 N., R. 15 W., near center of span on downstream side of bridge on U.S. Highway 71, 0.4 mile downstream from Willow Lake lateral, 2.0 miles south of Hosston, and 2.7 miles upstream from mouth.

Drainage area.—116 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 165.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge computed by using fall as determined from auxiliary recorder. Stage-discharge relation indefinite May 16–31; discharge estimated on basis of records for nearby stations.

Maxima.—April–May 1958: Discharge, 4,460 cfs 5 a.m. Apr. 28; gage height, 22.72 ft 4 a.m. Apr. 29.

1944 to March 1958: Discharge, 1,800 cfs Mar. 3, 1945; gage height, 17.23 ft Apr. 29, 1957.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 109 | 3,600 | 11 | 70 | 331 | 21 | 72 | 40 |
| 2 | 89 | 3,200 | 12 | 64 | 178 | 22 | 64 | 30 |
| 3 | 80 | 2,880 | 13 | 52 | 118 | 23 | 52 | 25 |
| 4 | 74 | 2,510 | 14 | 58 | 84 | 24 | 44 | 20 |
| 5 | 70 | 2,130 | 15 | 94 | 42 | 25 | 70 | 20 |
| 6 | 62 | 1,770 | 16 | 94 | 35 | 26 | 1,910 | 20 |
| 7 | 54 | 1,210 | 17 | 70 | 25 | 27 | 3,530 | 20 |
| 8 | 46 | 774 | 18 | 56 | 30 | 28 | 4,330 | 20 |
| 9 | 44 | 488 | 19 | 50 | 40 | 29 | 4,130 | 20 |
| 10 | 54 | 546 | 20 | 66 | 60 | 30 | 3,910 | 20 |
| | | | | | | 31 | | 25 |
| Monthly mean discharge | | | | | | | 649 | 655 |
| Runoff | | | | | | thousands of acre-feet | 38.61 | 40.29 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 26*—Con. | | | *Apr. 27*—Con. | | |
| 12 p.m. | 2.89 | 41 | 9 a.m. | 16.44 | 2,480 | 2 p.m. | 19.70 | 3,560 |
| *Apr. 25* | | | 10 | 16.55 | 2,520 | 4 | 20.05 | 3,750 |
| | | | 11 | 16.53 | 2,510 | 8 | 20.74 | 4,090 |
| | | | 12 m. | 16.44 | 2,380 | 10 | 21.05 | 4,220 |
| 2 a.m. | 2.88 | 40 | 1 p.m. | 16.37 | 2,290 | 12 p.m. | 21.32 | 4,330 |
| 4 | 3.67 | 71 | 2 | 16.29 | 2,210 | *Apr. 28* | | |
| 6 | 3.97 | 83 | 3 | 16.21 | 2,120 | | | |
| 8 | 4.09 | 88 | 4 | 16.27 | 2,120 | 4 a.m. | 21.83 | 4,450 |
| 12 m. | 3.80 | 76 | 5 | 16.76 | 2,300 | 5 | 21.93 | 4,460 |
| 4 p.m. | 3.54 | 66 | 6 | 17.17 | 2,470 | 6 | 22.03 | 4,430 |
| 10 | 3.39 | 60 | 7 | 17.40 | 2,540 | 8 | 22.18 | 4,430 |
| 11 | 4.02 | 85 | 8 | 17.52 | 2,570 | 12 m. | 22.39 | 4,320 |
| 12 p.m. | 4.42 | 105 | 9 | 17.59 | 2,590 | 6 p.m. | 22.57 | 4,240 |
| *Apr. 26* | | | 10 | 17.76 | 2,660 | 12 p.m. | 22.63 | 4,210 |
| | | | 11 | 17.99 | 2,760 | *Apr. 29* | | |
| 1 a.m. | 4.10 | 89 | 12 p.m. | 18.24 | 2,900 | | | |
| 2 | 4.32 | 100 | *Apr. 27* | | | 4 a.m. | 22.72 | 4,210 |
| 3 | 5.02 | 140 | | | | 8 | 22.66 | 4,170 |
| 4 | 8.27 | 420 | 2 a.m. | 18.52 | 3,010 | 12 m. | 22.61 | 4,130 |
| 5 | 11.47 | 1,020 | 4 | 18.72 | 3,090 | 6 p.m. | 22.49 | 4,060 |
| 6 | 13.92 | 1,630 | 8 | 18.99 | 3,210 | 12 p.m. | 22.34 | 4,020 |
| 7 | 15.32 | 2,060 | 10 | 19.17 | 3,290 | | | |
| 8 a.m. | 16.15 | 2,360 | 12 m. | 19.41 | 3,420 | | | |

### 40. BLACK BAYOU NEAR GILLIAM, LA.

Location.—Lat 32°48'55", long 93°52'15", in SE¼NW¼ sec. 13, T. 21 N., R. 15 W., near left bank on downstream side of bridge on State Highway 170, 0.2 mile downstream from Red Bayou and 2 miles southwest of Gilliam.

Drainage area.—364 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 155.59 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge computed by using fall as determined from auxiliary recorder as a factor. Stage-discharge relation indefinite May 8–31; discharge estimated on basis of records for nearby stations.

Maxima.—April–May 1958: Discharge, 17,700 cfs 4–10 a.m. Apr. 29 (gage height, 27.51 ft).

1942 to March 1958: Discharge, 8,200 cfs Apr. 29, 1957; gage height, 25.73 ft Apr. 5, 1945.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 602 | 14,600 | 11 | 319 | | 21 | 379 | |
| 2 | 575 | 13,100 | 12 | 296 | | 22 | 367 | |
| 3 | 549 | 12,600 | 13 | 274 | 400 | 23 | 347 | |
| 4 | 530 | 10,600 | 14 | 316 | | 24 | 320 | |
| 5 | 496 | 6,280 | 15 | 354 | | 25 | 390 | |
| 6 | 458 | 5,310 | 16 | 371 | | 26 | 3,540 | 100 |
| 7 | 373 | 2,950 | 17 | 333 | | 27 | 8,110 | |
| 8 | 320 | | 18 | 324 | 100 | 28 | 15,100 | |
| 9 | 289 | 2,000 | 19 | 322 | | 29 | 17,500 | |
| 10 | 316 | | 20 | 354 | | 30 | 16,600 | |
| | | | | | | 31 | | |
| Monthly mean discharge | | | | | | | 2,347 | 2,421 |
| Runoff | | | | | | thousands of acre-feet | 139.7 | 148.8 |
| Runoff | | | | | | inches | 7.20 | 7.67 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 26*—Con. | | | *Apr. 27*—Con. | | |
| 12 p.m. | 6.33 | 298 | 2 p.m. | 18.33 | 4,370 | 10 p.m. | 23.10 | 10,200 |
| *Apr. 25* | | | 3 | 18.62 | 4,700 | 11 | 23.33 | 10,500 |
| | | | 4 | 18.85 | 4,880 | 12 p.m. | 23.54 | 10,900 |
| 2 a.m. | 6.30 | 285 | 5 | 19.23 | 5,180 | *Apr. 28* | | |
| 3 | 6.34 | 298 | 6 | 19.58 | 5,490 | 1 a.m. | 23.78 | 11,200 |
| 4 | 6.44 | 328 | 7 | 19.84 | 5,740 | 3 | 24.33 | 12,200 |
| 5 | 6.64 | 395 | 8 | 20.05 | 5,950 | 4 | 24.58 | 12,600 |
| 6 | 6.85 | 454 | 9 | 20.16 | 6,060 | 6 | 25.14 | 13,500 |
| 8 | 7.02 | 475 | 10 | 20.25 | 6,150 | 10 | 26.03 | 15,100 |
| 10 | 7.08 | 461 | 12 p.m. | 20.51 | 6,410 | 12 m. | 26.38 | 15,700 |
| 12 m. | 7.11 | 437 | *Apr. 27* | | | 2 p.m. | 26.66 | 16,200 |
| 4 p.m. | 7.10 | 393 | | | | 6 | 27.06 | 16,900 |
| 10 | 7.03 | 369 | 1 a.m. | 20.64 | 6,570 | 12 p.m. | 27.33 | 17,400 |
| 11 | 7.03 | 295 | 3 | 20.86 | 6,830 | *Apr. 29* | | |
| 12 p.m. | 7.21 | 376 | 4 | 20.95 | 6,940 | | | |
| *Apr. 26* | | | 5 | 21.02 | 7,030 | 4 a.m. | 27.51 | 17,700 |
| | | | 6 | 21.10 | 7,150 | 10 | 27.51 | 17,700 |
| 1 a.m. | 7.35 | 420 | 7 | 21.16 | 7,240 | 12 m. | 27.47 | 17,600 |
| 3 | 7.67 | 468 | 8 | 21.23 | 7,340 | 6 p.m. | 27.38 | 17,500 |
| 4 | 8.78 | 797 | 10 | 21.37 | 7,560 | 12 p.m. | 27.14 | 17,100 |
| 5 | 10.48 | 1,450 | 11 | 21.44 | 7,660 | *Apr. 30* | | |
| 6 | 12.23 | 1,990 | 12 m. | 21.53 | 7,800 | | | |
| 7 | 13.70 | 2,190 | 1 p.m. | 21.62 | 7,930 | | | |
| 8 | 14.81 | 2,400 | 2 | 21.73 | 8,100 | | | |
| 9 | 15.68 | 2,680 | 3 | 21.85 | 8,280 | 6 a.m. | 27.08 | 16,900 |
| 10 | 16.40 | 2,970 | 5 | 22.11 | 8,660 | 12 m. | 26.85 | 16,500 |
| 11 | 17.01 | 3,280 | 6 | 22.28 | 8,920 | 6 p.m. | 26.75 | 16,400 |
| 12 m. | 17.50 | 3,600 | 7 | 22.50 | 9,250 | 12 p.m. | 26.81 | 16,400 |
| 1 p.m. | 17.96 | 4,060 | 8 | 22.71 | 9,560 | | | |
| | | | 9 p.m. | 22.90 | 9,850 | | | |

### 41. TWELVEMILE BAYOU NEAR DIXIE, LA.

Location.—Lat 32°38'45", long 93°52'40", in NW¼NW¼ sec. 14, T. 19 N., R. 15 W., near right bank on downstream side of pier of bridge on State Highway 173, 0.1 mile downstream from Cottonwood Bayou, 4.2 miles southwest of Dixie, 5.5 miles downstream from Caddo Lake, and 17.3 miles upstream from mouth.

Drainage area.—3,137 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 143.88 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements. Discharge Apr. 25–May 17 computed by using submergence as determined from auxiliary gage as a factor.

Maxima.—April–May 1958: Discharge, 38,400 cfs 6 a.m. May 5; gage height, 35.65 ft 6 p.m. May 5.

1942 to March 1958: Discharge, 34,900 cfs Apr. 5, 1945 (gage height, 35.65 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 4,400 | 29,800 | 11 | 3,380 | 31,000 | 21 | 3,000 | 16,500 |
| 2 | 4,300 | 33,400 | 12 | 3,080 | 29,700 | 22 | 2,960 | 15,300 |
| 3 | 4,350 | 36,200 | 13 | 3,000 | 28,200 | 23 | 2,920 | 14,200 |
| 4 | 4,100 | 37,900 | 14 | 3,160 | 26,900 | 24 | 2,960 | 13,300 |
| 5 | 4,150 | 38,300 | 15 | 3,280 | 25,300 | 25 | 3,080 | 12,600 |
| 6 | 4,050 | 37,700 | 16 | 3,160 | 23,700 | 26 | 6,860 | 12,000 |
| 7 | 3,510 | 36,700 | 17 | 3,080 | 22,100 | 27 | 10,800 | 11,300 |
| 8 | 3,000 | 35,300 | 18 | 3,040 | 20,600 | 28 | 13,400 | 10,500 |
| 9 | 3,040 | 34,000 | 19 | 3,000 | 19,000 | 29 | 17,700 | 9,860 |
| 10 | 3,510 | 32,500 | 20 | 3,080 | 17,600 | 30 | 24,000 | 9,010 |
| | | | | | | 31 | | 8,150 |
| Monthly mean discharge | | | | | | | 5,245 | 23,500 |
| Runoff | | | | | | thousands of acre-feet | 312.1 | 1,445 |
| Runoff | | | | | | inches | 1.86 | 8.64 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 27* | | | *May 1*—Con. | | |
| 12 p.m. | 10.00 | 2,840 | 6 a.m. | 22.98 | 10,200 | 12 m. | 32.04 | 28,900 |
| | | | 12 m. | 23.48 | 10,800 | 6 p.m. | 32.74 | 30,900 |
| *Apr. 25* | | | 6 p.m. | 24.13 | 11,600 | 12 p.m. | 33.08 | 31,800 |
| | | | 12 p.m. | 24.60 | 12,100 | | | |
| 12 m. | 10.58 | 3,070 | | | | *May 2* | | |
| 10 p.m. | 11.02 | 3,250 | *Apr. 28* | | | | | |
| 12 p.m. | 11.62 | 3,520 | 6 a.m. | 25.01 | 12,600 | 12 m. | 33.63 | 33,400 |
| | | | 12 m. | 25.47 | 13,200 | 12 p.m. | 34.15 | 34,800 |
| *Apr. 26* | | | 6 p.m. | 25.93 | 14,100 | | | |
| | | | 12 a.m. | 26.45 | 15,100 | *May 3* | | |
| 1 a.m. | 12.01 | 3,700 | | | | | | |
| 2 | 12.26 | 3,830 | *Apr. 29* | | | 12 m. | 34.70 | 36,400 |
| 3 | 13.00 | 4,200 | | | | 12 p.m. | 35.10 | 37,400 |
| 5 | 14.53 | 4,960 | 6 a.m. | 27.12 | 16,200 | | | |
| 6 | 15.42 | 5,410 | 12 m. | 27.71 | 17,600 | *May 4* | | |
| 7 | 16.28 | 5,840 | 6 p.m. | 28.35 | 19,100 | | | |
| 8 | 16.99 | 6,200 | 12 p.m. | 29.08 | 20,800 | 12 m. | 35.36 | 38,000 |
| 10 | 18.16 | 6,800 | | | | 12 p.m. | 35.53 | 38,300 |
| 11 | 18.60 | 7,060 | *Apr. 30* | | | | | |
| 12 m. | 18.94 | 7,260 | | | | *May 5* | | |
| 1 p.m. | 19.23 | 7,440 | 6 a.m. | 29.72 | 22,500 | | | |
| 2 | 19.42 | 7,550 | 12 m. | 30.40 | 24,300 | | | |
| 3 | 19.62 | 7,670 | 6 p.m. | 30.98 | 25,900 | 4 a.m. | 35.58 | 38,300 |
| 4 | 20.20 | 8,020 | 12 p.m. | 31.55 | 27,500 | 5 | 35.59 | 38,400 |
| 5 | 20.58 | 8,250 | | | | 6 | 35.60 | 38,400 |
| 9 | 21.62 | 8,930 | *May 1* | | | 12 m. | 35.61 | 38,300 |
| 10 | 21.84 | 9,090 | | | | 6 p.m. | 35.65 | 38,300 |
| 12 p.m. | 22.21 | 9,370 | 6 a.m. | 32.35 | 29,800 | 12 p.m. | 35.60 | 38,000 |

### 42. PAW PAW BAYOU NEAR GREENWOOD, LA.

Location.—Lat 32°31'00", long 93°58'20", in SE¼ sec. 26, T. 18 N., R. 16 W., near center of span on downstream side of bridge on State Highway 169, 1 mile upstream from Cross Lake, 5.1 miles north of Greenwood, and 11 miles west of Shreveport.

Drainage area.—78 sq mi.

690-439 O—63——5

Gage-height record.—Water-stage recorder graph. Datum of gage is 170.35 ft above mean sea level (Louisiana Geodetic Survey bench mark).

Discharge record.—Stage-discharge relation defined by current-meter measurements below 2,000 cfs.

Maxima.—April–May 1958: Discharge, 7,310 cfs 5:30 a.m. Apr. 27 (gage height, 13.84 ft).

1955 to March 1958: Discharge, 3,750 cfs Apr. 28, 1957 (gage height, 11.24 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 62 | 1,540 | 11 | 40 | 29 | 21 | 13 | 16 |
| 2 | 40 | 1,190 | 12 | 22 | 21 | 22 | 11 | 11 |
| 3 | 30 | 855 | 13 | 15 | 16 | 23 | 9.2 | 7.7 |
| 4 | 25 | 1,400 | 14 | 71 | 14 | 24 | 7.7 | 5.6 |
| 5 | 21 | 874 | 15 | 170 | 12 | 25 | 6.8 | 4.4 |
| 6 | 17 | 345 | 16 | 75 | 11 | 26 | 641 | 3.4 |
| 7 | 14 | 74 | 17 | 32 | 8.8 | 27 | 4,800 | 2.8 |
| 8 | 11 | 38 | 18 | 20 | 7.7 | 28 | 1,620 | 2.6 |
| 9 | 9.8 | 27 | 19 | 16 | 8.4 | 29 | 908 | 2.6 |
| 10 | 19 | 30 | 20 | 14 | 14 | 30 | 732 | 2.6 |
| | | | | | | 31 | | 2.8 |
| Monthly mean discharge | | | | | | | 316 | 212 |
| Runoff | | | | | | thousands of acre-feet | 18.79 | 13.04 |
| Runoff | | | | | | inches | 4.52 | 3.14 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 27*—Con. | | | *May 2*—Con. | | |
| 12 p.m. | 2.01 | 9.4 | 9 p.m. | 10.65 | 2,400 | 6 p.m. | 9.18 | 966 |
| *Apr. 26* | | | 12 p.m. | 10.37 | 2,080 | 12 p.m. | 8.94 | 820 |
| 3 a.m. | 2.21 | 13 | *Apr. 28* | | | *May 3* | | |
| 8 | 2.86 | 26 | 6 a.m. | 10.06 | 1,760 | 6 a.m. | 8.80 | 750 |
| 9 | 3.16 | 35 | 12 m. | 9.86 | 1,560 | 12 m. | 8.91 | 805 |
| 10 | 3.85 | 56 | 6 p.m. | 9.84 | 1,540 | 6 p.m. | 9.15 | 945 |
| 11 | 4.70 | 88 | 12 p.m. | 9.49 | 1,200 | 12 p.m. | 9.26 | 1,020 |
| 12 m. | 5.50 | 127 | *Apr. 29* | | | *May 4* | | |
| 1 p.m. | 6.13 | 170 | | | | | | |
| 2 | 6.52 | 204 | 6 a.m. | 9.21 | 987 | 6 a.m. | 9.80 | 1,500 |
| 3 | 6.80 | 230 | 12 m. | 9.00 | 850 | 12 m. | 9.82 | 1,520 |
| 4 | 7.03 | 253 | 6 p.m. | 8.93 | 815 | 6 p.m. | 9.74 | 1,440 |
| 5 | 7.30 | 280 | 12 p.m. | 8.82 | 760 | 12 p.m. | 9.52 | 1,230 |
| 6 | 7.95 | 435 | *Apr. 30* | | | *May 5* | | |
| 7 | 8.87 | 785 | | | | | | |
| 8 | 9.57 | 1,270 | 6 a.m. | 8.70 | 700 | 6 a.m. | 9.25 | 1,020 |
| 9 | 10.38 | 2,110 | 12 m. | 8.63 | 672 | 12 m. | 9.00 | 850 |
| 10 | 11.23 | 3,060 | 6 p.m. | 8.68 | 692 | 6 p.m. | 8.73 | 715 |
| 11 | 11.85 | 3,820 | 12 p.m. | 9.18 | 966 | 12 p.m. | 8.42 | 588 |
| 12 p.m. | 12.40 | 4,630 | *May 1* | | | *May 6* | | |
| *Apr. 27* | | | | | | | | |
| 1 a.m. | 12.92 | 5,530 | 4 a.m. | 9.62 | 1,320 | 6 a.m. | 8.06 | 468 |
| 2 | 13.39 | 6,410 | 6 | 9.63 | 1,330 | 12 m. | 7.57 | 334 |
| 3 | 13.64 | 6,910 | 10 | 9.94 | 1,640 | 6 p.m. | 6.68 | 218 |
| 4 | 13.78 | 7,190 | 12 m. | 9.95 | 1,650 | 12 p.m. | 5.59 | 132 |
| 5 | 13.83 | 7,290 | 4 p.m. | 10.12 | 1,820 | | | |
| 5:30 | 13.84 | 7,310 | 6 | 10.13 | 1,830 | *May 7* | | |
| 6 | 13.83 | 7,290 | 10 | 9.87 | 1,570 | | | |
| 7 | 13.78 | 7,190 | 12 p.m. | 9.88 | 1,580 | 6 a.m. | 4.65 | 86 |
| 8 | 13.64 | 6,910 | | | | 12 m. | 4.14 | 66 |
| 9 | 13.45 | 6,530 | *May 2* | | | 6 p.m. | 3.83 | 55 |
| 12 m. | 12.65 | 5,040 | | | | 12 p.m. | 3.60 | 48 |
| 3 p.m. | 11.78 | 3,730 | 6 a.m. | 9.74 | 1,440 | | | |
| 6 p.m. | 11.06 | 2,860 | 12 m. | 9.45 | 1,170 | | | |

### 43. RED RIVER AT SHREVEPORT, LA.

Location.—Lat 32°30'55", long 93°44'25", in SE¼SE¼ sec. 30, T. 18 N., R. 13 W., on second pier from east bank, at Illinois Central Railroad bridge at Shreveport, half a mile downstream from Cross Bayou.

Drainage area.—60,613 sq mi, of which 5,936 sq mi above Denison Dam is noncontributing.

Gage-height record.—Graph based on once-daily telemark readings. Datum of gage is 131.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1931 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 249,000 cfs May 8 (gage height, 33.70 ft).
1928 to March 1958: Discharge, 303,000 cfs Apr. 5, 1945; gage height, 37.9 ft in gage well, 38.4 ft from outside gage Apr. 7, 1945.
Maximum stage known, 45.9 ft in August 1849.

Remarks.—Some regulation by Lake Texoma and Texarkana Reservoir. Most discharge measurements and computations of records furnished by Corps of Engineers; occasional discharge measurements made and records reviewed by Geological Survey.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 42,200 | 125,000 | 11 | 21,500 | 182,000 | 21 | 24,200 | 54,600 |
| 2 | 38,400 | 142,000 | 12 | 20,400 | 157,000 | 22 | 22,400 | 48,200 |
| 3 | 37,600 | 168,000 | 13 | 20,700 | 143,000 | 23 | 21,500 | 44,200 |
| 4 | 37,600 | 194,000 | 14 | 23,300 | 134,000 | 24 | 22,400 | 41,100 |
| 5 | 34,200 | 218,000 | 15 | 24,200 | 131,000 | 25 | 28,500 | 39,200 |
| 6 | 30,700 | 234,000 | 16 | 24,200 | 125,000 | 26 | 34,800 | 37,300 |
| 7 | 29,600 | 245,000 | 17 | 23,700 | 112,000 | 27 | 56,300 | 36,300 |
| 8 | 27,900 | 249,000 | 18 | 24,200 | 94,500 | 28 | 88,600 | 35,000 |
| 9 | 26,800 | 229,000 | 19 | 24,200 | 77,400 | 29 | 102,000 | 35,000 |
| 10 | 24,200 | 208,000 | 20 | 24,200 | 63,300 | 30 | 114,000 | 34,100 |
| | | | | | | 31 | | 31,800 |
| Monthly mean discharge | | | | | | | 35,820 | 118,300 |
| Runoff (thousands of acre-feet) | | | | | | | 2,131 | 7,275 |

### 44. BAYOU DORCHEAT NEAR SPRINGHILL, LA.

Location.—Lat 32°59'40", long 93°23'45", in NE¼NE¼ sec. 16, T. 23 N., R. 10 W., near left bank on downstream side of bridge on State Highway 157, 0.4 mile downstream from Crooked Creek, 1.7 miles downstream from Arkansas-Louisiana State line, and 4 miles southeast of Springhill.

Drainage area.—605 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 173.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April-May 1958: Discharge, 36,400 cfs 4 p.m. Apr. 28 (gage height, 22.79 ft).
October 1957 to March 1958: Discharge, 3,270 cfs Nov, 21, 1957 (gage height, 13.71 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,460 | 22,400 | 11 | 335 | 1,600 | 21 | 438 | 482 |
| 2 | 1,280 | 18,600 | 12 | 272 | 1,380 | 22 | 406 | 534 |
| 3 | 1,140 | 14,600 | 13 | 242 | 1,280 | 23 | 368 | 715 |
| 4 | 1,030 | 11,400 | 14 | 258 | 1,220 | 24 | 328 | 912 |
| 5 | 915 | 8,620 | 15 | 279 | 1,130 | 25 | 523 | 995 |
| 6 | 798 | 5,960 | 16 | 283 | 983 | 26 | 3,400 | 908 |
| 7 | 670 | 4,240 | 17 | 308 | 815 | 27 | 18,700 | 735 |
| 8 | 558 | 3,240 | 18 | 362 | 634 | 28 | 35,000 | 514 |
| 9 | 469 | 2,520 | 19 | 419 | 558 | 29 | 32,500 | 341 |
| 10 | 390 | 1,970 | 20 | 448 | 530 | 30 | 26,200 | 242 |
| | | | | | | 31 | | 223 |
| Monthly mean discharge | | | | | | | 4,326 | 3,557 |
| Runoff, thousands of acre-feet | | | | | | | 257.4 | 218.7 |
| Runoff, inches | | | | | | | 7.98 | 6.78 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 26*—Con. | | | *Apr. 28*—Con. | | |
| 12 p.m. | 8.20 | 307 | 2 p.m. | 14.29 | 4,340 | 12 p.m. | 22.60 | 35,300 |
| *Apr. 25* | | | 4 | 14.48 | 4,750 | *Apr. 29* | | |
| | | | 6 | 14.65 | 5,140 | | | |
| | | | 8 | 14.83 | 5,590 | | | |
| 2 a.m. | 8.18 | 304 | 10 | 15.16 | 6,210 | 6 a.m. | 22.41 | 34,200 |
| 6 | 8.61 | 367 | 12 p.m. | 15.58 | 7,690 | 12 m. | 22.11 | 32,800 |
| 8 | 8.91 | 414 | | | | 6 p.m. | 21.78 | 31,100 |
| 10 | 9.31 | 484 | *Apr. 27* | | | 12 p.m. | 21.33 | 28,800 |
| 12 m. | 9.62 | 544 | | | | | | |
| 2 p.m. | 9.87 | 596 | 4 a.m. | 16.68 | 10,900 | *Apr. 30* | | |
| 4 | 10.08 | 643 | 8 | 17.80 | 14,300 | | | |
| 6 | 10.21 | 674 | 12 m. | 18.94 | 18,300 | 12 m. | 20.72 | 25,900 |
| 8 | 10.29 | 694 | 4 p.m. | 20.00 | 22,600 | 12 p.m. | 20.33 | 24,100 |
| 10 | 10.34 | 706 | 8 | 20.98 | 27,100 | | | |
| 12 p.m. | 10.38 | 715 | 12 p.m. | 21.72 | 30,800 | *May 1* | | |
| *Apr. 26* | | | *Apr. 28* | | | 12 m. | 19.95 | 22,400 |
| | | | | | | 12 p.m. | 19.53 | 20,600 |
| 2 a.m. | 10.43 | 728 | 4 a.m. | 22.22 | 33,300 | | | |
| 4 | 10.81 | 822 | 8 | 22.58 | 35,200 | *May 2* | | |
| 6 | 11.58 | 1,030 | 12 m. | 22.75 | 36,200 | | | |
| 8 | 12.46 | 1,520 | 4 p.m. | 22.79 | 36,400 | 12 m. | 19.03 | 18,600 |
| 10 | 13.40 | 2,780 | 8 p.m. | 22.73 | 36,100 | 12 p.m. | 18.44 | 16,400 |
| 12 m. | 13.97 | 3,740 | | | | | | |

### 45. FLAT LICK BAYOU NEAR LETON, LA.

Location.—Lat 32°46'10", long 93°16'00", in NW¼ sec. 35, T. 21 N., R. 9 W., near left bank on downstream side of bridge on State Highway 159, half a mile downstream from Cypress Creek, 6 miles upstream from mouth, and 6½ miles south of Leton.

Drainage area.—66.9 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 183.79 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements below 3,300 cfs and extended to peak stage by velocity-area studies.

Maxima.—April–May 1958: Discharge, 10,200 cfs 2 p.m. Apr. 26 (gage height, 12.95 ft).

1956 to March 1958: Discharge, 2,340 cfs Apr. 27. 1957 (gage height, 9.92 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 84 | 2,480 | 11 | 45 | 229 | 21 | 42 | 465 |
| 2 | 70 | 831 | 12 | 39 | 115 | 22 | 36 | 263 |
| 3 | 62 | 499 | 13 | 34 | 67 | 23 | 30 | 116 |
| 4 | 55 | 457 | 14 | 61 | 54 | 24 | 25 | 74 |
| 5 | 50 | 375 | 15 | 79 | 48 | 25 | 283 | 59 |
| 6 | 43 | 271 | 16 | 60 | 42 | 26 | 7,250 | 50 |
| 7 | 38 | 164 | 17 | 45 | 38 | 27 | 3,570 | 44 |
| 8 | 35 | 107 | 18 | 37 | 40 | 28 | 2,120 | 37 |
| 9 | 36 | 82 | 19 | 36 | 1,030 | 29 | 926 | 34 |
| 10 | 46 | 212 | 20 | 41 | 1,400 | 30 | 2,850 | 31 |
| | | | | | | 31 | | 26 |
| Monthly mean discharge | | | | | | | 604 | 314 |
| Runoff, thousands of acre-feet | | | | | | | 35,96 | 19.32 |
| Runoff, inches | | | | | | | 10.08 | 5.41 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 27*—Con. | | | *May 1*—Con. | | |
| 12 p.m | 3.42 | 23 | 8 a.m | 10.57 | 3,850 | 12 p.m | 9.26 | 1,360 |
| *Apr. 25* | | | 12 m | 10.18 | 2,970 | *May 2* | | |
| 4 a.m | 3.41 | 23 | 4 p.m | 9.74 | 2,130 | 12 m | 8.79 | 731 |
| 8 | 4.46 | 62 | 8 | 9.79 | 2,210 | 12 p.m | 8.47 | 503 |
| 12 m | 7.54 | 311 | 12 p.m | 10.17 | 2,950 | *May 18* | | |
| 4 p.m | 8.34 | 457 | *Apr. 28* | | | 12 m | 3.80 | 36 |
| 8 | 8.47 | 503 | 2 a.m | 10.27 | 3,160 | 12 p.m | 4.23 | 53 |
| 12 p.m | 8.71 | 659 | 12 m | 9.71 | 2,080 | *May 19* | | |
| *Apr. 26* | | | 12 p.m | 9.01 | 1,000 | 4 a.m | 6.32 | 185 |
| 2 a.m | 9.02 | 1,020 | *Apr. 29* | | | 8 | 8.56 | 548 |
| 4 | 10.00 | 2,600 | 12 m | 8.83 | 773 | 12 m | 9.25 | 1,340 |
| 6 | 11.47 | 6,110 | 12 p.m | 9.12 | 1,160 | 4 p.m | 9.27 | 1,380 |
| 8 | 12.62 | 9,310 | *Apr. 30* | | | 8 | 9.36 | 1,510 |
| 10 | 12.77 | 9,730 | 4 a.m | 9.05 | 1,060 | 12 p.m | 9.86 | 2,340 |
| 12 m | 12.92 | 10,100 | 8 | 10.00 | 2,600 | *May 20* | | |
| 2 p.m | 12.95 | 10,200 | 11 a.m | 10.89 | 4,620 | 1:30 a.m | 9.92 | 2,450 |
| 4 | 12.89 | 10,100 | 6 p.m | 10.08 | 2,760 | 12 m | 9.19 | 1,260 |
| 6 | 12.60 | 9,250 | 12 p.m | 10.60 | 3,920 | 6 p.m | 8.89 | 839 |
| 8 p.m | 12.15 | 7,990 | *May 1* | | | 12 p.m | 8.64 | 602 |
| 10 | 11.79 | 6,980 | 12 m | 9.85 | 2,320 | | | |
| 12 p.m | 11.67 | 6,650 | | | | | | |
| *Apr. 27* | | | | | | | | |
| 4 a.m | 11.23 | 5,480 | | | | | | |

### 46. BAYOU DORCHEAT NEAR MINDEN, LA.

Location.—Lat 32°35'55", long 93°20'00", in NW¼ sec. 31, T. 19 N., R. 9 W., on left bank 500 ft upstream from bridge on U.S. Highway 80, three-quarters of a mile upstream from Louisiana and Arkansas Railway bridge, 3 miles west of Minden, and 28 miles upstream from Bistineau Dam.

Drainage area.—1,097 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 133.75 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements. Discharge May 8–18 estimated on the basis of one discharge measurement, fall in reach, weather records, and records for nearby station.

Maxima.—April–May 1958: Discharge, 44,800 cfs 8 p.m. May 1 (gage height, 24.90 ft).

1928–31, 1936 to March 1958: Discharge, 40,000 cfs May 21, 1930 (gage height, 22.95 ft), from rating curve extended above 30,000 cfs.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,820 | 44,100 | 11 | 1,050 | 5,500 | 21 | 684 | 3,140 |
| 2 | 1,980 | 42,000 | 12 | 916 | 5,000 | 22 | 676 | 3,290 |
| 3 | 2,140 | 35,900 | 13 | 812 | 4,500 | 23 | 688 | 3,250 |
| 4 | 2,210 | 30,000 | 14 | 776 | 4,000 | 24 | 675 | 3,030 |
| 5 | 2,210 | 24,600 | 15 | 756 | 3,500 | 25 | 746 | 2,740 |
| 6 | 2,090 | 20,000 | 16 | 740 | 3,200 | 26 | 1,580 | 2,340 |
| 7 | 1,860 | 15,700 | 17 | 736 | 3,000 | 27 | 5,560 | 1,920 |
| 8 | 1,640 | 11,000 | 18 | 720 | 2,900 | 28 | 23,200 | 1,610 |
| 9 | 1,400 | 7,500 | 19 | 712 | 2,860 | 29 | 35,500 | 1,410 |
| 10 | 1,230 | 6,500 | 20 | 696 | 3,110 | 30 | 40,200 | 1,250 |
| | | | | | | 31 | | 1,060 |
| Monthly mean discharge | | | | | | | 4,533 | 9,675 |
| Runoff | | | | | | thousands of acre-feet | 269.8 | 594.9 |
| Runoff | | | | | | inches | 4.61 | 10.17 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 27*—Con. | | | *May 2* | | |
| 12 p.m. | 8.08 | 652 | 10 p.m. | 18.58 | 10,000 | 12 m. | 24.54 | 42,300 |
| *Apr. 25* | | | 12 p.m. | 19.21 | 12,000 | 12 p.m. | 24.00 | 38,700 |
| 12 m. | 8.31 | 744 | *Apr. 28* | | | *May 3* | | |
| 12 p.m. | 8.56 | 844 | 6 a.m. | 20.71 | 18,100 | 12 m. | 23.58 | 36,000 |
| *Apr. 26* | | | 12 m. | 21.85 | 24,200 | 12 p.m. | 23.08 | 32,800 |
| 6 a.m. | 9.34 | 1,170 | 6 p.m. | 22.57 | 28,500 | *May 4* | | |
| 12 m. | 10.13 | 1,540 | 12 p.m. | 23.04 | 31,900 | 12 m. | 22.60 | 29,900 |
| 6 p.m. | 10.87 | 1,950 | *Apr. 29* | | | 12 p.m. | 22.10 | 27,200 |
| 12 p.m. | 11.63 | 2,440 | 12 m. | 23.56 | 35,800 | *May 5* | | |
| *Apr. 27* | | | 12 p.m. | 23.95 | 38,400 | 12 m. | 21.60 | 24,600 |
| 2 a.m. | 11.92 | 2,640 | *Apr. 30* | | | 12 p.m. | 21.12 | 22,200 |
| 4 | 12.20 | 2,850 | 12 m. | 24.17 | 39,800 | *May 6* | | |
| 6 | 12.57 | 3,140 | 12 p.m. | 24.58 | 42,600 | 12 m. | 20.64 | 19,900 |
| 8 | 13.02 | 3,510 | *May 1* | | | 12 p.m. | 20.17 | 17,800 |
| 10 | 13.55 | 3,980 | 12 m. | 24.84 | 44,400 | *May 7* | | |
| 12 m. | 14.22 | 4,590 | 8 p.m. | 24.90 | 44,800 | 12 m. | 19.67 | 15,600 |
| 2 p.m. | 15.08 | 5,450 | 12 p.m. | 24.87 | 44,600 | 12 p.m. | 19.21 | 13,700 |
| 4 | 16.12 | 6,590 | | | | | | |
| 6 | 17.08 | 7,760 | | | | | | |
| 8 p.m. | 17.95 | 8,980 | | | | | | |

### 47. FLAT RIVER (SHELL BAYOU) NEAR SHREVEPORT, LA.

[Stage Station]

Location.—Lat 32°32′40″, long 93°38′30″, in SW¼SE¼ sec. 18, T. 18 N., R. 12 W., near center of span on downstream side of bridge on U.S. Highway 80, 2 miles southwest of Red Chute and 6.4 miles east of Shreveport.

Drainage area.—45.3 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Elevation, 163.15 ft May 4, 5.
1939 to March 1958: Elevation, 165.48 ft Mar. 8–10, 1945.
Flood of July 26, 1933, reached an elevation of 166.97 ft.
Remarks.—Records furnished by Corps of Engineers.

*Elevation, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 149.9 | 161.3 | 11 | 150.2 | 162.0 | 21 | 149.4 | 160.0 |
| 2 | 149.9 | 162.0 | 12 | 150.1 | 161.7 | 22 | 149.2 | 159.8 |
| 3 | 150.0 | 162.6 | 13 | 150.0 | 161.4 | 23 | 149.0 | 159.6 |
| 4 | 150.0 | 163.1 | 14 | 150.2 | 161.2 | 24 | 148.8 | 159.4 |
| 5 | 150.1 | 163.15 | 15 | 150.3 | 161.0 | 25 | 148.5 | 159.2 |
| 6 | 150.1 | 163.1 | 16 | 150.0 | 160.7 | 26 | 150.7 | 159.1 |
| 7 | 150.1 | 163.0 | 17 | 149.9 | 160.5 | 27 | 154.8 | 158.9 |
| 8 | 150.1 | 162.7 | 18 | 149.8 | 160.2 | 28 | 158.1 | 158.7 |
| 9 | 150.1 | 162.5 | 19 | 149.7 | 160.2 | 29 | 158.6 | 158.6 |
| 10 | 150.1 | 162.2 | 20 | 149.6 | 160.2 | 30 | 160.0 | 158.5 |
| | | | | | | 31 | | 158.3 |

### 48. ALLIGATOR BAYOU NEAR SHREVEPORT, LA.

[Stage station]

Location.—Lat 32°32′25″, long 93°39′05″, in NW¼NW¼ sec. 19, T. 18 N., R. 12 W., on downstream side of bridge on U.S. Highway 80, 5.7 miles east of Shreveport.

Gage-height record.—Water-stage recorder graph. Datum of gage is 152.14 ft above mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage height, 10.95 ft May 5.
1938 to March 1958: Gage height, 10.63 ft May 18, 19, 1953.

Remarks.—Records furnished by Corps of Engineers.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.0 | 9.2 | 11 | 3.9 | 9.8 | 21 | 3.8 | 7.8 |
| 2 | 3.9 | 9.8 | 12 | 3.8 | 9.5 | 22 | 3.8 | 7.7 |
| 3 | 3.9 | 10.4 | 13 | 3.8 | 9.3 | 23 | 3.8 | 7.5 |
| 4 | 3.9 | 10.9 | 14 | 3.9 | 9.0 | 24 | 3.8 | 7.4 |
| 5 | 3.9 | 10.95 | 15 | 3.9 | 8.8 | 25 | 3.8 | 7.2 |
| 6 | 3.9 | 10.9 | 16 | 3.9 | 8.6 | 26 | 4.1 | 7.1 |
| 7 | 3.9 | 10.8 | 17 | 3.8 | 8.3 | 27 | 8.5 | 7.0 |
| 8 | 3.9 | 10.5 | 18 | 3.8 | 8.1 | 28 | 6.9 | 6.8 |
| 9 | 3.9 | 10.3 | 19 | 3.8 | 8.0 | 29 | 7.4 | 6.8 |
| 10 | 3.9 | 10.0 | 20 | 3.8 | 8.0 | 30 | 8.1 | 6.7 |
| | | | | | | 31 | | 6.6 |

### 49. BODCAU BAYOU NEAR SAREPTA, LA.

[Formerly published as Bayou Bodcau]

Location.—Lat 32°54′15″, long 93°28′55″, in NW¼ sec. 15, T. 22 N., R. 11 W., on left bank on downstream side of bridge on State Highway 2, 2 miles west of Sarepta and 9.5 miles upstream from Caney Creek.

Drainage area.—546 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 173.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current meter measurements. Rate of change of stage used as a factor in discharge computations Apr. 26–28. Stage-discharge relation indefinite due to backwater from flood control dam May 3–30; discharge estimated on the basis of stage, fall, weather records and records for nearby stations.

Maxima.—April–May 1958: Discharge, 18,600 cfs 4 a.m. May 2 (gage height, 25.14 ft).

1938 to March 1958: Discharge, 12,600 cfs July 6, 1940 (gage height, 22.16 ft).

Flood of May 22, 23, 1930, exceeded 25 ft, and flood of 1905 may have reached a stage of 27 ft, from information by local residents.

Remarks.—Water used by the paper mill at Springhill is pumped from wells and discharged later as waste into bayou approximately 8 miles above station. This discharge is not continuous but is stored in a reservoir and is released whenever the flow of bayou is sufficient to dilute effluent from the mill.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 885 | 17,200 | 11 | 152 | 2,500 | 21 | 8.1 | 1,300 |
| 2 | 824 | 18,200 | 12 | 30 | 2,500 | 22 | 7.0 | 1,200 |
| 3 | 800 | 16,000 | 13 | 17 | 2,200 | 23 | 5.7 | 1,100 |
| 4 | 800 | 14,000 | 14 | 31 | 2,000 | 24 | 5.1 | 1,000 |
| 5 | 821 | 12,000 | 15 | 24 | 1,700 | 25 | 19 | 900 |
| 6 | 815 | 10,000 | 16 | 17 | 1,600 | 26 | 1,770 | 800 |
| 7 | 773 | 9,000 | 17 | 13 | 1,500 | 27 | 7,360 | 600 |
| 8 | 746 | 7,000 | 18 | 10 | 1,400 | 28 | 11,100 | 500 |
| 9 | 682 | 5,000 | 19 | 9.0 | 1,400 | 29 | 11,800 | 450 |
| 10 | 480 | 3,000 | 20 | 7.7 | 1,300 | 30 | 13,600 | 450 |
| | | | | | | 31 | | 400 |
| Monthly mean discharge | | | | | | | 1,787 | 4,458 |
| Runoff | | | | | | thousands of acre-feet | 106.3 | 274.1 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 26*—Con. | | | *Apr. 29* | | |
| 6 a.m. | 1.98 | 6.0 | 10 p.m. | 15.57 | 3,040 | 6 a.m. | 22.81 | 11,700 |
| 12 m. | 2.34 | 14 | 11 | 15.77 | 3,120 | 12 m. | 22.84 | 11,700 |
| 6 p.m. | 2.86 | 32 | 12 p.m. | 15.96 | 3,300 | 6 p.m. | 22.95 | 11,900 |
| 12 p.m. | 3.02 | 40 | | | | 12 p.m. | 23.08 | 12,200 |
| *Apr. 26* | | | *Apr. 27* | | | *Apr. 30* | | |
| 1 a.m. | 3.06 | 42 | 2 a.m. | 16.38 | 3,920 | 6 a.m. | 23.34 | 12,700 |
| 2 | 3.50 | 69 | 4 | 16.84 | 4,550 | 12 m. | 23.67 | 13,500 |
| 3 | 4.22 | 126 | 6 | 17.30 | 5,200 | 6 p.m. | 23.95 | 14,200 |
| 4 | 5.55 | 250 | 8 | 17.79 | 6,010 | 12 p.m. | 24.34 | 15,500 |
| 5 | 7.40 | 442 | 10 | 18.25 | 6,750 | *May 1* | | |
| 6 | 10.40 | 1,170 | 12 m. | 18.75 | 7,590 | | | |
| 7 | 12.50 | 2,390 | 2 p.m. | 19.20 | 8,170 | 6 a.m. | 24.61 | 16,400 |
| 8 | 13.39 | 2,430 | 4 | 19.68 | 9,220 | 12 m. | 24.82 | 17,300 |
| 9 | 13.63 | 1,930 | 6 | 20.18 | 9,860 | 6 p.m. | 25.03 | 18,100 |
| 10 | 13.74 | 1,750 | 8 | 20.64 | 10,100 | 12 p.m. | 25.11 | 18,400 |
| 11 | 13.80 | 1,720 | 10 | 21.02 | 10,100 | *May 2* | | |
| 12 m. | 13.86 | 1,750 | 12 p.m. | 21.37 | 10,300 | | | |
| 2 p.m. | 14.05 | 1,920 | | | | 4 a.m. | 25.14 | 18,600 |
| 4 | 14.30 | 2,070 | *Apr. 28* | | | 12 m. | 25.09 | 18,400 |
| 5 | 14.49 | 2,280 | | | | 12 p.m. | 24.83 | 17,300 |
| 6 | 14.70 | 2,420 | 8 a.m. | 22.25 | 10,900 | | | |
| 7 | 14.94 | 2,600 | 12 m. | 22.49 | 11,100 | | | |
| 8 | 15.15 | 2,690 | 4 p.m. | 22.64 | 11,400 | | | |
| 9 p.m. | 15.35 | 2,800 | 12 p.m. | 22.75 | 11,600 | | | |

### 50. BODCAU BAYOU RESERVOIR NEAR SHREVEPORT, LA.

Location.—Lat 32°42'07", long 93°30'39", in NW¼NW¼ sec. 28, T. 20 N., R. 11 W., directly above control line of outlet structure, 2.1 miles northeast of Bellevue and 20 miles northeast of Shreveport.

