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Water Resources Data for Louisiana

Part 1. Surface Water Records

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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Prepared in cooperation with the Louisiana Department of
Public Works and with other State and Federal agencies

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CALENDAR FOR WATER YEAR 1970

OCTOBER 1969

S	M	T	W	T	F	S
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NOVEMBER 1969

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JANUARY 1970

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FEBRUARY 1970

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MARCH 1970

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JUNE 1970

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JULY 1970

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AUGUST 1970

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SEPTEMBER 1970

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1970

**Water Resources Data
for
Louisiana**

Part 1. Surface Water Records
Part 2. Water Quality Records



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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Prepared in cooperation with the Louisiana Department of
Public Works and with other State and Federal agencies

Prepared in cooperation with
Louisiana Department of Public Works
Louisiana Department of Highways
Sabine River Compact Administration
Corps of Engineers, U.S. Army
Environmental Protection Agency, Water Quality Office

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
6554 Florida Boulevard
Baton Rouge, Louisiana 70806

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(c), chemical; (t), water temperature; (s), sediment/

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Figure 1.-- Map showing location of continuous-gaging stations.

WATER RESOURCES DATA FOR LOUISIANA, 1970

Part 1. Surface-Water Records

Part 2. Water-Quality Records

INTRODUCTION

Water-resources data for the 1970 water year for Louisiana, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, and records of water-quality data on the chemical and physical characteristics of surface water are given in this report. Records for a few pertinent gaging stations in bordering States are also included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Rex R. Meyer, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and federal agencies in Louisiana.

Through September 30, 1960, the records of discharge and stage of streams and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States."

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. Records will be published in Geological Survey water-supply papers at 5-year intervals.

The Geological Survey has published records of chemical quality, suspended sediment, and water temperatures since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records also have been released on a State-boundary basis in conjunction with streamflow records or in a separate volume.

COOPERATION

The U.S. Geological Survey and organizations of the State of Louisiana have had cooperative agreements for the systematic collection of streamflow records since 1938, and for water-quality records since 1943. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Louisiana Department of Public Works, C. H. Downs, director.

Louisiana Department of Highways, Leon Gary, director.

Sabine River Compact Administration, composed of W. H. Robinson, Federal representative and chairman; R. J. Palmer and C. H. Downs for Louisiana; Guy Cowser and J. M. Syler for Texas.

Cooperation in the form of funds or services was provided by the Corps of Engineers, U.S. Army, in collecting records for 28 gaging stations published in this report.

DEFINITION OF TERMS

Definition of terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (cfs, CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs) or DISCHARGE (CFS)."

Dissolved oxygen (DO)--Adequate dissolved oxygen is necessary for the life of fish and other aquatic organisms and is an indicator for corrosivity of water, photosynthetic activity, and septicity. It is one of the most important indicators of the condition of a water supply for biological, chemical and sanitary investigations (Rose, 1965).

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Micrograms per liter ($\mu\text{g/l}$, UG/L) See "milligrams per liter."

Milligrams per liter (mg/l , MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Concentration of suspended sediment expressed in milligrams per liter is based on the weight of sediment in a liter of water-sediment mixture. One thousand micrograms per liter is equal to one milligram per liter. Sediment concentrations that are expressed in parts per million are considered equivalent to milligrams per liter for concentration ranges to be expected in Louisiana.

Partial-record station is a particular site where limited stream-flow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Runoff in inches (IN.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C . Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published state annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which these tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 02489500, includes the part number "02" and a 6-digit number. This number appears just to the left of the station name. In this report the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

PART 1. SURFACE WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a non-recording gage. Measurements of discharge are made

with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.)

For a stream-gaging station, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage height to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method, in which the slope or fall in a reach of the stream is a factor in determining discharge. Information required for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the 1969 water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE." It is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents) and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record" the data given are for the period of record given in PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at

the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and to availability of water-quality records, is given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The daily table for stream-gaging stations gives the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with non-recording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily reading; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month.

Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN.") or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation of diversion, if the drainage area includes large noncontributing areas, or if the average rainfall on the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges for the calendar and water years; likewise, the minimums in this summary are minimum daily discharges.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE," certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. The methods used in computing discharge for various unusual conditions have been explained in preceeding paragraphs.

Accuracy of Data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation, or if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.00 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at some stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation or other factors. For these stations, discharge in cubic feet per second per square mile and runoff in inches are not published.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a listing of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water records for the 5-year period October 1, 1960, to September 30, 1965, also includes lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1304 (2B), 1311 (7), and 1312 (8); records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1724 (2B), 1731 (7), and 1732 (8); records for October 1961 to September 1965 have been compiled and published in Water-Supply Papers 1906 (2B), 1920 (7), and 1922 (8). These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were re-examined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other Data Available

Data collected at partial-record stations and at miscellaneous sites are given in five tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, the third is a table of discharge measurements at miscellaneous sites, the fourth is a table of peak elevations at flood-profile partial-record stations, and the fifth is a table of seepage investigations.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-stations records in Louisiana through 1967 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

PART 2. WATER QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads in this report.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Data on the quality of surface water were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly or less frequently. At some sites it was necessary to continuously record data on a punched paper tape at 15-, 30-, or 60-minute intervals.

Water-quality information is presented for chemical quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain

properties or characteristics such as hardness, specific conductance, and pH. Water-temperature data represent once-daily observations except for stations where a continuous-temperature recorder furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperatures in degrees Fahrenheit to degrees Celsius, see table 1 below.

Table 1.--Degrees Fahrenheit (°F) to degrees Celsius (°C)*
(Temperature reported to nearest 0.5°C)

<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>
32	0.0	50	10.0	68	20.0	86	30.0	104	40.0
33	.5	51	10.5	69	20.5	87	30.5	105	40.5
34	1.0	52	11.0	70	21.0	88	31.0	106	41.0
35	1.5	53	11.5	71	21.5	89	31.5	107	41.5
36	2.0	54	12.0	72	22.0	90	32.0	108	42.0
37	3.0	55	13.0	73	23.0	91	33.0	109	43.0
38	3.5	56	13.5	74	23.5	92	33.5	110	43.5
39	4.0	57	14.0	75	24.0	93	34.0	111	44.0
40	4.5	58	14.5	76	24.5	94	34.5	112	44.5
41	5.0	59	15.0	77	25.0	95	35.0	113	45.0
42	5.5	60	15.5	78	25.5	96	35.5	114	45.5
43	6.0	61	16.0	79	26.0	97	36.0	115	46.0
44	6.5	62	16.5	80	26.5	98	36.5	116	46.5
45	7.0	63	17.0	81	27.0	99	37.0	117	47.0
46	8.0	64	18.0	82	28.0	100	38.0	118	48.0
47	8.5	65	18.5	83	28.5	101	38.5	119	48.5
48	9.0	66	19.0	84	29.0	102	39.0	120	49.0
49	9.5	67	19.5	85	29.5	103	39.5	121	49.5

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32) \text{ or } ^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32.$$

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," p. 4.)

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Skougstad, Brown, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes through the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

The daily chemical-quality data in this report generally represent equal-volume composites for 2- to 30-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

At chemical-quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained by writing the U.S. Geological Survey in Baton Rouge, Louisiana (see p. II).

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken about the same time each day when sample is collected. Large streams have a small diurnal temperature change; small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

Sediment

At one station suspended-sediment samples are collected daily with a depth-integrating cable-suspended sampler from a fixed sampling point. Depth-integrated samples are collected periodically at many verticals in the cross section to determine the ratio of the cross-sectional distribution of the concentration of suspended sediment to the daily sampling vertical.

During periods of high or rapidly changing flow, samples are taken twice or more often throughout the day at one station. For periods when no samples are collected, daily loads of suspended sediment are estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations suspended-sediment samples are collected periodically with depth-integrating cable-suspended sampler at one vertical in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and stream-flow in predicting long-term sediment-discharge characteristics of the stream.

Publications

The table below shows the annual series of water-supply papers that give information on quality of surface waters in Louisiana. Data for the South Atlantic slope and Eastern Gulf of Mexico basins are given in Part 2; for the Lower Mississippi River basin in Part 7, and for the Western Gulf of Mexico basins in Part 8.

Table 2.--Water-supply paper numbers and parts, water years, 1941-68

Part number			Part number		
<u>Year</u>	<u>2</u>	<u>7-8</u>	<u>Year</u>	<u>2</u>	<u>7-8</u>
1941	942	942	1956	1450	1452
1942	950	950	1957	1520	1522
1943	970	970	1958	1571	1573
1944	1022	1022	1959	1641	1644
1945	1030	1030	1960	1741	1744
1946	1050	1050	1961	1881	1884
1947	1102	1102	1962	1941	1944
1958	1132	1133	1963	1947	1950
1949	1162	1163	1964	1954	1957
1950	1186	1188	1965	1961	1964
1951	1197	1199	1966	A1991	A1994
1952	1250	1252	1967	A2011	A2014
1953	1290	1292	1968	A2092	AB2096
1954	1350	1352			AC2097
1955	1400	1402			

A In press.

B Part 7.

C Part 8.

- American Public Health Association, and others, 1965, Standard methods for the examination of water and wastewater, 12th ed.: Am. Public Health Assoc., New York, 769 p.
- Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water, Water-Resources Inv., book 5, Chap. A1, 160 p.
- Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. A6, 13 p.
- Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.
- Corbett, D. M., and others, 1943, reprinted 1957, Stream-gaging procedures describing methods and practices of the Geological Survey: a manual of the U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.
- Rose, Arthur and Elizabeth, 1965, The condensed chemical dictionary: Reinhold Pub. Corp., New York, 5th ed., p. 412.

PART 1. SURFACE WATER RECORDS

SURFACE-WATER RECORDS

19

PEARL RIVER BASIN

Q2489500 Pearl River near Bogalusa, La.

LOCATION.--Lat 30°47'35", long 89°49'15", on line between secs. 17 and 18, T.3 S., R.14 E., Washington Parish, near right bank on downstream side of bridge on State Highway 10, 2 miles east of Bogalusa, and 2 miles upstream from Bogue Lusa Creek.

DRAINAGE AREA.--6,630 sq mi, approximately.

PERIOD OF RECORD --October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 55.00 ft above mean sea level (levels by Corps of Engineers). Prior to July 29, 1954, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 8,533 cfs (17.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 20,500 cfs May 7 (gage height, 18.30 ft); minimum, 1,190 cfs Nov. 18 (gage height, 6.08 ft).
Period of record: Maximum discharge, 88,200 cfs Feb. 23, 1961 (gage height, 21.70 ft); minimum, 1,020 cfs Oct. 29 to Nov. 1, 1963; minimum gage height, 4.84 ft Oct. 30, 31, 1963.
Flood of Apr. 11, 1938, reached a stage of 21.0 ft.

REMARKS.--Records good. Records of chemical analyses, water temperatures, and suspended-sediment loads for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,520	1,250	1,240	5,120	3,030	5,160	19,000	9,520	2,630	2,000	2,050	3,140
2	1,460	1,250	1,230	6,750	3,940	6,550	19,400	8,700	3,070	1,840	2,220	2,680
3	1,410	1,260	1,240	8,170	5,660	7,220	19,500	9,380	3,430	1,740	2,020	2,420
4	1,370	1,260	1,240	8,630	6,270	9,090	19,400	14,100	3,940	1,670	1,860	2,250
5	1,330	1,250	1,220	8,940	6,790	13,200	18,300	18,200	4,400	1,590	1,770	2,250
6	1,320	1,270	1,270	9,540	6,570	15,400	14,800	19,800	4,500	1,590	1,920	2,210
7	1,330	1,280	1,680	10,700	6,510	17,000	10,100	20,400	4,080	1,580	2,040	1,970
8	1,680	1,250	2,740	11,600	6,510	17,300	7,360	20,400	3,750	1,580	2,290	1,790
9	1,900	1,240	3,360	12,700	6,350	16,200	5,950	20,200	3,840	1,580	3,120	1,720
10	1,750	1,250	3,360	13,000	6,080	14,400	5,440	19,700	3,740	1,660	3,260	1,850
11	1,660	1,270	3,300	13,200	5,710	12,900	5,740	18,800	3,580	1,870	2,750	1,810
12	1,580	1,260	2,750	13,800	5,160	11,800	6,730	18,100	3,420	2,450	2,660	1,860
13	1,460	1,250	2,240	13,100	4,390	11,700	8,250	16,500	3,020	2,310	3,040	1,980
14	1,370	1,220	2,020	11,700	3,680	12,900	10,100	15,100	2,640	2,190	2,610	1,850
15	1,330	1,210	1,940	10,600	3,180	13,200	11,300	13,100	2,420	2,400	2,190	1,870
16	1,300	1,200	1,860	9,600	3,080	12,100	10,000	10,200	2,270	2,340	2,120	1,950
17	1,290	1,200	1,800	8,800	3,790	10,300	8,340	7,330	2,150	2,070	2,180	1,800
18	1,290	1,200	1,780	8,170	4,320	9,020	6,950	5,360	2,090	2,070	2,450	1,720
19	1,280	1,270	1,780	7,580	3,860	8,140	6,380	4,540	2,010	2,060	2,590	1,650
20	1,270	1,370	1,820	6,930	3,480	7,790	6,570	4,210	1,920	2,180	2,480	1,560
21	1,260	1,500	1,940	6,330	3,270	9,170	6,900	3,980	1,870	2,330	2,380	1,510
22	1,280	1,540	2,060	5,910	2,810	13,700	7,920	3,780	1,810	2,390	2,440	1,490
23	1,290	1,540	2,140	5,370	2,530	16,800	8,920	3,520	1,760	2,620	2,480	1,490
24	1,290	1,560	2,210	4,610	2,560	17,600	9,000	3,260	1,820	2,570	2,460	1,520
25	1,350	1,440	2,680	4,030	2,690	17,300	8,790	2,990	2,090	2,570	2,870	1,640
26	1,390	1,330	2,960	3,740	3,040	17,000	8,910	2,800	2,620	2,510	3,450	1,920
27	1,340	1,270	3,380	3,520	3,060	16,700	9,270	2,670	2,850	2,400	3,400	2,380
28	1,280	1,260	3,720	3,180	3,360	16,800	9,680	2,620	2,900	2,200	3,650	2,200
29	1,250	1,260	4,110	2,930	-----	17,100	9,900	2,630	2,620	1,980	4,020	1,950
30	1,240	1,240	4,390	2,970	-----	17,600	9,860	2,630	2,270	2,020	4,000	1,920
31	1,240	-----	4,630	3,090	-----	18,200	-----	2,520	-----	2,000	3,610	-----
TOTAL	43,110	38,950	74,090	244,310	121,680	409,340	308,760	307,040	85,510	64,300	82,380	58,350
MEAN	1,391	1,298	2,390	7,881	4,346	13,205	10,292	9,905	2,850	2,076	2,657	1,945
MAX	1,900	1,560	4,630	13,800	6,790	18,200	19,500	20,400	4,500	2,620	4,020	3,140
MIN	1,240	1,200	1,220	2,930	2,530	5,160	5,440	2,520	1,760	1,580	1,770	1,490
CFSM	.21	.20	.36	1.19	.66	1.99	1.55	1.49	.43	.31	.40	.29
IN.	.24	.22	.42	1.37	.68	2.30	1.73	1.72	.48	.36	.46	.33
CAL YR 1969:	TOTAL	2,447,120	MEAN	6,704	MAX	44,000	MIN	1,100	CFSM	1.01	IN.	13.73
WTR YR 1970:	TOTAL	1,837,880	MEAN	5,035	MAX	20,400	MIN	1,200	CFSM	.76	IN.	10.31

PEARL RIVER BASIN

02490105 Bogue Lusa Creek at State Highway 439, at Bogalusa, La.

LOCATION.--Lat 30°46'56", long 89°52'24", in SE $\frac{1}{4}$ sec.15, T.3 S., R.13 E., St. Helena meridian, Washington Parish, near center of span on downstream side of bridge on State Highway 439, in Bogalusa, 0.3 mile upstream from Ice Water Branch, 0.9 mile downstream from Adams Creek, and 4.0 miles upstream from mouth.

DRAINAGE AREA.--72.7 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 76.60 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 76.6 cfs (14.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 696 cfs Oct. 8 (gage height, 5.11 ft); minimum, 19 cfs June 22, 23, July 9, 10 (gage height, 3.66 ft).

Period of record: Maximum discharge, 3,840 cfs Feb. 12, 1966 (gage height, 9.13 ft), from rating curve extended above 1,320 cfs on basis of logarithmic plotting and contracted-opening measurement of peak flow of Nov. 14, 1961, at site 1 mile downstream; minimum, 5.0 cfs Oct. 27, 28, 1967 (gage height, 3.54 ft), affected by temporary regulation.

Flood of Nov. 14, 1961, reached a stage of about 13 ft, from information by local resident.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	30	31	77	53	50	80	30	45	31	33	68
2	24	31	33	58	135	45	80	71	89	26	154	50
3	24	30	33	48	118	50	86	239	74	27	71	45
4	24	29	33	43	77	330	68	249	50	22	95	43
5	23	29	33	43	58	288	58	124	37	21	150	39
6	22	29	41	146	53	169	53	74	31	21	187	35
7	58	29	86	154	50	111	50	55	29	20	118	31
8	481	30	95	98	45	105	45	45	27	20	65	29
9	154	29	68	68	45	89	45	41	25	19	55	28
10	80	28	74	58	43	71	45	39	24	43	45	27
11	55	27	80	139	43	74	53	37	24	58	43	26
12	45	27	60	169	41	101	89	35	24	65	37	26
13	39	31	50	108	41	83	89	33	23	131	33	28
14	37	41	43	80	39	68	92	30	23	74	30	26
15	37	39	41	68	39	60	53	29	23	43	28	25
16	35	35	39	60	60	55	74	29	27	37	39	25
17	35	33	39	58	121	105	68	43	23	35	33	25
18	33	33	37	55	86	192	55	41	22	48	92	25
19	31	43	37	50	63	128	55	35	21	45	63	28
20	31	53	37	50	53	135	108	31	20	35	53	25
21	35	45	45	48	48	249	74	30	20	33	45	23
22	35	39	60	45	43	249	53	28	20	35	39	23
23	33	37	58	45	43	150	45	26	19	31	43	26
24	31	33	48	45	41	108	41	25	24	33	58	26
25	29	33	43	43	65	89	39	24	33	55	50	27
26	29	33	43	43	98	80	37	24	35	48	43	27
27	29	33	41	43	71	74	35	23	29	37	98	48
28	28	31	39	45	55	65	33	26	98	33	174	37
29	28	31	39	45	-----	65	33	43	53	31	118	29
30	28	31	41	45	-----	77	31	37	41	26	224	25
31	29	-----	71	45	-----	95	-----	33	-----	25	111	-----
TOTAL	1,624	1,002	1,518	2,122	1,727	3,610	1,767	1,629	1,033	1,208	2,427	945
MEAN	52.4	33.4	49.0	68.5	61.7	116	58.9	52.5	34.4	39.0	78.3	31.5
MAX	481	53	95	169	135	330	108	249	98	131	224	68
MIN	22	27	31	43	39	45	31	23	19	19	28	23
CFSM	.72	.46	.67	.94	.85	1.60	.81	.72	.47	.54	1.08	.43
IN.	.83	.51	.78	1.09	.88	1.85	.90	.83	.53	.62	1.24	.48
CAL YR 1969	TOTAL 27,037		MEAN 74.1		MAX 1,000		MIN 19		CFSM 1.02		IN 13.83	
WTR YR 1970	TOTAL 20,612		MEAN 56.5		MAX 481		MIN 19		CFSM .78		IN 10.54	

PEAK DISCHARGE (BASE, 1,500 CFS).--No peak above base.

PEARL RIVER BASIN

21

02490500 Bogue Chitto near Tylertown, Miss.

LOCATION.--Lat 31°11', long 90°17', in SE¼ sec.34, T.3 N., R.9 E., Washington meridian, Pike County, near right bank on downstream side of bridge on U. S. Highway 98, 0.2 mile upstream from Fernwood, Columbia and Gulf Railroad bridge, 0.2 mile upstream from Bars Branch, 2.2 miles downstream from Topisaw Creek, and 9 miles northwest of Tylertown.

DRAINAGE AREA.--502 sq mi.

PERIOD OF RECORD.--August 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 227.40 ft above mean sea level.

AVERAGE DISCHARGE.--26 years, 753 cfs (20.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,470 cfs Mar. 22 (gage height, 10.84 ft); minimum, 189 cfs Oct. 1, 4-6 (gage height, 6.36 ft).

Period of record: Maximum discharge, 45,700 cfs Jan. 7, 1950 (gage height, 33.50 ft); minimum, 175 cfs Oct. 31, 1963; minimum gage height, 6.36 ft Sept. 29 to Oct. 1, Oct. 4-6, 1969.

Flood in February 1936 reached a stage 1.2 ft higher than the flood of Jan. 7, 1950, at the railroad bridge, 0.2 mile downstream.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1504: 1945(P), 1946(M), 1947-51, 1953.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	203	202	513	316	333	363	264	677	226	231	350
2	191	203	202	429	554	317	360	392	1,720	222	224	318
3	191	202	202	335	1,000	335	378	967	2,120	218	220	273
4	191	203	202	304	762	1,020	407	1,620	1,730	217	216	289
5	189	202	204	295	456	1,720	365	1,970	735	215	227	324
6	191	203	341	420	376	1,680	340	1,260	464	212	224	264
7	219	204	1,050	781	343	1,230	324	545	369	210	245	239
8	239	206	897	1,120	323	631	313	419	324	208	270	227
9	295	205	702	716	310	528	304	360	296	222	239	221
10	362	205	401	444	299	486	305	325	280	233	266	222
11	257	205	331	416	296	460	328	304	268	236	310	240
12	223	206	300	409	289	895	777	287	260	317	259	499
13	211	206	279	406	283	1,230	1,320	276	254	488	484	480
14	206	203	267	390	283	787	1,140	267	249	325	329	347
15	203	202	260	368	286	540	623	260	243	264	273	272
16	203	204	254	350	318	449	610	254	239	348	239	238
17	201	206	250	338	328	415	823	254	235	276	223	222
18	200	211	248	330	414	425	654	249	231	252	253	215
19	200	233	248	324	367	481	501	245	230	237	485	210
20	201	244	247	319	327	1,220	505	242	227	228	411	206
21	203	263	277	310	305	2,130	899	240	224	260	292	206
22	203	238	287	308	292	2,330	642	235	221	286	362	206
23	201	225	298	305	286	2,080	440	234	222	263	567	206
24	200	218	294	302	285	994	370	231	239	252	1,280	245
25	200	214	319	302	317	675	337	229	249	322	1,560	283
26	199	212	411	302	348	564	318	226	242	396	1,650	277
27	199	210	536	299	392	499	303	226	244	281	740	377
28	198	206	409	299	360	456	290	232	261	246	387	808
29	197	204	336	299	-----	418	280	243	238	232	321	773
30	198	202	321	294	-----	395	271	273	230	232	302	344
31	200	-----	312	291	-----	376	-----	291	-----	248	344	-----
TOTAL	6,562	6,348	10,887	12,318	10,515	26,099	14,890	13,422	13,521	8,172	13,433	9,381
MEAN	212	212	351	397	376	842	496	433	451	264	433	313
MAX	362	263	1,050	1,120	1,000	2,330	1,320	1,970	2,120	488	1,650	808
MIN	189	202	202	291	283	317	271	226	221	208	216	206
CFSM	.42	.42	.70	.79	.75	1.68	.99	.86	.90	.53	.86	.62
IN.	.49	.47	.81	.91	.78	1.93	1.10	.99	1.00	.61	1.00	.70

CAL YR 1969 TOTAL 183,627 MEAN 503 MAX 5,340 MIN 189 CFSM 1.00 IN 13.61

WAT YR 1970 TOTAL 145,548 MEAN 399 MAX 2,330 MIN 189 CFSM .79 IN 10.79

PEAK DISCHARGE (BASE, 6,000 CFS).--No peak above base.

02492000 Bogue Chitto near Bush, La.

LOCATION.--Lat 30°37'45", long 89°53'50", in T.5 S., R.13 E., St. Tammany Parish, near center of span on downstream side of bridge on State Highway 21, 0.2 mile downstream from Gulf, Mobile, and Ohio Railroad bridge, and 1.4 miles north of Bush.

DRAINAGE AREA.--1,210 sq mi, approximately.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 44.25 ft above mean sea level (levels by Corps of Engineers). Prior to July 21, 1954, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 1,789 cfs (20.08 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,800 cfs Mar. 6 (gage height, 8.32 ft); minimum, 372 cfs Oct. 1 (gage height, 2.25 ft).
Period of record: Maximum discharge, 57,000 cfs Feb. 23, 1961 (gage height, 17.04 ft); minimum, 366 cfs Oct. 22, 23, 26, 29, 1968; minimum gage height, 0.7 ft Oct. 1, 1937, Oct. 29-31, 1940, Oct. 22-27, 1941.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	391	447	499	858	800	859	1,290	645	1,090	607	601	1,180
2	407	467	491	817	1,070	816	1,240	716	1,490	574	655	922
3	411	459	488	907	1,530	789	1,350	1,280	1,890	562	643	818
4	415	431	482	829	1,550	1,500	1,320	1,990	2,530	535	625	756
5	437	437	481	757	1,600	3,180	1,210	2,270	2,640	523	613	700
6	413	447	527	924	1,300	3,720	1,110	2,360	2,190	514	634	694
7	485	436	718	1,290	1,070	3,470	998	2,350	1,460	502	724	682
8	1,400	442	1,300	1,390	948	3,050	903	1,710	1,050	493	637	637
9	869	455	1,490	1,530	878	2,350	852	1,250	866	487	706	619
10	681	450	1,530	1,590	822	1,800	845	1,040	776	559	798	592
11	663	456	1,330	1,380	784	1,540	851	929	721	1,340	703	571
12	664	449	1,030	1,590	755	1,490	1,000	851	685	1,440	667	565
13	565	525	857	1,620	731	1,490	1,720	772	658	1,240	649	628
14	564	541	766	1,350	715	1,760	1,960	709	637	1,380	625	784
15	526	490	710	1,160	715	1,770	1,950	661	619	1,090	715	742
16	523	468	672	1,040	866	1,440	1,670	636	598	832	655	703
17	510	464	644	948	1,040	1,290	1,440	749	580	815	649	637
18	471	466	621	886	1,030	1,500	1,370	715	568	934	625	592
19	462	500	597	844	972	1,570	1,380	641	556	986	700	562
20	484	542	588	798	942	1,490	1,270	601	550	773	706	544
21	513	558	638	764	851	1,880	1,150	578	538	733	843	517
22	500	532	700	739	784	2,860	1,160	551	532	794	804	517
23	483	536	759	720	743	3,360	1,280	528	523	1,210	745	535
24	451	519	736	705	720	3,390	1,050	516	529	866	902	544
25	448	501	710	698	780	2,820	894	514	601	784	1,170	568
26	456	475	712	691	893	2,040	814	517	634	787	1,630	646
27	446	548	777	698	922	1,660	770	497	631	776	1,920	655
28	452	491	848	702	876	1,440	732	515	685	752	2,390	625
29	452	496	894	701	-----	1,310	701	590	646	673	1,870	682
30	441	500	842	760	-----	1,240	674	657	673	640	1,710	592
31	428	-----	859	864	-----	1,270	-----	925	-----	613	1,720	-----
TOTAL	16,411	14,528	24,296	30,550	26,687	60,144	34,954	29,263	28,146	24,814	29,034	19,809
MEAN	529	484	784	985	953	1,940	1,165	944	938	800	937	660
MAX	1,400	558	1,530	1,620	1,600	3,720	1,960	2,360	2,640	1,440	2,390	1,180
MIN	391	431	481	691	715	789	674	497	523	487	601	517
CFSM	.44	.40	.65	.81	.79	1.60	.96	.78	.78	.66	.77	.55
IN.	.50	.45	.75	.94	.82	1.85	1.07	.90	.87	.76	.89	.61

CAL YR 1969 TOTAL 464,618 MEAN 1,273 MAX 14,000 MIN 391 CFSM 1.05 IN 14.28
WTR YR 1970 TOTAL 338,636 MEAN 928 MAX 3,720 MIN 391 CFSM .77 IN 10.41

PEAK DISCHARGE (BASE, 8,000 CFS).--No peak above base.

PEARL RIVER BASIN

23

02492000 Bogue Chitto near Bush, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.30	2.46	2.61	3.55	3.40	3.55	4.53	3.01	4.08	2.74	2.72	4.27
2	2.35	2.52	2.59	3.44	4.02	3.44	4.42	3.19	4.97	2.63	2.90	3.68
3	2.36	2.50	2.58	3.67	5.05	3.37	4.66	4.50	5.77	2.57	2.86	3.41
4	2.37	2.42	2.56	3.47	5.09	4.94	4.58	5.98	6.92	2.50	2.80	3.23
5	2.43	2.43	2.56	3.29	5.20	7.72	4.34	6.51	7.08	2.46	2.76	3.05
6	2.37	2.46	2.69	3.70	4.55	8.26	4.13	6.66	6.34	2.43	2.83	3.03
7	2.57	2.43	3.19	4.53	4.04	8.05	3.87	6.63	4.88	2.39	3.13	2.99
8	4.77	2.45	4.54	4.75	3.76	7.61	3.66	5.42	3.99	2.36	2.84	2.84
9	3.56	2.48	4.97	5.06	3.59	6.62	3.53	4.43	3.54	2.34	3.07	2.74
10	3.10	2.47	5.05	5.18	3.46	5.60	3.51	3.98	3.29	2.57	3.35	2.67
11	3.06	2.49	4.62	4.73	3.36	5.09	3.53	3.72	3.12	4.61	3.06	2.62
12	3.06	2.47	3.95	5.17	3.29	4.96	3.88	3.53	3.00	4.86	2.94	2.60
13	2.80	2.69	3.54	5.24	3.23	4.98	5.44	3.33	2.91	4.40	2.87	2.81
14	2.80	2.73	3.32	4.64	3.19	5.52	5.92	3.17	2.84	4.72	2.79	3.31
15	2.69	2.59	3.17	4.23	3.19	5.55	5.90	3.05	2.78	4.08	3.10	3.19
16	2.68	2.52	3.08	3.96	3.56	4.86	5.33	2.99	2.71	3.45	2.90	3.06
17	2.64	2.51	3.01	3.76	3.96	4.53	4.85	3.27	2.65	3.40	2.88	2.84
18	2.53	2.52	2.95	3.62	3.95	4.99	4.70	3.19	2.61	3.70	2.80	2.69
19	2.51	2.61	2.89	3.51	3.82	5.15	4.72	3.00	2.57	3.84	3.05	2.59
20	2.57	2.74	2.87	3.39	3.75	4.97	4.48	2.90	2.55	3.28	3.07	2.53
21	2.65	2.78	2.99	3.31	3.53	5.76	4.21	2.84	2.51	3.16	3.48	2.48
22	2.62	2.71	3.15	3.25	3.36	7.37	4.23	2.76	2.49	3.34	3.37	2.48
23	2.57	2.72	3.30	3.20	3.26	7.95	4.50	2.69	2.46	4.34	3.20	2.50
24	2.48	2.67	3.24	3.16	3.20	7.98	3.98	2.66	2.48	3.54	3.62	2.53
25	2.47	2.62	3.18	3.15	3.35	7.31	3.63	2.65	2.72	3.31	4.25	2.61
26	2.49	2.54	3.18	3.13	3.63	6.07	3.43	2.66	2.83	3.32	5.26	2.87
27	2.46	2.75	3.34	3.14	3.70	5.31	3.32	2.61	2.82	3.29	5.85	2.90
28	2.48	2.59	3.52	3.16	3.59	4.86	3.23	2.66	3.00	3.22	6.70	2.80
29	2.48	2.60	3.64	3.15	-----	4.56	3.15	2.87	2.86	2.96	5.73	2.99
30	2.45	2.61	3.50	3.30	-----	4.41	3.08	3.04	2.96	2.85	5.41	3.68
31	2.41	-----	3.55	3.56	-----	4.49	-----	3.70	-----	2.76	5.44	-----
MAX	4.77	2.78	5.05	5.24	5.20	8.26	5.97	6.66	7.08	4.86	6.70	4.27
MIN	2.30	2.42	2.56	3.13	3.19	3.37	3.08	2.61	2.46	2.34	2.72	2.48

PEARL RIVER BASIN

02492600 Pearl River at Pearl River, La.

LOCATION.--Lat 30°23'08", long 89°44'12", in NE¼ sec.1, T.8 S., R.14 E., St. Helena meridian, on right bank fender at downstream side of West Pearl River bridge on U.S. Highway 11, 500 ft upstream from Southern Railway System bridge, 0.5 mile upstream from old channel, and 0.8 mile northeast of town of Pearl River.

DRAINAGE AREA.--8,590 sq mi (including East Pearl River).

PERIOD OF RECORD.--Discharge: October 1963 to current year. Daily discharge October 1961 to September 1963 in files of Corps of Engineers, Mobile district.

Gage heights: Since June 6, 1906, in reports of U.S. Weather Bureau. Oct. 1, 1899, to May 31, 1906, (collected by Southern Railway System) on file at the U.S. Weather Bureau, Meridian, Miss.

GAGE.--West Pearl: Water-stage recorder. Datum of gage is 0.36 ft above mean sea level. Supplementary water-stage recorder since June 18, 1964, 500 ft downstream at same datum. Auxiliary water-stage recorder 7.4 miles upstream. Datum of auxiliary gage is mean sea level.

East Pearl: Water-stage recorder used for gage heights below 13.5 ft. Datum of gage is mean sea level. Supplementary staff gage 9.8 miles upstream at same datum. Auxiliary water-stage recorder 6.5 miles downstream. Datum of auxiliary gage is 0.12 ft below mean sea level.

AVERAGE DISCHARGE.--7 years, 9,470 cfs (14.97 inches per year).

EXTREMES.--Current year: Maximum daily discharge, 21,600 cfs Mar. 26; minimum daily, 2,160 cfs July 9.

Period of record: Maximum discharge, 114,700 cfs (gage height, 17.61 ft) Feb. 18, 1966; minimum daily, 1,580 cfs Oct. 24, Nov. 10, 1963.

Maximum stage reported by U.S. Weather Bureau, 18.6 ft Mar. 16, 1921, maximum stage reported by the Southern Railway System at railroad gage, 19.7 ft Apr. 19, 1900. Flood of 1874 reached a stage of 20.2 ft (furnished by Corps of Engineers).

REMARKS.--Records of daily discharge are the combined flow of the entire flood plain of the West and East Pearl Rivers. Flow is affected by tide below about 4,000 cfs.

COOPERATION.--Gage-height record, 7 discharge measurements, and computation of daily discharge furnished by Corps of Engineers; records reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,050	2,980	2,260	6,420	5,690	5,730	20,200	11,300	5,420	4,230	3,220	6,940
2	2,850	2,700	2,200	6,650	6,170	6,170	20,800	11,400	6,810	3,450	3,280	6,050
3	2,680	2,600	2,210	7,040	6,820	6,980	20,800	11,800	7,210	2,960	3,630	5,090
4	2,540	2,520	2,210	7,770	7,900	9,590	21,000	12,200	6,830	2,660	3,680	4,330
5	2,500	2,430	2,340	8,700	9,150	11,600	21,200	13,200	7,080	2,570	3,340	3,810
6	2,680	2,300	2,790	9,730	9,170	13,600	21,100	15,200	7,400	2,480	3,100	3,510
7	2,840	2,340	3,480	10,600	9,360	16,500	20,600	17,900	7,500	2,380	3,060	3,350
8	2,960	2,350	3,820	11,600	9,190	19,500	19,200	19,900	6,860	2,240	3,150	3,260
9	3,970	2,450	4,880	12,400	8,940	20,900	15,600	21,100	5,970	2,160	3,410	3,070
10	4,390	2,430	6,130	13,200	8,780	21,200	12,200	21,400	5,400	2,170	3,820	3,000
11	4,200	2,420	6,750	14,400	8,560	20,600	9,870	21,200	5,130	2,360	4,220	3,030
12	3,860	2,460	6,730	16,000	8,260	19,600	8,600	20,800	4,930	3,150	4,490	3,040
13	3,570	2,540	6,320	17,000	7,860	18,200	8,500	20,300	4,690	4,120	4,120	3,030
14	3,180	2,680	5,590	17,700	7,370	16,700	9,420	19,000	4,330	4,340	4,080	3,280
15	2,900	2,480	4,850	17,600	6,790	15,400	10,700	18,100	3,980	4,330	4,010	3,610
16	2,720	2,380	4,330	16,700	6,610	15,300	11,900	17,300	3,640	4,270	3,740	3,740
17	2,660	2,480	3,750	15,100	6,860	16,200	13,000	16,200	3,330	4,120	3,340	3,560
18	2,710	2,580	3,520	13,300	7,560	16,700	12,900	13,800	3,150	4,330	3,250	3,270
19	2,780	2,560	3,430	12,100	8,210	16,900	11,900	11,100	2,940	4,400	3,320	3,050
20	2,880	2,370	3,310	11,300	8,190	15,900	10,600	8,260	2,840	4,130	3,610	2,950
21	2,840	2,430	3,460	10,400	7,550	15,200	9,680	6,670	2,730	3,760	3,700	2,820
22	2,800	2,620	3,410	9,650	6,350	15,200	9,260	5,880	2,660	3,900	3,760	2,780
23	2,760	2,760	3,590	9,000	5,720	15,700	9,280	5,370	2,640	4,030	3,810	2,740
24	2,820	2,760	3,760	8,310	5,210	17,900	9,820	5,020	3,110	4,410	3,880	2,780
25	3,080	2,800	3,960	7,700	5,270	20,400	10,400	4,630	3,280	4,500	4,000	2,800
26	2,980	2,760	4,060	7,040	5,310	21,600	10,700	4,280	3,430	4,450	4,550	3,020
27	2,860	2,610	4,350	6,520	5,600	21,200	10,600	3,960	3,630	4,260	5,800	3,220
28	2,720	2,520	4,800	6,210	5,770	20,400	10,700	3,750	4,160	4,040	6,870	3,450
29	2,660	2,420	5,340	5,930	-----	19,700	10,800	3,870	4,990	4,050	7,280	3,500
30	2,920	2,340	5,810	5,720	-----	19,700	11,100	4,050	5,040	3,630	7,440	3,410
31	3,040	-----	6,120	5,560	-----	20,100	-----	4,470	-----	3,450	7,210	-----
TOTAL	93,400	76,070	129,560	327,340	204,220	510,370	402,430	373,410	141,110	111,330	130,170	105,490
MEAN	3,013	2,536	4,179	10,559	7,293	16,460	13,414	12,040	4,704	3,591	4,199	3,516
MAX	4,390	2,980	6,750	17,700	9,360	21,600	21,200	21,400	7,500	4,500	7,440	6,940
MIN	2,500	2,300	2,200	5,560	5,210	5,730	8,500	3,750	2,640	2,160	3,060	2,740
CFSM	.351	.295	.486	1.23	.849	1.92	1.56	1.40	.548	.418	.489	.409
IN.	.40	.33	.56	1.42	.88	2.20	1.74	1.61	.61	.48	.56	.46
CAL YR 1969: TOTAL	3,317,940		MEAN	9,090	MAX	45,200	MIN	2,200	CFSM	1.06	IN.	14.35
WTR YR 1970: TOTAL	2,604,900		MEAN	7,136	MAX	21,600	MIN	2,160	CFSM	.831	IN.	11.26

07344400 Red River near Hosston, La.

LOCATION.--Lat 32°53'35", long 93°49'20", in SW¼ sec.16, T.22 N., R.14 W., Caddo-Bossier Parish line, near left bank on downstream side 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.

PERIOD OF RECORD.--October 1957 to September 1968. October 1968 to current year (discharge below 5,000 cfs only).

GAGE.--Nonrecording gage read once daily. Datum of gage is 161.56 ft above mean sea level (levels by Corps of Engineers). Prior to Feb. 20, 1962, water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--11 years (1958-68), 17,920 cfs (12,980,000 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 18.59 ft Apr. 30 (from graph based on gage readings), discharge not determined; minimum daily discharge, 3,430 cfs July 15.
Period of record: Maximum discharge, 214,000 cfs May 7, 1958 (gage height, 27.89 ft); minimum daily, 850 cfs Nov. 15, 16, 1963.

REMARKS.--Records fair. Regulation by Lake Texoma since July 1942 (see station 07331500), Texarkana Reservoir since July 1953 (see station 07344200), and Millwood Reservoir since August 1966 (see station 07341300). Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,740		3,620								3,690	
2	3,730		3,660								4,210	
3	4,220		4,440								4,920	
4											4,980	
5												
6										4,660		
7										4,700		
8	4,610											
9	4,540											
10	4,460											
11	4,360											
12	4,160									4,490		
13	4,130									3,880		
14	4,140									3,500		4,880
15	4,280	4,580								3,430		4,210
16	4,460	3,890								4,160		4,380
17		3,680								4,490		
18										4,510		
19										4,290		4,940
20										3,780		4,620
21										3,760		4,470
22			4,470							4,050		4,070
23			4,960							4,740		4,660
24												
25												
26												
27												
28												
29										4,470		
30		4,190			-----					4,020		
31		-----			-----		-----		-----	3,700		-----
MAX	-	-	-							-	-	-
MIN	3,730	3,680	3,620							3,430	3,690	4,070

RED RIVER BASIN

07344400 Red River near Hosston, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.20	5.97	4.10	12.20	6.00	13.15	11.81	17.89	6.48	-	4.19	5.22
2	4.19	5.84	4.13	13.63	6.55	13.57	11.66	16.75	7.35	5.71	4.33	5.07
3	4.56	5.85	4.70	14.10	7.45	14.60	11.39	16.08	8.30	5.62	4.70	5.13
4	5.10	6.09	5.12	13.24	9.12	15.83	11.02	16.48	8.49	5.35	4.73	5.19
5	5.44	6.47	5.13	12.14	10.52	16.52	10.70	16.80	8.06	4.91	5.13	5.35
6	5.39	6.46	5.26	11.12	11.20	16.70	10.62	16.20	7.70	4.57	5.73	5.57
7	5.07	6.16	5.43	10.34	11.38	16.61	10.54	15.27	7.39	4.59	6.07	5.64
8	4.80	6.01	5.74	10.02	11.15	16.27	10.15	14.45	6.96	4.93	6.13	5.85
9	4.76	6.04	6.06	9.82	10.78	15.76	9.80	13.74	6.81	5.17	5.96	6.03
10	4.71	6.07	6.40	9.82	10.60	15.09	9.50	13.17	6.76	5.13	5.07	5.93
11	4.65	6.01	6.58	10.01	10.38	14.25	9.20	12.62	-	4.87	5.43	5.90
12	4.52	5.85	6.58	9.98	10.10	13.58	8.92	12.17	-	4.48	5.55	5.83
13	4.50	5.57	6.60	9.95	9.75	13.20	8.70	11.81	-	4.14	5.72	5.35
14	4.51	5.21	6.79	9.96	9.40	12.90	8.67	11.42	-	3.90	5.76	4.68
15	4.60	4.78	6.92	9.95	9.00	12.66	8.55	11.12	-	3.85	5.74	4.33
16	4.71	4.32	7.00	9.90	9.42	12.63	8.40	10.42	-	4.30	5.56	4.42
17	5.30	4.15	6.84	9.80	10.14	12.89	8.21	9.94	-	4.48	5.39	4.96
18	8.02	5.47	6.46	9.64	11.05	12.85	7.72	9.93	11.08	4.49	5.34	4.99
19	9.07	6.80	6.06	9.45	11.51	13.55	7.63	10.02	10.92	4.37	5.45	4.71
20	9.09	7.34	5.64	9.19	11.40	15.25	8.42	9.97	10.42	4.08	5.88	4.55
21	9.38	7.53	5.09	8.72	11.02	16.46	10.10	9.69	9.94	4.07	6.53	4.47
22	9.66	7.62	4.72	8.22	10.34	16.52	12.25	9.30	9.45	4.24	8.85	4.25
23	9.60	7.74	4.99	7.85	10.55	16.20	13.80	8.77	8.80	4.61	10.73	4.57
24	9.04	7.53	5.19	7.55	9.89	15.64	14.10	8.08	7.97	4.88	10.58	5.69
25	8.44	7.26	5.29	7.32	9.68	15.00	13.70	7.60	6.94	5.09	10.17	6.56
26	7.90	6.54	5.26	7.40	9.76	14.37	13.78	7.40	6.29	5.06	9.67	6.97
27	7.42	5.72	5.24	7.64	10.00	13.70	15.15	7.48	6.00	4.83	9.14	6.75
28	7.02	5.41	6.10	7.78	11.80	13.12	17.28	7.42	-	5.56	8.47	6.53
29	6.70	5.07	7.02	7.75	-----	12.59	18.40	7.19	-	4.47	7.60	7.53
30	6.45	4.54	8.15	7.23	-----	12.17	18.52	6.80	-	4.22	6.64	8.58
31	6.20	-----	10.37	6.32	-----	11.94	-----	6.49	-----	4.03	5.65	-----
MAX	9.66	7.74	10.37	14.10	11.80	16.70	18.52	17.89	-	-	10.73	8.58
MIN	4.19	4.15	4.10	6.32	6.00	11.94	7.63	6.49	-	3.85	4.19	4.25

RED RIVER BASIN

27

07344450 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., Caddo Parish, 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.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 170.35 ft above mean sea level (Louisiana Geodetic Survey bench mark).

AVERAGE DISCHARGE.--15 years, 58.9 cfs (10.25 inches per year, 42,670 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,190 cfs Feb. 26 (gage height, 9.47 ft); no flow Oct. 1 to Nov. 16, Aug. 9 to Sept. 30.
Period of record: Maximum discharge, 7,310 cfs Apr. 27, 1958 (gage height, 13.84 ft), from rating curve extended above 2,200 cfs; no flow at times each year.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	4.3	604	49	155	15	274	10	.37	.02	
2		0	3.6	202	300	144	16	527	9.6	.22	.02	
3		0	3.2	56	486	233	15	363	5.1	.15	.02	
4		0	2.8	34	247	711	12	69	3.2	.12	.01	
5		0	2.5	29	61	721	10	27	1.9	.10	.01	
6		0	4.1	117	39	321	9.0	18	1.2	.09	.01	
7		0	6.4	234	29	94	8.0	13	.89	.08	.01	
8		0	22	152	24	54	7.2	11	.63	.08	.01	
9		0	23	52	21	42	6.7	8.6	.48	.07	0	
10		0	17	33	18	34	6.7	7.1	.38	.07	0	
11		0	14	28	16	28	7.5	6.1	.31	.07	0	
12		0	11	28	14	25	8.2	5.5	.24	5.3	0	
13		0	8.8	25	13	23	7.7	4.9	.20	151	0	
14		0	8.3	21	12	21	6.4	4.3	.18	114	0	
15		0	8.5	18	23	19	5.3	3.7	.17	12	0	
16		0	7.5	16	138	17	6.9	3.2	.15	4.9	0	
17		15	6.7	15	133	108	25	2.7	.13	2.4	0	
18		217	5.9	14	62	342	20	2.3	.12	1.5	0	
19		656	7.4	13	39	384	71	1.8	.11	1.0	0	
20		608	8.5	12	27	146	273	1.4	.10	.63	0	
21		142	13	11	20	210	317	1.2	.13	.84	0	
22		26	17	10	16	524	72	1.0	.21	.79	0	
23		14	18	9.3	15	507	26	.84	.14	3.0	0	
24		9.8	16	8.9	24	171	17	.70	13	2.1	0	
25		7.7	14	8.7	400	66	17	.59	41	1.0	0	
26		9.1	13	8.7	1,050	45	100	.63	20	.54	0	
27		12	11	8.6	617	32	151	5.0	6.3	.29	0	
28		8.8	11	8.6	216	24	54	7.8	2.6	.19	0	
29		6.1	28	8.4	-----	20	26	15	1.2	.14	0	
30		4.9	235	8.1	-----	19	28	9.7	.61	.07	0	
31		-----	636	7.4	-----	17	-----	5.7	-----	.04	0	-----
TOTAL	0	1,736.4	1,187.5	1,800.7	4,109	5,257	1,344.6	1,401.76	120.28	303.15	.11	0
MEAN	0	57.9	38.3	58.1	147	170	44.8	45.2	4.01	9.78	.003	0
MAX	0	656	636	604	1,050	721	317	527	41	151	.02	0
MIN	0	0	2.5	7.4	12	17	5.3	.59	.10	.04	0	0
CFSM	0	.74	.49	.74	1.88	2.18	.57	.58	.051	.13	0	0
IN.	0	.83	.57	.86	1.96	2.51	.64	.67	.06	.14	0	0
AC-FT	0	3,440	2,360	3,570	8,150	10,430	2,670	2,780	239	601	.2	0

CAL YR 1969 TOTAL 34,625.62 MEAN 94.9 MAX 2,100 MIN 0 CFSM 1.22 IN 16.51 ACFT 68,680
WAT YR 1970 TOTAL 17,260.50 MEAN 47.3 MAX 1,050 MIN 0 CFSM .61 IN 8.23 ACFT 34,240

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-26	0930	9.47	1,190				
3-04	1930	9.10	910				

RED RIVER BASIN

29

07348000 Twelvemile Bayou near Dixie, La.

LOCATION.--Lat 32°38'45", long 93°52'40", in NW¹/₄ sec.14, T.19 N., R.15 W., Caddo Parish, 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.

PERIOD OF RECORD.--August 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 140.00 ft above mean sea level. Prior to Sept. 5, 1947, nonrecording gage and Sept. 5, 1947, to Sept. 30, 1950, water-stage recorder at datum 5.88 ft higher. Oct. 1, 1950, to Sept. 30, 1962, water-stage recorder at datum 3.88 ft higher. Nonrecording gage read once-daily for station on Red River at Shreveport used as auxiliary gage. Datum of auxiliary gage is 131.48 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--28 years, 2,561 cfs (11.09 inches per year, 1,855,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,540 cfs May 1 (gage height, 22.02 ft); maximum gage height, 22.04 ft May 1; minimum discharge, 1.3 cfs Sept. 30 (gage height, 1.17 ft).

Period of record: Maximum discharge, 38,400 cfs May 5, 1968; maximum gage height, 39.53 ft Apr. 5, 1945, and May 5, 1958, present datum; minimum discharge observed, 0.2 cfs Nov. 1, 6, 1963; minimum gage height, 1.17 ft Sept. 30, 1970.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow regulated by Ellison Creek Reservoir (usable capacity, 24,500 acre-ft) since January 1943; Lake O' the Pines (usable capacity, 839,200 acre-ft of which 587,200 acre-ft is available for flood storage) since August 1957; and Caddo Lake (usable capacity, 170,000 acre-ft). Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	43	599	3,600	980	3,590	5,000	8,150	500	90	9.5	30
2	6.0	38	576	3,600	2,500	3,680	4,930	8,230	800	84	7.5	20
3	6.0	33	592	3,700	2,570	4,370	4,340	8,020	1,000	86	6.0	15
4	6.0	25	474	3,900	2,310	5,370	3,940	7,830	1,300	75	5.4	9.8
5	5.9	19	387	4,000	2,300	5,490	3,710	7,680	1,500	50	5.0	8.2
6	5.9	15	607	4,200	2,480	5,560	3,350	7,220	1,600	41	4.4	6.8
7	5.8	13	948	4,500	2,660	5,720	2,990	6,860	1,700	36	4.4	6.0
8	5.8	12	664	4,800	2,790	6,120	2,770	6,200	1,700	30	3.7	5.7
9	5.8	12	597	5,000	2,910	6,410	2,450	5,550	1,600	15	2.8	4.7
10	7.0	11	666	5,000	2,800	6,680	2,200	4,900	1,500	11	3.0	3.6
11	6.0	11	815	4,800	2,810	6,720	1,980	4,240	1,400	9.2	2.2	2.8
12	6.5	11	773	4,600	2,630	6,840	1,820	3,680	1,300	20	1.9	2.2
13	8.0	10	910	4,300	2,620	6,720	1,730	3,210	1,200	40	2.1	2.0
14	7.0	9.3	960	4,100	2,610	6,570	1,430	2,690	1,100	30	2.6	1.8
15	6.0	8.5	1,010	3,800	2,520	6,170	1,220	2,400	1,000	15	1.8	1.7
16	5.5	8.9	916	3,400	2,720	5,600	1,230	1,920	950	12	1.6	1.6
17	5.0	26	995	3,100	2,730	6,250	1,210	1,540	900	9.8	1.6	1.6
18	4.5	899	1,030	2,900	2,760	6,810	1,070	1,250	800	8.5	2.2	1.9
19	4.0	1,440	960	2,900	2,740	6,670	1,760	1,100	700	7.2	1.8	2.7
20	4.0	765	899	2,500	2,630	6,470	2,250	926	600	6.8	2.1	3.9
21	4.0	380	1,140	2,400	2,650	6,750	2,080	762	498	7.0	33	4.2
22	4.0	202	983	2,300	2,600	7,160	2,470	672	380	6.8	140	4.2
23	4.0	117	1,020	2,170	2,460	7,230	2,680	555	304	6.5	323	3.8
24	4.0	80	815	1,920	2,450	6,900	2,940	478	300	6.2	500	3.4
25	3.5	75	916	1,950	3,370	6,670	3,280	436	252	6.0	300	3.3
26	3.5	99	900	1,600	3,550	6,440	5,100	349	220	5.7	100	4.0
27	4.5	206	700	1,450	3,430	5,890	5,850	341	180	6.0	50	3.2
28	6.0	332	900	1,500	3,320	5,800	6,040	330	150	10	30	2.7
29	8.0	508	1,550	1,550	-----	5,580	6,250	288	132	18	20	1.6
30	15	568	3,200	1,300	-----	5,160	6,470	250	120	17	15	1.4
31	29	-----	3,700	1,200	-----	4,960	-----	300	-----	12	20	-----
TOTAL	202.2	5,976.7	31,202	98,040	74,900	186,350	94,540	98,357	25,686	777.7	1,602.6	163.8
MEAN	6.52	199	1,007	3,163	2,675	6,011	3,151	3,173	856	25.1	51.7	5.46
MAX	29	1,440	3,700	5,000	3,550	7,230	6,470	8,230	1,700	90	500	30
MIN	3.5	8.5	387	1,200	980	3,590	1,070	250	120	5.7	1.6	1.4
CFSM	.002	.06	.32	1.01	.85	1.92	1.00	1.01	.27	.008	.02	.002
IN.	.002	.07	.37	1.16	.89	2.21	1.12	1.17	.30	.009	.02	.002
AC-FT	401	11,850	61,890	194,500	148,600	369,600	187,500	195,100	50,950	1,540	3,180	325
CAL YR 1969:	TOTAL	1,094,917.8	MEAN	3,000	MAX	13,900	MIN	3.5	CFSM	.96	IN.	12.98
WTR YR 1970:	TOTAL	617,798.0	MEAN	1,693	MAX	8,230	MIN	1.4	CFSM	.54	IN.	7.32
										AC-FT	2,172,000	
											AC-FT	1,225,000

NOTE.--No gage-height record Oct. 1-29, Dec. 26 to Jan. 22, Jan. 25 to Feb. 3.

RED RIVER BASIN

07348000 Twelvemile Bayou near Dixie, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	2.33	4.94	-	-	12.90	15.98	21.63	-	2.67	1.83	-
2	-	2.29	4.85	-	-	13.41	15.84	21.51	-	2.63	1.76	-
3	-	2.23	4.91	-	-	14.97	14.61	20.94	-	2.65	1.70	-
4	-	2.14	4.45	-	9.67	17.08	13.70	20.67	-	2.57	1.66	1.84
5	-	2.06	4.10	-	9.66	17.47	13.19	20.46	-	2.38	1.64	1.79
6	-	2.00	4.97	-	10.12	17.68	12.31	20.01	-	2.30	1.60	1.73
7	-	1.97	6.19	-	10.57	17.92	11.41	19.23	-	2.25	1.60	1.70
8	-	1.95	5.18	-	10.91	18.45	10.84	18.15	-	2.18	1.54	1.68
9	-	1.93	4.93	-	11.19	18.79	10.03	16.98	-	1.97	1.45	1.62
10	-	1.92	5.19	-	10.92	18.95	9.39	15.78	-	1.88	1.48	1.53
11	-	1.91	5.73	-	10.94	19.01	8.83	14.38	-	1.82	1.38	1.45
12	-	1.92	5.58	-	10.50	19.20	8.42	13.12	-	-	1.33	1.39
13	-	1.90	6.06	-	10.47	19.01	8.18	11.96	-	-	1.37	1.35
14	-	1.88	6.23	-	10.45	18.76	7.38	10.83	-	-	1.43	1.32
15	-	1.86	6.40	-	10.22	18.10	6.83	10.06	-	-	1.31	1.29
16	-	1.87	6.08	-	10.72	17.08	6.86	8.86	-	1.90	1.27	1.25
17	-	2.16	6.35	-	10.76	18.23	6.81	7.85	-	1.84	1.27	1.28
18	-	6.02	6.46	-	10.83	19.16	6.41	7.05	-	1.80	1.39	1.33
19	-	7.85	6.23	-	10.77	18.94	8.26	6.63	-	1.75	1.31	1.44
20	-	5.55	6.02	-	10.50	18.60	9.28	6.16	-	1.73	1.36	1.56
21	-	4.07	6.82	-	10.55	19.33	9.10	5.68	4.55	1.74	2.21	1.58
22	-	3.30	6.31	-	10.42	19.96	10.10	5.34	4.07	1.73	2.97	1.58
23	-	2.86	6.43	9.32	10.07	19.80	11.20	4.88	3.75	1.72	3.83	1.55
24	-	2.63	5.73	8.68	10.05	19.30	11.91	4.47	3.73	1.71	-	1.52
25	-	2.59	6.08	-	12.34	18.93	12.58	4.30	3.52	1.70	-	1.51
26	-	2.75	-	-	12.79	18.55	16.13	3.94	-	1.68	-	1.57
27	-	3.32	-	-	12.51	17.60	17.53	3.91	-	1.70	-	1.50
28	-	3.87	-	-	12.22	17.44	18.32	3.86	-	1.86	-	1.44
29	-	4.59	-	-	-----	17.03	18.91	3.68	2.93	2.01	-	1.26
30	2.00	4.82	-	-	-----	16.27	19.40	3.51	2.86	2.00	-	1.19
31	2.19	-----	-	-	-----	15.91	-----	-	-----	1.90	-	-----
MAX	2.19	7.85	-	-	12.79	19.96	19.40	21.63	-	2.67	-	-
MIN	-	1.86	4.10	-	-	12.90	6.41	3.51	2.86	1.68	1.27	1.19

07348500 Red River at Shreveport, La.

LOCATION.--Lat 32°30'55", long 93°44'25", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.30, T.18 N., R.13 W., Caddo Parish, on second pier from east bank, at Illinois Central Railroad bridge at Shreveport, 0.5 mile downstream from Cross Bayou.

DRAINAGE AREA.--60,613 sq mi, of which 5,936 sq mi above Denison Dam is noncontributing.

PERIOD OF RECORD.--August 1928 to current year. Daily gage heights since May 1873 and discharge intermittently 1872 to 1905 in reports of Mississippi River Commission.

GAGE.--Water-stage recorder. Datum of gage is 131.48 ft above mean sea level (levels by Corps of Engineers). Prior to June 1, 1918, nonrecording gage at same site at datum 10 ft higher.

AVERAGE DISCHARGE.--41 years, 24,230 cfs (17,560,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 101,000 cfs Apr. 30, May 1; minimum, 3,100 cfs July 15; minimum gage height, 5.36 ft Aug. 1.

Period of record: Maximum discharge, 303,000 cfs Apr. 5, 1945 (discharge measurement); maximum gage height, 37.9 ft in gage well, 38.4 ft from outside gage, Apr. 7, 1945; minimum discharge, 690 cfs Oct. 30, 1956; minimum gage height, 0.24 ft Nov. 9, 1939. Maximum stage known, 45.9 ft, present datum, in August 1849.

REMARKS.--Regulation by Lake Texoma, Millwood Reservoir, and Texarkana Reservoir.

COOPERATION.--Gage-height record, 52 discharge measurements, and computations of daily discharge furnished by Corps of Engineers; records reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1920: 1960 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,000	7,600	5,100	33,000	9,000	42,000	34,000	101,000	9,900	5,800	3,100	5,800
2	4,100	7,200	4,500	50,000	9,800	51,000	34,000	91,000	11,000	6,300	3,400	5,000
3	4,200	7,100	4,700	58,000	12,000	60,000	31,000	80,000	13,000	6,300	4,000	4,800
4	4,800	7,300	5,500	56,000	15,000	74,000	29,000	79,000	15,000	6,200	4,300	4,800
5	5,600	8,100	5,900	47,000	22,000	83,000	26,000	84,000	15,000	5,600	4,200	4,900
6	6,200	8,700	6,100	40,000	28,000	85,000	25,000	82,000	14,000	4,900	4,900	5,200
7	6,000	8,500	6,700	33,000	33,000	85,000	24,000	70,000	13,000	4,500	6,200	5,700
8	5,600	7,800	7,000	29,000	33,000	81,000	23,000	61,000	12,000	4,400	6,800	5,900
9	5,300	7,600	7,600	27,000	31,000	76,000	20,000	54,000	11,000	4,700	7,000	6,400
10	5,100	7,600	8,500	26,000	29,000	69,000	19,000	47,000	10,000	5,000	6,600	6,700
11	5,100	7,600	9,400	26,000	27,000	61,000	18,000	42,000	9,800	4,900	6,000	6,400
12	5,100	7,500	9,600	26,000	25,000	54,000	17,000	36,000	9,500	4,500	5,700	6,300
13	4,900	7,000	9,600	25,000	22,000	49,000	15,000	32,000	9,000	3,900	5,900	6,300
14	4,600	6,500	9,900	24,000	20,000	46,000	15,000	30,000	8,100	3,500	6,300	5,200
15	4,600	5,800	10,000	24,000	18,000	43,000	14,000	27,000	7,100	3,100	6,500	4,000
16	4,800	5,000	10,000	23,000	18,000	42,000	14,000	24,000	6,500	3,100	6,400	3,500
17	5,200	5,500	10,000	22,000	20,000	44,000	14,000	21,000	9,600	3,500	6,000	3,800
18	9,900	7,600	9,900	21,000	25,000	45,000	13,000	20,000	19,000	3,800	5,700	4,500
19	16,000	10,000	9,200	20,000	30,000	49,000	13,000	19,000	23,000	3,700	5,600	4,600
20	17,000	11,000	8,400	19,000	33,000	61,000	14,000	20,000	21,000	3,600	5,800	4,200
21	18,000	11,000	7,600	17,000	32,000	75,000	17,000	19,000	19,000	3,300	6,700	4,000
22	20,000	12,000	6,500	16,000	28,000	79,000	27,000	17,000	18,000	3,300	9,600	3,900
23	20,000	12,000	6,200	14,000	24,000	77,000	43,000	16,000	16,000	3,700	18,000	3,600
24	19,000	12,000	6,400	13,000	22,000	70,000	49,000	14,000	14,000	4,200	24,000	4,300
25	16,000	11,000	6,700	12,000	23,000	66,000	49,000	12,000	12,000	4,600	23,000	6,400
26	14,000	10,000	7,000	12,000	25,000	59,000	48,000	11,000	9,300	5,000	20,000	8,300
27	12,000	8,500	7,000	12,000	24,000	52,000	56,000	11,000	8,000	5,200	17,000	8,900
28	11,000	7,100	7,000	12,000	28,000	46,000	79,000	11,000	6,800	4,700	15,000	8,500
29	9,500	6,400	8,500	13,000	-----	41,000	95,000	11,000	5,900	4,100	13,000	8,200
30	9,100	5,800	15,000	12,000	-----	38,000	101,000	9,800	5,400	3,900	10,000	11,000
31	8,500	-----	25,000	10,000	-----	36,000	-----	9,500	-----	3,400	7,500	-----
TOTAL	285,200	246,800	260,500	772,000	665,800	1,839,000	976,000	1,161,300	360,900	136,700	274,200	171,100
MEAN	9,200	8,226	8,403	24,900	23,800	59,320	32,530	37,460	12,030	4,410	8,845	5,703
MAX	20,000	12,000	25,000	58,000	33,000	85,000	101,000	101,000	23,000	6,300	24,000	11,000
MIN	4,000	5,000	4,500	10,000	9,000	36,000	13,000	9,500	5,400	3,100	3,100	3,500
AC-FT	565,700	489,500	516,700	1,531,000	1,321,000	3,647,000	1,936,000	2,303,000	715,800	271,100	543,900	339,400
CAL YR 1969: TOTAL	10,628,600		MEAN	29,120	MAX	125,000	MIN	3,200	AC-FT	21,080,000		
WTR YR 1970: TOTAL	7,149,500		MEAN	19,590	MAX	101,000	MIN	3,100	AC-FT	14,180,000		

RED RIVER BASIN

07348700 Bayou Dorcheat near Springhill, La.

LOCATION.--Lat 32°59'40", long 93°23'47", in NE 1/4 sec.16, T.23 N., R.10 W., Webster Parish, 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 2.8 miles southeast of Springhill city limits.

DRAINAGE AREA.--605 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 495 cfs (11.11 inches per year, 358,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,170 cfs May 3 (gage height, 14.30 ft); minimum, 1.5 cfs Aug. 15 (gage height, 2.74 ft).
Period of record: Maximum discharge, 36,400 cfs Apr. 28, 1958 (gage height, 22.79 ft); no flow Oct. 10-14, 1957.

REMARKS.--Records good above 200 cfs and poor below. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	6.4	104	2,280	182	730	823	4,390	435	12	2.6	65
2	2.1	3.1	88	3,680	337	802	676	4,650	586	10	2.5	55
3	2.1	2.5	77	3,540	388	1,080	546	5,020	558	7.7	2.4	44
4	2.1	2.4	58	2,890	504	1,620	450	4,200	600	6.0	2.6	37
5	2.0	2.2	61	2,440	638	2,100	391	3,250	651	5.1	2.5	31
6	2.0	2.1	64	2,160	761	3,330	357	2,460	709	4.2	2.4	26
7	2.0	2.1	78	1,820	856	4,020	322	1,880	700	3.5	2.4	23
8	2.0	2.1	82	1,550	903	3,680	283	1,460	636	3.1	2.2	20
9	1.9	2.4	93	1,330	884	3,060	249	1,130	546	2.8	2.1	16
10	1.9	2.2	119	1,130	798	2,440	224	874	413	2.5	2.0	12
11	3.0	2.1	137	991	670	1,940	201	609	240	2.3	2.1	8.8
12	2.5	2.2	142	867	529	1,610	185	365	137	2.2	2.0	6.7
13	8.0	2.5	135	739	407	1,330	174	223	96	2.2	1.8	5.4
14	5.0	2.7	123	621	321	1,120	166	168	72	2.1	1.6	4.6
15	4.0	3.0	109	522	293	965	161	149	56	2.1	1.6	4.8
16	3.0	3.4	96	444	397	858	186	133	44	2.1	1.7	4.2
17	2.5	8.1	85	380	446	969	190	113	35	2.0	1.9	4.9
18	2.0	217	78	330	541	1,120	197	93	29	2.0	2.1	10
19	1.9	298	73	292	660	1,250	330	77	24	2.1	2.1	5.6
20	1.8	303	65	264	785	1,600	508	66	20	2.0	3.1	4.5
21	1.8	446	74	241	881	2,320	630	56	17	4.4	149	4.2
22	1.8	579	79	222	929	2,800	797	48	14	7.1	734	4.1
23	1.8	731	74	207	919	2,950	1,030	41	12	3.3	812	5.0
24	1.8	850	81	194	856	2,890	1,340	36	19	2.5	860	12
25	1.8	884	93	183	840	2,660	1,560	31	14	2.3	765	11
26	1.8	828	98	175	775	2,320	1,760	27	13	2.2	583	8.1
27	1.9	671	96	169	708	1,990	1,730	58	13	2.1	383	5.9
28	1.9	440	111	166	689	1,680	1,720	139	11	3.0	240	4.7
29	1.9	234	508	163	-----	1,390	2,360	118	10	3.3	149	4.2
30	4.8	137	958	157	-----	1,160	3,330	126	12	3.0	100	4.0
31	19	-----	1,610	152	-----	978	-----	143	-----	2.8	77	-----
TOTAL	24.2	6,669.5	5,659	30,299	17,897	58,762	22,876	32,133	6,722	114.0	4,895.7	451.7
MEAN	3.04	222	183	977	639	1,896	763	1,037	224	3.68	158	15.1
MAX	19	884	1,610	3,680	929	4,020	3,330	5,020	709	12	860	65
MIN	1.8	2.1	61	152	182	730	161	27	10	2.0	1.6	4.0
CFSM	.005	.37	.30	1.62	1.06	3.13	1.26	1.71	.37	.006	.26	.02
IN.	.006	.41	.35	1.86	1.10	3.61	1.41	1.98	.41	.007	.30	.03
AC-FT	187	13,230	11,220	60,100	35,500	116,600	45,370	63,740	13,330	226	9,710	896
CAL YR 1969 TOTAL 199,637.5 MEAN 547 MAX 5,660 MIN 1.6 CFSM .90 IN 12.27 AC-FT 396,000												
WTR YR 1970: TOTAL 186,573.1 MEAN 511 MAX 5,020 MIN 1.6 CFSM .84 IN 11.47 AC-FT 370,100												

07348800 Flat Lick Bayou near Leton, La.

LOCATION.--Lat 32°46'11", long 93°15'58", in NW¼ sec.35, T.21 N., R.9 W., Webster Parish, near left bank on downstream side of bridge on State Highway 159, 0.5 mile downstream from Cypress Creek, 6 miles upstream from mouth, and 6.5 miles south of Leton.

DRAINAGE AREA.--66.9 sq mi.

PERIOD OF RECORD.--Annual maximums, water years 1954-56 and occasional low-flow measurements, water years 1955-56. October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 182.79 ft above mean sea level. Nov. 9, 1953, to Sept. 13, 1956, crest-stage gage at datum 35.21 ft lower.

AVERAGE DISCHARGE.--14 years, 55.2 cfs (11.20 inches per year, 39,990 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,980 cfs May 1 (gage height, 9.65 ft); no flow on many days.

Period of record: Maximum discharge, 10,200 cfs Apr. 26, 1958 (gage height, 12.95 ft), from rating curve extended above 4,200 cfs by velocity-area study; no flow at times in 1957-58, 1960, 1963-70.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	0	.47	3.4	121	48	95	58	1,540	62	.22	.17	0		
2	0	.13	3.2	68	162	82	95	1,120	82	.16	.13	0		
3	0	.05	2.9	43	128	222	75	499	46	.13	.10	0		
4	0	.02	2.3	33	79	413	57	294	25	.10	.06	0		
5	0	.01	1.9	29	56	408	48	142	18	.09	.03	0		
6	0	0	2.7	69	47	272	41	90	13	.02	.02	0		
7	0	0	5.2	76	42	135	36	67	11	0	.04	0		
8	0	0	5.2	60	38	99	32	52	8.1	0	0	0		
9	0	0	5.1	42	32	82	29	42	6.1	0	0	0		
10	0	.01	4.7	35	28	68	36	37	4.5	0	0	0		
11	0	.01	4.3	36	25	65	37	30	3.5	.05	0	0		
12	0	.02	3.6	33	23	75	36	25	2.8	.04	0	0		
13	0	0	3.0	27	21	69	31	21	2.2	.04	0	0		
14	0	0	2.5	23	20	57	24	18	1.8	.05	0	0		
15	0	0	2.3	21	48	49	22	15	1.5	.06	0	0		
16	0	0	2.1	19	142	43	299	14	1.3	.04	0	0		
17	0	3.5	1.8	17	124	112	433	12	1.1	.04	0	0		
18	0	308	1.6	17	86	159	345	9.9	.90	.04	0	.04		
19	0	366	1.5	16	60	174	357	8.3	.75	.03	0	.08		
20	0	330	1.4	15	46	227	425	6.9	.62	.03	0	.05		
21	0	100	2.5	13	38	374	350	5.9	.48	.45	0	.02		
22	0	34	3.5	12	34	398	156	5.3	.38	.59	0	0		
23	0	21	3.4	12	33	338	84	4.9	.45	.22	0	.01		
24	0	15	3.0	11	39	200	66	4.1	4.0	.12	0	.02		
25	0	11	2.9	11	237	121	137	3.3	2.8	.09	0	.07		
26	0	8.4	2.7	11	226	92	398	3.3	1.5	.08	0	.16		
27	0	6.5	2.5	10	174	73	337	13	.94	.98	0	.20		
28	0	5.2	2.9	9.1	106	64	226	33	.65	.83	0	.15		
29	0	4.7	9.4	8.9	-----	69	103	22	.48	.59	0	.10		
30	0	4.0	99	7.3	-----	64	95	18	.36	.34	0	.10		
31	.46	-----	154	5.8	-----	56	-----	24	-----	.21	0	-----		
TOTAL	.46	1,218.02	346.5	911.1	2,142	4,755	4,468	4,179.9	304.21	5.64	.55	1.00		
MEAN	.015	40.6	11.2	29.4	76.5	153	149	135	10.1	.18	.018	.033		
MAX	.46	366	154	121	237	413	433	1,540	82	.98	.17	.20		
MIN	0	0	1.4	5.8	20	43	22	3.3	.36	0	0	0		
CFSM	.0002	.61	.17	.44	1.14	2.29	2.23	2.02	.15	.003	.0003	.0005		
IN.	0	.68	.19	.51	1.19	2.64	2.48	2.32	.17	.003	0	0		
AC-FT	.9	2,420	687	1,810	4,250	9,430	8,860	8,290	603	11	1.1	2.0		
CAL YR 1969	TOTAL	19,195.13	MEAN	52.6	MAX	1,280	MIN	0	CFSM	.79	IN	10.67	ACFT	38,070
WAT YR 1970	TOTAL	18,332.38	MEAN	50.2	MAX	1,540	MIN	0	CFSM	.75	IN	10.19	ACFT	36,360

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-01	0700	9.65	1,980				

07349000 Bayou Dorcheat near Minden, La.

LOCATION.--Lat 32°35'55", long 93°19'59", in NW¼ sec.31, T.19 N., R.9 W., Webster Parish, on left bank 500 ft upstream from bridge on U. S. Highway 80, 0.75 mile upstream from Louisiana & Arkansas Railway Co. bridge, 3 miles west of Minden, and 28 miles upstream from Bistineau Dam.

DRAINAGE AREA.--1,097 sq mi.

PERIOD OF RECORD.--July 1928 to September 1931, October 1936 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 133.75 ft above mean sea level (levels by Corps of Engineers). Prior to Mar. 1, 1940, nonrecording gage at same site and datum. Since July 29, 1953, supplemental water-stage recorder 4.6 mile upstream at different datum used for low stages.

AVERAGE DISCHARGE.--37 years, 1,092 cfs (13.52 inches per year, 791,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,630 cfs May 5 (gage height, 17.34 ft); minimum, no flow Oct. 1 to Nov. 6; minimum gage height, 1.57 ft Oct. 27.

Period of record: Maximum discharge, 44,800 cfs May 1, 1958 (gage height, 24.90 ft); practically no flow during October, November, and part of December 1936, no flow at times in 1954, 1956, 1964, 1969, and 1970.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1		0	620	1,030	298	1,700	2,900	3,820	551	28	5.8	197			
2		0	450	1,340	471	1,640	2,580	5,290	614	23	5.0	137			
3		0	285	1,570	657	1,630	2,280	7,100	715	19	4.2	102			
4		0	186	1,770	742	2,000	2,000	8,400	786	16	3.8	83			
5		0	140	1,970	804	2,430	1,700	8,500	922	14	3.2	67			
6		0	122	2,300	836	2,790	1,400	7,720	912	12	3.0	60			
7		2.2	116	2,600	858	3,230	1,100	6,640	809	11	3.5	50			
8		3.7	110	2,900	886	3,900	900	5,620	737	9.6	4.2	40			
9		3.8	102	3,050	908	4,350	750	4,780	710	8.9	3.5	35			
10		3.8	97	3,100	930	4,590	650	4,080	706	8.5	3.0	30			
11		4.0	97	2,900	958	4,680	600	3,430	683	7.9	2.5	26			
12		5.0	99	2,500	953	4,600	550	2,820	638	13	2.1	22			
13		5.5	109	2,200	948	4,280	500	2,280	498	22	1.8	18			
14		6.0	128	1,920	912	3,860	450	1,700	334	10	1.7	15			
15		6.2	143	1,670	854	3,360	400	1,080	207	7.9	1.5	13			
16		6.8	149	1,390	912	2,920	576	714	143	7.5	1.3	12			
17		15	144	1,150	944	2,620	804	580	106	6.8	1.1	9.9			
18		165	133	940	958	2,360	1,140	500	83	8.2	.89	9.9			
19		680	122	780	958	2,190	1,440	400	67	7.2	.82	9.2			
20		800	111	675	966	2,180	1,730	300	56	6.2	.96	8.5			
21		770	109	594	971	2,320	1,790	200	48	12	1.2	7.5			
22		770	105	530	976	2,640	1,800	125	42	12	1.7	6.8			
23		670	99	463	980	2,920	1,780	109	47	8.9	1.3	6.0			
24		560	96	421	1,020	3,230	1,760	96	234	7.5	32	6.0			
25		550	96	388	1,340	3,680	1,710	85	151	6.2	289	6.0			
26		600	99	358	1,620	4,110	1,810	76	87	5.8	572	7.2			
27		670	101	336	1,700	4,300	2,260	88	66	40	693	7.5			
28		720	104	316	1,710	4,230	2,650	135	53	28	718	6.2			
29		740	124	297	-----	4,000	2,810	189	42	11	647	5.5			
30		720	230	280	-----	3,650	2,920	265	33	7.5	474	5.0			
31		-----	614	265	-----	3,250	-----	438	-----	6.2	306	-----			
TOTAL	0	8,477.0	5,240	42,003	27,070	99,640	45,740	77,560	11,080	391.8	3,789.07	1,008.2			
MEAN	0	283	169	169	967	3,214	1,525	2,502	369	12.6	122	33.6			
MAX	0	800	620	3,100	1,710	4,680	2,920	8,500	922	40	718	197			
MIN	0	0	96	265	298	1,630	400	76	33	5.8	.82	5.0			
CFSM	0	.26	.15	1.24	.88	2.93	1.39	2.28	.34	.01	.11	.03			
IN.	0	.29	.18	1.42	.92	3.38	1.55	2.63	.38	.01	.13	.03			
AC-FT	0	16,810	10,390	83,310	53,690	197,600	90,730	153,800	21,980	777	7,520	2,000			
CAL YR 1969:	TOTAL	378,651.20		MEAN	1,037	MAX	9,300	MIN	0	CFSM	.95	IN.	12.84	AC-FT	751,100
WTR YR 1970:	TOTAL	321,999.07		MEAN	882	MAX	8,500	MIN	0	CFSM	.80	IN.	10.92	AC-FT	638,700

RED RIVER BASIN

35

07349250 Lake Bistineau near Ringgold, La.

LOCATION.--Lat 32°19'46", long 93°26'10", in sec.31, T.16 N., R.10 W., Bossier Parish, 40 feet above dam near right bank on upstream side of bridge on State Highway 154, 8.5 miles west of Ringgold city limits, and 17.0 miles upstream from mouth.

DRAINAGE AREA.--1,458 sq mi.

PERIOD OF RECORD.--October 1968 to current year (gage heights only).

GAGE.--Water-stage recorder and concrete dam. Datum of the gage is 130.00 ft above mean sea level (levels by Louisiana Department of Public Works).

EXTREMES.--Current year: Maximum gage height, 12.70 ft May 5; minimum, 5.41 ft Oct. 30.

Period of record: Maximum gage height, 12.91 ft Mar. 25, 1969; minimum, 5.41 ft Oct. 30, 1969.

REMARKS.--Reservoir is used for flood control and conservation. The reservoir is formed by an earthfill dam, containing a 1200 ft long reinforced concrete spillway equipped with 12 gates that are 6 ft long and 5 ft high. The spillway is 1.75 ft thick and flat crested. Built onto the spillway is a fish ladder that is 4 ft wide and begins to flow at a stage of 4.1 ft gage datum. Dam completed in 1935 and enlarged in 1951. Capacity, 120,000 acre-ft at elevation 141 ft mean sea level. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.68	5.80	6.92	7.06	11.29	11.75	11.96	12.18	11.28	11.18	11.04	11.18
2	5.62	5.80	6.88	7.30	11.44	11.73	11.94	12.48	11.31	11.15	11.02	11.14
3	5.61	5.79	6.80	7.50	11.45	11.78	11.86	12.58	11.30	11.13	11.00	11.14
4	5.60	5.79	6.70	7.71	11.39	11.94	11.83	12.64	11.32	11.13	10.98	11.13
5	5.60	5.78	6.56	8.02	11.43	11.95	11.76	12.69	11.36	11.08	10.97	11.14
6	5.60	5.77	6.45	8.42	11.44	11.96	11.68	12.69	11.40	11.04	10.96	11.15
7	5.62	5.77	6.40	8.72	11.44	11.97	11.64	12.64	11.40	11.00	10.97	11.13
8	5.59	5.80	6.30	9.10	11.44	11.98	-	12.49	11.39	10.96	10.94	11.13
9	5.54	5.80	6.19	9.46	11.45	11.99	-	12.36	11.36	10.95	10.92	11.12
10	5.51	5.79	6.13	9.84	11.43	12.05	-	12.26	11.34	10.94	10.90	11.12
11	5.51	5.76	6.14	10.20	11.42	12.12	-	12.15	11.35	10.93	10.92	11.12
12	5.50	5.83	6.08	10.55	11.45	12.12	-	12.08	11.34	11.00	10.90	11.08
13	5.58	5.85	5.99	10.85	11.43	12.12	-	11.95	11.34	11.06	10.86	11.06
14	5.59	5.84	5.99	11.10	11.42	12.09	-	11.87	11.33	11.06	10.85	11.06
15	5.54	5.75	5.94	11.30	11.54	12.06	-	11.78	11.28	11.05	10.84	11.05
16	5.54	5.75	5.95	11.40	11.57	11.98	-	11.68	11.22	11.04	10.81	11.06
17	5.54	5.88	5.98	11.44	11.54	12.00	-	11.54	11.19	11.04	10.82	11.06
18	5.51	6.61	6.00	11.46	11.53	11.96	-	11.42	11.18	11.06	10.87	10.94
19	5.50	7.30	6.06	11.45	11.55	11.96	-	11.36	11.16	11.04	10.85	10.42
20	5.51	7.42	6.09	11.41	11.51	11.96	-	11.30	11.14	11.05	10.85	9.90
21	5.54	7.48	6.15	11.40	11.48	11.99	-	11.25	11.11	11.15	10.84	9.48
22	5.55	7.44	6.18	11.35	11.48	12.01	-	11.24	11.11	11.14	10.82	9.08
23	5.53	7.46	6.18	11.34	11.49	12.00	-	11.19	11.16	11.10	10.86	8.74
24	5.48	7.44	6.23	11.32	11.53	11.96	-	11.17	11.43	11.08	10.90	8.40
25	5.46	7.35	6.28	11.27	11.73	12.00	-	11.18	11.49	11.07	10.89	8.08
26	5.46	7.26	6.26	11.30	11.76	12.05	-	11.17	11.39	11.05	10.92	7.84
27	5.49	7.22	6.27	11.28	11.77	12.04	-	11.21	11.35	11.06	10.96	7.58
28	5.48	7.15	6.30	11.21	11.76	12.05	11.75	11.18	11.32	11.07	11.03	7.30
29	5.45	7.06	6.42	11.29	-----	12.09	11.80	11.17	11.26	11.07	11.10	7.02
30	5.52	6.98	6.62	11.26	-----	12.06	11.82	11.20	11.22	11.05	11.15	6.79
31	5.74	-----	6.85	11.22	-----	12.02	-----	11.22	-----	11.04	11.20	-----
MAX	5.74	7.48	6.92	11.46	11.77	12.12	-	12.69	11.49	11.18	11.20	11.18
MIN	5.45	5.75	5.94	7.06	11.29	11.73	-	11.17	11.11	10.93	10.81	6.79

RED RIVER BASIN

07349500 Bodcau Bayou near Sarepta, La.

LOCATION.--Lat 32°54'18", long 93°28'58", (revised), in NW¹ sec.15, T.22 N., R.11 W., Bossier-Webster Parish line, on left bank on downstream side of bridge on State Highway 2, 2.1 miles northwest of Sarepta, and 9.5 miles upstream from Caney Creek.

DRAINAGE AREA.--546 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1958, published as Bayou Bodcau near Sarepta.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--32 years, 565 cfs (409,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,260 cfs May 3 (gage height, 17.63 ft); minimum, 1.2 cfs Oct. 2 (gage height, 1.62 ft).

Period of record: Maximum discharge, 18,600 cfs May 2, 1958 (gage height, 25.14 ft); minimum, 0.1 cfs at times in 1939, 1943, 1952, and 1954; minimum gage height, 1.43 ft Aug. 14-19, 1954.