Drainage area.—683 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Contents, 301,000 acre-ft May 11 (elevation 196.67 ft).

1949 to March 1958: Contents, 157,200 acre-ft May 26, 1953 (elevation, 187.01 ft).

Remarks.—Records furnished by Corps of Engineers. Reservoir is formed by earth-fill dam with uncontrolled outlet works and spillway. The reservoir does not retain a permanent pool. Outlet works intake invert at elevation 157.0 ft. Capacity, 967,900 acre-ft at spillway crest (elevation, 219.0 ft). Outlet works completed Dec. 17, 1949. Reservoir built for flood control.

*Elevation, in feet, and contents, in acre-feet, at 7 a.m., and mean discharge from reservoir, in cubic feet per second, for 24 hours ending at 7 a.m. of indicated day, 1958*

| Day | April | | | May | | |
|---|---|---|---|---|---|---|
| | Elevation | Contents | Discharge | Elevation | Contents | Discharge |
| 1 | 164.6 | 6,550 | 762 | 182.5 | 111,000 | 2,540 |
| 2 | 164.8 | 7,080 | 796 | 185.8 | 144,100 | 2,740 |
| 3 | 165.0 | 7,430 | 830 | 188.6 | 175,600 | 2,910 |
| 4 | 165.0 | 7,500 | 830 | 190.9 | 206,200 | 3,040 |
| 5 | 165.0 | 7,480 | 830 | 192.6 | 231,700 | 3,140 |
| 6 | 165.0 | 7,400 | 830 | 194.2 | 257,200 | 3,230 |
| 7 | 165.0 | 7,360 | 830 | 195.2 | 274,600 | 3,280 |
| 8 | 165.0 | 7,310 | 830 | 195.9 | 286,800 | 3,320 |
| 9 | 164.9 | 7,240 | 813 | 196.3 | 294,500 | 3,350 |
| 10 | 164.8 | 7,100 | 796 | 196.6 | 299,700 | 3,370 |
| 11 | 164.8 | 6,880 | 796 | 196.67 | 301,000 | 3,370 |
| 12 | 164.5 | 6,370 | 745 | 196.6 | 299,500 | 3,370 |
| 13 | 164.1 | 5,470 | 673 | 196.4 | 296,900 | 3,350 |
| 14 | 163.6 | 4,600 | 587 | 196.3 | 293,800 | 3,350 |
| 15 | 163.2 | 3,880 | 519 | 196.1 | 289,700 | 3,340 |
| 16 | 162.7 | 3,160 | 440 | 195.8 | 285,200 | 3,320 |
| 17 | 162.1 | 2,530 | 354 | 195.6 | 280,700 | 3,310 |
| 18 | 161.6 | 2,040 | 288 | 195.3 | 275,900 | 3,290 |
| 19 | 161.1 | 1,630 | 227 | 195.2 | 274,200 | 3,280 |
| 20 | 160.7 | 1,310 | 182 | 195.0 | 270,300 | 3,270 |
| 21 | 160.3 | 1,060 | 142 | 194.7 | 265,400 | 3,260 |
| 22 | 159.8 | 850 | 99 | 194.4 | 260,500 | 3,240 |
| 23 | 159.4 | 660 | 66 | 194.1 | 255,400 | 3,220 |
| 24 | 159.9 | 510 | 107 | 193.8 | 250,300 | 3,210 |
| 25 | 158.8 | 470 | 37 | 193.4 | 244,500 | 3,180 |
| 26 | 161.2 | 1,720 | 239 | 193.0 | 238,200 | 3,160 |
| 27 | 165.8 | 9,490 | 955 | 192.6 | 231,600 | 3,140 |
| 28 | 170.8 | 29,170 | 1,600 | 192.2 | 225,300 | 3,110 |
| 29 | 174.6 | 49,630 | 1,970 | 191.7 | 218,500 | 3,080 |
| 30 | 178.5 | 76,980 | 2,280 | 191.3 | 212,000 | 3,060 |
| 31 | | | | 190.8 | 205,300 | 3,040 |
| Change in contents, acre-feet | | +71,290 | | | +128,300 | |

### 51. CYPRESS BAYOU NEAR BENTON, LA.

Location.—Lat 32°42'20", long 93°41'15", in NW¼SW¼ sec. 23, T. 20 N., R. 13 W., near right bank on downstream side of bridge on State Highway 162, 2 miles upstream from Little Caney Bayou and 3 miles east of Benton.

Drainage area.—133 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 165.98 ft above mean sea level, datum of 1929 (authority, Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurement.

Maxima.—April–May 1958: Discharge, 8,350 cfs 9 p.m. Apr. 27 (gage height, 15.18 ft).

1956 to March 1958: Discharge, 8,130 cfs Apr. 28, 1957 (gage height, 15.08 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 139 | 4,370 | 11 | 48 | 389 | 21 | 38 | 223 |
| 2 | 100 | 3,920 | 12 | 56 | 520 | 22 | 35 | 189 |
| 3 | 79 | 2,600 | 13 | 42 | 430 | 23 | 33 | 91 |
| 4 | 66 | 2,230 | 14 | 60 | 280 | 24 | 25 | 51 |
| 5 | 55 | 1,890 | 15 | 138 | 146 | 25 | 29 | 37 |
| 6 | 45 | 1,410 | 16 | 144 | 86 | 26 | 706 | 27 |
| 7 | 37 | 985 | 17 | 94 | 62 | 27 | 6,300 | 20 |
| 8 | 29 | 548 | 18 | 54 | 48 | 28 | 6,790 | 16 |
| 9 | 25 | 381 | 19 | 42 | 60 | 29 | 3,820 | 14 |
| 10 | 26 | 292 | 20 | 40 | 156 | 30 | 3,920 | 14 |
| | | | | | | 31 | | 17 |
| Monthly mean discharge | | | | | | | 767 | 694 |
| Runoff | | | | | | thousands of acre-feet | 45.65 | 42.65 |
| Runoff | | | | | | inches | 6.44 | 6.01 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 27*—Con. | | | *Apr. 30* | | |
| 12 m | 2.66 | 28 | 12 m | 14.48 | 6,860 | 8 a.m | 12.67 | 3,580 |
| 12 p.m | 2.90 | 38 | 4 p.m | 14.76 | 7,400 | 12 m | 13.12 | 4,300 |
| *Apr. 26* | | | 9 | 15.18 | 8,350 | 4 p.m | 13.23 | 4,490 |
| | | | 12 p.m | 15.16 | 8,300 | 12 p.m | 13.06 | 4,210 |
| 4 a.m | 3.68 | 78 | *Apr. 28* | | | *May 1* | | |
| 8 | 7.54 | 390 | | | | | | |
| 12 m | 9.20 | 590 | | | | | | |
| 4 p.m | 9.74 | 820 | 12 m | 14.50 | 6,900 | 12 m | 13.16 | 4,370 |
| 8 | 10.40 | 1,180 | 12 p.m | 13.56 | 5,070 | 12 p.m | 13.26 | 4,540 |
| 12 p.m | 11.70 | 2,320 | *Apr. 29* | | | *May 2* | | |
| *Apr. 27* | | | | | | | | |
| 4 a.m | 13.12 | 4,300 | 12 m | 12.72 | 3,660 | 12 m | 12.95 | 4,030 |
| 8 a.m | 13.90 | 5,700 | 12 p.m | 12.17 | 2,890 | 12 p.m | 12.31 | 3,070 |

### 52. RED CHUTE BAYOU NEAR SHREVEPORT, LA.

[Stage Station]

Location.—Lat 32°33'15", long 93°37'26", in NW¼NE¼ sec. 17, T. 18 N., R. 12 W., at bridge on U.S. Highway 80, 7 miles east of Shreveport.

Drainage area.—925 sq mi.

Gage-height record.—Water-stage recorder graph except Apr. 27–May 3. Datum of gage is 133.83 ft above mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage height, 27.62 ft May 4, 5.
1939 to March 1958: Gage height, 31.1 ft Jan. 4, 5, 1941.
Flood of July 26, 1933 reached a stage of 33.1 ft.
Remarks.—Records furnished by Corps of Engineers.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 16.5 | ------- | 11 | 17.0 | 26.6 | 21 | 16.2 | 25.1 |
| 2 | 16.7 | ------- | 12 | 17.0 | 26.4 | 22 | 15.9 | 25.0 |
| 3 | 16.7 | ------- | 13 | 17.0 | 26.2 | 23 | 15.8 | 24.8 |
| 4 | 16.8 | 27.62 | 14 | 17.0 | 26.0 | 24 | 15.5 | 24.6 |
| 5 | 17.0 | 27.62 | 15 | 16.9 | 25.8 | 25 | 15.3 | 24.5 |
| 6 | 17.1 | 27.6 | 16 | 16.8 | 25.6 | 26 | 16.1 | 24.3 |
| 7 | 17.0 | 27.4 | 17 | 16.7 | 25.4 | 27 | ------- | 24.2 |
| 8 | 17.0 | 27.2 | 18 | 16.6 | 25.3 | 28 | ------- | 24.0 |
| 9 | 17.0 | 27.0 | 19 | 16.5 | 25.3 | 29 | ------- | 24.0 |
| 10 | 17.0 | 26.8 | 20 | 16.3 | 25.2 | 30 | ------- | 23.8 |
| | | | | | | 31 | ------- | 23.7 |

### 53. LOGGY BAYOU NEAR NINOCK, LA.

Location.—Lat 32°14′10″, long 93°25′35″, in SE¼SE¼ sec. 31, T. 15 N., R. 10 W., near center of span on downstream side of bridge on U.S. Highway 71, a quarter of a mile downstream from Flat River, 2 miles southeast of Ninock, and 6 miles downstream from Lake Bistineau Dam.
Drainage area.—2,628 sq mi.
Gage-height record.—Water-stage recorder graph. Datum of gage is 100.26 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers). Auxiliary water-stage recorder 6 miles downstream at datum 0.05 ft lower.
Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge computed by using fall as determined from auxiliary gage as a factor. Discharge May 1–19 computed on the basis of 5 discharge measurements, precipitation records, stage of Red River, and records for nearby stations.
Maxima.—April–May 1958: Daily discharge, 32,600 cfs May 4; gage height, 47.83 ft 10 p.m. May 8.
1948 to March 1958: Daily discharge, 20,000 cfs May 21, 22, 1953; gage height, 47.08 ft May 7, 1957.
Remarks.—Flood flow affected by Bodcau Bayou Reservoir.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 3,010 | 28,500 | 11 | 2,620 | 20,000 | 21 | 1,540 | 17,300 |
| 2 | 2,950 | 31,500 | 12 | 2,440 | 20,000 | 22 | 1,450 | 15,400 |
| 3 | 2,930 | 32,500 | 13 | 2,140 | 20,000 | 23 | 1,340 | 13,200 |
| 4 | 3,090 | 32,600 | 14 | 2,280 | 20,000 | 24 | 1,220 | 11,400 |
| 5 | 3,060 | 30,500 | 15 | 2,240 | 19,500 | 25 | 1,220 | 10,000 |
| 6 | 3,190 | 28,000 | 16 | 2,090 | 19,500 | 26 | 1,720 | 8,790 |
| 7 | 3,210 | 26,000 | 17 | 1,950 | 19,500 | 27 | 3,210 | 7,480 |
| 8 | 3,040 | 23,000 | 18 | 1,820 | 19,500 | 28 | 6,250 | 6,400 |
| 9 | 2,920 | 21,500 | 19 | 1,740 | 19,000 | 29 | 9,690 | 5,850 |
| 10 | 2,820 | 20,500 | 20 | 1,600 | 18,600 | 30 | 17,600 | 5,510 |
| | | | | | | 31 | ------- | 5,170 |
| Monthly mean discharge | | | | | | | 3,213 | 18,600 |
| Runoff (thousands of acre-feet) | | | | | | | 191.2 | 1,144 |

### 54. BAYOU PIERRE NEAR GAYLE, LA.

[Stage station]

Location.—Lat 32°18'00", long 93°37'40", in NW¼SW¼ sec. 8, T. 15 N., R. 12 W., at bridge on parish road 3.2 miles south of Gayle, and 64.9 miles above mouth.

Gage-height record.—Water-stage recorder graph. Datum of gage is 126.94 ft above mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage height, 10.28 ft 9 a.m. May 1.

1938 to March 1958: Gage height, 22.66 ft Jan. 6, 1946.

Remarks.—Records furnished by Corps of Engineers.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.6 | 10.26 | 11 | 3.4 | 6.7 | 21 | 3.6 | 4.5 |
| 2 | 4.5 | 9.0 | 12 | 3.7 | 6.4 | 22 | 3.6 | 4.5 |
| 3 | 4.2 | 8.4 | 13 | 3.9 | 5.8 | 23 | 3.5 | 4.2 |
| 4 | 4.0 | 9.9 | 14 | 3.9 | 5.3 | 24 | 3.5 | 4.0 |
| 5 | 3.9 | 9.4 | 15 | 4.0 | 4.8 | 25 | 3.4 | 3.7 |
| 6 | 3.7 | 9.0 | 16 | 4.2 | 4.2 | 26 | 3.6 | 3.6 |
| 7 | 3.6 | 8.6 | 17 | 4.3 | 4.1 | 27 | 4.4 | 3.5 |
| 8 | 3.5 | 8.0 | 18 | 4.1 | 3.8 | 28 | 6.7 | 3.4 |
| 9 | 3.5 | 7.5 | 19 | 3.9 | 3.8 | 29 | 6.1 | 3.3 |
| 10 | 3.5 | 7.0 | 20 | 3.8 | 3.9 | 30 | 6.2 | 3.3 |
| | | | | | | 31 | | 3.2 |

### 55. BOGGY BAYOU NEAR KEITHVILLE, LA.

Location.—Lat 32°22'35", long 93°49'20", in NW¼SE¼ sec. 17, T. 16 N., R. 14 W., near right bank on downstream side of bridge on U.S. Highway 171, 0.4 mile downstream from Gilmer Bayou, 3 miles north of Keithville, and 5 miles upstream from mouth.

Drainage area.—79 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 145.13 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 1,460 cfs 12 m. May 4 (gage height, 16.46 ft).

1938 to March 1958: Discharge, 14,800 cfs Jan. 5, 1946 (gage height, 20.2 ft, from graph based on gage readings).

Maximum stage known, 26.7 ft in 1933, from floodmark.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 43 | 1,130 | 11 | 17 | 62 | 21 | 12 | 16 |
| 2 | 30 | 836 | 12 | 16 | 28 | 22 | 11 | 8.4 |
| 3 | 23 | 761 | 13 | 14 | 17 | 23 | 9.9 | 6.0 |
| 4 | 19 | 1,340 | 14 | 20 | 12 | 24 | 9.0 | 5.0 |
| 5 | 15 | 662 | 15 | 49 | 9.9 | 25 | 8.9 | 4.3 |
| 6 | 12 | 278 | 16 | 36 | 8.3 | 26 | 17 | 4.5 |
| 7 | 10 | 64 | 17 | 22 | 7.4 | 27 | 673 | 3.7 |
| 8 | 8.9 | 34 | 18 | 15 | 6.8 | 28 | 671 | 3.3 |
| 9 | 8.9 | 26 | 19 | 13 | 11 | 29 | 494 | 3.0 |
| 10 | 12 | 56 | 20 | 12 | 22 | 30 | 835 | 2.8 |
| | | | | | | 31 | | 2.8 |
| Monthly mean discharge | | | | | | | 105 | 175 |
| Runoff | | | | | | thousands of acre-feet | 6.22 | 10.77 |
| Runoff | | | | | | inches | 1.48 | 2.56 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 28*—Con. | | | *May 3*—Con. | | |
| 12 p.m. | 9.12 | 9.3 | 6 p.m. | 15.57 | 610 | 6 p.m. | 16.03 | 890 |
| *Apr. 26* | | | 12 p.m. | 15.38 | 555 | 12 p.m. | 16.40 | 1,380 |
| 6 a.m. | 9.14 | 9.6 | *Apr. 29* | | | *May 4* | | |
| 12 m. | 9.25 | 11 | 6 a.m. | 15.13 | 482 | 6 a.m. | 16.45 | 1,450 |
| 2 p.m. | 9.40 | 14 | 12 m. | 14.76 | 407 | 12 m. | 16.46 | 1,460 |
| 6 | 9.68 | 18 | 6 p.m. | 15.10 | 475 | 6 p.m. | 16.35 | 1,280 |
| 8 | 9.90 | 22 | 12 p.m. | 15.70 | 670 | 12 p.m. | 16.12 | 972 |
| 9 | 10.20 | 28 | *Apr 30* | | | *May 5* | | |
| 11 | 11.20 | 49 | 6 a.m. | 15.95 | 820 | 6 a.m. | 15.85 | 738 |
| 12 p.m. | 11.80 | 75 | 12 m. | 15.99 | 852 | 12 m. | 15.63 | 630 |
| *Apr. 27* | | | 6 p.m. | 16.00 | 860 | 6 p.m. | 15.40 | 555 |
| 1 a.m. | 12.27 | 102 | 12 p.m. | 16.08 | 940 | 12 p.m. | 15.12 | 475 |
| 2 | 12.75 | 144 | *May 1* | | | *May 6* | | |
| 3 | 13.10 | 177 | 6 a.m. | 16.30 | 1,220 | 3 a.m. | 14.90 | 426 |
| 5 | 13.75 | 254 | 12 m. | 16.30 | 1,220 | 6 | 14.63 | 380 |
| 6 | 14.12 | 303 | 6 p.m. | 16.22 | 1,120 | 9 | 14.28 | 324 |
| 7 | 14.50 | 362 | 12 p.m. | 16.19 | 1,070 | 12 m. | 13.90 | 268 |
| 8 | 15.00 | 455 | *May 2* | | | 3 p.m. | 13.50 | 217 |
| 9 | 15.40 | 555 | 6 a.m. | 16.13 | 996 | 6 | 13.12 | 177 |
| 10 | 15.70 | 670 | 12 m. | 15.95 | 820 | 9 | 12.75 | 139 |
| 11 | 15.93 | 804 | 6 p.m. | 15.75 | 695 | 12 p.m. | 12.42 | 114 |
| 12 m. | 16.10 | 960 | 12 p.m. | 15.54 | 606 | *May 7* | | |
| 1 p.m. | 16.17 | 1,040 | *May 3* | | | 4 a.m. | 12.04 | 86 |
| 2 | 16.18 | 1,060 | 6 a.m. | 15.39 | 552 | 8 | 11.72 | 68 |
| 3 | 16.17 | 1,040 | 12 m. | 15.55 | 610 | 12 m. | 11.45 | 57 |
| 4 | 16.16 | 1,030 | | | | 4 p.m. | 11.24 | 49 |
| 6 | 16.12 | 984 | | | | 8 | 11.05 | 44 |
| 12 p.m. | 15.96 | 828 | | | | 12 p.m. | 10.88 | 41 |
| *Apr. 28* | | | | | | | | |
| 6 a.m. | 15.82 | 732 | | | | | | |
| 12 m. | 15.67 | 650 | | | | | | |

### 56. WALLACE LAKE NEAR SHREVEPORT, LA.

Location.—Lat 32°19'05", long 93°40'15", in NE¼ sec. 2, T. 15 N., R. 13 W., at dam, 4¾ miles north of Frierson and 12 miles southeast of Shreveport.

Drainage area.—266 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958; Contents, 31,500 acre-ft May 5 (elevation, 148.60 ft). 1946 to March 1958; Contents, 56,500 acre-ft May 18, 1953 (elevation, 153.00 ft).

Remarks.—Records furnished by Corps of Engineers.

*Elevation, in feet, and contents, in acre-feet, at 7 a.m., and mean discharge from reservoir, in cubic feet per second, for 24 hours ending at 7 a.m. of indicated day, 1958*

| Day | April | | | May | | |
|---|---|---|---|---|---|---|
| | Elevation | Contents | Discharge | Elevation | Contents | Discharge |
| 1 | 143.0 | 10,350 | 385 | 145.2 | 17,170 | 871 |
| 2 | 143.0 | 10,400 | 385 | 146.4 | 21,750 | 1,080 |
| 3 | 143.0 | 10,140 | 340 | 147.0 | 24,230 | 1,180 |
| 4 | 142.8 | 9,840 | 272 | 147.6 | 27,010 | 1,280 |
| 5 | 142.8 | 9,640 | 250 | 148.48 | 30,970 | 1,420 |
| 6 | 142.6 | 9,340 | 196 | 148.55 | 31,260 | 1,440 |
| 7 | 142.5 | 9,040 | 144 | 148.2 | 29,640 | 1,380 |
| 8 | 142.4 | 8,780 | 106 | 147.7 | 27,360 | 1,300 |
| 9 | 142.4 | 8,710 | 95.5 | 147.2 | 25,160 | 1,220 |
| 10 | 142.4 | 8,710 | 95.5 | 146.7 | 23,220 | 1,140 |
| 11 | 142.4 | 8,640 | 85.0 | 146.3 | 21,470 | 1,060 |
| 12 | 142.3 | 8,540 | 71.8 | 145.9 | 19,870 | 999 |
| 13 | 142.3 | 8,480 | 65.2 | 145.5 | 18,390 | 915 |
| 14 | 142.3 | 8,510 | 68.5 | 145.2 | 17,060 | 849 |
| 15 | 142.4 | 8,640 | 85.0 | 144.8 | 15,840 | 782 |
| 16 | 142.4 | 8,740 | 99.0 | 144.5 | 14,720 | 713 |
| 17 | 142.4 | 8,760 | 102 | 144.2 | 13,760 | 663 |
| 18 | 142.4 | 8,710 | 95.5 | 143.9 | 12,840 | 582 |
| 19 | 142.4 | 8,640 | 85.0 | 143.7 | 12,410 | 555 |
| 20 | 142.3 | 8,560 | 75.1 | 143.6 | 11,970 | 521 |
| 21 | 142.3 | 8,510 | 68.5 | 143.4 | 11,540 | 487 |
| 22 | 142.3 | 8,460 | 61.9 | 143.3 | 11,100 | 419 |
| 23 | 142.2 | 8,360 | 49.3 | 143.1 | 10,550 | 362 |
| 24 | 142.2 | 8,310 | 43.9 | 142.9 | 10,110 | 295 |
| 25 | 142.2 | 8,260 | 38.5 | 142.8 | 9,780 | 250 |
| 26 | 142.3 | 8,460 | 61.9 | 142.7 | 9,460 | 200 |
| 27 | 142.3 | 8,510 | 68.5 | 142.6 | 9,160 | 152 |
| 28 | 142.7 | 9,510 | 214 | 142.4 | 8,880 | 113 |
| 29 | 143.1 | 10,640 | 385 | 142.4 | 8,760 | 95.5 |
| 30 | 143.7 | 12,320 | 555 | 142.3 | 8,560 | 71.8 |
| 31 | | | | 142.3 | 8,440 | 61.9 |
| Change in contents, acre-feet | | +2,560 | | | −3,880 | |

### 57. LAKE OUACHITA NEAR HOT SPRINGS, ARK.

Location.—Lat 34°34'20", long 93°11'50", in NE¼ sec. 12, T. 2 S., R. 21 W., at Blakely Mountain Dam on Ouachita River, 3.0 miles upstream from Glazypeau Creek, 3.8 miles downstream from Mill Creek, and 10 miles northwest of Hot Springs.

Drainage area.—1,105 sq mi.

Gage-height record.—Water-stage recorder graph. Elevation at 8 a.m. used to determine contents. Datum of gage is at mean sea level, datum of 1929.

Maxima.—April–May 1958: Contents, 2,383,100 acre-ft May 6 (elevation, 583.57 ft).

1952 to March 1958: Contents, 2,402,100 acre-ft May 1, 1957 (elevation, 584.01 ft).

Remarks.—Reservoir is formed by dam of rolled earth fill. Reservoir is used for the dual purpose of flood control and power generation. Spillway is a 200-foot wide uncontrolled channel in natural saddle of ridge west of dam. Flood control flow is regulated by three 8- by 15-foot gates. The powerplant consists of 2 vertical type 37,500 kw generating units.

Capacity of reservoir, 2,768,000 acre-ft at elevation 592.0 ft (spillway crest) of which 617,000 acre-ft are available for flood-control storage, 1,286,000 acre-ft are for power storage and 865,000 acre-ft are permanent storage. Water below elevation 480.0 ft cannot be released. Figures given herein represent total contents. Records furnished by Corps of Engineers.

*Elevation, in feet, and contents, in acre-feet, at 8 a.m. of indicated day, 1958*

| Day | April | | May | | Day | April | | May | |
|---|---|---|---|---|---|---|---|---|---|
| | Elevation | Contents | Elevation | Contents | | Elevation | Contents | Elevation | Contents |
| 1 | 573.14 | 1,963,100 | 578.05 | 2,153,100 | 16 | 574.80 | 2,025,800 | 581.94 | 2,313,400 |
| 2 | 573.21 | 1,965,700 | 578 91 | 2,187,800 | 17 | 574.96 | 2,031,900 | 581.56 | 2,297,400 |
| 3 | 573.35 | 1,970,900 | 581.16 | 2,280,500 | 18 | 575.06 | 2,035,800 | 581.20 | 2,282,200 |
| 4 | 573.50 | 1,976,600 | 582.89 | 2,353,800 | 19 | 575.16 | 2,039,600 | 580.84 | 2,267,100 |
| 5 | 573.59 | 1,980,000 | 583.39 | 2,375,300 | 20 | 575.25 | 2,043,100 | 580.48 | 2,252,200 |
| 6 | 573.72 | 1,984,800 | 583.54 | 2,381,800 | 21 | 575.90 | 2,068,200 | 580.22 | 2,241,100 |
| 7 | 573.76 | 1,986,300 | 583.55 | 2,382,200 | 22 | 576.31 | 2,084,200 | 579.95 | 2,230,300 |
| 8 | 573.76 | 1,986,300 | 583.42 | 2,376,600 | 23 | 576.49 | 2,091,300 | 579.71 | 2,220,500 |
| 9 | 573.88 | 1,990,800 | 583.20 | 2,367,100 | 24 | 576.66 | 2,098,000 | 579.43 | 2,209,000 |
| 10 | 573.94 | 1,993,100 | 583.36 | 2,374,000 | 25 | 576.59 | 2,095,200 | 579.22 | 2,200,400 |
| 11 | 574.10 | 1,999,200 | 583.44 | 2,377,500 | 26 | 576.63 | 2,096,800 | 578 93 | 2,188,600 |
| 12 | 574.23 | 2,004,100 | 583.24 | 2,368,900 | 27 | 577.09 | 2,114,900 | 578.66 | 2,177,700 |
| 13 | 574.32 | 2,007,500 | 582.95 | 2,356,400 | 28 | 577.60 | 2,135,200 | 578.42 | 2,168,000 |
| 14 | 574.45 | 2,012,500 | 582.64 | 2,343,200 | 29 | 577.86 | 2,145,500 | 578.12 | 2,155,900 |
| 15 | 574.61 | 2,018,600 | 582.29 | 2,328,200 | 30 | 578.00 | 2,151,100 | 577.94 | 2,148,700 |
| | | | | | 31 | | | 577.91 | 2,147,500 |
| Change in contents, acre-feet | | | | | | | +186,400 | | −3,600 |

### 58. OUACHITA RIVER NEAR MALVERN, ARK.

Location.—Lat 34°23'10", long 92°50'20", in NW¼ sec. 16, T. 4 S., R. 17 W., near right bank on downstream side of pier of bridge on State Highway 84, 2 miles northwest of Malvern and 5.8 miles downstream from Remmel Dam.

Drainage area.—1,562 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 228.05 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 55,200 cfs 12 p.m. May 2 (gage height, 21.16 ft).

1903–5, 1922–24, 1937 to March 1958: Discharge, 140,000 cfs May 15, 1923 (gage height, 30.3 ft).

Remarks.—Flow regulated by Lake Catherine since 1925 (capacity, 13,950 acre-ft), by Lake Hamilton since 1932 (capacity, 70,560 acre-ft), and by Lake Ouachita since July 1952 (see preceding record). No significant regulation by Lake Catherine and Lake Hamilton during flood period.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 352 | 12,800 | 11 | 586 | 8,820 | 21 | 1,940 | 6,010 |
| 2 | 336 | 25,700 | 12 | 399 | 10,300 | 22 | 3,050 | 5,870 |
| 3 | 1,570 | 31,100 | 13 | 1,030 | 9,980 | 23 | 2,040 | 5,470 |
| 4 | 1,710 | 17,600 | 14 | 1,800 | 8,980 | 24 | 3,050 | 5,730 |
| 5 | 1,010 | 8,820 | 15 | 1,750 | 9,470 | 25 | 3,050 | 5,870 |
| 6 | 441 | 4,190 | 16 | 1,100 | 9,140 | 26 | 4,190 | 5,210 |
| 7 | 1,740 | 7,290 | 17 | 827 | 8,820 | 27 | 8,820 | 3,370 |
| 8 | 504 | 9,470 | 18 | 780 | 9,470 | 28 | 8,660 | 3,370 |
| 9 | 1,260 | 10,200 | 19 | 756 | 8,820 | 29 | 8,340 | 3,370 |
| 10 | 846 | 10,900 | 20 | 1,230 | 8,980 | 30 | 8,980 | 712 |
| | | | | | | 31 | | 394 |
| Monthly mean discharge | | | | | | | 2,405 | 8,911 |
| Runoff, thousands of acre-feet | | | | | | | 143.1 | 547.9 |

### 59. CADDO RIVER NEAR ALPINE, ARK.

Location.—Lat 34°16′, long 93°22′, in SE¼ sec. 28, T. 5 S., R. 22 W., at Runyan Bridge on gravel road between Alpina and Bismark, 2½ miles northeast of Alpine, 7.1 miles downstream from Sugar Fork, and 33.8 miles upstream from mouth.

Drainage area.—312 sq mi.

Gage-height record.—Water-stage recorder graph except May 2–4. Datum of gage is 394.85 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements below 38,000 cfs. Discharge for period of no gage-height record computed on basis of unit-hydrograph study and floodmark.

Maxima.—April–May 1958: Discharge, 36,500 cfs 2 p.m. May 2 (gage height, 20.18 ft, from floodmark).

1938 to March 1958: Discharge, 64,200 cfs Mar. 30, 1945 (gage height, 30.16 ft).

Remarks.—Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 760 | 8,790 | 11 | 1,200 | 1,320 | 21 | 1,240 | 256 |
| 2 | 694 | 25,900 | 12 | 890 | 930 | 22 | 925 | 216 |
| 3 | 742 | 17,300 | 13 | 676 | 745 | 23 | 694 | 190 |
| 4 | 652 | 7,050 | 14 | 995 | 600 | 24 | 575 | 171 |
| 5 | 540 | 2,530 | 15 | 1,450 | 479 | 25 | 490 | 148 |
| 6 | 450 | 1,520 | 16 | 1,200 | 401 | 26 | 2,270 | 171 |
| 7 | 385 | 1,080 | 17 | 925 | 303 | 27 | 9,500 | 142 |
| 8 | 328 | 828 | 18 | 730 | 303 | 28 | 4,050 | 137 |
| 9 | 480 | 1,120 | 19 | 610 | 299 | 29 | 2,870 | 135 |
| 10 | 820 | 2,200 | 20 | 925 | 307 | 30 | 1,710 | 122 |
| | | | | | | 31 | | 109 |
| Monthly mean discharge | | | | | | | 1,326 | 2,445 |
| Runoff, thousands of acre-feet | | | | | | | 78.89 | 150.4 |
| Runoff, inches | | | | | | | 4.74 | 9.04 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 2.23 | 555 |
| *Apr. 26* | | |
| 2 a.m. | 2.63 | 778 |
| 4 | 3.93 | 1,680 |
| 6 | 4.27 | 1,990 |
| 8 | 4.37 | 2,090 |
| 10 | 4.37 | 2,090 |
| 12 m. | 4.29 | 2,010 |
| 2 p.m. | 4.40 | 2,120 |
| 4 | 4.53 | 2,250 |
| 6 | 4.55 | 2,280 |
| 8 | 4.75 | 2,500 |
| 10 | 5.67 | 3,740 |
| 12 p.m. | 7.97 | 6,960 |
| *Apr. 27* | | |
| 2 a.m. | 9.87 | 10,200 |
| 4 | 10.67 | 11,800 |
| 6 | 10.94 | 12,500 |
| 8 | 11.07 | 12,800 |
| 10 | 10.87 | 12,300 |
| 12 m. | 10.12 | 10,700 |
| 2 p.m. | 9.27 | 9,100 |
| 4 | 8.67 | 8,040 |
| 6 | 8.19 | 7,280 |
| 8 | 7.81 | 6,730 |
| 10 | 7.44 | 6,220 |
| 12 p.m. | 7.10 | 5,740 |
| *Apr. 28* | | |
| 2 a.m. | 6.83 | 5,360 |
| 4 | 6.60 | 5,040 |
| 6 | 6.33 | 4,660 |
| 8 | 6.14 | 4,400 |
| 10 | 5.95 | 4,130 |
| 12 m. | 5.77 | 3,880 |
| 2 p.m. | 5.59 | 3,630 |
| 4 | 5.45 | 3,430 |
| 6 | 5.30 | 3,220 |
| 8 | 5.17 | 3,040 |
| 10 | 5.11 | 2,950 |
| 12 p.m. | 5.87 | 4,020 |
| *Apr. 29* | | |
| 2 a.m. | 6.32 | 4,650 |
| *Apr. 29*—Con. | | |
| 4 a.m. | 5.89 | 4,050 |
| 6 | 5.39 | 3,350 |
| 8 | 5.10 | 2,940 |
| 10 | 4.93 | 2,710 |
| 12 m. | 4.79 | 2,540 |
| 2 p.m. | 4.69 | 2,430 |
| 4 | 4.63 | 2,360 |
| 6 | 4.53 | 2,250 |
| 8 | 4.43 | 2,150 |
| 10 | 4.34 | 2,060 |
| 12 p.m. | 4.24 | 1,960 |
| *Apr. 30* | | |
| 6 a.m. | 4.07 | 1,800 |
| 12 m. | 3.86 | 1,630 |
| 4 p.m. | 3.79 | 1,580 |
| 8 | 3.89 | 1,650 |
| 12 p.m. | 3.85 | 1,620 |
| *May 1* | | |
| 2 a.m. | 3.85 | 1,620 |
| 4 | 4.12 | 1,850 |
| 6 | 5.93 | 4,100 |
| 8 | 8.31 | 7,470 |
| 10 | 11.07 | 12,800 |
| 12 m. | 11.89 | 14,800 |
| 2 p.m. | 11.67 | 14,300 |
| 4 | 11.29 | 13,300 |
| 6 | 10.65 | 11,800 |
| 8 | 9.85 | 10,200 |
| 10 | 8.99 | 8,580 |
| 12 p.m. | 8.43 | 7,660 |
| *May 2* | | |
| 2 a.m. | 8.00 | 7,000 |
| 4 | 9.50 | 9,540 |
| 6 | ------- | 16,600 |
| 8 | ------- | 23,000 |
| 10 | ------- | 30,500 |
| 12 m. | ------- | 35,000 |
| 2 p.m. | 20.18 | 36,500 |
| 4 | ------- | 36,300 |
| 6 | ------- | 35,000 |
| 8 | ------- | 33,000 |
| 10 | ------- | 30,500 |
| 12 p.m. | ------- | 27,500 |
| *May 3* | | |
| 2 a.m. | ------- | 25,000 |
| 6 | ------- | 21,000 |
| 10 | ------- | 18,000 |
| 12 m. | ------- | 16,500 |
| 2 p.m. | ------- | 15,200 |
| 4 | ------- | 14,000 |
| 8 | ------- | 12,000 |
| 10 | ------- | 11,300 |
| 12 p.m. | ------- | 10,700 |
| *May 4* | | |
| 4 a.m. | ------- | 9,400 |
| 8 | ------- | 8,000 |
| 12 m. | ------- | 6,800 |
| 4 p.m. | ------- | 5,900 |
| 8 | ------- | 4,800 |
| 12 p.m. | ------- | 4,100 |
| *May 5* | | |
| 4 a.m. | 5.70 | 3,180 |
| 8 | 5.33 | 2,680 |
| 12 m. | 5.08 | 2,390 |
| 4 p.m. | 4.85 | 2,160 |
| 8 | 4.63 | 1,970 |
| 12 p. m. | 4.43 | 1,810 |
| *May 6* | | |
| 6 a.m. | 4.20 | 1,640 |
| 12 m. | 4.02 | 1,510 |
| 6 p.m. | 3.83 | 1,380 |
| 12 p.m. | 3.64 | 1,250 |
| *May 7* | | |
| 6 a.m. | 3.50 | 1,150 |
| 12 m. | 3.38 | 1,070 |
| 6 p.m. | 3.27 | 1,000 |
| 12 p.m. | 3.14 | 924 |
| *May 8* | | |
| 6 a.m. | 3.04 | 867 |
| 12 m. | 2.96 | 825 |
| 6 p.m. | 2.88 | 785 |
| 12 p.m. | 2.80 | 745 |

NOTE.—Daily means cannot be computed precisely from figures shown.

### 60. OUACHITA RIVER AT ARKADELPHIA, ARK.

Location.—Lat 34°07'16", long 93°02'46", on line between secs. 16 and 21, T. 7 S., R. 19 W., near center of bridge on downstream side of pier of bridge on State Highway 7 at Arkadelphia, 800 ft upstream from Missouri Pacific Railroad bridge, and 5.4 miles downstream from Caddo River.

Drainage area.—2,311 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 160.30 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 119,000 cfs 3 a.m. May 3 (gage height, 27.65 ft).

1929 to March 1958: Discharge, 170,000 cfs Mar. 30, 1945 (gage height, 30.3 ft), from rating curve extended above 130,000 cfs.

Remarks.—For regulation see Remarks for station near Malvern. Records furnished by Corps of Engineers.

690-439 O—63——6

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,700 | 34,600 | 12 | 1,940 | 10,500 | 23 | 3,700 | 5,570 |
| 2 | 1,390 | 77,100 | 13 | 1,560 | 10,700 | 24 | 3,700 | 5,350 |
| 3 | 1,270 | 100,000 | 14 | 2,440 | 9,420 | 25 | 3,810 | 5,460 |
| 4 | 2,710 | 47,000 | 15 | 3,700 | 9,160 | 26 | 9,510 | 5,460 |
| 5 | 2,660 | 23,400 | 16 | 3,590 | 9,030 | 27 | 25,100 | 4,470 |
| 6 | 1,890 | 10,800 | 17 | 2,820 | 8,380 | 28 | 20,400 | 3,810 |
| 7 | 1,230 | 7,440 | 18 | 2,100 | 8,640 | 29 | 14,100 | 3,700 |
| 8 | 2,270 | 8,900 | 19 | 2,100 | 8,510 | 30 | 15,000 | 3,040 |
| 9 | 1,150 | 10,600 | 20 | 2,000 | 8,770 | 31 | | 1,150 |
| 10 | 2,160 | 14,600 | 21 | 3,370 | 7,220 | | | |
| 11 | 2,160 | 12,500 | 22 | 4,360 | 5,900 | | | |
| Monthly mean discharge | | | | | | | 4,863 | 15,520 |
| Runoff | | | | | | thousands of acre-feet | 289.4 | 954.4 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 29*—Con. | | | *May 3*—Con. | | |
| 12 p.m. | 7.76 | 3,990 | 10 p.m. | 14.90 | 12,700 | 10 a.m. | 26.88 | 105,000 |
| *Apr. 26* | | | 12 p.m. | 14.68 | 12,400 | 12 m. | 26.66 | 101,000 |
| | | | *Apr. 30* | | | 2 p.m. | 26.43 | 96,500 |
| 2 a.m. | 7.88 | 4,120 | | | | 4 | 26.24 | 92,900 |
| 4 | 8.27 | 4,550 | 2 a.m. | 14.53 | 12,100 | 6 | 26.08 | 89,800 |
| 6 | 9.00 | 5,410 | 4 | 14.38 | 11,900 | 8 | 25.85 | 85,400 |
| 8 | 9.65 | 6,190 | 6 | 14.26 | 11,800 | 10 | 25.56 | 79,900 |
| 10 | 10.65 | 7,480 | 10 | 14.02 | 11,400 | 12 p.m. | 25.30 | 75,000 |
| 12 m. | 12.10 | 9,370 | 12 m. | 13.90 | 11,300 | *May 4* | | |
| 2 p.m. | 13.42 | 11,100 | 2 p.m. | 14.13 | 11,600 | | | |
| 4 | 14.47 | 12,600 | 4 | 17.00 | 16,000 | 2 a.m. | 25.03 | 69,900 |
| 8 | 15.40 | 14,400 | 6 | 18.60 | 20,100 | 4 | 24.68 | 63,200 |
| 10 | 15.80 | 15,200 | 8 | 19.00 | 21,400 | 6 | 24.25 | 55,800 |
| 12 p.m. | 16.40 | 16,400 | 10 | 19.45 | 23,000 | 8 | 24.10 | 53,600 |
| *Apr. 27* | | | 12 p.m. | 19.85 | 24,400 | 10 | 23.56 | 47,000 |
| | | | *May 1* | | | 12 m. | 23.10 | 42,700 |
| 2 a.m. | 17.20 | 18,000 | 2 a.m. | 20.30 | 26,200 | 2 p.m. | 22.74 | 40,000 |
| 4 | 18.10 | 19,800 | 4 | 20.86 | 28,800 | 4 | 22.35 | 37,600 |
| 6 | 18.90 | 21,700 | 6 | 21.30 | 31,300 | 6 | 22.07 | 35,900 |
| 8 | 19.56 | 23,700 | 8 | 21.59 | 33,000 | 10 | 21.40 | 31,900 |
| 10 | 20.56 | 27,400 | 10 | 21.84 | 34,500 | 12 p.m. | 21.10 | 30,100 |
| 12 m. | 20.76 | 28,300 | 12 m. | 22.06 | 35,900 | *May 5* | | |
| 2 p.m. | 20.70 | 28,000 | 2 p.m. | 22.23 | 36,900 | | | |
| 4 | 20.75 | 28,200 | 4 | 22.42 | 38,000 | 2 a.m. | 20.86 | 28,800 |
| 6 | 20.80 | 28,500 | 6 | 22.58 | 39,000 | 4 | 20.55 | 27,300 |
| 10 | 20.72 | 28,100 | 8 | 22.66 | 39,500 | 6 | 20.26 | 26,000 |
| 12 p.m. | 20.52 | 27,300 | 12 p.m. | 22.66 | 39,500 | 8 | 20.00 | 25,000 |
| *Apr. 28* | | | *May 2* | | | 10 | 19.85 | 24,400 |
| | | | | | | 12 m. | 19.70 | 23,900 |
| 2 a.m. | 20.32 | 26,300 | 2 a.m. | 22.60 | 39,100 | 2 p.m. | 19.50 | 23,100 |
| 6 | 19.65 | 23,700 | 4 | 22.78 | 40,300 | 4 | 19.05 | 21,600 |
| 8 | 19.38 | 22,700 | 6 | 23.06 | 42,400 | 6 | 18.68 | 20,400 |
| 10 | 18.83 | 20,900 | 8 | 23.50 | 46,300 | 10 | 17.70 | 17,600 |
| 12 m. | 18.48 | 19,800 | 10 | 24.34 | 57,300 | 12 p.m. | 17.15 | 16,300 |
| 2 p.m. | 18.15 | 18,800 | 12 m. | 25.21 | 73,300 | *May 6* | | |
| 4 | 17.74 | 17,700 | 2 p.m. | 26.32 | 94,400 | | | |
| 6 | 17.42 | 16,900 | 4 | 27.02 | 108,000 | 2 a.m. | 16.38 | 14,900 |
| 10 | 16.72 | 15,500 | 6 | 27.33 | 114,000 | 4 | 15.85 | 14,100 |
| 12 p.m. | 16.57 | 15,200 | 8 | 27.50 | 117,000 | 8 | 14.62 | 12,300 |
| *Apr. 29* | | | 10 | 27.40 | 115,000 | 10 | 13.82 | 11,200 |
| | | | 12 p.m. | 27.50 | 117,000 | 12 m. | 13.20 | 10,300 |
| 4 a.m. | 16.54 | 15,200 | *May 3* | | | 2 p.m. | 12.60 | 9,550 |
| 8 | 16.31 | 14,800 | | | | 4 | 12.05 | 8,840 |
| 10 | 16.06 | 14,400 | 2 a.m. | 27.58 | 118,000 | 6 | 11.62 | 8,280 |
| 2 p.m. | 15.70 | 13,800 | 3 | 27.65 | 119,000 | 8 | 11.03 | 7,580 |
| 4 | 15.54 | 13,600 | 4 | 27.50 | 117,000 | 10 | 10.70 | 7,220 |
| 6 | 15.30 | 13,200 | 6 | 27.27 | 112,000 | 12 p.m. | 10.46 | 6,960 |
| 8 p.m. | 15.07 | 12,900 | 8 a.m. | 27.13 | 110,000 | | | |

NOTE.—Daily means cannot be computed precisely from figures shown.

### 61. LAKE GREESON NEAR MURFREESBORO, ARK.

Location.—Lat 34°08'55", long 93°42'55", in NW¼ sec. 18, T. 7 S., R. 25 W., at Narrows Dam on Little Missouri River, 6.5 miles northwest of Murfreesboro and 9.7 miles upstream from Muddy Fork Creek.

Drainage area.—237 sq mi.

Gage-height record.—Water-stage recorder graph. Elevation at 8 a.m. used to determine contents. Datum of gage is at mean sea level, datum of 1929.

Maxima.—April–May 1958: Contents, 359,100 acre-ft May 6 (elevation, 557.81 ft).

1949 to March 1958: Contents, 359,330 acre-ft May 21, 1953 (elevation, 557.84 ft).

Remarks.—Reservoir is formed by dam of concrete gravity construction comprised of two nonoverflow abutment sections, a flood control section containing two regulated outlets, an uncontrolled overflow spillway section and stilling basin, and a power intake section containing three 10-foot diameter penstocks. Capacity, 408,000 acre-ft at elevation 563.0 ft (crest of spillway) of which 202,000 acre-ft is available for power storage, 128,000 acre-ft is available for flood control storage, and 78,000 acre-ft is permanent storage for incidental recreational purposes at elevation 504.0 ft. Water below elevation 436.9 ft cannot be withdrawn through outlet tunnel. Reservoir is used for the dual purpose of flood control and electric generation. Power generation began May 27, 1950. Figures given herein represent total contents. Records furnished by Corps of Engineers.

*Elevation, in feet, and contents, in acre-feet, at 8 a.m. of indicated day, 1958*

| Day | April | | May | | Day | April | | May | |
|---|---|---|---|---|---|---|---|---|---|
| | Elevation | Contents | Elevation | Contents | | Elevation | Contents | Elevation | Contents |
| 1 | 544.03 | 252,100 | 548.97 | 286,800 | 19 | 544.86 | 257,700 | 551.87 | 309,000 |
| 2 | 544.05 | 252,200 | 552.30 | 312,400 | 20 | 544.98 | 258,500 | 551.02 | 302,300 |
| 3 | 544.10 | 252,500 | 556.00 | 343,100 | | | | | |
| 4 | 544.19 | 253,100 | 557.46 | 355,900 | 21 | 545.22 | 260,100 | 550.17 | 295,800 |
| 5 | 544.20 | 253,200 | 557.73 | 358,400 | 22 | 545.28 | 260,500 | 549.71 | 292,400 |
| | | | | | 23 | 545.24 | 260,300 | 549.31 | 289,400 |
| 6 | 544.19 | 253,100 | 557.80 | 359,000 | 24 | 545.20 | 260,000 | 548.90 | 286,300 |
| 7 | 544.22 | 253,300 | 557.73 | 358,400 | 25 | 545.18 | 259,800 | 548.48 | 283,200 |
| 8 | 544.33 | 254,100 | 557.48 | 356,100 | | | | | |
| 9 | 544.40 | 254,600 | 556.95 | 351,400 | 26 | 545.20 | 260,000 | 548.04 | 280,000 |
| 10 | 544.55 | 255,600 | 557.07 | 352,400 | 27 | 546.67 | 270,200 | 547.86 | 278,700 |
| | | | | | 28 | 547.57 | 276,600 | 547.60 | 276,800 |
| 11 | 544.58 | 255,800 | 557.04 | 352,200 | 29 | 547.93 | 279,200 | 547.34 | 275,000 |
| 12 | 544.66 | 256,300 | 556.92 | 351,100 | 30 | 548.07 | 280,200 | 547.07 | 273,000 |
| 13 | 544.77 | 257,100 | 556.41 | 346,700 | | | | | |
| 14 | 544.88 | 257,800 | 555.71 | 340,600 | 31 | ------ | ------ | 546.91 | 271,900 |
| 15 | 544.88 | 257,800 | 555.00 | 334,500 | | | | | |
| | | | | | Change in contents, in acre-feet | ------ | +28,600 | ------ | −8,800 |
| 16 | 544.98 | 258,500 | 554.28 | 328,500 | | | | | |
| 17 | 545.11 | 259,400 | 553.49 | 322,000 | | | | | |
| 18 | 544.99 | 258,500 | 552.68 | 315,400 | | | | | |

### 62. MUDDY FORK CREEK NEAR MURFREESBORO, ARK.

Location.—Lat 34°04'59", long 93°45'07", in NE¼ sec. 3, T. 8 S., R. 26 W., on right bank at Murfreesboro Dam site, 1.8 miles upstream from mouth, and 3 miles northwest of Murfreesboro.

Drainage area.—121 sq mi.

Gage-height record.—Water-stage recorder graph, except May 3–9. Datum of gage is 337.29 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements below 24,000 cfs. Discharge for period of no gage-height record estimated on basis of rainfall records and records for nearby stations.

Maxima.—April–May 1958: Discharge, 35,100 cfs 1 p.m. May 2 (gage height, 26.28 ft).

1940 to March 1958: Discharge, 47,100 cfs Mar. 30, 1945 (gage height, 29.7 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 146 | 10,700 | 11 | 154 | 440 | 21 | 358 | 28 |
| 2 | 128 | 17,400 | 12 | 101 | 263 | 22 | 184 | 23 |
| 3 | 134 | 3,700 | 13 | 78 | 174 | 23 | 134 | 23 |
| 4 | 130 | 1,360 | 14 | 412 | 119 | 24 | 108 | 21 |
| 5 | 91 | 790 | 15 | 711 | 83 | 25 | 86 | 18 |
| 6 | 64 | 280 | 16 | 345 | 36 | 26 | 1,170 | 18 |
| 7 | 50 | 440 | 17 | 221 | 48 | 27 | 5,300 | 17 |
| 8 | 43 | 580 | 18 | 162 | 38 | 28 | 975 | 22 |
| 9 | 150 | 1,360 | 19 | 144 | 36 | 29 | 742 | 19 |
| 10 | 210 | 950 | 20 | 201 | 31 | 30 | 1,040 | 18 |
| | | | | | | 31 | | 15 |
| Monthly mean discharge | | | | | | | 459 | 1,260 |
| Runoff | | | | | | thousands of acre-feet | 27.32 | 77.45 |
| Runoff | | | | | | inches | 4.23 | 12.00 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 28* | | | *May 1* | | |
| 10 p.m. | 3.80 | 78 | 2 a.m. | 7.79 | 1,260 | 2 a.m. | 10.00 | 2,800 |
| 12 p.m. | 3.98 | 108 | 6 | 7.42 | 1,100 | 4 | 15.90 | 10,600 |
| *Apr. 26* | | | 8 | 7.28 | 1,040 | 6 | 17.25 | 12,800 |
| | | | 12 m. | 6.98 | 923 | 8 | 17.45 | 13,100 |
| 2 a.m. | 5.72 | 530 | 4 p.m. | 6.72 | 831 | 10 | 18.12 | 14,300 |
| 4 | 5.96 | 597 | 6 | 6.61 | 793 | 12 m. | 18.45 | 14,900 |
| 6 | 6.50 | 758 | 8 | 6.65 | 807 | 2 p.m. | 18.70 | 15,500 |
| 8 | 7.55 | 1,150 | 10 | 6.70 | 824 | 4 | 18.80 | 15,700 |
| 10 | 7.55 | 1,150 | 12 p.m. | 6.62 | 797 | 6 | 18.80 | 15,700 |
| 12 m. | 7.60 | 1,180 | *Apr. 29* | | | 8 | 13.50 | 6,770 |
| 2 p.m. | 7.45 | 1,110 | | | | 10 | 11.10 | 3,800 |
| 4 | 7.14 | 986 | 6 a.m. | 6.52 | 764 | 12 p.m. | 9.85 | 2,680 |
| 6 | 6.96 | 916 | 12 m. | 6.34 | 708 | *May 2* | | |
| 8 | 7.70 | 1,220 | 6 p.m. | 6.43 | 736 | | | |
| 10 | 9.40 | 2,320 | 12 p.m. | 6.38 | 720 | 2 a.m. | 9.48 | 2,380 |
| 12 p.m. | 11.40 | 4,100 | *Apr. 30* | | | 4 | 9.35 | 2,280 |
| *Apr. 27* | | | | | | 6 | 12.90 | 5,910 |
| | | | 2 a.m. | 6.33 | 705 | 8 | 19.34 | 17,000 |
| 2 a.m. | 13.55 | 6,840 | 4 | 6.28 | 690 | 10 | 22.50 | 24,600 |
| 4 | 15.30 | 9,630 | 6 | 6.21 | 669 | 12 m. | 25.50 | 32,500 |
| 6 | 16.10 | 10,900 | 8 | 6.17 | 657 | 1 p.m. | 26.28 | 35,100 |
| 8 | 15.56 | 10,000 | 10 | 6.08 | 630 | 2 | 26.00 | 34,200 |
| 10 | 14.12 | 7,740 | 12 m. | 6.12 | 642 | 4 | 25.60 | 32,800 |
| 12 m. | 12.38 | 5,210 | 2 p.m. | 6.37 | 717 | 6 | 22.00 | 23,400 |
| 2 p.m. | 10.18 | 2,960 | 4 | 7.12 | 978 | 8 | 18.90 | 15,900 |
| 4 | 9.40 | 2,320 | 6 | 7.90 | 1,310 | 10 | 16.20 | 11,100 |
| 6 | 8.94 | 1,960 | 8 | 8.70 | 1,790 | 12 p.m. | 14.50 | 8,350 |
| 8 | 8.58 | 1,710 | 10 | 9.28 | 2,220 | | | |
| 10 | 8.30 | 1,530 | 12 p.m. | 9.25 | 2,200 | | | |
| 12 p.m. | 8.03 | 1,380 | | | | | | |

Note.—Daily means cannot be computed precisely from figures shown.

### 63. LITTLE MISSOURI RIVER NEAR MURFREESBORO, ARK.

Location.—Lat 34°03′, long 93°43′, in SE¼ sec. 13, T. 8 S., R. 26 W., near right bank on downstream side of pier of bridge on State Highway 27, 1.9 miles downstream from Muddy Fork, 2 miles southwest of Murfreesboro, 4.6 miles upstream from Prairie Creek and 11.4 miles downstream from Lake Greeson.

Drainage area.—380 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 324.28 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 30,300 cfs 2 p.m. May 2 (gage height, 15.74 ft).

1928–31, 1937 to March 1958: Discharge, 120,000 cfs Mar. 30, 1945 (gage height, 19.84 ft) on basis of contracted-opening measurement of peak flow.

Maximum stage known, about 21 ft in April 1927, from information by Arkansas State Highway Department.

Remarks.—Flow regulated by Lake Greeson (see station No. 61).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 446 | 9,620 | 11 | 354 | 2,080 | 21 | 526 | 2,850 |
| 2 | 370 | 18,300 | 12 | 253 | 2,190 | 22 | 798 | 1,700 |
| 3 | 236 | 8,090 | 13 | 359 | 3,630 | 23 | 604 | 1,640 |
| 4 | 448 | 2,370 | 14 | 1,220 | 3,630 | 24 | 763 | 1,700 |
| 5 | 213 | 2,000 | 15 | 1,140 | 3,630 | 25 | 705 | 1,640 |
| 6 | 133 | 1,500 | 16 | 651 | 3,630 | 26 | 1,480 | 1,640 |
| 7 | 87 | 1,660 | 17 | 970 | 3,630 | 27 | 7,130 | 992 |
| 8 | 234 | 2,190 | 18 | 960 | 3,510 | 28 | 2,020 | 880 |
| 9 | 406 | 4,190 | 19 | 532 | 3,630 | 29 | 1,920 | 1,010 |
| 10 | 496 | 2,910 | 20 | 224 | 3,510 | 30 | 2,050 | 812 |
| | | | | | | 31 | | 178 |
| Monthly mean discharge | | | | | | | 924 | 3,256 |
| Runoff (thousands of acre-feet) | | | | | | | 55 | 200.2 |

### 64. ANTOINE RIVER AT ANTOINE, ARK.

Location.—Lat 34°02'20", long 93°25'05", in NW¼ sec. 24, T. 8 S., R. 23 W., near right bank on downstream side of pier of bridge on State Highway 26 at Antoine, 1.6 miles downstream from Brushy Creek, 1.9 miles downstream from Suck Creek, and 8.5 miles upstream from mouth.

Drainage area.—181 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 229.33 ft above mean sea level, datum of 1929.

Discharge record.—Stage discharge relation defined by current-meter measurements below 28,000 cfs.

Maxima.—April–May 1958: Discharge, 35,500 cfs 9:30 a.m. May 2 (gage height, 28.75 ft).

1950 to March 1958: Discharge, 16,600 cfs Apr. 3, 1957 (gage height, 24.00 ft).

Maximum stage known, 29.7 ft in 1905, from information by Arkansas State Highway Department (discharge 40,000 cfs).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 282 | 11,500 | 11 | 266 | 703 | 21 | 307 | 94 |
| 2 | 255 | 20,500 | 12 | 202 | 488 | 22 | 226 | 77 |
| 3 | 247 | 17,100 | 13 | 172 | 350 | 23 | 185 | 64 |
| 4 | 265 | 2,540 | 14 | 461 | 267 | 24 | 164 | 56 |
| 5 | 209 | 1,260 | 15 | 644 | 212 | 25 | 149 | 47 |
| 6 | 174 | 855 | 16 | 461 | 176 | 26 | 1,800 | 42 |
| 7 | 146 | 634 | 17 | 359 | 144 | 27 | 7,250 | 36 |
| 8 | 126 | 476 | 18 | 298 | 123 | 28 | 1,940 | 34 |
| 9 | 158 | 744 | 19 | 270 | 113 | 29 | 2,200 | 30 |
| 10 | 260 | 1,390 | 20 | 250 | 116 | 30 | 1,480 | 27 |
| | | | | | | 31 | | 24 |
| Monthly mean discharge | | | | | | | 707 | 1,943 |
| Runoff | | | | | | thousands of acre-feet | 42,06 | 119.4 |
| Runoff | | | | | | inches | 4.36 | 12.37 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 10 p.m. | 3.96 | 144 |
| 12 p.m. | 4.26 | 186 |
| *Apr. 26* | | |
| 1 a.m. | 4.52 | 223 |
| 2 | 4.92 | 287 |
| 3 | 5.50 | 392 |
| 4 | 5.93 | 481 |
| 5 | 6.49 | 608 |
| 6 | 7.20 | 786 |
| 7 | 7.74 | 929 |
| 8 | 8.14 | 1,040 |
| 9 | 8.68 | 1,200 |
| 10 | 9.30 | 1,410 |
| 12 m. | 10.20 | 1,750 |
| 1 p.m. | 10.55 | 1,880 |
| 2 | 10.75 | 1,960 |
| 3 | 10.75 | 1,960 |
| 4 | 10.70 | 1,940 |
| 5 | 10.80 | 1,980 |
| 6 | 11.09 | 2,100 |
| 7 | 11.60 | 2,310 |
| 8 | 12.40 | 2,660 |
| 9 | 13.64 | 3,260 |
| 10 | 15.02 | 4,030 |
| 11 | 16.65 | 5,100 |
| 12 p.m. | 18.28 | 6,430 |
| *Apr. 27* | | |
| 1 a.m. | 19.75 | 7,850 |
| 2 | 20.62 | 8,780 |
| 3 | 21.08 | 9,300 |
| 4 | 21.23 | 9,490 |
| 4:30 | 21.24 | 9,510 |
| 5 | 21.22 | 9,480 |
| 6 | 21.15 | 9,380 |
| 7 | 21.08 | 9,300 |
| 8 | 21.02 | 9,220 |
| 9 | 20.94 | 9,130 |
| 10 | 20.82 | 9,000 |
| 11 | 20.65 | 8,820 |
| 12 m. | 20.45 | 8,600 |
| 1 p.m. | 20.15 | 8,260 |
| 2 | 19.75 | 7,850 |
| 3 | 19.20 | 7,300 |
| 4 | 18.48 | 6,610 |
| 5 | 17.72 | 5,930 |
| 6 | 16.76 | 5,170 |
| 7 | 15.98 | 4,640 |
| 8 | 15.22 | 4,150 |
| 9 | 14.70 | 3,840 |
| 10 | 14.25 | 3,600 |
| 11 | 13.85 | 3,380 |
| 12 p.m. | 13.60 | 3,240 |
| *Apr. 28* | | |
| 2 a.m. | 12.87 | 2,880 |
| 4 | 12.21 | 2,570 |
| 6 | 11.64 | 2,330 |
| 8 | 11.14 | 2,120 |
| 10 a.m. | 10.72 | 1,950 |
| 2 p.m. | 10.00 | 1,670 |
| 4 | 9.74 | 1,570 |
| 6 | 9.49 | 1,480 |
| 8 | 9.22 | 1,380 |
| 10 | 9.00 | 1,310 |
| 12 p.m. | 8.89 | 1,270 |
| *Apr. 29* | | |
| 1 a.m. | 9.15 | 1,360 |
| 2 | 10.00 | 1,670 |
| 3 | 10.98 | 2,050 |
| 4 | 11.73 | 2,370 |
| 5 a.m. | 12.24 | 2,590 |
| *Apr. 29*—Con. | | |
| 6 a.m. | 12.78 | 2,830 |
| 7 | 13.30 | 3,090 |
| 8 | 13.58 | 3,230 |
| 8:30 | 13.61 | 3,250 |
| 9 | 13.56 | 3,220 |
| 10 | 13.24 | 3,060 |
| 11 | 12.80 | 2,840 |
| 12 m. | 12.30 | 2,620 |
| 1 p.m. | 11.83 | 2,410 |
| 2 | 11.39 | 2,220 |
| 3 | 10.99 | 2,060 |
| 4 | 10.68 | 1,930 |
| 5 | 10.42 | 1,830 |
| 7 | 10.69 | 1,710 |
| 9 | 9.85 | 1,620 |
| 11 | 9.67 | 1,550 |
| 12 p.m. | 9.58 | 1,510 |
| *Apr. 30* | | |
| 6 a.m. | 8.98 | 1,300 |
| 8 | 8.83 | 1,250 |
| 10 | 8.72 | 1,210 |
| 12 m. | 8.60 | 1,180 |
| 2 p.m. | 8.66 | 1,200 |
| 4 | 9.33 | 1,420 |
| 6 | 10.09 | 1,710 |
| 8 | 10.52 | 1,870 |
| 10 | 10.82 | 1,990 |
| 12 p.m. | 11.24 | 2,160 |
| *May 1* | | |
| 1 a.m. | 11.50 | 2,270 |
| 3 | 12.03 | 2,490 |
| 4 | 12.72 | 2,800 |
| 5 | 14.40 | 3,680 |
| 6 | 20.00 | 8,100 |
| 7 | 23.40 | 14,600 |
| 8 | 24.85 | 19,700 |
| 9 | 25.60 | 22,500 |
| 9:30 | 25.67 | 22,700 |
| 10 | 25.50 | 22,100 |
| 11 | 24.90 | 19,800 |
| 12 m. | 24.30 | 17,700 |
| 1 p.m. | 23.85 | 16,100 |
| 3 | 23.28 | 14,200 |
| 5 | 22.77 | 12,800 |
| 7 | 22.11 | 11,100 |
| 8 | 21.75 | 10,400 |
| 9 | 21.36 | 9,680 |
| 11 | 20.51 | 8,660 |
| 12 p.m. | 19.85 | 7,950 |
| *May 2* | | |
| 1 a.m. | 19.14 | 7,240 |
| 2 | 18.24 | 6,400 |
| 3 | 17.34 | 5,610 |
| 4 | 16.50 | 4,990 |
| 4:30 | 16.17 | 4,760 |
| 5 | 16.55 | 5,020 |
| 6 | 21.50 | 9,900 |
| 7 | 25.57 | 22,400 |
| 8 | 27.72 | 31,000 |
| 9 | 28.69 | 35,200 |
| 9:30 | 28.75 | 35,500 |
| 10 | 28.47 | 34,300 |
| 11 | 27.67 | 30,800 |
| 12 m. | 26.77 | 27,100 |
| 1 p.m. | 25.97 | 23,900 |
| 2 | 25.47 | 22,000 |
| 3 | 25.25 | 21,200 |
| 4 | 25.14 | 20,700 |
| 5 | 25.07 | 20,500 |
| 5:30 | 25.04 | 20,400 |
| 6 | 25.08 | 20,500 |
| 7 p.m. | 25.25 | 21,200 |
| *May 2*—Con. | | |
| 8 p.m. | 25.84 | 23,400 |
| 9 | 26.37 | 25,500 |
| 10 | 26.87 | 27,500 |
| 11 | 27.07 | 28,300 |
| 12 p.m. | 26.96 | 27,900 |
| *May 3* | | |
| 1 a.m. | 26.82 | 27,300 |
| 2 | 26.60 | 26,700 |
| 3 | 26.54 | 26,200 |
| 6 | 26.09 | 24,400 |
| 7 | 25.90 | 23,600 |
| 8 | 25.67 | 22,700 |
| 9 | 25.45 | 21,900 |
| 10 | 25.10 | 20,600 |
| 12 m. | 24.50 | 18,400 |
| 1 p.m. | 24.24 | 17,500 |
| 2 | 23.85 | 16,100 |
| 3 | 23.40 | 14,600 |
| 4 | 22.83 | 12,900 |
| 5 | 22.12 | 11,100 |
| 6 | 21.20 | 9,450 |
| 7 | 20.00 | 8,100 |
| 8 | 18.72 | 6,830 |
| 9 | 17.58 | 5,800 |
| 10 | 16.57 | 5,040 |
| 11 | 15.80 | 4,520 |
| 12 p.m. | 15.20 | 4,140 |
| *May 4* | | |
| 2 a.m. | 14.33 | 3,640 |
| 4 | 13.66 | 3,270 |
| 6 | 13.08 | 2,980 |
| 8 | 12.60 | 2,750 |
| 10 | 12.17 | 2,560 |
| 12 m. | 11.77 | 2,380 |
| 4 p.m. | 11.10 | 2,100 |
| 8 | 10.56 | 1,880 |
| 10 | 10.30 | 1,790 |
| 12 p.m. | 10.03 | 1,680 |
| *May 5* | | |
| 2 a.m. | 9.72 | 1,550 |
| 4 | 9.52 | 1,470 |
| 6 | 9.32 | 1,400 |
| 8 | 9.16 | 1,340 |
| 12 m. | 8.85 | 1,240 |
| 4 p.m. | 8.58 | 1,150 |
| 8 | 8.29 | 1,060 |
| 12 p.m. | 8.09 | 999 |
| *May 6* | | |
| 4 a.m. | 7.89 | 931 |
| 8 | 7.75 | 892 |
| 12 m. | 7.63 | 858 |
| 4 p.m. | 7.47 | 816 |
| 8 | 7.28 | 767 |
| 12 p.m. | 7.13 | 728 |
| *May 7* | | |
| 4 a.m. | 6.98 | 691 |
| 8 | 6.83 | 655 |
| 12 m. | 6.74 | 634 |
| 4 p.m. | 6.64 | 610 |
| 8 | 6.51 | 578 |
| 12 p.m. | 6.37 | 545 |
| *May 8* | | |
| 6 a.m. | 6.19 | 502 |
| 12 m. | 6.08 | 476 |
| 6 p.m. | 5.95 | 446 |
| 12 p.m. | 5.81 | 412 |

### 65. LITTLE MISSOURI RIVER NEAR BOUGHTON, ARK.

Location.—Lat 33°52'32", long 93°18'16", in NE¼ sec. 13, T. 10 S., R. 22 W., on downstream side of bridge on U.S. Highway 67, 1.5 miles northeast of Boughton, 5.9 miles downstream from Howard Creek, and 10.2 miles downstream from Antoine River.

Drainage area.—1,068 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 182.13 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 66,000 cfs 7 p.m. May 3 (gage height, 24.22 ft).

1937 to March 1958: Discharge, 111,000 cfs Mar. 31, 1945 (gage height, 27.2 ft, from floodmark), from rating curve extended above 60,000 cfs.

Remarks.—Flow regulated by Lake Greeson (see station No. 61). Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,290 | 21,400 | 11 | 975 | 7,080 | 21 | 928 | 4,010 |
| 2 | 1,290 | 44,100 | 12 | 905 | 5,060 | 22 | 1,080 | 3,520 |
| 3 | 1,110 | 61,300 | 13 | 735 | 3,590 | 23 | 1,170 | 2,190 |
| 4 | 1,060 | 41,300 | 14 | 928 | 4,220 | 24 | 885 | 2,060 |
| 5 | 1,000 | 18,900 | 15 | 3,170 | 4,360 | 25 | 1,140 | 1,990 |
| 6 | 812 | 9,680 | 16 | 3,310 | 4,220 | 26 | 4,710 | 1,920 |
| 7 | 615 | 5,130 | 17 | 1,800 | 4,080 | 27 | 13,000 | 1,920 |
| 8 | 512 | 3,620 | 18 | 1,540 | 4,010 | 28 | 24,800 | 1,290 |
| 9 | 570 | 3,450 | 19 | 1,730 | 4,010 | 29 | 18,500 | 1,440 |
| 10 | 750 | 6,040 | 20 | 1,290 | 4,080 | 30 | 13,400 | 1,380 |
| | | | | | | 31 | | 1,080 |
| Monthly mean discharge | | | | | | | 3,500 | 9,111 |
| Runoff (thousands of acre-feet) | | | | | | | 208.3 | 560.2 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 9.04 | 2,150 |
| *Apr. 26* | | |
| 2 a.m. | 10.50 | 3,170 |
| 4 | 11.39 | 3,790 |
| 6 | 12.17 | 4,340 |
| 8 | 12.50 | 4,570 |
| 10 | 12.68 | 4,700 |
| 12 m. | 12.71 | 4,720 |
| 2 p.m. | 12.72 | 4,720 |
| 4 | 12.90 | 4,850 |
| 6 | 13.33 | 5,150 |
| 8 | 13.95 | 5,580 |
| 10 | 14.86 | 6,220 |
| 12 p.m. | 15.90 | 7,360 |
| *Apr. 27* | | |
| 2 a.m. | 16.70 | 8,660 |
| 4 | 17.30 | 9,840 |
| 6 | 17.53 | 10,300 |
| 8 | 17.67 | 10,700 |
| 10 | 17.78 | 10,900 |
| 12 m. | 17.95 | 11,300 |
| 2 p.m. | 18.26 | 12,000 |
| 4 | 18.70 | 13,200 |
| 6 | 19.30 | 15,100 |
| 8 | 20.00 | 18,400 |
| 10 | 20.40 | 20,600 |
| 12 p.m. | 20.74 | 23,000 |
| *Apr. 28* | | |
| 2 a.m. | 20.83 | 23,600 |
| 6 | 20.94 | 24,400 |
| 8 | 20.97 | 24,600 |
| 10 | 21.05 | 25,200 |
| 12 m. | 21.11 | 25,600 |
| 2 p.m. | 21.13 | 25,700 |
| 4 | 21.13 | 25,700 |
| 6 | 21.10 | 25,500 |
| 10 | 20.98 | 24,700 |
| 12 p.m. | 20.89 | 24,000 |
| *Apr. 29* | | |
| 4 a.m. | 20.68 | 22,600 |
| 8 a.m. | 20.30 | 20,000 |
| *Apr. 29*—Con. | | |
| 12 m. | 19.97 | 18,200 |
| 4 p.m. | 19.58 | 16,300 |
| 8 | 19.28 | 15,000 |
| 12 p.m. | 19.00 | 14,100 |
| *Apr. 30* | | |
| 4 a.m. | 18.72 | 13,300 |
| 12 m. | 18.36 | 12,300 |
| 4 p.m. | 18.82 | 13,600 |
| 8 | 19.14 | 14,500 |
| 12 p.m. | 19.21 | 14,800 |
| *May 1* | | |
| 4 a.m. | 19.34 | 15,300 |
| 8 | 19.90 | 17,900 |
| 12 m. | 20.43 | 20,800 |
| 4 p.m. | 20.63 | 22,200 |
| 8 | 21.35 | 27,200 |
| 12 p.m. | 22.15 | 35,300 |
| *May 2* | | |
| 4 a.m. | 22.42 | 39,300 |
| 8 | 22.49 | 40,400 |
| 12 m. | 22.48 | 40,200 |
| 2 p.m. | 22.50 | 40,500 |
| 4 | 22.75 | 44,200 |
| 6 | 23.12 | 49,800 |
| 8 | 23.42 | 54,300 |
| 10 | 23.58 | 56,700 |
| 12 p.m. | 23.60 | 57,000 |
| *May 3* | | |
| 4 a.m. | 23.56 | 56,400 |
| 8 | 23.67 | 58,000 |
| 10 | 23.78 | 59,700 |
| 12 m. | 23.92 | 61,800 |
| 2 p.m. | 24.05 | 63,800 |
| 4 | 24.15 | 65,200 |
| 5 | 24.19 | 65,800 |
| 6 | 24.21 | 65,900 |
| 7 | 24.22 | 66,000 |
| 8 | 24.21 | 65,900 |
| 9 | 24.18 | 65,700 |
| 10 | 24.12 | 64,800 |
| 12 p.m. | 23.98 | 62,700 |
| *May 4* | | |
| 2 a.m. | 23.78 | 59,700 |
| 4 | 23.52 | 55,800 |
| 6 | 23.22 | 51,300 |
| 8 | 22.98 | 47,700 |
| 10 | 22.70 | 43,500 |
| 12 m. | 22.38 | 38,700 |
| 2 p.m. | 22.14 | 35,200 |
| 4 | 21.94 | 32,600 |
| 6 | 21.75 | 30,500 |
| 8 | 21.59 | 29,000 |
| 12 p.m. | 21.20 | 26,200 |
| *May 5* | | |
| 4 a.m. | 20.82 | 23,500 |
| 8 | 20.44 | 20,900 |
| 12 m. | 20.00 | 18,400 |
| 4 p.m. | 19.57 | 16,300 |
| 8 | 19.12 | 14,500 |
| 12 p.m. | 18.70 | 13,200 |
| *May 6* | | |
| 4 a.m. | 18.21 | 11,900 |
| 8 | 17.74 | 10,800 |
| 12 m. | 17.15 | 9,510 |
| 4 p.m. | 16.57 | 8,430 |
| 8 | 16.00 | 7,500 |
| 12 p.m. | 15.35 | 6,640 |
| *May 7* | | |
| 4 a.m. | 14.52 | 5,980 |
| 8 | 13.73 | 5,430 |
| 12 m. | 13.10 | 4,990 |
| 4 p.m. | 12.63 | 4,660 |
| 8 | 12.22 | 4,370 |
| 12 p.m. | 11.73 | 4,030 |
| *May 8* | | |
| 4 a.m. | 11.32 | 3,740 |
| 8 | 11.13 | 3,610 |
| 12 m. | 11.07 | 3,570 |
| 8 p.m. | 10.98 | 3,510 |
| 12 p.m. | 10.89 | 3,440 |

NOTE.—Daily means cannot be computed precisely from figures shown.

### 66. OUACHITA RIVER AT CAMDEN, ARK.

Location.—Lat 33°35'49", long 92°49'12", in SE¼ sec. 14, T. 13 S., R. 17 W., on line between Ouachita and Calhoun Counties on downstream side of bridge on U.S. Highway 79 at Camden, 0.4 mile downstream from St. Louis Southwestern Railway bridge, 3½ miles downstream from Ecore Fabre Bayou, and 7½ miles upstream from Two Bayou Creek.

Drainage area.—5,391 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 71.69 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements. Fall used as a factor.

Maxima.—April–May 1958: Discharge, 185,000 cfs May 5 (gage height, 43.87 ft 11 p.m. May 5).

1928 to March 1958: Discharge, 243,000 cfs Apr. 3, 1945 (gage height, 44.82 ft).

Flood of 1882 reached a stage of 46.0 ft, from information by Corps of Engineers.

Remarks.—For regulation see "Remarks" for station near Malvern and Little Missouri River near Murfreesboro, Ark. Records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 9,810 | 74,600 | 11 | 3,490 | 51,500 | 21 | 6,660 | 16,400 |
| 2 | 8,330 | 83,900 | 12 | 4,430 | 43,900 | 22 | 8,250 | 15,700 |
| 3 | 6,840 | 106,000 | 13 | 4,600 | 37,700 | 23 | 8,890 | 13,900 |
| 4 | 5,870 | 139,000 | 14 | 4,050 | 31,300 | 24 | 9,030 | 12,400 |
| 5 | 5,800 | 181,000 | 15 | 4,870 | 27,300 | 25 | 7,680 | 10,400 |
| 6 | 5,650 | 174,000 | 16 | 7,670 | 23,000 | 26 | 9,110 | 9,070 |
| 7 | 5,200 | 140,000 | 17 | 11,400 | 20,300 | 27 | 17,300 | 8,870 |
| 8 | 4,060 | 105,000 | 18 | 12,500 | 18,500 | 28 | 26,200 | 8,360 |
| 9 | 3,960 | 79,900 | 19 | 10,000 | 16,900 | 29 | 47,100 | 7,120 |
| 10 | 3,520 | 63,800 | 20 | 7,490 | 16,800 | 30 | 65,700 | 6,670 |
| | | | | | | 31 | | 6,630 |
| Monthly mean discharge | | | | | | | 11,180 | 49,997 |
| Runoff | | | | | | thousands of acre-feet | 665.4 | 3,074 |

### 67. SMACKOVER CREEK NEAR SMACKOVER, ARK.

Location.—Lat 33°22'40", long 92°46'45", in S½ sec. 32, T. 15 S., R. 16 W., on downstream side of bridge on State Highway 7, 0.1 mile downstream from Camp Creek, 3 miles west of Smackover and 23 miles above mouth.

Drainage area.—377 sq mi.

Gage-height record.—Water-stage recorder graph except Apr. 26–29. Datum of gage is 97.56 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements below 11,000 cfs. Discharge for period of no gage-height record computed from graph based on floodmark and normal recession.

Maxima.—April–May 1958. Discharge 25,000 cfs about 12 m. Apr. 27 (gage height, 21.21 ft, from floodmark).

1938 to March 1958: Discharge, 16,500 cfs Apr. 3, 1945 (gage height, 19.8 ft).

Remarks.—Gage-height record and results of discharge measurements furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 647 | 12,400 | 11 | 195 | 1,580 | 21 | 187 | 3,300 |
| 2 | 519 | 11,200 | 12 | 206 | 1,340 | 22 | 213 | 2,680 |
| 3 | 403 | 7,610 | 13 | 187 | 940 | 23 | 179 | 1,930 |
| 4 | 326 | 5,100 | 14 | 194 | 680 | 24 | 147 | 1,340 |
| 5 | 281 | 4,000 | 15 | 295 | 391 | 25 | 347 | 720 |
| 6 | 242 | 3,160 | 16 | 387 | 255 | 26 | 6,680 | 272 |
| 7 | 209 | 2,430 | 17 | 341 | 206 | 27 | 23,300 | 195 |
| 8 | 179 | 1,930 | 18 | 253 | 179 | 28 | 16,400 | 172 |
| 9 | 165 | 1,550 | 19 | 190 | 1,050 | 29 | 10,700 | 180 |
| 10 | 174 | 1,750 | 20 | 172 | 2,820 | 30 | 10,200 | 197 |
| | | | | | | 31 | | 158 |
| Monthly mean discharge | | | | | | | 2,464 | 2,313 |
| Runoff (thousands of acre-feet) | | | | | | | 146.6 | 142.2 |
| Runoff (inches) | | | | | | | 7.29 | 7.07 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 29* | | | *May 4* | | |
| 12 p.m. | 4.93 | 139 | 6 a.m. | | 11,200 | 4 a.m. | 15.62 | 5,680 |
| *Apr. 25* | | | 12 m. | | 10,400 | 8 | 15.39 | 5,300 |
| 4 a.m. | 5.16 | 159 | 6 p.m. | | 10,000 | 12 m. | 15.18 | 4,970 |
| 8 | 5.75 | 215 | 12 p.m. | | 9,720 | 4 p.m. | 15.04 | 4,740 |
| 12 m. | 6.86 | 338 | *Apr. 30* | | | 8 | 14.94 | 4,600 |
| 4 p.m. | 7.62 | 437 | 8 a.m. | 17.50 | 9,720 | 12 p.m. | 14.84 | 4,460 |
| 8 | 8.08 | 503 | 12 m. | 17.52 | 9,780 | *May 5* | | |
| 12 p.m. | 9.36 | 722 | 6 p.m. | 17.82 | 10,600 | 6 a.m. | 14.65 | 4,190 |
| *Apr. 26* | | | 12 p.m. | 18.16 | 11,700 | 12 m. | 14.50 | 3,980 |
| 4 a.m. | | 1,290 | *May 1* | | | 6 p.m. | 14.35 | 3,800 |
| 8 | | 2,860 | 4 a.m. | 18.30 | 12,200 | 12 p.m. | 14.18 | 3,600 |
| 12 m. | | 5,160 | 8 | 18.36 | 12,400 | *May 6* | | |
| 4 p.m. | | 8,280 | 4 p.m. | 18.43 | 12,600 | 6 a.m. | 14.00 | 3,390 |
| 8 | | 12,700 | 8 | 18.42 | 12,600 | 12 m. | 13.78 | 3,150 |
| 12 p.m. | | 18,800 | 12 p.m. | 18.38 | 12,400 | 6 p.m. | 13.56 | 2,920 |
| *Apr. 27* | | | *May 2* | | | 12 p.m. | 13.38 | 2,740 |
| 4 a.m. | | 22,800 | 4 a.m. | 18.32 | 12,200 | *May 7* | | |
| 8 | | 24,900 | 8 | 18.21 | 11,900 | 6 a.m. | 13.22 | 2,590 |
| 12 m. | 21.21 | 25,000 | 12 m. | 18.05 | 11,400 | 12 m. | 13.04 | 2,430 |
| 4 p.m. | | 24,400 | 4 p.m. | 17.86 | 10,800 | 6 p.m. | 12.88 | 2,240 |
| 8 | | 22,800 | 8 | 17.63 | 10,100 | 12 p.m. | 12.74 | 2,170 |
| 12 p.m. | | 21,200 | 12 p.m. | 17.37 | 9,360 | *May 8* | | |
| *Apr. 28* | | | *May 3* | | | 6 a.m. | 12.59 | 2,050 |
| 6 a.m. | | 18,800 | 4 a.m. | 17.12 | 8,690 | 12 m. | 12.42 | 1,920 |
| 12 m. | | 16,100 | 8 | 16.88 | 8,110 | 6 p.m. | 12.26 | 1,810 |
| 6 p.m. | | 14,100 | 12 m. | 16.62 | 7,540 | 12 p.m. | 12.12 | 1,710 |
| 12 p.m. | | 12,500 | 4 p.m. | 16.36 | 7,010 | | | |
| | | | 8 | 16.12 | 6,580 | | | |
| | | | 12 p.m. | 15.86 | 6,110 | | | |

### 68. MORO CREEK NEAR FORDYCE, ARK.

Location.—Lat 33°47′, long 92°20′, in NW¼ sec. 3, T. 11 S., R. 12 W., on downstream side of bridge on State Highway 8, 1,100 ft upstream from Caney Creek, 4 miles southeast of Fordyce, and 12 miles upstream from White Water Creek.

Drainage area.—216 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 160.63 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 26,800 cfs 4–5 p.m. May 2 (gage height, 16.47 ft).

1951 to March 1958: Discharge, 11,100 cfs Apr. 5, 1957 (gage height, 14.35 ft).