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

REMARKS.--Records good. Water used by 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 mill. Some diversion and regulation by Lake Erling (usable capacity, 79,000 acre-ft) 15 miles upstream. Records of water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	18	372	1,810	663	687	515	3,190	350	4.9	6.2	23
2	1.5	14	392	1,820	744	665	328	4,190	824	33	6.0	15
3	4.4	18	395	1,630	831	844	715	4,220	984	61	14	12
4	4.8	157	399	1,430	908	1,120	142	3,870	1,020	34	31	13
5	7.8	188	397	1,250	932	1,190	92	3,120	938	16	22	12
6	9.1	189	411	1,130	903	1,160	59	2,480	755	8.8	29	13
7	9.7	161	433	1,040	836	1,090	49	1,940	565	6.1	52	14
8	10	179	433	1,020	769	992	46	1,620	439	18	51	20
9	11	179	387	981	716	877	45	1,340	376	14	51	30
10	11	188	333	917	677	742	45	1,120	373	25	48	60
11	14	286	311	834	649	641	47	950	382	24	61	78
12	16	371	302	751	628	599	52	813	319	8.2	38	28
13	19	396	309	698	613	584	49	699	250	6.7	13	11
14	17	398	317	630	601	591	48	581	198	8.6	8.0	8.4
15	14	407	318	548	611	609	42	446	165	8.2	33	7.6
16	12	394	314	508	666	621	45	297	118	7.7	72	62
17	11	406	314	476	716	725	56	212	60	9.6	22	88
18	10	693	316	457	765	937	52	148	87	8.1	6.9	87
19	9.9	835	316	442	778	1,180	125	90	98	9.2	4.9	33
20	10	917	318	476	760	1,340	208	62	31	8.8	6.7	12
21	10	875	334	537	729	1,420	233	55	15	14	40	9.1
22	10	717	335	511	687	1,450	223	24	63	23	53	8.6
23	9.9	518	334	523	649	1,450	239	21	67	26	96	9.4
24	9.1	381	342	599	598	1,400	306	20	37	18	104	10
25	8.8	319	396	659	639	1,320	460	36	47	13	110	8.6
26	8.9	297	405	664	656	1,200	748	70	57	11	68	8.9
27	8.8	289	392	662	700	1,060	1,030	65	19	13	33	9.9
28	8.5	286	408	664	709	950	1,560	68	8.1	11	19	15
29	8.1	303	610	659	-----	902	1,870	52	6.8	9.2	15	16
30	13	340	990	645	-----	842	2,120	74	4.9	8.4	62	17
31	23	-----	1,550	635	-----	724	-----	69	-----	6.8	57	-----
TOTAL	322.2	10,739	13,183	25,606	20,133	29,912	11,049	31,942	8,656.8	473.3	1,232.7	739.5
MEAN	10.4	338	425	826	719	965	368	1,030	289	15.3	39.8	24.7
MAX	23	917	1,550	1,820	932	1,450	2,120	4,220	1,020	61	110	88
MIN	1.5	14	302	442	598	584	42	20	4.9	4.9	4.9	7.6
AC-FT	639	21,300	26,150	50,790	39,930	59,330	21,920	63,360	17,170	939	2,450	1,470
CAL YR 1969	TOTAL 191,388.77	MEAN 524	MAX 4,340	MIN .93	AC-FT 379,600							
WTR YR 1970	TOTAL 153,988.5	MEAN 422	MAX 4,220	MIN 1.5	AC-FT 305,400							

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-03	0515	17.63	4,260				

RED RIVER BASIN

37

07349500 Bodcau Bayou near Sarepta, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.68	2.36	7.20	14.47	9.33	9.48	8.29	16.12	6.72	1.87	1.93	2.43
2	1.65	2.22	7.37	14.49	9.87	9.34	6.82	17.22	10.37	2.75	1.92	2.16
3	1.84	2.33	7.39	14.05	10.42	10.46	5.74	17.59	11.30	3.54	2.20	2.05
4	1.86	5.04	7.42	13.38	10.88	12.03	4.86	17.21	11.51	2.87	2.79	2.09
5	1.98	5.45	7.41	12.61	11.01	12.35	4.11	16.53	11.04	2.27	2.51	----
6	2.04	5.46	7.51	12.04	10.85	12.19	3.50	15.70	9.93	2.02	2.73	----
7	2.06	5.37	7.68	11.63	10.45	11.87	3.29	14.86	8.65	1.92	3.33	----
8	2.08	5.34	7.69	11.49	10.03	11.35	3.21	13.98	7.73	2.34	3.33	----
9	2.10	5.34	7.32	11.29	9.68	10.69	3.18	13.01	7.24	2.23	3.31	----
10	2.11	5.45	6.88	10.93	9.42	9.85	3.19	12.03	7.21	2.59	3.25	3.44
11	2.22	6.45	6.68	10.44	9.23	9.18	3.24	11.11	7.28	2.55	3.51	3.85
12	2.28	7.19	6.60	9.91	9.09	8.89	3.35	10.31	6.75	2.00	2.96	2.59
13	2.40	7.40	6.66	9.56	8.99	8.79	3.29	9.57	6.10	1.94	2.18	2.01
14	2.33	7.41	6.73	9.10	8.91	8.83	3.25	8.76	5.56	2.02	1.99	1.92
15	2.23	7.43	6.74	8.60	8.97	8.97	3.09	7.78	5.16	2.00	2.73	1.89
16	2.14	7.38	6.71	8.24	9.35	9.05	3.19	6.55	4.51	1.98	3.76	3.45
17	2.10	7.47	6.71	8.02	9.68	9.74	3.44	5.71	3.52	2.06	2.49	4.03
18	2.09	9.52	6.73	7.87	10.00	11.03	3.34	4.94	4.02	2.00	1.95	4.01
19	2.07	10.44	6.73	7.75	10.09	12.31	4.52	4.07	4.22	2.04	1.87	2.72
20	2.08	10.93	6.74	8.01	9.98	13.02	5.66	3.56	2.74	2.03	1.94	2.05
21	2.09	10.68	6.88	8.45	9.76	13.33	5.94	3.38	2.24	2.22	2.96	1.95
22	2.08	9.69	6.89	8.26	9.49	13.47	5.84	2.57	3.58	2.54	3.33	1.93
23	2.07	8.31	6.88	8.35	9.23	13.44	6.00	2.47	3.66	2.61	4.18	1.96
24	2.04	7.27	6.95	8.89	8.89	13.28	6.63	2.45	2.96	2.35	4.32	2.00
25	2.03	6.75	7.40	9.30	9.16	12.93	7.88	2.86	3.13	2.17	4.41	1.93
26	2.03	6.55	7.47	9.33	9.28	12.38	9.89	3.72	3.43	2.13	3.62	1.94
27	2.03	6.48	7.37	9.32	9.58	11.72	11.53	3.62	2.40	2.19	2.74	1.98
28	2.02	6.46	7.49	9.33	9.64	11.12	13.51	3.69	2.00	2.11	2.31	2.17
29	2.00	6.61	8.96	9.30	-----	10.84	14.57	3.34	1.95	2.04	2.18	2.21
30	2.19	6.93	11.30	9.21	-----	10.48	15.00	3.80	1.87	2.01	3.42	2.23
31	2.53	-----	13.49	9.14	-----	9.73	-----	3.71	-----	1.95	3.33	-----
MAX	2.53	10.93	13.49	14.49	11.01	13.47	15.00	17.59	11.51	3.54	4.41	4.03
MIN	1.65	2.22	6.60	7.75	8.89	8.79	3.09	2.45	1.87	1.87	1.87	1.89

RED RIVER BASIN

07349800 Cypress Bayou near Benton, La.

LOCATION.--Lat 32°42'24", long 93°41'17", (revised), in NW¼SW¼ sec.23, T.20 N., R.13 W., Bossier Parish, 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.

PERIOD OF RECORD.--October 1955 to October 1968, May 1969 to current year. Nov. 8, 1938, to Nov. 30, 1946, and Jan. 29, 1948, to Oct. 31, 1952, daily gage heights and occasional discharge measurements in files of Corps of Engineers, New Orleans District.

GAGE.--Water-stage recorder and concrete control. Datum of the gage is 165.98 ft above mean sea level (authority, Corps of Engineers).

AVERAGE DISCHARGE.--14 years (1955-68, 1970), 102 cfs (9.02 inches per year, 63,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,230 cfs May 2 (gage height, 10.96 ft); no flow on many days.

Period of record: Maximum discharge, 8,350 cfs Apr. 27, 1958 (gage height, 15.18 ft); no flow for long periods in most years.

REMARKS.--Records good. Since October 1961, flow regulated by 3 flood-control reservoirs above station (combined capacity of reservoirs, 1,784 acre-ft). Records of water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

REVISIONS.--WSP 1561: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	5.7	624	40	200	97	686	259	1.1		
2		0	5.1	550	146	150	96	1,080	699	.64		
3		0	3.7	337	280	250	100	1,180	1,060	.43		
4		0	3.2	181	250	739	83	962	957	.27		
5		0	2.8	135	154	957	64	631	624	.19		
6		0	3.1	164	118	884	55	270	233	.14		
7		0	3.6	258	106	695	47	150	107	.08		
8		0	12	250	99	447	40	107	72	.05		
9		0	26	172	92	264	35	80	49	.02		
10		0	23	125	85	192	34	60	34	.01		
11		1.8	16	104	80	154	36	47	25	0		
12		24	12	100	75	139	39	37	21	0		
13		18	11	98	73	144	37	28	16	0		
14		4.8	11	84	72	144	32	22	11	0		
15		1.9	11	71	74	114	27	18	8.3	0		
16		1.1	11	62	143	91	78	15	6.0	0		
17		2.5	9.9	58	281	157	195	12	4.6	0		
18		85	9.3	57	259	397	173	16	3.4	0		
19		273	9.0	56	180	554	170	12	2.6	0		
20		345	9.0	56	139	604	200	8.5	2.0	0		
21		194	10	55	114	678	150	6.3	1.6	0		
22		55	11	53	97	759	100	5.1	1.4	0		
23		29	13	52	91	781	70	4.3	1.2	0		
24		21	15	49	93	682	50	4.1	.93	0		
25		15	16	48	235	510	70	5.1	.83	0		
26		12	15	47	464	298	400	4.3	1.9	0		
27		9.2	14	46	490	197	900	11	15	0		
28		7.2	14	45	335	150	800	46	6.2	0		
29		6.3	26	42	-----	127	488	95	3.2	0		
30		5.9	261	40	-----	118	196	46	1.8	0		
31		-----	532	37	-----	108	-----	23	-----	0		-----
TOTAL	0	1,111.7	1,124.4	4,056	4,665	11,684	4,862	5,671.7	4,227.96	2.93	0	0
MEAN	0	37.1	36.3	131	167	377	162	183	141	.095	0	0
MAX	0	345	532	624	490	957	900	1,180	1,060	1.1	0	0
MIN	0	0	2.8	37	40	91	27	4.1	.83	0	0	0
CFSM	0	.28	.27	.98	1.25	2.83	1.22	1.38	1.06	.0007	0	0
IN.	0	.31	.31	1.13	1.30	3.27	1.36	1.59	1.18	.0008	0	0
AC-FT	0	2,210	2,230	8,050	9,250	23,180	9,640	11,250	8,390	5.8	0	0

CAL YR 1969	TOTAL	MEAN	MAX	MIN	CFSM	IN	AC-FT
WTR YR 1970:	TOTAL 37,405.69	MEAN 102	MAX 1,180	MIN 0	CFSM .77	IN 10.46	AC-FT 74,190

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-02	2330	10.96	1,230				
6-03	1830	10.76	1,110				

07349800 Cypress Bayou near Benton, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.56	1.56	2.13	9.49	3.15	----	4.46	9.59	6.22	1.89	1.55	1.54
2	1.56	1.56	2.11	9.09	5.27	----	4.43	10.70	9.69	1.84	1.55	1.54
3	1.56	1.56	2.05	7.52	7.03	----	4.52	10.88	10.67	1.81	1.55	1.53
4	1.56	1.56	2.03	5.88	6.71	9.89	4.17	10.46	10.45	1.78	1.55	1.53
5	1.56	1.56	2.01	5.18	5.48	10.46	3.77	9.42	9.41	1.76	1.55	1.53
6	1.56	1.56	2.03	5.62	4.88	10.29	3.54	6.87	6.41	1.75	1.55	1.53
7	1.56	1.56	2.05	6.81	4.64	9.74	3.35	5.42	4.66	1.73	1.54	1.53
8	1.56	1.56	2.30	6.72	4.49	8.40	3.17	4.67	3.94	1.71	1.54	1.53
9	1.56	1.56	2.76	5.75	4.36	6.86	3.03	4.11	3.41	1.69	1.54	1.52
10	1.56	1.56	2.62	5.00	4.22	6.02	2.98	3.67	3.00	1.68	1.54	1.51
11	1.56	1.65	2.38	4.59	4.12	5.49	3.06	3.34	2.68	1.66	1.54	1.51
12	1.56	2.63	2.30	4.53	4.01	5.25	3.14	3.07	2.50	1.64	1.54	1.51
13	1.56	2.45	2.29	4.49	3.96	5.34	3.09	2.79	2.38	1.63	1.54	1.51
14	1.56	2.09	2.28	4.21	3.94	5.34	2.95	2.55	2.29	1.61	1.54	1.51
15	1.56	1.95	2.28	3.92	3.98	4.80	2.77	2.43	2.21	1.59	1.54	1.51
16	1.56	1.90	2.28	3.72	5.26	4.34	3.98	2.36	2.14	1.58	1.54	1.51
17	1.56	1.98	2.25	3.63	7.04	5.37	6.06	2.31	2.09	1.57	1.54	1.51
18	1.56	3.94	2.24	3.59	6.81	8.04	5.75	2.39	2.04	1.64	1.54	1.51
19	1.56	6.95	2.23	3.57	5.86	9.12	----	2.31	2.00	1.62	1.54	1.50
20	1.56	7.63	2.23	3.58	5.26	9.39	----	2.21	1.96	1.60	1.54	1.50
21	1.56	5.92	2.26	3.56	4.80	9.69	----	2.15	1.93	1.64	1.54	1.50
22	1.56	3.54	2.27	3.50	4.46	9.97	----	2.11	1.91	1.66	1.54	1.50
23	1.56	2.83	2.33	3.47	4.33	10.03	----	2.08	1.90	1.65	1.54	1.50
24	1.56	2.50	2.37	3.39	4.39	9.71	----	2.07	1.88	1.63	1.54	1.50
25	1.56	2.36	2.38	3.37	6.40	8.84	----	2.11	1.86	1.61	1.54	1.50
26	1.56	2.30	2.36	3.35	8.55	7.18	----	2.08	1.92	1.60	1.54	1.50
27	1.56	2.24	2.34	3.33	8.73	6.10	----	2.27	2.36	1.59	1.54	1.50
28	1.56	2.18	2.34	3.29	7.53	5.43	----	3.28	2.15	1.58	1.54	1.50
29	1.56	2.15	2.69	3.23	-----	5.05	8.62	4.42	2.03	1.57	1.54	1.50
30	1.56	2.14	6.61	3.18	-----	4.89	6.05	3.29	1.94	1.57	1.54	1.50
31	1.56	-----	8.99	3.08	-----	4.68	-----	2.59	-----	1.56	1.54	-----
MAX	1.56	7.63	8.99	9.49	9.73	10.46		10.88	10.67	1.89	1.55	1.54
MIN	1.56	1.56	2.01	3.08	3.15	4.34	2.77	2.07	1.86	1.56	1.54	1.50

RED RIVER BASIN

07350000 Loggy Bayou near Ninock, La.

LOCATION.--Lat 32°14'10", long 93°25'35", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.15 N., R.10 W., Bienville-Bossier Parish line, near center of span on downstream side of bridge on U. S. Highway 71, 0.3 mile downstream from Flat River, 1.9 miles southeast of Ninock, and 7.5 miles upstream from mouth.

DRAINAGE AREA.--2,628 sq mi.

PERIOD OF RECORD.--October 1948 to December 1960. January 1961 to September 1964 (annual maximum). January 1961 to current year (gage height only).

GAGE.--Water-stage recorder. Datum of gage is 100.26 ft above mean sea level (levels by Corps of Engineers). Prior to Mar. 29, 1949, and June 30 to Sept. 24, 1951, nonrecording gage, Mar. 29, 1949, to June 29, 1951, water-stage recorder at same site and datum. Sept. 15, 1955, to Sept. 30, 1964, auxiliary water-stage recorder 6 miles downstream at datum 100.21 ft above mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum gage height, 32.69 ft May 1; minimum, 12.49 ft Aug. 2.
Period of record: Maximum gage height, 47.83 ft May 8, 1958; minimum gage height not determined.
1948-64: Maximum discharge, 32,600 cfs May 4, 1958; no flow at times due to severe backwater conditions.

REMARKS.--Some regulation by Lake Bistineau (usable capacity, 88,000 acre-ft) and of flood flows by Bodcau Bayou Reservoir. Records of chemical analyses for the water year 1970 are published in Part 2 of this report.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.12	15.39	16.57	21.24	17.41	23.66	26.02	32.04	-	-	12.63	15.10
2	13.16	15.00	16.34	23.37	18.12	24.86	25.70	32.50	-	-	12.52	14.48
3	13.25	14.76	16.14	25.10	18.35	25.62	25.32	31.91	-	-	12.83	14.17
4	13.26	14.70	16.07	25.28	18.53	27.86	24.72	31.67	-	-	13.29	14.05
5	13.58	14.76	16.15	24.45	19.64	29.05	24.15	31.95	-	-	13.40	14.00
6	14.12	15.11	16.30	23.60	20.90	29.70	23.48	32.28	-	-	13.42	14.02
7	14.36	15.33	16.32	22.65	21.74	29.90	23.04	32.08	-	-	13.99	14.17
8	14.22	15.17	16.38	21.84	22.05	29.90	22.58	31.37	-	-	14.67	14.34
9	14.02	14.92	16.35	21.42	21.96	29.70	22.04	30.48	-	-	14.97	14.40
10	13.86	14.85	16.36	21.17	21.63	29.22	21.63	29.72	-	-	14.91	14.69
11	13.77	14.85	16.21	21.05	21.38	28.73	21.13	28.78	-	-	14.58	14.74
12	13.76	14.85	16.38	21.03	21.14	28.19	20.70	27.81	-	-	14.17	14.54
13	13.75	14.76	16.46	20.96	20.83	27.69	20.26	26.82	-	-	14.07	14.55
14	13.52	14.55	16.49	20.85	20.42	27.26	19.86	25.65	-	-	14.19	14.39
15	13.36	14.27	16.58	20.93	20.33	26.86	19.55	24.42	-	13.08	14.39	13.75
16	13.37	13.89	16.69	21.14	20.78	26.50	19.37	23.71	-	12.93	14.45	13.28
17	13.50	13.77	16.49	21.14	20.72	26.32	19.24	22.67	-	12.94	14.36	13.16
18	13.87	16.98	16.34	20.99	21.14	26.56	19.09	21.77	-	13.25	14.18	13.82
19	17.28	19.20	16.07	20.87	22.02	26.62	19.46	21.33	-	13.36	13.98	18.03
20	18.59	18.66	15.68	20.58	22.42	27.29	20.27	21.18	-	13.27	13.95	18.75
21	18.73	18.39	15.40	20.29	22.24	28.84	20.94	21.01	-	13.35	14.17	18.51
22	19.01	18.40	14.98	19.76	21.89	29.84	21.97	20.66	-	13.25	14.75	18.20
23	19.32	18.29	14.50	19.19	21.10	29.88	24.28	20.20	-	13.07	17.15	17.84
24	19.24	18.30	14.39	18.75	20.70	29.36	25.58	19.65	-	13.23	19.75	17.46
25	18.74	18.42	14.45	18.31	22.45	28.78	25.78	19.04	-	13.44	20.05	17.26
26	18.03	18.24	14.55	18.09	23.05	28.40	25.51	18.60	-	13.67	19.69	17.53
27	17.32	17.93	14.55	18.00	22.70	27.94	25.75	18.42	-	13.87	19.05	17.78
28	16.65	17.44	14.48	17.96	22.44	27.45	27.54	18.42	-	13.95	18.41	17.61
29	16.14	17.06	14.64	18.06	-----	27.02	29.59	18.25	-	13.57	17.84	17.21
30	13.80	16.80	16.20	18.05	-----	26.71	30.62	18.02	-	13.22	17.03	17.11
31	15.78	-----	18.74	17.64	-----	26.36	-----	17.65	-----	12.98	16.06	-----
MAX	19.32	19.20	18.74	25.28	23.05	29.90	30.62	32.50	-	-	20.05	18.75
MIN	13.12	13.77	14.39	17.64	17.41	23.66	19.09	17.65	-	-	12.52	13.16

RED RIVER BASIN

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07351000 Boggy Bayou near Keithville, La.

LOCATION.--Lat 32°22'35", long 93°49'17", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.17, T.16 N., R.14 W., Caddo-DeSoto Parish line, 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

PERIOD OF RECORD.--December 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 145.13 ft above mean sea level (levels by Corps of Engineers). Prior to Sept. 7, 1949, nonrecording gage, Sept. 7, 1949, to Jan. 18, 1954, water-stage recorder, Jan. 19, 1954, to Apr. 7, 1954, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years (1939-70), 71.8 cfs (12.34 inches per year, 52,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,580 cfs Mar. 4 (gage height, 16.65 ft); no flow Aug. 17 and Sept. 15; minimum gage height, 8.37 ft Aug. 17.

Period of record: Maximum discharge, 14,800 cfs Jan. 5, 1946 (gage height, 20.2 ft, from graph based on gage readings), from rating curve extended above 5,200 cfs by velocity-area studies; no flow at times in 1939-40, 1942-44, 1947-49, 1951-60, 1962-67, 1970.

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

REMARKS.--Records fair. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1211: 1939-45, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.27	7.6	248	39	105	17	578	75	2.0	.35	5.9
2	.02	.17	7.2	102	297	88	28	582	28	.97	.22	6.2
3	.01	.09	7.6	51	230	358	28	172	7.6	.40	.13	6.0
4	.10	.07	8.0	30	95	1,380	20	60	5.1	.20	.09	5.9
5	.20	.05	7.3	27	50	624	15	26	4.0	.11	.06	5.8
6	.17	.07	8.7	197	33	223	13	15	3.4	.07	.04	5.3
7	.12	.04	13	282	24	98	12	10	3.0	.07	.03	4.9
8	.07	.02	26	136	20	65	10	8.2	2.6	.06	.03	3.2
9	.05	.02	20	66	17	49	9.9	7.2	2.2	.04	.03	1.3
10	.04	.02	12	39	14	37	10	7.0	2.0	.03	.04	.39
11	.06	.02	10	30	12	30	12	6.4	1.7	.02	.07	.06
12	.19	.02	8.5	30	11	26	13	6.0	1.6	18	.05	.03
13	.68	.02	7.9	27	10	24	11	5.6	1.4	47	.03	.02
14	.70	.02	7.7	20	9.8	22	10	5.3	1.2	9.2	.02	.01
15	.32	.03	7.4	17	21	19	8.7	5.1	1.1	4.4	.01	0
16	.16	.03	7.1	14	125	17	8.6	4.8	.88	2.4	0	.04
17	.09	.32	7.6	13	111	91	9.1	4.5	.59	1.2	.04	.06
18	.07	448	7.5	12	63	318	9.8	4.2	.38	1.3	22	.14
19	.06	727	7.4	11	39	158	49	4.0	.31	.97	7.0	.05
20	.06	325	7.8	11	25	95	139	3.8	.25	.57	2.8	.27
21	.03	100	12	10	17	217	70	3.4	.19	6.4	1.3	1.1
22	.02	34	14	9.9	13	465	27	3.2	.16	3.8	.70	.84
23	.02	15	12	9.2	12	226	14	3.0	12	6.6	5.0	2.2
24	.02	10	10	8.8	17	95	10	2.8	1.9	4.0	10	1.8
25	.02	20	8.5	8.9	596	61	14	2.8	1.5	2.0	50	.60
26	.01	54	7.7	8.8	903	41	18	2.8	1.1	1.1	20	.24
27	.02	23	7.8	8.8	367	28	14	49	.83	.66	10	.13
28	.01	11	7.2	8.8	133	22	9.6	22	1.8	3.4	7.0	.08
29	.01	8.3	8.6	8.7	-----	19	8.0	7.4	4.4	3.2	5.0	.05
30	.26	7.6	155	8.5	-----	18	12	4.9	2.6	1.4	5.0	.03
31	.29	-----	437	8.3	-----	17	-----	4.0	-----	.76	6.0	-----
TOTAL	3.90	1,815.86	876.1	1,461.7	3,303.8	5,036	629.7	1,620.4	168.79	122.33	153.04	52.64
MEAN	.13	60.5	28.3	47.2	118	162	21.0	52.3	5.63	3.95	4.94	1.75
MAX	.70	727	437	282	903	1,380	139	532	75	47	50	6.2
MIN	.01	.02	7.1	8.3	9.8	17	8.0	2.8	.16	.02	0	0
CFSM	.002	.77	.36	.60	1.49	2.05	.27	.66	.071	.050	.063	.022
IN.	.001	.86	.41	.69	1.56	2.37	.30	.76	.08	.06	.07	.02
AC-FT	7.7	3,600	1,740	2,900	6,550	9,990	1,250	3,210	335	243	304	104

CAL YR 1969	TOTAL 36,174.35	MEAN 99.1	MAX 3,700	MIN .01	CFSM 1.25	IN 17.03	ACFT 71,750
WAT YR 1970	TOTAL 15,244.26	MEAN 41.8	MAX 1,380	MIN 0	CFSM .53	IN 7.18	ACFT 30,240

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-4	1200	16.65	1,580				

RED RIVER BASIN

07352000 Saline Bayou near Lucky, La.

LOCATION.--Lat 32°15'00", long 92°58'35", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.15 N., R.6 W., Bienville Parish, near center of span on downstream side of bridge on State Highway 4, 0.7 mile downstream from Sixmile Creek, and 1.0 mile east of Lucky.

DRAINAGE AREA.--154 sq mi.

PERIOD OF RECORD.--June 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 152.65 ft above mean sea level. Prior to Feb. 28, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 160 cfs (14.11 inches per year, 115,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 970 cfs May 4 (gage height, 6.80 ft); minimum, 5.1 cfs July 11; minimum gage height, 2.68 ft Aug. 11, 12.

Period of record: Maximum discharge, 13,500 cfs Jan. 1, 1945 (gage height, 12.9 ft), from rating curve extended above 6,400 cfs on basis of records for Black Lake Bayou near Castor and Dugdemona River near Jonesboro; minimum, 2.4 cfs Aug. 14, 1954; minimum gage height, 1.66 ft Aug. 7, 8, 1964.

REMARKS.--Records poor. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS.--WSP 1177: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	57	38	184	87	346	120	237	48	13	12	43
2	12	30	38	193	182	208	129	736	63	9.6	11	26
3	10	20	38	153	266	177	136	788	68	8.1	9.6	21
4	8.1	18	38	112	290	425	129	942	44	7.5	9.9	21
5	8.9	17	38	94	250	544	117	795	29	6.2	8.9	19
6	8.1	17	86	132	158	592	104	532	22	5.7	8.2	17
7	12	17	150	141	124	682	95	223	18	6.2	9.2	16
8	19	17	132	138	104	610	90	124	16	6.0	14	15
9	22	17	101	132	91	375	88	84	15	6.2	13	13
10	21	17	91	107	80	233	123	62	14	6.0	9.2	16
11	20	17	82	103	71	203	125	48	13	5.2	8.9	27
12	20	18	78	109	64	236	113	38	12	9.6	11	21
13	23	21	75	106	59	258	109	34	12	13	12	21
14	22	20	74	98	56	243	96	30	10	13	13	18
15	22	18	73	84	72	184	86	28	9.0	14	15	19
16	21	18	72	72	137	147	84	31	8.4	16	16	19
17	20	21	70	66	163	154	84	31	7.8	13	15	27
18	20	70	70	64	206	226	88	27	7.1	10	16	61
19	19	169	70	64	190	306	128	25	6.7	8.7	14	76
20	20	171	72	63	141	314	175	24	6.4	7.5	12	30
21	22	138	79	61	110	342	206	23	6.0	14	12	23
22	22	122	86	58	87	410	182	22	14	17	13	21
23	20	55	86	58	74	460	124	21	37	15	16	21
24	18	21	78	56	74	475	94	21	82	12	17	26
25	18	28	76	56	154	405	84	33	76	13	18	25
26	18	31	75	54	266	258	96	35	56	52	17	25
27	17	32	73	54	346	169	103	64	26	106	17	28
28	17	36	72	53	380	141	91	110	21	40	17	30
29	17	36	84	52	-----	129	84	63	27	24	16	29
30	19	38	156	51	-----	124	76	44	21	17	18	29
31	61	-----	188	50	-----	122	-----	31	-----	14	30	-----
TOTAL	591.1	1,307	2,539	2,818	4,282	9,498	3,359	5,306	795.4	508.5	428.9	783
MEAN	19.1	43.6	81.9	90.9	153	306	112	171	26.5	16.4	13.8	26.1
MAX	61	171	188	193	380	682	206	942	82	106	30	76
MIN	8.1	17	38	50	56	122	76	21	6.0	5.2	8.2	13
CFSM	.12	.28	.53	.59	.99	1.99	.73	1.11	.17	.11	.09	.17
IN.	.14	.32	.61	.68	1.03	2.29	.81	1.28	.19	.12	.10	.19
AC-FT	1,170	2,590	5,040	5,590	8,490	18,840	6,660	10,520	1,580	1,010	851	1,550
CAL YR 1969	TOTAL	40,745.0		MEAN	112	MAX	900	MIN	7.1	CFSM	.73	
WTR YR 1970	TOTAL	32,215.9		MEAN	88.3	MAX	942	MIN	5.2	CFSM	.57	
								IN	9.84	ACFT	80,820	
								IN	7.78	ACFT	63,900	

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

RED RIVER BASIN

43

07352800 Grand Bayou near Coushatta, La.

LOCATION.--Lat 32°02'55", long 93°18'10", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.12 N., R.9 W., Red River Parish, near right bank on downstream side of bridge on State Highway 155, half a mile upstream from Carrol Creek, and 3.3 miles north of Coushatta.

DRAINAGE AREA.--93.9 sq mi.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 136.26 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 80.1 cfs (11.58 inches per year, 58,030 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,880 cfs May 2 (gage height, 9.06 ft); no flow at times.

Period of record: Maximum discharge, 7,920 cfs Sept. 21, 1958 (gage height, 11.47 ft), from rating curve extended above 3,200 cfs on basis of velocity-area study; no flow at times each year.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.25	.60	144	11	158	23	455	8.1	31	.24	.08
2	0	.15	.31	131	68	78	23	1,520	4.9	17	.21	.18
3	0	.13	.16	71	176	105	26	1,390	3.4	9.8	.17	.13
4	0	.10	.09	36	173	297	25	902	2.1	5.9	.16	.06
5	0	.09	.05	24	97	332	21	592	1.3	3.7	.12	.03
6	0	.12	2.6	29	49	322	17	307	2.6	2.5	.08	.01
7	0	.13	1.5	106	31	256	14	79	2.1	1.7	.06	0
8	0	.12	18	134	24	127	11	33	1.2	1.1	.11	0
9	0	.14	26	80	20	82	10	21	.62	.59	.08	0
10	0	.14	21	47	17	70	27	14	.34	.34	.07	0
11	0	.20	14	30	15	55	66	10	.25	.25	.05	.08
12	0	.19	8.3	40	13	51	57	7.9	.18	.25	.02	.07
13	.23	.16	5.8	54	11	71	41	5.8	.13	.20	0	.04
14	.06	.11	4.4	41	9.5	70	29	4.5	.11	.24	0	.01
15	.03	.07	3.1	30	11	54	20	3.7	.09	.55	0	0
16	.02	.08	2.2	23	47	39	15	3.2	.07	7.3	0	.11
17	.01	.22	1.3	19	146	54	11	2.7	.05	4.8	0	.10
18	.01	1.8	1.1	16	153	153	9.3	2.2	.04	2.4	0	.07
19	.01	.06	1.2	14	92	182	21	1.8	.04	1.4	0	.15
20	.03	1.1	1.3	14	52	170	117	1.3	.03	.73	0	.35
21	.08	68	1.8	17	33	220	134	.99	.04	.99	0	.35
22	.04	52	11	19	23	281	77	.75	.07	1.2	0	.34
23	.02	24	24	17	18	308	39	.52	.04	1.3	.07	.32
24	.02	12	21	15	16	284	21	.38	.43	1.0	.07	.35
25	.01	6.7	17	13	82	156	14	.32	15	1.3	.03	.33
26	.02	4.1	12	12	228	71	18	.34	155	1.5	0	.34
27	.02	2.4	8.8	11	270	49	22	.43	244	1.7	0	.30
28	.02	1.3	6.8	10	262	36	16	4.1	255	1.8	0	.22
29	.02	1.1	5.8	9.2	-----	29	10	6.5	89	1.2	0	2.2
30	.69	.79	8.8	7.6	-----	26	6.9	6.2	51	.66	.02	5.1
31	1.3	-----	62	6.6	-----	25	-----	11	-----	.35	.11	-----
TOTAL	2.64	178.65	292.01	1,220.4	2,147.5	4,211	941.2	5,387.63	837.23	104.75	1.67	11.32
MEAN	.085	5.06	9.42	39.4	76.7	136	31.4	174	27.9	3.38	.054	.38
MAX	1.3	68	62	144	270	332	134	1,520	255	31	.24	5.1
MIN	0	.07	.05	6.6	9.5	25	6.9	.32	.03	.20	0	0
CFSM	.0009	.064	.10	.42	.82	1.45	.33	1.85	.30	.036	.0006	.004
IN.	.001	.07	.12	.48	.85	1.67	.37	2.13	.33	.04	0	.004
AC-FT	5.2	354	579	2,420	4,260	8,350	1,870	10,690	1,660	208	3.3	22
CAL YR 1969	TOTAL 25,758.71	MEAN 70.6	MAX 1,100	MIN 0	CFSM .75	IN 10.20	ACFT 51,090					
WAT YR 1970	TOTAL 15,336.00	MEAN 42.0	MAX 1,520	MIN 0	CFSM .45	IN 6.08	ACFT 30,420					

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-02	1800	9.06	1,880				

RED RIVER BASIN

07353000 Saline Bayou near Clarence, La.

Location.--Lat 31°49'05", long 92°56'55", in SE $\frac{1}{4}$ sec.26, T.10 N., R.6 W., Natchitoches-Winn Parish line, near center of span on downstream side of bridge on U.S. Highway 84, 1.8 miles downstream from Bayou Bourbeaux, 4.0 miles downstream from Allen Dam, 4.6 miles east of Clarence, and 6.7 miles upstream from mouth.

DRAINAGE AREA.--1,386 sq mi.

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 72.75 ft above mean sea level (levels by Louisiana Department of Public Works). Prior to Nov. 2, 1954, nonrecording gage at same site and datum. Auxiliary water-stage recorder 6.8 miles upstream. Datum of auxiliary gage is 94.49 ft above mean sea level. Prior to Nov. 3, 1954, auxiliary nonrecording gage and Nov. 3, 1954, to Dec. 3, 1969, auxiliary water-stage recorder 5.3 miles downstream at datum 21.52 ft lower.

AVERAGE DISCHARGE.--21 years, 1,214 cfs (879,500 acre-ft per year).

EXTREMES.--Current year; Maximum discharge, 3,140 cfs May 7; maximum gage height, 23.71 ft May 6, 7; minimum discharge (unaffected by backwater), 9.0 cfs Sept. 12.

Period of record: Maximum discharge, 14,200 cfs May 19, 1953; maximum daily reverse flow, 6,570 cfs May 11, 1958 (backwater from Red River); maximum gage height, 40.46 ft May 21, 1953; minimum discharge (unaffected by backwater), 1.4 cfs Sept. 1, Oct. 30 to Nov. 6, Nov. 9-18, 1964.

Flood in April 1945 reached a stage of 43.6 ft, from information by local resident.

REMARKS.--Records good except those for period of indefinite stage-discharge relation, which are poor. Some regulation by Saline Lake-Black Lake (combined usable capacity, 161,000 acre-ft). Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	21	203	626	498	1,320	1,000	1,350	792	499	154	20
2	9.4	18	204	683	624	1,340	1,840	1,850	812	476	142	31
3	9.3	14	197	709	631	1,480	1,700	2,100	755	427	124	34
4	9.2	11	158	725	592	1,750	1,610	2,500	736	384	120	32
5	9.1	10	142	797	663	1,880	1,500	2,880	714	330	112	29
6	9.1	9.5	317	979	720	1,980	1,380	3,080	679	275	104	27
7	9.8	9.0	409	952	761	2,090	1,270	3,130	650	236	105	24
8	11	9.0	400	967	794	2,210	1,160	3,120	630	211	136	20
9	12	9.0	416	986	820	2,240	1,100	3,110	613	189	117	15
10	15	9.0	433	981	793	2,250	1,090	3,090	590	161	100	15
11	21	10	439	1,060	805	2,270	1,050	2,990	540	136	84	14
12	20	12	418	1,070	806	2,250	1,000	2,860	519	130	67	12
13	19	11	408	1,050	795	2,190	992	2,680	497	116	50	12
14	16	10	403	1,040	786	2,160	941	2,490	469	99	42	18
15	14	9.0	394	1,010	828	2,110	896	2,310	429	102	36	13
16	13	9.0	374	980	861	2,030	884	2,170	385	109	31	19
17	12	9.0	353	951	803	2,120	849	1,930	349	126	27	30
18	11	9.5	336	918	796	2,100	769	1,720	324	145	28	52
19	10	10	355	889	829	2,150	366	1,540	291	127	29	60
20	11	12	353	828	813	2,060	942	1,390	263	115	31	50
21	12	14	389	757	822	2,230	836	1,260	240	207	30	40
22	20	25	345	706	830	2,310	839	1,140	234	212	26	37
23	27	40	348	675	826	2,330	868	1,050	236	192	37	35
24	31	50	320	625	857	2,290	898	968	321	182	51	31
25	34	60	343	601	1,120	2,300	887	929	313	177	47	28
26	34	90	313	578	1,160	2,290	889	861	304	179	42	25
27	32	125	288	536	1,220	2,190	868	880	317	202	36	24
28	29	157	297	501	1,270	2,140	874	870	352	197	29	23
29	26	203	352	552	-----	2,080	871	837	418	187	26	22
30	23	217	536	490	-----	2,010	848	817	476	175	22	21
31	22	-----	584	438	-----	1,950	-----	792	-----	165	20	-----
TOTAL	540.4	1,202.0	10,827	24,660	23,123	64,050	32,317	58,684	14,248	6,468	2,005	813
MEAN	17.4	40.1	349	795	926	2,066	1,077	1,893	475	209	64.7	27.1
MAX	34	217	584	1,070	1,270	2,330	1,900	3,130	812	499	154	60
MIN	9.1	9.0	142	438	498	1,320	769	792	234	99	20	12
AC-FT	1,070	2,380	21,480	48,910	45,860	127,000	64,100	116,400	28,260	12,830	3,980	1,610

CAL YR 1969 TOTAL 380,035.4 MEAN 1,041 MAX 5,220 MIN 9.0 ACFT 753,800
WAT YR 1970 TOTAL 238,937.4 MEAN 655 MAX 3,130 MIN 9.0 ACFT 473,900

NOTE.--Indefinite stage-discharge relation Oct. 6 to Nov. 27.

RED RIVER BASIN

45

07354000 Little Sandy Creek at Kisatchie, La.

LOCATION.--Lat 31°24'30", long 93°10'15", in SE $\frac{1}{4}$ sec.15, T.5 N., R.8 W., Natchitoches Parish, near right bank at downstream side of bridge on State Highway 117, 0.5 mile south of Kisatchie, and 2 miles upstream from mouth.

DRAINAGE AREA.--21.4 sq mi.

PERIOD OF RECORD.--September 1949 to current year.

GAGE.--Water stage recorder. Datum of gage is 204.44 ft above mean sea level. May 20, 1964, to Aug. 31, 1965, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 27.9 cfs (17.70 inches per year, 20,210 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,170 cfs Dec. 6 (gage height, 8.73 ft); minimum daily, 0.46 cfs Sept. 8-9.

Period of record: Maximum discharge, 5,880 cfs Apr. 29, 1953 (gage height, 15.36 ft); minimum, 0.2 cfs Sept. 19, 21, 22, 27, 1956.

REMARKS.--Records good except those below about 20 cfs, which are fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.59	2.8	1.4	17	245	9.4	13	487	7.4	1.0	1.6	1.2		
2	.59	2.1	1.4	17	33	8.8	13	77	5.2	.94	1.3	2.5		
3	.59	1.8	1.4	12	17	287	11	25	3.9	.84	1.2	2.1		
4	.59	1.7	1.4	9.8	15	58	11	17	2.8	.84	1.7	1.8		
5	.59	1.6	1.7	67	13	24	11	14	2.8	.76	1.3	1.2		
6	.59	1.6	737	203	12	17	10	11	2.7	.76	1.2	.84		
7	.67	1.6	36	26	11	23	9.4	10	2.1	.76	1.3	.59		
8	.76	1.6	16	21	9.8	16	8.8	9.1	2.1	.84	1.3	.46		
9	.84	1.4	12	17	9.6	14	20	8.6	1.9	.84	1.0	.46		
10	.94	1.4	10	16	9.4	12	168	8.2	1.9	.84	.94	9.3		
11	.94	1.3	8.6	51	8.8	24	32	7.6	1.9	.84	.94	6.4		
12	.94	1.3	8.2	19	8.4	16	21	6.4	2.2	85	.84	2.7		
13	1.7	1.3	7.6	14	8.4	13	16	6.4	2.4	7.6	.76	1.9		
14	1.2	1.2	7.0	13	8.4	12	14	6.2	1.6	5.4	.76	1.6		
15	1.0	1.1	6.7	12	16	11	13	6.0	1.3	5.2	.67	1.2		
16	.94	1.2	6.0	11	21	10	16	7.6	1.2	4.3	.67	1.9		
17	.94	1.3	5.8	10	13	168	13	5.8	1.2	3.9	.67	2.2		
18	.84	10	5.6	9.8	11	28	12	5.0	1.2	3.2	.67	1.8		
19	.84	7.0	6.2	11	9.8	21	112	4.5	1.1	2.2	.84	1.7		
20	5.1	2.8	20	10	9.1	18	22	4.3	1.1	1.8	.84	1.6		
21	9.8	2.1	14	9.1	8.4	122	15	4.1	1.2	7.4	.94	1.6		
22	2.1	1.9	11	8.6	8.4	32	13	3.9	1.2	7.0	.76	1.4		
23	1.6	1.8	10	8.4	8.2	22	12	3.8	2.2	3.9	.94	1.3		
24	1.3	1.8	9.0	8.2	9.1	19	12	3.2	5.2	6.1	2.5	1.3		
25	1.2	1.7	8.0	7.6	22	17	10	3.2	2.4	11	1.6	1.6		
26	1.2	1.6	7.4	7.4	12	17	9.6	5.6	1.6	4.3	.84	1.4		
27	1.2	1.6	7.0	7.0	10	15	9.4	7.4	1.3	3.6	.76	1.2		
28	1.1	1.4	6.8	6.4	9.4	14	9.1	6.0	1.3	2.7	.76	1.0		
29	1.1	1.4	113	7.2	-----	14	8.6	4.3	1.2	2.4	.76	.94		
30	1.8	1.4	293	6.7	-----	13	8.2	3.6	1.0	1.9	.94	-----		
31	4.1	-----	28	6.4	-----	13	-----	4.3	-----	1.7	.76	-----		
TOTAL	47.69	62.8	1,407.2	649.6	576.2	1,088.2	653.1	776.1	66.6	179.86	32.06	56.13		
MEAN	1.54	2.09	45.4	21.0	20.6	35.1	21.8	25.0	2.22	5.80	1.03	1.87		
MAX	9.8	10	737	203	245	287	168	487	7.4	85	2.5	9.3		
MIN	.59	1.1	1.4	6.4	8.2	8.8	8.2	3.2	1.0	.76	.67	.46		
CFSM	.07	.10	2.12	.98	.96	1.64	1.02	1.17	.10	.27	.05	.09		
IN.	.08	.11	2.45	1.13	1.00	1.89	1.14	1.35	.12	.31	.06	.10		
AC-FT	94.6	125	2,790	1,290	1,140	2,160	1,300	1,540	132	357	63.6	111		
CAL YR 1969:	TOTAL	10,883.67	MEAN	29.8	MAX	1,300	MIN	.59	CFSM	1.39	IN.	18.93	AC-FT	21,590
WTR YR 1970:	TOTAL	5,595.54	MEAN	15.3	MAX	737	MIN	.46	CFSM	.72	IN.	9.74	AC-FT	11,100

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12- 6	1400	8.73	2,170	3- 3	1900	6.28	1,280
2- 1	1500	5.57	1,030	5- 1	1700	6.80	1,460

RED RIVER BASIN

07355500 Red River at Alexandria, La.

LOCATION.--Lat 31°18'46", long 92°26'34", in SE $\frac{1}{4}$ sec.10, T.4 N., R.1 W., Rapides Parish, near center of span on downstream side of old bridge on U.S. Highway 165 between Alexandria and Pineville, and 1.7 miles downstream from Bayou Rigolette.