Flood of January 1938 reached a stage of 15.1 ft according to Arkansas State Highway Department (discharge 15,800 cfs).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 558 | 8,330 | 11 | 63 | 999 | 21 | 321 | 1,020 |
| 2 | 423 | 23,600 | 12 | 68 | 794 | 22 | 246 | 874 |
| 3 | 327 | 15,500 | 13 | 68 | 750 | 23 | 307 | 680 |
| 4 | 234 | 5,410 | 14 | 79 | 645 | 24 | 362 | 459 |
| 5 | 171 | 3,220 | 15 | 302 | 463 | 25 | 558 | 203 |
| 6 | 132 | 2,050 | 16 | 356 | 240 | 26 | 1,940 | 101 |
| 7 | 105 | 1,470 | 17 | 379 | 138 | 27 | 5,520 | 65 |
| 8 | 82 | 1,070 | 18 | 448 | 90 | 28 | 6,540 | 49 |
| 9 | 70 | 854 | 19 | 530 | 688 | 29 | 5,760 | 40 |
| 10 | 62 | 1,320 | 20 | 498 | 1,220 | 30 | 3,860 | 33 |
| | | | | | | 31 | | 28 |
| Monthly mean discharge | | | | | | | 1,012 | 2,336 |
| Runoff | | | | | | thousands of acre-feet | 60.24 | 143.6 |
| Runoff | | | | | | inches | 5.23 | 12.47 |

*Gate height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 24* | | |
| 12 p.m. | 7.48 | 376 |
| *Apr. 25* | | |
| 1 a.m. | 7.50 | 379 |
| 3 | 7.60 | 395 |
| 3 | 7.71 | 414 |
| 4 | 7.86 | 441 |
| 6 | 8.18 | 500 |
| 8 | 8.41 | 546 |
| 9 | 8.53 | 570 |
| 11 a.m. | 8.73 | 610 |
| 1 p.m. | 8.82 | 628 |
| 3 | 8.84 | 633 |
| 6 | 8.81 | 626 |
| 7 | 8.78 | 620 |
| 8 | 8.76 | 616 |
| 9 | 8.73 | 610 |
| 10 | 8.72 | 608 |
| 11 | 8.70 | 604 |
| 12 p.m. | 8.73 | 610 |
| *Apr. 26* | | |
| 1 a.m. | 8.85 | 635 |
| 2 | 9.06 | 680 |
| 3 | 9.28 | 733 |
| 5 | 9.66 | 843 |
| 6 | 9.88 | 922 |
| 7 | 10.24 | 1,090 |
| 8 | 10.50 | 1,250 |
| 9 | 10.72 | 1,420 |
| 10 | 10.92 | 1,580 |
| 11 | 11.12 | 1,770 |
| 12 m. | 11.27 | 1,950 |
| 1 p.m. | 11.42 | 2,160 |
| 2 | 11.52 | 2,300 |
| 3 | 11.62 | 2,470 |
| 4 | 11.69 | 2,596 |
| 5 | 11.76 | 2,730 |
| 6 | 11.82 | 2,850 |
| 7 | 11.86 | 2,940 |
| 8 | 11.92 | 3,070 |
| 9 | 11.95 | 3,140 |
| 10 | 12.00 | 3,250 |
| 11 | 12.04 | 3,340 |
| 12 p.m. | 12.10 | 3,470 |
| *Apr. 27* | | |
| 2 a.m. | 12.22 | 3,760 |
| 4 | 12.38 | 4,140 |
| 6 | 12.61 | 4,760 |
| 8 | 12.80 | 5,310 |
| 10 | 12.96 | 5,790 |
| 12 m. | 13.06 | 6,100 |
| 2 p.m. | 13.12 | 6,300 |
| 4 | 13.14 | 6,370 |
| 10 | 13.11 | 6,260 |
| 12 p.m. | 13.11 | 6,260 |
| *Apr. 28* | | |
| 4 a.m. | 13.14 | 6,370 |
| 8 | 13.22 | 6,640 |
| 12 m. | 13.26 | 6,790 |
| *Apr. 28*—Con. | | |
| 4 p.m. | 13.23 | 6,680 |
| 8 | 13.17 | 6,470 |
| 12 p.m. | 13.13 | 6,330 |
| *Apr. 29* | | |
| 4 a.m. | 13.11 | 6,260 |
| 8 | 13.10 | 6,230 |
| 12 m. | 13.04 | 6,040 |
| 4 p.m. | 12.91 | 5,640 |
| 8 | 12.65 | 4,870 |
| 12 p.m. | 12.57 | 4,650 |
| *Apr. 30* | | |
| 2 a.m. | 12.48 | 4,400 |
| 4 | 12.38 | 4,140 |
| 6 | 12.30 | 3,950 |
| 10 | 12.18 | 3,760 |
| 12 m. | 12.12 | 3,520 |
| 2 p.m. | 12.10 | 3,470 |
| 4 | 12.13 | 3,540 |
| 6 | 12.17 | 3,640 |
| 8 | 12.22 | 3,760 |
| 10 | 12.31 | 3,970 |
| 12 p.m. | 12.40 | 4,190 |
| *May 1* | | |
| 1 a.m. | 12.43 | 4,270 |
| 2 | 12.47 | 4,370 |
| 3 | 12.50 | 4,450 |
| 4 | 12.56 | 4,620 |
| 5 | 12.60 | 4,730 |
| 6 | 12.63 | 4,810 |
| 7 | 12.68 | 4,950 |
| 8 | 12.73 | 5,100 |
| 9 | 12.79 | 5,280 |
| 10 | 12.86 | 5,490 |
| 11 | 12.95 | 5,760 |
| 12 m. | 13.05 | 6,070 |
| 1 p.m. | 13.25 | 6,750 |
| 2 | 13.40 | 7,290 |
| 3 | 13.60 | 8,070 |
| 4 | 13.89 | 9,310 |
| 5 | 14.15 | 10,500 |
| 6 | 14.42 | 11,800 |
| 7 | 14.67 | 13,100 |
| 8 | 14.87 | 14,300 |
| 9 | 15.03 | 15,200 |
| 10 | 15.15 | 16,000 |
| 11 | 15.27 | 16,800 |
| 12 p.m. | 15.35 | 17,400 |
| *May 2* | | |
| 1 a.m. | 15.42 | 18,000 |
| 2 | 15.49 | 18,500 |
| 3 | 15.57 | 19,100 |
| 4 | 15.62 | 19,500 |
| 5 | 15.69 | 20,100 |
| 6 | 15.78 | 20,800 |
| 7 | 15.90 | 21,800 |
| 8 | 15.99 | 22,600 |
| 9 | 16.07 | 23,200 |
| 10 a.m. | 16.16 | 24,000 |
| *May 2*—Con. | | |
| 11 a.m. | 16.22 | 24,500 |
| 12 m. | 16.30 | 25,200 |
| 1 p.m. | 16.36 | 25,800 |
| 2 | 16.41 | 26,200 |
| 4 | 16.47 | 26,800 |
| 5 | 16.47 | 26,800 |
| 8 | 16.40 | 26,200 |
| 9 | 16.36 | 25,800 |
| 12 p.m. | 16.19 | 24,300 |
| *May 3* | | |
| 2 a.m. | 16.04 | 23,000 |
| 4 | 15.87 | 21,500 |
| 6 | 15.67 | 19,900 |
| 8 | 15.46 | 18,200 |
| 12 m. | 14.99 | 15,000 |
| 4 p.m. | 14.48 | 12,000 |
| 6 | 14.25 | 10,900 |
| 8 | 14.02 | 9,890 |
| 10 | 13.88 | 9,260 |
| 12 p.m. | 13.59 | 8,030 |
| *May 4* | | |
| 2 a.m. | 13.38 | 7,220 |
| 4 | 13.20 | 6,570 |
| 6 | 13.05 | 6,070 |
| 8 | 12.91 | 5,640 |
| 10 | 12.82 | 5,370 |
| 12 m. | 12.74 | 5,130 |
| 4 p.m. | 12.60 | 4,730 |
| 6 | 12.54 | 4,560 |
| 8 | 12.49 | 4,420 |
| 10 | 12.42 | 4,240 |
| 12 p.m. | 12.36 | 4,090 |
| *May 5* | | |
| 6 a.m. | 12.17 | 3,640 |
| 12 m. | 11.97 | 3,180 |
| 6 p.m. | 11.78 | 2,770 |
| 12 p.m. | 11.61 | 2,450 |
| *May 6* | | |
| 6 a.m. | 11.46 | 2,210 |
| 12 m. | 11.32 | 2,020 |
| 6 p.m. | 11.20 | 1,870 |
| 12 p.m. | 11.08 | 1,730 |
| *May 7* | | |
| 6 a.m. | 10.94 | 1,600 |
| 12 m. | 10.79 | 1,470 |
| 6 p.m. | 10.63 | 1,340 |
| 12 p.m. | 10.49 | 1,240 |
| *May 8* | | |
| 6 a.m. | 10.35 | 1,150 |
| 12 m. | 10.19 | 1,060 |
| 6 p.m. | 10.02 | 979 |
| 12 p.m. | 9.86 | 914 |

### 69. SALINE RIVER AT BENTON, ARK.

Location.—Lat 34°34'05", long 92°36'40", in NE¼ sec. 9, T. 2 S., R. 15 W., on left bank three-quarters of a mile west of Benton and 3 miles downstream from confluence of North Fork and Alum Fork.

Drainage area.—569 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 260.91 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current meter measurements.

Maxima.—April–May 1958: Discharge, 28,400 cfs 9 a.m. May 3 (gage height, 21.40 ft).

1938 to March 1958: Discharge, 67,000 cfs Apr. 17, 1939 (gage height, about 26.1 ft, from stage relation curve).

Flood of April 1927 reached a stage of 30.5 ft, from information by Arkansas State Highway Department.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 772 | 6,030 | 11 | 677 | 3,750 | 21 | 3,190 | 336 |
| 2 | 684 | 14,600 | 12 | 590 | 2,000 | 22 | 2,380 | 286 |
| 3 | 2,500 | 24,100 | 13 | 510 | 1,290 | 23 | 1,570 | 247 |
| 4 | 2,660 | 8,720 | 14 | 583 | 942 | 24 | 1,150 | 224 |
| 5 | 1,490 | 8,870 | 15 | 980 | 737 | 25 | 932 | 207 |
| 6 | 1,100 | 5,080 | 16 | 873 | 600 | 26 | 2,480 | 228 |
| 7 | 864 | 2,350 | 17 | 726 | 495 | 27 | 7,820 | 210 |
| 8 | 722 | 1,520 | 18 | 621 | 409 | 28 | 5,820 | 189 |
| 9 | 638 | 1,990 | 19 | 570 | 377 | 29 | 6,730 | 169 |
| 10 | 722 | 8,160 | 20 | 628 | 401 | 30 | 4,560 | 150 |
| | | | | | | 31 | | 134 |
| Monthly mean discharge | | | | | | | 1,851 | 3,058 |
| Runoff (thousands of acre-feet) | | | | | | | 110.2 | 188 |
| Runoff (inches) | | | | | | | 3.63 | 6.20 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 25* | | |
| 12 p.m. | 4.96 | 995 |
| *Apr. 26* | | |
| 2 a.m. | 5.48 | 1,280 |
| 4 | 5.71 | 1,420 |
| 6 | 6.25 | 1,750 |
| 8 | 7.10 | 2,360 |
| 10 | 7.74 | 2,820 |
| 12 m. | 8.03 | 3,050 |
| 2 p.m. | 8.10 | 3,110 |
| 6 | 8.00 | 3,030 |
| 10 | 7.85 | 2,910 |
| 12 p.m. | 8.06 | 3,080 |
| *Apr. 27* | | |
| 2 a.m. | 8.80 | 3,700 |
| 4 | 10.10 | 4,820 |
| 6 | 11.50 | 6,120 |
| 8 | 12.60 | 7,240 |
| 10 | 13.34 | 8,080 |
| 12 m. | 13.94 | 8,800 |
| 2 p.m. | 14.35 | 9,320 |
| 4 | 14.65 | 9,720 |
| 6 | 14.76 | 9,860 |
| 8 | 14.80 | 9,920 |
| 10 | 14.80 | 9,920 |
| 12 p.m. | 14.63 | 9,690 |
| *Apr. 28* | | |
| 2 a.m. | 14.24 | 9,180 |
| 4 | 13.60 | 8,390 |
| 6 | 12.80 | 7,460 |
| 8 | 12.00 | 6,610 |
| 10 | 11.20 | 5,830 |
| 12 m. | 10.58 | 5,250 |
| 2 p.m. | 10.02 | 4,750 |
| 4 | 9.59 | 4,370 |
| 8 | 8.90 | 3,780 |
| 12 p.m. | 8.40 | 3,360 |
| *Apr. 29* | | |
| 2 a.m. | 8.20 | 3,190 |
| 4 | 8.04 | 3,060 |
| 6 | 9.10 | 3,950 |
| 8 | 11.25 | 5,880 |
| 10 | 13.00 | 7,680 |
| 12 m. | 14.20 | 9,130 |
| 2 p.m. | 14.88 | 10,000 |
| 2:30 | 14.95 | 10,100 |
| 4 | 14.80 | 9,920 |
| 6 | 13.95 | 8,810 |
| 8 p.m. | 12.90 | 7,570 |
| 10 p.m. | 12.10 | 6,710 |
| 12 p.m. | 11.70 | 6,310 |
| *Apr. 30* | | |
| 4 a.m. | 11.30 | 5,920 |
| 8 | 10.62 | 5,290 |
| 12 m. | 9.70 | 4,460 |
| 4 p.m. | 8.90 | 3,780 |
| 8 | 8.32 | 3,290 |
| 12 p.m. | 7.86 | 2,920 |
| *May 1* | | |
| 2 a.m. | 7.69 | 2,790 |
| 4 | 7.56 | 2,690 |
| 6 | 7.48 | 2,630 |
| 8 | 7.54 | 2,680 |
| 10 | 8.65 | 3,570 |
| 12 m. | 10.50 | 5,180 |
| 2 p.m. | 12.40 | 7,020 |
| 4 | 13.70 | 8,510 |
| 6 | 14.49 | 9,390 |
| 8 | 14.98 | 10,200 |
| 10 | 15.35 | 10,700 |
| 12 p.m. | 15.64 | 11,100 |
| *May 2* | | |
| 2 a.m. | 15.80 | 11,400 |
| 6 | 15.94 | 11,600 |
| 8 | 16.04 | 11,800 |
| 10 | 16.28 | 12,200 |
| 12 m. | 16.76 | 13,200 |
| 2 p.m. | 17.45 | 14,700 |
| 4 | 18.16 | 16,400 |
| 6 | 18.50 | 17,300 |
| 8 | 18.96 | 18,700 |
| 10 | 19.52 | 20,400 |
| 12 p.m. | 20.00 | 22,000 |
| *May 3* | | |
| 2 a.m. | 20.40 | 23,600 |
| 4 | 20.70 | 24,900 |
| 6 | 21.00 | 26,400 |
| 8 | 21.32 | 28,000 |
| 9 | 21.40 | 28,400 |
| 10 | 21.38 | 28,300 |
| 12 m. | 21.15 | 27,100 |
| 2 p.m. | 20.80 | 25,400 |
| 4 | 20.50 | 24,000 |
| 6 | 20.10 | 22,400 |
| 8 | 19.56 | 20,500 |
| 10 | 19.02 | 18,800 |
| 12 p.m. | 18.34 | 16,900 |
| *May 4* | | |
| 2 a.m. | 17.60 | 15,000 |
| 4 | 16.65 | 13,000 |
| 6 | 15.60 | 11,100 |
| 8 | 14.65 | 9,720 |
| 10 | 13.75 | 8,570 |
| 12 m. | 12.92 | 7,590 |
| 2 p.m. | 12.20 | 6,810 |
| 4 | 11.60 | 6,210 |
| 6 | 11.00 | 5,640 |
| 8 | 10.52 | 5,200 |
| 10 | 10.20 | 4,910 |
| 12 p.m. | 10.22 | 4,930 |
| *May 5* | | |
| 2 a.m. | 10.75 | 5,400 |
| 4 | 11.40 | 6,020 |
| 6 | 12.20 | 6,810 |
| 8 | 13.20 | 7,910 |
| 10 | 14.12 | 9,030 |
| 12 m. | 14.95 | 10,100 |
| 2 p.m. | 15.44 | 10,800 |
| 4 | 15.65 | 11,200 |
| 6 | 15.66 | 11,200 |
| 8 | 15.44 | 10,800 |
| 10 | 14.90 | 10,100 |
| 12 p.m. | 14.20 | 9,130 |
| *May 6* | | |
| 2 a.m. | 13.28 | 8,010 |
| 4 | 12.40 | 7,020 |
| 6 | 11.62 | 6,230 |
| 8 | 10.90 | 5,540 |
| 12 m. | 9.78 | 4,530 |
| 2 p.m. | 9.40 | 4,200 |
| 4 | 9.08 | 3,930 |
| 6 | 8.76 | 3,660 |
| 8 | 8.50 | 3,440 |
| 10 | 8.25 | 3,230 |
| 12 p.m. | 8.02 | 3,050 |
| *May 7* | | |
| 4 a.m. | 7.66 | 2,760 |
| 8 | 7.32 | 2,510 |
| 12 m. | 7.05 | 2,320 |
| 4 p.m. | 6.80 | 2,120 |
| 8 | 6.60 | 1,980 |
| 12 p.m. | 6.40 | 1,820 |
| *May 8* | | |
| 6 a.m. | 6.16 | 1,650 |
| 12 m. | 5.92 | 1,490 |
| 6 p.m. | 5.73 | 1,370 |
| 12 p.m. | 5.60 | 1,290 |

### 70. SALINE RIVER AND GAMBLE CREEK NEAR SHERIDAN, ARK.

Location.—Lat 34°06'40", long 92°24'10", in sec. 15, T. 7 S., R. 13 W., on downstream side of bridge on U.S. Highway 167, 1 mile upstream from Gamble Creek, 1.6 miles downstream from Lost Creek, 6.4 miles upstream from Hurricane Creek, and 13½ miles south of Sheridan.

Drainage area.—1,129 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 152.86 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 48,000 cfs 10 p.m. May 3 (gage height, 18.97 ft).

1938 to March 1958; Discharge, 70,000 cfs Jan. 24, 1938 (gage height, 21.0 ft).

Remarks.—Gage-height record and results of discharge measurements furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 3,560 | 23,800 | 11 | 1,130 | 5,960 | 21 | 1,360 | 1,060 |
| 2 | 2,970 | 39,000 | 12 | 1,050 | 5,180 | 22 | 1,820 | 943 |
| 3 | 2,310 | 45,600 | 13 | 1,030 | 6,140 | 23 | 2,400 | 823 |
| 4 | 1,700 | 43,800 | 14 | 1,090 | 7,080 | 24 | 2,880 | 673 |
| 5 | 1,680 | 36,900 | 15 | 1,360 | 6,000 | 25 | 3,400 | 545 |
| 6 | 2,100 | 22,700 | 16 | 1,550 | 4,460 | 26 | 4,250 | 463 |
| 7 | 2,460 | 12,100 | 17 | 1,660 | 3,200 | 27 | 5,840 | 405 |
| 8 | 2,550 | 9,460 | 18 | 1,670 | 1,920 | 28 | 11,400 | 374 |
| 9 | 2,000 | 8,700 | 19 | 1,480 | 1,300 | 29 | 12,900 | 366 |
| 10 | 1,430 | 7,490 | 20 | 1,230 | 1,200 | 30 | 10,800 | 337 |
| | | | | | | 31 | | 302 |
| Monthly mean discharge | | | | | | | 3,102 | 9,622 |
| Runoff | | | | | | thousands of acre-feet | 184.6 | 591.6 |
| Runoff | | | | | | inches | 3.07 | 9.83 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 20* | | |
| 12 p.m. | 8.53 | 1,210 |
| *Apr. 21* | | |
| 4 a.m. | 8.77 | 1,270 |
| 12 m. | 9.09 | 1,350 |
| 4 p.m. | 9.30 | 1,400 |
| 8 | 9.57 | 1,470 |
| 12 p.m. | 9.87 | 1,550 |
| *Apr. 22* | | |
| 4 a.m. | 10.08 | 1,610 |
| 8 | 10.36 | 1,700 |
| 12 m. | 10.62 | 1,800 |
| 8 p.m. | 11.10 | 2,040 |
| 12 p.m. | 11.30 | 2,140 |
| *Apr. 23* | | |
| 4 a.m. | 11.48 | 2,230 |
| 8 | 11.64 | 2,320 |
| 12 m. | 11.79 | 2,400 |
| 4 p.m. | 11.93 | 2,490 |
| 8 | 12.05 | 2,560 |
| 12 p.m. | 12.18 | 2,640 |
| *Apr. 24* | | |
| 4 a.m. | 12.31 | 2,720 |
| 8 | 12.44 | 2,810 |
| 12 m. | 12.55 | 2,880 |
| 4 p.m. | 12.67 | 2,960 |
| 8 | 12.77 | 3,030 |
| 12 p.m. | 12.90 | 3,120 |
| *Apr. 25* | | |
| 4 a.m. | 13.06 | 3,240 |
| 8 | 13.17 | 3,330 |
| 12 m. | 13.26 | 3,400 |
| 4 p.m. | 13.34 | 3,480 |
| 8 | 13.40 | 3,530 |
| 12 p.m. | 13.50 | 3,660 |
| *Apr. 26* | | |
| 4 a.m. | 13.64 | 3,840 |
| 8 | 13.76 | 4,040 |
| 12 m. | 13.84 | 4,180 |
| 4 p.m. | 13.94 | 4,380 |
| 8 | 14.08 | 4,700 |
| 12 p.m. | 14.23 | 5,090 |
| *Apr. 27* | | |
| 4 a.m. | 14.33 | 5,390 |
| 8 | 14.37 | 5,510 |
| 12 m. | 14.44 | 5,720 |
| 4 p.m. | 14.50 | 5,900 |
| 8 | 14.62 | 6,320 |
| 12 p.m. | 14.88 | 7,320 |
| *Apr. 28* | | |
| 2 a.m. | 15.06 | 8,070 |
| 4 | 15.24 | 8,900 |
| 6 | 15.41 | 9,750 |
| 8 | 15.55 | 10,500 |
| 10 a.m. | 15.69 | 11,300 |
| 2 p.m. | 15.88 | 12,500 |
| 4 | 15.94 | 12,900 |
| 8 | 16.00 | 13,300 |
| 10 | 16.01 | 13,400 |
| 12 p.m. | 16.08 | 13,900 |
| *Apr. 29* | | |
| 8 a.m. | 16.00 | 13,300 |
| 4 p.m. | 15.87 | 12,500 |
| 12 p.m. | 15.75 | 11,700 |
| *Apr. 30* | | |
| 8 a.m. | 15.62 | 10,900 |
| 12 m. | 15.56 | 10,400 |
| 6 p.m. | 15.58 | 10,700 |
| 12 p.m. | 15.57 | 10,600 |
| *May 1* | | |
| 4 a.m. | 15.60 | 10,800 |
| 6 | 15.76 | 11,800 |
| 8 | 16.00 | 13,300 |
| 10 | 16.35 | 15,900 |
| 12 m. | 16.92 | 21,200 |
| 2 p.m. | 17.52 | 27,400 |
| 4 | 18.02 | 33,300 |
| 6 | 18.32 | 37,200 |
| 8 | 18.45 | 39,200 |
| 10 | 18.48 | 39,600 |
| 12 p.m. | 18.47 | 39,400 |
| *May 2* | | |
| 2 a.m. | 18.41 | 38,600 |
| 4 | 18.35 | 37,600 |
| 6 | 18.30 | 36,900 |
| 8 | 18.31 | 37,000 |
| 12 m. | 18.37 | 38,000 |
| 4 p.m. | 18.47 | 39,400 |
| 8 | 18.58 | 41,100 |
| 12 p.m. | 18.66 | 42,300 |
| *May 3* | | |
| 4 a.m. | 18.73 | 43,400 |
| 8 | 18.81 | 44,800 |
| 12 m. | 18.86 | 45,600 |
| 6 p.m. | 18.95 | 47,400 |
| 10 | 18.97 | 48,000 |
| 12 p.m. | 18.96 | 47,700 |
| *May 4* | | |
| 4 a.m. | 18.92 | 46,600 |
| 8 | 18.85 | 45,400 |
| 4 p.m. | 18.65 | 42,200 |
| 8 | 18.57 | 41,000 |
| 12 p.m. | 18.50 | 39,900 |
| *May 5* | | |
| 4 a.m. | 18.49 | 39,800 |
| 8 | 18.44 | 39,000 |
| 12 m. | 18.35 | 37,600 |
| 4 p.m. | 18.23 | 36,000 |
| 8 | 18.05 | 33,600 |
| 12 p.m. | 17.83 | 31,000 |
| *May 6* | | |
| 4 a.m. | 17.58 | 28,100 |
| 8 | 17.29 | 24,900 |
| 12 m. | 17.04 | 22,400 |
| 4 p.m. | 16.79 | 19,900 |
| 8 | 16.54 | 17,600 |
| 12 p.m. | 16.31 | 15,600 |
| *May 7* | | |
| 4 a.m. | 16.09 | 13,900 |
| 8 | 15.92 | 12,800 |
| 12 m. | 15.78 | 11,900 |
| 4 p.m. | 15.64 | 11,000 |
| 8 | 15.54 | 10,400 |
| 12 p.m. | 15.47 | 10,000 |
| *May 8* | | |
| 6 a.m. | 15.39 | 9,650 |
| 12 m. | 15.33 | 9,350 |
| 6 p.m. | 15.30 | 9,200 |
| 12 p.m. | 15.29 | 9,150 |
| *May 9* | | |
| 6 a.m. | 15.26 | 9,000 |
| 12 m. | 15.19 | 8,660 |
| 6 p.m. | 15.14 | 8,430 |
| 12 p.m. | 15.10 | 8,250 |
| *May 10* | | |
| 6 a.m. | 15.02 | 7,890 |
| 12 m. | 14.93 | 7,520 |
| 6 p.m. | 14.83 | 7,120 |
| 12 p.m. | 14.71 | 6,640 |
| *May 11* | | |
| 6 a.m. | 14.61 | 6,280 |
| 12 m. | 14.50 | 5,900 |
| 6 p.m. | 14.41 | 5,630 |
| 12 p.m. | 14.33 | 5,390 |

### 71. HURRICANE CREEK NEAR SHERIDAN, ARK.

Location.—Lat 34°13'30", long 92°21'45", in sec. 1, T. 6 S., R. 13 W., on downstream side of bridge on State Highway 35, 5¾ miles southeast of Sheridan, and 11 miles upstream from mouth.

Drainage area.—270 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 180.10 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 16,000 cfs 8 a.m. May 3 (gage height, 14.48 ft).

1938–40, 1946 to March 1958: Gage height, 15.4 ft Feb. 13, 1950.

Remarks.—Gage-height record and results of discharge measurements furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 838 | 6,220 | 11 | 156 | 1,580 | 21 | 504 | 224 |
| 2 | 530 | 11,600 | 12 | 153 | 1,860 | 22 | 1,010 | 188 |
| 3 | 386 | 13,800 | 13 | 144 | 1,900 | 23 | 1,150 | 122 |
| 4 | 334 | 7,490 | 14 | 202 | 1,290 | 24 | 731 | 88 |
| 5 | 525 | 4,310 | 15 | 436 | 471 | 25 | 476 | 68 |
| 6 | 787 | 2,640 | 16 | 717 | 262 | 26 | 1,620 | 56 |
| 7 | 498 | 2,140 | 17 | 550 | 190 | 27 | 7,280 | 48 |
| 8 | 254 | 1,840 | 18 | 308 | 148 | 28 | 5,790 | 40 |
| 9 | 185 | 1,330 | 19 | 212 | 132 | 29 | 3,300 | 36 |
| 10 | 150 | 1,280 | 20 | 208 | 179 | 30 | 2,500 | 32 |
| | | | | | | 31 | | 30 |
| Monthly mean discharge | | | | | | | 1,064 | 1,987 |
| Runoff | | | | | | thousands of acre-feet | 63.34 | 122.2 |
| Runoff | | | | | | inches | 4.40 | 8.48 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge |
|---|---|---|
| *Apr. 24* | | |
| 12 p.m. | 6.63 | 460 |
| *Apr. 25* | | |
| 6 a.m. | 6.43 | 423 |
| 12 m. | 6.67 | 469 |
| 6 p.m. | 6.88 | 513 |
| 12 p.m. | 7.00 | 538 |
| *Apr. 26* | | |
| 2 a.m. | 7.36 | 624 |
| 4 | 8.00 | 790 |
| 8 | 9.43 | 1,270 |
| 12 m. | 10.46 | 1,750 |
| 2 p.m. | 10.74 | 1,930 |
| 6 | 11.09 | 2,190 |
| 10 | 11.28 | 2,380 |
| 12 p.m. | 11.43 | 2,600 |
| *Apr. 27* | | |
| 2 a.m. | 11.73 | 3,180 |
| 4 | 12.07 | 4,110 |
| 6 | 12.43 | 5,260 |
| 8 | 12.77 | 6,530 |
| 10 | 13.07 | 7,820 |
| 12 m. | 13.28 | 8,800 |
| 2 p.m. | 13.40 | 9,400 |
| 4 | 13.42 | 9,500 |
| 6 | 13.41 | 9,450 |
| 8 | 13.35 | 9,150 |
| 10 | 13.27 | 8,750 |
| 12 p.m. | 13.15 | 8,180 |
| *Apr. 28* | | |
| 2 a.m. | 13.06 | 7,770 |
| 4 | 12.94 | 7,230 |
| 6 | 12.82 | 6,730 |
| 8 | 12.70 | 6,250 |
| 10 | 12.62 | 5,930 |
| 12 m. | 12.52 | 5,570 |
| 2 p.m. | 12.45 | 5,320 |
| 4 | 12.35 | 4,980 |
| 8 | 12.20 | 4,500 |
| 10 | 12.13 | 4,290 |
| 12 p.m. | 12.08 | 4,140 |
| *Apr. 29* | | |
| 4 a.m. | 11.97 | 3,810 |
| 8 | 11.84 | 3,450 |
| 12 m. | 11.74 | 3,200 |
| *Apr. 29*—Con. | | |
| 4 p.m. | 11.66 | 3,020 |
| 8 | 11.58 | 2,860 |
| 12 p.m. | 11.52 | 2,740 |
| *Apr. 30* | | |
| 4 a.m. | 11.46 | 2,640 |
| 8 | 11.38 | 2,520 |
| 12 m. | 11.32 | 2,430 |
| 6 p.m. | 11.31 | 2,420 |
| 12 p.m. | 11.32 | 2,430 |
| *May 1* | | |
| 4 a.m. | 11.33 | 2,440 |
| 6 | 11.72 | 3,150 |
| 8 | 12.01 | 3,930 |
| 10 | 12.90 | 7,050 |
| 12 m. | 13.32 | 9,000 |
| 2 p.m. | 13.32 | 9,000 |
| 6 | 13.20 | 8,400 |
| 8 | 13.11 | 8,000 |
| 10 | 13.04 | 7,680 |
| 12 p.m. | 12.94 | 7,230 |
| *May 2* | | |
| 2 a.m. | 12.83 | 6,770 |
| 4 | 12.73 | 6,370 |
| 6 | 12.85 | 6,850 |
| 8 | 13.13 | 8,080 |
| 10 | 13.62 | 10,600 |
| 12 m. | 14.03 | 12,900 |
| 2 p.m. | 14.20 | 13,900 |
| 4 | 14.35 | 15,000 |
| 6 | 14.46 | 15,700 |
| 8 | 14.47 | 15,800 |
| 10 | 14.46 | 15,700 |
| 12 p.m. | 14.42 | 15,400 |
| *May 3* | | |
| 2 a.m. | 14.42 | 15,400 |
| 6 | 14.47 | 15,800 |
| 8 | 14.48 | 16,000 |
| 10 | 14.44 | 15,600 |
| 2 p.m. | 14.24 | 14,200 |
| 4 | 14.08 | 13,200 |
| 6 | 13.88 | 12,000 |
| 8 | 13.72 | 11,100 |
| 10 | 13.53 | 10,100 |
| 12 p.m. | 13.36 | 9,200 |
| *May 4* | | |
| 2 a.m. | 13.25 | 8,650 |
| 4 | 13.14 | 8,130 |
| 6 | 13.07 | 7,820 |
| 8 | 13.02 | 7,590 |
| 10 | 13.01 | 7,540 |
| 12 m. | 13.00 | 7,500 |
| 2 p.m. | 12.98 | 7,410 |
| 4 | 12.95 | 7,280 |
| 6 | 12.90 | 7,050 |
| 8 | 12.84 | 6,810 |
| 10 | 12.75 | 6,450 |
| 12 p.m. | 12.66 | 6,090 |
| *May 5* | | |
| 2 a.m. | 12.56 | 5,710 |
| 6 | 12.36 | 5,010 |
| 10 | 12.17 | 4,410 |
| 2 p.m. | 12.01 | 3,930 |
| 4 | 11.93 | 3,690 |
| 6 | 11.87 | 3,520 |
| 8 | 11.82 | 3,400 |
| 10 | 11.75 | 3,200 |
| 12 p.m. | 11.70 | 3,100 |
| *May 6* | | |
| 4 a.m. | 11.61 | 2,920 |
| 8 | 11.52 | 2,740 |
| 12 m. | 11.43 | 2,600 |
| 4 p.m. | 11.35 | 2,480 |
| 8 | 11.29 | 2,390 |
| 12 p.m. | 11.22 | 2,320 |
| *May 7* | | |
| 6 a.m. | 11.12 | 2,220 |
| 12 m. | 11.02 | 2,140 |
| 6 p.m. | 10.93 | 2,060 |
| 12 p.m. | 10.83 | 1,990 |
| *May 8* | | |
| 6 a.m. | 10.73 | 1,920 |
| 12 m. | 10.62 | 1,840 |
| 6 p.m. | 10.48 | 1,760 |
| 12 p.m. | 10.29 | 1,640 |
| *May 9* | | |
| 6 a.m. | 9.99 | 1,500 |
| 12 m. | 9.50 | 1,300 |
| 6 p.m. | 9.07 | 1,150 |
| 12 p.m. | 9.00 | 1,120 |

### 72. SALINE RIVER NEAR RYE, ARK.

Location.—Lat 33°42′, long 92°02′, on line between secs. 3 and 4, T. 12 S., R. 9 W., near left bank on downstream side of pier of bridge on State Highway 15, 4 miles southwest of Rye and 5 miles upstream from Hudgins Creek.

Drainage area.—2,062 sq mi.

Gage-height record.—Water-stage recorder graph. Altitude of gage is 95 ft (by barometer).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 70,500 cfs 2 p.m. May 3 (gage height, 30.31 ft).

1937 to March 1958: Discharge, 57,400 cfs Jan. 31, 1949 (gage height, 29.19 ft).

Maximum stage known, 30.5 ft in April 1927 (about 73,000 cfs).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 6,250 | 25,800 | 11 | 2,850 | 20,200 | 21 | 2,520 | 11,700 |
| 2 | 6,790 | 51,700 | 12 | 2,560 | 17,100 | 22 | 2,470 | 10,500 |
| 3 | 7,090 | 69,500 | 13 | 1,990 | 15,000 | 23 | 2,650 | 8,960 |
| 4 | 7,050 | 68,500 | 14 | 1,600 | 13,200 | 24 | 2,860 | 6,580 |
| 5 | 6,630 | 65,900 | 15 | 1,950 | 11,400 | 25 | 3,840 | 3,590 |
| 6 | 5,840 | 59,600 | 16 | 2,590 | 9,850 | 26 | 7,080 | 1,630 |
| 7 | 4,750 | 51,700 | 17 | 2,840 | 8,910 | 27 | 12,200 | 1,090 |
| 8 | 3,680 | 42,900 | 18 | 2,910 | 8,350 | 28 | 15,200 | 881 |
| 9 | 3,060 | 32,800 | 19 | 2,800 | 9,250 | 29 | 17,200 | 737 |
| 10 | 2,910 | 25,500 | 20 | 2,640 | 11,500 | 20 | 19,000 | 641 |
| | | | | | | 31 | | 578 |
| Monthly mean discharge | | | | | | | 5,460 | 21,470 |
| Runoff | | | | | | thousands of acre-feet | 324.9 | 1,320 |
| Runoff | | | | | | inches | 2.95 | 12.00 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *May 1* | | | *May 7* | | |
| 12 p.m. | 12.88 | 2,960 | 2 a.m. | 24.64 | 20,900 | 6 a.m. | 28.79 | 53,700 |
| | | | 4 | 24.74 | 21,400 | 12 m. | 28.60 | 51,800 |
| *Apr. 25* | | | 8 | 24.99 | 22,800 | 6 p.m. | 28.39 | 49,700 |
| | | | 12 m. | 25.25 | 24,400 | 12 p.m. | 28.19 | 47,700 |
| 2 a.m. | 13.04 | 3,050 | 2 p.m. | 25.44 | 25,600 | | | |
| 4 | 13.24 | 3,160 | 4 | 25.72 | 27,400 | *May 8* | | |
| 6 | 13.53 | 3,320 | 6 | 25.97 | 29,100 | | | |
| 8 | 13.85 | 3,400 | 8 | 26.23 | 31,000 | 6 a.m. | 27.96 | 45,400 |
| 10 | 14.18 | 3,680 | 10 | 26.53 | 33,300 | 12 m. | 27.70 | 43,100 |
| 12 m. | 14.48 | 3,850 | 12 p.m. | 26.85 | 35,800 | 6 p.m. | 27.41 | 40,500 |
| 2 p.m. | 14.80 | 4,040 | | | | 12 p.m. | 27.09 | 37,800 |
| 4 | 15.09 | 4,210 | *May 2* | | | | | |
| 8 | 15.55 | 4,510 | | | | *May 9* | | |
| 12 p.m. | 15.92 | 4,750 | 2 a.m. | 27.15 | 38,300 | | | |
| | | | 4 | 27.44 | 40,800 | 6 a.m. | 26.77 | 35,200 |
| *Apr. 26* | | | 6 | 27.70 | 43,100 | 12 m. | 26.44 | 32,600 |
| | | | 10 | 28.35 | 49,300 | 6 p.m. | 26.11 | 30,100 |
| 2 a.m. | 16.20 | 4,930 | 12 m. | 28.65 | 52,300 | 12 p.m. | 25.88 | 28,500 |
| 4 | 16.51 | 5,150 | 2 p.m. | 28.91 | 54,900 | | | |
| 6 | 16.95 | 5,460 | 4 | 29.18 | 57,800 | *May 10* | | |
| 8 | 17.46 | 5,840 | 6 | 29.41 | 60,300 | | | |
| 10 | 18.05 | 6,310 | 8 | 29.60 | 62,400 | 6 a.m. | 25.65 | 26,900 |
| 12 m. | 18.63 | 6,820 | 10 | 29.76 | 64,200 | 12 m. | 25.44 | 25,600 |
| 2 p.m. | 19.20 | 7,370 | 12 p.m. | 29.90 | 65,700 | 6 p.m. | 25.19 | 24,000 |
| 4 | 19.82 | 8,030 | | | | 12 p.m. | 24.94 | 22,500 |
| 6 | 20.40 | 8,710 | *May 3* | | | | | |
| 8 | 20.82 | 9,250 | | | | *May 11* | | |
| 10 | 21.12 | 9,670 | 2 a.m. | 30.08 | 67,800 | | | |
| 12 p.m. | 21.37 | 10,100 | 4 | 30.14 | 68,500 | 6 a.m. | 24.70 | 21,200 |
| | | | 6 | 30.20 | 69,200 | 12 m. | 24.47 | 20,000 |
| *Apr. 27* | | | 8 | 30.26 | 69,900 | 6 p.m. | 24.25 | 19,000 |
| | | | 10 | 30.28 | 70,200 | 12 p.m. | 24.08 | 18,300 |
| 2 a.m. | 21.63 | 10,500 | 12 m. | 30.30 | 70,400 | | | |
| 4 | 21.85 | 11,000 | 2 p.m. | 30.31 | 70,500 | *May 12* | | |
| 8 | 22.18 | 11,800 | 4 | 30.30 | 70,400 | | | |
| 10 | 22.30 | 12,100 | 6 | 30.29 | 70,300 | 6 a.m. | 23.92 | 17,600 |
| 12 m. | 22.40 | 12,300 | 8 | 30.27 | 70,000 | 12 m. | 23.78 | 17,000 |
| 4 p.m. | 22.60 | 12,900 | 10 | 30.24 | 69,700 | 6 p.m. | 23.65 | 16,500 |
| 6 | 22.68 | 13,100 | 12 p.m. | 30.21 | 69,300 | 12 p.m. | 23.52 | 16,000 |
| 8 | 22.77 | 13,400 | | | | | | |
| 10 | 22.85 | 13,600 | *May 4* | | | *May 13* | | |
| 12 p.m. | 22.92 | 13,900 | | | | | | |
| | | | 6 a.m. | 30.14 | 68,500 | 6 a.m. | 23.39 | 15,500 |
| *Apr. 28* | | | 12 m. | 30.14 | 68,500 | 12 m. | 23.26 | 15,000 |
| | | | 6 p.m. | 30.12 | 68,200 | 6 p.m. | 23.12 | 14,500 |
| 6 a.m. | 23.13 | 14,600 | 12 p.m. | 30.12 | 68,200 | 12 p.m. | 22.99 | 14,100 |
| 12 m. | 23.33 | 15,300 | | | | | | |
| 6 p.m. | 23.48 | 15,800 | *May 5* | | | *May 14* | | |
| 12 p.m. | 23.62 | 16,400 | | | | | | |
| | | | 6 a.m. | 30.02 | 67,000 | 6 a.m. | 22.86 | 13,700 |
| *Apr. 29* | | | 12 m. | 29.94 | 66,100 | 12 m. | 22.70 | 13,200 |
| | | | 6 p.m. | 29.80 | 64,600 | 6 p.m. | 22.53 | 12,700 |
| 6 a.m. | 23.73 | 16,800 | 12 p.m. | 29.68 | 63,300 | 12 p.m. | 22.37 | 12,200 |
| 12 m. | 23.83 | 17,200 | | | | | | |
| 6 p.m. | 23.93 | 17,600 | *May 6* | | | *May 15* | | |
| 12 p.m. | 24.01 | 18,000 | | | | | | |
| | | | 6 a.m. | 29.53 | 61,600 | 6 a.m. | 22.20 | 11,800 |
| *Apr. 30* | | | 12 m. | 29.37 | 59,900 | 12 m. | 22.01 | 11,300 |
| | | | 6 p.m. | 29.17 | 57,700 | 6 p.m. | 21.82 | 10,900 |
| 6 a.m. | 24.12 | 18,400 | 12 p.m. | 28.97 | 55,500 | 12 p.m. | 21.64 | 10,600 |
| 12 m. | 24.20 | 18,800 | | | | | | |
| 6 p.m. | 24.38 | 19,600 | | | | | | |
| 12 p.m. | 24.57 | 20,600 | | | | | | |

### 73. BAYOU BARTHOLOMEW NEAR STAR CITY, ARK.

Location.—Lat 33°57'40", long 91°47'05", in SW¼ sec. 1, T. 9 S., R. 7 W., on downstream side of bridge on State Highway 11, 3.7 miles east of Star City, and 10.7 miles upstream from Deep Bayou.

Drainage area.—215 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 153.25 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 4,000 cfs 10 p.m. May 2 (gage height, 26.29 ft).

1941 to March 1958: Discharge, 2,860 cfs May 18, 1953 (gage height, 23.97 ft).

Remarks.—Gage-height record and results of discharge measurements furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 582 | 3,070 | 11 | 241 | 3,080 | 21 | 301 | 1,820 |
| 2 | 565 | 3,900 | 12 | 226 | 2,940 | 22 | 316 | 1,670 |
| 3 | 541 | 3,950 | 13 | 217 | 2,800 | 23 | 327 | 1,510 |
| 4 | 512 | 3,860 | 14 | 211 | 2,630 | 24 | 322 | 1,350 |
| 5 | 480 | 3,800 | 15 | 213 | 2,480 | 25 | 326 | 1,220 |
| 6 | 442 | 3,640 | 16 | 214 | 2,330 | 26 | 510 | 1,080 |
| 7 | 404 | 3,500 | 17 | 230 | 2,170 | 27 | 1,020 | 960 |
| 8 | 362 | 3,380 | 18 | 243 | 2,000 | 28 | 1,360 | 850 |
| 9 | 312 | 3,240 | 19 | 256 | 1,980 | 29 | 1,720 | 750 |
| 10 | 266 | 3,210 | 20 | 280 | 1,950 | 30 | 2,060 | 670 |
| | | | | | | 31 | | 610 |
| Monthly mean discharge | | | | | | | 502 | 2,335 |
| Runoff | | | | | | thousands of acre-feet | 29.87 | 143.6 |
| Runoff | | | | | | inches | 2.60 | 12.52 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 30* | | | *May 3* | | |
| 12 p.m. | 11.98 | 340 | 4 a.m. | 21.00 | 1,890 | 6 a.m. | 26.27 | 3,990 |
| *Apr. 26* | | | 8 | 21.11 | 1,920 | 12 m. | 26.24 | 3,950 |
| | | | 12 m. | 21.40 | 2,000 | 6 p.m. | 26.22 | 3,900 |
| 4 a.m. | 12.21 | 365 | 4 p.m. | 21.97 | 2,170 | 12 p.m. | 26.19 | 3,870 |
| 8 | 12.67 | 416 | 8 | 22.32 | 2,280 | *May 4* | | |
| 12 m. | 13.24 | 481 | 12 p.m. | 22.68 | 2,390 | | | |
| 4 p.m. | 13.95 | 568 | *May 1* | | | 6 a.m. | 26.15 | 3,820 |
| 8 | 14.74 | 674 | | | | 12 m. | 26.20 | 3,880 |
| 12 p.m. | 15.42 | 769 | 2 a.m. | 22.84 | 2,450 | 6 p.m. | 26.20 | 3,880 |
| *Apr. 27* | | | 6 | 23.20 | 2,570 | 12 p.m. | 26.21 | 3,890 |
| | | | 8 | 23.70 | 2,750 | *May 5* | | |
| 4 a.m. | 16.07 | 866 | 10 | 24.17 | 2,950 | | | |
| 8 | 16.58 | 947 | 12 m. | 24.58 | 3,130 | 12 m. | 26.14 | 3,810 |
| 12 m. | 17.07 | 1,030 | 2 p.m. | 24.80 | 3,240 | 12 p.m. | 26.06 | 3,740 |
| 8 p.m. | 17.88 | 1,170 | 4 | 25.05 | 3,360 | *May 6* | | |
| 12 p.m. | 18.18 | 1,230 | 6 | 25.38 | 3,530 | | | |
| *Apr. 28* | | | 8 | 25.57 | 3,620 | 12 m. | 25.98 | 3,640 |
| | | | 10 | 25.68 | 3,680 | 12 p.m. | 25.90 | 3,550 |
| 4 a.m. | 18.41 | 1,280 | 12 p.m. | 25.76 | 3,720 | *May 7* | | |
| 12 m. | 18.81 | 1,360 | *May 2* | | | | | |
| 4 p.m. | 19.00 | 1,400 | | | | 12 m. | 25.83 | 3,500 |
| 8 | 19.24 | 1,450 | 2 a.m. | 25.81 | 3,740 | 12 p.m. | 25.76 | 3,430 |
| 12 p.m. | 19.56 | 1,530 | 6 | 25.87 | 3,780 | *May 8* | | |
| *Apr. 29* | | | 10 | 26.10 | 3,900 | | | |
| | | | 12 m. | 26.14 | 3,920 | 12 m. | 25.68 | 3,380 |
| 4 a.m. | 19.83 | 1,590 | 2 p.m. | 26.21 | 3,970 | 12 p.m. | 25.62 | 3,320 |
| 12 m. | 20.40 | 1,730 | 4 | 26.24 | 3,980 | | | |
| 4 p.m. | 20.62 | 1,790 | 6 | 26.27 | 4,000 | | | |
| 8 | 20.76 | 1,820 | 10 | 26.29 | 4,000 | | | |
| 12 p.m. | 20.89 | 1,860 | 12 p.m. | 26.28 | 4,000 | | | |

### 74. BAYOU BARTHOLOMEW NEAR McGEHEE, ARK.

Location.—Lat 33°37'40", long 91°26'45", in W½ sec. 30, T. 12S., R. 3 W., near center of stream on downstream side of pier of bridge on State Highway 4, 2.7 miles west of McGehee, and 17.5 miles downstream from Ables Creek.

Drainage area.—592 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 121.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 6,870 cfs 4–8 a.m. May 11 (gage height, 24.49 ft).

1938 to March 1958; Discharge, 5,700 cfs May 25, 1953 (gage height, 22.5 ft).

Flood of May 11, 1958 was the highest known since at least 1930.

Remarks.—Gage-height and discharge measurements records furnished by Corps of Engineers.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,150 | 3,550 | 11 | 831 | 6,870 | 21 | 422 | 6,160 |
| 2 | 1,180 | 4,500 | 12 | 784 | 6,850 | 22 | 400 | 6,060 |
| 3 | 1,170 | 5,160 | 13 | 732 | 6,800 | 23 | 406 | 5,960 |
| 4 | 1,150 | 5,680 | 14 | 687 | 6,700 | 24 | 426 | 5,920 |
| 5 | 1,120 | 6,180 | 15 | 654 | 6,560 | 25 | 466 | 5,860 |
| 6 | 1,070 | 6,480 | 16 | 602 | 6,420 | 26 | 681 | 5,760 |
| 7 | 1,030 | 6,640 | 17 | 558 | 6,280 | 27 | 1,160 | 5,620 |
| 8 | 982 | 6,700 | 18 | 516 | 6,130 | 28 | 1,680 | 5,440 |
| 9 | 928 | 6,760 | 19 | 485 | 6,110 | 29 | 2,270 | 5,220 |
| 10 | 876 | 6,840 | 20 | 452 | 6,240 | 30 | 2,830 | 4,980 |
| | | | | | | 31 | | 4,700 |
| Monthly mean discharge | | | | | | | 923 | 5,972 |
| Runoff | | | | | | thousands of acre-feet | 54.94 | 367.2 |
| Runoff | | | | | | inches | 1.74 | 11.63 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *May 1*—Con. | | | *May 7* | | |
| 12 p.m. | 6.92 | 489 | 12 m. | 17.86 | 3,480 | 4 a.m. | 24.10 | 6,600 |
| *Apr. 26* | | | 2 p.m. | 18.02 | 3,550 | 12 m. | 24.16 | 6,640 |
| 4 a.m. | 7.20 | 532 | 4 | 18.50 | 3,750 | 4 p.m. | 24.18 | 6,660 |
| 8 | 7.67 | 607 | 8 | 18.94 | 3,940 | 12 p.m. | 24.22 | 6,680 |
| 12 m. | 8.10 | 678 | 12 p.m. | 19.30 | 4,090 | *May 8* | | |
| 4 p.m. | 8.52 | 754 | *May 2* | | | 12 m. | 24.25 | 6,700 |
| 8 | 8.90 | 822 | 4 a.m. | 19.70 | 4,270 | 12 p.m. | 24.28 | 6,730 |
| 12 p.m. | 9.28 | 896 | 8 | 19.95 | 4,380 | *May 9* | | |
| *Apr. 27* | | | 12 m. | 20.20 | 4,500 | 12 m. | 24.30 | 6,740 |
| 4 a.m. | 9.88 | 1,020 | 4 p.m. | 20.50 | 4,640 | 12 p.m. | 24.40 | 6,810 |
| 8 | 10.14 | 1,080 | 8 | 20.74 | 4,760 | *May 10* | | |
| 12 m. | 10.50 | 1,160 | 12 p.m. | 20.96 | 4,860 | 12 m. | 24.46 | 6,850 |
| 8 p.m. | 11.18 | 1,320 | *May 3* | | | 12 p.m. | 24.47 | 6,860 |
| 12 p.m. | 11.53 | 1,410 | 4 a.m. | 21.18 | 4,970 | *May 11* | | |
| *Apr. 28* | | | 8 | 21.37 | 5,060 | 4 a.m. | 24.49 | 6,870 |
| 4 a.m. | 11.90 | 1,500 | 12 m. | 21.58 | 5,170 | 8 | 24.49 | 6,870 |
| 8 | 12.24 | 1,590 | 4 p.m. | 21.76 | 5,260 | 12 m. | 24.48 | 6,870 |
| 12 m. | 12.52 | 1,670 | 8 | 21.92 | 5,340 | 12 p.m. | 24.47 | 6,860 |
| 4 p.m. | 12.90 | 1,770 | 12 p.m. | 22.08 | 5,420 | *May 12* | | |
| 8 | 13.25 | 1,880 | *May 4* | | | 12 m. | 24.46 | 6,850 |
| 12 p.m. | 13.60 | 1,980 | 4 a.m. | 22.20 | 5,490 | 12 p.m. | 24.46 | 6,850 |
| *Apr. 29* | | | 8 | 22.34 | 5,570 | *May 13* | | |
| 4 a.m. | 14.00 | 2,100 | 12 m. | 22.54 | 5,680 | 12 m. | 24.47 | 6,790 |
| 8 | 14.22 | 2,170 | 4 p.m. | 22.72 | 5,780 | 12 p.m. | 24.44 | 6,770 |
| 12 m. | 14.54 | 2,270 | 8 | 22.87 | 5,860 | *May 14* | | |
| 4 p.m. | 14.82 | 2,370 | 12 p.m. | 23.04 | 5,950 | 12 m. | 24.41 | 6,680 |
| 8 | 15.08 | 2,460 | *May 5* | | | 12 p.m. | 24.37 | 6,650 |
| 12 p.m. | 15.34 | 2,540 | 4 a.m. | 23.20 | 6,050 | *May 15* | | |
| *Apr. 30* | | | 8 | 23.34 | 6,130 | 12 m. | 24.32 | 6,540 |
| 8 a.m. | 15.87 | 2,740 | 12 m. | 23.44 | 6,190 | 12 p.m. | 24.26 | 6,510 |
| 12 m. | 16.10 | 2,820 | 8 p.m. | 23.64 | 6,310 | | | |
| 8 p.m. | 16.66 | 3,020 | 12 p.m. | 23.72 | 6,360 | | | |
| 12 p.m. | 16.92 | 3,120 | *May 6* | | | | | |
| *May 1* | | | 4 a.m. | 23.80 | 6,410 | | | |
| 4 a.m. | 17.20 | 3,230 | 8 | 23.86 | 6,450 | | | |
| 8 a.m. | 17.46 | 3,320 | 12 m. | 23.92 | 6,480 | | | |
| | | | 4 p.m. | 23.97 | 6,510 | | | |
| | | | 12 p.m. | 24.06 | 6,570 | | | |

### 75. BAYOU BARTHOLOMEW AT WILMOT, ARK.

Location.—Lat 33°04'10", long 91°34'40" in SW¼ sec. 1, T. 19 S., R. 5 W., on downstream side of bridge on State Highway 52, 0.9 mile northwest of Wilmot and 19.7 miles upstream from Overflow Creek.

Drainage area.—1,170 sq. mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 85.17 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 8,000 cfs May 23 (gage height, 26.16 ft); 1925 to March 1958: Discharge, 7,100 cfs Jan. 12, 1932 (gage height, 26.3 ft).

Remarks.—Gage-height record and results of discharge measurements furnished by Corps of Engineers.

*Mean discharge in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,210 | 4,460 | 11 | 1,820 | 7,580 | 21 | 1,240 | 7,890 |
| 2 | 2,210 | 4,870 | 12 | 1,760 | 7,630 | 22 | 1,200 | 7,920 |
| 3 | 2,200 | 5,240 | 13 | 1,690 | 7,670 | 23 | 1,170 | 7,970 |
| 4 | 2,170 | 5,910 | 14 | 1,630 | 7,700 | 24 | 1,120 | 7,960 |
| 5 | 2,130 | 6,640 | 15 | 1,590 | 7,720 | 25 | 1,490 | 7,920 |
| 6 | 2,100 | 6,940 | 16 | 1,530 | 7,720 | 26 | 2,020 | 7,900 |
| 7 | 2,050 | 7,120 | 17 | 1,460 | 7,730 | 27 | 2,440 | 7,890 |
| 8 | 1,990 | 7,220 | 18 | 1,400 | 7,730 | 28 | 3,000 | 7,890 |
| 9 | 1,940 | 7,340 | 19 | 1,340 | 7,800 | 29 | 3,530 | 7,870 |
| 10 | 1,880 | 7,530 | 20 | 1,290 | 7,890 | 30 | 4,050 | 7,840 |
| | | | | | | 31 | | 7,780 |
| Monthly mean discharge | | | | | | | 1,922 | 7,331 |
| Runoff | | | | | | thousands of acre-feet | 114.3 | 450.8 |
| Runoff | | | | | | inches | 1.83 | 7.22 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 29* | | | *May 4*—Con. | | |
| 12 p.m. | 9.82 | 1,160 | 4 a.m. | 19.36 | 3,330 | 10 a.m. | 24.81 | 5,880 |
| *Apr. 25* | | | 8 | 19.62 | 3,400 | 4 p.m. | 24.99 | 6,150 |
| 2 a.m. | 9.93 | 1,180 | 12 m. | 20.12 | 3,550 | 8 | 25.05 | 6,230 |
| 4 | 10.16 | 1,220 | 4 p.m. | 20.42 | 3,640 | 12 p.m. | 25.15 | 6,380 |
| 8 | 11.04 | 1,390 | 8 | 20.68 | 3,720 | *May 5* | | |
| 10 | 11.65 | 1,530 | 12 p.m. | 20.96 | 3,810 | 6 a.m. | 25.28 | 6,570 |
| 12 m. | 11.95 | 1,580 | *Apr. 30* | | | 12 m. | 25.34 | 6,660 |
| 4 p.m. | 12.30 | 1,660 | 6 a.m. | 21.40 | 3,960 | 6 p.m. | 25.40 | 6,750 |
| 8 | 12.49 | 1,700 | 12 m. | 21.67 | 4,050 | 12 p.m. | 25.45 | 6,820 |
| 12 p.m. | 12.64 | 1,730 | 6 p.m. | 21.93 | 4,140 | *May 6* | | |
| *Apr. 26* | | | 12 p.m. | 22.26 | 4,260 | 6 a.m. | 25.49 | 6,880 |
| 2 a.m. | 12.79 | 1,760 | *May 1* | | | 12 m. | 25.53 | 6,940 |
| 4 | 13.13 | 1,840 | 6 a.m. | 22.50 | 4,350 | 6 p.m. | 25.57 | 7,000 |
| 8 | 13.76 | 1,980 | 12 m. | 22.76 | 4,450 | 12 p.m. | 25.60 | 7,050 |
| 12 m. | 14.22 | 2,080 | 6 p.m. | 23.06 | 4,580 | *May 7* | | |
| 8 p.m. | 14.50 | 2,140 | 12 p.m. | 23.26 | 4,670 | 12 m. | 25.64 | 7,110 |
| 12 p.m. | 14.69 | 2,180 | *May 2* | | | 12 p.m. | 25.68 | 7,180 |
| *Apr. 27* | | | 6 a.m. | 23.46 | 4,780 | *May 8* | | |
| 4 a.m. | 14.93 | 2,240 | 12 m. | 23.62 | 4,870 | 12 m. | 25.70 | 7,210 |
| 8 | 15.27 | 2,310 | 6 p.m. | 23.76 | 4,960 | 12 p.m. | 25.73 | 7,260 |
| 12 m. | 15.76 | 2,420 | 12 p.m. | 23.92 | 5,060 | *May 9* | | |
| 8 p.m. | 16.74 | 2,660 | *May 3* | | | 12 m. | 25.75 | 7,290 |
| 12 p.m. | 17.14 | 2,760 | 6 a.m. | 24.05 | 5,160 | 12 p.m. | 25.88 | 7,500 |
| *Apr. 28* | | | 12 m. | 24.19 | 5,250 | *May 10* | | |
| 4 a.m. | 17.48 | 2,840 | 6 p.m. | 24.26 | 5,310 | 12 m. | 25.90 | 7,530 |
| 8 | 17.82 | 2,920 | 12 p.m. | 24.43 | 5,460 | 12 p.m. | 25.92 | 7,560 |
| 12 m. | 18.14 | 3,010 | *May 4* | | | | | |
| 4 p.m. | 18.42 | 3,080 | 6 a.m. | 24.54 | 5,570 | | | |
| 8 | 18.72 | 3,160 | 8 a.m. | 24.57 | 5,600 | | | |
| 12 p.m. | 18.98 | 3,220 | | | | | | |

### 76. BAYOU BARTHOLOMEW NEAR JONES, LA.

[Stage station]

Location.—Lat 32°59'25", long 91°39'20", in SE¼SW¼ sec. 9, T. 23 N., R. 8 E., on downstream side of right pier of bridge on State Highway 834, 1 mile downstream from Arkansas-Louisiana State line and 1.6 miles northwest of Jones.

Drainage area.—1,187 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 79.21 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage height, 28.24 ft May 21, 22.

October 1957 to March 1958: Gage height, 25.64 ft Dec. 1, 2, 1957.

Remarks.—Station established Oct. 16, 1957. In extreme floods considerable flow bypasses the station. Most flow is into the Bayou LaFourche-Boeuf River basins via interconnecting system of bayous and drainage ditches and passes the two stations Bayou LaFourche near Crew Lake and Boeuf River at Girard (see elsewhere in this report).

*Mean gage height, in feet, on indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 15.79 | 25.46 | 12 | 13.52 | 27.95 | 23 | 10.52 | 28.22 |
| 2 | 15.86 | 25.97 | 13 | 13.22 | 28.03 | 24 | 10.33 | 28.19 |
| 3 | 15.85 | 26.21 | 14 | 12.97 | 28.06 | 25 | 11.96 | 28.16 |
| 4 | 15.75 | 26.59 | 15 | 12.80 | 28.08 | 26 | 15.23 | 28.14 |
| 5 | 15.59 | 26.95 | 16 | 12.53 | 28.08 | 27 | 20.29 | 28.10 |
| 6 | 15.36 | 27.11 | 17 | 12.24 | 28.07 | 28 | 22.60 | 28.07 |
| 7 | 15.06 | 27.21 | 18 | 11.94 | 28.06 | 29 | 23.68 | 28.03 |
| 8 | 14.76 | 27.30 | 19 | 11.64 | 28.13 | 30 | 24.73 | 27.96 |
| 9 | 14.44 | 27.41 | 20 | 11.33 | 28.22 | 31 | ------ | 27.90 |
| 10 | 14.14 | 27.67 | 21 | 11.07 | 28.23 | | | |
| 11 | 13.82 | 27.84 | 22 | 10.79 | 28.23 | | | |

### 77. CHEMIN A HAUT BAYOU NEAR BEEKMAN, LA.

Location.—Lat 32°58'55", long 91°48'20", in SE¼ sec. 13, T 23 N., R. 6E., near center of span on downstream side of bridge on parish road, 1½ miles downstream from Arkansas-Louisiana State line and 6 miles northeast of Beekman.

Drainage area.—271 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 85.58 ft above mean sea level. Water-stage recorder on Bayou Bartholomew near Beekman used as auxiliary gage. Datum of auxiliary gage is 70.60 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 29,500 cfs 10 p.m. Apr. 26; gage height, 18.71 ft 6–8 a.m. Apr. 27.

1955 to March 1958: Discharge, 3,890 cfs Apr. 7, 1956; gage height, 12.78 ft Apr. 6, 1957.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 718 | 7,500 | 11 | 26 | 2,660 | 21 | 37 | 3,680 |
| 2 | 550 | 6,230 | 12 | 21 | 3,210 | 22 | 32 | 3,560 |
| 3 | 379 | 4,500 | 13 | 18 | 3,070 | 23 | 49 | 3,100 |
| 4 | 277 | 4,080 | 14 | 20 | 2,600 | 24 | 107 | 2,630 |
| 5 | 181 | 4,150 | 15 | 65 | 2,260 | 25 | 1,610 | 2,280 |
| 6 | 116 | 3,770 | 16 | 81 | 1,990 | 26 | 20,800 | 2,020 |
| 7 | 76 | 3,270 | 17 | 109 | 1,810 | 27 | 24,700 | 1,820 |
| 8 | 54 | 2,900 | 18 | 92 | 1,670 | 28 | 13,400 | 1,640 |
| 9 | 40 | 2,700 | 19 | 62 | 1,700 | 29 | 7,660 | 1,470 |
| 10 | 32 | 2,630 | 20 | 46 | 2,690 | 30 | 7,220 | 1,300 |
| | | | | | | 31 | | 1,150 |
| Monthly mean discharge | | | | | | | 2,619 | 2,905 |
| Runoff | | | | | | thousands of acre-feet | 155.9 | 178.6 |
| Runoff | | | | | | inches | 10.78 | 12.36 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated times, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 23* | | | *Apr. 26*—Con. | | | *Apr. 29*—Con. | | |
| 12 m | 2.74 | 46 | 4 a.m | 14.80 | 10,300 | 12 p.m | 16.12 | 6,790 |
| 12 p.m | 3.29 | 70 | 6 | 15.55 | 13,000 | | | |
| | | | 8 | 16.20 | 16,200 | *Apr. 30* | | |
| *Apr. 24* | | | 10 | 16.78 | 19,700 | | | |
| | | | 12 m | 17.36 | 23,800 | 12 m | 16.21 | 7,200 |
| 12 m | 3.72 | 91 | 2 p.m | 17.63 | 25,900 | 12 p.m | 16.36 | 7,700 |
| 6 p.m | 3.87 | 100 | 4 | 17.92 | 27,800 | | | |
| 7 | 3.90 | 102 | 6 | 18.14 | 28,700 | *May 1* | | |
| 9 | 4.70 | 156 | 8 | 18.32 | 29,100 | | | |
| 12 p.m | 5.85 | 255 | 9 | 18.40 | 29,300 | 12 m | 16.34 | 7,480 |
| | | | 10 | 18.47 | 29,500 | 12 p.m | 16.34 | 7,360 |
| *Apr. 25* | | | 11 | 18.54 | 29,300 | | | |
| | | | 12 p.m | 18.58 | 29,000 | *May 2* | | |
| 2 a.m | 6.58 | 331 | | | | | | |
| 4 | 7.11 | 417 | *Apr. 27* | | | 12 m | 16.04 | 6,240 |
| 6 | 7.53 | 529 | | | | 12 p.m | 15.65 | 5,080 |
| 8 | 7.96 | 676 | 6 a.m | 18.71 | 27,500 | | | |
| 10 | 8.49 | 854 | 12 m | 18.62 | 24,600 | *May 3* | | |
| 12 m | 8.90 | 1,100 | 6 p.m | 18.47 | 22,700 | | | |
| 2 p.m | 9.24 | 1,280 | 12 p.m | 18.08 | 18,900 | 12 m | 15.34 | 4,430 |
| 4 | 9.62 | 1,560 | | | | 12 p.m | 15.15 | 4,060 |
| 6 | 10.19 | 2,010 | *Apr. 28* | | | | | |
| 8 | 11.17 | 3,020 | | | | *May 4* | | |
| 10 | 12.12 | 4,360 | 12 m | 17.41 | 12,800 | | | |
| 12 p.m | 13.05 | 6,070 | 12 p.m | 16.74 | 9,200 | 8 a.m | 14.97 | 3,770 |
| | | | | | | 4 p.m | 15.30 | 4,300 |
| *Apr. 26* | | | *Apr. 29* | | | 12 p.m | 15.31 | 4,260 |
| 2 a.m | 13.97 | 8,080 | 12 m | 16.27 | 7,320 | | | |

### 78. BAYOU BARTHOLOMEW NEAR BEEKMAN, LA.

Location.—Lat 32°52′20″, long 91°52′04″, in NW¼NW¼ sec. 28, T. 22 N., R. 6 E., near center of span on downstream side of bridge on State Highway 139, 0.8 mile downstream from Bayou De Glaize, 4 miles south of Beekman, and 7 miles north of Bastrop.

Drainage area.—1,645 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 70.60 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 14,700 cfs 8 a.m. May 2 (gage height, 28.30 ft).

1928–31, 1938 to March 1958: Discharge, 10,400 cfs Feb. 12, 1946 (gage height, 27.23 ft).

A discharge of 12,400 cfs (gage height, 25.78 ft) was measured by Corps of Engineers Jan. 12, 1932.

Remarks.—In extreme floods, considerable flow bypasses the station. Most flow is into the Bayou LaFourche-Boeuf River basins via interconnecting system of bayous and drainage ditches and passes the two stations Bayou LaFourche near Crew Lake and Boeuf River at Girard (see elsewhere in this report).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 3,160 | 14,300 | 11 | 2,250 | 9,950 | 21 | 1,610 | 10,000 |
| 2 | 3,160 | 14,600 | 12 | 2,160 | 9,870 | 22 | 1,530 | 10,200 |
| 3 | 3,090 | 13,700 | 13 | 2,090 | 9,920 | 23 | 1,450 | 10,300 |
| 4 | 3,010 | 13,300 | 14 | 2,030 | 9,860 | 24 | 1,410 | 10,100 |
| 5 | 2,900 | 13,400 | 15 | 2,000 | 9,700 | 25 | 1,960 | 9,820 |
| 6 | 2,790 | 12,500 | 16 | 2,000 | 9,520 | 26 | 4,760 | 9,560 |
| 7 | 2,680 | 11,400 | 17 | 1,940 | 9,350 | 27 | 9,620 | 9,340 |
| 8 | 2,580 | 10,700 | 18 | 1,870 | 9,210 | 28 | 13,500 | 9,130 |
| 9 | 2,470 | 10,200 | 19 | 1,790 | 9,250 | 29 | 14,000 | 8,960 |
| 10 | 2,370 | 10,100 | 20 | 1,690 | 9,550 | 30 | 13,800 | 8,810 |
| | | | | | | 31 | | 8,660 |
| Monthly mean discharge | | | | | | | 3,722 | 10,490 |
| Runoff | | | | | | thousands of acre-feet | 221.5 | 645.1 |
| Runoff | | | | | | inches | 2.52 | 7.35 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 27* | | | *Apr. 30* | | |
| 12 m | 8.03 | 1,390 | 2 a.m. | 23.98 | 8,110 | 12 m | 28.07 | 13,700 |
| 12 p.m. | 8.21 | 1,440 | 4 | 24.50 | 8,430 | 12 p.m. | 28.15 | 14,000 |
| *Apr. 25* | | | 6 | 25.14 | 8,880 | *May 1* | | |
| | | | 8 | 25.80 | 9,380 | 12 m | 28.22 | 14,300 |
| 4 a.m. | 8.60 | 1,540 | 10 | 26.10 | 9,650 | 12 p.m. | 28.28 | 14,600 |
| 8 | 9.15 | 1,690 | 12 m | 26.30 | 9,840 | *May 2* | | |
| 12 m | 10.11 | 1,950 | 2 p.m. | 26.48 | 10,000 | | | |
| 4 p.m. | 10.96 | 2,180 | 4 | 26.62 | 10,200 | 8 a.m. | 28.30 | 14,700 |
| 8 | 11.76 | 2,400 | 6 | 26.74 | 10,300 | 4 p.m. | 28.27 | 14,600 |
| 12 p.m. | 12.47 | 2,600 | 8 | 26.85 | 10,500 | 12 p.m. | 28.19 | 14,200 |
| *Apr. 26* | | | 10 | 27.08 | 10,800 | *May 3* | | |
| | | | 12 p.m. | 27.22 | 11,000 | | | |
| 2 a.m. | 12.95 | 2,740 | *Apr. 28* | | | 12 m | 28.05 | 13,600 |
| 4 | 13.48 | 2,910 | | | | 12 p.m. | 27.94 | 13,200 |
| 6 | 14.40 | 3,250 | 4 a.m. | 27.70 | 12,300 | *May 4* | | |
| 8 | 15.30 | 3,620 | 8 | 28.00 | 13,400 | | | |
| 10 | 16.20 | 4,020 | 12 m | 28.14 | 14,000 | 8 a.m. | 27.84 | 12,800 |
| 12 m | 17.35 | 4,580 | 4 p.m. | 28.21 | 14,300 | 4 p.m. | 28.06 | 13,600 |
| 2 p.m. | 18.40 | 5,100 | 8 | 28.22 | 14,300 | 12 p.m. | 28.10 | 13,800 |
| 4 | 19.50 | 5,660 | 12 p.m. | 28.20 | 14,200 | *May 5* | | |
| 6 | 20.60 | 6,220 | *Apr. 29* | | | | | |
| 8 | 21.52 | 6,720 | | | | 12 m | 28.01 | 13,400 |
| 10 | 22.40 | 7,200 | 12 m | 28.14 | 14,000 | 12 p.m. | 27.95 | 13,200 |
| 12 p.m. | 23.30 | 7,700 | 12 p.m. | 28.12 | 13,900 | | | |

### 79. BAYOU DE LOUTRE NEAR LARAN, LA.

Location.—Lat 32°57'20", long 92°30'00", in NW¼ sec. 29, T. 23 N., R. 1 W., near center of span on downstream side of bridge on Parish road, 1½ miles southwest of Laran, 1½ miles downstream from Lion Creek, and 3 miles upstream from bridge on State Highway 550.

Drainage area.—141 sq mi.

Gage-height record.—Water-stage recorder graph except Apr. 27, and part of Apr. 28 when recorder was submerged. Graph was reconstructed for Apr. 28 on basis of high-water mark in gage house, outside gage reading, and partial recorder record. Datum of gage is 112.34 ft. above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 22,600 cfs (time unknown) Apr. 27 (gage height, 20.29 ft, from floodmark).

1956 to March 1958: Discharge, 2,700 cfs Apr. 30, 1957 (gage height, 11.10 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 244 | 4,040 | 11 | 59 | 527 | 21 | 105 | 1,550 |
| 2 | 200 | 3,620 | 12 | 60 | 491 | 22 | 102 | 1,530 |
| 3 | 179 | 2,620 | 13 | 61 | 440 | 23 | 110 | 922 |
| 4 | 148 | 1,700 | 14 | 78 | 404 | 24 | 116 | 565 |
| 5 | 111 | 1,150 | 15 | 97 | 303 | 25 | 671 | 338 |
| 6 | 87 | 830 | 16 | 101 | 159 | 26 | 5,440 | 153 |
| 7 | 72 | 897 | 17 | 105 | 89 | 27 | 20,000 | 81 |
| 8 | 65 | 765 | 18 | 107 | 84 | 28 | 15,000 | 63 |
| 9 | 60 | 579 | 19 | 108 | 395 | 29 | 7,160 | 56 |
| 10 | 60 | 525 | 20 | 100 | 1,150 | 30 | 4,520 | 50 |
| | | | | | | 31 | | 46 |
| Monthly mean discharge | | | | | | | 1,844 | 843 |
| Runoff, thousands of acre-feet | | | | | | | 109.7 | 51.81 |
| Runoff, inches | | | | | | | 14.59 | 6.89 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 27* | | | *May 1* | | |
| 12 m | 2.96 | 108 | ---------- | 20.29 | 22,600 | 12 m | 12.74 | 4,060 |
| 12 p.m | 3.31 | 137 | *Apr. 28* | | | 12 p.m | 12.65 | 3,980 |
| *Apr. 25* | | | 2 a.m | 19.90 | 21,000 | *May 2* | | |
| 6 a.m | 4.94 | 316 | 12 m | 18.12 | 14,700 | 12 m | 12.30 | 3,660 |
| 12 m | 7.08 | 667 | 12 p.m | 16.24 | 9,610 | 12 p.m | 11.71 | 3,170 |
| 6 p.m | 8.01 | 949 | *Apr. 29* | | | *May 3* | | |
| 12 p.m | 8.92 | 1,370 | 6 a.m | 15.58 | 8,200 | 12 m | 10.98 | 2,610 |
| *Apr. 26* | | | 12 m | 14.87 | 6,900 | 12 p.m | 10.16 | 2,080 |
| 4 a.m | 10.14 | 2,060 | 6 p.m | 14.36 | 6,070 | *May 4* | | |
| 8 | 11.40 | 2,920 | 12 p.m | 13.84 | 5,320 | 12 m | 9.48 | 1,670 |
| 12 m | 12.98 | 4,290 | *Apr. 30* | | | 12 p.m | 8.96 | 1,340 |
| 4 p.m | 14.65 | 6,530 | 12 m | 13.05 | 4,360 | | | |
| 8 | 16.15 | 9,410 | 12 p.m | 12.75 | 4,060 | | | |
| 12 p.m | 17.74 | 13,500 | | | | | | |

### 80. BAYOU DE LOUTRE NEAR DE LOUTRE, LA.

[Stage station]

Location.—Lat 32°50'25", long 92°18'39", in SW¼NW¼ sec. 6, T. 21 N., R. 2 E., near center of span on downstream side of bridge on State Highway 33, 0.3 mile upstream from Missouri Pacific Railroad bridge and half a mile north of de Loutre.

Drainage area.—302 sq mi.

Gage-height record.—Wire-weight gage read at 8 a.m. daily. Datum of gage is at mean sea level, datum of 1929, supplementary adjustment of 1941.

Maxima.—April–May 1958: Elevation, 98.55 ft 8:00 a.m. Apr. 28.
1948 to March 1958: Elevation, 90.72 ft May 19, 1953.

Remarks.—Records furnished by Corps of Engineers.

*Elevation, in feet, at 8 a.m. on indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 81.6 | 94.6 | 11 | 78.6 | 84.5 | 21 | 78.9 | 89.4 |
| 2 | 81.4 | 92.1 | 12 | 78.1 | 84.5 | 22 | 79.2 | 88.6 |
| 3 | 81.2 | 91.8 | 13 | 78.1 | 84.5 | 23 | 79.4 | 88.2 |
| 4 | 80.7 | 90.4 | 14 | 78.2 | 84.4 | 24 | 79.4 | 87.0 |
| 5 | 80.3 | 88.9 | 15 | 78.3 | 84.4 | 25 | 82.1 | 86.9 |
| 6 | 80.1 | 88.1 | 16 | 78.5 | 84.1 | 26 | 91.1 | 86.4 |
| 7 | 79.9 | 87.4 | 17 | 78.5 | 84.0 | 27 | 97.0 | 85.9 |
| 8 | 79.9 | 85.2 | 18 | 78.7 | 84.1 | 28 | 98.55 | 85.6 |
| 9 | 79.6 | 84.8 | 19 | 78.7 | 85.5 | 29 | 97.7 | 84.6 |
| 10 | 79.1 | 84.6 | 20 | 78.8 | 88.7 | 30 | 96.4 | 83.1 |
| | | | | | | 31 | | 82.7 |

### 81. BIG CREEK NEAR VIENNA, LA.

[Crest-stage gage]

Location.—Lat 32°37'50", long 92°43'25", in SW¼SW¼ sec. 18, T. 19 N., R. 3 W., on upstream side of bridge on State Highway 146, 0.2 mile downstream from Wafer Creek and 5.3 miles north of Vienna.

Drainage area.—68.9 sq mi.

Gage-height record.—Crest stages only. Datum of gage is 88.52 ft above mean sea level (Louisiana Geodetic Survey bench mark; levels by Louisiana Department of Public Works).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 2,350 cfs Apr. 27 (gage height, 45.08 ft).
1954 to March 1958: Discharge 3,280 cfs June 1, 1957 (gage height, 45.75 ft).

### 82. BAYOU D'ARBONNE NEAR DUBACH, LA.

Location.—Lat 32°40'50", long 92°39'10", in SW¼NW¼ sec. 35, T. 20 N., R. 3 W., near left bank on downstream side of bridge on U.S. Highway 167, 1½ miles south of Dubach and 8 miles upstream from Middle Fork Bayou D'Arbonne.

Drainage area.—355 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 83.25 ft above mean sea level, datum of 1929 (levels by Louisiana Department of Public Works).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 13,400 cfs 8 a.m. Apr. 28 (gage height, 20.90 ft).

1940 to March 1958: Discharge, 23,400 cfs Apr. 2, 1945 (gage height, 22.83 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 652 | 8,660 | 11 | 290 | 1,050 | 21 | 329 | 5,870 |
| 2 | 601 | 8,390 | 12 | 278 | 907 | 22 | 319 | 3,800 |
| 3 | 528 | 5,580 | 13 | 249 | 785 | 23 | 259 | 2,450 |
| 4 | 451 | 3,580 | 14 | 270 | 739 | 24 | 249 | 1,860 |
| 5 | 402 | 3,030 | 15 | 397 | 610 | 25 | 968 | 1,420 |
| 6 | 358 | 2,540 | 16 | 402 | 448 | 26 | 4,100 | 987 |
| 7 | 312 | 2,090 | 17 | 348 | 357 | 27 | 7,410 | 657 |
| 8 | 271 | 1,720 | 18 | 285 | 685 | 28 | 12,000 | 516 |
| 9 | 251 | 1,370 | 19 | 292 | 1,880 | 29 | 7,700 | 438 |
| 10 | 264 | 1,170 | 20 | 343 | 4,430 | 30 | 6,660 | 395 |
| | | | | | | 31 | | 348 |
| Monthly mean discharge | | | | | | | 1,575 | 2,218 |
| Runoff, thousands of acre-feet | | | | | | | 93.7 | 136.4 |
| Runoff, inches | | | | | | | 4.95 | 7.20 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 28* | | | *May 18*—Con. | | |
| 6 a.m. | 6.79 | 225 | 8 a.m. | 20.90 | 13,400 | 6 p.m. | 11.40 | 1,010 |
| 12 m. | 6.74 | 217 | 4 p.m. | 20.60 | 12,000 | 12 p.m. | 12.50 | 1,200 |
| 6 p.m. | 6.68 | 207 | 12 p.m. | 20.07 | 9,620 | *May 19* | | |
| 12 p.m. | 8.18 | 462 | *Apr. 29* | | | 6 a.m. | 13.86 | 1,480 |
| *Apr. 25* | | | 12 m. | 19.54 | 7,310 | 12 m. | 14.97 | 1,730 |
| | | | 12 p.m. | 19.35 | 6,550 | 6 p.m. | 16.10 | 2,040 |
| 6 a.m. | 9.42 | 672 | *Apr. 30* | | | 12 p.m. | 18.00 | 3,300 |
| 12 m. | 10.63 | 878 | | | | *May 20* | | |
| 6 p.m. | 12.70 | 1,240 | 12 m. | 19.27 | 6,240 | | | |
| 12 p.m. | 14.83 | 1,700 | 12 p.m. | 19.61 | 7,590 | 6 a.m. | 18.47 | 3,890 |
| | | | *May 1* | | | 12 m. | 18.60 | 4,200 |
| *Apr. 26* | | | | | | 6 p.m. | 18.89 | 4,970 |
| | | | 12 m. | 19.89 | 8,800 | 12 p.m. | 19.20 | 6,000 |
| 6 a.m. | 17.22 | 2,560 | 12 p.m. | 20.03 | 9,440 | *May 21* | | |
| 12 m. | 18.60 | 4,200 | *May 2* | | | | | |
| 6 p.m. | 19.10 | 5,650 | | | | 4 a.m. | 19.24 | 6,140 |
| 12 p.m. | 19.27 | 6,240 | 12 m. | 19.82 | 8,490 | 12 m. | 19.20 | 6,000 |
| | | | 12 p.m. | 19.50 | 7,150 | 12 p.m. | 18.88 | 4,940 |
| *Apr. 27* | | | *May 18* | | | *May 22* | | |
| 6 a.m. | 19.30 | 6,350 | | | | | | |
| 12 m. | 19.29 | 6,320 | 6 a.m. | 7.40 | 329 | 12 m. | 18.32 | 3,630 |
| 6 p.m. | 19.70 | 7,950 | 12m. | 9.21 | 637 | 12 p.m. | 17.68 | 2,980 |
| 12 p.m. | 20.56 | 11,800 | | | | | | |

### 83. CYPRESS CREEK NEAR UNIONVILLE, LA.

[Crest-stage gage]

Location.—Lat 32°39'35", long 92°35'20" on line between sec. 4 and 5, T. 19 N., R. 2 W., at bridge on State Highway 822, 0.4 mile downstream from Sixteen Branch and 3.2 miles east of Unionville.

Drainage area.—63.3 sq mi.

Gage-height record.—Crest stages only. Datum of gage is 57.83 ft above mean sea level (levels by Louisiana Department of Public Works).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 2,520 cfs Apr. 27 (gage height, 42.72 ft).
1953 to March 1958: Discharge, 4,200 cfs July 3, 1955 (gage height, 43.52 ft).

### 84. MIDDLE FORK BAYOU D'ARBONNE NEAR BERNICE, LA.

[Crest-stage gage]

Location.—Lat 32°45'50", long 92°39'30", in NE¼SE¼ sec. 34, T. 21 N., R. 3 W., near center of channel on downstream side of bridge on U.S. Highway 167, 4 miles south of Bernice and 8 miles upstream from mouth.

Drainage area.—178 sq mi.

Gage-height record.—Crest stages only. Datum of gage is 97.08 ft above mean sea level, datum of 1929 (levels by Louisiana Department of Public Works).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 28,000 cfs Apr. 27 (gage height, 13.86 ft).
1940 to March 1958: Discharge, 10,500 cfs Mar. 5, 1945 (gage height, 11.45 ft).

Remarks.—Discontinued as a gaging station Sept. 30, 1957.

### 85. CORNIE BAYOU NEAR THREE CREEKS, ARK.

Location.—Lat 33°02', long 92°56', in NW¼ sec. 36, T. 19 S., R. 18 W., on downstream side of bridge on State Highway 15, 4½ miles downstream from Pidgeon Roost Creek and 6 miles southwest of town of Three Creeks.

Drainage area.—180 sq mi.

Gage-height record.—Wire-weight gage read once daily.

Discharge record.—Stage discharge relation defined by current-meter measurements below 11,000 cfs and extended above on basis of contracted-opening measurement of peak flow.

Maxima.—April–May 1958: Discharge, 35,800 cfs 7 a.m. Apr. 27 (gage height, 15.50 ft).
1956 to March 1958: Discharge, 6,440 cfs Apr. 28, 1957 (gage height, 12.00 ft).
Maximum stage known since at least 1880, that of Apr. 27, 1958.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 249 | 5,320 | 11 | 76 | 262 | 21 | 73 | 994 |
| 2 | 198 | 4,210 | 12 | 82 | 257 | 22 | 76 | 1,090 |
| 3 | 158 | 2,120 | 13 | 79 | 260 | 23 | 92 | 736 |
| 4 | 128 | 1,380 | 14 | 99 | 282 | 24 | 89 | 482 |
| 5 | 107 | 1,090 | 15 | 174 | 159 | 25 | 356 | 296 |
| 6 | 93 | 928 | 16 | 205 | 108 | 26 | 10,800 | 146 |
| 7 | 78 | 710 | 17 | 188 | 88 | 27 | 28,900 | 92 |
| 8 | 68 | 546 | 18 | 131 | 98 | 28 | 12,400 | 75 |
| 9 | 65 | 432 | 19 | 88 | 408 | 29 | 4,410 | 75 |
| 10 | 72 | 320 | 20 | 77 | 656 | 30 | 2,150 | 72 |
| | | | | | | 31 | | 65 |
| Monthly mean discharge | | | | | | | 2.059 | 766 |
| Runoff | | | | | | thousands of acre-feet | 122.5 | 47.12 |
| Runoff | | | | | | inches | 12.76 | 4.91 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 27*—Con. | | | *May 1*—Con. | | |
| 12 p.m. | 5.10 | 83 | 12 p.m. | 14.00 | 20,500 | 12 p.m. | 11.43 | 5,490 |
| *Apr. 25* | | | *Apr. 28* | | | *May 2* | | |
| 2 a.m. | 5.47 | 102 | 2 a.m. | 13.80 | 18,900 | 4 a.m. | 11.34 | 5,150 |
| 6 | 6.32 | 151 | 4 | 13.60 | 17,400 | 8 | 11.23 | 4,750 |
| 8 | 6.75 | 182 | 6 | 13.35 | 15,600 | 12 m. | 11.08 | 4,210 |
| 10 | 7.18 | 217 | 8 | 13.14 | 14,100 | 4 p.m. | 10.93 | 3,700 |
| 12 m. | 7.58 | 255 | 10 | 12.94 | 12,800 | 8 | 10.80 | 3,280 |
| 2 p.m. | 7.96 | 296 | 12 m. | 12.73 | 11,600 | 12 p.m. | 10.67 | 2,870 |
| 4 | 8.38 | 349 | 2 p.m. | 12.54 | 10,500 | *May 3* | | |
| 6 | 8.84 | 431 | 4 | 12.35 | 9,550 | | | |
| 8 | 9.26 | 554 | 6 | 12.18 | 8,710 | | | |
| 10 | 9.68 | 840 | 8 | 12.04 | 8,060 | 6 a.m. | 10.50 | 2,380 |
| 12 p.m. | 10.10 | 1,460 | 10 | 11.90 | 7,440 | 12 m. | 10.36 | 2,020 |
| *Apr. 26* | | | 12 p.m. | 11.76 | 6,820 | 6 p.m. | 10.28 | 1,840 |
| | | | *Apr. 29* | | | 12 p.m. | 10.19 | 1,640 |
| 2 a.m. | 10.50 | 2,380 | | | | *May 4* | | |
| 4 | 10.90 | 3,600 | 4 a.m. | 11.53 | 5,880 | | | |
| 6 | 11.30 | 5,000 | 8 | 11.31 | 5,040 | 6 a.m. | 10.12 | 1,500 |
| 8 | 11.68 | 6,480 | 12 m. | 11.07 | 4,180 | 12 m. | 10.04 | 1,350 |
| 10 | 12.00 | 7,880 | 4 p.m. | 10.90 | 3,600 | 6 p.m. | 9.99 | 1,260 |
| 12 m. | 12.38 | 9,700 | 8 | 10.73 | 3,060 | 12 p.m. | 9.94 | 1,180 |
| 2 p.m. | 12.73 | 11,600 | 12 p.m. | 10.56 | 2,550 | *May 5* | | |
| 4 | 13.10 | 13,800 | | | | | | |
| 6 | 13.44 | 16,200 | *Apr. 30* | | | | | |
| 8 | 13.78 | 18,700 | | | | 6 a.m. | 9.91 | 1,140 |
| 10 | 14.12 | 21,500 | 4 a.m. | 10.46 | 2,280 | 12 m. | 9.87 | 1,080 |
| 12 p.m. | 14.40 | 24,000 | 8 | 10.36 | 2,020 | 6 p.m. | 9.84 | 1,040 |
| | | | 12 m. | 10.30 | 1,880 | 12 p.m. | 9.82 | 1,010 |
| *Apr. 27* | | | 4 p.m. | 10.30 | 1,880 | | | |
| | | | 8 | 10.38 | 2,070 | *May 6* | | |
| 2 a.m. | 14.80 | 27,900 | 12 p.m. | 10.70 | 2,960 | | | |
| 4 | 15.13 | 31,500 | | | | 6 a.m. | 9.80 | 980 |
| 6 | 15.46 | 35,300 | *May 1* | | | 12 m. | 9.76 | 932 |
| 7 | 15.50 | 35,800 | | | | 6 p.m. | 9.72 | 884 |
| 8 | 15.47 | 35,400 | 2 a.m. | 10.93 | 3,700 | 12 p.m. | 9.66 | 820 |
| 10 | 15.34 | 33,900 | 4 | 11.16 | 4,500 | | | |
| 12 m. | 15.15 | 31,700 | 6 | 11.34 | 5,150 | *May 7* | | |
| 2 p.m. | 14.96 | 29,600 | 8 | 11.45 | 5,570 | | | |
| 4 | 14.76 | 27,500 | 10 | 11.50 | 5,760 | 6 a.m. | 9.60 | 760 |
| 6 | 14.58 | 25,700 | 12 m. | 11.54 | 5,920 | 12 m. | 9.53 | 704 |
| 8 | 14.38 | 23,800 | 4 p.m. | 11.53 | 5,880 | 6 p.m. | 9.46 | 656 |
| 10 p.m. | 14.20 | 22,200 | 8 p.m. | 11.50 | 5,760 | 12 p.m. | 9.39 | 615 |

### 86. THREE CREEK NEAR THREE CREEKS, ARK.

Location.—Lat 33°04′, long 92°53′, in SE¼ sec. 17, T. 19 S., R. 17 W., on downstream side of bridge on State Highway 15, 2¼ miles southwest of town of Three Creeks and 2¼ miles upstream from small tributary.