DRAINAGE AREA.--67,500 sq mi., of which 5,936 sq mi above Denison Dam is noncontributing.

RECORDS AVAILABLE.--October 1928 to current year. Since January 1928, in reports of Mississippi River Commission. Discharge observations in 1858 and intermittently 1879 to 1927 and gage heights since 1872, in reports of Mississippi River Commission.

GAGE.--Wire-weight gage read twice daily. Datum of gage is 44.26 ft above mean sea level or 44.18 ft above mean Gulf level, datum of Mississippi River Commission (levels by Corps of Engineers). Prior to July 14, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 31,020 cfs (22,500,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 114,000 cfs May 3; minimum, 4,400 cfs Aug. 4, 5 (gage height, -0.13 ft).

Period of record: Maximum discharge, 233,000 cfs Apr. 17, 1945 (gage height, 45.23 ft); minimum, 873 cfs Oct. 30, 1956 (gage height, -3.01 ft).

A discharge of 210,000 cfs was measured July 2, 1908 (gage height, 41.6 ft).

REMARKS.--Regulation by Lake Texoma, Millwood Reservoir, and Texarkana Reservoir.

COOPERATION.--Gage-height record, 51 discharge measurements, and computations of daily discharge furnished by Corps of Engineers; records reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1929-36.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,300	10,000	10,000	19,000	15,000	34,000	49,000	101,000	14,000	9,700	5,500	14,000
2	5,000	9,600	9,300	30,000	16,000	40,000	46,000	112,000	13,000	8,700	5,000	12,000
3	4,900	8,900	8,800	44,000	15,000	48,000	45,000	114,000	13,000	8,200	4,700	10,000
4	4,800	8,200	7,900	53,000	15,000	59,000	42,000	108,000	14,000	8,200	4,400	8,300
5	4,800	7,700	7,500	57,000	17,000	74,000	39,000	103,000	15,000	8,300	4,400	7,300
6	5,000	7,500	10,000	56,000	20,000	86,000	37,000	101,000	17,000	8,200	4,700	6,900
7	5,100	7,700	16,000	52,000	28,000	91,000	34,000	99,000	18,000	7,900	5,000	6,600
8	5,600	8,100	15,000	46,000	33,000	93,000	32,000	94,000	18,000	7,200	5,300	6,500
9	6,000	8,300	13,000	41,000	36,000	92,000	30,000	82,000	17,000	6,800	5,800	6,600
10	6,100	8,300	13,000	37,000	37,000	88,000	29,000	73,000	17,000	6,100	6,600	6,900
11	6,000	8,000	12,000	35,000	36,000	83,000	28,000	66,000	16,000	6,100	7,400	7,100
12	5,700	7,800	11,000	34,000	35,000	76,000	26,000	58,000	15,000	6,300	7,800	7,400
13	5,700	7,700	11,000	33,000	33,000	70,000	26,000	52,000	14,000	6,500	7,700	7,700
14	5,500	7,500	11,000	32,000	30,000	63,000	24,000	46,000	13,000	6,500	7,200	7,600
15	5,400	7,400	12,000	31,000	29,000	59,000	23,000	42,000	13,000	6,200	6,800	7,600
16	5,300	7,200	12,000	30,000	27,000	54,000	21,000	38,000	12,000	5,700	6,800	7,500
17	5,100	6,700	12,000	29,000	25,000	53,000	20,000	34,000	11,000	5,300	7,000	6,900
18	5,000	6,300	13,000	29,000	25,000	54,000	19,000	31,000	10,000	5,000	7,100	6,100
19	4,900	6,300	13,000	28,000	28,000	55,000	19,000	28,000	11,000	4,800	7,100	5,600
20	5,800	8,500	12,000	27,000	32,000	59,000	19,000	26,000	17,000	5,000	7,000	5,400
21	12,000	11,000	12,000	26,000	32,000	69,000	19,000	25,000	23,000	5,200	6,800	5,700
22	16,000	14,000	11,000	25,000	35,000	84,000	20,000	25,000	24,000	5,300	6,700	7,900
23	18,000	15,000	10,000	23,000	33,000	91,000	24,000	24,000	23,000	5,200	6,900	8,100
24	19,000	15,000	9,400	21,000	30,000	93,000	35,000	23,000	21,000	5,200	9,200	8,000
25	20,000	15,000	8,600	19,000	28,000	88,000	44,000	21,000	21,000	5,200	17,000	7,700
26	20,000	15,000	7,900	18,000	29,000	83,000	47,000	19,000	19,000	5,200	22,000	7,600
27	18,000	15,000	7,900	16,000	31,000	75,000	48,000	18,000	17,000	5,800	23,000	7,900
28	16,000	14,000	7,800	16,000	32,000	67,000	53,000	17,000	14,000	6,000	22,000	9,000
29	14,000	13,000	8,800	15,000	-----	62,000	71,000	16,000	12,000	6,200	20,000	10,000
30	13,000	11,000	13,000	15,000	-----	57,000	90,000	16,000	11,000	6,200	19,000	11,000
31	11,000	-----	15,000	15,000	-----	52,000	-----	15,000	-----	6,000	16,000	-----
TOTAL	284,000	281,300	331,900	952,000	782,000	2,152,000	1,059,000	1,627,000	473,000	198,200	291,900	236,900
MEAN	9,161	9,377	10,710	30,710	27,930	69,400	35,300	52,480	15,770	6,393	9,416	7,897
MAX	20,000	15,000	16,000	57,000	37,000	93,000	90,000	114,000	24,000	9,700	23,000	14,000
MIN	4,800	6,300	7,500	15,000	15,000	34,000	19,000	15,000	10,000	4,800	4,400	5,400
AC-FT	563,300	557,900	658,300	1,888,000	1,551,000	4,268,000	2,100,000	3,227,000	938,100	393,100	579,000	469,900
CAL YR 1969: TOTAL	13,297,400		MEAN	36,430	MAX	134,000	MIN	3,900	AC-FT	26,380,000		
WTR YR 1970: TOTAL	8,669,200		MEAN	23,750	MAX	114,000	MIN	4,400	AC-FT	17,190,000		

MISSISSIPPI RIVER DELTA

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07355650 Larto Lake at dam near Acme, La.

LOCATION.--Lat 31°20'01", long 91°56'10", in SW $\frac{1}{4}$ sec.11, T.4 N., R.5 E., Catahoula Parish, at dam, 3.0 miles west of Argo, 4.2 miles upstream from mouth of Larto Bayou, and 7.7 miles northwest of Acme.

DRAINAGE AREA.--291 sq mi.

PERIOD OF RECORD.--December, 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 33.05 ft above mean sea level (levels by Louisiana Department of Public Works).

EXTREMES.--December 1968 to September 1969: Maximum gage height 14.20 ft Mar. 2; minimum 3.82 ft Sept. 2.
Water year 1970: Maximum gage height 12.69 ft May 16; minimum 3.50 ft Nov. 18.

REMARKS.--Records good.

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				4.85	4.23	14.15	7.98	10.87	8.10	4.10	4.88	3.97
2				4.80	4.25	14.17	8.26	10.77	7.73	4.09	4.77	3.96
3				4.76	4.29	14.15	8.44	10.69	7.28	4.10	4.71	3.98
4				4.75	4.30	13.87	8.52	10.79	6.83	4.10	4.62	4.02
5				4.64	4.93	13.45	8.58	10.98	6.46	3.97	4.57	4.15
6				4.59	5.67	13.14	8.65	11.18	6.05	4.07	4.51	4.17
7				4.53	6.67	12.65	8.66	11.20	5.70	4.08	4.47	4.17
8				4.50	7.64	12.19	8.71	11.44	5.38	4.07	4.43	4.17
9				4.56	8.36	11.80	8.78	11.68	5.20	4.05	4.40	4.15
10				4.47	8.85	11.34	8.78	11.80	5.04	4.03	4.36	4.12
11				4.43	9.27	10.88	8.69	12.07	4.90	4.01	4.32	4.10
12			4.69	4.40	9.64	10.36	8.49	12.26	4.79	4.03	4.31	4.07
13			4.83	4.38	9.90	9.88	8.63	12.45	4.71	4.00	4.28	4.05
14			4.90	4.36	10.24	9.36	8.90	12.58	4.65	4.00	4.26	4.04
15			4.87	4.35	10.58	8.90	9.19	12.57	4.60	4.01	4.23	4.03
16			4.84	4.33	10.76	8.60	9.48	12.50	4.51	4.00	4.21	4.00
17			4.78	4.32	10.90	8.41	9.78	12.30	4.43	3.99	4.20	4.00
18			4.72	4.32	11.07	8.36	10.10	12.02	4.40	3.98	4.23	3.99
19			4.84	4.35	11.24	8.43	10.44	11.70	4.35	4.07	4.16	4.00
20			4.85	4.30	11.40	8.39	10.79	11.35	4.32	4.35	4.15	4.00
21			4.92	4.29	11.59	8.37	11.07	11.04	4.31	4.33	4.15	4.00
22			5.43	4.27	12.08	8.17	11.27	10.77	4.27	4.32	4.15	3.99
23			5.05	4.27	12.45	7.88	11.36	10.55	4.24	4.55	4.15	3.98
24			5.47	4.32	12.76	7.75	11.30	10.36	4.19	5.22	4.11	3.98
25			5.35	4.26	13.10	7.59	11.24	10.20	4.17	5.39	4.09	3.96
26			5.21	4.24	13.41	7.47	11.18	9.97	4.14	5.30	4.07	3.95
27			5.05	4.22	13.71	7.29	11.10	9.70	4.15	5.23	4.05	3.94
28			5.08	4.21	14.04	7.34	11.17	9.34	4.17	5.24	4.04	3.92
29			4.97	4.20	-----	7.47	11.05	9.00	4.15	5.20	4.01	3.90
30			4.89	4.21	-----	7.69	10.95	8.63	4.13	5.12	4.01	3.89
31		-----	4.94	4.20	-----	7.85	-----	8.40	-----	5.00	3.99	-----
MAX			5.47	4.85	14.04	14.17	11.36	12.58	8.10	5.39	4.88	4.17
MIN			4.64	4.20	4.23	7.29	7.98	8.40	4.13	3.97	3.99	3.89

MISSISSIPPI RIVER DELTA

07355650 Larto Lake at dam near Acme, La.--Continued

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.87	3.85	3.70	5.99	5.56	5.00	6.33	7.20	10.00	5.36	4.71	4.47
2	3.84	3.86	3.69	6.01	5.40	4.98	6.37	8.75	9.65	5.32	4.68	4.48
3	3.82	3.82	3.69	6.01	5.53	4.96	6.25	10.08	9.29	5.25	4.64	4.52
4	3.82	3.83	3.66	5.96	5.50	5.54	6.21	10.92	8.88	5.17	4.62	4.55
5	3.82	3.82	3.66	5.90	5.43	5.23	6.17	11.40	8.50	5.12	4.61	4.54
6	3.80	3.77	4.00	6.23	5.43	5.25	6.08	11.76	8.14	5.05	4.59	4.51
7	3.85	3.74	4.90	6.36	5.41	5.26	6.01	12.08	7.82	4.99	4.58	4.49
8	3.84	3.73	5.07	6.38	5.38	5.29	5.94	12.35	7.52	4.95	4.58	4.47
9	3.82	3.74	5.13	6.37	5.36	5.25	5.89	12.48	7.23	4.94	4.56	4.44
10	3.80	3.72	5.15	6.32	5.33	5.21	5.88	12.54	6.91	4.82	4.55	4.44
11	3.78	3.70	5.13	6.33	5.29	5.17	6.07	12.57	6.64	4.80	4.53	4.41
12	3.78	3.70	5.10	6.33	5.25	5.27	6.11	12.60	6.41	4.74	4.51	4.42
13	3.78	3.73	5.08	6.31	5.20	5.28	6.11	12.62	6.23	4.75	4.49	4.40
14	3.84	3.77	5.06	6.26	5.13	5.21	6.07	12.62	6.08	5.09	4.46	4.38
15	3.75	3.64	5.05	6.21	5.14	5.15	5.99	12.62	5.98	5.09	4.43	4.37
16	3.74	3.61	5.02	6.16	5.20	5.10	5.95	12.67	5.89	5.09	4.41	4.33
17	3.72	3.59	4.97	6.09	5.14	5.07	5.92	12.64	5.80	5.01	4.39	4.38
18	3.70	3.60	4.95	6.02	5.10	5.14	5.55	12.64	5.73	5.08	4.39	4.40
19	3.70	3.83	4.92	5.99	5.11	5.10	5.27	12.61	5.66	5.05	4.39	4.38
20	3.69	3.73	4.97	5.91	5.07	5.20	5.30	12.57	5.57	5.03	4.40	4.35
21	3.70	3.73	4.92	5.85	5.03	5.30	5.24	12.49	5.51	5.02	4.42	4.37
22	3.68	3.72	5.00	5.80	5.00	5.48	5.15	12.41	5.46	5.09	4.41	4.35
23	3.69	3.72	5.00	5.75	4.97	6.13	5.64	12.29	5.43	4.97	4.44	4.33
24	3.66	3.71	4.99	5.69	4.95	6.28	5.60	12.14	5.38	4.89	4.55	4.41
25	3.65	3.72	5.02	5.65	5.09	6.41	5.64	11.98	5.47	4.87	4.55	4.43
26	3.63	3.72	5.02	5.62	5.04	6.60	5.74	11.75	5.43	4.84	4.53	4.44
27	3.65	3.71	4.99	5.59	5.02	6.59	5.84	11.53	5.38	4.84	4.53	4.46
28	3.65	3.72	4.98	5.51	5.01	6.55	5.96	11.51	5.48	4.84	4.50	4.42
29	3.62	3.71	5.01	5.45	-----	6.52	6.11	11.02	5.48	4.82	4.47	4.37
30	3.60	3.70	5.49	5.50	-----	6.49	6.41	10.70	5.43	4.78	4.47	4.36
31	3.57	-----	5.88	5.40	-----	6.40	-----	10.35	-----	4.74	4.50	-----
MAX	3.87	3.86	5.88	6.38	5.53	6.60	6.41	12.67	10.00	5.36	4.71	4.55
MIN	3.57	3.59	3.66	5.40	4.95	4.96	5.15	7.20	5.38	4.74	4.39	4.33

07364100 Ouachita River near Arkansas-Louisiana State line

LOCATION.--Lat 33°01'52", long 92°05'16" (revised), in SE 1/4 sec. 25, T.19 S., R.10 W., Union County, on right bank 500 ft below lock and dam No. 6, 1.6 miles north of Arkansas-Louisiana State line, 3.5 miles downstream from Missouri Pacific Railroad Co. bridge, and 4 miles southeast of Felsenthal, Ark.

DRAINAGE AREA.--10,787 sq mi.

PERIOD OF RECORD.--April 1958 to current year (discharge above 19.0 ft stage not determined). Gage-height record for some periods collected at same site since 1912 are contained in reports of Corps of Engineers, Vicksburg district.

GAGE.--Water-stage recorder. Datum of gage is 44.09 ft above mean sea level (levels by Corps of Engineers). Prior to Aug. 26, 1958, nonrecording gage at same site and datum. Auxiliary water-stage recorder 16 miles downstream at same datum. Prior to Aug. 26, 1958, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum gage height, 29.81 ft May 12 (discharge not determined); minimum daily discharge, 952 cfs Nov. 14; minimum gage height, 6.93 ft Nov. 14.

Period of record: Maximum gage height, 43.04 ft May 14, 15, 1958 (discharge not determined); minimum daily discharge, 494 cfs June 12, 1963; minimum gage height, 6.60 ft June 4, 1959.

1912-69: Maximum gage height, 44.2 ft Apr. 11, 12, 1945; minimum, -0.3 ft Nov. 11, 1916; minimum since 1928, 5.8 ft Aug. 25, 1951.

REMARKS.--Records poor. Discharge computed for stages below bankfull, about 19 ft. Flow regulated by Lake Ouachita since 1952 (usable capacity, 1,903,000 acre-ft), Lake Hamilton since 1932 (usable capacity, 119,560 acre-ft), Lake Catherine since 1925 (usable capacity, 21,300 acre-ft), Lake Greason since 1949 (usable capacity, 330,000 acre-ft), and by navigation pools. Records of chemical analyses for Lock and Dam No. 6 for the water year 1970 are published in Part 2 of the Arkansas report (see station No. 07364080). Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,860	1,220	4,060	16,900	7,900					1,140	1,220	1,040
2	1,740	1,250	3,520		9,610					1,120	1,110	1,050
3	1,680	1,380	3,090		10,500					1,180	1,290	1,100
4	1,670	1,430	2,450		10,800					1,230	1,330	1,100
5	1,650	1,400	2,570		14,500					1,270	1,290	1,110
6	2,010	1,340	2,650		15,600					1,400	1,250	1,150
7	2,320	1,280	2,690		15,900					1,940	1,330	1,130
8	2,120	1,230	3,370		16,200					1,970	1,420	1,160
9	1,930	1,200	5,050		16,300					1,470	1,430	1,220
10	1,800	1,180	5,830		16,300					1,480	1,510	1,240
11	1,640	1,170	5,790		15,400					1,580	1,570	1,290
12	1,570	1,120	5,550		14,400				11,800	1,570	1,500	1,320
13	2,070	1,080	4,990		12,800				11,100	1,460	1,420	1,370
14	2,370	952	4,920		11,500				9,480	1,650	1,300	1,420
15	2,330	1,090	4,870		10,500				8,210	1,920	1,200	1,440
16	1,940	1,190	4,370		10,300				7,390	1,670	1,110	1,480
17	1,440	1,260	3,470		11,800				5,740	1,590	1,040	1,450
18	1,300	3,780	2,950		14,900				4,480	1,660	1,080	1,400
19	1,210	7,390	3,000		16,200				3,430	1,600	1,080	1,430
20	1,180	10,200	2,900		17,000				2,860	1,510	1,040	1,580
21	1,160	14,400	3,510						2,580	1,520	1,040	1,590
22	1,120	15,700	3,720						2,530	1,550	1,130	1,550
23	1,070	15,700	4,080						2,370	1,620	1,170	1,20
24	1,220	15,400	4,480						1,820	1,610	1,220	1,230
25	1,340	12,600	4,280						1,320	1,530	1,220	1,440
26	1,310	9,610	4,010						1,370	1,420	1,300	1,450
27	1,250	6,800	2,580						1,160	1,320	1,360	1,430
28	1,250	5,160	3,030	11,900					1,140	1,290	1,360	1,390
29	1,220	4,890	4,660	11,200					1,110	1,440	1,260	1,270
30	1,210	4,560	9,760	9,880	-----				1,110	1,490	1,180	1,200
31	1,190	-----	15,600	8,440	-----	-----	-----	-----	-----	1,350	1,110	-----
MAX	2,370	15,700	15,600	-----	-----				-----	1,970	1,570	1,590
MIN	1,070	952	2,450	8,440	7,900				1,110	1,120	1,040	1,040

RED RIVER BASIN

07364200 Bayou Bartholomew near Jones, La.

LOCATION.--Lat 32°59'25", long 91°39'20", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.9, T.23 N., R.8 E., Morehouse Parish, 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.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 79.21 ft above mean sea level (levels by Corps of Engineers). Auxiliary water-stage recorder at site 4.0 miles downstream at different datum. Oct. 1, 1959, to Dec. 6, 1966, auxiliary nonrecording gage 4.1 miles downstream at datum 1.0 ft higher. Prior to Oct. 1, 1959, auxiliary water-stage recorder 15.3 miles upstream at datum 85.17 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--13 years, 1,187 cfs (860,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 4,920 cfs Mar. 29; maximum gage height, 24.00 ft Apr. 1; minimum discharge, 82 cfs Nov. 11, 15, 16 (gage height, 1.57 ft).

Period of record: Maximum daily discharge, 6,680 cfs Mar. 11-13, 1961; maximum gage height, 28.24 ft May 21, 22, 1958; minimum discharge, 32 cfs July 22, 1966 (gage height, 0.35 ft).

REMARKS.--Records fair. Small diversions above station for irrigation. In extreme floods, considerable flow bypasses station. Most of flow is into the Bayou Lafourche-Boeuf River basins via interconnecting system of bayous and drainage ditches and passes stations Bayou Lafourche near Crew Lake and Boeuf River at Girard. (See stations 07369000 and 07368000.) Other flow bypasses station and reenters the basin 5 miles downstream via Overflow Creek. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	91	1,140	1,310	1,780	1,420	4,860	3,400	1,690	121	142	116
2	175	90	1,160	1,530	1,690	1,500	4,840	3,710	1,550	119	143	114
3	169	89	1,180	1,780	1,630	1,630	4,800	3,880	1,390	115	146	115
4	163	88	1,200	2,080	1,550	1,760	4,710	4,070	1,230	112	151	115
5	158	87	1,200	2,370	1,540	1,890	4,630	4,170	1,050	109	161	115
6	151	86	1,220	2,580	1,540	1,990	4,510	4,280	909	106	167	118
7	146	85	1,240	2,780	1,560	2,140	4,380	4,360	784	103	179	124
8	133	84	1,240	2,920	1,590	2,280	4,210	4,390	671	100	189	130
9	123	84	1,210	3,040	1,620	2,440	4,050	4,420	559	100	185	136
10	115	83	1,180	3,150	1,610	2,590	3,890	4,430	474	113	183	139
11	110	82	1,140	3,270	1,590	2,730	3,650	4,400	398	148	183	140
12	105	84	1,080	3,330	1,550	2,900	3,540	4,370	346	189	184	138
13	102	84	1,040	3,350	1,480	3,040	3,240	4,310	304	268	190	137
14	100	84	972	3,250	1,400	3,120	3,020	4,260	278	323	206	135
15	99	82	911	3,290	1,320	3,220	2,940	4,110	259	324	222	133
16	101	82	852	3,250	1,240	3,330	2,930	4,160	244	299	232	130
17	103	92	784	3,240	1,170	3,410	2,800	4,060	230	273	232	129
18	104	172	720	3,210	1,110	3,570	2,700	3,940	215	339	223	127
19	104	332	649	3,190	1,060	3,680	2,600	3,720	202	317	208	125
20	104	396	584	3,140	1,030	3,760	2,600	3,560	188	284	190	122
21	103	544	561	3,050	1,040	3,880	2,600	3,440	177	289	173	118
22	100	671	535	2,950	1,060	4,070	2,630	3,320	168	291	159	115
23	96	764	537	2,860	1,100	4,150	2,670	3,110	158	268	151	113
24	93	831	546	2,720	1,140	4,290	2,740	2,990	150	257	142	112
25	91	887	610	2,620	1,210	4,460	2,780	2,800	144	244	133	113
26	89	947	674	2,480	1,260	4,630	2,910	2,680	140	220	128	115
27	88	988	717	2,320	1,300	4,740	3,040	2,490	135	196	126	116
28	87	1,060	737	2,160	1,350	4,880	3,140	2,340	130	175	125	121
29	86	1,050	819	2,020	-----	4,920	3,240	2,170	127	157	124	121
30	88	1,110	984	1,930	-----	4,930	3,320	2,060	124	146	122	117
31	92	-----	1,160	1,840	-----	4,870	-----	1,850	-----	142	119	-----
TOTAL	3,556	11,209	28,582	83,010	38,520	102,220	103,970	111,250	14,424	6,247	5,218	3,699
MEAN	115	374	922	2,678	1,376	3,297	3,466	3,589	481	202	168	123
MAX	178	1,110	1,240	3,350	1,780	4,930	4,860	4,430	1,690	339	232	140
MIN	86	82	535	1,310	1,030	1,420	2,600	1,850	124	100	119	112
AC-FT	7,050	22,230	56,690	164,700	76,400	202,800	206,200	220,700	28,610	12,390	10,350	7,340
CAL YR 1969: TOTAL	395,107			MEAN 1,082	MAX 4,200	MIN 82		AC-FT 783,700				
WTR YR 1970: TOTAL	511,905			MEAN 1,402	MAX 4,930	MIN 82		AC-FT 1,015,000				

RED RIVER BASIN

51

07364300 Chemin-a-Haut Bayou near Beekman, La.

LOCATION.--Lat 32°58'55", long 91°48'20", in SE $\frac{1}{4}$ sec.13, T.23 N., R.6 E., Morehouse Parish, near center of span on downstream side of bridge on parish road, 1.9 miles downstream from Arkansas-Louisiana State line, and 6 miles northeast of Beekman.

DRAINAGE AREA.--271 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 76.08 ft above mean sea level. Prior to Jan. 28, 1956, nonrecording gage, Jan. 29, 1956, to Oct. 1, 1966, at datum 9.5 ft higher. Auxiliary water-stage recorder 4 miles downstream. Datum of auxiliary gage is 76.08 ft above mean sea level. Prior to Sept. 30, 1968, water-stage recorder on Bayou Bartholomew near Beekman 12.2 miles downstream was used as an auxiliary gage (see station 07364500).

AVERAGE DISCHARGE.--15 years, 244 cfs (176,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,820 cfs May 3 (gage height, 21.95 ft); maximum gage height, 22.02 ft May 3; minimum discharge, .30 cfs Oct. 29 (gage height, 10.50 ft).

Period of record: Maximum discharge, 29,500 cfs Apr. 26, 1958; maximum gage height, 28.21 ft Apr. 27, 1958, present datum; no flow at times in 1956, 1963, 1965, 1966.

REMARKS.--Records fair. Some diversions above station for irrigation. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.44	18	1,030	105	564	68	830	2.2	.87	32	13
2	2.1	.41	16	1,330	586	488	74	1,780	2.0	1.1	26	11
3	2.0	.37	11	1,340	816	443	139	2,750	2.8	.83	17	17
4	1.6	.36	7.9	1,120	905	625	222	2,360	3.8	.75	11	20
5	1.2	.33	6.8	912	916	764	237	1,700	4.0	.99	9.5	26
6	.91	.33	11	760	904	860	220	1,130	13	1.0	11	33
7	.97	.34	29	609	815	914	192	705	13	2.4	13	39
8	.73	.34	38	420	681	900	128	400	7.1	3.5	10	39
9	.64	.31	44	307	512	808	71	250	4.7	3.1	8.1	32
10	.56	.31	78	260	286	688	51	112	4.1	2.3	8.8	23
11	.52	.31	92	225	133	475	58	57	3.1	44	15	14
12	.48	.34	74	228	83	316	62	39	4.3	395	24	9.0
13	.46	.34	47	217	65	325	71	42	6.0	568	21	5.5
14	.44	.34	33	230	55	438	71	44	5.6	355	23	5.0
15	.41	.34	24	231	49	485	66	43	5.1	142	33	7.6
16	.39	.34	17	213	85	418	123	43	3.6	69	34	8.7
17	.36	.91	12	206	193	371	247	45	2.5	44	28	12
18	.34	3.0	10	172	329	419	533	44	2.5	40	20	9.0
19	.33	10	8.2	121	383	500	797	43	2.0	39	15	6.2
20	.39	30	7.9	93	357	700	1,050	42	1.3	64	12	13
21	.41	130	14	77	290	1,030	1,200	38	1.0	100	8.3	10
22	.36	205	26	67	182	1,320	1,210	37	.83	96	6.5	8.6
23	.34	259	38	57	107	1,350	1,120	35	.75	72	10	10
24	.36	271	76	48	75	1,090	953	32	.71	103	14	12
25	.36	270	122	39	185	826	778	27	.59	125	13	24
26	.34	205	150	31	464	621	546	18	.53	95	9.0	38
27	.34	90	134	26	589	400	509	5.7	.62	64	6.0	19
28	.33	39	132	24	613	300	550	2.1	.83	39	5.1	7.6
29	.31	25	213	27	-----	216	600	2.3	.87	23	5.1	5.3
30	.36	21	631	35	-----	127	650	2.0	.87	18	7.5	4.3
31	.46	-----	918	42	-----	87	-----	2.0	-----	28	12	-----
TOTAL	21.00	1,564.46	3,038.8	10,497	10,763	18,868	12,596	12,660.1	100.30	2,539.84	467.9	481.8
MEAN	.68	52.1	98.0	339	384	609	420	408	3.34	81.9	15.1	16.1
MAX	2.2	271	918	1,340	916	1,350	1,210	2,750	13	568	34	39
MIN	.31	.31	6.8	24	49	87	51	2.0	.53	.75	5.1	4.3
AC-FT	42	3,100	6,030	20,820	21,350	37,420	24,980	25,110	199	5,040	928	956
CAL YR 1969: TOTAL	55,640.21			MEAN 152		MAX 1,220	MIN .31	AC-FT 110,400				
WTR YR 1970: TOTAL	73,598.20			MEAN 202		MAX 2,750	MIN .31	AC-FT 146,000				

RED RIVER BASIN

07364500 Bayou Bartholomew near Beekman, La.

LOCATION.--Lat 32°52'20", long 91°52'04", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.21, T.22 N., R.6 E., Morehouse Parish, near right bank on downstream end of pier of bridge on State Highway 139, 0.6 mile downstream from Bayou de Glaize, 3.6 miles south of Beekman, and 7.0 miles northwest of Bastrop court house.

DRAINAGE AREA.--1,645 sq mi.

PERIOD OF RECORD.--August 1928 to September 1931, October 1938 to September 1959. October 1959 to current year (annual maximum). Monthly discharge only for some periods, published in WSP 1311. August 1928 to October 1931 (fragmentary) in files of Corps of Engineers, Vicksburg district, since August 1932 in reports of Corps of Engineers, Vicksburg district, and October 1959 to current year in reports of the U. S. Geological Survey (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 70.60 ft above mean sea level (levels by Corps of Engineers). Feb. 3, 1939, to Aug. 17, 1955, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 7,140 cfs May 5 (gage height, 21.80 ft); minimum gage height, 0.95 ft Nov. 16. Period of record: Maximum discharge, 14,700 cfs May 2, 1958 (gage height, 28.30 ft); minimum gage height, 0.63 ft July 23-26, 1966, and Nov. 27, 28, 1967. 1928-31, 1938-59: Minimum discharge, 38 cfs July 30, 1956. A stage of 26.75 ft (from floodmark) occurred Apr. 17, 1927 (affected by overflow from Mississippi River). A discharge of 12,400 cfs (gage height, 25.78 ft) was measured by the Corps of Engineers Jan. 12, 1932.

REMARKS.--Small diversions above station for irrigation. In extreme floods, considerable flow bypasses station. Most of 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 station numbers 07369000 and 07368000).

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.85	1.11	7.45	11.55	12.04	11.03	19.63	17.04	11.88	-	1.74	1.54
2	1.80	1.10	7.50	12.39	12.90	11.20	19.64	19.50	11.22	-	1.75	1.53
3	1.77	1.09	7.54	13.65	13.26	11.28	19.61	20.76	10.58	-	1.73	1.56
4	1.74	1.08	7.60	14.55	13.32	12.33	19.60	21.48	9.90	-	1.72	1.54
5	1.70	1.07	7.66	14.94	13.44	12.82	19.64	21.78	9.23	-	1.71	1.54
6	1.66	1.06	7.78	15.15	13.54	13.18	19.62	21.74	8.53	-	1.75	1.55
7	1.68	1.05	8.30	15.23	13.57	13.77	19.54	21.44	7.77	-	1.78	1.58
8	1.62	1.04	8.45	15.27	13.48	14.40	19.39	21.02	-	-	1.79	1.65
9	1.53	1.03	8.49	15.29	13.23	14.93	19.16	20.53	-	-	1.87	1.71
10	1.44	1.02	8.51	15.32	12.84	15.20	18.84	20.01	-	-	1.93	1.74
11	1.39	1.01	8.60	15.46	12.28	15.35	18.51	19.48	-	-	1.95	1.73
12	1.33	1.04	8.64	15.65	11.68	15.47	18.15	19.02	-	-	1.91	1.70
13	1.28	1.01	8.51	15.76	11.06	15.48	17.79	18.66	-	-	1.94	1.68
14	1.22	.99	8.20	15.91	10.55	15.59	17.39	18.38	-	-	1.98	1.64
15	1.19	.97	7.80	16.05	10.08	15.86	16.99	18.16	-	-	2.02	1.60
16	1.17	.96	7.36	16.16	9.78	16.16	16.84	17.97	-	-	2.15	1.58
17	1.17	.96	6.89	16.23	9.51	16.49	17.30	17.79	-	-	2.29	1.63
18	1.17	1.18	6.42	16.22	9.38	16.90	16.98	17.60	-	-	2.34	1.59
19	1.18	2.58	5.95	16.15	9.39	17.25	16.71	17.40	-	-	2.31	1.57
20	1.20	3.44	5.49	16.00	9.38	17.94	17.10	17.20	-	-	2.22	1.54
21	1.21	4.10	5.23	15.84	9.26	18.56	17.21	16.96	-	-	2.11	1.50
22	1.20	4.83	4.97	15.64	9.06	19.63	17.44	16.70	-	-	1.98	1.49
23	1.21	5.87	4.75	15.40	8.76	20.32	17.54	16.41	-	-	1.88	1.45
24	1.19	6.76	4.64	15.16	8.46	20.69	17.48	16.07	-	3.25	1.83	1.42
25	1.15	7.36	5.02	14.84	8.78	20.80	17.26	15.67	-	3.12	1.74	1.49
26	1.13	7.75	5.80	14.52	9.85	20.76	17.23	15.25	-	3.30	1.68	1.45
27	1.11	7.94	6.22	14.17	10.30	20.58	17.39	14.76	-	3.15	1.61	1.51
28	1.09	7.82	6.44	13.79	10.69	20.42	17.05	14.23	-	2.76	1.57	-
29	1.07	7.59	6.71	13.40	-----	20.24	16.84	13.62	-	2.36	1.56	-
30	1.06	7.46	8.52	12.98	-----	20.01	16.82	13.08	-	2.03	1.55	-
31	1.12	-----	10.61	12.53	-----	19.79	-----	12.47	-----	1.83	1.55	-----
MAX	1.85	7.94	10.61	16.23	13.57	20.80	19.64	21.78	11.88	-	2.34	1.74
MIN	1.06	.96	4.64	11.55	8.46	11.03	16.71	12.47	-	-	1.55	-

RED RIVER BASIN

53

07364700 Bayou de Loutre near Laran, La.

LOCATION.--Lat 32°57'19", long 92°29'59", in NW¼ sec.29, T.23 N., R.1 W., Union Parish, near center of span on downstream side of bridge on parish road, 1.5 miles southwest of Laran, 1.5 miles downstream from Lion Creek, and 3.0 miles upstream from bridge on State Highway 550.

DRAINAGE AREA.--141 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 112.34 ft above mean sea level. Prior to Jan. 31, 1956, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 167 cfs (16.08 inches per year, 121,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,080 cfs Mar. 22 (gage height, 10.18 ft); minimum, 9.0 cfs Oct. 5 (gage height, 1.30 ft).
Period of record: Maximum discharge, 22,600 cfs Apr. 27, 1958 (gage height, 20.29 ft, from floodmark); minimum, 1.0 cfs July 21, 25, 26, 1964; minimum gage height, 1.04 ft Aug. 16-18, 1967.

REMARKS.--Records fair. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.66	.56	.559	.123	.405	.155	.570	.96	.12	.19	.15
2	.11	.86	.53	.670	.249	.386	.169	1,130	.79	.12	.15	.16
3	.11	.86	.51	.672	.377	.353	.164	1,580	.90	.11	.13	.16
4	.10	.91	.49	.535	.409	.548	.163	1,410	.84	.10	.12	.15
5	9.7	.96	.48	.347	.419	.809	.185	.848	.76	.10	.11	.14
6	.11	.79	.61	.242	.455	1,380	.202	.531	.66	9.6	.11	.13
7	.22	.56	.86	.221	.360	1,000	.156	.286	.50	9.2	.11	.12
8	.20	.44	.91	.212	.208	.659	.103	.131	.41	9.2	.10	.12
9	.19	.39	.99	.195	.135	.413	.81	.74	.33	9.6	.11	.11
10	.20	.36	.97	.188	.113	.230	.83	.55	.27	9.4	.15	.10
11	.21	.34	.99	.194	.103	.164	.80	.46	.23	.12	.27	9.6
12	.21	.36	.90	.171	.92	.229	.77	.40	.20	.22	.31	9.6
13	.26	.36	.74	.155	.83	.276	.73	.36	.18	.26	.28	.11
14	.27	.32	.63	.148	.77	.255	.68	.32	.17	.22	.27	.11
15	.26	.31	.57	.141	.87	.221	.64	.29	.16	.23	.25	.11
16	.26	.30	.54	.129	.178	.196	.346	.28	.15	.32	.21	.11
17	.26	.57	.51	.111	.294	.189	.670	.26	.14	.25	.16	.18
18	.25	.324	.49	.96	.343	.241	.518	.24	.13	.25	.14	.34
19	.24	.587	.48	.89	.381	.350	.398	.23	.12	.20	.13	.22
20	.23	.692	.49	.84	.435	.544	.478	.22	.12	.18	.12	.26
21	.24	.695	.112	.79	.339	1,540	.479	.20	.13	.32	.12	.27
22	.26	.747	.161	.74	.184	1,920	.417	.20	.24	.44	.12	.24
23	.26	.602	.173	.71	.115	1,280	.454	.20	.23	.51	.12	.19
24	.25	.400	.150	.69	.99	.894	.366	.19	.20	.54	.15	.29
25	.24	.219	.155	.68	.193	.690	.207	.21	.23	.48	.15	.36
26	.23	.121	.161	.68	.307	.497	.176	.21	.26	.41	.16	.62
27	.23	.87	.138	.68	.360	.304	.189	.26	.23	.51	.16	.83
28	.22	.75	.120	.67	.354	.181	.243	.41	.18	.55	.14	.91
29	.22	.66	.145	.67	-----	.152	.302	.48	.15	.34	.13	.87
30	.27	.60	.298	.71	-----	.149	.333	.83	.13	.26	.13	.71
31	.52	-----	.471	.91	-----	.149	-----	.107	-----	.22	.15	-----
TOTAL	683.7	5,610	3,409	5,952	6,872	16,604	7,399	7,347	1,000	785.0	495	826.2
MEAN	22.1	187	110	192	245	536	247	237	33.3	25.3	16.0	27.5
MAX	52	747	471	672	455	1,920	670	1,580	96	55	31	91
MIN	9.7	30	48	67	77	149	64	19	12	9.2	10	9.6
CFSM	.16	1.33	.78	1.36	1.74	3.80	1.75	1.68	.24	.18	.11	.20
IN.	.18	1.48	.90	1.57	1.81	4.38	1.95	1.94	.26	.21	.13	.22
AC-FT	1,360	11,130	6,760	11,810	13,630	32,930	14,680	14,570	1,980	1,560	982	1,640
CAL YR 1969	TOTAL 59,617.7		MEAN 163		MAX 2,700		MIN 4.6		CFSM 1.16	IN 15.72	AC-FT 118,300	
WTR YR 1970:	TOTAL 56,982.9		MEAN 156		MAX 1,920		MIN 9.2		CFSM 1.11	IN 15.03	AC-FT 113,000	

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-06	1030	9.14	1,460	5-03	1815	9.58	1,720
3-22	0115	10.18	2,080				

07364840 Lake Claiborne near Aycock, La.

LOCATION.--Lat 32°44'20", long 92°54'18" (revised), in sec.8, T.20 N., R.5 W., Claiborne Parish, on parish road 518 at dam 2 miles northeast of Aycock.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--1962 (one discharge measurement), August 1966 to current year (gage heights and discharge measurements only).

GAGE.--Water-stage recorder. Datum of gage is 176.00 ft above mean sea level (levels by Louisiana Department of Public Works).

EXTREMES.--Current year: Maximum gage height, 10.66 ft May 2; minimum, 7.57 ft Oct. 30.

Period of record: Maximum gage height, 10.66 ft May 2, 1970; minimum, 0.64 ft Feb. 1, 1968, lowest recordable stage.

REMARKS.--Reservoir is used for flood control and conservation. The reservoir is formed by an earthfill dam, containing a reinforced concrete drop inlet spillway near the left end of dam. Outflow from lake is uncontrolled over spillway. Outflow below spillway elevation is controlled by sluice gates at outlet. Capacity, 100,000 acre-ft at elevation 185.0 ft mean sea level. Dam completed and storage began in 1966.

Discharge measurements made during collection of record

Date	Discharge (cfs)	Date	Discharge (cfs)
Oct. 21, 1969 . . .	0	Feb. 2	176
Nov. 18	0	2	184
Dec. 8	4.22	11	101
8	4.05	Mar. 4	673
Jan. 5, 1970 . . .	162		

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.79	7.80	9.02	9.58	9.30	9.67	9.66	10.17	9.52	9.05	8.88	8.64
2	7.78	7.80	9.01	9.56	9.52	9.65	9.68	10.65	9.56	9.03	8.87	8.61
3	7.77	7.80	9.02	9.54	9.55	9.70	9.62	10.61	9.52	9.02	8.84	8.63
4	7.75	7.79	9.02	9.52	9.52	10.10	9.60	10.50	9.49	9.01	8.82	8.61
5	7.74	7.79	9.01	9.52	9.51	10.12	9.58	10.34	9.44	8.98	8.84	8.60
6	7.72	7.78	9.04	9.60	9.50	10.08	9.56	10.23	9.41	8.95	8.82	8.60
7	7.75	7.77	9.11	9.60	9.49	10.00	9.51	10.10	9.35	8.91	8.89	8.59
8	7.74	7.78	9.11	9.58	9.48	9.91	9.49	9.92	9.33	8.91	8.88	8.58
9	7.71	7.78	9.11	9.55	9.48	9.82	9.48	9.82	9.30	8.91	8.87	8.53
10	7.74	7.77	9.12	9.51	9.43	9.78	9.48	9.75	9.26	8.89	8.84	8.52
11	7.73	7.78	9.14	9.51	9.42	9.72	9.47	9.71	9.23	8.87	8.82	8.50
12	7.72	7.77	9.11	9.50	9.41	9.73	9.46	9.64	9.21	8.88	8.81	8.49
13	7.78	7.76	9.12	9.48	9.39	9.70	9.46	9.59	9.18	8.89	8.80	8.48
14	7.72	7.77	9.13	9.47	9.39	9.65	9.42	9.55	9.17	8.86	8.78	8.47
15	7.70	7.72	9.14	9.45	9.39	9.61	9.38	9.50	9.15	8.87	8.76	8.44
16	7.69	7.70	9.14	9.42	9.54	9.57	9.51	9.47	9.14	8.89	8.74	8.41
17	7.68	7.74	9.13	9.42	9.56	9.63	9.71	9.45	9.12	8.88	8.72	8.45
18	7.66	8.39	9.14	9.41	9.54	9.67	9.76	9.40	9.11	8.89	8.71	8.47
19	7.65	8.77	9.14	9.40	9.53	9.74	9.83	9.38	9.10	8.89	8.71	8.45
20	7.64	8.86	9.13	9.40	9.51	9.98	9.99	9.36	9.08	8.87	8.71	8.43
21	7.67	8.89	9.22	9.38	9.49	10.09	9.98	9.33	9.06	8.89	8.71	8.41
22	7.68	8.91	9.22	9.37	9.48	10.19	9.93	9.34	9.13	8.90	8.74	8.40
23	7.66	8.93	9.22	9.36	9.47	10.17	9.85	9.32	9.12	8.89	8.72	8.39
24	7.63	8.94	9.21	9.35	9.46	10.07	9.78	9.30	9.12	8.87	8.71	8.39
25	7.62	8.98	9.22	9.35	9.65	9.99	9.77	9.30	9.13	8.86	8.70	8.38
26	7.61	8.99	9.21	9.35	9.70	9.91	10.09	9.31	9.11	8.84	8.69	8.39
27	7.61	9.01	9.20	9.34	9.70	9.81	10.15	9.29	9.10	8.86	8.68	8.40
28	7.60	9.01	9.21	9.33	9.68	9.77	10.10	9.41	9.08	8.90	8.67	8.38
29	7.59	9.01	9.29	9.35	-----	9.76	9.99	9.41	9.07	8.89	8.68	8.36
30	7.57	9.01	9.49	9.32	-----	9.71	9.88	9.39	9.06	8.89	8.67	8.34
31	7.80	-----	9.58	9.31	-----	9.69	-----	9.36	-----	8.88	8.66	-----
MAX	7.80	9.01	9.58	9.60	9.70	10.19	10.15	10.65	9.56	9.05	8.89	8.64
MIN	7.57	7.70	9.01	9.31	9.30	9.57	9.38	9.29	9.06	8.84	8.66	8.34

07365500 Middle Fork Bayou D'Arbonne near Bernice, La.

LOCATION.--Lat 32°45'48", long 92°39'29", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.21 N., R.3 W., Union Parish, near center of channel on downstream side of bridge on U. S. Highway 167, 2.5 miles south of Bernice town limits, and 8.0 miles upstream from mouth.

DRAINAGE AREA.--178 sq mi.

PERIOD OF RECORD.--June 1940 to September 1957. October 1957 to September 1967 (annual maximums). October 1967 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 97.08 ft above mean sea level (levels by Louisiana Department of Public Works). Prior to July 8, 1947, Jan. 23, 1951, to July 7, 1952, nonrecording gage, Oct. 4, 1957, to Sept. 30, 1967, crest-stage gage, July 8, 1947, to Jan. 22, 1951, and July 8, 1952, to Sept. 30, 1957, water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--20 years (1941-57, 1968-70), 214 cfs (16.33 inches per year, 155,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,500 cfs May 4 (gage height, 7.93 ft); no flow Oct. 1 to Nov. 17, July 8-14, July 27 to Sept. 30.

Period of record: Maximum discharge, 28,000 cfs Apr. 27, 1958 (gage height, 13.86 ft) from rating curve extended above 12,100 cfs; no flow for many days in most years.

REMARKS.--Records good. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	26	360	80	424	246	698	39	.56		
2		0	24	358	266	405	230	1,240	46	.42		
3		0	23	364	302	415	192	1,240	46	.33		
4		0	22	356	312	560	219	1,410	46	.24		
5		0	21	257	324	596	252	1,030	46	.13		
6		0	28	222	320	781	226	729	45	.06		
7		0	51	237	229	766	159	568	36	.01		
8		0	44	237	149	774	131	404	28	0		
9		0	44	227	127	774	116	213	22	0		
10		0	43	199	113	650	112	141	17	0		
11		0	40	161	103	509	112	122	15	0		
12		0	38	144	93	408	117	112	12	0		
13		0	36	136	85	343	113	92	11	0		
14		0	34	123	81	326	102	75	9.1	0		
15		0	31	112	92	328	89	62	7.8	.02		
16		0	29	100	217	294	149	55	6.8	.11		
17		0	26	92	277	227	367	50	5.8	.06		
18		104	25	87	302	284	533	45	5.6	.08		
19		302	24	83	311	324	793	38	4.6	.06		
20		208	24	78	280	404	749	33	3.8	.05		
21		189	38	73	178	466	633	28	3.2	.06		
22		186	47	68	130	900	589	24	3.8	.08		
23		126	58	65	116	850	591	23	2.4	.13		
24		68	57	62	115	800	567	21	3.2	.07		
25		47	54	61	296	738	515	16	2.6	.02		
26		38	55	59	393	636	446	18	1.6	.01		
27		34	50	57	401	545	435	18	1.6	0		
28		32	45	55	412	435	441	34	1.9	0		
29		29	54	55	-----	333	451	46	1.6	0		
30		27	174	50	-----	278	460	46	.88	0		
31		-----	342	46	-----	258	-----	44	-----	0		-----
TOTAL	0	1,390	1,607	4,584	6,104	15,831	10,135	8,675	475.28	2.50	0	0
MEAN	0	46.3	51.8	148	218	511	338	280	15.8	.081	0	0
MAX	0	302	342	364	412	900	793	1,410	46	.56	0	0
MIN	0	0	21	46	80	227	89	16	.88	0	0	0
CFSM	0	.26	.29	.83	1.22	2.87	1.90	1.57	.09	.0004	0	0
IN.	0	.29	.34	.96	1.28	3.31	2.12	1.81	.10	.0005	0	0
AC-FT	0	2,760	3,190	9,090	12,110	31,400	20,100	17,210	943	5.0	0	0
CAL YR 1969	TOTAL	52,599.19	MEAN	144	MAX	1,310	MIN	0	CFSM	.81	IN	10.99
WTR YR 1970:	TOTAL	48,803.78	MEAN	134	MAX	1,410	MIN	0	CFSM	.75	IN	10.20
									AC-FT	104,300		96,800

PEAK DISCHARGE (BASE, 2,000 CFS).--No peaks above base.

07366200 Little Corney Bayou near Lillie, La.

LOCATION.--Lat 32°55'43", long 92°37'56", (revised), in NW¼ sec.1, T.22 N., R.3 W., Union Parish, near center of span on downstream side of bridge on State Highway 15, 1.4 miles east of Lillie, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--208 sq mi.

PERIOD OF RECORD.--October 1955 to current year. Prior to October 1957, published as Little Cornie Bayou near Lillie.

GAGE.--Water-stage recorder. Datum of gage is 91.48 ft above mean sea level. Prior to Jan. 27, 1956, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 169 cfs (11.03 inches per year, 122,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,300 cfs Mar. 5 (gage height, 9.16 ft); minimum, 1.7 cfs Oct. 7, 8 (gage height, 1.16 ft).
Period of record: Maximum discharge, 21,400 cfs Apr. 28, 1958 (gage height, 16.52 ft, from floodmark); no flow Aug. 18-20, Sept. 21 to Oct. 1, Oct. 3-5, 1956, Aug. 11-14, 1964.

REMARKS.--Records fair. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	45	45	615	83	522	250	828	193	7.1	10	9.3
2	3.1	45	43	662	363	516	242	1,390	157	6.4	8.5	9.3
3	2.9	33	43	710	501	504	265	1,820	104	5.7	7.1	8.5
4	2.7	22	42	630	522	820	313	1,390	91	5.3	6.4	8.3
5	2.2	16	41	519	525	2,660	408	812	83	4.8	6.0	8.3
6	2.1	14	45	388	529	2,720	492	564	57	4.3	5.5	7.8
7	2.0	14	74	354	504	1,160	420	390	46	3.9	5.7	6.9
8	2.6	13	96	345	354	717	216	140	38	3.9	23	6.4
9	3.6	13	90	324	177	553	110	65	32	4.1	25	6.0
10	4.4	13	75	278	121	453	91	51	27	4.6	16	5.5
11	4.4	14	62	189	101	317	101	48	23	5.3	19	5.0
12	4.4	15	54	184	83	329	94	44	21	8.5	19	4.8
13	5.4	15	49	178	71	359	85	38	20	26	15	4.8
14	5.8	16	47	157	65	336	71	34	18	35	12	4.6
15	8.1	15	46	126	76	295	61	30	16	22	9.0	4.6
16	7.8	13	45	101	308	219	557	28	14	13	7.6	4.6
17	6.4	23	43	86	438	209	788	27	13	13	6.6	5.0
18	5.5	216	42	78	480	366	550	25	12	13	6.4	8.3
19	5.0	480	43	72	519	480	529	22	10	12	7.3	13
20	5.0	529	44	66	529	1,080	625	20	9.0	13	6.9	10
21	7.3	498	88	60	483	1,900	650	19	8.8	15	6.4	8.3
22	8.8	428	189	57	289	1,870	887	18	9.5	31	11	6.6
23	7.3	373	190	54	131	1,350	804	17	14	50	39	6.4
24	6.4	207	167	53	114	1,000	564	17	27	37	44	20
25	5.7	82	132	54	297	780	425	21	24	24	28	30
26	5.0	64	106	54	471	588	306	25	18	16	17	20
27	4.8	63	100	53	492	480	383	32	14	34	12	21
28	5.5	60	91	52	501	352	441	104	12	37	9.0	26
29	6.9	52	118	52	-----	252	525	154	9.3	25	8.1	17
30	8.1	48	363	60	-----	240	546	209	8.1	18	8.3	12
31	20	-----	536	64	-----	254	-----	246	-----	13	8.5	-----
TOTAL	172.7	3,439	3,149	6,675	9,127	23,681	11,799	8,628	1,128.7	510.9	413.3	308.3
MEAN	5.57	115	102	215	326	764	393	278	37.6	16.5	13.3	10.3
MAX	20	529	536	710	529	2,720	887	1,820	193	50	44	30
MIN	2.0	13	41	52	65	209	61	17	8.1	3.9	5.5	4.6
CFSM	.03	.55	.49	1.04	1.57	3.67	1.89	1.34	.18	.08	.06	.05
IN.	.03	.61	.56	1.19	1.63	4.23	2.11	1.54	.20	.09	.07	.06
AC-FT	343	6,820	6,250	13,240	18,100	46,970	23,400	17,110	2,240	1,010	820	612

CAL YR 1969 TOTAL 82,711.3 MEAN 227 MAX 2,670 MIN 1.6 CFSM 1.09 IN 14.79 AC-FT 164,100
WTR YR 1970: TOTAL 69,031.9 MEAN 189 MAX 2,720 MIN 2.0 CFSM .91 IN 12.34 AC-FT 136,900

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-05	1930	9.16	4,300	5-03	1415	7.82	2,040
3-22	0230	7.79	2,000				

RED RIVER BASIN

59

07367700 Boeuf River near Arkansas-Louisiana State line

LOCATION.--Lat 32°58'25", long 91°26'25", in NE 1/4 sec. 21, T.23 N., R.10 E., Morehouse-West Carroll Parish line, near left bank on downstream side of bridge on State Highway 835, 2 miles downstream from Arkansas-Louisiana State line, and 8 miles west of Kilbourne.

DRAINAGE AREA.--785 sq mi (see REMARKS).

PERIOD OF RECORD.--October 1957 to September 1968. October 1968 to current year (discharge below 200 cfs only). Gage-height record and occasional discharge measurements since May 1946 in files of Corps of Engineers, Vicksburg district.

GAGE.--Water-stage recorder. Datum of gage is 74.11 ft above mean sea level (levels by Corps of Engineers). Prior to Dec. 31, 1957, nonrecording gage, Dec. 31, 1957, to Oct. 1, 1961, water-stage recorder on left bank 300 ft upstream at same datum. Auxiliary water-stage recorder at site 1.7 miles downstream at datum 74.35 ft above mean sea level (discontinued Apr. 16, 1969). May 4, 1959, to Dec. 4, 1962, auxiliary nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years (1958-68), 952 cfs (689,700 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 20.02 ft Dec. 31; minimum discharge, 10 cfs July 6 (gage height, 0.76 ft), result of pumping for irrigation.

Period of record: Maximum gage height, 22.64 ft Feb. 23, 1961; no flow June 13-19, July 15, 16, 29, 30, 1966, result of pumping for irrigation.

1957-68: Maximum discharge, 16,500 cfs Feb. 11, 1966.

Maximum stage since at least 1946, 22.8 ft Feb. 15, 1948.

REMARKS.--Records poor. Small diversions above station for irrigation. 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. In extreme floods, considerable flow bypasses station. Flow re-enters and passes stations Bayou Lafourche near Crew Lake, and Boeuf River near Girard. (See stations 07369000 and 07368000.) Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	70	130							30	97	138
2	86	66	119							14	78	135
3	84	66	111							14	74	156
4	84	65	100							14	66	192
5	80	63	90							14	63	192
6	78	61								11		148
7	76	60								13		106
8	74	61								15		82
9	68	63							152	27		65
10	66	63					166		111	54		58
11	66	68			199		130		100			60
12	66	74			170		127		86			65
13	66	74			159		124		70			76
14	68	70	177		148		130		61			70
15	63	65	145		156		124	177	70	184	145	68
16	61	61	122					180	76		124	74
17	60	78	104					133	68	156	106	70
18	58		102					111	58		86	63
19	56		97					102	39		86	68
20	58		84					100	45		80	76
21	60			188				90			70	78
22	58			156				88	152		93	72
23	53			148				90				68
24	49			156				104	124			78
25	50			145				156	90	124		86
26	53			138					74	88		88
27	58			127					72		177	95
28	60	192		124				192	72		156	111
29	56	162		199	-----			180	58		148	93
30	61	145			-----				44		135	78
31	72	-----			-----		-----		-----	142	148	-----
MAX	95	-	-	-	-		-	-	-	-	-	192
MIN	49	60	84	124	148		124	88	39	11	63	58

RED RIVER BASIN

07368000 Boeuf River near Girard, La.

LOCATION (revised).--Lat 32°28'52", long 91°47'52", on line between sec.1, T.17 N., R.6 E., and sec.6, T.17 N., R.7 E., Richland Parish, on downstream side of U. S. Highway 80 bridge, and 0.5 mile east of Girard.

DRAINAGE AREA.--1,226 sq mi (see REMARKS).

PERIOD OF RECORD.--October 1938 to current year. Daily gage heights as follows: 1886-94 in reports of U. S. Weather Bureau; September 1925 to December 1931 in files of Corps of Engineers, Vicksburg district; since January 1932 in reports of Corps of Engineers, Vicksburg district.

GAGE.--Water-stage recorder. Datum of gage is 49.42 ft above mean sea level (levels by Corps of Engineers). Prior to July 11, 1944, nonrecording gage at same site. July 11, 1944, to Nov. 2, 1955, nonrecording gage on highway bridge 200 ft upstream. Prior to Oct. 1, 1966, at datum 2.20 ft higher. Auxiliary water-stage recorder 6.4 miles downstream at datum 49.40 ft above mean sea level. Dec. 8, 1952, to Nov. 19, 1962, auxiliary nonrecording gage 8.1 miles downstream at different datum. Feb. 15, 1945, to Dec. 8, 1952, auxiliary nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--32 years, 430 cfs (311,500 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge during year, 1,550 cfs Jan. 3; maximum gage height, 13.08 ft Jan. 3, from flood-mark; minimum discharge, 10 cfs July 8; minimum gage height, 3.31 ft Sept. 30.

Period of record: Maximum discharge, 3,070 cfs May 2, 1958; maximum gage height, 21.51 ft May 6, 1958, present datum; minimum discharge, 9.9 cfs Aug. 17, 18, 1969; minimum gage height, 2.92 ft Aug. 21, 23, 1953, June 10, 1966, present datum.

Maximum stage known, 31.7 ft May 7, 1927, present datum (affected by overflow from Mississippi River).

REMARKS.--Records fair. Large diversions above station for irrigation. 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. Boeuf River and Bayou Lafourche basins are connected by canal upstream. In extreme floods, considerable flow from Bayou Bartholomew basin passes this station. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	28	31	1,200	58	137	90	90	95	14	41	42
2	27	27	23	1,400	135	102	80	105	215	13	35	45
3	24	24	20	1,550	245	93	100	496	243	12	32	45
4	24	24	17	1,400	339	153	150	793	201	12	26	43
5	23	23	16	1,100	282	267	140	856	159	11	15	41
6	24	22	98	800	190	399	110	734	119	11	28	39
7	27	22	183	550	129	450	90	443	88	11	31	39
8	26	22	216	400	92	403	75	236	66	10	20	37
9	26	22	293	300	62	321	60	112	55	12	22	36
10	24	21	221	250	42	230	50	86	44	36	36	33
11	24	21	166	200	25	157	43	67	38	72	39	32
12	23	21	134	180	20	123	39	54	32	58	37	32
13	24	22	104	165	19	113	33	36	27	50	15	31
14	22	21	80	154	19	112	29	28	23	68	19	31
15	22	20	59	138	18	108	26	22	22	65	27	31
16	22	20	45	113	19	91	28	19	23	56	28	33
17	20	20	34	98	17	80	52	14	15	49	30	37
18	20	28	28	81	20	70	199	14	14	64	32	42
19	20	44	22	67	28	60	244	13	14	68	36	39
20	21	58	20	55	50	100	264	13	17	76	32	37
21	21	226	23	44	42	500	350	12	22	110	35	37
22	20	346	20	38	24	900	390	12	23	123	27	36
23	20	349	26	33	20	1,000	319	12	26	128	42	32
24	20	262	52	29	20	1,000	219	14	39	113	44	32
25	20	183	70	27	99	900	149	17	32	84	82	31
26	19	143	66	24	148	600	72	21	27	78	83	28
27	20	103	90	22	180	400	185	22	22	71	69	26
28	19	75	140	23	172	250	495	27	19	60	56	24
29	20	56	163	23	-----	200	494	24	17	53	49	23
30	20	42	289	22	-----	150	165	39	15	48	48	23
31	28	-----	700	22	-----	100	-----	46	-----	45	48	-----
TOTAL	698	2,295	3,449	10,508	2,514	9,569	4,740	4,477	1,752	1,681	1,164	1,037
MEAN	22.5	76.5	111	339	89.8	309	158	144	58.4	54.2	37.5	34.6
MAX	28	349	700	1,550	339	1,000	495	856	243	128	83	45
MIN	19	20	16	22	17	60	26	12	14	10	15	23
AC-FT	1,380	4,550	6,840	20,840	4,990	18,980	9,400	8,880	3,480	3,330	2,310	2,060
CAL YR 1969:	TOTAL	31,661	MEAN	86.7	MAX	700	MIN	10	AC-FT	62,800		
WTR YR 1970:	TOTAL	43,884	MEAN	120	MAX	1,550	MIN	10	AC-FT	87,040		

NOTE.--No gage-height record Dec. 31 to Jan. 13.

RED RIVER BASIN

61

07368500 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., West Carroll Parish, 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).

PERIOD OF RECORD.--October 1949 to current year. Daily elevations since October 1940 in reports of Corps of Engineers, Vicksburg district.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Oct. 20, 1949, nonrecording gage, Oct. 20, 1949, to July 15, 1952, water-stage recorder, July 16, 1952, to Jan. 27, 1953, nonrecording gage, at same site at datum 87.29 ft higher. Jan. 28, 1953, to Jan. 20, 1954, nonrecording gage at same site at present datum. Auxiliary water-stage recorder 5.7 miles downstream at same datum as base gage. Jan. 1 to Oct. 7, 1954, auxiliary nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 45.8 cfs (33,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 749 cfs Dec. 30 (elevation, 90.68 ft); maximum elevation, 90.69 ft Dec. 30; no flow for many days.
Period of record: Maximum discharge, 2,050 cfs Mar. 22, 1955; maximum elevation, 95.22 ft Jan. 4, 1951 (present datum); no flow at times each year.
Maximum elevation known since 1940, 95.5 ft Apr. 12, 1947, (present datum), from records of Corps of Engineers.

REMARKS.--Records poor. 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. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

COOPERATION.--Base gage elevation record furnished by Corps of Engineers.

REVISIONS.--WSP 1241: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.15	332	125	7.1	1.4	5.9	1.1	.35	.33	.25
2		0	.13	157	497	4.3	6.3	239	6.3	.21	.23	.18
3		0	.11	35	225	12	11	168	9.5	.14	.14	.18
4		0	.09	7.9	34	181	5.3	19	4.1	.08	.07	.17
5		0	.06	3.7	10	65	2.5	7.5	1.8	.04	.03	.13
6		0	265	13	5.9	17	1.5	3.8	1.2	.02	.08	.11
7		0	518	6.9	3.8	7.5	1.1	2.4	.81	0	16	.07
8		0	238	6.0	2.6	4.1	.89	1.7	.58	0	6.5	.05
9		0	80	2.6	1.8	2.6	.70	1.3	.45	0	3.8	.02
10		0	17	1.7	1.4	1.8	.61	.97	.31	1.1	3.8	0
11		0	5.2	31	1.2	1.9	.53	.61	.21	5.3	3.0	0
12		0	2.1	58	.97	12	.51	.41	.14	3.7	1.8	0
13		0	1.4	31	.86	10	.45	.29	.12	2.1	1.4	0
14		0	1.1	11	.73	5.5	.33	.18	.07	1.4	1.1	0
15		0	.95	5.6	.63	3.1	.31	.15	.03	8.3	.95	0
16		0	.70	3.4	1.4	1.9	26	.17	.01	6.5	.75	0
17		0	.55	2.4	3.6	6.9	153	.15	0	2.8	.56	0
18		0	.48	1.8	3.2	19	48	.15	0	7.5	.43	0
19		1.6	.38	1.7	1.9	17	106	.15	0	25	.37	0
20		3.8	.32	1.5	1.4	60	236	.14	0	13	.33	0
21		1.5	3.0	1.4	1.1	420	44	.11	.50	88	.26	0
22		.90	7.9	1.2	.95	512	12	.06	52	139	.21	0
23		.58	4.6	1.1	.78	231	5.3	.03	38	45	.21	0
24		.44	2.4	1.0	.70	32	3.0	0	22	14	.20	0
25		.34	4.6	.95	269	9.5	12	0	18	5.9	.18	0
26		.28	24	.85	250	7.5	102	.03	6.5	3.8	.37	0
27		.23	9.3	.75	46	4.1	214	1.0	2.6	3.1	.39	.12
28		.20	4.6	.70	14	2.6	72	1.0	1.5	2.4	.37	.17
29		.20	112	1.1	-----	2.4	22	.73	1.0	1.1	.37	.14
30		.16	694	4.8	-----	1.8	8.3	.49	.58	.75	.33	.12
31		-----	603	3.4	-----	1.6	-----	.33	-----	.51	.31	-----
TOTAL	0	10.23	2,601.12	730.45	1,504.92	1,664.2	1,097.03	455.75	169.41	381.10	44.87	1.71
MEAN	0	.34	84.0	23.6	53.7	53.7	36.6	14.7	5.65	12.3	1.45	.06
MAX	0	3.8	694	332	497	512	236	239	52	139	16	.25
MIN	0	0	.06	.70	.63	1.6	.31	0	0	0	.03	0
AC-FT	0	20	5,160	1,450	2,980	3,300	2,180	904	336	756	89	3.4
CAL YR 1969:	TOTAL	8,655.05	MEAN	23.7	MAX	694	MIN	0	AC-FT	17,170		
WTR YR 1970:	TOTAL	8,660.79	MEAN	23.7	MAX	694	MIN	0	AC-FT	17,180		

RED RIVER BASIN

07369000 Bayou Lafourche near Crew Lake, La.

LOCATION.--Lat 32°29'55", long 91°55'05", in SW $\frac{1}{4}$ sec.36, T.18 N., R.5 E., Ouachita-Richland Parish line, 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).

PERIOD OF RECORD.--October 1938 to current year. Prior to December 1938 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 37.08 ft above mean sea level (levels by Corps of Engineers). Prior to Aug. 10, 1944, nonrecording gage, Aug. 10, 1944, to June 5, 1952, water-stage recorder, and June 6 to September 30, 1952, nonrecording gage, all at same site at datum 19.00 ft higher. Since Oct. 1, 1957, auxiliary water-stage recorder 9.5 miles downstream at mean sea level datum.

AVERAGE DISCHARGE.--32 years, 1,411 cfs (1,022,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,200 cfs Jan. 2 (gage height, 24.35 ft); minimum, 38 cfs Oct. 29 (gage height, 1.55 ft). Period of record: Maximum discharge, 26,800 cfs May 2, 1958; maximum gage height, 27.55 ft Feb. 14, 1966; maximum daily reverse flow not determined; no flow at times in August, September, and October 1952, result of temporary storage due to excavation of channel upstream.

A discharge of 17,000 cfs was measured Dec. 24, 1931 (from reports of Corps of Engineers, Vicksburg district).

REMARKS.--Records poor. Small diversions above station for irrigation. 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. Boeuf River and Bayou Lafourche basins are connected by canal upstream. In extreme floods, considerable flow from the Bayou Bartholomew basin passes this station. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

COOPERATION.--Auxiliary gage-height record furnished by Corps of Engineers.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	63	204	15,000	1,300	1,340	682	1,800	900	71	295	272
2	83	57	192	15,100	5,580	1,030	2,990	8,500	2,400	61	233	246
3	87	54	173	14,900	8,320	1,300	5,270	13,100	2,000	58	214	240
4	87	49	168	11,300	6,690	5,180	3,330	13,700	1,200	64	214	237
5	86	46	147	5,910	3,050	8,410	1,960	12,400	800	71	192	275
6	82	45	566	2,590	1,590	8,850	1,010	7,360	650	71	204	272
7	90	48	3,950	2,390	1,060	7,740	750	1,880	500	70	577	218
8	86	51	5,530	1,770	993	5,980	550	1,100	400	70	1,320	190
9	70	50	3,500	1,280	737	4,220	450	900	300	80	1,340	166
10	66	50	1,580	950	561	2,310	400	850	200	253	853	140
11	70	45	1,070	1,200	451	1,510	300	750	150	565	740	109
12	72	51	860	2,560	410	2,280	250	700	120	2,480	1,080	97
13	68	54	544	2,900	342	3,010	200	650	100	2,280	791	111
14	65	51	374	2,090	298	2,700	150	600	100	1,190	502	129
15	54	48	290	1,390	322	1,920	100	550	120	587	328	135
16	54	51	260	1,040	410	1,180	1,300	500	140	398	260	148
17	56	57	231	872	1,390	1,020	5,800	450	154	460	249	218
18	51	97	212	780	2,360	1,590	5,630	400	118	1,700	233	159
19	50	2,120	218	722	1,590	2,590	2,810	380	92	2,560	224	135
20	52	5,780	188	573	995	6,760	6,900	350	78	1,680	231	123
21	56	7,370	260	555	791	11,700	8,100	350	70	1,670	202	121
22	51	6,650	1,830	457	538	14,400	6,600	350	570	2,880	194	111
23	49	4,080	2,560	371	432	14,200	2,900	350	887	2,420	377	109
24	42	1,720	1,780	330	368	10,600	1,000	500	401	1,300	524	120
25	43	995	1,200	311	1,640	5,390	700	550	251	764	489	127
26	44	587	2,620	319	3,820	2,100	3,300	600	173	528	414	124
27	49	423	3,370	285	4,140	1,800	8,300	800	164	448	353	117
28	47	328	2,700	258	2,330	1,610	9,230	900	145	696	277	118
29	41	256	1,960	303	-----	1,070	6,900	1,000	132	819	256	129
30	46	224	8,620	538	-----	844	2,800	1,000	100	610	268	117
31	70	-----	14,300	1,240	-----	691	-----	1,000	-----	414	305	-----
TOTAL	1,969	31,500	61,457	90,284	52,508	135,325	90,662	74,320	13,415	27,318	13,739	4,813
MEAN	63.5	1,050	1,982	2,912	1,875	4,365	3,022	2,397	447	881	443	160
MAX	102	7,370	14,300	15,100	8,320	14,400	9,230	13,700	2,400	2,880	1,340	275
MIN	41	45	147	258	298	691	100	350	70	58	192	97
AC-FT	3,910	62,480	121,900	179,100	104,100	268,400	179,800	147,400	26,610	54,190	27,250	9,550
CAL YR 1969:	TOTAL	418,307	MEAN	1,146	MAX	14,300	MIN	41	AC-FT	829,700		
WTR YR 1970:	TOTAL	597,310	MEAN	1,636	MAX	15,100	MIN	41	AC-FT	1,185,000		

RED RIVER BASIN

63

07369370 Lake Providence at Lake Providence, La.

LOCATION.--Lat 32°50'40", (revised), long 91°13'25", in sec.13, T.21 N., R.12 E., East Carroll Parish, on upstream side of U. S. Highway 65 bridge over Baxter Bayou, 3 miles northwest of village of Lake Providence.

PERIOD OF RECORD.--January 1967 to current year (elevations only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Louisiana Department of Public Works).

EXTREMES.--Current year: Maximum elevation, 90.55 ft May 2; minimum, 88.31 ft Dec. 5.

Period of record: Maximum elevation, 92.54 ft Apr. 10, 1968, but may have been higher during period of no gage-height record in November and December 1968; minimum, 88.31 ft Dec. 5, 1969.

ELEVATION, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88.78	88.45	88.35	89.46	89.63	89.98	90.05	90.33	89.98	89.95	89.88	89.68
2	88.75	88.44	88.34	89.46	89.84	89.96	90.10	90.50	90.07	89.93	89.86	89.67
3	88.75	88.43	88.34	89.45	89.83	90.02	90.07	90.51	90.07	89.90	89.84	89.71
4	-	88.41	88.33	89.45	89.83	90.08	90.05	90.35	90.05	89.87	89.81	89.70
5	-	88.40	88.32	89.45	89.80	90.06	90.01	90.34	90.00	89.85	89.79	89.70
6	-	88.40	88.40	89.50	89.80	90.05	89.99	90.33	89.97	89.81	89.77	89.68
7	-	88.40	88.68	89.49	89.80	90.04	89.97	90.27	89.94	89.79	89.79	89.67
8	88.70	88.39	88.69	89.48	89.79	90.01	89.95	90.23	89.92	89.77	89.77	89.65
9	88.69	88.39	88.68	89.47	89.78	89.98	89.93	90.17	89.90	89.77	89.76	89.64
10	88.69	88.38	88.68	89.49	89.78	89.96	89.95	90.15	89.89	90.06	89.78	89.62
11	88.68	88.37	88.68	89.55	89.77	89.95	89.94	90.11	89.88	90.04	89.81	89.60
12	88.67	88.39	88.67	89.57	89.76	89.99	89.94	90.10	89.86	90.01	89.79	89.58
13	88.65	88.39	88.66	89.57	89.75	89.96	89.92	90.05	89.85	90.06	89.78	89.58
14	88.60	88.36	88.66	89.57	89.75	89.95	89.90	90.02	89.83	90.04	89.77	89.57
15	88.59	88.34	88.66	89.57	89.75	89.93	89.88	89.95	89.82	90.00	89.76	89.55
16	88.57	88.33	88.65	89.57	89.80	89.91	89.90	90.05	89.81	90.00	89.75	89.54
17	88.55	88.32	88.64	89.57	89.79	89.92	89.94	90.02	89.80	89.96	89.74	89.59
18	88.54	88.33	88.64	89.58	89.78	89.94	89.93	90.00	89.78	90.06	89.73	89.58
19	88.51	88.43	88.64	89.58	89.77	89.94	89.94	89.96	89.77	90.04	89.67	89.56
20	88.51	88.42	88.63	89.58	89.76	89.93	90.00	89.94	89.75	90.00	89.68	89.55
21	88.54	88.41	88.68	89.56	89.75	90.14	89.96	89.92	89.74	90.07	89.67	89.53
22	88.53	88.40	88.67	89.56	89.74	90.32	89.95	89.91	89.74	90.04	89.66	89.51
23	88.49	88.40	88.67	89.56	89.75	90.30	89.95	89.89	89.75	90.01	89.71	89.50
24	88.45	88.40	88.65	89.56	89.75	90.26	89.93	89.88	90.09	89.99	89.74	89.49
25	88.44	88.40	88.72	89.57	89.95	90.24	89.96	89.86	90.16	89.97	89.73	89.49
26	88.44	88.40	88.72	89.57	90.01	90.21	90.14	89.86	90.14	89.98	89.70	89.49
27	88.43	88.40	88.72	89.57	90.00	90.17	90.50	89.85	90.10	89.96	89.69	89.45
28	88.41	88.39	88.72	89.58	89.98	90.14	90.50	89.83	90.06	89.95	89.68	89.42
29	88.39	88.37	88.75	89.60	-----	90.12	90.45	89.82	90.02	89.94	89.67	89.39
30	88.39	88.36	89.22	89.61	-----	90.09	90.40	89.94	89.98	89.91	89.66	89.38
31	88.46	-----	89.43	89.60	-----	90.07	-----	89.94	-----	89.89	89.69	-----
MAX	88.78	88.45	89.43	89.61	90.01	90.32	90.50	90.51	90.16	90.07	89.88	89.71
MIN	88.39	88.32	88.32	89.45	89.63	89.91	89.88	89.82	89.74	89.77	89.66	89.38

RED RIVER BASIN

07369500 Tensas River at Tental, La.

LOCATION.--Lat 32°25'55", long 91°22'00", in NW $\frac{1}{4}$ sec.29, T.17 N., R.11 E., Madison Parish, near left bank on upstream side of bridge on U. S. Highway 80 at Tental, 200 ft upstream from Illinois Central Railroad bridge, and 3 miles east of Waverly.

DRAINAGE AREA.--309 sq mi (see REMARKS).

PERIOD OF RECORD.--December 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 50.07 ft above mean sea level. Prior to July 11, 1944, nonrecording gage at site 1,000 ft upstream at same datum. July 11, 1944, to Sept. 14, 1954, nonrecording gage at same site and datum. Auxiliary water-stage recorder 8.5 miles downstream at datum 50.07 ft above mean sea level. Feb. 19, 1945, to Nov. 27, 1951, auxiliary nonrecording gage 9.5 miles downstream at datum 46.65 ft above mean sea level. Nov. 28, 1951, to Sept. 30, 1957, auxiliary nonrecording gage at present site at datum 0.31 ft lower. Oct. 1, 1957, to Nov. 8, 1962, auxiliary nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years (1936-70), 305 cfs (221,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 3,000 cfs Dec. 31; maximum gage height, 19.82 ft Jan. 1; minimum daily discharge, 7.9 cfs Nov. 15, 16; minimum gage height, 5.75 ft Oct. 19.

Period of record: Maximum discharge, 4,610 cfs Nov. 19, 1948; maximum gage height, 24.78 ft Nov. 20, 1948; minimum daily discharge, 2.8 cfs Dec. 8, 1954, but may have been less during period of indefinite stage-discharge relation in October 1954.

Maximum stage known, 34.02 ft May 15, 1927 (affected by overflow from Mississippi River).

REMARKS.--Records fair. Small diversions above station for irrigation. 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. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	12	2,900	49	437	200	168	522	32	54	89
2	10	14	12	2,500	478	343	168	289	557	26	52	91
3	11	13	11	2,000	650	284	141	670	607	22	46	90
4	11	11	12	1,800	489	579	118	562	529	24	38	87
5	11	10	11	1,600	369	670	101	449	450	20	35	81
6	12	9.5	43	1,400	256	539	86	354	400	16	44	74
7	13	9.1	169	1,200	176	429	72	279	351	12	57	66
8	12	9.1	240	1,000	126	335	60	226	305	15	110	57
9	12	9.1	212	900	95	245	50	185	245	20	123	50
10	11	8.7	159	700	74	179	45	147	188	26	123	45
11	11	8.3	111	500	57	172	41	117	136	27	124	41
12	11	9.1	80	600	47	403	38	95	92	34	124	38
13	9.5	8.3	59	500	38	414	37	78	63	40	124	36
14	9.5	8.3	43	464	32	303	36	64	52	47	124	34
15	9.1	7.9	33	384	30	205	34	52	46	55	117	33
16	9.1	7.9	26	314	32	139	47	92	54	62	94	32
17	9.1	8.3	22	237	33	114	498	112	67	62	73	31
18	9.1	13	18	178	41	132	650	87	73	62	58	30
19	9.1	22	17	132	43	148	502	62	83	60	47	26
20	9.5	20	15	102	37	471	639	45	75	63	39	21
21	11	19	16	81	32	910	541	34	60	98	33	18
22	10	18	17	63	32	1,290	379	26	17	122	29	15
23	9.1	16	18	50	32	1,100	247	13	16	118	33	13
24	9.1	15	17	41	31	858	163	25	15	85	60	13
25	8.7	14	19	36	343	691	116	29	15	57	89	14
26	8.7	13	23	34	878	585	92	46	16	42	96	16
27	9.1	13	32	30	707	495	95	32	51	36	89	41
28	8.7	12	36	25	548	426	136	22	47	32	82	79
29	8.3	12	110	27	-----	367	168	18	38	27	87	85
30	8.7	12	2,000	35	-----	301	175	111	36	35	91	71
31	15	-----	3,000	31	-----	245	-----	556	-----	49	91	-----
TOTAL	316.4	367.6	6,593	19,864	5,755	13,809	5,675	5,045	5,206	1,426	2,386	1,417
MEAN	10.2	12.3	213	641	206	445	189	163	174	46.0	77.0	47.2
MAX	15	22	3,000	2,900	878	1,290	650	670	607	122	124	91
MIN	8.3	7.9	11	25	30	114	34	13	15	12	29	13
AC-FT	628	729	13,080	39,400	11,420	27,390	11,260	10,010	10,330	2,830	4,730	2,810
CAL YR 1969:	TOTAL	63,751.0	MEAN	175	MAX	3,000	MIN	7.9	AC-FT	126,500		
WTR YR 1970:	TOTAL	67,860.0	MEAN	186	MAX	3,000	MIN	7.9	AC-FT	134,600		

NOTE.--No auxiliary gage-height record Dec. 30 to Jan. 13.

07369700 Bayou Macon near Kilbourne, La.

LOCATION.--Lat 32°59'35", long 91°15'45", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.8, T.23 N., R.12 E., East Carroll-West Carroll Parish line, near center of channel on downstream side of bridge on State Highway 585, 0.8 mile south of Arkansas-Louisiana State line, and 3 miles east of Kilbourne.

DRAINAGE AREA.--504 sq mi (see REMARKS).

PERIOD OF RECORD.--October 1957 to September 1968. October 1968 to current year (annual maximum gage height and discharge below 200 cfs only).

GAGE.--Water-stage recorder. Datum of gage is 75.41 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1965, at datum 2.00 ft higher.

AVERAGE DISCHARGE.--11 years (1958-68), 508 cfs (368,000 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 20.68 ft Apr. 27; minimum daily discharge, 55 cfs Aug. 3.

Period of record: Maximum gage height, 26.35 ft May 5, 1958, present datum; no flow June 11, 1963, result of pumping for irrigation.

1957-68: Maximum discharge, 4,740 cfs May 5, 1958.

REMARKS.--Records fair. Large diversions above station for irrigation. 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. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	116								70	66	153
2	140	112								67	60	152
3	145	109								82	55	161
4	148	108								78	70	163
5	142	108								76	80	130
6	138	108								91	90	117
7	137	107								92	110	115
8	134	107								108	100	113
9	131	106								146	110	110
10	130	105							198	151	150	110
11	131	105							153		180	110
12	130	110							140	190	170	116
13	131	108							146	143	150	122
14	129	107							147	138	130	122
15	126	105							138	137	111	114
16	126	105							125	115	103	129
17	124	115							105	99	104	133
18	122	165	193						100	129	96	121
19	122		182						99	110	89	120
20	122		174						115	109	82	116
21	122								130		89	117
22	120								193		93	120
23	118								173		184	128
24	117								190	178		130
25	117								158	123	143	151
26	117								131	113	127	151
27	117								120	137	110	142
28	113								86	144	129	131
29	112								81	141	154	120
30	114				-----				74	112	147	116
31	120	-----			-----		-----		-----	75	168	-----
MAX	152	-	-						-	-	-	163
MIN	112	105	174						74	67	55	110

RED RIVER BASIN

07370000 Bayou Macon near Delhi, La.

LOCATION.--Lat 32°27'25", long 91°28'30", in E $\frac{1}{2}$ sec.18, T.17 N., R.10 E., Richland-Madison Parish line, near right bank on downstream side of bridge on U. S. Highway 80, 0.2 mile upstream from Illinois Central Railroad bridge, and 1 mile east of Delhi.

DRAINAGE AREA.--782 sq mi (see REMARKS).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311. Daily gage heights as follows: 1885-99 in reports of U. S. Weather Bureau; September 1925 to December 1931 in files of Corps of Engineers, Vicksburg district; since January 1932 in reports of Corps of Engineers, Vicksburg district.

GAGE.--Water-stage recorder. Datum of gage is 50.05 ft above mean sea level (levels by Corps of Engineers). Prior to Mar. 14, 1949, nonrecording gage; Mar. 14, 1949, to Oct. 1, 1963, water-stage recorder; all gages within 2,000 ft downstream at same datum. Auxiliary nonrecording gage 7.7 miles downstream at datum 46.05 ft above mean sea level. Feb. 16, 1945, to Oct. 26, 1962, auxiliary nonrecording gage; Oct. 27, 1962, to Nov. 10, 1964, auxiliary water-stage recorder; and Nov. 11, 1964, to Feb. 19, 1965, auxiliary nonrecording gage at same site at datum 2.00 ft lower.

AVERAGE DISCHARGE.--35 years, 906 cfs (656,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,250 cfs Mar. 23 (gage height, 14.64 ft); maximum gage height, 14.68 ft Mar. 23; minimum daily discharge, 127 cfs Aug. 5.

Period of record: Maximum discharge, 9,050 cfs Feb. 13, 1966; maximum gage height, 26.00 ft May 6, 7, 1958; no flow May 25, 26, 28, June 1, 1963, result of temporary dam.

Maximum stage known, 37.5 ft in March 1882, from records of U. S. Weather Bureau (affected by overflow from Mississippi River).