Drainage area.—46 sq mi.

Gage-height record.—Staff gage read twice daily.

Discharge record.—Stage discharge relation defined by current-meter measurements below 2,300 cfs and extended above on basis of contracted-opening measurement of peak flow.

Maxima.—April–May 1958: Discharge, 11,300 cfs 6–8 p.m. Apr. 26 (gage height, 9.35 ft).

1956 to March 1958: Discharge, 1,450 cfs Apr. 27, 1957 (gage height, 5.82).

Maximum stage known since at least 1880, that of Apr. 26, 1958.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 38 | 1,700 | 11 | 14 | 126 | 21 | 14 | 430 |
| 2 | 26 | 877 | 12 | 13 | 91 | 22 | 28 | 118 |
| 3 | 20 | 447 | 13 | 12 | 32 | 23 | 16 | 31 |
| 4 | 18 | 414 | 14 | 31 | 20 | 24 | 13 | 18 |
| 5 | 18 | 334 | 15 | 81 | 15 | 25 | 374 | 13 |
| 6 | 18 | 167 | 16 | 72 | 13 | 26 | 7,910 | 9.6 |
| 7 | 18 | 66 | 17 | 32 | 11 | 27 | 6,420 | 9.0 |
| 8 | 16 | 37 | 18 | 18 | 20 | 28 | 1,390 | 8.3 |
| 9 | 15 | 22 | 19 | 13 | 384 | 29 | 1,370 | 10 |
| 10 | 13 | 30 | 20 | 11 | 772 | 30 | 2,380 | 9.0 |
| | | | | | | 31 | | 7.7 |
| Monthly mean discharge | | | | | | | 680 | 201 |
| Runoff | | | | | | thousands of acre-feet | 40.49 | 12.38 |
| Runoff | | | | | | inches | 16.50 | 5.05 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 27*—Con. | | | *May 2* | | |
| 12 p.m. | 2.55 | 26 | 10 p.m. | 6.30 | 2,900 | 6 a.m. | 5.27 | 1,050 |
| *Apr. 25* | | | 12 p.m. | 6.06 | 2,420 | 12 m. | 5.14 | 872 |
| | | | *Apr. 28* | | | 6 p.m. | 4.97 | 667 |
| 2 a.m. | 2.80 | 36 | 2 a.m. | 5.90 | 2,100 | 12 p.m. | 4.86 | 550 |
| 8 | 3.51 | 79 | 4 | 5.73 | 1,790 | *May 3* | | |
| 10 | 3.74 | 103 | 6 | 5.62 | 1,600 | | | |
| 12 m. | 3.98 | 140 | 8 | 5.55 | 1,480 | 6 a.m. | 4.80 | 490 |
| 2 p.m. | 4.23 | 205 | 10 | 5.46 | 1,340 | 12 m. | 4.73 | 430 |
| 4 | 4.50 | 294 | 2 p.m. | 5.36 | 1,180 | 6 p.m. | 4.70 | 405 |
| 6 | 4.80 | 441 | 6 | 5.28 | 1,060 | 12 p.m. | 4.66 | 377 |
| 8 | 5.12 | 796 | 8 | 5.26 | 1,030 | *May 4* | | |
| 10 | 5.45 | 1,310 | 12 p.m. | 5.26 | 1,030 | | | |
| 12 p.m. | 5.80 | 1,920 | *Apr. 29* | | | 6 a.m. | 4.67 | 384 |
| *Apr. 26* | | | | | | 12 m. | 4.70 | 405 |
| | | | 4 a.m. | 5.27 | 1,050 | 6 p.m. | 4.76 | 451 |
| 2 a.m. | 6.20 | 2,700 | 8 | 5.33 | 1,140 | 12 p.m. | 4.76 | 451 |
| 4 | 6.65 | 3,670 | 12 m. | 5.42 | 1,270 | *May 5* | | |
| 6 | 7.15 | 4,880 | 4 p.m. | 5.55 | 1,480 | | | |
| 8 | 7.70 | 6,250 | 8 | 5.70 | 1,740 | 6 a.m. | 4.76 | 451 |
| 10 | 8.16 | 7,430 | 12 p.m. | 5.88 | 2,060 | 12 m. | 4.58 | 324 |
| 12 m. | 8.60 | 8,650 | *Apr. 30* | | | 6 p.m. | 4.37 | 231 |
| 2 p.m. | 9.06 | 10,200 | | | | 12 p.m. | 4.28 | 205 |
| 4 | 9.27 | 11,000 | 4 a.m. | 6.05 | 2,400 | *May 6* | | |
| 6 | 9.35 | 11,300 | 8 | 6.17 | 2,640 | | | |
| 8 | 9.35 | 11,300 | 12 m. | 6.14 | 2,580 | 6 a.m. | 4.25 | 198 |
| 10 | 9.27 | 11,000 | 4 p.m. | 6.03 | 2,360 | 12 m. | 4.17 | 179 |
| 12 p.m. | 9.12 | 10,400 | 8 | 5.92 | 2,140 | 6 p.m. | 3.97 | 139 |
| *Apr. 27* | | | 12 p.m. | 5.86 | 2,030 | 12 p.m. | 3.72 | 101 |
| | | | *May 1* | | | *May 7* | | |
| 2 a.m. | 8.98 | 9,880 | | | | | | |
| 4 | 8.83 | 9,360 | 4 a.m. | 5.85 | 2,010 | 6 a.m. | 3.45 | 74 |
| 8 | 8.45 | 8,220 | 8 | 5.82 | 1,960 | 12 m. | 3.29 | 62 |
| 10 | 8.13 | 7,350 | 12 m. | 5.74 | 1,810 | 6 p.m. | 3.15 | 54 |
| 12 m. | 7.75 | 6,380 | 4 p.m. | 5.63 | 1,610 | 12 p.m. | 3.02 | 47 |
| 2 p.m. | 7.40 | 5,500 | 8 | 5.52 | 1,430 | | | |
| 6 | 6.80 | 4,020 | 12 p.m. | 5.43 | 1,290 | | | |
| 8 p.m. | 6.54 | 3,430 | | | | | | |

### 87. CORNEY BAYOU NEAR LILLIE, LA.

[Crest-stage gage]

Location.—Lat 32°53'15", long 92°39'25", in NE¼NE¼ sec. 22, T. 22 N., R. 3 W., on downstream side of bridge on U.S. Highway 167, 2 miles upstream from confluence with Little Corney Bayou and 3 miles south of Lillie.

Drainage area.—462 sq mi.

Gage-height record.—Crest stages only. Datum of gage is 84.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 46,300 cfs Apr. 27 (gage height, 25.20 ft).
1940 to March 1958: Discharge, 17,200 cfs Mar. 5, 1945 (gage height, 18.20 ft).

Remarks.—Discontinued as gaging station Sept. 30, 1957.

### 88. LITTLE CORNEY BAYOU NEAR LILLIE, LA.

Location.—Lat 32°55'40", long 92°37'55", in NW¼ sec. 1, T. 22 N., R. 3 W., near center of span on downstream side of bridge on State Highway 15, 1.4 miles east of Lillie and 2½ miles upstream from mouth.

Drainage area.—208 sq mi.

Gage-height record.—Water-stage recorder graph except Apr. 27–30. Graph for Apr. 27 was reconstructed on basis of high-water mark in gage house and outside gage readings. Datum of gage is 91.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1941.

Discharge record.—Stage-discharge relation defined by current-meter measurements. Stage-discharge relation indefinite Apr. 28–May 3, discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby stations.

Maxima.—April–May 1958: Discharge, 21,400 cfs (time unknown) Apr. 28 (gage height, 16.52 ft, from floodmark).
1956 to March 1958: Discharge, 4,660 cfs Apr. 29, 1957 (gage height, 9.19 ft).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 299 | 3,000 | 11 | 76 | 471 | 21 | 103 | 1,670 |
| 2 | 273 | 2,500 | 12 | 77 | 402 | 22 | 149 | 1,490 |
| 3 | 231 | 2,000 | 13 | 68 | 336 | 23 | 132 | 914 |
| 4 | 166 | 1,650 | 14 | 85 | 336 | 24 | 87 | 572 |
| 5 | 122 | 1,120 | 15 | 149 | 310 | 25 | 628 | 400 |
| 6 | 93 | 960 | 16 | 167 | 181 | 26 | 8,060 | 206 |
| 7 | 73 | 820 | 17 | 189 | 108 | 27 | 18,200 | 108 |
| 8 | 62 | 588 | 18 | 193 | 92 | 28 | 20,000 | 82 |
| 9 | 58 | 471 | 19 | 147 | 575 | 29 | 11,000 | 103 |
| 10 | 64 | 441 | 20 | 102 | 1,800 | 30 | 5,000 | 102 |
| | | | | | | 31 | | 86 |
| Monthly mean discharge | | | | | | | 2,202 | 771 |
| Runoff | | | | | | thousands of acre-feet | 131 | 47.39 |
| Runoff | | | | | | inches | 11.81 | 4.27 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 25*—Con. | | | *Apr. 26*—Con. | | |
| 12 p.m. | 3.56 | 88 | 10 p.m. | 7.01 | 1,060 | 10 p.m. | 13.89 | 14,900 |
| *Apr. 25* | | | 12 p.m. | 7.25 | 1,320 | 12 p.m. | 14.05 | 15,300 |
| 2 a.m. | 3.66 | 97 | *Apr. 26* | | | *Apr. 27* | | |
| 4 | 4.08 | 145 | 2 a.m. | 7.52 | 1,640 | 2 a.m. | 14.15 | 15,600 |
| 6 | 5.00 | 262 | 4 | 8.05 | 2,380 | 4 | 14.27 | 15,800 |
| 8 | 5.80 | 410 | 6 | 8.47 | 3,060 | 8 | 14.58 | 16,600 |
| 10 | 6.27 | 550 | 8 | 9.18 | 4,340 | 10 | 14.79 | 17,100 |
| 12 m. | 6.55 | 680 | 10 | 9.91 | 5,810 | 12 m. | 15.22 | 18,200 |
| 2 p.m. | 6.72 | 796 | 12 m. | 10.77 | 7,640 | 4 p.m. | 15.81 | 19,600 |
| 4 | 6.83 | 887 | 2 p.m. | 11.69 | 9,700 | 6 | 16.07 | 20,300 |
| 6 | 6.90 | 950 | 4 | 12.52 | 11,600 | 8 | 16.22 | 20,700 |
| 8 p.m. | 6.94 | 990 | 6 | 13.13 | 13,100 | 12 p.m. | 16.40 | 21,100 |
| | | | 8 p.m. | 13.62 | 14,300 | | | |

### 89. BAYOU D'ARBONNE NEAR FARMERVILLE, LA.

[Stage station]

Location.—Lat 32°45'27", long 92°24'54", in SE¼SE¼ sec. 36, T. 21 N., R. 1 W., near right bank on downstream side of bridge on State Highway 33, 0.5 mile southwest of Farmerville and 1.2 miles downstream from Corney Bayou.

Drainage area.—1,470 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 39.79 ft above mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage-height, 45.71 ft 8 a.m. Apr. 30.
1925 to March 1958: Gage height, 44.5 ft May 3, 1927.

Remarks.—Records furnished by Corps of Engineers.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 27.9 | 45.2 | 12 | 21.0 | 39.0 | 23 | 22.0 | 43.5 |
| 2 | 28.0 | 44.3 | 13 | 20.6 | 39.6 | 24 | 21.1 | 43.4 |
| 3 | 27.9 | 43.6 | 14 | 20.4 | 40.1 | 25 | 25.0 | 43.1 |
| 4 | 27.7 | 42.6 | 15 | 21.1 | 40.5 | 26 | 30.9 | 42.8 |
| 5 | 27.2 | 41.2 | 16 | 21.8 | 41.0 | 27 | 34.0 | 42.5 |
| 6 | 26.6 | 40.0 | 17 | 21.6 | 41.3 | 28 | 38.0 | 42.2 |
| 7 | 25.6 | 39.2 | 18 | 21.0 | 41.5 | 29 | 44.6 | 41.8 |
| 8 | 24.5 | 38.1 | 19 | 20.6 | 42.1 | 30 | 45.71 | 41.5 |
| 9 | 23.2 | 37.8 | 20 | 21.0 | 42.8 | 31 | | 41.1 |
| 10 | 22.2 | 38.0 | 21 | 22.1 | 43.2 | | | |
| 11 | 21.5 | 38.4 | 22 | 22.4 | 43.5 | | | |

### 90. BAYOU DESIARD AT MONROE, LA.

[Stage station]

Location.—Lat 32°33'18", long 92°07'06", in lot 35, T. 18 N., R. 3 E., on east side of intake structure of city of Monroe pumping station, 100 ft east of east levee of Ouachita River and 1 mile north of Monroe.

Gage-height record.—Wire-weight gage read twice daily. Datum of gage is at mean sea level, datum of 1929.

Maxima.—April–May 1958: Elevation observed, 71.32 ft May 20, 21.
1939 to March 1958: Elevation observed, 72.86 ft Apr. 27, 1946.

Remarks.—Daily elevations computed from twice-daily gage readings. Bayou Desiard, which is a source of water supply for the city of Monroe, is a long narrow lake formed by an old channel of Bayou Bartholomew. It is dammed off from Bayou Bartholomew at its north end by a levee and from Ouachita River at its west end by a levee and floodgates.

*Mean elevations, in feet, of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 70.77 | 71.10 | 12 | 70.59 | 71.20 | 23 | 70.52 | 71.16 |
| 2 | 70.76 | 71.06 | 13 | 70.58 | 71.14 | 24 | 70.49 | 71.14 |
| 3 | 70.73 | 71.08 | 14 | 70.58 | 71.12 | 25 | 70.54 | 71.13 |
| 4 | 70.72 | 71.09 | 15 | 70.57 | 71.10 | 26 | 70.76 | 71.11 |
| 5 | 70.72 | 71.11 | 16 | 70.55 | 71.08 | 27 | 70.76 | 71.10 |
| 6 | 70.70 | 71.10 | 17 | 70.54 | 71.08 | 28 | 70.74 | 71.09 |
| 7 | 70.68 | 71.10 | 18 | 70.53 | 71.29 | 29 | 70.80 | 71.08 |
| 8 | 70.68 | 71.09 | 19 | 70.52 | 71.30 | 30 | 70.97 | 71.08 |
| 9 | 70.64 | 71.08 | 20 | 70.53 | 71.32 | 31 | ---- | 71.04 |
| 10 | 70.63 | 71.11 | 21 | 70.54 | 71.32 | | | |
| 11 | 70.60 | 71.18 | 22 | 70.52 | 71.17 | | | |

### 91. OUACHITA RIVER AT MONROE, LA.

Location.—Lat 32°30'19", long 92°07'32", in lot 50, T. 18 N., R. 3 E., near center of span on downstream side of bridge on U.S. Highway 80 at Monroe, 0.4 mile upstream from Illinois Central Railroad bridge and 5½ miles upstream from lock and dam No. 4.

Drainage area.—15,298 sq mi.

Gage-height record.—Wire-weight gage read once daily. Datum of gage is 31.40 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Daily discharge, 97,200 cfs May 22; gage height, 50.45 ft May 23.

1932 to March 1958: Discharge, 101,000 cfs Feb. 2, 3, 1932; gage height, 50.42 ft Apr. 15, 1945.

Remarks.—Base data collected and records computed by Corps of Engineers; occasional discharge measurements and records reviewed by Geological Survey.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 25,000 | 57,300 | 11 | 26,500 | 80,300 | 21 | 21,500 | 95,600 |
| 2 | 25,900 | 59,400 | 12 | 25,800 | 82,600 | 22 | 21,000 | 97,200 |
| 3 | 26,800 | 61,300 | 13 | 25,300 | 85,500 | 23 | 20,700 | 95,400 |
| 4 | 27,500 | 63,300 | 14 | 24,700 | 88,900 | 24 | 20,000 | 94,000 |
| 5 | 28,100 | 65,100 | 15 | 24,100 | 91,000 | 25 | 20,900 | 92,500 |
| 6 | 28,400 | 68,100 | 16 | 23,600 | 90,200 | 26 | 25,900 | 91,000 |
| 7 | 28,400 | 71,000 | 17 | 23,000 | 90,100 | 27 | 31,300 | 89,900 |
| 8 | 28,100 | 73,900 | 18 | 22,600 | 90,200 | 28 | 37,000 | 89,100 |
| 9 | 27,400 | 75,900 | 19 | 22,300 | 93,000 | 29 | 42,300 | 86,200 |
| 10 | 27,000 | 78,200 | 20 | 21,700 | 93,900 | 30 | 49,500 | 84,200 |
| | | | | | | 31 | ---- | 81,600 |
| Monthly mean discharge | | | | | | | 26,740 | 82,450 |
| Runoff, thousands of acre-feet | | | | | | | 1,591 | 5,070 |
| Runoff, inches | | | | | | | 1.95 | 6.21 |

### 92. BOEUF RIVER NEAR ARKANSAS-LOUISIANA STATE LINE

[Stage station]

Location.—Lat 32°58'35", long 94°26'20", in SW¼SW¼, sec. 15, T. 23 N., R. 10 E., on left bank 2 miles downstream from Arkansas-Louisiana State line and 8 miles west of Kilbourne.

Drainage area.—785 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph except April 20 to May 31 when graph was based on twice-daily staff-gage readings to tenths furnished by Corps of Engineers. Datum of gage is 74.11 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (authority Corps of Engineers).

Maxima.—April–May 1958: Gage height, 22.56 ft 4 a.m. May 6.

1946 to March 1958: Gage height, 22.8 ft Feb. 15, 1948.

Remarks.—Records collected by Corps of Engineers prior to Dec. 31, 1957. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Mean gage height, in feet, of indicated day, 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.46 | 22.2 | 12 | 1.92 | 19.2 | 23 | 2.2 | 15.5 |
| 2 | 3.93 | 22.3 | 13 | 1.86 | 16.9 | 24 | 2.2 | 13.8 |
| 3 | 3.45 | 22.0 | 14 | 1.87 | 15.3 | 25 | 12.6 | 12.5 |
| 4 | 3.20 | 22.0 | 15 | 2.59 | 14.3 | 26 | 19.6 | 11.6 |
| 5 | 2.90 | 22.4 | 16 | 2.51 | 13.2 | 27 | 21.4 | 11.0 |
| 6 | 2.70 | 22.5 | 17 | 2.24 | 12.4 | 28 | 21.8 | 10.1 |
| 7 | 2.48 | 22.1 | 18 | 2.10 | 11.8 | 29 | 22.0 | 8.9 |
| 8 | 2.31 | 21.2 | 19 | 2.04 | 11.4 | 30 | 22.2 | 7.8 |
| 9 | 2.19 | 20.2 | 20 | 2.2 | 16.1 | 31 | ------ | 6.6 |
| 10 | 2.09 | 19.9 | 21 | 2.3 | 18.8 | | | |
| 11 | 2.03 | 19 8 | 22 | 2.2 | 17.7 | | | |

### 93. BOEUF RIVER NEAR OAK GROVE, LA.

[Stage station]

Location.—Lat 32°46'18", long 91°35'45", in SW¼SW¼ sec. 30, T. 21 N., R. 9 E., near left bank on downstream side of bridge on State Highway 2, 13 miles west of Oak Grove.

Drainage area.—1,052 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph. Datum of gage is at mean sea level (levels by Corps of Engineers).

Maxima.—April–May 1958: Elevation, 88.60 ft 2 p.m. May 5.

1946 to March 1958: Elevation, 89.6 ft Feb. 21, 1948.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Elevation, in feet, at 8 a.m. of indicated day, 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 68.6 | 88.2 | 11 | 64.7 | 86.3 | 21 | 64.7 | 83.7 |
| 2 | 67.6 | 88.1 | 12 | 64.6 | 85.4 | 22 | 64.8 | 83.4 |
| 3 | 66.9 | 87.9 | 13 | 64.5 | 83.6 | 23 | 64.8 | 81.6 |
| 4 | 66.4 | 87.8 | 14 | 64.4 | 81.3 | 24 | 64.7 | 78.9 |
| 5 | 66.0 | 88.60 | 15 | 64.8 | 79.6 | 25 | 70.1 | 76.9 |
| 6 | 65.6 | 88.5 | 16 | 65.5 | 78.3 | 26 | 83.7 | 75.6 |
| 7 | 65.3 | 88.3 | 17 | 65.1 | 77.2 | 27 | 86.1 | 75.3 |
| 8 | 65.0 | 88.0 | 18 | 64.8 | 76.1 | 28 | 86.5 | 74.2 |
| 9 | 64.9 | 87.5 | 19 | 64.7 | 75.6 | 29 | 86.8 | 72.2 |
| 10 | 64.8 | 86.9 | 20 | 64.6 | 78.5 | 30 | 87.5 | 70.9 |
| | | | | | | 31 | ------ | 70.1 |

### 94. BOEUF RIVER NEAR OAK RIDGE, LA.

[Stage station]

Location.—Lat 32°36'54", long 91°41'12" in NW¼SE¼ sec. 19, T. 19 N., R. 8 E., on downstream side of bridge on State Highway 134, 5 miles east of Oak Ridge.

Drainage area.—1,199 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph. Datum of gage in doubt.

Maxima.—April–May 1958: Gage height, 80.52 ft 8 a.m. May 5.

1946 to March 1958: Gage height, 79.8 ft Apr. 11, 1947.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Gage height, in feet, at 8 a.m. of indicated day, 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 66.0 | 80.5 | 11 | 64.5 | 78.4 | 21 | 64.5 | 75.5 |
| 2 | 65.6 | 80.3 | 12 | 64.5 | 77.8 | 22 | 64.5 | 75.8 |
| 3 | 65.3 | 80.0 | 13 | 64.5 | 76.6 | 23 | 64.5 | 74.7 |
| 4 | 65.1 | 79.7 | 14 | 64.4 | 74.9 | 24 | 64.5 | 72.9 |
| 5 | 65.0 | 80.52 | 15 | 64.5 | 73.4 | 25 | 65.7 | 71.4 |
| 6 | 64.9 | 80.3 | 16 | 64.8 | 72.3 | 26 | 74.8 | 70.3 |
| 7 | 64.8 | 80.1 | 17 | 64.7 | 71.4 | 27 | 77.5 | 69.9 |
| 8 | 64.6 | 80.0 | 18 | 64.6 | 70.8 | 28 | 78.3 | 69.4 |
| 9 | 64.6 | 79.5 | 19 | 64.5 | 70.3 | 29 | 78.5 | 68.2 |
| 10 | 64.6 | 78.9 | 20 | 64.5 | 71.2 | 30 | 79.5 | 67.4 |
| | | | | | | 31 | | 66.9 |

### 95. BOEUF RIVER NEAR GIRARD, LA.

Location.—Lat 32°28'50", long 91°47'55", on line between sec. 1, T. 17 N., R. 6 E., and sec. 6, T. 17 N., R. 7 E., on upstream side of pier on Illinois Central Railroad bridge, 0.5 mile east of Girard.

Drainage area.—1,226 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph. Datum of gage is 51.62 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers). Auxiliary staff gage read twice daily at site 8.1 miles downstream at different datum.

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge Apr. 29–May 31, computed by using fall as determined from auxiliary gage as a factor.

Maxima.—April–May 1958: Discharge, 3,070 cfs 10 a.m. May 2; gage height, 19.31 ft 4 a.m. May 6.

1938 to March 1958: Discharge, 2,970 cfs Apr. 12, 1947 (gage height, 18.80 ft).

Maximum stage known, 29.5 ft May 7, 1927 (affected by overflow from Mississippi River).

Remarks.—Interconnecting system of bayous and drainage ditches produce an interchange of flow; hence, the drainage limits were more or less arbitrarily determined. Boeuf River and Bayou LaFourche basins are connected by a canal upstream. In extreme floods, considerable flow from the Bayou Bartholomew basin passes this station.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 379 | 2,540 | 11 | 131 | 2,560 | 21 | 127 | 1,400 |
| 2 | 345 | 2,980 | 12 | 126 | 2,500 | 22 | 124 | 1,680 |
| 3 | 291 | 2,880 | 13 | 122 | 2,360 | 23 | 124 | 1,780 |
| 4 | 248 | 2,810 | 14 | 120 | 2,180 | 24 | 124 | 1,670 |
| 5 | 216 | 2,800 | 15 | 117 | 1,970 | 25 | 134 | 1,460 |
| 6 | 191 | 2,810 | 16 | 118 | 1,670 | 26 | 397 | 1,210 |
| 7 | 171 | 2,770 | 17 | 129 | 1,470 | 27 | 1,080 | 935 |
| 8 | 160 | 2,740 | 18 | 130 | 1,360 | 28 | 1,580 | 923 |
| 9 | 148 | 2,700 | 19 | 129 | 1,300 | 29 | 1,900 | 701 |
| 10 | 138 | 2,640 | 20 | 127 | 1,160 | 30 | 2,150 | 591 |
| | | | | | | 31 | | 501 |
| Monthly mean discharge | | | | | | | 376 | 1,905 |
| Runoff | | | | | | thousands of acre-feet | 22.37 | 117.1 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 28* | | | *May 2*—Con. | | |
| 12 p.m. | 1.22 | 125 | 8 a.m. | 10.65 | 1,530 | 10 a.m. | 18.84 | 3,070 |
| *Apr. 25* | | | 4 p.m. | 11.24 | 1,640 | 12 m. | 18.90 | 2,990 |
| 12 m. | 1.27 | 129 | 12 p.m. | 11.80 | 1,740 | 8 p.m. | 19.10 | 2,970 |
| 12 p.m. | 1.48 | 151 | *Apr. 29* | | | 12 p.m. | 19.14 | 2,950 |
| *Apr. 26* | | | 8 a.m. | 12.35 | 1,840 | *May 3* | | |
| 2 a.m. | 1.60 | 163 | 4 p.m. | 13.10 | 1,980 | 12 m. | 19.16 | 2,880 |
| 4 | 1.78 | 182 | 12 p.m. | 13.76 | 2,000 | 12 p.m. | 19.10 | 2,830 |
| 6 | 2.10 | 215 | *Apr. 30* | | | *May 4* | | |
| 8 | 2.65 | 274 | 6 a.m. | 14.24 | 2,090 | 8 a.m. | 19.10 | 2,840 |
| 10 | 3.10 | 321 | 12 m. | 14.52 | 2,140 | 4 p.m. | 19.12 | 2,780 |
| 12 m. | 3.60 | 384 | 6 p.m. | 14.75 | 2,180 | 12 p.m. | 19.20 | 2,790 |
| 2 p.m. | 4.10 | 446 | 12 p.m. | 15.48 | 2,410 | *May 5* | | |
| 4 | 4.55 | 502 | *May 1* | | | 12 m. | 19.23 | 2,800 |
| 6 | 4.93 | 550 | 4 a.m. | 15.78 | 2,470 | 12 p.m. | 19.30 | 2,820 |
| 8 | 5.40 | 610 | 8 | 15.98 | 2,500 | *May 6* | | |
| 10 | 5.84 | 673 | 12 m. | 16.16 | 2,420 | 4 a.m. | 19.31 | 2,810 |
| 12 p.m. | 6.25 | 741 | 4 p.m. | 16.48 | 2,450 | 12 m. | 19.30 | 2,810 |
| *Apr. 27* | | | 8 | 17.34 | 2,770 | 12 p.m. | 19.24 | 2,780 |
| 4 a.m. | 7.05 | 881 | 12 p.m. | 17.80 | 2,860 | *May 7* | | |
| 8 | 7.60 | 977 | *May 2* | | | 12 m. | 19.18 | 2,780 |
| 12 m. | 8.20 | 1,080 | 4 a.m. | 18.30 | 2,960 | 12 p.m. | 19.10 | 2,750 |
| 4 p.m. | 8.80 | 1,190 | 8 a.m. | 18.65 | 3,030 | | | |
| 8 | 9.45 | 1,310 | | | | | | |
| 12 p.m. | 9.93 | 1,400 | | | | | | |

### 96. BIG COLEWA BAYOU NEAR OAK GROVE, LA.

Location.—Lat 32°47'55", long 91°30'05", in NE¼ sec. 24, T. 21 N., R. 9 E., on downstream side near center of bridge on State Highway 2, 0.1 mile downstream from Little Colewa Bayou and 8 miles southwest of Oak Grove.

Drainage area.—42 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph. Datum of gage is at mean sea level, datum of 1929, with 1941 Alluvial Valley and 1944 Birmingham-Corinth supplementary adjustments (levels by Corps of Engineers). Auxiliary water-stage recorder graph at site 5.7 miles downstream. Datum of auxiliary gage is at mean sea level, datum of 1929 with 1941 Alluvial Valley and 1944 Birmingham-Corinth supplementary adjustments.

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge Apr. 24, 26, 28–30, May 3–7 computed by using fall as determined from auxiliary gage as a factor. Stage-discharge relation indefinite Apr. 27, May 1, 2; discharge estimated on basis of fall, weather records, records for nearby stations, and three discharge measurements.

Maxima.—April–May 1958: Discharge, 1,040 cfs. 8 a.m. May 5; elevation, 91.93 ft 12 m. May 1.

1949 to March 1958: Discharge, 2,050 cfs. Mar. 22, 1955; elevation, 95.22 ft Jan. 4, 1951.

Elevation known since 1940, 95.5 ft Apr. 12, 1947, from records of Corps of Engineers.

Remarks.—Base gage elevations and three discharge measurements furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 20 | 900 | 11 | 0.8 | 239 | 21 | 2.4 | 705 |
| 2 | 14 | 900 | 12 | .4 | 135 | 22 | 2.0 | 348 |
| 3 | 9.5 | 565 | 13 | .2 | 76 | 23 | 1.7 | 149 |
| 4 | 6.0 | 552 | 14 | .2 | 24 | 24 | 2.0 | 36 |
| 5 | 4.5 | 1,010 | 15 | 24 | 9.5 | 25 | 416 | 11 |
| 6 | 3.4 | 776 | 16 | 26 | 4.5 | 26 | 827 | 5.2 |
| 7 | 1.8 | 420 | 17 | 14 | 2.4 | 27 | 850 | 2.4 |
| 8 | 1.6 | 288 | 18 | 7.7 | 8.6 | 28 | 604 | 1.6 |
| 9 | 1.0 | 208 | 19 | 5.9 | 62 | 29 | 577 | .8 |
| 10 | .8 | 291 | 20 | 3.2 | 589 | 30 | 856 | .4 |
| | | | | | | 31 | | .2 |
| Monthly mean discharge | | | | | | | 143 | 268 |
| Runoff (thousands of acre-feet) | | | | | | | 8.5 | 16.5 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 24* | | | *Apr. 29*—Con. | | | *May 8*—Con. | | |
| 10 p.m. | 83.02 | 1.2 | 12 p.m. | 90.49 | 761 | 12 p.m. | 86.29 | 240 |
| 11 | 83.34 | 7.7 | *Apr. 30* | | | *May 9* | | |
| 12 p.m. | 83.70 | 20.0 | 6 a.m. | 90.77 | 831 | 12 m. | 85.96 | 207 |
| *Apr. 25* | | | 12 m. | 91.00 | 864 | 10 p.m. | 85.69 | 180 |
| 2 a.m. | 85.90 | 201 | 6 p.m. | 91.07 | 881 | 12 p.m. | 85.90 | 201 |
| 4 | 86.90 | 301 | 12 p.m. | 91.47 | 939 | *May 10* | | |
| 6 | 87.60 | 376 | *May 1* | | | 12 m. | 87.18 | 330 |
| 8 | 87.88 | 407 | 12 m. | 91.93 | | 12 p.m. | 86.92 | 303 |
| 12 m. | 88.30 | 453 | *May 3* | | | *May 19* | | |
| 4 p.m. | 88.76 | 509 | 12 m. | 90.10 | 571 | 12 m. | 83.97 | 32 |
| 6 | 88.86 | 522 | 12 p.m. | 89.51 | 394 | 12 p.m. | 85.30 | 141 |
| 8 | 88.88 | 525 | *May 4* | | | *May 20* | | |
| 10 | 88.86 | 522 | 12 m. | 89.00 | 402 | 4 a.m. | 86.00 | 211 |
| 12 p.m. | 88.82 | 517 | 12 p.m. | 91.34 | 1,010 | 8 | 88.33 | 456 |
| *Apr. 26* | | | *May 5* | | | 12 m. | 90.00 | 720 |
| 2 a.m. | 88.82 | 517 | 8 a.m. | 91.48 | 1,040 | 4 p.m. | 90.46 | 815 |
| 4 | 88.90 | 528 | 4 p.m. | 91.39 | 1,010 | 8 | 90.59 | 842 |
| 6 | 89.80 | 680 | 12 p.m. | 91.18 | 951 | 12 p.m. | 90.57 | 838 |
| 8 | 90.15 | 706 | *May 6* | | | *May 21* | | |
| 10 | 90.80 | 868 | 8 a.m. | 90.86 | 871 | 8 a.m. | 90.32 | 783 |
| 12 m. | 91.14 | 939 | 4 p.m. | 90.30 | 707 | 4 p.m. | 89.84 | 667 |
| 2 p.m. | 91.28 | 940 | 12 p.m. | 89.58 | 546 | 12 p.m. | 89.01 | 494 |
| 4 | 91.42 | 971 | *May 7* | | | *May 22* | | |
| 6 | 91.52 | 1,000 | 12 m. | 88.46 | 398 | 12 m. | 87.64 | 332 |
| 12 p.m. | 91.60 | 1,010 | 12 p.m. | 87.52 | 337 | 12 p.m. | 86.43 | 236 |
| *Apr. 28* | | | *May 8* | | | *May 28* | | |
| 6 a.m. | 90.68 | 709 | 12 m. | 86.77 | 288 | 12 m. | 85.31 | 142 |
| 12 m. | 90.30 | 622 | | | | 12 p.m. | 84.60 | 75 |
| 6 p.m. | 89.82 | 520 | | | | | | |
| 12 p.m. | 89.00 | 332 | | | | | | |
| *Apr. 29* | | | | | | | | |
| 6 a.m. | 89.10 | 438 | | | | | | |
| 12 m. | 89.60 | 602 | | | | | | |
| 6 p.m. | 90.18 | 723 | | | | | | |

### 97. BIG CREEK NEAR HOLLY RIDGE, LA.

[Stage station]

Location.—Lat 32°27'58", long 91°36'42", in SE¼ sec. 11, T. 17 N., R. 8 E., on upstream side of Illinois Central Railroad bridge and 1 mile east of Holly Ridge.

Drainage area.—171 sq mi (see Remarks).

Gage-height record.—Staff gage read twice daily. Datum of gage is 70.63 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage height, 9.5 ft 4 p.m. May 2.
1940 to March 1958: Gage height, 10.6 ft Apr. 12, 13, 1947.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | −2.5 | 8.6 | 11 | −4.4 | −0.2 | 21 | −4.0 | 3.8 |
| 2 | −2.9 | 9.5 | 12 | −4.4 | −1.1 | 22 | −4.0 | 4.0 |
| 3 | −3.5 | 9.4 | 13 | −4.5 | −1.6 | 23 | −4.1 | 2.9 |
| 4 | −3.6 | 9.2 | 14 | −4.4 | −2.3 | 24 | −3.8 | .2 |
| 5 | −3.8 | 9.0 | 15 | −3.5 | −2.8 | 25 | −3.9 | −.9 |
| 6 | −3.9 | 8.8 | 16 | −3.6 | −3.3 | 26 | −3.7 | −2.4 |
| 7 | −4.0 | 8.5 | 17 | −3.7 | −3.5 | 27 | −1.7 | −3.1 |
| 8 | −4.2 | 7.7 | 18 | −3.8 | −3.6 | 28 | 7.1 | −3.5 |
| 9 | −4.3 | 6.6 | 19 | −3.9 | .5 | 29 | 7.8 | −3.7 |
| 10 | −4.4 | 2.7 | 20 | −3.9 | 2.0 | 30 | 8.2 | −3.9 |
| | | | | | | 31 | | −4.1 |

### 98. BAYOU LaFOURCHE CUTOFF NEAR OAK RIDGE, LA.

[Stage station]

Location.—Lat 32°36′43″, long 91°42′08″ in sec. 24, T. 19 N., R. 7 E., near center of span on downstream side of bridge on State Highway 852, 4.5 miles east of Oak Ridge.

Drainage area.—1 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph.

Maxima.—April–May 1958: Gage height, 79.28 ft 9:30 a.m. May 5.
1947 to March 1958: Gage height, 78.8 ft Apr. 11, 1947.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined. Boeuf River and Bayou LaFourche basins are connected by canal upstream.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 65.9 | 79.26 | 11 | 64.5 | 77.2 | 21 | 64.5 | 74.3 |
| 2 | 65.5 | 79.0 | 12 | 64.5 | 76.6 | 22 | 64.5 | 74.6 |
| 3 | 65.3 | 78.6 | 13 | 64.5 | 75.5 | 23 | 64.5 | 73.6 |
| 4 | 65.1 | 78.4 | 14 | 64.5 | 73.9 | 24 | 64.5 | 71.9 |
| 5 | 65.0 | 79.28 | 15 | 64.5 | 72.4 | 25 | 65.7 | 70.5 |
| 6 | 64.8 | 79.1 | 16 | 64.7 | 71.4 | 26 | 73.6 | 69.6 |
| 7 | 64.8 | 78.8 | 17 | 64.7 | 70.6 | 27 | 76.2 | 69.2 |
| 8 | 64.7 | 78.6 | 18 | 64.6 | 70.0 | 28 | 77.0 | 68.7 |
| 9 | 64.6 | 78.2 | 19 | 64.5 | 69.7 | 29 | 77.2 | 67.7 |
| 10 | 64.6 | 77.7 | 20 | 64.5 | 70.3 | 30 | 78.2 | 67.0 |
| | | | | | | 31 | | 66.6 |

### 99. BAYOU LaFOURCHE NEAR IRWIN LAKE, LA.

[Stage station]

Location.—Lat 32°33′25″, long 91°50′28″, in NW¼SE¼ sec. 10, T. 18 N., R. 6 E., on downstream side of bridge on Parish road and 6 miles southwest of Oak Ridge.

Drainage area.—6 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph.

Maxima.—April–May 1958: Gage height, 69.20 ft 8 p.m. May 1.
1948 to March 1958: Gage height, 68.90 ft Mar. 22, 1955.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined. Boeuf River and Bayou LaFourche basins are connected by canal upstream.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 65.1 | 69.20 | 12 | 64.1 | 68.4 | 23 | 64.2 | 67.6 |
| 2 | 64.9 | 69.1 | 13 | 64.1 | 68.1 | 24 | 64.1 | 67.2 |
| 3 | 64.7 | 69.0 | 14 | 64.1 | 67.6 | 25 | 64.9 | 66.7 |
| 4 | 64.6 | 68.8 | 15 | 64.1 | 67.3 | 26 | 67.6 | 66.4 |
| 5 | 64.5 | 69.1 | 16 | 64.3 | 67.0 | 27 | 68.4 | 66.3 |
| 6 | 64.4 | 69.0 | 17 | 64.3 | 66.8 | 28 | 68.6 | 66.2 |
| 7 | 64.4 | 69.0 | 18 | 64.2 | 66.6 | 29 | 68.6 | 65.8 |
| 8 | 64.3 | 68.9 | 19 | 64.1 | 66.5 | 30 | 68.9 | 65.6 |
| 9 | 64.2 | 68.8 | 20 | 64.1 | 66.6 | 31 | ---- | 65.4 |
| 10 | 64.2 | 68.6 | 21 | 64.1 | 67.7 | | | |
| 11 | 64.2 | 68.5 | 22 | 64.2 | 67.8 | | | |

### 100. BAYOU GALION NEAR OAK RIDGE, LA.

[Stage station]

Location.—Lat 32°42'30", long 91°47'00", in sec. 19, T. 20 N., R. 7 E., on downstream side of bridge on State Highway 133, 5.5 miles north of Oak Ridge.

Drainage area.—42 sq mi (see Remarks).

Gage-height record.—Wire-weight gage read twice daily. Datum of gage is 70.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage height, 10.2 ft, 8 a.m. Apr. 27.
1941 to March 1958: Gage height, 13.8 ft Apr. 12, 1947.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | −0.7 | 9.6 | 12 | −2.1 | 0.8 | 23 | −2.1 | 1.8 |
| 2 | −1.0 | 8.2 | 13 | −2.1 | .1 | 24 | −2.2 | 0 |
| 3 | −1.5 | 4.6 | 14 | −2.1 | −.2 | 25 | 1.5 | −.2 |
| 4 | −1.6 | 6.9 | 15 | −2.2 | −.6 | 26 | 9.4 | −.5 |
| 5 | −1.7 | 6.5 | 16 | −2.2 | −.9 | 27 | 10.2 | −.6 |
| 6 | −1.8 | 3.3 | 17 | −2.2 | −1.1 | 28 | 9.5 | −.6 |
| 7 | −1.9 | 1.0 | 18 | −2.2 | −.8 | 29 | 6.6 | −.7 |
| 8 | −2.0 | −.1 | 19 | −2.2 | .1 | 30 | 6.4 | −.8 |
| 9 | −2.1 | −.5 | 20 | −2.1 | 7.4 | 31 | ---- | −.9 |
| 10 | −2.1 | 1.3 | 21 | −2.0 | 4.9 | | | |
| 11 | −2.0 | 1.4 | 22 | −2.0 | 2.8 | | | |

### 101. BAYOU LaFOURCHE NEAR CREW LAKE, LA.

Location.—Lat 32°29'55", long 91°55'05", in SW¼ sec. 36, T. 18 N., R. 5 E., near center of span on downstream side of bridge on U.S. Highway 80, 1.1 miles upstream from Illinois Central Railroad bridge and 2.5 miles west of town of Crew Lake.

Drainage area.—361 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph except Apr. 1–20. Datum of gage is 37.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers). Auxiliary water-stage recorder graph at site 9.5 miles downstream. Datum of auxiliary gage at mean sea level (auxiliary record furnished by Corps of Engineers).

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge Apr. 1–20 estimated on basis of auxiliary gage heights, range line, weather records, and records for nearby stations. Discharge Apr. 21–25 and May 2–31 computed by using fall as determined from auxiliary gage as a factor.

Maxima.—April–May 1958: Discharge, 26,800 cfs 8 a.m. May 2; gage height, 27.50 ft, 8–11 a.m. May 6.

1938 to March 1958: Discharge, 20,800 cfs Mar. 25, 1955 (gage height, 25.28 ft).

Remarks.—Interconnecting system of bayous and drainage ditches produce an interchange of flow; hence, the drainage limits were more or less arbitrarily determined. Boeuf River and Bayou LaFourche basins are connected by canal upstream. In extreme floods considerable flow from the Bayou Bartholomew basin passes this station.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,500 | 25,400 | 11 | 350 | 20,700 | 21 | 348 | 13,900 |
| 2 | 1,500 | 26,600 | 12 | 300 | 19,600 | 22 | 359 | 15,100 |
| 3 | 1,000 | 26,000 | 13 | 300 | 18,400 | 23 | 399 | 14,000 |
| 4 | 900 | 25,400 | 14 | 300 | 16,700 | 24 | 361 | 12,000 |
| 5 | 800 | 26,200 | 15 | 300 | 14,900 | 25 | 2,540 | 9,840 |
| 6 | 700 | 26,400 | 16 | 350 | 12,800 | 26 | 11,100 | 8,550 |
| 7 | 600 | 26,000 | 17 | 350 | 10,700 | 27 | 16,000 | 7,160 |
| 8 | 500 | 24,000 | 18 | 350 | 10,100 | 28 | 18,400 | 6,350 |
| 9 | 450 | 22,700 | 19 | 350 | 9,460 | 29 | 20,100 | 4,900 |
| 10 | 400 | 21,600 | 20 | 350 | 10,500 | 30 | 22,700 | 3,830 |
| | | | | | | 31 | | 3,280 |
| Monthly mean discharge | | | | | | | 3,465 | 15,910 |
| Runoff | | | | | thousands of acre-feet | | 206.2 | 978 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 28* | | | *May 1* | | |
| 7 a.m. | 5.67 | 711 | 12 m. | 24.99 | 18,500 | 12 m. | 26.75 | 25,400 |
| 12 p.m. | 15.80 | 5,970 | 12 p.m. | 25.18 | 19,100 | 12 p.m. | 27.01 | 26,500 |
| *Apr. 26* | | | *Apr. 29* | | | *May 2* | | |
| 12 m. | 22.32 | 11,800 | 12 m. | 25.39 | 20,000 | 8 a.m. | 27.10 | 26,800 |
| 6 p.m. | 23.23 | 13,300 | 12 p.m. | 25.74 | 21,400 | 4 p.m. | 27.13 | 26,500 |
| *Apr. 27* | | | *Apr. 30* | | | 12 | 27.15 | 26,300 |
| 12 m. | 24.28 | 16,000 | 12 m. | 26.02 | 22,500 | | | |
| 12 p.m. | 24.70 | 17,400 | 12 p.m. | 26.50 | 24,400 | | | |

### 102. TENSAS BAYOU NEAR TRANSYLVANIA, LA.

[Stage station]

Location.—Lat 32°42′52″, long 91°16′07″, in SW¼SW¼ sec. 17, T. 20 N, R. 12 E., on downstream side of bridge on State Highway 581 and 5 miles west of Transylvania.

Drainage area.—89 sq mi (see Remarks).

Gage-height record.—Staff gage read twice daily. Datum of gage is 67.28 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage-height, 14.7 ft May 2.
1941 to March 1958: Gage height, 17.5 ft Feb. 11, 1946.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Gage height, in feet, at 8 a.m. of indicated day, 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 5.8 | 14.3 | 11 | 4.2 | 11.2 | 21 | 4.0 | 7.5 |
| 2 | 5.3 | 14.7 | 12 | 4.1 | 10.9 | 22 | 4.0 | 7.5 |
| 3 | 5.0 | 14.5 | 13 | 4.0 | 10.4 | 23 | 3.9 | 7.3 |
| 4 | 4.8 | 14.3 | 14 | 4.0 | 9.6 | 24 | 3.9 | 6.9 |
| 5 | 4.7 | 14.0 | 15 | 4.3 | 9.0 | 25 | 5.2 | 6.6 |
| 6 | 4.5 | 13.9 | 16 | 4.4 | 8.4 | 26 | 5.6 | 6.3 |
| 7 | 4.4 | 13.4 | 17 | 4.3 | 7.8 | 27 | 6.8 | 6.0 |
| 8 | 4.3 | 12.9 | 18 | 4.2 | 7.2 | 28 | 11.7 | 5.8 |
| 9 | 4.3 | 12.1 | 19 | 4.1 | 6.8 | 29 | 11.8 | 5.7 |
| 10 | 4.3 | 11.6 | 20 | 4.1 | 7.0 | 30 | 13.0 | 5.5 |
| | | | | | | 31 | | 6.3 |

### 103. TENSAS BAYOU NEAR ALSATIA, LA.

[Stage station]

Location.—Lat 32°36'41", long 91°17'51", on line between sec. 24 and sec. 25, T. 19 N., R. 11 E., on piling under bridge on State Highway 580, 7 miles west of Alsatia.

Drainage area.—141 sq mi (see Remarks).

Gage-height record.—Staff gage read twice daily. Datum of gage is at mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Maxima.—April–May 1958: Elevation, 79.4 ft May 2.
1946 to March 1958: Elevation, 80.4 ft Nov. 20, 1948.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Elevation, in feet, at 8 a.m. of indicated day, 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 67.0 | 79.0 | 11 | 64.2 | 76.7 | 21 | 64.5 | 69.9 |
| 2 | 66.2 | 79.4 | 12 | 64.1 | 75.8 | 22 | 64.3 | 69.7 |
| 3 | 65.7 | 79.3 | 13 | 64.0 | 74.8 | 23 | 64.2 | 69.4 |
| 4 | 65.3 | 79.0 | 14 | 64.1 | 73.6 | 24 | 64.0 | 68.8 |
| 5 | 65.1 | 79.1 | 15 | 64.6 | 72.2 | 25 | 64.5 | 68.4 |
| 6 | 64.9 | 79.0 | 16 | 64.9 | 71.1 | 26 | 68.5 | 67.6 |
| 7 | 64.7 | 78.6 | 17 | 64.7 | 70.0 | 27 | 72.5 | 67.5 |
| 8 | 64.5 | 78.2 | 18 | 64.5 | 69.4 | 28 | 76.9 | 67.2 |
| 9 | 64.3 | 77.8 | 19 | 64.4 | 68.8 | 29 | 77.0 | 66.9 |
| 10 | 64.3 | 77.3 | 20 | 64.3 | 68.7 | 30 | 78.2 | 66.7 |
| | | | | | | 31 | | 66.5 |

### 104. TENSAS RIVER AT TENDAL, LA.

Location.—Lat 32°25'55", long 91°22'00", in NW¼ sec. 29, T. 17 N., R. 11 E., near left bank on upstream side of bridge on U.S. Highway 80 at Tendal, 200 ft upstream from Illinois Central Railroad bridge and 3 miles east of Waverly.

Drainage area.—309 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph. Datum of gage is 50.07 ft above mean sea level, datum of 1929, supplementary adjustment of 1941. Auxiliary staff gage read twice daily at site 8.5 miles downstream at same datum.

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge Apr. 1–3, Apr. 26–May 31 computed by using fall as determined from auxiliary gage as a factor.

Maxima.—April–May 1958: Discharge, 3,900 cfs 11 p.m. May 1; gage height, 23.07 ft 8–10 a.m. May 2.

1935 to March 1958: Discharge, 4,610 cfs Nov. 19, 1948; gage height, 24. 78 ft Nov. 20, 1948.

Maximum stage known, 34.02 ft May 15, 1927 (affected by overflow from Mississippi River).

Remarks.—Interconnecting system of bayous and drainage ditches produce an interchange of flow; hence, the drainage limits were more or less arbitrarily determined.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 608 | 3,250 | 11 | 139 | 2,340 | 21 | 117 | 703 |
| 2 | 478 | 3,460 | 12 | 127 | 2,160 | 22 | 110 | 693 |
| 3 | 400 | 3,260 | 13 | 119 | 1,770 | 23 | 103 | 646 |
| 4 | 342 | 3,140 | 14 | 110 | 1,470 | 24 | 98 | 595 |
| 5 | 278 | 3,120 | 15 | 116 | 1,220 | 25 | 97 | 534 |
| 6 | 229 | 3,040 | 16 | 145 | 1,010 | 26 | 178 | 477 |
| 7 | 190 | 3,000 | 17 | 150 | 849 | 27 | 564 | 421 |
| 8 | 162 | 2,890 | 18 | 140 | 760 | 28 | 1,580 | 411 |
| 9 | 151 | 2,720 | 19 | 127 | 761 | 29 | 2,180 | 359 |
| 10 | 145 | 2,590 | 20 | 121 | 693 | 30 | 2,840 | 321 |
| | | | | | | 31 | | 287 |
| Monthly mean discharge | | | | | | | 405 | 1,579 |
| Runoff | | | | | | thousands of acre-feet | 24.09 | 97.09 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 26* | | | *Apr. 29* | | | *May 1*—Con. | | |
| 12 m | 7.33 | 176 | 12 m | 17.24 | 2,090 | 10 p.m | 22.83 | 3,870 |
| 12 p.m | 9.02 | 249 | 12 p.m | 18.67 | 2,610 | 11 | 22.89 | 3,900 |
| *Apr. 27* | | | *Apr. 30* | | | 12 p.m | 22.94 | 3,890 |
| 12 m | 10.70 | 513 | 12 m | 19.87 | 2,810 | *May 2* | | |
| 12 p.m | 12.63 | 981 | 12 p.m | 20.94 | 3,120 | 2 a.m | 23.01 | 3,870 |
| *Apr. 28* | | | *May 1* | | | 4 | 23.05 | 3,760 |
| 6 a.m | 13.94 | 1,370 | 12 m | 21.67 | 3,010 | 6 | 23.06 | 3,580 |
| 4 p.m | 15.65 | 1,810 | 6 p.m | 22.06 | 3,250 | 8 | 23.07 | 3,480 |
| 12 p.m | 16.36 | 1,940 | 8 p.m | 22.60 | 3,750 | 4 p.m | 23.05 | 3,300 |
| | | | | | | 12 p.m | 22.97 | 3,260 |

### 105. BAYOU MACON NEAR KILBOURNE, LA.

Location.—Lat 32°59'35", long 91°15'45", in SW¼SE¼ sec. 8, T. 23 N., R. 12 E., near center of channel on downstream side of bridge on State Highway 585, three-quarters of a mile south of Arkansas-Louisiana State line and 3 miles east of Kilbourne.

Drainage area.—504 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph. Datum of gage is 77.41 ft above mean sea level (Corps of Engineers bench mark).

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 4,740 cfs 12 m. May 5 (gage height, 24.35 ft).

October 1957 to March 1958: Discharge, 2,980 cfs 1 a.m. Nov. 25, 1957 (gage height, 21.85 ft).

Remarks.—Interconnecting system of bayous and drainage ditches produces an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,050 | 3,850 | 11 | 587 | 4,390 | 21 | 501 | 4,240 |
| 2 | 990 | 3,940 | 12 | 549 | 4,320 | 22 | 503 | 4,220 |
| 3 | 941 | 3,780 | 13 | 513 | 4,280 | 23 | 496 | 4,210 |
| 4 | 904 | 4,160 | 14 | 484 | 4,240 | 24 | 490 | 4,200 |
| 5 | 864 | 4,700 | 15 | 519 | 4,200 | 25 | 1,340 | 4,150 |
| 6 | 820 | 4,540 | 16 | 520 | 4,150 | 26 | 2,520 | 4,100 |
| 7 | 778 | 4,380 | 17 | 482 | 4,100 | 27 | 3,020 | 4,020 |
| 8 | 733 | 4,280 | 18 | 471 | 4,060 | 28 | 3,080 | 3,930 |
| 9 | 681 | 4,210 | 19 | 480 | 4,080 | 29 | 3,280 | 3,800 |
| 10 | 632 | 4,430 | 20 | 492 | 4,200 | 30 | 3,640 | 3,640 |
| | | | | | | 31 | | 3,450 |
| Monthly mean discharge | | | | | | | 1,079 | 4,137 |
| Runoff | | | | | | thousands of acre-feet | 64.19 | 254.4 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 23* | | | *Apr. 28* | | | *May 4* | | |
| 12 p.m. | 6.06 | 486 | 12 m. | 22.03 | 3,080 | 10 a.m. | 23.12 | 3,680 |
| *Apr. 24* | | | 12 p.m. | 21.94 | 3,040 | 12 m. | 23.92 | 4,350 |
| 6 a.m. | 5.99 | 479 | *Apr. 29* | | | 6 p.m. | 24.20 | 4,600 |
| 6 p.m. | 5.87 | 467 | 4 a.m. | 22.00 | 3,070 | 12 p.m. | 24.28 | 4,670 |
| 12 p.m. | 7.10 | 595 | 8 | 22.37 | 3,240 | *May 5* | | |
| *Apr. 25* | | | 12 m. | 22.43 | 3,260 | 12 m. | 24.35 | 4,740 |
| 2 a.m. | 8.15 | 706 | 4 p.m. | 22.68 | 3,400 | 12 p.m. | 24.25 | 4,640 |
| 4 | 9.08 | 809 | 8 | 22.77 | 3,450 | *May 6* | | |
| 6 | 10.19 | 931 | 12 p.m. | 22.86 | 3,510 | 12 m. | 24.13 | 4,540 |
| 8 | 11.25 | 1,060 | *Apr. 30* | | | 12 p.m. | 24.03 | 4,450 |
| 10 | 12.32 | 1,210 | 12 m. | 23.07 | 3,650 | *May 7* | | |
| 12 m. | 13.20 | 1,340 | 12 p.m. | 23.24 | 3,770 | 12 m. | 23.95 | 4,380 |
| 2 p.m. | 14.30 | 1,520 | *May 1* | | | 12 p.m. | 23.89 | 4,320 |
| 6 | 15.81 | 1,780 | 4 a.m. | 23.30 | 3,820 | *May 8* | | |
| 8 | 16.33 | 1,870 | 8 | 23.30 | 3,820 | 12 m. | 23.84 | 4,280 |
| 10 | 16.81 | 1,950 | 12 m. | 23.28 | 3,800 | 12 p.m. | 23.79 | 4,230 |
| 12 p.m. | 17.21 | 2,020 | 4 p.m. | 23.26 | 3,790 | *May 9* | | |
| *Apr. 26* | | | 8 | 23.49 | 3,970 | 12 m. | 23.75 | 4,200 |
| 4 a.m. | 17.91 | 2,140 | 12 p.m. | 23.51 | 3,990 | 10 p.m. | 23.74 | 4,190 |
| 8 | 19.07 | 2,350 | *May 2* | | | 12 p.m. | 23.98 | 4,400 |
| 12 m. | 20.44 | 2,600 | 12 m. | 23.46 | 3,950 | *May 10* | | |
| 4 p.m. | 21.04 | 2,730 | 12 p.m. | 23.36 | 3,870 | 12 m. | 24.03 | 4,450 |
| 8 | 21.44 | 2,840 | *May 3* | | | 12 p.m. | 24.00 | 4,420 |
| 12 p.m. | 21.67 | 2,930 | 12 m. | 23.23 | 3,760 | | | |
| *Apr. 27* | | | 12 p.m. | 23.19 | 3,730 | | | |
| 8 a.m. | 21.86 | 3,010 | | | | | | |
| 4 p.m. | 21.92 | 3,030 | | | | | | |
| 12 p.m. | 22.08 | 3,110 | | | | | | |

### 106. BAYOU MACON NEAR OAK GROVE, LA.

[Stage station]

Location.—Lat 32°51′33″, long 91°20′29″, in NE¼NE¼ sec. 33, T. 22 N., R. 11 E., on downstream side of bridge on State Highway 2, 3 miles east of Oak Grove.

Drainage area.—582 sq mi (see Remarks).

Gage-height record.—Wire-weight gage read twice daily. Datum of gage is 68.11 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Maxima.—April–May 1958: Gage height, 23.2 ft May 5.
1946 to March 1958: Gage height, 24.7 ft Apr. 11, 1947.

Remarks.—Records furnished by Corps of Engineers. Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Gage height, in feet, at 8 a.m. of indicated day 1958*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 12.3 | 22.8 | 11 | 8.0 | 22.7 | 21 | 6.9 | 22.7 |
| 2 | 11.7 | 22.8 | 12 | 7.8 | 22.6 | 22 | 7.0 | 22.6 |
| 3 | 11.2 | 22.5 | 13 | 7.4 | 22.5 | 23 | 7.0 | 22.4 |
| 4 | 10.8 | 22.4 | 14 | 7.1 | 22.4 | 24 | 6.8 | 22.3 |
| 5 | 10.4 | 23.2 | 15 | 7.4 | 22.3 | 25 | 11.0 | 22.3 |
| 6 | 10.0 | 23.0 | 16 | 7.6 | 22.2 | 26 | 18.8 | 22.2 |
| 7 | 9.8 | 22.8 | 17 | 7.3 | 22.2 | 27 | 21.6 | 22.2 |
| 8 | 9.4 | 22.6 | 18 | 6.9 | 22.2 | 28 | 21.6 | 22.1 |
| 9 | 9.1 | 22.5 | 19 | 6.8 | 22.2 | 29 | 21.7 | 22.0 |
| 10 | 8.5 | 22.8 | 20 | 6.8 | 22.4 | 30 | 22.4 | 21.9 |
| | | | | | | 31 | | 21.8 |

### 107. BAYOU MACON NEAR DELHI, LA.

Location.—Lat 32°27'20", long 91°28'30", in SE¼ sec. 18, T. 17 N., R. 10 E., near right bank on downstream side of pier of bridge on (old) U.S. Highway 80, 150 ft upstream from Illinois Central Railroad bridge and 1 mile east of Delhi.

Drainage area.—782 sq mi (see Remarks).

Gage-height record.—Water-stage recorder graph. Datum of gage is 50.05 ft above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers). Auxiliary staff gage read twice daily at site 7.5 miles downstream at different datum.

Discharge record.—Slope-stage-discharge relation defined by current-meter measurements. Discharge Apr. 1–16, 18–21, Apr. 25–May 31, computed by using fall as determined from auxiliary gage as a factor.

Maxima.—April–May 1958: Discharge, 4,760 cfs 10 p.m. May 1; gage-height, 26.00 ft May 6, 7.

1935 to March 1958: Discharge, 5,460 cfs Apr. 14, 1947; gage height, 25.58 ft May 20, 21, 1953.

Maximum stage known, 37.5 ft in March 1882 from records of U.S. Weather Bureau.

Remarks.—Interconnecting system of bayous and drainage ditches produce an interchange of flow under varying conditions; hence, the drainage limits were more or less arbitrarily determined.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,130 | 4,600 | 11 | 809 | 4,050 | 21 | 645 | 3,980 |
| 2 | 1,920 | 4,610 | 12 | 745 | 4,020 | 22 | 674 | 4,000 |
| 3 | 1,800 | 4,430 | 13 | 702 | 4,010 | 23 | 674 | 3,990 |
| 4 | 1,550 | 4,300 | 14 | 663 | 3,990 | 24 | 663 | 4,000 |
| 5 | 1,370 | 4,300 | 15 | 684 | 3,990 | 25 | 855 | 3,980 |
| 6 | 1,240 | 4,260 | 16 | 759 | 3,990 | 26 | 1,980 | 3,970 |
| 7 | 1,140 | 4,160 | 17 | 792 | 3,960 | 27 | 3,520 | 3,950 |
| 8 | 1,070 | 4,100 | 18 | 733 | 3,990 | 28 | 4,140 | 3,950 |
| 9 | 969 | 4,070 | 19 | 682 | 3,950 | 29 | 4,210 | 3,970 |
| 10 | 877 | 4,060 | 20 | 642 | 3,950 | 30 | 4,500 | 3,950 |
| | | | | | | 31 | | 3,950 |
| Monthly mean discharge | | | | | | | 1,438 | 4,080 |
| Runoff | | | | | | thousands of acre-feet | 85.56 | 250.9 |

*Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1958*

| Hour | Gage height | Discharge | Hour | Gage height | Discharge | Hour | Gage height | Discharge |
|---|---|---|---|---|---|---|---|---|
| *Apr. 25* | | | *Apr. 28* | | | *May 1* | | |
| 4 a.m. | 5.27 | 685 | 6 a.m. | 18.67 | 4,120 | 4 a.m. | 23.65 | 4,580 |
| 8 | 5.40 | 716 | 12 m. | 19.18 | 4,190 | 8 | 23.90 | 4,550 |
| 12 m. | 5.77 | 803 | 6 p.m. | 19.50 | 4,160 | 12 m. | 24.10 | 4,560 |
| 4 p.m. | 6.28 | 916 | 12 p.m. | 19.77 | 4,160 | 2 p.m. | 24.20 | 4,600 |
| 8 | 6.94 | 1,070 | *Apr. 29* | | | 4 | 24.28 | 4,610 |
| 12 p.m. | 7.60 | 1,220 | | | | 6 | 24.62 | 4,570 |
| *Apr. 26* | | | 6 a.m. | 20.01 | 4,140 | 8 | 24.87 | 4,720 |
| | | | 12 m. | 20.38 | 4,170 | 10 | 24.97 | 4,760 |
| 8 a.m. | 9.29 | 1,610 | 6 p.m. | 20.87 | 4,230 | 12 p.m. | 25.02 | 4,740 |
| 4 p.m. | 11.74 | 2,280 | 12 p.m. | 21.49 | 4,410 | *May 2* | | |
| 12 p.m. | 13.94 | 2,880 | *Apr. 30* | | | 12 m. | 25.19 | 4,610 |
| *Apr. 27* | | | | | | 12 p.m. | 25.32 | 4,550 |
| 6 a.m. | 15.17 | 3,240 | 6 a.m. | 21.98 | 4,540 | | | |
| 12 m. | 16.11 | 3,510 | 12 m. | 22.43 | 4,580 | | | |
| 6 p.m. | 17.18 | 3,860 | 6 p.m. | 22.76 | 4,440 | | | |
| 12 p.m. | 18.08 | 4,050 | 12 p.m. | 23.27 | 4,510 | | | |

## SABINE RIVER BASIN

### 108. SABINE RIVER NEAR EMORY, TEX.

Location.—Lat 32°46′, long 95°48′, on left bank at downstream side of bridge on State Highway 19, 3.0 miles upstream from Giladon Creek, 7.5 miles south of Emory, Rains County, 8.0 miles downstream from McBees Creek, and at mile 501.

Drainage area.—965 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 350.28 ft above mean sea level, unadjusted (Texas Reclamation Department bench mark).

Discharge record.—Stage-discharge relation defined by current-meter measure-
mark).

Maxima.—April–May 1958: Discharge, 35,400 cfs 1 p.m. Apr. 28 (gage height, 20.27 ft).

1952 to March 1958: Discharge, 74,000 cfs Apr. 27, 1957 (gage height, 25.06 ft).

Maximum stage since at least 1900, 25.7 ft in June 1943, from information by local resident and Texas Highway Department.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 5,550 | 16,100 | 11 | 48 | 94 | 21 | 144 | 24 |
| 2 | 3,150 | 19,600 | 12 | 61 | 70 | 22 | 257 | 20 |
| 3 | 1,240 | 22,000 | 13 | 82 | 56 | 23 | 400 | 13 |
| 4 | 231 | 19,400 | 14 | 171 | 46 | 24 | 308 | 8.0 |
| 5 | 114 | 18,700 | 15 | 622 | 40 | 25 | 156 | 5.6 |
| 6 | 124 | 11,100 | 16 | 885 | 46 | 26 | 951 | 3.0 |
| 7 | 89 | 5,240 | 17 | 1,260 | 54 | 27 | 15,000 | 1.4 |
| 8 | 58 | 2,350 | 18 | 820 | 48 | 28 | 31,500 | 1.0 |
| 9 | 50 | 733 | 19 | 208 | 41 | 29 | 22,600 | .7 |
| 10 | 49 | 161 | 20 | 112 | 31 | 30 | 15,900 | .5 |
| | | | | | | 31 | | .3 |
| Monthly mean discharge | | | | | | | 3,405 | 3,742 |
| Runoff | | | | | | thousands of acre-feet | 202.6 | 230.1 |
| Runoff | | | | | | inches | 3.95 | 4.49 |

### 109. SABINE RIVER NEAR MINEOLA, TEX.

Location.—Lat 32°36'45", long 95°29'10", near center of main channel on downstream side of pier of bridge on U.S. Highway 69, 3.2 miles south of Mineola, Wood County, 4.5 miles upstream from International-Great Northern Railroad bridge, and at mile 461.

Drainage area.—1,445 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 304.16 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–June 1958: Discharge, 36,000 cfs 5 a.m. Apr. 30 (gage height, 20.60 ft).

1939 to March 1958: Discharge, 76,000 cfs Apr. 1, 1945; gage height, 24.37 ft June 8, 1943.

Maximum stage since at least 1915, that of June 8, 1943 (discharge, 64,100 cfs).

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,370 | 30,000 | 11 | 154 | 4,380 | 21 | 876 | 88 |
| 2 | 1,610 | 24,600 | 12 | 161 | 2,020 | 22 | 512 | 78 |
| 3 | 2,290 | 24,600 | 13 | 158 | 857 | 23 | 412 | 66 |
| 4 | 2,700 | 26,800 | 14 | 403 | 336 | 24 | 436 | 56 |
| 5 | 3,910 | 25,300 | 15 | 972 | 193 | 25 | 486 | 50 |
| 6 | 2,240 | 23,200 | 16 | 1,130 | 201 | 26 | 1,660 | 44 |
| 7 | 1,010 | 19,600 | 17 | 1,190 | 140 | 27 | 13,200 | 39 |
| 8 | 386 | 12,000 | 18 | 1,280 | 123 | 28 | 23,200 | 35 |
| 9 | 270 | 8,000 | 19 | 1,340 | 117 | 29 | 31,000 | 33 |
| 10 | 177 | 6,300 | 20 | 1,280 | 105 | 30 | 34,000 | 29 |
| | | | | | | 31 | | 25 |
| Monthly mean discharge | | | | | | | 4,327 | 6,755 |
| Runoff | | | | | | thousands of acre-feet | 257.5 | 415.4 |
| Runoff | | | | | | inches | 3.34 | 5.39 |

### 110. LAKE FORK SABINE RIVER NEAR QUITMAN, TEX.

Location.—Lat 32°46', long 95°28', near center of main channel at upstream side of bridge on State Highway 37, half a mile downstream from Dry Creek and 2.5 miles south of Quitman, Wood County.

Drainage area.—586 sq mi.

Gage-height record.—From graph based on twice-daily wire-weight gage readings. Datum of gage is 317.42 ft above mean sea level, datum of 1929.

Discharge record.—Stage-discharge relation defined by current-meter measurements.

Maxima.—April–May 1958: Discharge, 39,400 cfs 1 a.m. Apr. 28 (gage height, 24.38 ft, from floodmark).

1924–26, 1939 to March 1958: Discharge, 75,600 cfs Mar. 30, 1945 (gage height, 29.85 ft, from floodmark), from rating curve extended above 49,000 cfs.

Maximum stage since at least 1895, that of Mar. 30, 1945.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,920 | 18,700 | 11 | 166 | 184 | 21 | 216 | 56 |
| 2 | 1,800 | 15,400 | 12 | 208 | 170 | 22 | 282 | 47 |
| 3 | 1,190 | 9,220 | 13 | 216 | 135 | 23 | 416 | 40 |
| 4 | 494 | 10,500 | 14 | 462 | 110 | 24 | 478 | 32 |
| 5 | 240 | 8,600 | 15 | 866 | 93 | 25 | 584 | 28 |
| 6 | 163 | 4,040 | 16 | 844 | 116 | 26 | 3,590 | 26 |
| 7 | 128 | 2,360 | 17 | 1,030 | 248 | 27 | 26,200 | 21 |
| 8 | 96 | 1,540 | 18 | 1,080 | 232 | 28 | 32,800 | 28 |
| 9 | 96 | 760 | 19 | 660 | 107 | 29 | 13,800 | 34 |
| 10 | 122 | 348 | 20 | 232 | 71 | 30 | 13,800 | 54 |
| | | | | | | 31 | | 47 |
| Monthly mean discharge | | | | | | | 3,506 | 2,366 |
| Runoff | | | | | | thousands of acre-feet | 208.6 | 145.5 |
| Runoff | | | | | | inches | 6.67 | 4.65 |

### 111. BIG SANDY CREEK NEAR BIG SANDY, TEX.

Location.—Lat. 32°36′, long 95°06′, near center of channel on downstream side of pier of bridge on State Highway 155, 0.8 mile upstream from St. Louis Southwestern Railway Lines bridge, 1.3 miles northeast of Big Sandy, Upshur County, and 7.1 miles upstream from mouth.

Drainage area.—236 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 278.38 ft above mean sea level, datum of 1929, supplementary adjustment of 1942.

Discharge record.—Stage-discharge relation defined by current-meter measurements. Stage-discharge relation affected by backwater from Sabine River Apr. 29–May 15, 1958.

Maxima.—April–May 1958: Discharge, 12,900 cfs 9 a.m. Apr. 28 (gage height, 21.30 ft).

1939 to March 1958: Discharge, 38,000 cfs Mar. 31, 1945 (gage height, 24.1 ft, from floodmark), from rating curve extended above 13,000 cfs on basis of rainfall-runoff study for this and adjoining basins.

Maximum stage since at least 1905, that of Mar. 31, 1945.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 269 | 3,150 | 11 | 154 | 290 | 21 | 293 | 122 |
| 2 | 301 | 4,500 | 12 | 144 | 250 | 22 | 237 | 114 |
| 3 | 358 | 3,700 | 13 | 134 | 215 | 23 | 201 | 106 |
| 4 | 349 | 2,300 | 14 | 184 | 205 | 24 | 169 | 102 |
| 5 | 309 | 1,600 | 15 | 215 | 190 | 25 | 159 | 94 |
| 6 | 253 | 1,300 | 16 | 229 | 174 | 26 | 386 | 92 |
| 7 | 208 | 850 | 17 | 285 | 159 | 27 | 2,560 | 87 |
| 8 | 179 | 600 | 18 | 459 | 149 | 28 | 11,400 | 94 |
| 9 | 164 | 460 | 19 | 507 | 139 | 29 | 7,660 | 96 |
| 10 | 159 | 360 | 20 | 388 | 129 | 30 | 3,710 | 85 |
| | | | | | | 31 | | 83 |
| Monthly mean discharge | | | | | | | 1,067 | 703 |
| Runoff | | | | | | thousands of acre-feet | 63.52 | 43.23 |
| Runoff | | | | | | inches | 5.05 | 3.43 |

### 112. SABINE RIVER NEAR GLADEWATER, TEX.

Location.—Lat 32°32′, long 94°57′, on right bank on downstream side of pier of bridge on U.S. Highway 271, half a mile downstream from Glade Creek, 1 mile southwest of Gladewater, Gregg County, and at mile 398.

Drainage area.—2,846 sq mi.

Gage-height record.—Water-stage recorder graph. Datum of gage is 243.85 ft above mean sea level (Texas Reclamation Department bench mark based on Geological Survey datum).

Discharge record.—Stage-discharge relation defined by current- meter measurements. Discharge computed by using rate-of-change in stage as a factor.

Maxima.—April–May 1958: Discharge, 53,500 cfs 5 a.m. May 3 (gage height, 39.90 ft).

1932 to March 1958: Discharge, 138,000 cfs Apr. 2, 1945 (gage height, 44.16 ft, from floodmark), from rating curve extended above 91,000 cfs.

Maximum stage since at least 1914, that of Apr. 2, 1945.

*Mean discharge, in cubic feet per second*

| Day | April | May | Day | April | May | Day | April | May |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,260 | 44.900 | 11 | 1,850 | 17,000 | 21 | 2,680 | 1,110 |
| 2 | 2,280 | 51,300 | 12 | 1,180 | 14,200 | 22 | 2,790 | 748 |
| 3 | 2,440 | 52,400 | 13 | 858 | 11,900 | 23 | 2,760 | 594 |
| 4 | 2,710 | 48,000 | 14 | 990 | 10,000 | 24 | 2,590 | 512 |
| 5 | 3,170 | 42,000 | 15 | 1,250 | 8,630 | 25 | 2,030 | 452 |
| 6 | 3,550 | 37,700 | 16 | 1,540 | 6,830 | 26 | 2,940 | 412 |
| 7 | 3,830 | 33,800 | 17 | 1,820 | 5,390 | 27 | 6,380 | 382 |
| 8 | 3,890 | 29,700 | 18 | 2,060 | 3,750 | 28 | 6,460 | 422 |
| 9 | 3,920 | 25,200 | 19 | 2,330 | 2,560 | 29 | 13,000 | 492 |
| 10 | 2,860 | 20,800 | 20 | 2,540 | 1,750 | 30 | 32,200 | 532 |
| | | | | | | 31 | | 552 |
| Monthly mean discharge | | | | | | | 4,039 | 15,290 |
| Runoff | | | | | | thousands of acre-feet | 240.3 | 940.2 |
| Runoff | | | | | | inches | 1.58 | 6.20 |

## SUMMARY OF FLOOD STAGES AND DISCHARGES

Maximum flood flows at stream-gaging stations in the area covered by this report are summarized in table 1. The reference numbers correspond to those on figures 1 and 12–14.

The first column under maximum floods shows the period of known floods prior to April 1958. This period does not necessarily correspond to that in which continuous records of discharge were obtained, but in many cases it extends back to an earlier date. More than one period of known floods are shown for some stations. Periods are shown when they can be associated with a maximum stage even though the corresponding discharge may not be known—a second period of known floods is then given in which the maximum discharge and stage are both known.

The second column under maximum floods shows the year in which the maximum stage or discharge occurred.

The third column under maximum floods gives the date of the maximum stage or discharge during the flood period April–May 1958.

Some of the stages and discharges listed in table 1 are affected by regulation, overflow, diversions, or other factors. These effects are indicated in footnotes or are described in the corresponding station description in the section, "Stages and discharges at stream-gaging stations."

The results of discharge measurements at many stage stations operated by the Corps of Engineers are tabulated in "Stages and Discharges of the Mississippi River and Tributaries in the Vicksburg District, 1958" or in "Stages and Discharges of the Mississippi River and Tributaries and other streams and waterways in the New Orleans district for 1957–1958."

TABLE 1.—*Flood stages and discharges, Louisiana and adjacent States*

| No. | Permanent station number | Stream and place of determination | Drainage area (sq mi) | Maximum floods | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Prior to April 1958 | | April–May 1958 (Date) | Gage height (ft) | Discharge | |
| | | | | Period | Year | | | Cfs | Ratio to $Q_{2.33}$ |
| **PART 2B** | | | | | | | | | |
| | | **Pearl River basin** | | | | | | | |
| 1 | 4820 | Pearl River at Edinburg, Miss | 898 | 1902–58 | 1902 | | 29.0 | (1) | |
| | | | | 1928–58 | 1935 | | | 31,400 | |
| | | | | | 1950 | | 26.30 | | |
| | | | | | | May 5 | 24.58 | 11,600 | |
| 2 | 4825 | Lobutcha Creek near Carthage, Miss | 313 | 1937–58 | 1951 | | 18.00 | 19,100 | |
| | | | | | | May 2 | 16.21 | 7,460 | |
| 3 | 4830 | Tuscolameta Creek at Walnut Grove, Miss | 411 | 1939–58 | 1950 | | 23.00 | 34,600 | |
| | | | | | | May 1 | 16.69 | 8,400 | |
| 4 | 4840 | Yockanookany River near Kosciusko, Miss | 314 | 1938–58 | 1951 | | 18.72 | 19,300 | |
| | | | | | | May 2 | 14.32 | 4,780 | |
| 5 | 4845 | Yockanookany River near Ofahoma, Miss | 484 | 1943–58 | 1951 | | 20.28 | 20,700 | |
| | | | | | | May 3 | 18.07 | 9,220 | |
| 6 | 4850 | Pearl River at Meeks Bridge near Canton, Miss | 2,780 | 1932 | 1932 | | 26.4 | (1) | |
| | | | | 1939–58 | 1951 | | 26.30 | 57,800 | |
| | | | | | | May 6 | 25.00 | 39,400 | |
| 7 | 4855 | Pelahatchie Creek near Fannin, Miss | 205 | 1880–1958 | 1950 | | 23.7 | (1) | |
| | | | | 1951–58 | 1955 | | 22.08 | 13,500 | |
| | | | | | | May 1 | 20.30 | 5,860 | |
| 8 | 4860 | Pearl River at Jackson, Miss | 3,100 | 1901–58 | 1902 | | 37.2 | 80,800 | |
| | | | | | | May 8 | 34.23 | 38,900 | |
| **PART 7** | | | | | | | | | |
| | | **Yazoo River basin** | | | | | | | |
| 9 | 2800 | Tallahatchie River near Lambert, Miss | [2] 1,980 | 1932 | 1932 | | 36.8 | (1) | |
| | | | | 1935–58 | 1937 | | 35.54 | [3] 32,800 | |
| | | | | | | May 3 | 30.54 | 11,600 | |
| 10 | 2810 | Tallahatchie River at Swan Lake, Miss | 5,130 | 1904–58 | 1932 | | 37.0 | | |
| | | | | | 1933 | | | [3] 49,200 | |
| | | | | | | May 4 | 30.40 | | |
| | | | | | | May 4 | | 28,300 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 11 | 2865 | Thompson Creek at McCarley, Miss. | 14.4 | 1950–58 | 1955 | | 14.05 | [1] | |
| | | | | 1956–58 | 1957 | | 12.06 | 2,420 | |
| 12 | 2870 | Yazoo River at Greenwood, Miss. | 7,450 | 1882 | 1882 | Apr. 29 | 8.80 | 1,330 | 0.8 |
| | | | | 1904–58 | 1932 | | 41.2 | [1] | |
| | | | | | | | 40.10 | 72,900 | |
| | | | | | | May 10 | 34.15 | | |
| 13 | 2885 | Sunflower River at Sunflower, Miss. | 767 | 1935–58 | 1946 | May 10 | | 28,200 | |
| | | | | | 1946 | | [3] 27.43 | | |
| | | | | | | | | [3] 7,700 | |
| | | **Big Black River basin** | | | | May 5 | 28.31 | 9,300 | 1.8 |
| 14 | 2895 | Big Black River at Pickens, Miss. | 1,460 | 1926 | 1926 | | 23.7 | [1] | |
| | | | | 1936–58 | 1951 | | 22.20 | 49,400 | |
| 15 | 2900 | Big Black River near Bovina, Miss. | [4] 2,810 | 1912, 1927 | 1912, 1927 | May 2 | 20.15 | 37,800 | 1.9 |
| | | | | | | | [5] | [1] | |
| | | | | 1936–58 | 1951 | | 39.65 | 58,600 | |
| | | | | | | May 5 | 39.74 | 52,500 | 2.0 |
| | | **Red River basin** | | | | | | | |
| 16 | 3355 | Red River at Arthur City, Tex. | [6] 44,531 | 1905–11, 1936–58 | 1908 | | 43.2 | 400,000 | |
| | | | | | | May 3 | 26.35 | 120,000 | 1.3 |
| 17 | 3365 | Kiamichi River near Belzoni, Okla. | 1,423 | 1915 | 1915 | | 44.2 | [1] | |
| | | | | 1925–58 | 1938 | | 44.0 | 71,400 | |
| | | | | | | May 3 | 40.78 | 55,200 | 1.4 |
| 18 | 3370 | Red River at Index, Ark. | [6] 48,030 | 1936–58 | 1938 | | 34.25 | 297,000 | |
| | | | | | | May 6 | 25.8 | 145,000 | 1.4 |
| 19 | 3375 | Little River near Wright City, Okla. | 645 | 1929–31, 1944–58 | 1950 | | 45.77 | 75,400 | |
| | | | | | | May 2 | 41.63 | | |
| | | | | | | May 2 | | 44,600 | 1.2 |
| 20 | 3385 | Little River below Lukfata Creek near Idabel, Okla. | 1,226 | 1938 | 1938 | | 39.7 | 86,000 | |
| | | | | 1946–58 | 1949 | | 39.22 | 76,000 | |
| | | | | | | May 4 | | 40,700 | 1.1 |
| | | | | | | May 4 | 35.01 | | |
| 21 | 3390 | Mountain Fork River near Eagletown, Okla. | 787 | 1915 | 1915 | | 26.4 | 92,500 | |
| | | | | 1924–25, 1929–58 | 1945 | | 25.80 | | |
| | | | | | 1950 | | | 91,500 | |
| | | | | | | May 3 | 18.52 | 41,300 | 1.0 |
| 22 | 3395 | Rolling Fork near DeQueen, Ark. | 181 | 1947–58 | 1947 | | 25.6 | 110,000 | |
| | | | | | | May 2 | 18.73 | 13,800 | .9 |
| 23 | 3400 | Little River near Horatio, Ark. | 2,674 | 1915 | 1915 | | 38 | 124,000 | |
| | | | | 1930–58 | 1945 | | 37.70 | 120,000 | |
| | | | | | | May 4 | 32.72 | 63,600 | 1.1 |
| 24 | 3405 | Cossatot River near DeQueen, Ark. | 361 | 1938–58 | 1947 | | 20.47 | 46,900 | |
| | | | | | | May 3 | 18.56 | 28,900 | 1.2 |
| 25 | 3410 | Saline River near Dierks, Ark. | 124 | 1920 | 1920 | | 21.9 | [1] | |
| | | | | 1938–58 | 1945 | | 19.93 | 31,200 | |
| | | | | | | May 1 | 14.71 | 7,160 | .6 |

See footnotes at end of table.