REMARKS.--Records fair. Large diversions above station for irrigation. 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. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	188	534	2,900	662	1,140	2,110	2,720	831	188	210	233
2	203	179	470	3,000	1,840	1,060	1,940	2,970	1,330	160	181	248
3	203	158	380	3,000	2,080	1,110	1,950	3,750	1,210	147	145	245
4	201	168	350	2,900	1,690	1,770	2,020	3,550	887	141	129	238
5	199	164	300	2,800	1,380	1,810	1,940	3,010	649	139	127	233
6	199	158	592	2,700	1,240	1,660	1,800	2,860	522	145	147	226
7	203	158	1,400	2,600	1,180	1,700	1,640	2,650	470	139	168	214
8	203	158	1,490	2,500	1,090	1,830	1,470	2,490	432	139	203	203
9	197	155	1,300	2,400	964	1,930	1,320	2,340	414	139	197	199
10	188	153	1,080	2,300	838	2,000	1,190	2,160	368	172	205	194
11	188	151	859	2,100	747	2,060	1,060	1,950	322	248	245	188
12	183	164	668	2,000	649	2,220	929	1,770	284	314	278	181
13	190	179	522	1,900	574	2,200	824	1,630	258	356	339	179
14	186	360	432	1,690	517	2,050	734	1,520	235	350	322	179
15	179	210	356	1,480	506	1,880	649	1,390	226	311	260	186
16	179	137	308	1,320	495	1,740	810	1,300	226	290	221	190
17	177	153	275	1,180	500	1,680	1,590	1,150	233	308	201	192
18	175	168	252	1,060	522	1,670	1,610	1,040	226	300	205	194
19	177	205	235	971	623	1,600	1,390	929	201	360	203	199
20	177	242	250	901	810	1,810	1,650	824	177	336	194	194
21	181	400	300	838	1,010	2,670	1,900	733	172	356	181	194
22	177	534	400	754	1,060	4,590	1,940	675	179	445	201	192
23	172	701	450	708	1,040	5,070	1,960	610	205	694	376	197
24	164	859	500	649	964	4,160	1,980	539	260	580	500	203
25	162	936	600	604	1,690	3,720	1,980	475	314	404	427	212
26	166	936	800	580	2,080	3,400	2,100	450	339	314	346	224
27	168	880	900	528	1,730	3,100	2,720	480	322	258	281	248
28	168	789	900	500	1,310	2,840	3,390	517	260	240	237	240
29	162	694	1,500	517	-----	2,820	3,340	485	233	245	221	226
30	162	610	2,000	517	-----	2,550	3,040	550	212	240	221	217
31	190	-----	2,500	522	-----	2,340	-----	656	-----	228	233	-----
TOTAL	5,691	10,947	22,903	48,419	29,791	72,180	52,976	48,173	11,997	8,686	7,404	6,268
MEAN	184	365	739	1,562	1,064	2,328	1,766	1,554	400	280	239	209
MAX	212	936	2,500	3,000	2,080	5,070	3,390	3,750	1,330	694	500	248
MIN	162	137	235	500	495	1,060	649	450	172	139	127	179
AC-FT	11,290	21,710	45,430	96,040	59,090	143,200	105,100	95,550	23,800	17,230	14,690	12,430
GAL YR 1969: TOTAL	218,887			600		3,750	116		434,200			
WTR YR 1970: TOTAL	325,435			892		5,070	127		645,500			

07370500 Castor Creek near Grayson, La.

LOCATION.--Lat 32°04'55", long 92°12'25", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.30, T.13 N., R.3 E., Caldwell Parish, near center of span on downstream side of bridge on State Highway 126, 6 miles upstream from Beaucoup Creek, and 6.5 miles northwest of Grayson.

DRAINAGE AREA.--271 sq mi.

PERIOD OF RECORD.--May 1940 to September 1970 (discontinued). Prior to October 1957, published as Bayou Castor near Grayson.

GAGE.--Water-stage recorder. Datum of gage is 89.89 ft above mean sea level. Prior to July 15, 1947, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 242 cfs (12.13 inches per year, 175,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,180 cfs Mar. 23 (gage height, 10.32 ft); no flow many days.

Period of record: Maximum discharge, 21,200 cfs Apr. 11, 1947 (gage height, 16.25 ft, from floodmark), from rating extended above 11,000 cfs by velocity-area studies; no flow at times most years.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 957: 1941. WSP 1057: 1945. WSP 1211: 1943, 1949, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.04	0	14	257	27	201	203	37	17	28	4.0	28		
2	0	0	13	226	94	216	147	277	18	35	3.6	18		
3	0	0	13	217	171	249	115	378	19	39	5.4	12		
4	0	0	12	224	186	479	100	331	15	31	5.5	9.2		
5	0	0	12	237	193	617	90	307	11	18	8.1	7.9		
6	0	0	22	255	212	690	80	430	12	8.5	9.5	6.7		
7	0	0	57	258	242	601	70	757	13	4.6	5.7	5.4		
8	0	0	97	239	278	504	60	744	10	2.7	4.1	4.8		
9	0	0	101	200	307	460	49	536	7.0	1.7	3.8	4.9		
10	0	0	116	165	307	443	41	397	5.0	1.1	2.7	4.9		
11	0	0	133	153	264	437	46	274	3.7	1.2	4.0	4.1		
12	0	0	145	145	196	429	63	166	2.8	1.2	5.2	3.1		
13	0	0	153	124	127	387	75	73	2.0	3.0	4.0	2.3		
14	0	0	148	103	86	319	81	24	1.4	5.5	2.5	1.8		
15	0	0	123	96	77	261	83	14	1.1	4.1	1.6	1.4		
16	0	0	89	100	85	219	80	11	.88	17	1.2	.92		
17	0	0	57	99	93	216	74	9.7	.64	22	2.8	.72		
18	0	.10	28	89	94	267	59	8.8	.51	24	6.0	.60		
19	0	10	18	74	104	253	51	7.2	.33	38	2.7	.48		
20	0	35	17	60	118	266	82	5.9	.24	35	1.4	.48		
21	0	45	17	48	127	459	126	5.2	.19	27	1.1	.68		
22	0	50	16	40	130	924	153	4.6	.15	22	1.7	.54		
23	0	47	18	36	119	1,150	166	4.1	.13	21	4.1	.42		
24	0	45	17	36	96	1,110	171	4.2	.12	17	8.1	.39		
25	0	35	18	36	133	932	172	4.7	2.3	13	35	.28		
26	0	27	34	35	199	788	158	5.6	2.5	8.6	40	.28		
27	0	20	48	33	190	673	112	5.6	21	6.5	22	.28		
28	0	16	49	30	189	549	59	8.6	49	6.2	14	.28		
29	0	15	46	28	-----	455	27	9.8	46	5.7	9.8	.28		
30	0	14	180	26	-----	366	20	11	38	5.6	16	.28		
31	0	-----	286	23	-----	277	-----	19	-----	5.7	30	-----		
TOTAL	.04	359.10	2,097	3,692	4,444	15,197	2,813	4,870.0	299.99	458.9	265.6	121.41		
MEAN	.001	12.0	67.6	119	159	490	93.8	157	10.0	14.8	8.57	4.05		
MAX	.04	50	286	258	307	1,150	203	757	49	39	40	28		
MIN	0	0	12	23	27	201	20	4.1	.12	1.1	1.1	.28		
CFSM	0	.044	.25	.44	.59	1.81	.35	.58	.037	.055	.032	.015		
IN.	0	.05	.29	.51	.61	2.09	.39	.67	.04	.06	.04	.02		
AC-FT	.08	712	4,160	7,320	8,810	30,140	5,580	9,660	595	910	527	241		
CAL YR 1969	TOTAL	57,668.78	MEAN	158	MAX	1,750	MIN	0	CFSM	.58	IN	7.92	ACFT	114,400
WAT YR 1970	TOTAL	34,618.04	MEAN	94.8	MAX	1,150	MIN	0	CFSM	.35	IN	4.75	ACFT	68,660

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

RED RIVER BASIN

07371000 Garrett Creek at Jonesboro, La.

LOCATION.--Lat 32°13'55", long 92°43'35", in NE¼ sec.1, T.14 N., R.4 W., Jackson Parish, on left bank just downstream from bridge on State Highway 4, 0.3 mile southwest of Jonesboro town limits, and 0.9 mile upstream from Little Dugdemona River.

DRAINAGE AREA.--2.14 sq mi.

PERIOD OF RECORD.--October 1952 to September 1970 (discontinued).

GAGE.--Duplex water-stage recorder (rain gage and water stage combination), and concrete control since Aug. 31, 1965. Datum of gage is 171.86 ft above mean sea level. Prior to Apr. 11, 1961, water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--18 years, 2.21 cfs (14.02 inches per year, 1,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 316 cfs May 1 (gage height, 7.30 ft); no flow June 13, 14, 17-21, Aug. 9-21; minimum gage height, 0.73 ft Aug. 20.

Period of record: Maximum discharge, 1,670 cfs Apr. 29, 1953 (gage height, 9.87 ft), from rating curve extended above 1,000 cfs; no flow at times in 1963-67, 1970.

REMARKS.--Records poor. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	.01	.05	.03	1.9	23	.59	1.2	91	.04	.02	.01	.01			
2	.01	.05	.03	1.6	6.1	.59	1.0	8.5	.06	.02	.01	.01			
3	.01	.03	.03	1.4	1.9	25	.46	1.9	.04	.01	.01	.01			
4	.01	.02	.03	1.2	1.0	10	.30	.83	.03	.01	.01	.02			
5	.01	.02	.03	1.6	.59	2.7	.26	.46	.03	.01	.01	.01			
6	.01	.02	15	9.8	.46	1.6	.22	.22	.03	.01	.01	.01			
7	.01	.02	1.7	2.7	.35	1.2	.22	.17	.03	.01	.01	.01			
8	.01	.02	.40	1.9	.30	2.3	.22	.13	.02	.01	.01	.01			
9	.01	.02	.22	1.6	.30	1.4	1.1	.13	.02	.01	0	.01			
10	.02	.02	.19	1.2	.26	.92	5.8	.13	.02	.01	0	.01			
11	.03	.02	.13	1.4	.19	12	3.4	.11	.01	.01	0	.01			
12	.03	.05	.11	1.3	.17	4.8	1.2	.11	.01	.01	0	.01			
13	.03	.10	.11	1.1	.19	2.0	.67	.10	0	.01	0	.01			
14	.02	.03	.10	.92	.19	1.3	.35	.08	0	.02	0	.01			
15	.02	.02	.09	.75	1.0	.92	.30	.07	.01	.01	0	.01			
16	.02	.02	.07	.59	2.7	.59	.35	.05	.01	.01	0	.01			
17	.02	.04	.07	.46	1.4	15	.30	.05	0	.10	0	.01			
18	.01	.83	.07	.35	.83	3.8	.22	.04	0	.06	0	.01			
19	.01	.35	.11	.26	.46	4.3	12	.04	0	.02	0	.01			
20	.04	.09	.17	.26	.35	3.1	2.3	.05	0	.01	0	.01			
21	.04	.05	.52	.22	.30	22	.75	.04	0	.26	0	.01			
22	.03	.04	.19	.19	.26	5.8	.40	.02	.01	.04	.10	.01			
23	.02	.04	.11	.19	.26	2.7	.26	.01	.14	.02	.07	.01			
24	.02	.03	.13	.19	.70	2.0	.22	.01	.11	.02	.02	.02			
25	.02	.14	.14	.14	12	2.1	.22	.02	.04	.02	.02	.02			
26	.02	.09	.10	.13	2.2	2.0	.25	.02	.02	.02	.04	.02			
27	.02	.06	.10	.13	1.2	1.6	.24	.08	.04	.02	.04	.02			
28	.02	.04	.14	.11	.92	1.5	.22	.11	.04	.02	.01	.02			
29	.02	.04	5.0	.52	-----	1.6	.21	.03	.03	.02	.01	.01			
30	.19	.03	16	.30	-----	1.4	1.0	.03	.02	.01	.01	.01			
31	.13	-----	3.4	.22	-----	1.3	-----	.02	-----	.01	.02	-----			
TOTAL	.87	2.38	44.52	34.63	59.58	138.11	35.64	104.56	.81	.84	.42	.36			
MEAN	.028	.079	1.44	1.12	2.13	4.46	1.19	3.37	.027	.027	.014	.012			
MAX	.19	.83	16	9.8	23	25	12	91	.14	.26	.10	.02			
MIN	.01	.02	.03	.11	.17	.59	.21	.01	0	.01	0	.01			
CFSM	.01	.04	.67	.52	1.00	2.08	.56	1.57	.01	.01	.01	.01			
IN.	.02	.04	.77	.60	1.04	2.40	.62	1.82	.01	.01	.01	.01			
AC-FT	1.7	4.7	88	69	118	274	71	207	1.6	1.7	.8	.7			
(††)	3.17	2.40	5.20	1.62	3.36	4.90	-	-	2.39	2.65	4.96	.82			
CAL YR 1969	TOTAL	489.60		MEAN	1.34	MAX	66	MIN	.01	CFSM	.63	IN	8.51	AC-FT	971
WTR YR 1970	TOTAL	422.72		MEAN	1.16	MAX	91	MIN	0	CFSM	.54	IN	7.35	AC-FT	838

PEAK DISCHARGE (BASE, 300 CFS).--May 1 (1030) 316 cfs (7.30 ft).

††Precipitation, in inches, during month. Total for calendar year 1969, 33.49 inches; total for water year 1969-70, 37.79 inches.

RED RIVER BASIN

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07371500 Dugdemona River near Jonesboro, La.

LOCATION.--Lat 32°12'25", long 92°48'05", in SW $\frac{1}{4}$ sec.8, T.14 N., R.4 W., Bienville-Jackson Parish line, on left bank just downstream from bridge on State Highway 4, 200 ft downstream from Brush Creek, 1.5 miles downstream from McDonald Creek, and 5.4 miles southwest of Jackson Parish courthouse in Jonesboro.

DRAINAGE AREA.--347 sq mi.

PERIOD OF RECORD.--October 1938 to September 1957. November 1957 to current year (annual maximum and gage height only).

GAGE.--Water-stage recorder. Datum of gage is 116.53 ft above mean sea level. Prior to Nov. 29, 1938, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 3,070 cfs May 4 (gage height, 13.08 ft); minimum gage height, 3.52 ft July 8, Sept. 10. Period of record: Maximum discharge, 30,600 cfs Jan. 1, 1945 (gage height, 19.87 ft); minimum gage height, 2.67 ft Sept. 26, 1955.

1938-57: Minimum observed, 0.4 cfs Aug. 31, 1954 (discharge measurement), but may have been less in September 1954.

REMARKS.--Water used by paper mill at Hodge is pumped from wells and discharged into stream about 7 miles above station. Part of effluent is discharged continually whenever mill is operating, but that containing waste material is stored in a reservoir and released whenever river flow is sufficient to materially dilute it.

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.17	4.65	4.14	8.47	4.97	10.90	7.98	6.25	4.82	4.90	4.16	3.75
2	4.15	4.22	4.12	8.90	6.85	10.38	7.71	10.62	4.63	4.24	3.92	3.71
3	4.16	4.07	4.10	8.88	9.04	9.65	7.67	12.45	4.62	3.98	3.80	3.72
4	4.18	4.04	4.09	8.37	9.45	9.79	8.45	13.05	6.57	3.87	3.76	3.77
5	4.19	4.02	4.04	7.25	9.67	10.46	8.62	12.92	6.10	3.79	3.71	3.77
6	4.19	4.04	4.14	6.71	9.63	11.07	8.10	12.36	5.32	3.67	3.67	3.76
7	4.21	4.03	5.35	7.28	8.88	11.23	7.35	11.63	4.73	3.57	3.65	3.71
8	4.23	4.03	5.98	7.92	8.00	11.33	6.85	10.65	4.44	3.52	3.64	3.70
9	4.24	4.03	6.35	8.45	7.29	11.15	6.48	9.22	4.27	3.58	3.74	3.63
10	4.21	4.04	6.49	8.15	6.81	10.61	7.03	7.89	4.12	3.64	3.82	3.53
11	4.20	4.01	5.90	7.36	6.41	9.95	7.45	6.86	4.05	3.67	3.83	3.53
12	4.24	4.05	5.25	6.80	6.12	9.68	7.62	6.23	3.99	3.65	3.80	3.62
13	4.26	4.06	4.86	6.86	5.88	9.69	7.52	5.80	3.94	3.69	3.77	3.65
14	4.27	4.04	4.66	7.36	5.71	9.65	7.14	5.48	3.86	3.68	3.73	3.70
15	4.25	3.94	4.53	7.21	5.63	9.50	6.65	5.21	3.80	3.66	3.71	3.71
16	4.24	3.89	4.43	6.71	5.89	9.06	6.26	4.98	3.79	3.75	3.70	3.70
17	4.22	3.93	4.35	6.30	7.10	8.71	6.19	4.82	3.79	3.81	3.78	3.69
18	4.24	4.02	4.29	6.04	8.57	9.38	6.15	4.65	3.74	4.94	3.73	3.71
19	4.20	4.65	4.27	5.86	9.03	9.94	6.53	4.52	3.72	4.83	3.67	3.71
20	4.20	4.75	4.27	5.68	8.84	10.40	8.13	4.42	3.70	4.22	3.64	3.70
21	4.37	5.14	4.30	5.57	8.20	10.78	9.23	4.37	3.68	4.73	3.69	3.67
22	4.40	5.87	4.49	5.47	7.23	11.04	9.55	4.29	3.66	4.78	3.76	3.67
23	4.32	5.34	4.50	5.46	6.58	11.35	9.63	4.21	3.75	4.57	3.95	3.69
24	4.16	4.80	4.65	5.42	6.21	11.43	8.72	4.15	4.07	4.15	4.65	3.73
25	4.12	4.52	4.91	5.36	6.62	11.45	7.49	4.11	5.22	4.09	4.18	3.80
26	4.12	4.35	4.74	5.34	9.08	11.32	6.65	4.07	5.77	4.16	3.89	3.91
27	4.09	4.24	4.63	5.29	9.80	10.67	6.98	4.04	5.27	4.04	3.79	3.95
28	4.09	4.14	4.45	5.21	10.24	9.87	7.71	4.39	4.86	3.92	3.73	3.90
29	4.11	4.10	4.26	5.20	-----	9.14	7.45	4.57	6.95	3.82	3.72	3.89
30	4.09	4.13	4.63	5.16	-----	8.58	6.60	4.87	6.36	4.47	3.73	3.81
31	4.42	-----	6.82	5.02	-----	8.23	-----	5.20	-----	4.39	3.74	-----
MAX	4.42	5.87	6.82	8.90	10.24	11.45	9.63	13.05	6.95	4.94	4.65	3.95
MIN	4.09	3.89	4.04	5.02	4.97	8.23	6.15	4.04	3.66	3.52	3.64	3.53

RED RIVER BASIN

07372000 Dugdemona River near Winnfield, La.

LOCATION.--Lat 31°58'30", long 92°39'10", on line between secs.34 and 35, T.12 N., R.3 W., Winn Parish, on right bank just downstream from bridge on U. S. Highway 167, 300 ft upstream from Chicago, Rock Island and Pacific Railroad Co. bridge, 2.4 miles downstream from Kyiaies Creek, and 3.5 miles north of Winnfield.

DRAINAGE AREA.--654 sq mi.

PERIOD OF RECORD.--April 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 81.14 ft above mean sea level (Louisiana Geodetic Survey bench mark). Prior to Dec. 19, 1950, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 694 cfs (502,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,040 cfs May 8 (gage height, 14.26 ft); minimum, 8.8 cfs July 12 (gage height, 1.69 ft).
Period of record: Maximum discharge, 27,100 cfs May 19, 1953 (gage height, 23.78 ft); no flow at times in 1947, 1954, 1956-57, (result of temporary regulation).

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Water used by paper mill at Hodge is pumped from wells and discharged into stream about 30 miles above station. Part of effluent is discharged continually whenever mill is operating, but that containing waste material is stored in a reservoir and released whenever river flow is sufficient to materially dilute it. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1391: 1939-41.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	22	30	392	92	514	890	318	119	87	15	21
2	11	21	24	361	257	523	701	925	108	126	14	20
3	10	21	22	340	330	582	522	1,290	104	112	14	19
4	10	26	22	320	406	996	411	1,590	94	68	14	17
5	10	31	22	300	444	1,210	355	1,800	98	43	14	15
6	10	31	40	350	442	1,210	333	1,860	121	29	18	14
7	9.7	23	62	400	445	1,190	343	1,900	155	21	20	14
8	9.5	20	92	350	461	1,130	353	2,010	140	18	18	14
9	9.9	18	110	300	477	1,040	330	1,980	93	15	17	13
10	10	17	149	250	478	988	290	1,770	65	13	16	13
11	10	17	155	300	440	1,010	281	1,470	49	11	15	16
12	10	18	153	250	346	1,080	337	1,160	39	9.4	14	13
13	13	18	146	200	244	1,120	410	824	32	9.5	14	11
14	12	20	121	170	189	1,110	411	436	28	9.6	14	10
15	11	19	92	160	161	1,020	376	192	25	11	14	10
16	11	17	70	150	165	882	331	143	22	12	15	9.8
17	11	17	56	150	182	791	283	123	20	13	20	11
18	12	21	48	140	212	834	237	93	18	13	30	11
19	12	29	43	140	276	845	257	73	16	12	20	12
20	12	27	40	130	319	890	423	63	15	14	15	11
21	12	24	38	130	352	1,070	461	55	14	37	13	11
22	12	28	36	120	378	1,380	479	48	13	54	13	11
23	12	39	36	120	389	1,490	456	43	13	55	17	11
24	12	49	38	110	370	1,500	445	40	13	50	20	11
25	15	62	42	110	424	1,500	461	38	14	30	27	13
26	17	67	46	100	547	1,430	473	46	13	35	27	12
27	18	62	50	100	505	1,340	448	50	19	25	34	11
28	19	53	57	90	514	1,270	343	107	55	20	33	13
29	20	44	68	89	-----	1,220	235	162	79	18	26	15
30	20	37	254	84	-----	1,150	221	195	78	17	20	16
31	24	-----	470	79	-----	1,040	-----	164	-----	16	19	-----
TOTAL	396.1	898	2,632	6,285	9,845	33,355	11,896	20,968	1,672	1,003.5	580	398.8
MEAN	12.8	29.9	84.9	203	352	1,076	397	676	55.7	32.4	18.7	13.3
MAX	24	67	470	400	547	1,500	890	2,010	155	126	34	21
MIN	9.5	17	22	79	92	514	221	38	13	9.4	13	9.8
AC-FT	786	1,780	5,220	12,470	19,530	66,160	23,600	41,590	3,320	1,990	1,150	791
CAL YR 1969	TOTAL	162,656.8	MEAN	446	MAX	4,000	MIN	5.5	AC-FT	322,600		
WTR YR 1970	TOTAL	89,929.4	MEAN	246	MAX	2,010	MIN	9.4	AC-FT	178,400		

RED RIVER BASIN

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07372200 Little River near Rochelle, La.

LOCATION.--Lat 31°45'15", long 92°20'40", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.9 N., R.1 E., La Salle-Grant Parish line, near right bank on downstream side of pier of bridge on State Highway 500, 700 ft upstream from Louisiana Midland Railway Co. bridge, 1.1 miles northeast of Zenoria, and 3 miles southeast of Rochelle.

DRAINAGE AREA.--1,880 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 24.79 ft above mean sea level (Corps of Engineers bench mark). Auxiliary water-stage recorder 5 miles upstream at same datum. Prior to May 9, 1960, auxiliary nonrecording gage 5.1 miles upstream at same datum.

AVERAGE DISCHARGE.--13 years, 1,743 cfs (12.59 inches per year, 1,263,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,650 cfs Mar. 27 (gage height, 24.77 ft); minimum daily discharge, 15 cfs Oct. 24, 28-29. Period of record: Maximum discharge, 51,900 cfs Apr. 11, 1968 (gage height, 39.88 ft); minimum daily, 14 cfs Oct. 20-29, 1967; minimum gage height, 5.10 ft Oct. 27, 28, 29, 1967.

REMARKS.--Records fair. Natural flow is supplemented by effluent from operation of several oilfields above station. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	18	21	91	3,290	283	1,360	2,260	358	140	188	85	94		
2	18	22	76	3,170	542	1,210	1,960	1,220	180	204	75	127		
3	17	25	64	2,640	977	1,080	1,670	2,450	230	197	67	149		
4	17	24	53	1,990	1,160	1,640	1,380	2,960	260	203	65	182		
5	17	23	46	1,540	1,080	2,450	1,060	2,980	270	205	65	194		
6	17	22	274	1,490	973	2,640	824	2,930	275	187	68	144		
7	18	21	962	1,640	896	2,620	679	2,830	280	158	75	106		
8	18	21	878	1,510	827	2,590	611	2,710	285	127	70	80		
9	17	23	669	1,280	776	2,530	570	2,680	290	98	62	64		
10	17	24	507	1,110	742	2,420	566	2,700	270	73	56	54		
11	17	23	401	1,090	712	2,260	626	2,650	220	60	52	50		
12	17	22	347	1,200	690	2,150	738	2,440	190	56	50	45		
13	17	20	336	1,140	660	2,180	854	2,260	160	51	45	50		
14	16	19	327	979	595	2,180	876	1,940	140	46	41	108		
15	16	18	310	845	505	2,110	876	1,420	110	45	38	110		
16	16	18	292	699	438	2,030	821	776	90	43	39	87		
17	16	17	269	587	405	1,980	729	370	75	41	35	66		
18	16	20	234	515	401	2,180	638	275	65	41	42	53		
19	17	32	195	478	400	2,330	653	220	57	37	75	44		
20	17	34	166	441	408	2,250	913	170	50	59	70	38		
21	17	32	164	403	439	2,280	1,240	130	45	100	60	35		
22	16	30	159	367	470	2,830	1,330	110	40	145	57	32		
23	16	28	146	334	484	3,240	1,260	100	40	184	59	31		
24	15	25	129	308	493	3,380	1,140	94	45	211	95	30		
25	16	23	113	296	577	3,520	973	90	60	219	174	30		
26	16	23	104	281	940	3,610	838	90	90	197	154	29		
27	16	32	100	276	1,340	3,650	754	90	120	206	124	28		
28	15	68	96	271	1,440	3,600	707	90	176	228	144	30		
29	15	101	235	267	-----	3,450	624	90	197	186	140	33		
30	16	103	2,000	259	-----	3,190	471	100	174	137	117	34		
31	21	-----	3,170	263	-----	2,630	-----	115	-----	105	101	-----		
TOTAL	518	914	12,913	30,959	19,653	77,570	28,641	37,438	4,624	4,037	2,400	2,157		
MEAN	16.7	30.5	417	999	702	2,502	955	1,208	154	130	77.4	71.9		
MAX	21	103	3,170	3,290	1,440	3,650	2,260	2,980	290	228	174	194		
MIN	15	17	46	259	283	1,080	471	90	40	37	35	28		
CFSM	.009	.016	.22	.53	.37	1.33	.51	.64	.082	.069	.041	.038		
IN.	.01	.02	.26	.61	.39	1.53	.57	.74	.09	.08	.05	.04		
AC-FT	1,030	1,810	25,610	61,410	38,980	153,900	56,810	74,260	9,170	8,010	4,760	4,280		
CAL YR 1969	TOTAL	468,720	MEAN	1,284	MAX	6,900	MIN	15	CFSM	.68	IN	9.27	ACFT	929,700
WAT YR 1970	TOTAL	221,824	MEAN	608	MAX	3,650	MIN	15	CFSM	.32	IN	4.39	ACFT	440,000

RED RIVER BASIN

07372500 Bayou Funny Louis near Trout, La.

LOCATION.--Lat 31°43'00", long 92°13'20", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T.9 N., R.2 E., La Salle Parish, near left bank on downstream side of bridge on U. S. Highway 84, 0.4 mile downstream from Jumping Gully Creek, 3 miles northwest of Trout, and 12 miles upstream from mouth.

DRAINAGE AREA.--92 sq mi.

PERIOD OF RECORD.--April 1939 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 81.51 ft above mean sea level. Prior to Aug. 4, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 123 cfs (18.16 inches per year, 89,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,520 cfs Dec. 30 (gage height, 15.96 ft); minimum, no flow for part of Oct. 5, 6.
Period of record: Maximum discharge, 32,700 cfs May 17, 1953 (gage height, 23.26 ft); from rating curve extended above 14,000 cfs; no flow at times in 1943, 1952, 1954, 1956, 1968, 1970.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1211: 1940(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	2.8	4.8	1,110	94	43	21	6.9	3.2	7.8	3.2	.55
2	.16	2.7	5.1	376	610	34	23	381	3.0	3.5	4.6	1.7
3	.08	2.6	5.2	70	399	71	22	455	2.4	2.1	3.2	3.1
4	.04	2.3	5.2	46	137	571	25	169	1.8	1.3	2.1	4.7
5	.01	2.3	5.3	37	65	381	25	50	1.5	.91	1.7	6.5
6	.13	1.9	381	617	44	140	20	26	1.4	.72	2.2	4.5
7	2.0	2.2	904	521	33	71	16	16	1.2	.58	4.8	3.8
8	1.5	2.7	316	196	27	53	14	11	1.1	.55	3.5	2.9
9	1.2	2.9	84	80	24	46	12	7.7	.99	.47	2.1	1.7
10	.91	2.9	31	51	20	38	20	6.2	.97	.40	1.2	.81
11	1.0	2.8	19	245	17	67	74	4.8	.92	.47	.81	.58
12	1.2	1.8	13	326	14	246	108	4.0	.91	.58	.58	.53
13	1.0	1.0	9.5	169	12	194	82	3.3	.90	.69	.43	.47
14	1.0	.72	7.7	87	12	85	49	2.8	.85	.69	.31	.38
15	1.0	.64	6.4	57	12	52	33	2.4	.83	.81	.25	.31
16	.81	.69	5.6	43	45	37	26	2.2	.81	1.2	.23	.43
17	.72	.91	4.9	35	55	138	25	1.9	.81	1.3	.23	3.0
18	.45	2.8	4.4	30	48	271	22	1.7	.78	.91	.81	10
19	.29	7.7	4.3	26	38	156	53	1.4	.73	.69	.91	7.7
20	.29	6.7	4.4	24	23	96	160	1.3	.78	.55	.58	3.3
21	.29	7.0	7.0	23	20	129	82	1.2	.86	.47	1.6	1.8
22	.25	6.5	13	21	16	264	42	1.2	1.4	.50	1.8	1.1
23	.18	5.8	13	20	13	167	26	1.2	1.3	.43	5.8	.95
24	.16	5.2	10	18	12	86	17	1.0	2.0	.40	6.8	1.0
25	.18	4.8	7.9	17	96	54	13	1.1	6.7	.36	3.9	.81
26	.21	4.8	6.7	16	173	46	10	1.0	7.4	.55	2.8	.58
27	.29	4.9	5.9	15	110	40	8.4	2.4	3.6	1.2	1.9	.38
28	.40	3.7	5.3	14	63	36	7.2	5.4	71	.95	1.3	.29
29	.45	4.3	98	13	-----	30	6.1	3.7	95	.81	.87	.29
30	.75	4.6	1,810	11	-----	26	5.2	2.2	20	.69	.61	.25
31	3.0	-----	1,800	10	-----	22	-----	2.0	-----	.78	.55	-----
TOTAL	20.20	102.66	5,597.6	4,324	2,232	3,690	1,046.9	1,177.0	235.14	33.36	61.67	64.41
MEAN	.65	3.42	181	139	79.7	119	34.9	38.0	7.84	1.08	1.99	2.15
MAX	3.0	7.7	1,810	1,110	610	571	160	455	95	7.8	6.8	10
MIN	.01	.64	4.3	10	12	22	5.2	1.0	.73	.36	.23	.25
CFSM	.007	.04	1.96	1.52	.87	1.29	.38	.41	.09	.01	.02	.02
IN.	.008	.04	2.26	1.75	.90	1.49	.42	.48	.10	.01	.02	.03
AC-FT	40	204	11,100	8,580	4,430	7,320	2,080	2,330	466	66	122	128
CAL YR 1969	TOTAL 33,393.05	MEAN 91.5	MAX 2,170	MIN .01	CFSM .99	IN 13.50	AC-FT 66,240					
WTR YR 1970:	TOTAL 18,584.94	MEAN 50.9	MAX 1,810	MIN .01	CFSM .55	IN 7.51	AC-FT 36,860					

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-30	1900	15.96	2,520				

07373000 Big Creek at Pollock, La.
(hydrologic bench-mark station)

LOCATION.--Lat 31°32'10", long 92°24'30", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.7 N., R.1 E., Grant Parish, near right bank on downstream side of bridge on U. S. Highway 165, 0.5 mile upstream from Sugar Branch, 0.6 mile upstream from Missouri Pacific Railroad Co. bridge, 0.8 mile upstream from water-supply diversion dam, 0.8 mile north of Pollock, and 1.3 miles downstream from Dyson Creek.

DRAINAGE AREA.--51 sq mi.

PERIOD OF RECORD.--January 1942 to current year.

GAGE.--Duplex water-stage recorder (rain gage, water stage, and water temperature combination), concrete control since July 16, 1964. Datum of gage is 76.69 ft above mean sea level. Prior to Feb. 25, 1942, nonrecording gage and Feb. 25, 1942, to June 21, 1955, water-stage recorder, at site 0.3 mile downstream at same datum, June 21, 1955, to May 18, 1964, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--27 years, 59.9 cfs (43,400 acre-ft per year); 28 years, 58.9 cfs (42,670 acre-ft per year).

EXTREMES.--Water year 1969: Maximum discharge, 15,300 cfs July 23 (gage height, 18.25 ft); minimum, 11 cfs Sept. 19, 29, 30; minimum gage height, 2.88 ft Sept. 19.

Water year 1970: Maximum discharge, 1,210 cfs Dec. 30 (gage height, 9.61 ft); minimum, 8.4 cfs June 20, 21 (gage height, 2.80 ft).

Period of record: Maximum discharge, 23,500 cfs Apr. 29, 1953 (gage height, 18.03 ft, 16.90 ft, site then in use); minimum, 3.7 cfs Sept. 29, 1956 (gage height, 1.08 ft).

REMARKS.--Records good. Supplementary recording rain gage 3.8 miles northwest of gaging station since June 26, 1964. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	94.9	60	49	51	41	31	32	15	29	15
2	14	12	198	49	65	46	40	30	28	19	27	14
3	14	12	81	53	47	47	38	28	27	15	28	15
4	13	13	70	56	39	46	38	34	34	14	24	15
5	13	13	58	46	33	46	42	79	87	16	23	16
6	15	44	51	43	36	85	41	151	43	21	22	15
7	17	26	46	40	35	61	36	356	33	19	21	15
8	15	18	42	39	32	57	34	673	28	17	21	14
9	14	36	40	38	30	55	33	570	26	15	20	13
10	17	28	39	33	26	46	65	113	24	15	20	13
11	16	32	36	32	26	41	51	71	23	15	20	12
12	15	24	42	31	26	41	54	59	22	42	20	12
13	14	19	196	30	25	39	695	50	22	23	19	12
14	14	18	73	30	70	37	474	47	21	17	19	12
15	13	20	54	30	130	158	96	43	21	16	18	12
16	13	34	47	30	63	267	70	47	21	17	19	12
17	13	31	44	33	46	154	120	55	21	18	18	12
18	13	26	44	36	41	350	117	65	21	18	18	12
19	13	20	59	34	36	122	67	48	20	20	18	11
20	13	18	46	30	34	78	55	41	20	88	17	12
21	13	18	67	30	75	65	48	36	19	87	16	12
22	13	18	149	30	738	56	43	34	18	30	16	13
23	13	18	101	30	197	80	41	31	18	5,790	17	16
24	13	18	64	28	77	113	38	30	17	735	17	19
25	13	20	53	26	64	65	36	30	16	82	16	15
26	13	20	50	24	55	55	33	29	16	57	16	13
27	13	141	50	26	50	49	36	34	16	48	15	12
28	12	1,160	51	26	59	48	49	30	16	53	13	12
29	12	164	44	26	-----	46	37	31	16	44	13	11
30	12	95	59	28	-----	43	33	28	15	37	13	11
31	12	-----	100	33	-----	42	-----	35	-----	32	13	-----
TOTAL	422	2,128	3,003	1,080	2,204	2,489	2,601	2,939	741	7,435	586	398
MEAN	13.6	70.9	96.9	34.8	78.7	80.3	86.7	94.8	24.7	240	18.9	13.3
MAX	17	1,160	949	60	738	350	695	673	87	5,790	29	19
MIN	12	12	36	24	25	37	33	28	15	14	13	11
CFSM	.27	1.39	1.90	.68	1.54	1.57	1.70	1.86	.48	4.71	.37	.26
IN.	.31	1.55	2.19	.79	1.61	1.82	1.90	2.14	.54	5.42	.43	.29
AC-FT	837	4,220	5,960	2,140	4,370	4,940	5,160	5,830	1,470	14,750	1,160	789
(+)	.48	7.01	3.61	.56	4.36	4.52	4.33	6.37	2.03	8.96	0	1.40
(±)	.52	13.41	5.07	.67	5.15	4.82	5.27	6.20	1.95	15.68	.05	.18

CAL YR 1968:	TOTAL	24,494	MEAN	67.1	MAX	2,140	MIN	12	CFSM	1.32	IN.	17.86	AC-FT	48,580
WTR YR 1969:	TOTAL	26,026	MEAN	71.3	MAX	5,790	MIN	11	CFSM	1.40	IN.	18.98	AC-FT	51,620

PEAK DISCHARGE (BASE, 650 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-28	0730	10.40	1,610	5-7	1945	8.72	874
12-1	0730	9.98	1,370	7-23	1100	18.25	15,300
2-22	0615	8.77	972				
4-13	1810	8.14	838				

† Precipitation, in inches, during month at rain gage at station. Total for calendar year 1968, 46.25 inches; total for water year 1968-69, 43.63 inches.

‡ Precipitation, in inches, during month at rain gage upstream. Total for calendar year 1968, 64.86 inches; total for water year 1968-69, 58.97 inches.

RED RIVER BASIN

07373000 Big Creek at Pollock, La.--Continued
(hydrologic bench-mark station)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	11	20	15	77	62	32	28	23	20	12	10	12		
2	11	15	15	60	91	30	29	81	18	11	10	17		
3	11	14	15	51	51	48	27	42	16	11	10	37		
4	11	14	15	47	42	114	24	28	15	11	11	27		
5	11	13	16	43	38	59	24	22	14	11	12	17		
6	37	13	473	81	34	46	24	20	14	10	16	15		
7	31	14	363	247	32	40	23	19	13	10	31	13		
8	18	14	55	84	31	41	22	18	13	10	55	12		
9	16	13	38	55	29	36	22	18	12	9.0	19	12		
10	15	13	32	47	28	34	65	18	12	9.0	13	12		
11	14	13	27	74	28	39	73	17	12	9.0	12	14		
12	14	12	24	100	28	46	51	16	11	12	11	13		
13	14	12	24	59	27	37	38	15	11	12	11	12		
14	14	12	23	47	27	35	30	15	11	11	10	11		
15	14	12	22	42	29	30	28	15	11	10	9.8	10		
16	13	12	22	38	54	28	28	20	10	10	10	10		
17	13	12	21	36	41	64	28	18	9.8	10	10	10		
18	13	22	21	34	34	67	25	15	9.5	18	17	12		
19	13	55	21	34	31	48	36	15	9.5	15	19	12		
20	13	22	54	35	28	42	41	15	9.2	12	25	11		
21	13	18	47	30	26	55	28	14	9.2	11	21	10		
22	13	17	40	28	26	65	24	14	23	16	14	10		
23	12	16	30	28	26	44	21	13	17	14	21	10		
24	12	16	27	28	28	38	21	13	19	12	34	12		
25	12	16	26	28	55	35	21	13	20	12	19	14		
26	12	15	24	28	44	34	20	13	15	19	14	24		
27	12	15	23	27	35	31	20	21	14	20	13	47		
28	12	15	22	27	33	29	19	42	14	16	12	20		
29	12	15	295	36	-----	29	18	21	14	18	12	14		
30	13	15	1,040	32	-----	28	17	16	13	19	12	12		
31	26	-----	282	28	-----	28	-----	17	-----	11	13	-----		
TOTAL	456	485	3,152	1,611	1,038	1,332	875	647	409.2	391.0	506.8	462		
MEAN	14.7	16.2	102	52.0	37.1	43.0	29.2	20.9	13.6	12.6	16.3	15.4		
MAX	37	55	1,040	247	91	114	73	81	23	20	55	47		
MIN	11	12	15	27	26	28	17	13	9.2	9.0	9.8	10		
CFSM	.29	.32	2.00	1.02	.73	.84	.57	.41	.27	.25	.32	.30		
IN.	.33	.35	2.30	1.17	.76	.97	.64	.47	.30	.29	.37	.34		
AC-FT	904	962	6,250	3,200	2,060	2,640	1,740	1,280	812	776	1,000	916		
(+)	4.15	2.02	9.41	3.08	2.44	3.00	2.34	5.30	3.54	1.73	3.70	2.77		
(+)	2.53	1.82	11.95	2.30	2.02	3.88	2.23	4.39	1.50	3.22	5.26	3.14		
CAL YR 1969:	TOTAL	24,566	MEAN	67.3	MAX	5,740	MIN	11	CFSM	1.32	IN.	17.91	AC-FT	48,730
WTR YR 1970:	TOTAL	11,365	MEAN	31.1	MAX	1,040	MIN	9.0	CFSM	.61	IN.	8.29	AC-FT	22,540

PEAK DISCHARGE (BASE, 650 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-6	2030	8.76	970	12-30	0615	9.61	1,210

† Precipitation, in inches, during month at rain gage at station. Total for calendar year 1969, 48.11 inches; total for water year 1969-70, 45.48 inches.

‡ Precipitation, in inches, during month at rain gage upstream. Total for calendar year 1969, 55.60 inches; total for water year 1969-70, 44.24 inches.

RED RIVER BASIN

75

07373278 Lake St. John near Waterproof, La.

LOCATION.--Lat 31°42'00", long 91°27'30", in lot 47, T.8 N., R.10 E., Concordia Parish, at private fishing pier, 8.5 miles southwest of Waterproof.

PERIOD OF RECORD.--January 1967 to current year (gage height only).

GAGE.--Water-stage recorder. Datum of gage is 50.00 ft above mean sea level.

EXTREMES.--Current year: Maximum gage height, 3.87 ft June 2; minimum, 2.37 ft Dec. 5.
Period of record: Maximum gage height, 5.77 ft Apr. 13, 1969; minimum, 1.95 ft Nov. 29, 1967.