TABLE 1.—*Flood stages and discharges, Louisiana and adjacent States*—Continued

| No. | Permanent station number | Stream and place of determination | Drainage area (sq mi) | Maximum floods | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Prior to April 1958 | | April–May 1958 (Date) | Gage height (ft) | Discharge | |
| | | | | Period | Year | | | Cfs | Ratio to $Q_{2.33}$ |
| **PART 7—Continued** | | | | | | | | | |
| | | **Red River basin—Continued** | | | | | | | |
| 26 | 3415 | Red River at Fulton, Ark | [6] 52,380 | 1927–58 | 1938 | | | 338,000 | |
| | | | | | 1945 | | 37.4 | | |
| | | | | | | May 6 | | 214,000 | 1.9 |
| | | | | | | May 6 | 29.47 | | |
| 27 | 3425 | South Sulphur River near Cooper, Tex | 527 | 1942–58 | 1953 | | 23.00 | 23,800 | |
| | | | | | | May 1 | 20.93 | 17,400 | 1.4 |
| 28 | 3430 | North Sulphur River near Cooper, Tex | 276 | 1915–58 | 1944 | | 26.6 | [1] | |
| | | | | 1949–58 | 1953 | | 25.86 | 42,800 | |
| | | | | | | May 2 | 22.35 | 39,500 | 5.1 |
| 29 | 3432 | Sulphur River near Talco, Tex | 1,365 | 1908–58 | 1908, 1914 | | 27.5 | [1] | |
| | | | | 1956–58 | 1957 | | 24.60 | 44,900 | |
| | | | | | | May 3 | 25.69 | 50,600 | 1.9 |
| 30 | 3435 | Whiteoak Creek near Talco, Tex | 494 | 1870–1958 | 1945 | | 25.3 | [1] | |
| | | | | 1949–58 | 1950 | | 18.98 | 23,300 | |
| | | | | | | Apr. 28 | 19.52 | 26,600 | 2.2 |
| 31 | 3442 | Texarkana Reservoir near Texarkana, Tex | 3,443 | 1953–58 | 1957 | | [7] 250.36 | [8] 1,700 | |
| | | | | | | May 12 | [7] 249.82 | [8] 1,651 | |
| 32 | | Posten Bayou near Wardview, La | | 1956–58 | 1957 | | [7] 196.70 | [1] | |
| | | | | | | May 1 | [7] 198.98 | [1] | |
| 33 | 3444 | Red River near Hosston, La | [7] 57,041 | | | May 7 | 27.89 | 214,000 | |
| 34 | 3445 | Cypress Creek near Pittsburg, Tex | 366 | 1895–1958 | 1945 | | 28.32 | [9] | |
| | | | | 1943–58 | 1945 | | 28.32 | 58,500 | 6.5 |
| 35 | 3450 | Boggy Creek near Daingerfield, Tex | 72 | 1900–58 | 1938 | | 17.5 | [1] | |
| | | | | 1943–58 | 1945 | | 15.56 | 15,900 | |
| | | | | | | Apr. 27 | 17.80 | 28,900 | 10.1 |
| 36 | 3459 | Lake O' the Pines near Jefferson, Tex | 850 | | | May 7 | [7] 239.71 | [8] 515.8 | |
| 37 | 3460 | Cypress Creek near Jefferson, Tex | 850 | 1853–1958 | 1945 | | [10] 212.48 | [9] | |
| | | | | 1924–58 | 1945 | | [10] 212.48 | 57,100 | |
| | | | | | | Apr. 29 | [7] 201.30 | 5,190 | .5 |
| 38 | | Caddo Lake near Mooringsport, La | 2,744 | 1921–58 | 1945 | | [7] 181.8 | [8] 745.5 | |
| | | | | | | May 5 | [7] 182.59 | [8] 783.3 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 39 | 3470 | Kelly Bayou near Hosston, La | 116 | 1944–58 | 1945 | | | 1,800 | |
| | | | | | 1957 | | 17.23 | | |
| | | | | | | Apr. 28 | | 4,460 | 2.6 |
| | | | | | | Apr. 29 | 22.72 | | |
| 40 | 3475 | Black Bayou near Gilliam, La | 364 | 1942–58 | 1945 | | 25.73 | | |
| | | | | | 1947 | | | 8,200 | |
| | | | | | | Apr. 29 | 27.51 | 17,700 | 4.9 |
| 41 | 3480 | Twelvemile Bayou near Dixie, La | 3,137 | 1942–58 | 1945 | | 35.65 | 34,900 | |
| | | | | | | May 5 | | 38,400 | 3.0 |
| | | | | | | May 5 | 35.65 | | |
| 42 | 3482 | Paw Paw Bayou near Greenwood, La | 78 | 1955–58 | 1957 | | 11.24 | 3,750 | |
| | | | | | | Apr. 27 | 13.84 | 7,310 | 2.4 |
| 43 | 3485 | Red River at Shreveport, La | [7] 60,613 | 1849 | 1849 | | 45.9 | (1) | |
| | | | | 1928–58 | 1945 | | | 303,000 | |
| | | | | | 1945 | | 38.4 | | |
| | | | | | | May 8 | 33.70 | 249,000 | 1.9 |
| 44 | 3487 | Bayou Dorcheat near Springhill, La | 605 | | | Apr. 28 | 22.79 | 36,400 | 4.4 |
| 45 | 3488 | Flat Lick Bayou near Leton, La | 66.9 | 1956–58 | 1957 | | 9.92 | 2,340 | |
| | | | | | | Apr. 26 | 12.95 | 10,200 | 5.1 |
| 46 | 3490 | Bayou Dorcheat near Minden, La | 1,097 | 1928–31, 1936–58 | 1930 | | 22.95 | 40,000 | |
| | | | | | | May 1 | 24.90 | 44,800 | 3.7 |
| 47 | | Flat River (Shell Bayou) near Shreveport, La | 45.3 | 1933 | 1933 | | [7] 166.97 | (1) | |
| | | | | 1939–58 | 1945 | | [7] 165.48 | (1) | |
| | | | | | | May 4, 5 | [7] 163.15 | (1) | |
| 48 | | Alligator Bayou near Shreveport, La | | 1938–58 | 1953 | | 10.63 | (1) | |
| | | | | | | May 5 | 10.95 | (1) | |
| 49 | 3495 | Bodcau Bayou near Sarepta, La | 546 | 1905 | 1905 | | (11) | (1) | |
| | | | | 1938–58 | 1940 | | 22.16 | 12,600 | |
| | | | | | | May 2 | 25.14 | 18,600 | 2.4 |
| 50 | | Bodcau Bayou Reservoir near Shreveport, La | 683 | 1949–58 | 1953 | | [7] 187.01 | [8] 157.2 | |
| | | | | | | May 11 | [7] 196.67 | [8] 301.1 | |
| 51 | 3498 | Cypress Bayou near Benton, La | 133 | 1956–58 | 1957 | | 15.08 | 8,130 | |
| | | | | | | Apr. 27 | 15.18 | 8,350 | 2.7 |
| 52 | | Red Chute Bayou near Shreveport, La | 925 | 1933 | 1933 | | 33.1 | (1) | |
| | | | | 1939–58 | 1941 | | 31.1 | (1) | |
| | | | | | | May 4, 5 | 27.62 | (1) | |
| 53 | 3500 | Loggy Bayou near Ninock, La | 2,628 | 1948–58 | 1953 | | | [12] 20,000 | |
| | | | | | 1957 | | 47.08 | | |
| | | | | | | May 4 | | [12] 32,600 | |
| | | | | | | May 8 | 47.83 | | |
| 54 | | Bayou Pierre near Gayle, La | | 1938–58 | 1946 | | 22.66 | (1) | |
| | | | | | | May 1 | 10.28 | (1) | |
| 55 | 3510 | Boggy Bayou near Keithville, La | 79 | 1933 | 1933 | | 26.7 | (1) | |
| | | | | 1938–58 | 1946 | | 20.2 | 14,800 | |
| | | | | | | May 4 | 16.46 | 1,460 | .3 |
| 56 | | Wallace Lake near Shreveport, La | 266 | 1946–58 | 1953 | | [7] 153.00 | [8] 56.5 | |
| | | | | | | May 4 | [7] 148.60 | [8] 31.5 | |
| 57 | 3575 | Lake Ouachita near Hot Springs, Ark | 1,105 | 1952–58 | 1957 | | [7] 584.01 | [8] 2,402.1 | |
| | | | | | | May 6 | [7] 583.57 | [8] 2,383.1 | |
| 58 | 3595 | Ouachita River near Malvern, Ark | 1,562 | 1903–5, 1922–58 | 1923 | | 30.3 | 140,000 | |
| | | | | | | May 2 | 21.16 | [13] 55,200 | |

**See footnotes at end of table.**

TABLE 1.—*Flood stages and discharges, Louisiana and adjacent States*—Continued

| No. | Permanent station number | Stream and place of determination | Drainage area (sq mi) | Maximum floods | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Prior to April 1958 | | April–May 1958 (Date) | Gage height (ft) | Discharge | |
| | | | | Period | Year | | | Cfs | Ratio to $Q_{2.33}$ |
| **PART 7—Continued** | | | | | | | | | |
| | | **Red River basin—Continued** | | | | | | | |
| 59 | 3598 | Caddo River near Alpine, Ark | 312 | 1938–58 | 1945 | | 30.16 | 64,200 | |
| | | | | | | May 2 | 20.18 | 36,500 | 1.6 |
| 60 | 3600 | Ouachita River at Arkadelphia, Ark | 2,311 | 1929–58 | 1945 | | 30.3 | [13]170,000 | |
| | | | | | | May 3 | 27.65 | [13]119,000 | |
| 61 | 3605 | Lake Greeson near Murfreesboro, Ark | 237 | 1949–58 | 1953 | | [7]557.84 | [8]359.3 | |
| | | | | | | May 6 | [7]557.81 | [8]359.1 | |
| 62 | 3608 | Muddy Fork Creek near Murfreesboro, Ark | 121 | 1940–58 | 1945 | | 29.7 | 47,100 | |
| | | | | | | May 2 | 26.28 | 35,100 | 2.8 |
| 63 | 3610 | Little Missouri River near Murfreesboro, Ark | 380 | 1927 | 1927 | | 21 | (1) | |
| | | | | 1928–31, 1937–58 | 1945 | | 19.84 | 120,000 | |
| | | | | | | May 2 | 15.74 | 30,300 | 1.2 |
| 64 | 3615 | Antoine River at Antoine, Ark | 181 | 1905 | 1905 | | 29.7 | 40,000 | |
| | | | | 1950–58 | 1957 | | 24.00 | 16,600 | |
| | | | | | | May 2 | 28.75 | 35,500 | 2.2 |
| 65 | 3616 | Little Missouri River near Boughton, Ark | 1,068 | 1937–58 | 1945 | | 27.2 | 111,000 | |
| | | | | | | May 3 | 24.22 | 66,000 | 2.1 |
| 66 | 3620 | Ouachita River at Camden, Ark | 5,391 | 1882 | 1882 | | 46.0 | (1) | |
| | | | | 1928–58 | 1945 | | 44.82 | 243,000 | |
| | | | | | | May 5 | 43.87 | 185,000 | 2.0 |
| 67 | 3621 | Smackover Creek near Smackover, Ark | 377 | 1938–58 | 1945 | | 19.8 | 16,500 | |
| | | | | | | Apr. 27 | 21.21 | 25,000 | 4.1 |
| 68 | 3625 | Moro Creek near Fordyce, Ark | 216 | 1938 | 1938 | | 15.1 | 15,800 | |
| | | | | 1951–58 | 1957 | | 14.35 | 11,100 | |
| | | | | | | May 2 | 16.47 | 26,800 | 4.2 |
| 69 | 3630 | Saline River at Benton, Ark | 569 | 1927 | 1927 | | 30.5 | (1) | |
| | | | | 1938–58 | 1939 | | 26.1 | 67,000 | |
| | | | | | | May 3 | 21.40 | 28,400 | 1.3 |
| 70 | 3632 | Saline River and Gamble Creek near Sheridan, Ark | 1,129 | 1938–58 | 1938 | | 21.0 | 70,000 | |
| | | | | | | May 3 | 18.97 | 48,000 | 1.5 |
| 71 | 3634 | Hurricane Creek near Sheridan, Ark | 270 | 1938–40, 1946–58 | 1950 | | 15.4 | (1) | |
| | | | | | | May 3 | 14.48 | 16,000 | 1.2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 72 | 3635 | Saline River near Rye, Ark | 2,062 | 1927 | 1927 | | 30.5 | 73,000 | | |
| | | | | 1937–58 | 1949 | | 29.19 | 57,400 | | |
| | | | | | | May 3 | 30.31 | 70,500 | 2.2 | |
| 73 | 3641.2 | Bayou Bartholomew near Star City, Ark | 215 | 1941–58 | 1953 | | 23.97 | 2,860 | | |
| | | | | | | May 2 | 26.29 | 4,000 | 2.4 | |
| 74 | 3641.5 | Bayou Bartholomew near McGehee, Ark | 592 | 1938–58 | 1953 | | 22.5 | 5,700 | | |
| | | | | | | May 11 | [14] 24.49 | 6,870 | 2.0 | |
| 75 | 3641.9 | Bayou Bartholomew at Wilmot, Ark | 1,170 | 1925–58 | 1932 | | 26.3 | 7,100 | | |
| | | | | | | May 23 | 26.16 | 8,000 | 1.4 | |
| 76 | 3642 | Bayou Bartholomew near Jones, La | 1,187 | | | May 21, 22 | 28.24 | (1) | | |
| 77 | 3643 | Chemin a Haut Bayou near Beekman, La | 271 | 1955–58 | 1956 | | | 3,890 | | |
| | | | | | 1957 | | 12.78 | | | |
| | | | | | | Apr. 26 | | 29,500 | 12.4 | |
| | | | | | | Apr. 27 | 18.71 | | | |
| 78 | 3645 | Bayou Bartholomew near Beekman, La | 1,645 | 1932 | 1932 | | 25.78 | 12,400 | | |
| | | | | 1928–31, 1938–58 | 1946 | | 27.23 | 10,400 | | |
| | | | | | | May 2 | 28.30 | 14,700 | 1.9 | |
| 79 | 3647 | Bayou de Loutre near Laran, La | 141 | 1956–58 | 1957 | | 11.10 | 2,700 | | |
| | | | | | | Apr. 27 | 20.29 | 22,600 | 7.0 | |
| 80 | | Bayou de Loutre near De Loutre, La | 302 | 1948–58 | 1953 | | [7] 90.72 | | | |
| | | | | | | Apr. 28 | [7] 98.55 | | | |
| 81 | 3649 | Big Creek near Vienna, La | 68.9 | 1954–58 | 1957 | | 45.75 | 3,280 | | |
| | | | | | | Apr. 27 | 45.08 | 2,350 | .8 | |
| 82 | 3650 | Bayou D'Arbonne near Dubach, La | 355 | 1940–58 | 1945 | | 22.83 | 23,400 | | |
| | | | | | | Apr. 28 | 20.90 | 13,400 | 1.6 | |
| 83 | 3651 | Cypress Creek near Unionville, La | 63.3 | 1953–58 | 1955 | | 43.52 | 4,200 | | |
| | | | | | | Apr. 27 | 42.72 | 2,520 | 1.0 | |
| 84 | 3655 | Middle Fork Bayou D'Arbonne near Bernice, La | 178 | 1940–58 | 1945 | | 11.45 | 10,500 | | |
| | | | | | | Apr. 27 | 13.86 | 28,000 | 7.4 | |
| 85 | 3658 | Cornie Bayou near Three Creeks, Ark | 180 | 1956–58 | 1957 | | [15] 12.00 | 6,440 | | |
| | | | | | | Apr. 27 | 15.50 | 35,800 | 9.5 | |
| 86 | 3659 | Three Creek near Three Creeks, Ark | 46 | 1956–58 | 1957 | | [15] 5.82 | 1,450 | | |
| | | | | | | Apr. 26 | 9.35 | 11,300 | 7.2 | |
| 87 | 3660 | Corney Bayou near Lillie, La | 462 | 1940–58 | 1945 | | 18.20 | 17,200 | | |
| | | | | | | Apr. 27 | 25.20 | 46,300 | 6.6 | |
| 88 | 3662 | Little Corney Bayou near Lillie, La | 208 | 1956–58 | 1957 | | 9.19 | 4,660 | | |
| | | | | | | Apr. 28 | 16.52 | 21,400 | 5.2 | |
| 89 | | Bayou D'Arbonne near Farmerville, La | 1,470 | 1925–58 | 1927 | | 44.5 | (1) | | |
| | | | | | | Apr. 30 | 45.71 | (1) | | |
| 90 | 3665 | Bayou Desiard at Monroe, La | | 1939–58 | 1946 | | [7] 72.86 | (1) | | |
| | | | | | | May 20, 21 | [7] 71.32 | (1) | | |
| 91 | 3670 | Ouachita River at Monroe, La | 15,298 | 1932–58 | 1932 | | | 101,000 | | |
| | | | | | 1945 | | 50.42 | | | |
| | | | | | | May 22 | | [13] 97,200 | 1.8 | |
| | | | | | | May 23 | 50.45 | | | |
| 92 | 3677 | Boeuf River near Arkansas-Louisiana State line | 785 | 1946–58 | 1948 | | 22.8 | (1) | | |
| | | | | | | May 6 | 22.56 | (1) | | |
| 93 | | Boeuf River near Oak Grove, La | 1,052 | 1946–58 | 1948 | | [7] 89.6 | (1) | | |
| | | | | | | May 5 | [7] 88.60 | (1) | | |

**See footnotes at end of table.**

TABLE 1.—*Flood stages and discharges, Louisiana and adjacent States*—Continued

| No. | Permanent station number | Stream and place of determination | Drainage area (sq mi) | Maximum floods | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Prior to April 1958 | | April–May 1958 (Date) | Gage height (ft) | Discharge | |
| | | | | Period | Year | | | Cfs | Ratio to $Q_{2.33}$ |
| **PART 7—Continued** | | | | | | | | | |
| | | **Red River basin—Continued** | | | | | | | |
| 94 | | Boeuf River near Oak Ridge, La | 1,199 | 1946–58 | 1947 | | 79.8 | (1) | |
| | | | | | | May 5 | 80.52 | (1) | |
| 95 | 3680 | Boeuf River near Girard, La | 1,226 | 1927 | 1927 | | 29.5 | (1) | |
| | | | | 1938–58 | 1947 | | 18.80 | 2,970 | |
| | | | | | | May 2 | | 3,070 | |
| | | | | | | May 6 | 19.31 | | |
| 96 | 3685 | Big Colewa Bayou near Oak Grove, La | 42 | 1940–58 | 1947 | | [7] 95.5 | (1) | |
| | | | | 1949–58 | 1951 | | [7] 95.22 | | |
| | | | | | 1955 | | | 2,050 | |
| | | | | | | May 1 | [7] 91.93 | | |
| | | | | | | May 5 | | 1,040 | |
| 97 | | Big Creek near Holly Ridge, La | 171 | 1940–58 | 1947 | | 10.6 | (1) | |
| | | | | | | May 2 | 9.5 | (1) | |
| 98 | | Bayou LaFourche cutoff near Oak Ridge, La | 1 | 1947–58 | 1947 | | 78.8 | (1) | |
| | | | | | | May 5 | 79.28 | (1) | |
| 99 | | Bayou LaFourche near Irwin Lake, La | 6 | 1948–58 | 1955 | | 68.90 | (1) | |
| | | | | | | May 1 | 69.20 | (1) | |
| 100 | | Bayou Galion near Oak Ridge, La | 42 | 1941–58 | 1947 | | 13.8 | (1) | |
| | | | | | | Apr. 27 | 10.2 | (1) | |
| 101 | 3690 | Bayou LaFourche near Crew Lake, La | 361 | 1938–58 | 1955 | | 25.28 | 20,800 | |
| | | | | | | May 2 | | 26,800 | |
| | | | | | | May 6 | 27.50 | | |
| 102 | | Tensas Bayou near Transylvania, La | 89 | 1941–58 | 1946 | | 17.5 | (1) | |
| | | | | | | May 2 | 14.7 | (1) | |
| 103 | | Tensas Bayou near Alsatia, La | 141 | 1946–58 | 1948 | | [7] 80.4 | (1) | |
| | | | | | | May 2 | [7] 79.4 | (1) | |
| 104 | 3695 | Tensas River at Tendal, La | 309 | 1927 | 1927 | | 34.02 | (1) | |
| | | | | 1935–58 | 1948 | | | 4,610 | |
| | | | | | 1948 | | 24.78 | | |
| | | | | | | May 1 | | 3,900 | |
| | | | | | | May 2 | 23.07 | | |
| 105 | 3697 | Bayou Macon near Kilbourne, La | 504 | | | May 5 | 24.35 | 4,740 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 106 | ---------- | Bayou Macon near Oak Grove, La | 582 | 1946–58 | 1947 | ---------- | 24.7 | (1) | ---------- |
| | | | | | | May 5 | 23.2 | (1) | ---------- |
| 107 | 3700 | Bayou Macon near Delhi, La | 782 | 1882 | 1882 | ---------- | 37.5 | (1) | ---------- |
| | | | | 1935–58 | 1947 | ---------- | ---------- | 5,460 | ---------- |
| | | | | | 1953 | ---------- | 25.58 | ---------- | ---------- |
| | | | | | | May 1 | ---------- | 4,760 | 1.1 |
| | | | | | | May 6, 7 | 26.00 | ---------- | ---------- |
| | | **PART 8** | | | | | | | |
| | | **Sabine River Basin** | | | | | | | |
| 108 | 0175 | Sabine River near Emory, Tex | 965 | 1900–1958 | 1943 | ---------- | 25.7 | (1) | ---------- |
| | | | | 1952–58 | 1957 | ---------- | 25.06 | 74,000 | ---------- |
| | | | | | | Apr. 28 | 20.27 | 35,400 | ---------- |
| 109 | 0185 | Sabine River near Mineola, Tex | 1,445 | 1915–58 | 1943 | ---------- | 24.37 | (9) | ---------- |
| | | | | 1939–58 | 1943 | ---------- | 24.37 | ---------- | ---------- |
| | | | | | 1945 | ---------- | ---------- | 76,000 | ---------- |
| | | | | | | Apr. 30 | 20.60 | 36,000 | ---------- |
| 110 | 0190 | Lake Fork Sabine River near Quitman, Tex | 586 | 1895–1958 | 1945 | ---------- | 29.85 | (9) | ---------- |
| | | | | 1924–26, 1939–58 | 1945 | ---------- | 29.85 | 75,600 | ---------- |
| | | | | | | Apr. 28 | 24.38 | 39,400 | ---------- |
| 111 | 0195 | Big Sandy Creek near Big Sandy, Tex | 236 | 1905–58 | 1945 | ---------- | 24.1 | (9) | ---------- |
| | | | | 1939–58 | 1945 | ---------- | 24.1 | 38,000 | ---------- |
| | | | | | | Apr. 28 | 21.30 | 12,900 | ---------- |
| 112 | 0200 | Sabine River near Gladewater, Tex | 2,846 | 1914–58 | 1945 | ---------- | 44.16 | (9) | ---------- |
| | | | | 1932–58 | 1945 | ---------- | 44.16 | 138,000 | ---------- |
| | | | | | | May 3 | 39.90 | 53,500 | ---------- |

[1] Not determined.
[2] Does not include 2,600 sq mi of upper Tallahatchie and Yocona Rivers.
[3] Observed.
[4] Includes drainage area of Clear Creek.
[5] About 3 ft higher than that of May 5, 1958 at site 6 miles upstream.
[6] 5,936 sq mi above Denison Dam is noncontributing.
[7] Elevation in feet.
[8] Contents in thousands of acre-feet.
[9] Peak discharge of this flood not necessarily maximum of the period.
[10] Elevation in feet, at site 1,500 ft upstream.
[11] May have reached 27 ft.
[12] Daily mean discharge.
[13] Regulated since 1925.
[14] Maximum stage known since at least 1930.
[15] Maximum stage known since at least 1880.

## FLOOD-CREST STAGES

Records of flood-crest stages (table 2) were collected by the Geological Survey at sites generally located by landline locations and referenced to prominent physical features.

Flood-crest data for the Ouachita River (table 3) were furnished by the Corps of Engineers. The points are between Mount Ida, Ark., and Acme, La., and are identified by river mileage above the mouth of the Black River. A similar tabulation (table 4) is given for the Red River from the mouth of Barkman Creek, Tex., to Torras, La.

TABLE 2.—*Flood-crest stages in Louisiana and Mississippi*

| Stream and location | Date | Elevation (feet) |
|---|---|---|
| **Pearl River Basin** | | |
| Tallahaga Creek, in NE¼ sec. 4, T. 13 N., R. 12 E., Choctaw meridian, at bridge on State Highway 15, ¼ mile upstream from Gulf, Mobile and Ohio Railroad bridge and 1¼ miles north of Noxapater, Miss | April 30 | [1] 91. 11 |
| Noxapater Creek, in SE¼ sec. 20, T. 13 N., R. 12 E., Choctaw meridian, at bridge on State Highway 15, ¾ mile upstream from Gulf, Mobile and Ohio Railroad bridge and 2 miles south of Noxapater, Miss | do | [1] 93. 47 |
| Purple Creek, in NW¼ sec. 8, T. 6 N., R. 2 E., Choctaw meridian, at Colonial Country Club, 1½ miles upstream from mouth, and 2½ miles southeast of Tougaloo, Miss | May 5 | [1] 96. 76 |
| Hanging Moss Creek, in NE¼ sec. 13, T. 6 N., R. 1 E., Choctaw meridian, at bridge on new U.S. Highway 51, 1 mile upstream from Whiteoak Creek and 2 miles upstream from mouth | May 4 | [1] 96. 84 |
| Hanging Moss Creek tributary, in NE¼ sec. 11, T. 6 N., R. 1 E., Choctaw meridian, at bridge on U.S. Highway 51, 1 mile upstream from mouth and 1.3 miles southwest of Tougaloo, Miss | do | [1] 94. 43 |
| Eubanks Creek, in SE¼NE¼ sec. 26, T. 6 N., R. 1 E., Choctaw meridian, at bridge on U.S. Highway 51 in north Jackson, Miss., 1,700 ft downstream from Crane Creek, 0.4 mile upstream from Lakeland Drive, and 1 mile upstream from mouth | do | 271. 96 |
| Town Creek, in NW¼SW¼, sec. 3, T. 5 N., R. 1 E., Choctaw meridian, at bridge on Gallatin street in Jackson, Miss., and 300 ft upstream from Illinois Central Railroad bridge | do | 274. 32 |
| Lynch Creek, in NE¼SW¼, sec. 8, T. 5 N., R. 1 E., Choctaw meridian, at culvert on U.S. Highway 80 in Jackson, Miss., 1.3 miles upstream from Illinois Central Railroad bridge and 2.3 miles upstream from mouth | do | 280. 17 |
| **Yazoo River Basin** | | |
| Otuckalofa Creek, in SW¼NE¼, sec. 8, T. 11 S., R. 4 W., Chickasaw meridian, at bridge on State Highway 7, 0.9 mile south of Water Valley, Miss., and 5.2 miles above mouth | April 29 | [1] 24. 59 |
| Long Creek, in sec. 9., T. 10 S., R. 7 W., Chicasaw meridian, at bridge on U.S. Highway 51, 1 mile south of Courtland, Miss., 5½ miles upstream from mouth, and 6 miles south of Batesville, Miss | April 28 | 225. 76 |

See footnote at end of table.

TABLE 2.—*Flood-crest stages in Louisiana and Mississippi*—Continued

| Stream and location | Date | Elevation (feet) |
|---|---|---|
| **Yazoo River Basin—Continued** | | |
| Fannegusha Creek, in NW¼NE¼ sec. 28, T. 15 N., R. 1 E., Choctaw meridian, at bridge on county road, 1 mile north of Howard, Miss., and 3.2 miles southeast of Tchula, Miss | ---------- | 139. 72 |
| Piney Creek, in NE¼ sec. 10, T. 12 N., R. 2 W., Choctaw meridian, at bridge on U.S. Highway 49 E., 75 ft upstream from Illinois Central Railroad bridge, 3 miles northeast of north city limits of Yazoo City, Miss | ---------- | 111. 18 |
| Martins Creek, in NE¼ sec. 10, T. 12 N., R. 2 W., Choctaw meridian, at bridge on U.S. Highway 49E., 75 ft upstream from Illinois Central Railroad bridge, ⅓ mile upstream from mouth, and 2.7 miles northeast of north city limits of Yazoo City, Miss | ---------- | 110. 12 |
| **Big Black River Basin** | | |
| Doaks Creek, in NE¼ sec. 9, T. 10 N., R. 3 E., Choctaw meridian, at bridge on U.S. Highway 51, 3½ miles upstream from mouth, and 8½ miles north of Canton, Miss | May 2 | 208. 73 |
| Bachelor Creek, in NW¼ sec. 19, T. 9 N., R. 3 E., Choctaw meridian, at bridge on U.S. 51 truck route at Canton High School, Canton, Miss | April 29 | 219. 57 |
| Tilda Bogue, in SW¼ sec. 5, T. 9 N., R. 3 E., Choctaw meridian, at bridge on U.S. Highway 51, 3 miles north of Canton, Miss., and 3½ miles upstream from mouth | ---do---- | 225. 41 |
| Bogue Chitto, in NW¼ sec. 15, T. 8 N., R. 2 W., Choctaw meridian, at bridge on State Highway 22, 4.6 miles southwest of Flora, Miss | May 2 | 188. 39 |
| Clear Creek, in SW¼ sec. 17, T. 6 N., R. 5 W., Choctaw meridian, at bridge on county highway, 1 mile northeast of Bovina, Miss | May 1 | 138. 59 |
| **Red River Basin** | | |
| Bayou Dorcheat at bridge on State Highway 160, 1.8 miles upstream from Black Bayou and 4 miles northeast of Cotton Valley, La | April 29 | [1] 46. 74 |
| Black Bayou at bridge on State Highway 159, 0.5 mile south of Leton, La., and 1 mile downstream from Sand Creek | April 26 | 212. 84 |
| Brushy Creek at bridge on State Highway 7, 2.4 miles south of Hortman, La | ---do---- | 173. 94 |
| Clarke Bayou at bridge on U.S. Highways 79 and 80, 2.5 miles southeast of Haughton, La | April 29 | 195. 37 |
| Cypress Bayou at bridge on U.S. Highway 171, 2 miles south of Keithville, La., and 6 miles upstream from mouth of Boggy Bayou | May 4 | 172. 66 |
| Bayou D'Arbonne at bridge on U.S. Highway 79, 0.2 mile north of Homer, La., and 0.5 mile upstream from Beaver Branch | April 26 | 207. 15 |
| Middle Fork Bayou D'Arbonne at bridge on State Highway 520, 0.1 mile downstream from Tiger Creek and 2 miles southwest of Colquitt, La | ---do---- | [1] 49. 68 |
| Little Bayou Boeuf at bridge on State Highway 139, 4.5 miles southwest of Collinston, La | May 1 | 75. 09 |
| Lyon Bayou at bridge on State Highway 582, 0.5 mile southeast of Forest, La | ---do---- | 89. 06 |
| Bayou Macon on right bank at end of Parish road, 2.2 miles northeast of Floyd, La | May 6 | 85. 87 |

[1] Gage height referred to an arbitrary datum.

TABLE 3.—*Flood-crest elevations on Ouachita River (Furnished by Corps of Engineers)*

| Designation of gage | Miles above mouth of Black River (1939) | Date May 1957 | Elevation (feet) |
|---|---|---|---|
| Mt. Ida, Ark | 553. 4 | 3 | 677. 18 |
| Blakely Dam (headwater) | 487. 0 | 6 | 583. 57 |
| Blakely Dam (tailwater) | 486. 9 | 2 | 402. 07 |
| Below Blakely Dam | 486. 8 | 2 | 402. 08 |
| Carpenter Dam (headwater) | 467. 9 | 2 | 400. 76 |
| Carpenter Dam (tailwater) | 467. 9 | 3 | 308. 29 |
| Remmel Dam (headwater) | 455. 9 | 2 | 308. 07 |
| Remmel Dam (tailwater) | 455. 9 | 3 | 271. 24 |
| Malvern, Ark | 450. 1 | 2 | 249. 21 |
| Arkadelphia, Ark | 420. 6 | 3 | 187. 95 |
| H.W. No. 60 | 397. 7 | ------ | 153. 51 |
| H.W. No. 61 | 380. 0 | ------ | 133. 15 |
| Camden, Ark | 354. 1 | 5 | 115. 56 |
| Below Camden, Ark | 348. 5 | 6 | 113. 31 |
| H.W. No. 62 | 329. 1 | ------ | 104. 85 |
| H.W. No. 63 | 309. 1 | ------ | 98. 90 |
| Lock and Dam No. 8 | 297. 9 | 8 | 95. 5 |
| H.W. No. 64 | 287. 2 | ------ | 91. 20 |
| Lock and Dam No. 6 | 239. 4 | 14–16 | 87. 1 |
| Lock and Dam No. 5 | 208. 3 | 21, 22 | 85. 8 |
| Monroe, La | 183. 7 | 23 | 81. 86 |
| Lock and Dam No. 4 | 178. 1 | 23, 24 | 80. 57 |
| Buckhorn Bend, La | 175. 9 | 23 | 80. 23 |
| Lock and Dam No. 3 | 134. 1 | 25 | 71. 18 |
| Stafford Point Landing, La | 80. 9 | 30, 31 | 58. 2 |
| Lock and Dam No. 2 | 73. 3 | 28–31 | 56. 4 |
| Black River: | | | |
| Jonesville, La | [1] 56. 3 | 29 | 54. 83 |
| Acme, La | [1] . 1 | 23, 24 | 51. 1 |

[1] River miles as of 1949.

TABLE 4.—*Flood-crest elevations on lower Red River (furnished by Corps of Engineers)*

| Designation of gage | Miles above mouth | Date May 1957 | Elevation (feet) |
|---|---|---|---|
| H.W. No. 77, Mouth of Barkman Creek, Tex | 434. 8 | 6 | 276. 3 |
| H.W. No. 76 | 432. 0 | 6 | 274. 8 |
| Index, Ark | 429. 5 | 6 | 272. 6 |
| H.W. No. 75 | 424. 7 | 6 | 268. 9 |
| H.W. No. 74 | 417. 5 | 6 | 263. 7 |
| H.W. No. 73 | 412. 8 | 6 | 260. 9 |
| H.W. No. 72 | 410. 4 | 6 | 259. 0 |
| Fulton, Ark | 405. 0 | 6 | 254. 4 |
| H.W. No. 71 | 401. 5 | ------ | ------ |
| H.W. No. 70 | 398. 5 | 6 | 249. 1 |
| H.W. No. 69 | 392. 2 | 7 | 246. 3 |
| H.W. No. 68 | 387. 0 | 7 | 242. 1 |
| H.W. No. 67 | 379. 7 | 7 | 240. 0 |
| H.W. No. 66 | 378. 0 | 7 | 235. 3 |

TABLE 4.—*Flood-crest elevations on lower Red River (furnished by Corps of Engineers)*—Continued

| Designation of gage | Miles above mouth | Date May 1957 | Elevation (feet) |
|---|---|---|---|
| Garland City, Ark | 372.0 | 7 | 231.6 |
| H.W. No. 65 | 366.9 | ------- | ------- |
| H.W. No. 64 | 360.8 | 7 | 220.5 |
| H.W. No. 63 | 355.5 | 7 | 220.5 |
| H.W. No. 62 | 353.0 | ------- | ------- |
| H.W. No. 61 | 347.8 | ------- | ------- |
| H.W. No. 60 | 346.7 | [1] 8 | 208.9 |
| H.W. No. 59 | 344.8 | [1] 8 | 207.4 |
| H.W. No. 58 | 338.3 | ------- | ------- |
| H.W. No. 57 | 336.0 | ------- | ------- |
| Spring Bank, Ark | 334.6 | 7, 8 | 198.9 |
| H.W. No. 56 | 331.4 | ------- | ------- |
| H.W. No. 55 | 327.0 | ------- | ------- |
| H.W. No. 54 | 326.5 | [1] 8 | 193.4 |
| H.W. No. 53 | 323.2 | ------- | ------- |
| H.W. No. 52 | 318.9 | ------- | ------- |
| Millers Bluff, La | 317.8 | 7 | 189.9 |
| H.W. No. 51 | 315.5 | ------- | ------- |
| H.W. No. 50 | 309.0 | [1] 9 | 182.0 |
| H.W. No. 49 | 303.4 | [1] 9 | 180.1 |
| H.W. No. 48 | 297.0 | ------- | ------- |
| H.W. No. 47 | 291.4 | [1] 9 | 172.9 |
| H.W. No. 46 | 286.7 | ------- | ------- |
| H.W. No. 45 | 282.3 | [1] 9 | 168.7 |
| Shreveport, La | 276.9 | 8 | 165.2 |
| H.W. No. 44 | 273.6 | [1] 9 | 161.4 |
| H.W. No. 43 | 269.7 | ------- | ------- |
| H.W. No. 42 | 264.9 | [1] 9 | 158.4 |
| H.W No. 41 | 259.8 | [1] 9 | 155.5 |
| H.W. No. 40 | 255.0 | [1] 9 | 153.2 |
| H.W. No. 39 | 252.0 | 8 | 152.8 |
| H.W. No. 38 | 245.3 | 8 | 149.6 |
| H.W. No. 37 | 239.2 | 8 | 147.4 |
| H.W. No. 36 | 235.0 | 9 | 145.4 |
| H.W. No. 35 | 230.9 | [1] 10 | 142.3 |
| H.W. No. 34 | 227.1 | 9 | 140.8 |
| H.W. No. 33 | 222.4 | 9 | 137.6 |
| Coushatta, La | 217.6 | 9 | 134.3 |
| H.W. No. 32 | 216.4 | ------- | ------- |
| H.W. No. 31 | 211.2 | 10 | 131.1 |
| H.W. No. 30 | 208.9 | 10 | 130.7 |
| H.W. No. 29 | 204.4 | 10 | 128.9 |
| H.W. No. 28 | 197.3 | 10 | 125.1 |
| H.W. No. 27 | 190.3 | 10 | 121.1 |
| H.W. No. 26 | 185.8 | 10 | 119.7 |
| Grand Ecore, La | 181.4 | 11 | 117.0 |
| H.W. No. 25 | 176.9 | 11 | 115.9 |
| H.W. No. 24 | 172.5 | 11 | 113.4 |
| H.W. No. 23 | 166.0 | 11 | 111.4 |
| H.W. No. 22 | 162.3 | 12 | 109.4 |
| H.W. No. 21 | 158.0 | 12 | 108.2 |
| H.W. No. 20 | 155.2 | 12 | 106.8 |
| H.W. No. 19 | 149.5 | 12 | 104.9 |
| H.W. No. 18 | 142.1 | 12 | 102.2 |

See footnote at end of table.

TABLE 4.—*Flood-crest elevations on lower Red River (furnished by Corps of Engineers)*—Continued

| Designation of gage | Miles above mouth | Date May 1957 | Elevation (feet) |
|---|---|---|---|
| Colfax, La | 139. 1 | 12 | 100. 8 |
| H.W. No. 17 | 134. 5 | 13 | 99. 2 |
| H.W. No. 16 | 128. 4 | ------ | ------ |
| H.W. No. 15 | 123. 9 | 13 | 94. 6 |
| H.W. No. 14 | 119. 7 | 13 | 92. 8 |
| H.W. No. 13 | 113. 4 | 13 | 89. 8 |
| H.W. No. 12 | 108. 5 | 13 | 88. 4 |
| Alexandria, La | 103. 2 | 13 | 84. 5 |
| H.W. No. 11 | 98. 4 | 14 | 81. 9 |
| H.W. No. 10 | 91. 6 | 14 | 78. 4 |
| H.W. No. 9 | 86. 4 | 14 | 76. 4 |
| H.W. No. 8 | 82. 0 | 14 | 74. 9 |
| H.W. No. 7 | 77. 2 | 14 | 73. 3 |
| H.W. No. 6 | 73. 2 | 14 | 70. 7 |
| H.W. No. 5 | 69. 6 | 14 | 68. 4 |
| Moncla, La | 66. 0 | 14 | 66. 4 |
| H.W. No. 4 | 60. 7 | 14 | 64. 8 |
| H.W. No. 3 | 58. 1 | 14 | 64. 0 |
| H.W. No. 2 | 55. 3 | 14 | 61. 2 |
| H.W. No. 1 | 51. 0 | 15 | 58. 7 |
| Lake Long | 46. 4 | 20 | 55. 9 |
| Black River at Acme, La | 34. 4 | 23, 24 | 51. 1 |
| Bayou Cocodrie below lock, La | 22. 2 | 22–25 | 48. 5 |
| Barbre Landing, La | 6. 3 | 24–26 | 45. 4 |
| Lower Old River, Torras, La | 1. 0 | 24 | 46. 8 |

[1] Levels to water surface were run on this date; crest probably occurred 1 day earlier.

## MAGNITUDE AND FREQUENCY OF FLOODS

The Geological Survey expresses the frequency of a flood in terms of its recurrence interval, which is defined as the average interval in which a flood of a given magnitude will be equaled or exceeded as an annual maximum discharge. The probability of the occurrence of a given flood is the reciprocal of its recurrence interval. For example, a flood with a recurrence interval of 25 years (a 25-year flood) has a 4 percent chance, and one with a 50-year recurrence interval has a 2 percent chance of being equaled or exceeded in any one year.

The mean annual flood is indicative of the flood characteristics of a drainage basin and is a good index of the geographical variation of flood flows. The mean annual flood is difficult to determine arithmetically because records of flood discharges are comparatively short, but the distribution of annual maximum discharges does approach the distribution implicit in the theory of extreme values. On the basis of this theory, the mean annual flood (the mean of an infinitely long series of annual maximum floods) is obtained by reading from a graph, visually fitted to a plot of annual floods versus recurrence intervals, the annual flood corresponding to a recurrence interval of

2.33 years and can be determined with acceptable accuracy from a short period of record.

Relations of peak discharge to drainage area for various recurrence intervals (figs. 12–14) have been tentatively defined for part of the area included in this report (written communication, Patterson, 1960).

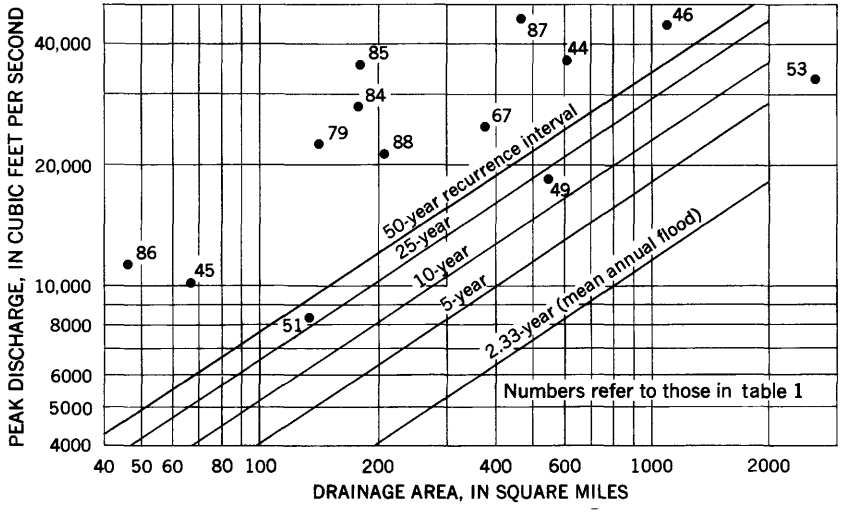


FIGURE 12.—Relation of peak discharge to drainage area for various recurrence intervals at selected points in Arkansas and Louisiana.

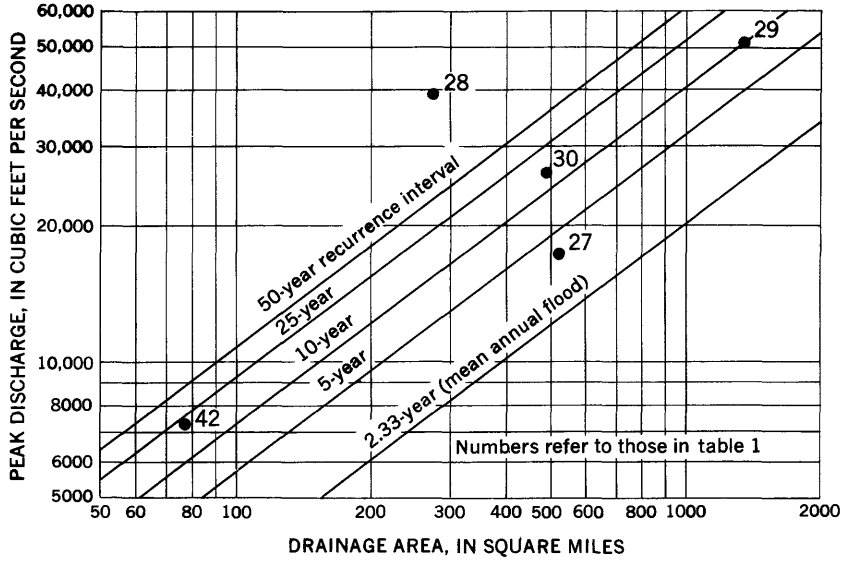


FIGURE 13.—Relation of peak discharge to drainage area for various recurrence intervals at selected points in Louisiana and Texas.

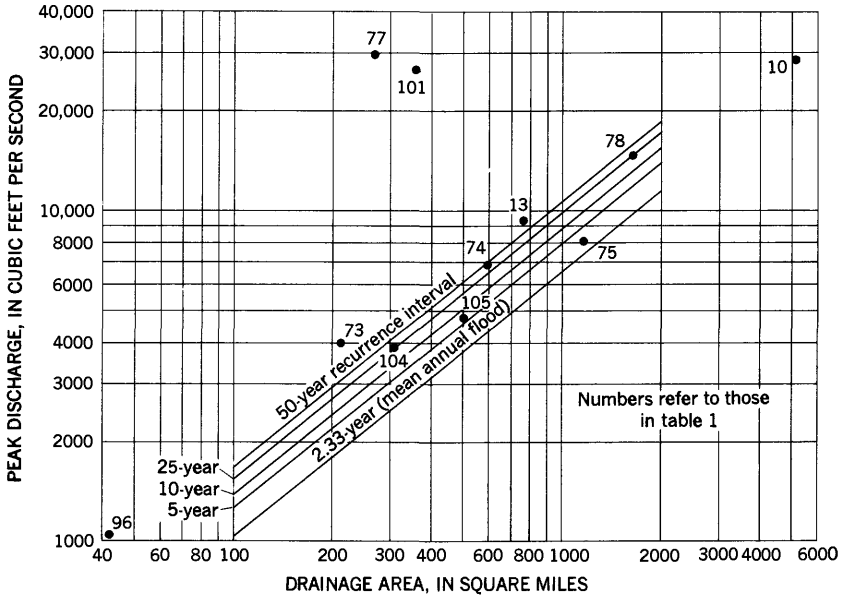


FIGURE 14.—Relation of peak discharge to drainage area for various recurrence intervals at selected points in Arkansas, Louisiana, and Mississippi.

Each figure is for a different area represented by the stream-gaging station data plotted. These figures provide a comparison of the peak discharges during the floods of April–May 1958 with those for several selected recurrence intervals. Table 5 supplements figures 12–14 and shows ratios and recurrence intervals for several streams from four additional parts of the flood area.

TABLE 5.—*Other outstanding flood discharges during April–May 1958*

| Stream and location | Discharge (cfs) | Ratio to | | Recurrence interval (years) |
|---|---|---|---|---|
| | | Mean annual flood | 50-year flood | |
| Boggy Creek near Daingerfield, Tex. | 28, 900 | 10. 1 | 2. 2 | (1) |
| Kelly Bayou near Hosston, La. | 4, 460 | 2. 56 | . 86 | 25 |
| Black Bayou near Gilliam, La. | 17, 700 | 4. 92 | 1. 65 | (1) |
| Twelvemile Bayou near Dixie, La. | 38, 400 | 2. 69 | . 90 | 31 |
| Muddy Fork Creek near Murfreesboro, Ark. | 35, 100 | 2. 85 | 1. 19 | (1) |
| Antoine Creek at Antoine, Ark. | 35, 500 | 2. 23 | . 93 | 34 |
| Moro Creek near Fordyce, Ark. | 26, 800 | 4. 22 | 1. 76 | (1) |
| Saline River near Rye, Ark. | 70, 500 | 2. 04 | . 85 | 23 |

[1] Much greater than 50 years.

Peak discharges of this flood along the main stem of the Red River, after adjustment for storage in Lake Texhoma, have recurrence intervals of 5 to 6 years at Arthur City, Tex., and Index, Ark., about 17 years at Fulton, Ark., and 29 years at Shreveport, La. The peak discharge of about 97,200 cfs on Ouachita River at Monroe, La., has a 45-year recurrence interval. In Mississippi, the recurrence interval for the maximum discharge on Big Black River near Bovina is 15 years.

# INDEX

○