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.85	2.69	2.41	(a)	3.47	3.49	(a)	(a)	3.76	3.44	3.01	2.77
2	2.81	2.68	2.40	(a)	3.61	3.49	(a)	(a)	3.87	3.42	3.00	2.75
3	2.80	2.66	2.40	(a)	3.60	3.48	3.68	(a)	3.86	3.40	2.98	2.75
4	2.79	2.64	2.38	(a)	3.59	3.70	3.68	(a)	3.85	3.39	3.00	2.80
5	2.77	2.63	2.37	(a)	3.58	3.74	3.65	(a)	3.83	3.36	2.98	2.78
6	2.75	2.61	2.55	(a)	3.58	3.75	3.65	(a)	3.82	3.32	2.96	2.77
7	3.07	2.60	2.90	(a)	3.58	3.75	3.64	(a)	3.80	3.29	2.95	2.75
8	3.07	2.59	2.94	(a)	3.57	3.75	3.62	(a)	3.78	3.26	2.93	2.74
9	3.05	2.59	2.96	(a)	3.57	3.73	3.61	(a)	3.77	3.24	2.90	2.72
10	3.03	2.58	2.97	(a)	3.56	3.72	3.67	(a)	3.75	3.22	2.88	2.70
11	(a)	2.57	2.96	(a)	3.54	3.74	3.72	(a)	3.72	3.21	2.88	2.67
12	(a)	2.56	2.96	(a)	3.53	3.74	3.72	(a)	3.70	3.20	2.85	2.66
13	(a)	2.55	2.95	(a)	3.52	(a)	3.72	(a)	3.69	3.19	2.84	2.65
14	(a)	2.53	(a)	(a)	3.52	(a)	3.72	(a)	3.67	3.16	2.82	2.63
15	(a)	2.50	(a)	(a)	3.52	(a)	3.71	(a)	3.67	3.19	2.79	2.61
16	(a)	2.47	(a)	3.55	3.52	(a)	3.70	(a)	3.65	3.18	2.76	2.59
17	2.88	2.45	(a)	3.54	3.52	(a)	3.69	(a)	3.62	3.16	2.74	2.61
18	2.86	2.44	(a)	3.53	3.50	(a)	3.69	(a)	3.59	3.19	2.72	2.59
19	2.84	2.54	(a)	3.53	3.50	(a)	(a)	(a)	3.59	3.17	2.70	2.57
20	2.83	2.53	(a)	3.52	3.49	(a)	(a)	(a)	3.56	3.15	2.68	2.56
21	2.83	2.51	(a)	3.52	3.47	(a)	(a)	(a)	3.55	3.14	2.70	2.56
22	2.82	2.50	(a)	3.49	3.46	(a)	(a)	3.61	3.52	3.11	2.76	2.56
23	2.78	2.49	(a)	3.48	3.45	(a)	(a)	3.59	3.51	3.09	2.83	2.54
24	2.75	2.48	(a)	3.48	3.45	(a)	(a)	3.57	3.49	3.09	2.85	2.56
25	2.73	2.47	(a)	3.48	3.53	(a)	(a)	3.56	3.50	3.06	2.84	2.70
26	2.72	2.47	(a)	3.48	3.51	(a)	(a)	3.57	3.48	3.08	2.81	2.69
27	2.71	2.47	(a)	3.47	3.50	(a)	(a)	3.56	3.46	3.09	2.79	2.69
28	2.67	2.45	(a)	3.46	3.49	(a)	(a)	3.61	3.49	3.07	2.77	(a)
29	2.65	2.43	(a)	3.48	-----	(a)	(a)	3.60	3.47	3.05	2.75	(a)
30	2.65	2.42	(a)	3.48	-----	(a)	(a)	3.60	3.46	3.05	2.75	2.57
31	2.70	-----	(a)	3.47	-----	(a)	-----	3.60	-----	3.03	2.78	-----
MAX	3.07	2.69	----	----	3.61	----	----	----	3.87	3.44	3.01	2.80
MIN	2.65	2.42	----	----	3.45	3.49	3.61	3.56	3.46	3.03	2.68	2.54

a No gage-height record.

RED RIVER BASIN

07373280 Lake Concordia near Ferriday, La.

LOCATION.--Lat 31°40'25", long 91°30'05", in lot 33, T.8 N., R.9 E., Concordia Parish, at Louisiana Wildlife and Fisheries Commission pier, 3.5 miles northeast of Ferriday.

PERIOD OF RECORD.--January 1967 to current year (gage height only).

GAGE.--Water-stage recorder. Datum of gage is 29.00 ft above mean sea level.

EXTREMES.--Current year: Maximum gage height, 21.94 ft May 3; minimum, 20.52 ft Dec. 4, 5, 1969.

Period of record: Maximum gage height, 22.72 ft Apr. 14, 1968; minimum, 19.87 ft Dec. 9, 1967.

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.85	20.73	20.56	21.22	21.25	21.25	21.62	21.67	21.75	21.60	21.23	21.18
2	20.83	20.72	20.55	21.22	21.44	21.25	21.60	21.87	21.92	21.58	21.21	21.17
3	20.82	20.70	20.55	21.20	21.42	21.25	21.60	21.94	21.86	21.57	21.20	21.21
4	20.80	20.68	20.53	21.20	21.41	21.50	21.59	21.92	21.86	21.56	21.18	21.22
5	20.79	20.67	20.52	21.19	21.40	21.50	21.58	21.92	21.84	21.51	21.17	21.22
6	20.78	20.66	20.65	21.35	21.38	21.50	21.57	21.92	21.82	21.50	21.15	21.20
7	21.02	20.66	21.05	21.35	21.37	21.50	21.56	21.91	21.80	21.47	21.14	21.18
8	20.99	20.65	21.04	21.34	21.37	21.50	21.55	21.90	21.79	21.45	21.12	21.17
9	20.98	20.56	21.03	21.33	21.37	21.49	21.55	21.90	21.78	21.44	21.12	21.15
10	20.97	20.65	21.03	21.33	21.36	21.48	21.59	21.88	21.77	21.42	21.10	21.13
11	20.96	20.65	21.02	21.39	21.35	21.51	21.66	21.87	21.75	21.40	21.08	21.11
12	20.95	20.64	21.01	21.38	21.32	21.52	21.67	21.86	21.74	21.40	21.06	21.10
13	20.94	20.63	21.00	21.37	21.32	21.51	21.66	21.85	21.72	21.38	21.05	21.09
14	20.89	20.61	20.99	21.37	21.32	21.50	21.66	21.83	21.72	21.36	21.03	21.10
15	20.87	20.59	20.98	21.37	21.30	21.49	21.66	21.82	21.70	21.38	21.00	21.08
16	20.86	20.57	20.96	21.36	21.31	21.49	21.66	21.82	21.69	21.37	20.98	21.07
17	20.85	20.56	20.95	21.36	21.31	21.50	21.67	21.78	21.67	21.36	20.97	21.10
18	20.82	20.56	20.95	21.36	21.30	21.55	21.66	21.76	21.65	21.38	20.96	21.08
19	20.81	20.65	20.94	21.35	21.28	21.57	21.73	21.75	21.65	21.36	20.95	21.07
20	20.80	20.64	20.94	21.34	21.26	21.57	21.76	21.75	21.63	21.35	20.94	21.05
21	20.80	20.63	21.04	21.31	21.24	21.62	21.74	21.74	21.61	21.32	20.94	21.08
22	20.78	20.62	21.03	21.31	21.23	21.64	21.75	21.71	21.59	21.30	20.95	21.06
23	20.75	20.61	21.03	21.30	21.21	21.64	21.74	21.70	21.58	21.30	21.18	21.07
24	20.73	20.61	21.01	21.29	21.21	21.64	21.73	21.69	21.59	21.28	21.20	21.16
25	20.72	20.60	21.02	21.29	21.28	21.62	21.73	21.68	21.65	21.26	21.17	21.17
26	20.71	20.60	21.02	21.28	21.28	21.63	21.71	21.67	21.65	21.26	21.15	21.22
27	20.70	20.60	21.01	21.27	21.27	21.62	21.72	21.66	21.63	21.27	21.13	21.18
28	20.68	20.59	21.01	21.28	21.26	21.61	21.70	21.70	21.64	21.26	21.16	21.15
29	20.66	20.58	21.02	21.29	-----	21.60	21.70	21.70	21.63	21.25	21.10	21.12
30	20.67	20.57	21.20	21.28	-----	21.60	21.70	21.69	21.62	21.26	21.13	21.10
31	20.74	-----	21.23	21.27	-----	21.60	-----	21.67	-----	21.25	21.19	-----
MAX	21.02	20.73	21.23	21.39	21.44	21.64	21.76	21.94	21.87	21.60	21.23	21.22
MIN	20.66	20.56	20.52	21.19	21.21	21.25	21.55	21.66	21.58	21.25	20.94	21.05

THOMPSON CREEK BASIN

77

07373500 West Fork Thompson Creek near Wakefield, La.

LOCATION.--Lat 30°55'20", long 91°17'35", in lot 43, T.1 S., R.2 W., St. Helena meridian, West Feliciana Parish, near right bank on downstream side of bridge on State Highway 421, 3.5 miles northeast of Wakefield, and 4.5 miles upstream from Middle Fork Thompson Creek.

DRAINAGE AREA.--35.3 sq mi.

PERIOD OF RECORD.--October 1949 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 120 ft (from topographic map). Prior to Oct. 30, 1950, and Jan. 29, 1952, to Jan. 14, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 42.9 cfs (16.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,760 cfs June 2 (gage height, 15.05 ft); minimum daily, 3.8 cfs Oct. 1-5, Dec. 1-3.

Period of record: Maximum discharge, 18,100 cfs May 4, 1953 (gage height, 22.65 ft), from rating curve extended above 5,100 cfs on basis of slope-area measurement at gage height 20.47 ft; minimum daily, 2.2 cfs Sept. 17-19, 1955, Aug. 9-13, 19-21, 1962.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	6.2	3.8	13	192	17	11	11	12	5.1	5.7	5.1
2	3.8	4.9	3.8	10	58	17	12	222	1,540	4.6	5.3	5.1
3	3.8	4.4	3.8	8.1	28	296	9.5	52	25	4.6	5.1	10
4	3.8	4.4	4.0	6.9	22	250	8.6	21	15	4.4	5.1	6.9
5	3.8	4.4	4.4	11	21	45	8.1	12	8.0	4.4	111	5.1
6	70	4.2	568	294	20	34	8.1	9.8	6.5	4.4	17	4.9
7	190	4.2	74	27	19	42	7.1	3.1	5.4	4.2	11	4.9
8	18	4.2	10	15	20	45	7.1	7.1	5.2	4.2	15	4.9
9	7.6	4.2	11	11	19	31	7.1	6.6	5.0	4.2	9.5	4.9
10	5.7	4.2	14	9.2	19	27	71	6.2	4.8	7.8	7.8	4.9
11	5.5	4.0	7.3	38	18	100	342	6.2	4.6	76	7.0	9.2
12	4.9	4.0	5.5	17	18	40	141	6.0	4.5	66	6.4	7.3
13	5.1	10	5.1	11	18	26	42	6.0	4.4	21	6.0	5.5
14	5.1	4.4	4.9	9.8	18	22	28	5.5	4.3	9.5	5.6	4.9
15	4.9	4.0	4.4	8.9	22	21	46	5.5	4.3	11	5.3	5.1
16	4.6	4.0	4.2	8.4	128	19	65	5.5	4.2	21	5.0	13
17	4.6	4.0	4.2	8.1	33	98	26	5.5	4.2	737	5.0	8.9
18	4.4	8.5	4.0	7.6	22	40	20	5.3	4.1	207	85	5.5
19	4.4	17	4.2	7.3	19	284	84	5.3	4.1	25	10	4.9
20	4.4	6.4	4.4	7.1	17	228	36	5.5	4.1	16	15	4.9
21	4.4	4.6	21	6.6	16	130	19	5.5	4.0	13	6.0	7.1
22	4.4	4.4	8.4	6.6	16	74	16	5.3	4.0	11	11	5.1
23	4.2	4.2	5.1	6.6	16	35	14	5.3	9.8	10	5.0	5.1
24	4.2	4.2	4.0	6.6	16	24	14	5.5	18	9.0	25	34
25	4.2	4.2	11	6.6	48	20	12	6.0	9.5	8.4	9.0	15
26	4.2	4.2	9.5	6.6	24	20	12	6.0	7.6	7.8	7.5	6.2
27	4.2	4.2	4.6	6.6	19	17	12	8.6	15	7.3	6.5	5.1
28	4.0	4.0	4.0	6.6	18	14	11	7.6	101	6.9	5.8	4.4
29	4.0	4.0	4.4	6.6	-----	14	11	7.1	7.1	15	5.4	4.2
30	4.4	4.0	576	6.2	-----	13	11	6.2	5.5	28	5.2	4.2
31	12	-----	28	6.0	-----	11	-----	5.7	-----	6.6	5.1	-----
TOTAL	412.4	153.6	1,373.0	600	904	2,054	1,111.6	480.9	1,851.2	1,360.4	433.3	216.3
MEAN	13.3	5.12	44.3	19.4	32.3	66.3	37.1	15.5	61.7	43.9	14.0	7.21
MAX	190	16	568	294	192	296	342	222	1,540	737	111	34
MIN	3.8	3.8	3.8	6.0	16	11	7.1	5.3	4.0	4.2	5.0	4.2
CFSM	.38	.14	1.25	.55	.92	1.88	1.05	.44	1.75	1.24	.40	.20
IN.	.43	.16	1.45	.63	.95	2.16	1.17	.51	1.95	1.43	.46	.23
CAL YR 1969:	TOTAL	15,974.0	MEAN	43.8	MAX	1,120	MIN	3.0	CFSM	1.24	IN.	16.83
WTR YR 1970:	TOTAL	10,950.7	MEAN	30.0	MAX	1,540	MIN	3.8	CFSM	.85	IN.	11.54

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
6-2	0800	15.05	6,760	7-17	1900	11.78	3,740

MISSISSIPPI RIVER DELTA

07375000 Tchefuncta River near Folsom, La.

LOCATION.--Lat 30°36'55", long 90°14'55", on line between SE $\frac{1}{4}$ NE $\frac{1}{4}$ and SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.5 S., R.9 E., St. Helena meridian, Tangipahoa Parish, near center of span on downstream side of bridge on State Highway 40, 1.2 miles upstream from Bull Branch, and 3.6 miles southwest of Folsom.

DRAINAGE AREA.--95.5 sq mi, not including Bull Branch which has a drainage area of 7.5 sq mi at Highway 40. Total drainage area for extreme floods is 103 sq mi.

PERIOD OF RECORD.--October 1943 to current year. Prior to January 1944 monthly discharge only, published in WSP 1311. Prior to October 1954, published as Chefuncta River near Folsom.

GAGE.--Water-stage recorder. Datum of gage is 62.11 ft above mean sea level (Louisiana Geodetic Survey bench mark). Prior to June 9, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--27 years, 153 cfs (21.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,060 cfs Mar. 5 (gage height, 13.54 ft); minimum, 31 cfs Oct. 1, 2, 5, 6; minimum gage height, 4.83 ft July 8, 9.

Period of record: Maximum discharge, 29,200 cfs May 3, 1953 (gage height, 22.26 ft), from rating curve extended above 12,000 cfs by contracted-opening measurement at gage height 22.10 ft; minimum, 26 cfs Sept. 14, 15, 1968 (gage height, 4.81 ft).

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1057: 1944(M), 1945. WSP 1281: 1953(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	38	41	56	70	63	108	47	90	40	41	58
2	32	38	41	52	142	61	88	61	130	37	40	48
3	32	38	41	49	264	61	98	188	200	36	40	44
4	32	38	41	47	156	263	85	309	250	36	40	43
5	32	37	41	47	100	892	73	178	120	35	39	42
6	31	37	43	72	88	776	67	97	90	34	45	40
7	49	37	55	153	88	329	63	74	74	34	58	38
8	86	38	78	107	88	185	60	64	70	33	49	37
9	110	38	63	75	89	154	58	58	64	33	45	36
10	72	37	59	65	88	123	60	55	60	128	80	36
11	52	37	71	78	85	108	66	54	54	665	51	36
12	45	37	64	165	85	133	157	51	52	522	43	35
13	43	39	54	156	87	130	291	50	50	173	40	35
14	50	46	50	105	89	103	171	49	47	278	38	34
15	62	46	48	87	90	89	97	48	45	136	37	34
16	49	43	47	79	97	81	87	47	42	82	36	35
17	44	41	46	73	119	91	97	48	41	70	36	38
18	41	41	45	69	103	194	84	50	40	64	36	36
19	40	42	45	66	73	182	73	49	39	105	42	35
20	40	45	45	64	66	150	70	46	38	74	54	34
21	40	45	47	62	61	171	69	46	37	59	42	34
22	40	43	59	60	58	231	63	45	36	53	44	36
23	39	42	62	59	57	209	58	44	36	68	46	41
24	38	42	54	58	56	137	55	43	37	63	43	38
25	38	42	50	58	62	109	54	43	38	53	62	38
26	38	42	49	57	87	95	52	42	42	58	53	38
27	38	42	49	59	80	87	52	42	48	55	86	37
28	38	41	48	65	68	79	50	42	41	48	81	36
29	37	41	47	65	-----	75	49	50	43	45	60	34
30	37	42	51	64	-----	72	48	70	42	43	92	34
31	38	-----	56	70	-----	91	-----	110	-----	42	84	-----
TOTAL	1,394	1,215	1,590	2,342	2,596	5,524	2,503	2,200	1,996	3,202	1,583	1,140
MEAN	45.0	40.5	51.3	75.5	92.7	178	83.4	71.0	66.5	103	51.1	38.0
MAX	110	46	78	165	264	892	291	309	250	665	92	58
MIN	31	37	41	47	56	61	48	42	36	33	36	34
CFSM	.47	.42	.54	.79	.97	1.87	.87	.74	.70	1.08	.53	.40
IN.	.54	.47	.62	.91	1.01	2.15	.97	.86	.78	1.25	.62	.44

CAL YR 1969 TOTAL 38,136 MEAN 104 MAX 2,370 MIN 31 CFSM 1.09 IN 14.85
WTR YR 1970 TOTAL 27,285 MEAN 74.8 MAX 892 MIN 31 CFSM .78 IN 10.63

PEAK DISCHARGE (BASE, 1,300 CFS).--No peak above base.

NOTE.--No gage-height record May 24 to June 24.

MISSISSIPPI RIVER DELTA

79

07375500 Tangipahoa River at Robert, La.

LOCATION.--Lat 30°30'23", long 90°21'42", in lot 39, T.6 S., R.8 E., St. Helena meridian, Tangipahoa Parish, on right bank just downstream from bridge on U.S. Highway 190, 1 mile west of Robert, 2 miles downstream from Chappelpeela Creek, and 6 miles east of Hammond.

DRAINAGE AREA.--646 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 6.87 ft above mean sea level. Prior to Nov. 25, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 1,057 cfs (22.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,680 cfs Mar. 5 (gage height, 12.70 ft); minimum, 278 cfs Oct. 7 (gage height, 4.60 ft).
Period of record: Maximum discharge, 50,500 cfs May 3, 1953 (gage height, 23.13 ft); minimum discharge, 245 cfs Oct. 30 to Nov. 3, 1968; minimum gage height, 2.95 ft Oct. 25, 1939.
Maximum stage known, 27.1 ft in 1921, from floodmark.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	300	312	422	526	448	620	381	803	573	360	615
2	284	300	310	414	1,120	434	605	436	806	482	360	600
3	284	298	310	400	1,330	442	610	690	1,560	424	360	634
4	284	290	310	386	900	2,200	605	866	2,040	388	360	580
5	284	288	310	386	650	3,560	542	670	1,280	374	360	500
6	280	286	329	568	600	3,030	501	534	842	352	400	450
7	1,250	286	454	905	560	1,700	472	470	662	341	800	420
8	1,520	286	1,160	893	540	1,160	460	431	586	332	600	400
9	933	284	988	645	520	971	450	405	508	337	500	380
10	497	284	706	560	520	830	450	393	477	912	600	360
11	428	284	576	592	510	752	500	374	453	950	508	350
12	388	284	514	956	500	833	1,050	371	436	890	488	350
13	366	288	458	935	500	878	2,380	386	429	726	419	350
14	435	312	426	728	500	812	2,060	378	414	1,260	388	350
15	384	320	412	615	500	720	1,160	369	407	950	393	350
16	362	308	395	558	498	642	860	371	395	670	405	360
17	347	306	383	521	581	692	800	385	383	560	407	400
18	331	302	376	490	545	926	830	374	374	470	513	370
19	329	312	371	475	485	917	698	366	364	600	764	360
20	325	322	369	455	448	935	623	362	362	500	625	350
21	325	329	400	441	430	1,230	602	354	357	450	676	350
22	322	331	448	429	420	1,540	566	352	350	420	628	380
23	318	322	506	424	410	1,420	532	341	359	500	695	420
24	351	318	448	417	410	1,070	498	339	381	450	612	390
25	362	314	419	410	424	866	467	334	371	420	650	370
26	364	314	419	407	498	746	446	332	412	450	770	360
27	336	314	475	431	521	673	429	334	410	410	788	350
28	302	316	490	434	480	634	414	339	429	390	1,250	350
29	298	314	443	455	-----	594	407	339	495	380	817	350
30	294	312	424	490	-----	566	393	478	631	370	1,420	350
31	294	-----	422	516	-----	579	-----	938	-----	370	890	-----
TOTAL	13,161	9,124	14,363	16,758	15,926	32,800	21,030	13,492	17,776	16,701	18,806	12,199
MEAN	425	304	463	541	569	1,060	701	435	593	539	607	407
MAX	1,520	331	1,160	956	1,330	3,560	2,380	938	2,040	1,260	1,420	634
MIN	280	284	310	386	410	434	393	332	350	332	360	350
CFSM	.66	.47	.72	.84	.88	1.64	1.09	.67	.92	.83	.94	.63
IN.	.76	.53	.83	.96	.92	1.89	1.21	.77	1.02	.96	1.08	.75

CAL YR 1969: TOTAL 292,012 MEAN 800 MAX 13,800 MIN 270 CFSM 1.24 IN. 16.81
WTR YR 1970: TOTAL 202,136 MEAN 554 MAX 3,560 MIN 280 CFSM .86 IN. 11.64

PEAK DISCHARGE (BASE, 5,000 CFS).--No peak above base.

NOTE.--No gage-height record Sept. 4-30.

MISSISSIPPI RIVER DELTA

07376000 Tickfaw River at Holden, La.

LOCATION.--Lat 30°30'13", long 90°40'38", in sec.26, T.6 S., R.5 E., St. Helena meridian, Livingston Parish, near left bank on downstream side of bridge on U.S. Highway 190, 0.5 mile west of Holden, and 5.1 miles upstream from Big Branch.

DRAINAGE AREA.--247 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 19.15 ft above mean sea level. Prior to Sept. 13, 1944, nonrecording gage, Sept. 14, 1944, to June 14, 1949, water-stage recorder, June 15, 1949, to Dec. 9, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 344 cfs (18.91 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,340 cfs Mar. 5 (gage height, 8.30 ft); minimum, 69 cfs Oct. 3, 4, 5, 6; minimum gage height, 1.42 ft July 9, Sept. 22, 23.

Period of record: Maximum discharge, 14,500 cfs Apr. 29, 1962; maximum gage height, 19.75 ft Mar. 22, 1943, from graph based on gage readings; minimum discharge, 65 cfs Oct. 1, 2, 3, 4, 1969; minimum gage height, 1.32 ft Sept. 4, 1968.

REMARKS.--Records good. See following page for table of daily gage height. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS.--WSP 1711: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	75	77	97	151	122	153	118	377	184	78	128
2	70	75	78	95	269	115	159	123	243	152	94	107
3	70	74	78	94	431	208	160	154	308	107	94	106
4	69	74	79	93	359	903	150	168	277	91	84	94
5	70	73	79	95	252	1,300	142	154	229	84	78	88
6	69	74	94	151	193	1,060	134	137	194	81	80	84
7	89	74	118	220	159	527	127	123	140	78	201	81
8	170	75	166	250	141	370	122	115	117	76	150	79
9	194	75	268	206	132	298	118	111	106	74	153	80
10	124	75	304	156	123	258	122	109	99	186	267	113
11	98	74	177	158	117	246	154	106	95	139	139	92
12	86	74	139	213	113	280	392	104	93	113	107	84
13	82	74	121	306	109	353	750	102	91	216	92	81
14	82	75	111	246	107	318	1,020	100	89	198	85	79
15	79	77	105	191	106	259	950	98	88	184	82	80
16	77	78	101	259	109	221	998	97	86	144	82	84
17	77	79	98	140	116	220	478	97	84	120	91	79
18	77	77	96	129	135	252	318	95	83	119	82	78
19	76	80	94	119	136	282	260	94	81	109	95	77
20	77	82	93	114	122	299	225	93	80	92	96	76
21	76	81	101	109	113	372	206	92	78	86	93	75
22	76	80	101	106	107	478	190	92	78	112	122	74
23	75	78	102	104	104	482	173	90	118	125	110	75
24	74	79	114	102	104	366	161	88	112	102	95	76
25	74	79	106	102	118	288	151	87	87	93	94	75
26	74	78	100	101	145	236	142	86	84	89	109	79
27	74	78	103	101	147	201	136	85	100	83	104	173
28	74	78	101	100	136	179	130	85	103	81	97	224
29	73	78	98	105	-----	168	126	89	86	79	88	161
30	73	77	98	132	-----	163	122	111	93	78	104	107
31	77	-----	97	141	-----	157	-----	114	-----	86	154	-----
TOTAL	2,626	2,300	3,597	4,535	4,354	10,981	8,469	3,317	3,899	3,561	3,400	2,889
MEAN	84.7	76.7	116	146	156	354	282	107	130	115	110	96.3
MAX	194	82	304	306	431	1,300	1,020	168	377	216	267	224
MIN	69	73	77	93	104	115	118	85	78	74	78	74
CFSM	.34	.31	.47	.59	.63	1.43	1.14	.43	.53	.47	.44	.39
IN.	.40	.35	.54	.68	.66	1.65	1.28	.50	.59	.54	.51	.43
CAL YR 1969	TOTAL 90,972		MEAN 249		MAX 5,540		MIN 69		CFSM 1.01		IN 13.70	
WTR YR 1970	TOTAL 53,928		MEAN 148		MAX 1,300		MIN 69		CFSM .60		IN 8.12	

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

07376000 Tickfaw River at Holden, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.48	1.56	1.59	1.85	2.34	2.12	2.39	1.90	3.65	2.49	1.48	1.99
2	1.48	1.56	1.60	1.83	3.17	2.05	2.44	1.95	2.98	2.22	1.65	1.79
3	1.48	1.55	1.60	1.81	4.13	2.58	2.45	2.24	3.45	1.78	1.65	1.78
4	1.47	1.54	1.61	1.80	3.72	6.55	2.36	2.36	3.24	1.62	1.55	1.66
5	1.48	1.53	1.62	1.83	3.06	8.17	2.29	2.24	2.87	1.55	1.47	1.59
6	1.47	1.54	1.80	2.35	2.65	7.13	2.21	2.08	2.58	1.51	1.50	1.54
7	1.74	1.54	2.10	2.84	2.41	4.76	2.15	1.95	2.11	1.47	2.63	1.51
8	2.66	1.55	2.61	3.04	2.27	3.88	2.10	1.87	1.89	1.45	2.19	1.49
9	2.90	1.55	3.57	2.74	2.19	3.41	2.06	1.83	1.78	1.43	2.19	1.50
10	2.17	1.55	3.81	2.39	2.12	3.09	2.10	1.81	1.71	2.45	3.13	1.84
11	1.86	1.55	2.73	2.40	2.07	3.00	2.39	1.78	1.67	2.09	2.10	1.63
12	1.71	1.54	2.34	2.79	2.03	3.25	3.98	1.76	1.64	1.85	1.79	1.54
13	1.66	1.54	2.14	3.42	2.00	3.77	5.89	1.74	1.62	2.75	1.63	1.51
14	1.65	1.55	2.02	3.02	1.98	3.53	7.06	1.72	1.60	2.62	1.56	1.49
15	1.61	1.58	1.95	2.64	1.96	3.10	6.76	1.70	1.59	2.50	1.52	1.50
16	1.59	1.60	1.90	2.41	2.00	2.81	6.93	1.69	1.57	2.15	1.52	1.54
17	1.59	1.61	1.87	2.26	2.06	2.80	4.49	1.69	1.55	1.92	1.62	1.49
18	1.58	1.59	1.84	2.17	2.22	3.05	3.54	1.67	1.53	1.91	1.52	1.47
19	1.58	1.63	1.82	2.09	2.23	3.27	3.11	1.66	1.51	1.81	1.64	1.46
20	1.58	1.65	1.80	2.04	2.11	3.41	2.84	1.64	1.50	1.63	1.68	1.45
21	1.58	1.64	1.90	2.00	2.03	3.87	2.68	1.63	1.48	1.57	1.64	1.44
22	1.57	1.62	1.91	1.96	1.97	4.50	2.55	1.63	1.47	1.83	1.93	1.43
23	1.56	1.61	1.91	1.94	1.94	4.52	2.41	1.61	1.83	1.97	1.82	1.44
24	1.55	1.61	2.05	1.92	1.94	3.85	2.30	1.59	1.83	1.74	1.67	1.45
25	1.54	1.61	1.96	1.91	2.08	3.34	2.21	1.58	1.58	1.64	1.66	1.44
26	1.54	1.60	1.89	1.90	2.30	3.00	2.13	1.57	1.55	1.60	1.81	1.49
27	1.54	1.61	1.93	1.90	2.32	2.76	2.07	1.56	1.71	1.53	1.76	2.40
28	1.54	1.60	1.90	1.89	2.23	2.60	2.02	1.56	1.74	1.51	1.69	2.83
29	1.53	1.59	1.86	1.95	-----	2.51	1.98	1.60	1.57	1.49	1.59	2.30
30	1.53	1.59	1.86	2.20	-----	2.47	1.94	1.83	1.64	1.47	1.75	1.79
31	1.58	-----	1.85	2.27	-----	2.42	-----	1.86	-----	1.57	2.24	-----
MAX	2.90	1.65	3.81	3.42	4.13	8.17	7.06	2.36	3.65	2.75	3.13	2.83
MIN	1.47	1.53	1.59	1.80	1.94	2.05	1.94	1.56	1.47	1.43	1.47	1.43

MISSISSIPPI RIVER DELTA

07376500 Natalbany River at Baptist, La.

LOCATION.--Lat 30°30'15", long 90°32'45", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.30, T.6 S., R.7 E., St. Helena meridian, Tangipahoa Parish, near right bank on downstream side of bridge on U.S. Highway 190, 0.7 mile downstream from Still Branch, and 0.7 mile west of Baptist.

DRAINAGE AREA.--79.5 sq mi.

PERIOD OF RECORD.--August 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 11.28 ft above mean sea level. Prior to June 4, 1948, nonrecording gage, and June 4, 1948, to Apr. 13, 1950, water-stage recorder at old highway bridge 100 ft upstream at same datum.

AVERAGE DISCHARGE.--27 years, 107 cfs (18.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,660 cfs Mar. 4 (gage height, 12.17 ft); minimum, 3.0 cfs Oct. 3, 4 (gage height, 3.04 ft).

Period of record: Maximum discharge, 9,550 cfs May 3, 1953 (gage height, 19.73 ft); minimum, 1.8 cfs Nov. 2-5, 1963; minimum gage height, 3.04 ft Oct. 3, 4, 1969.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Records of water temperatures for the water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1057: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	5.0	4.9	6.4	152	17	21	11	218	25	9.0	32
2	3.4	4.6	4.9	6.2	373	15	30	20	127	15	20	24
3	3.3	4.6	4.9	5.8	141	134	26	145	214	11	14	18
4	3.4	4.4	4.7	5.7	57	1,520	21	46	38	9.0	11	14
5	3.4	4.4	4.9	7.7	32	754	18	18	19	8.0	16	12
6	3.5	4.4	16	202	25	295	16	14	15	7.6	28	11
7	58	4.4	111	102	20	150	15	12	12	7.2	48	11
8	396	4.4	24	35	18	111	14	11	11	7.2	25	14
9	50	4.3	15	20	16	67	13	11	10	15	62	13
10	17	4.3	38	15	15	45	16	11	9.6	25	85	11
11	10	4.3	18	82	15	101	153	10	9.3	20	24	9.3
12	7.5	4.3	11	116	14	161	599	10	9.3	13	17	9.0
13	6.6	4.3	9.0	51	14	84	295	9.9	9.6	32	12	9.0
14	9.6	4.2	7.5	30	12	43	119	9.9	8.8	20	9.9	8.8
15	7.1	4.6	6.8	22	12	31	79	9.6	8.2	12	9.0	9.0
16	5.8	5.0	6.4	19	24	26	91	9.9	8.0	10	8.5	9.6
17	5.3	4.6	6.2	17	18	140	74	10	7.7	8.6	13	9.0
18	5.3	4.7	6.0	16	16	162	41	9.6	7.2	7.6	11	8.5
19	5.0	5.5	5.8	15	15	101	30	9.6	7.5	7.4	101	8.2
20	4.9	5.2	5.8	14	14	134	26	9.6	7.2	7.4	57	8.2
21	4.9	5.8	17	14	13	220	22	8.8	7.2	9.4	23	8.0
22	4.7	5.3	14	13	12	183	19	8.8	7.1	15	40	8.2
23	4.6	5.0	9.0	13	12	101	17	8.8	16	20	25	8.8
24	4.4	5.0	7.1	12	12	53	16	8.5	13	14	12	9.6
25	4.6	5.0	6.4	12	34	35	15	8.5	8.2	10	10	10
26	4.6	4.9	6.0	12	37	29	14	8.5	7.2	9.0	25	9.9
27	4.4	5.0	5.8	12	23	25	13	8.2	10	8.0	18	77
28	4.4	4.9	6.0	11	19	22	12	8.2	14	7.6	13	92
29	4.3	5.0	6.4	14	-----	20	12	8.5	10	7.4	10	32
30	4.6	4.9	6.2	87	-----	22	11	10	7.2	8.4	20	17
31	5.5	-----	6.2	37	-----	27	-----	12	-----	11	45	-----
TOTAL	659.5	142.3	400.9	1,024.8	1,165	4,828	1,848	495.9	856.3	387.8	821.4	521.1
MEAN	21.3	4.74	12.9	33.1	41.6	156	61.6	16.0	28.5	12.5	26.5	17.4
MAX	396	5.8	111	202	373	1,520	599	145	218	32	101	92
MIN	3.3	4.2	4.7	5.7	12	15	11	8.2	7.1	7.2	8.5	8.0
CFSM	.27	.06	.16	.42	.52	1.96	.77	.20	.36	.16	.33	.22
IN.	.31	.07	.19	.48	.54	2.26	.86	.23	.40	.18	.38	.24

CAL YR 1969 TOTAL 29,325.1 MEAN 80.3 MAX 3,740 MIN 3.2 CFSM 1.01 IN 13.72
WTR YR 1970 TOTAL 13,151.0 MEAN 36.0 MAX 1,520 MIN 3.3 CFSM .45 IN 6.15

PEAK DISCHARGE (BASE, 1,500 CFS)

NOTE.--No gage-height record June 27 to Aug. 2.

DATE TIME G.H. DISCHARGE DATE TIME G.H. DISCHARGE
3- 4 1000 12.17 1,660

MISSISSIPPI RIVER DELTA

83

07377000 Amite River near Darlington, La.

LOCATION.--Lat 30°53'20", long 90°50'40", in lot 72, T.2 S., R.4 E., St. Helena meridian, St. Helena Parish, near center of span on downstream side of State Highway 10, 1.5 miles upstream from Collins Creek, and 4.0 miles west of Darlington.

DRAINAGE AREA.--580 sq mi.

PERIOD OF RECORD.--March 1949 to September 1950 (annual maximum), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 145.81 ft above mean sea level. Mar. 17, 1949, to Oct. 23, 1950, crest-stage gage; Oct. 24, 1950, to Jan. 12, 1951, nonrecording gage; Jan. 13, 1951, to May 28, 1963, water-stage recorder at former channel 700 ft to the left; and July 30, 1963, to Feb. 12, 1964, nonrecording gage at present site. Prior to Oct. 1, 1963, datum 2.99 ft higher.

AVERAGE DISCHARGE.--20 years, 791 cfs (18.52 inches per year).

EXTREMES.--Maximum discharge during year, 3,630 cfs Mar. 21 (gage height, 9.26 ft); minimum, 194 cfs Oct. 2; minimum gage height, 2.46 ft Aug. 15, 16, Sept. 22, 23, 24.

Period of record: Maximum discharge, 55,700 cfs Apr. 13, 1955 (gage height, 18.18 ft, site and datum then in use); minimum discharge, 188 cfs Oct. 18, 1956.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	222	226	598	285	315	368	272	444	240	236	298
2	196	224	228	397	734	305	358	288	758	228	228	262
3	196	220	230	338	720	312	360	500	1,500	222	226	246
4	198	218	228	312	545	1,120	348	476	914	220	222	282
5	198	216	230	302	391	2,150	338	440	496	216	236	288
6	198	218	394	528	342	1,690	328	350	338	214	300	254
7	276	220	2,380	1,160	322	842	315	310	292	210	312	232
8	300	222	1,760	862	312	612	308	285	270	208	328	222
9	258	220	661	549	302	542	300	272	258	210	338	220
10	236	218	444	406	298	476	308	264	252	264	260	214
11	232	218	382	479	290	493	500	260	246	252	228	214
12	228	216	330	552	285	814	2,090	256	244	350	216	486
13	228	224	300	388	282	692	1,330	252	240	1,070	212	360
14	230	236	288	370	280	566	922	250	238	636	208	418
15	224	222	278	345	282	462	605	246	234	362	205	403
16	224	216	272	330	328	400	682	244	232	285	206	256
17	224	218	268	320	524	406	1,290	246	228	258	220	236
18	222	224	262	310	412	622	762	244	226	258	234	222
19	226	232	262	302	355	577	552	240	224	268	244	216
20	222	256	262	298	330	1,780	898	238	222	256	234	210
21	224	242	290	290	308	3,280	922	238	222	242	256	206
22	222	232	355	285	295	2,600	644	234	236	260	262	205
23	220	224	322	282	290	1,520	458	232	246	278	310	203
24	216	228	290	282	288	978	379	230	234	272	256	206
25	218	228	278	280	315	714	342	264	440	262	218	322
26	218	228	636	280	373	612	325	242	342	238	208	295
27	218	228	640	280	352	563	310	232	264	252	300	315
28	216	228	394	278	328	482	298	232	246	236	250	240
29	214	228	332	278	-----	437	288	236	275	242	256	228
30	218	226	318	272	-----	409	280	234	288	238	302	214
31	220	-----	675	268	-----	385	-----	228	-----	256	270	-----
TOTAL	6,918	6,756	14,215	12,221	10,168	27,156	17,208	8,535	10,649	9,003	7,781	7,973
MEAN	223	225	459	394	363	876	574	275	355	290	251	266
MAX	300	256	2,380	1,160	734	3,280	2,090	500	1,500	1,070	338	486
MIN	196	216	226	268	280	305	280	228	222	208	205	203
CFSM	.38	.39	.79	.68	.63	1.51	.99	.47	.61	.50	.43	.46
IN.	.44	.43	.91	.78	.65	1.74	1.10	.55	.68	.58	.50	.51
CAL YR 1969	TOTAL 220,709		MEAN 605		MAX 8,480		MIN 196		CFSM 1.04		IN 14.15	
WTR YR 1970	TOTAL 138,583		MEAN 380		MAX 3,280		MIN 196		CFSM .65		IN 8.89	

PEAK DISCHARGE (BASE, 5,000 CFS).--No peak above base.

MISSISSIPPI RIVER DELTA

07377500 Comite River near Olive Branch, La.

LOCATION.--Lat 30°45'21", long 91°02'38", in lot 41, T.3 S., R.2 E., St. Helena meridian, East Feliciana Parish, near center of span on downstream side of bridge on State Highway 67, 1,800 ft downstream from Knighton Bayou, and 1.3 miles northeast of Olive Branch.

DRAINAGE AREA.--145 sq mi.

PERIOD OF RECORD.--August 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 115.65 ft above mean sea level (Louisiana Geodetic Survey bench mark). Prior to Aug. 25, 1944, nonrecording gage; Aug. 25, 1944, to Oct. 29, 1949, water-stage recorder and nonrecording gage at site 1,400 ft upstream at same datum.

AVERAGE DISCHARGE.--28 years, 220 cfs (20.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,960 cfs Oct. 7 (gage height, 8.52 ft); minimum, 32 cfs June 22, 23; minimum gage height, 1.65 ft Sept. 26.

Period of record: Maximum discharge, 19,900 cfs Mar. 18, 1961 (gage height, 21.37 ft); minimum, 31 cfs Sept. 9, 1965, Nov. 4, 5, 1968; minimum gage height, 1.55 ft Nov. 4, 5, 1968.

REMARKS.--Records good. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1007: Drainage area. WSP 1177: 1948, 1949 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	43	41	99	62	64	66	46	498	40	56	57
2	40	45	41	73	253	63	66	65	506	38	56	45
3	40	42	41	68	184	66	65	134	717	37	56	56
4	40	42	41	66	87	334	65	94	301	37	65	75
5	41	42	41	66	73	348	62	67	83	35	89	47
6	42	42	300	282	69	106	61	53	61	36	76	42
7	1,700	42	1,460	314	66	84	62	49	54	37	92	40
8	220	42	765	116	66	84	61	47	50	36	57	42
9	68	42	150	82	64	87	60	46	46	37	60	46
10	53	42	120	72	63	84	64	45	43	44	75	46
11	50	41	112	188	61	178	150	45	41	138	56	44
12	49	41	89	232	61	423	451	44	40	62	52	158
13	48	41	77	118	60	168	259	44	39	237	51	194
14	48	42	72	83	60	95	98	44	38	82	51	95
15	48	48	70	72	62	76	71	43	37	61	50	99
16	47	42	68	68	74	69	72	43	36	54	50	52
17	45	41	66	65	74	125	71	43	36	52	50	46
18	43	41	65	64	72	257	64	43	35	54	52	44
19	43	43	64	62	66	146	61	43	35	123	60	44
20	43	43	64	60	54	597	188	42	34	59	57	42
21	43	45	70	59	59	572	127	42	34	54	52	41
22	43	42	84	58	61	294	67	42	33	52	64	42
23	42	42	80	57	61	184	57	42	38	72	88	42
24	42	42	69	57	61	118	53	42	41	54	56	42
25	42	42	66	57	76	95	51	42	46	60	59	43
26	42	41	64	57	75	84	50	44	59	76	71	42
27	42	41	66	56	71	84	48	43	41	67	54	95
28	42	41	64	56	66	78	47	42	65	60	51	50
29	42	41	64	57	-----	73	47	46	52	53	50	44
30	42	41	66	56	-----	72	46	80	42	51	52	42
31	44	-----	148	55	-----	70	-----	56	-----	54	105	-----
TOTAL	3,215	1,265	4,588	2,875	2,161	5,178	2,710	1,601	3,181	1,952	1,913	1,797
MEAN	104	42.2	148	92.7	77.2	167	90.3	51.6	106	63.0	61.7	59.9
MAX	1,700	48	1,460	314	253	597	451	134	717	237	105	194
MIN	40	41	41	55	54	63	46	42	33	35	50	40
CFSM	.72	.29	1.02	.64	.53	1.15	.62	.36	.73	.43	.43	.41
IN.	.82	.32	1.18	.74	.55	1.33	.70	.41	.82	.50	.49	.46

CAL YR 1969 TOTAL 70,668

MEAN 194

MAX 3,400

MIN 40

CFSM 1.34

IN 18.13

WTR YR 1970 TOTAL 32,436

MEAN 88.9

MAX 1,700

MIN 33

CFSM .61

IN 8.32

PEAK DISCHARGE (BASE, 2,500 CFS)

NOTE.--No gage-height record Oct. 18 to Nov. 17.

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-7	0845	8.52	2,960				

MISSISSIPPI RIVER DELTA

85

07378000 Comite River near Comite, La.

LOCATION.--Lat 30°30'45", long 91°04'25", in NW $\frac{1}{4}$ sec.24, T.6 S., R.1 E., St. Helena meridian, East Baton Rouge Parish, near left bank on downstream side of bridge on State Highway 946, 0.5 mile downstream from Blackwater Bayou, and 2.6 miles west of Comite.

DRAINAGE AREA.--284 sq mi (see REMARKS).

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 25.85 ft above mean sea level (Louisiana Geodetic Survey bench mark; levels by Louisiana Department of Public Works). Prior to Apr. 22, 1946, nonrecording gage at same site. Prior to Oct. 1, 1962, at datum 3.00 ft higher.

AVERAGE DISCHARGE.--26 years, 436 cfs (20.85 inches per year).

EXTREMES.--Current year: Maximum discharge, 13,800 cfs Oct. 7 (gage height, 17.99 ft); minimum, 45 cfs June 16, 20, 22, 23; minimum gage height, 2.17 ft (Nov. 28, 29, 30, Dec. 1, 2, 3, 4, 5).

Period of record: Maximum discharge, 20,900 cfs Apr. 29, 1962; maximum gage height, 28.64 ft May 19, 1953, present datum (prior to channel dredging August 1961); minimum daily discharge, 29 cfs Oct. 29 to Nov. 3, 1963.

REMARKS.--Records good. Since 1957, entire flow from 46 sq mi diverted from basin. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

REVISIONS.--WSP 1920: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	57	51	130	193	90	105	70	236	50	91	140
2	53	57	51	83	534	84	102	605	1,570	49	94	85
3	53	57	51	73	491	655	98	1,040	1,370	48	79	102
4	53	55	51	69	195	3,310	97	480	714	48	80	97
5	53	55	52	70	134	1,140	94	184	200	47	99	96
6	53	54	143	735	112	359	88	105	90	46	244	75
7	9,880	54	2,810	758	102	246	86	80	65	46	195	69
8	5,490	54	1,500	293	97	289	85	73	59	46	188	100
9	1,170	54	388	155	91	205	84	71	55	46	97	146
10	603	53	398	119	86	154	192	69	53	52	83	116
11	206	53	221	308	85	573	443	68	51	60	92	132
12	119	53	133	669	85	1,150	2,150	67	49	128	84	238
13	87	52	91	294	83	529	713	66	48	198	69	196
14	75	52	77	166	82	222	263	66	47	270	64	172
15	70	53	72	126	81	158	246	66	46	138	60	120
16	67	53	70	107	116	130	245	66	46	94	60	130
17	65	53	69	95	136	219	139	66	46	165	60	104
18	63	52	68	91	114	562	111	65	46	565	70	77
19	62	53	68	80	98	382	95	66	46	180	100	72
20	62	53	68	84	88	731	125	66	46	140	85	69
21	61	53	87	83	83	1,320	273	65	46	128	70	67
22	60	54	86	81	82	732	135	65	46	251	80	67
23	59	53	84	79	80	420	93	64	74	132	120	67
24	58	52	76	78	81	228	81	64	83	130	80	69
25	58	52	73	76	148	172	76	64	56	96	74	83
26	57	52	73	75	158	148	75	64	54	252	100	112
27	57	52	69	74	122	132	72	65	55	351	80	959
28	56	52	68	74	102	128	71	66	51	188	65	228
29	56	51	68	75	-----	118	70	64	64	108	60	74
30	56	51	68	82	-----	114	70	81	56	248	80	55
31	57	-----	68	75	-----	112	-----	177	-----	120	200	-----
TOTAL	18,972	1,599	7,252	5,366	3,859	14,812	6,580	4,278	5,488	4,440	2,998	4,117
MEAN	612	53.3	234	173	138	478	219	138	183	143	96.7	137
MAX	9,880	57	2,810	758	534	3,310	2,150	1,040	1,570	565	244	959
MIN	53	51	51	69	80	84	70	64	46	46	60	55
CFSM	2.15	.19	.82	.61	.49	1.68	.77	.49	.64	.50	.34	.48
IN.	2.48	.21	.95	.70	.51	1.94	.86	.56	.72	.58	.39	.54

CAL YR 1969	TOTAL	149,613	MEAN	410	MAX	9,880	MIN	51	CFSM	1.44	IN	19.59
WTR YR 1970	TOTAL	79,761	MEAN	219	MAX	9,880	MIN	46	CFSM	.77	IN	10.44

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-7	2315	17.99	13,800				

MISSISSIPPI RIVER DELTA

07378000 Comite River near Comite, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.60	2.36	2.18	3.15	3.26	2.81	2.89	2.73	3.39	2.66	2.86	
2	2.60	2.35	2.18	2.87	4.46	2.77	2.86	4.40	6.56	2.63	2.89	2.92
3	2.59	2.35	2.18	2.77	4.44	3.88	2.84	5.64	6.26	2.61	2.78	2.96
4	2.59	2.31	2.18	2.72	3.41	8.60	2.83	4.30	4.91	2.60	2.78	2.92
5	2.59	2.29	2.20	2.73	3.11	5.79	2.81	3.39	3.46	2.58	2.97	2.91
6	2.61	2.28	2.73	4.89	2.97	3.97	2.77	3.02	3.05	2.56	3.59	2.74
7	17.49	2.27	8.09	5.00	2.90	3.60	2.76	2.85	2.89	2.57	3.41	2.66
8	14.10	2.27	6.36	3.77	2.86	3.76	2.75	2.78	2.79	2.57	3.39	2.82
9	6.81	2.25	4.03	3.27	2.82	3.43	2.74	2.74	2.74	2.57	2.90	3.22
10	4.62	2.24	4.10	3.09	2.79	3.17	3.33	2.71	2.70	2.68	2.82	3.04
11	3.47	2.23	3.53	3.75	2.78	4.36	4.01	2.69	2.67	2.78	2.83	3.07
12	3.10	2.22	3.16	4.80	2.78	5.54	7.33	2.67	2.63	3.21	2.72	3.57
13	2.91	2.21	2.94	3.78	2.76	4.43	4.90	2.66	2.61	3.43	2.66	3.43
14	2.79	2.20	2.82	3.32	2.75	3.50	3.67	2.65	2.59	3.69	-----	3.34
15	2.73	2.23	2.76	3.13	2.74	3.19	3.56	2.64	2.56	3.25	-----	3.07
16	2.68	2.24	2.73	3.04	2.95	3.03	3.61	2.64	2.56	3.06	-----	3.13
17	2.63	2.22	2.71	2.99	3.12	3.42	3.19	2.65	2.56	3.25	-----	2.96
18	2.58	2.21	2.70	2.94	2.98	4.53	3.05	2.63	2.56	4.50	-----	2.76
19	2.55	2.25	2.69	2.91	2.87	4.04	2.97	2.65	2.56	3.34	-----	2.69
20	2.52	2.24	2.70	2.89	2.80	4.84	3.12	2.65	2.55	3.14	-----	2.66
21	2.49	2.23	2.89	2.88	2.76	6.15	3.71	2.62	2.55	3.03	-----	2.61
22	2.45	2.27	2.90	2.86	2.75	4.95	3.17	2.61	2.55	3.63	-----	2.61
23	2.42	2.22	2.88	2.84	2.73	4.16	2.95	2.61	2.76	3.08	-----	2.62
24	2.41	2.21	2.80	2.83	2.74	3.56	2.86	2.61	3.01	3.07	-----	2.64
25	2.39	2.20	2.77	2.81	3.18	3.28	2.81	2.60	2.76	2.88	-----	2.81
26	2.37	2.19	2.77	2.80	3.25	3.13	2.80	2.60	2.72	3.62	-----	2.83
27	2.35	2.19	2.72	2.78	3.03	3.04	2.76	2.64	2.73	3.96	-----	5.38
28	2.33	2.18	2.71	2.78	2.89	3.01	2.74	2.65	2.66	3.38	-----	3.55
29	2.32	2.17	2.69	2.80	-----	2.95	2.73	2.61	2.85	2.96	-----	2.95
30	2.32	2.17	2.69	2.87	-----	2.92	2.73	2.80	2.75	3.58	-----	2.76
31	2.38	-----	2.70	2.80	-----	2.90	-----	3.34	-----	3.05	-----	-----
MAX	17.49	2.36	8.09	5.00	4.46	8.60	7.35	5.64	6.56	4.50	3.59	5.38
MIN	2.32	2.17	2.18	2.72	2.73	2.77	2.73	2.60	2.55	2.56	2.66	2.61

MISSISSIPPI RIVER DELTA

87

07378500 Amite River near Denham Springs, La.

LOCATION.--Lat 30°27'50", long 90°59'25", in lot 2, T.7 S., R.2 E., St. Helena meridian, Livingston Parish, on right bank at downstream side of bridge on U.S. Highway 190, 1,000 ft downstream from Comite River, 3 miles southwest of town of Denham Springs, and 15 miles east of Baton Rouge.

DRAINAGE AREA.--1,280 sq mi.

PERIOD OF RECORD.--September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.87 ft above mean sea level. Prior to Aug. 8, 1939, nonrecording gage at same site and datum. Auxiliary water-stage recorder 3 miles downstream at datum 3.12 ft above mean sea level (Corps of Engineers bench mark). Oct. 1, 1945, to Dec. 23, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 1,824 cfs (19.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 21,700 cfs Oct. 8 (gage height, 25.18 ft); minimum, 277 cfs Oct. 4 (gage height, 5.66 ft).
Period of record: Maximum discharge, 67,000 cfs May 20, 1953; maximum gage height, 32.46 ft May 20, 1953; minimum daily discharge, 271 cfs Oct. 17, 18, 1956; minimum gage height, 4.56 ft Nov. 18, 1938.
Maximum stage known, 35.4 ft Mar. 15, 1921, from floodmark.

REMARKS.--Records good. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report. Since 1957, entire flow from 46 sq mi diverted from basin.

REVISIONS.--WSP 1920: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	428	340	712	668	552	836	581	1,030	470	458	620
2	281	412	335	866	1,650	510	805	1,080	2,280	440	599	554
3	279	412	335	683	1,960	1,060	752	2,590	2,540	405	442	557
4	279	398	335	580	1,420	6,060	728	2,050	2,610	385	428	512
5	281	385	342	548	1,000	5,610	710	1,240	1,680	372	503	482
6	283	375	455	1,440	777	4,340	676	930	1,040	362	892	462
7	7,160	375	2,410	2,120	653	2,980	650	763	766	355	647	440
8	20,200	378	4,030	1,880	596	2,240	629	659	638	350	819	491
9	11,300	372	3,210	1,400	555	1,600	611	602	572	350	721	938
10	4,310	372	1,920	1,010	523	1,270	868	569	527	440	596	623
11	1,690	365	1,540	1,170	502	1,720	1,220	548	494	455	572	460
12	951	362	1,010	1,890	487	2,870	4,240	527	472	463	472	791
13	779	358	775	1,690	475	2,540	6,660	512	460	780	415	693
14	684	352	663	1,110	468	1,640	4,830	500	448	1,420	388	784
15	632	358	602	852	465	1,240	2,320	488	438	1,240	375	662
16	599	362	561	728	491	1,040	1,960	480	428	875	405	690
17	566	355	534	660	571	1,190	1,410	480	415	614	380	584
18	539	352	513	615	666	1,710	1,820	472	410	1,180	542	460
19	524	380	496	582	671	1,750	1,390	478	402	732	524	418
20	512	362	488	555	577	1,720	1,170	506	395	620	460	410
21	500	368	592	535	524	3,490	1,400	468	390	509	455	410
22	478	392	608	516	494	4,930	1,450	452	388	1,120	539	365
23	460	372	597	502	474	4,390	1,170	448	390	858	500	362
24	452	360	597	488	464	2,940	978	440	587	714	551	378
25	445	355	542	484	649	1,900	880	438	475	766	521	470
26	435	350	543	483	684	1,430	780	435	506	791	533	442
27	428	348	559	475	638	1,210	686	465	602	1,080	686	1,940
28	440	348	838	472	611	1,110	653	470	512	794	560	1,550
29	408	340	684	482	-----	1,010	626	438	482	560	468	760
30	405	340	588	520	-----	918	602	669	470	599	551	509
31	438	-----	539	474	-----	875	-----	798	-----	563	830	-----
TOTAL	57,023	11,086	27,581	26,522	19,713	67,845	43,510	21,576	22,847	20,662	16,832	18,817
MEAN	1,839	370	890	856	704	2,189	1,450	696	762	667	543	627
MAX	20,200	428	4,030	2,120	1,960	6,060	6,660	2,590	2,610	1,420	892	1,940
MIN	279	340	335	472	464	510	602	435	388	350	375	362
CFSM	1.44	.29	.70	.67	.55	1.71	1.13	.54	.59	.52	.42	.49
IN.	1.66	.32	.80	.77	.57	1.97	1.26	.63	.66	.60	.49	.55
CAL YR 1969	TOTAL 570,330			MEAN 1,563		MAX 21,600	MIN 279	CFSM 1.22	IN 16.57			
WTR YR 1970	TOTAL 354,014			MEAN 970		MAX 20,200	MIN 279	CFSM .76	IN 10.29			

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-8	1145	25.18	21,700				

MISSISSIPPI RIVER DELTA

07378740 Bayou Braud near St. Gabriel, La.

LOCATION.--Lat 30°15'16", long 91°03'00", in sec.19, T.9 S., R.2 E., Iberville Parish, near center of span on upstream side of bridge on State Highway 74, 2.3 miles east of St. Gabriel, and 3.9 miles west of Dutchtown.

PERIOD OF RECORD.--October 1965 to April 1970 (gage height only, discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 18 ft (from topographic map).

EXTREMES.--Maximum gage height during period October 1969 to April 1970, 8.52 ft Mar. 4, from recorded range in stage; minimum, 3.74 ft Oct. 16.

Period of record: Maximum gage height, 10.19 ft Apr. 12, 1969; minimum, 1.68 ft Dec. 2, 1967.

REMARKS.--Discharge regulated by locks at Manchac.

GAGE HEIGHT, IN FEET, AT 0800, OCTOBER 1969 TO APRIL 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.82	4.46	4.30	4.65	----	4.67	5.25					
2	3.81	4.45	4.30	4.56	5.82	4.46	5.30					
3	3.79	4.44	4.29	4.47	5.19	4.43	5.28					
4	3.78	4.43	4.29	4.35	4.63	----	5.27					
5	3.77	4.42	4.29	4.25	4.38	5.95	5.27					
6	3.76	4.42	4.33	4.85	4.45	5.75	5.26					
7	5.10	4.41	4.58	4.65	4.48	5.75	5.25					
8	4.71	4.41	4.58	4.38	4.51	----	5.24					
9	4.67	4.40	4.63	4.32	4.54	----	----					
10	4.65	4.39	5.00	4.35	4.55	----	----					
11	4.65	4.38	4.90	4.73	4.55	----	----					
12	4.64	4.38	4.89	4.80	4.59	----	----					
13	4.63	4.42	4.88	4.82	4.57	----	----					
14	4.63	4.43	4.88	4.83	4.57	----	----					
15	4.59	4.37	4.87	4.85	4.59	----	----					
16	4.57	4.37	4.87	4.87	4.71	5.20	----					
17	4.56	4.36	4.79	4.87	4.72	5.15	----					
18	4.55	4.35	4.69	4.88	4.74	5.30	----					
19	4.53	4.41	4.60	4.89	4.76	5.28	----					
20	4.53	4.36	4.50	4.84	4.77	5.54	----					
21	4.53	4.36	4.49	4.74	4.76	5.34	----					
22	4.51	4.35	4.43	4.62	4.76	5.11	----					
23	4.48	4.35	4.39	4.49	4.76	5.09	----					
24	4.47	4.35	4.40	4.47	4.77	5.14	----					
25	4.46	4.35	4.55	4.46	5.13	5.17	----					
26	4.45	4.35	4.79	4.49	5.01	5.23	----					
27	4.44	4.34	4.78	4.50	4.89	5.22	----					
28	4.43	4.35	4.80	4.50	4.77	5.22	----					
29	4.42	4.33	4.80	4.53	----	5.23	----					
30	4.41	4.32	4.80	4.93	----	5.24	----					
31	4.47	----	4.75	4.94	----	5.26	----		----			----
MAX	5.10	4.46	5.00	4.94	----	----	----					
MIN	3.76	4.32	4.29	4.25	4.38	----	----					

MISSISSIPPI RIVER DELTA

89

07380224, Black Bayou near Duplessis, La.

LOCATION.--Lat 30°16'35", long 90°55'15", on line between secs.8 and 9, T.9 S., R.3 E., St. Helena meridian, Ascension Parish, near right bank on downstream side of bridge on State Highway 44, 1.2 miles northeast of Duplessis, and 4.2 miles upstream from Bayou Narcisse.

DRAINAGE AREA.--3.66 sq mi.

PERIOD OF RECORD.--November 1964 to September 1970 (discontinued).

GAGE.--Water-stage recorder, concrete control. Altitude of gage is 10 ft (from topographic map).

AVERAGE DISCHARGE.--5 years (1966-70), 3.76 cfs (13.95 inches per year).

EXTREMES.--Current year: Maximum discharge, 191 cfs Mar. 4 (gage height, 6.22 ft); no flow for many days.

Period of record: Maximum discharge, 452 cfs Feb. 12, 1966 (gage height, 8.19 ft); no flow for many days each year.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.02	20	.08	0	0	3.6	0	0	41
2	0	0	0	0	14	.04	.05	.08	.08	0	0	34
3	0	0	0	0	1.8	14	0	11	0	0	.13	5.6
4	0	0	0	0	.55	133	0	1.9	0	0	.19	2.0
5	0	0	0	.06	.20	5.8	0	.10	0	0	.24	.54
6	0	0	.07	19	.09	1.3	0	0	0	0	.01	.03
7	38	0	4.1	2.0	.05	4.5	0	0	0	0	0	0
8	6.8	0	.71	.55	.03	5.2	0	0	0	0	0	17
9	.96	0	1.5	.18	.01	1.3	0	0	0	0	0	16
10	.26	0	13	.08	0	.50	.03	0	0	0	0	1.8
11	.09	0	1.6	7.4	0	23	13	0	0	0	0	37
12	.05	0	.55	3.1	0	6.1	16	0	0	0	0	28
13	.03	0	.15	1.2	0	1.5	2.2	0	0	15	0	1.8
14	.02	0	.06	.32	0	.88	.48	0	0	19	0	.22
15	.01	0	.03	.10	0	.56	.05	0	0	1.3	0	.03
16	.01	0	.01	.06	2.8	.24	0	0	0	.05	0	0
17	0	0	0	.03	1.5	11	0	0	0	0	8.0	0
18	0	0	0	.02	.42	5.3	0	0	0	4.0	6.7	0
19	0	0	0	0	.12	3.6	0	0	0	15	.41	0
20	0	0	0	0	.04	10	0	0	0	1.2	.01	.08
21	0	0	.20	0	.01	8.0	0	0	0	13	.01	.09
22	0	0	.17	0	0	5.4	0	0	0	6.3	0	8.6
23	0	0	.17	0	0	1.5	0	0	0	.42	0	19
24	0	0	.08	0	0	.51	0	0	.24	.01	5.0	9.3
25	0	0	2.2	0	14	.14	0	0	2.4	0	19	1.5
26	0	0	1.1	0	2.1	.03	0	0	.32	0	7.5	.34
27	0	0	.32	0	.66	0	0	0	0	0	5.0	.02
28	0	0	.12	0	.24	0	0	.34	0	0	.48	0
29	0	0	.10	.50	-----	0	0	.03	.01	0	1.4	0
30	0	0	.06	6.6	-----	0	0	35	.33	0	1.5	0
31	0	-----	.03	.96	-----	0	-----	19	-----	0	1.2	-----
TOTAL	46.23	0	26.33	42.18	58.62	243.48	31.81	67.45	6.98	75.28	56.78	223.95
MEAN	1.49	0	.85	1.36	2.09	7.85	1.06	2.18	.23	2.43	1.83	7.47
MAX	38	0	13	19	20	133	16	35	3.6	19	19	41
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	.41	0	.23	.37	.57	2.15	.29	.59	.06	.66	.50	2.04
IN.	.47	0	.27	.43	.60	2.47	.32	.69	.07	.76	.58	2.28
CAL YR 1969	TOTAL 1,494.96		MEAN 4.10		MAX 204		MIN 0		CFSM 1.12	IN 15.19		
WTR YR 1970	TOTAL 879.09		MEAN 2.41		MAX 133		MIN 0		CFSM .66	IN 8.93		

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

MISSISSIPPI RIVER DELTA

07380225 Black Bayou near Gonzales, La.

LOCATION.--Lat 30°15'32", long 90°54'15", on line between secs. 15 and 16, T.9 S., R.3 E., Ascension Parish, near center of span on downstream side of bridge on Parish Road 932, 1.8 miles northeast of Gonzales, and 2.3 miles upstream from Bayou Narcisse.

DRAINAGE AREA.--8.93 sq mi.

PERIOD OF RECORD.--November 1964 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5.0 ft (from topographic map).

EXTREMES.--Current year: Maximum gage height, 6.02 ft Sept. 11; minimum, 0.28 ft Mar. 24.

Period of record: Maximum gage height, 8.75 ft Feb. 12, 1966; minimum, -0.22 ft Feb. 27, 1965.

REMARKS.--Gage height affected by tide at low stages.

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.35	3.25	.59	.95	1.46	1.52	2.29	2.41	2.62	1.70	1.89	2.98
2	2.09	3.05	.32	1.10	1.69	1.74	1.72	2.47	3.15	1.67	2.12	4.02
3	1.90	2.77	.65	1.27	1.57	2.01	1.74	2.81	3.00	1.20	2.45	2.93
4	1.58	2.06	.57	1.08	1.04	5.80	2.01	2.35	2.77	1.28	2.63	2.46
5	1.54	1.59	1.37	1.37	1.00	3.84	1.72	1.95	2.42	1.39	2.42	2.00
6	2.10	1.28	2.32	2.99	1.12	2.58	1.31	1.61	1.46	1.70	2.10	1.68
7	2.78	1.35	2.57	1.47	1.22	2.48	1.24	1.35	1.38	1.66	1.89	1.45
8	2.93	1.44	2.17	.45	1.13	2.65	1.37	1.53	1.65	.83	1.75	1.35
9	2.71	1.43	2.30	.34	.92	2.35	1.67	1.83	1.75	.65	1.62	2.21
10	2.74	1.57	3.02	.32	.53	1.68	1.85	2.25	1.68	.60	1.15	1.86
11	2.67	1.66	2.50	.72	.34	2.17	1.94	2.45	1.83	.44	.85	2.17
12	2.66	1.49	1.82	1.22	.38	2.55	3.94	2.52	2.15	.74	1.00	5.30
13	2.72	1.51	1.17	1.22	.65	1.48	2.29	2.50	2.14	1.07	1.28	2.99
14	2.54	1.42	.92	1.35	1.04	.69	1.86	2.41	1.47	2.39	1.53	2.46
15	1.79	.87	.69	1.66	1.28	.38	1.77	2.37	.97	1.83	1.94	2.68
16	1.65	.77	.85	1.76	1.54	.57	2.10	2.23	1.64	1.81	1.95	2.97
17	1.65	1.47	1.29	1.90	.93	2.58	2.09	2.38	1.92	1.62	1.84	3.02
18	1.90	1.86	1.36	1.65	.71	2.32	2.04	2.62	2.00	1.66	2.10	2.80
19	2.30	1.69	1.37	1.49	.85	2.27	2.27	2.77	1.80	1.74	2.06	2.59
20	2.62	.77	1.30	1.07	.82	2.04	1.92	2.87	1.63	1.53	2.06	2.66
21	2.73	.79	1.60	.75	1.07	1.93	1.77	2.92	1.68	1.65	1.75	2.67
22	2.71	.90	.84	.86	.72	.79	2.19	2.88	1.85	2.85	1.60	2.66
23	2.70	1.15	.67	.99	.89	.96	2.31	2.78	1.75	2.27	1.41	2.86
24	2.75	1.30	.80	.95	1.24	.43	2.27	2.62	1.71	1.96	1.26	2.86
25	2.95	1.35	.72	1.29	2.22	.58	2.14	2.52	1.47	2.30	1.74	2.77
26	3.12	1.26	1.34	1.18	1.04	1.09	2.16	2.12	.73	2.37	1.81	2.86
27	3.04	1.24	.70	1.22	.97	1.67	2.16	1.83	.37	2.29	2.36	3.06
28	2.80	1.33	1.53	1.55	1.17	2.25	2.19	1.93	.34	2.04	2.50	2.92
29	2.61	1.22	1.87	1.59	-----	2.20	2.19	2.30	.61	1.80	2.63	2.79
30	2.81	1.10	1.72	1.62	-----	2.12	2.29	2.66	1.20	1.80	2.74	2.85
31	3.04	-----	1.20	.96	-----	2.19	-----	2.44	-----	1.84	2.98	-----
MAX	3.12	3.25	3.02	2.99	2.22	5.80	3.94	2.92	3.15	2.85	2.98	5.30
MIN	1.54	.77	.32	.32	.34	.38	1.24	1.35	.34	.44	.85	1.35

MISSISSIPPI RIVER DELTA

91

07380400 Bayou Lafourche at Donaldsonville, La.

LOCATION.--Lat 30°06'00", long 90°58'40", in Lot 96, T.11 S., R.14 E., Louisiana meridian, Ascension Parish, on left bank 40 ft upstream from culvert under State Highway 18 in Donaldsonville, and 1,500 ft downstream from Donaldsonville Pumping Plant.

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark, levels by Louisiana Department of Highways).

AVERAGE DISCHARGE.--13 years, 273 cfs (197,800 acre-ft per year). 12 years, 272 cfs; figure published in Water Resources Data for Louisiana, 1969, in error.

EXTREMES.--Period of record: Maximum daily discharge, 542 cfs Apr. 10, 1967, no flow June 11, 14, 1959, Feb. 23, 24-27, 28, 1970.

REMARKS.--Records good. Pumping plant at Donaldsonville pumps total flow of Bayou Lafourche from Mississippi River except for small amounts of storm drainage during freshets. Records of chemical analyses, water temperatures, and suspended-sediment loads for the water year 1970 are published in Part 2 of this report. See following page for table of daily elevation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	344	460	345	192	370	170	271	266	253	202	220
2	204	339	458	345	121	390	171	391	268	248	200	215
3	200	332	457	348	4.3	466	170	434	238	243	206	211
4	200	325	462	358	102	424	168	400	193	238	277	204
5	200	322	471	366	333	199	168	363	160	233	408	201
6	204	320	401	338	311	151	173	333	120	229	360	197
7	206	318	364	253	284	138	176	318	145	228	217	201
8	204	317	353	244	105	127	180	317	158	225	212	233
9	202	317	358	246	128	110	172	311	138	221	205	238
10	201	317	363	266	189	89	182	328	144	222	204	220
11	202	368	353	288	192	95	181	339	220	220	263	212
12	204	430	347	306	192	112	228	380	227	221	433	211
13	275	424	344	317	194	128	263	400	229	232	451	212
14	422	442	342	325	195	147	232	415	232	236	460	212
15	439	444	341	291	195	157	206	424	241	223	464	215
16	390	444	281	124	196	168	215	440	263	214	469	215
17	317	444	327	74	210	182	227	457	272	217	473	212
18	313	446	335	50	235	188	235	444	271	215	403	210
19	313	442	336	169	234	193	239	439	261	217	250	210
20	324	439	338	414	241	197	244	439	262	216	228	215
21	325	437	361	437	245	206	178	435	258	221	223	217
22	341	439	347	443	245	210	201	422	258	246	218	219
23	347	440	341	333	100	205	213	364	262	225	215	228
24	352	444	338	229	0	182	204	345	265	211	216	225
25	457	444	345	211	0	182	196	329	277	208	238	312
26	471	444	345	200	0	180	193	320	271	208	226	444
27	475	448	344	195	0	181	188	318	267	210	218	462
28	473	453	344	192	115	174	185	308	270	210	211	469
29	460	457	347	191	-----	170	194	298	263	205	210	473
30	430	458	347	189	-----	128	197	281	256	204	223	475
31	355	-----	344	187	-----	169	-----	258	-----	202	228	-----
TOTAL	9,712	12,038	11,294	8,274	4,558.3	6,018	5,949	11,321	6,955	6,901	8,811	7,788
MEAN	313	401	364	267	163	194	198	365	232	223	284	260
MAX	475	458	471	443	333	466	263	457	277	253	473	475
MIN	200	317	281	50	0	89	168	258	120	202	200	197
AC-FT	19,260	23,880	22,400	16,410	9,040	11,940	11,800	22,460	13,800	13,690	17,480	15,450
CAL YR 1969	TOTAL 95,912		MEAN 263		MAX 475		MIN 29		AC-FT 190,200			
WTR YR 1970	TOTAL 99,619.30		MEAN 273		MAX 475		MIN 0		AC-FT 197,600			

MISSISSIPPI RIVER DELTA

07380400 Bayou Lafourche at Donaldsonville, La.--Continued

ELEVATION, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.67	8.01	8.69	8.02	6.52	8.17	6.25	7.33	7.35	7.22	6.65	6.86
2	6.67	7.98	8.68	8.02	5.61	8.30	6.26	8.30	7.38	7.17	6.62	6.80
3	6.62	7.93	8.67	8.04	4.89	8.72	6.25	8.54	7.04	7.11	6.70	6.76
4	6.62	7.88	8.70	8.10	6.50	8.49	6.22	8.35	6.54	7.05	7.26	6.68
5	6.63	7.86	8.75	8.15	7.94	6.59	6.23	8.13	6.13	7.00	8.40	6.64
6	6.68	7.84	8.36	7.95	7.75	6.00	6.28	7.93	5.63	6.96	8.07	6.59
7	6.70	7.83	8.14	7.22	7.54	5.84	6.33	7.83	5.94	6.94	6.81	6.64
8	6.68	7.82	8.07	7.12	6.73	5.71	6.38	7.82	6.10	6.91	6.76	6.96
9	6.65	7.82	8.10	7.15	6.84	5.50	6.27	7.78	5.85	6.87	6.69	7.04
10	6.64	7.82	8.13	7.36	7.51	5.21	6.40	7.90	5.91	6.88	6.67	6.85
11	6.65	8.16	8.07	7.58	7.54	5.30	6.39	7.98	6.86	6.85	7.11	6.77
12	6.67	8.52	8.03	7.73	7.55	5.51	6.94	-----	6.93	6.87	8.54	6.76
13	7.26	8.48	8.01	7.82	7.57	5.72	7.33	-----	6.96	6.98	8.64	6.77
14	8.48	8.59	8.00	7.88	7.58	5.95	6.98	8.44	6.99	7.03	8.69	6.77
15	8.57	8.60	7.99	7.23	7.58	6.08	6.70	8.49	7.09	6.88	8.71	6.80
16	8.30	8.60	7.31	5.66	7.59	6.22	6.80	8.58	7.33	6.79	8.74	6.80
17	7.82	8.60	7.89	5.02	7.74	6.39	6.93	8.67	7.42	6.82	8.76	6.77
18	7.79	8.61	7.95	4.69	8.04	6.48	7.02	8.60	7.41	6.80	8.37	6.75
19	7.79	8.59	7.96	6.02	8.03	6.54	7.07	8.57	7.31	6.82	7.18	6.75
20	7.87	8.57	7.97	8.43	8.11	6.59	7.12	8.57	7.32	6.80	6.95	6.80
21	7.88	8.56	8.12	8.56	8.15	6.70	6.35	8.55	7.28	6.85	6.89	6.82
22	8.00	8.57	8.03	8.60	8.15	6.74	6.63	8.48	7.28	7.14	6.83	6.84
23	8.03	8.58	7.99	7.82	7.08	6.69	6.78	8.14	7.31	6.91	6.80	6.94
24	8.04	8.60	7.97	6.96	6.85	6.39	6.67	8.02	7.35	6.76	6.80	6.91
25	8.67	8.60	8.02	6.75	6.62	6.39	6.57	7.91	7.47	6.72	7.05	7.65
26	8.75	8.60	8.02	6.62	6.61	6.38	6.54	7.84	7.41	6.72	6.92	8.60
27	8.77	8.62	8.01	6.56	6.04	6.39	6.47	7.83	7.37	6.75	6.83	8.70
28	8.76	8.65	8.01	6.52	6.36	6.30	6.43	7.75	7.40	6.74	6.76	8.74
29	8.69	8.67	8.03	6.52	-----	6.24	6.54	7.66	7.33	6.69	6.74	8.76
30	8.52	8.68	8.03	6.49	-----	5.71	6.58	7.51	7.26	6.67	6.88	8.77
31	8.08	-----	8.01	6.46	-----	6.23	-----	7.28	-----	6.65	6.95	-----
MAX	8.77	8.68	8.75	8.60	8.15	8.72	7.33	8.67	7.47	7.22	8.76	8.77
MIN	6.62	7.82	7.31	4.69	4.89	5.21	6.22	7.28	5.63	6.65	6.62	6.59

MISSISSIPPI RIVER DELTA

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07381000 Bayou Lafourche at Thibodaux, La.

LOCATION.--Lat 29°47'52", long 90°49'21", in lot 117, T.15 S., R.16 E., Lafourche Parish, on downstream side of left pier of drawspan of bridge on State Highway 20 at Thibodaux, 2.7 miles upstream from Laurel Valley Canal.

PERIOD OF RECORD.--April 1966 to current year (elevations only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Louisiana Department of Public Works).

EXTREMES.--Current year: Maximum elevation, 5.97 ft Mar. 4; minimum, 2.84 ft Feb. 27.
Period of record: Maximum elevation, 6.74 ft May 21, 1966; minimum, 0.82 ft Dec. 2, 1966.

REMARKS.--Low-water sill about 1,000 ft downstream since Nov. 5, 1969. Records of suspended-sediment loads for the water year 1970 are published in Part 2 of this report.

ELEVATION, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.28	5.32	5.55	5.51	4.90	3.66	5.27	5.23	5.38	5.23	5.10	5.33
2	5.25	5.30	5.54	5.51	5.03	4.70	5.31	5.43	5.77	5.22	5.11	5.30
3	5.24	5.29	5.53	5.51	4.70	5.09	5.26	5.70	5.67	5.22	5.11	5.33
4	5.30	5.24	5.53	5.52	4.14	5.92	5.28	5.74	5.38	5.21	5.14	5.24
5	5.35	5.22	5.61	5.52	4.19	5.51	5.34	5.67	5.22	5.20	5.27	5.15
6	5.41	5.22	5.68	5.59	5.02	5.20	5.40	5.62	5.02	5.18	5.44	5.16
7	5.24	5.24	5.67	5.47	5.15	5.12	5.42	5.57	4.89	5.18	5.39	5.13
8	5.25	5.20	5.59	5.36	5.16	5.15	5.20	5.52	4.98	5.18	5.22	5.14
9	5.24	5.20	5.62	5.30	4.81	5.06	5.20	5.51	4.97	5.16	5.18	5.55
10	5.24	5.22	5.70	5.29	4.67	5.06	5.21	5.55	4.93	5.19	5.15	5.35
11	5.27	5.21	5.64	5.41	4.87	5.18	5.30	5.59	4.97	5.16	5.12	5.21
12	5.34	5.32	5.59	5.41	4.95	5.22	5.41	5.53	5.12	5.16	5.32	5.17
13	5.35	5.41	5.58	5.40	4.98	5.16	5.50	5.56	5.16	5.20	5.50	5.23
14	5.50	5.41	5.57	5.42	5.01	5.14	5.55	5.56	5.19	5.40	5.55	5.23
15	5.63	5.44	5.55	5.42	5.03	5.25	5.33	5.58	5.21	5.28	5.57	5.20
16	5.64	5.47	5.54	5.28	5.07	5.27	5.30	5.65	5.21	5.18	5.62	5.21
17	5.57	5.50	5.43	5.08	5.02	5.15	5.30	5.80	5.24	5.22	5.64	5.20
18	5.47	5.49	5.51	4.95	4.98	5.22	5.31	5.70	5.30	5.20	5.62	5.21
19	5.45	5.42	5.48	4.87	5.00	5.25	5.35	5.67	5.32	5.31	5.51	5.25
20	5.52	5.40	5.44	4.84	5.00	5.30	5.37	5.63	5.26	5.23	5.32	5.29
21	5.56	5.44	5.63	5.25	4.94	5.50	5.33	5.63	5.27	5.22	5.23	5.32
22	5.49	5.43	5.55	5.38	4.98	5.45	5.25	5.63	5.32	5.58	5.20	5.32
23	5.45	5.49	5.49	5.43	4.98	5.39	5.30	5.60	5.28	5.37	5.19	5.46
24	5.30	5.50	5.47	5.27	4.60	5.33	5.28	5.54	5.26	5.22	5.19	5.48
25	5.31	5.49	5.51	5.13	4.14	5.26	5.26	5.50	5.28	5.15	5.20	5.42
26	5.44	5.47	5.56	5.04	3.57	5.25	5.28	5.45	5.33	5.17	5.35	5.46
27	5.53	5.48	5.53	4.95	3.04	5.21	5.25	5.44	5.29	5.16	5.30	5.58
28	5.47	5.51	5.52	4.92	2.92	5.27	5.22	5.42	5.37	5.16	5.22	5.57
29	5.46	5.51	5.52	4.90	----	5.29	5.19	5.42	5.31	5.13	5.21	5.55
30	5.45	5.53	5.54	4.90	----	5.35	5.20	5.40	5.26	5.11	5.22	5.55
31	5.41	----	5.52	4.89	----	5.26	----	5.38	----	5.11	5.42	----
MAX	5.64	5.53	5.70	5.59	5.16	5.92	5.55	5.80	5.77	5.58	5.64	5.58
MIN	5.24	5.20	5.43	4.84	2.92	3.66	5.19	5.73	4.93	5.11	5.10	5.13

MISSISSIPPI RIVER DELTA

07381200 Bayou Lafourche at Valentine, La.

LOCATION.--Lat 29°35'35", long 90°28'25", on line between lots 96 and 98, T.17 S., R.20 E., Lafourche Parish, on upstream side of bridge on State Highway 308, at Valentine, 5.7 miles south of Lockport, and 5.2 miles upstream from Intracoastal Waterway.

PERIOD OF RECORD.--April 1966 to current year (elevations only).

GAGE.--Water-stage recorder. Datum of gage is mean sea level. Prior to Oct. 1, 1968, at datum 2.98 ft higher.

EXTREMES.--Current year: Maximum elevation, 2.05 ft June 2; minimum, -0.16 ft Feb. 21.

Period of record: Maximum elevation, 2.10 ft May 21, 1966; minimum, -0.18 ft Feb. 9, 1968 (present datum).

REMARKS.--Gage height affected by tide at all stages.

ELEVATION, IN FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.08	1.55	.34	.54	.38	.47	1.21	1.82	1.68	.96	1.21	1.75
2	1.06	1.33	.25	.39	.98	.72	1.45	1.73	1.88	.99	1.28	1.82
3	1.14	1.18	.25	.39	1.04	.96	1.13	1.70	1.95	.91	1.58	1.79
4	1.07	.88	.40	.16	.40	1.70	1.17	1.37	1.77	.87	1.74	1.69
5	.96	.83	.58	.40	.47	1.69	1.09	1.12	1.72	.95	1.64	1.66
6	.98	.86	.75	1.04	.60	1.62	.94	1.04	1.52	.90	1.46	1.55
7	1.35	.93	1.32	.47	.51	1.59	.87	.93	1.32	.80	1.32	1.45
8	1.41	.97	1.15	.18	.63	1.50	.79	.91	1.18	.72	1.20	1.38
9	1.34	.98	1.25	.13	.45	1.15	.87	1.03	1.17	.62	1.21	1.63
10	1.40	.91	1.52	.05	.14	1.10	.97	1.37	1.15	.54	1.28	1.56
11	1.62	.93	1.43	.57	.07	1.21	1.08	1.55	1.26	.56	1.31	1.48
12	1.71	1.03	1.11	.84	.17	1.39	1.15	1.55	1.50	.64	1.24	1.49
13	1.72	1.14	.90	.52	.17	1.12	1.15	1.52	1.63	.84	1.17	1.50
14	1.50	1.04	.79	.35	.43	.67	1.01	1.52	1.48	1.19	1.12	1.49
15	1.17	.58	.74	.36	.62	.56	.93	1.55	1.20	1.20	1.14	1.55
16	1.09	.59	.57	.49	.86	.51	1.07	1.55	1.11	1.15	1.17	1.82
17	1.06	.74	.52	.58	.32	.88	1.26	1.70	1.22	1.12	1.12	1.80
18	.97	.99	.45	.64	.26	1.19	1.20	1.57	1.25	1.08	1.12	1.70
19	1.03	1.09	.46	.62	.44	1.20	1.52	1.60	1.18	1.10	1.20	1.70
20	1.27	.39	.50	.50	.26	1.31	1.58	1.65	1.19	1.12	1.24	1.70
21	1.45	.30	.65	.30	.01	1.22	1.40	1.68	1.22	1.15	1.22	1.71
22	1.48	.40	.46	.25	.08	1.17	1.43	1.65	1.30	1.21	1.23	1.70
23	1.29	.56	.50	.37	.21	.81	1.54	1.64	1.30	1.26	1.23	1.77
24	1.14	.66	.59	.40	.33	.64	1.50	1.65	1.24	1.31	1.14	1.85
25	1.27	.74	.60	.47	.69	.72	1.45	1.63	1.32	1.27	1.06	1.80
26	1.44	.71	.47	.61	.33	.95	1.50	1.58	1.32	1.34	1.28	1.80
27	1.50	.72	.36	.57	.22	.71	1.55	1.50	1.21	1.37	1.38	1.83
28	1.50	.75	.64	.65	.36	.87	1.67	1.45	1.09	1.32	1.39	1.66
29	1.37	.50	.90	.76	----	1.01	1.70	1.60	.96	1.22	1.45	1.44
30	1.43	.33	1.25	.66	----	1.05	1.72	1.66	.95	1.20	1.63	1.42
31	1.60	----	.91	.14	----	1.13	----	1.60	----	1.19	1.73	----
MAX	1.72	1.55	1.52	1.04	1.04	1.70	1.72	1.82	1.95	1.37	1.74	1.85
MIN	.96	.33	.25	.05	.01	.47	.79	.91	.95	.54	1.06	1.38

MISSISSIPPI RIVER DELTA

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07381800 Spring Creek near Glenmora, La.

LOCATION.--Lat 31°00'10", long 92°34'10", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.1 S., R.2 W., Rapides Parish, Louisiana meridian, near right bank on downstream side of bridge on U.S. Highway 165, 0.25 mile upstream from Missouri Pacific Railroad Co. Bridge, 2 miles north of Glenmora, and 7.9 miles above mouth.

DRAINAGE AREA.--68.3 sq mi.

PERIOD OF RECORD.--Water years 1954-56 (annual maximum), March 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 63.28 ft above mean sea level (Louisiana Geodetic Survey bench mark). Oct. 23, 1953, to Mar. 6, 1956, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 88.0 cfs (17.50 inches per year, 63,760 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 460 cfs May 2 (gage height, 10.77 ft); minimum, 27 cfs Sept. 20 (gage height, 4.56 ft).
 Period of record: Maximum discharge, 6,120 cfs (revised) Nov. 12, 1966 (gage height, 17.22 ft).
 1956-70: Minimum discharge, 27 cfs Sept. 20, 1970; minimum gage height, 4.56 ft Sept. 20, 1970.
 Maximum stage known since 1886, 20.5 ft in May 1953; flood of June 1886 was similar, from floodmarks and information by local residents.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply papers and water-resources data publications indicated.

Publication	Water years	Date	Discharge (cfs)	Gage height (feet)
WSP 1920	1961	Mar. 18, 1961	1,840	14.10
WSP 1920	1962	Dec. 18, 1961	2,810	15.14
WSP 1920	1964	Apr. 18, 1964	2,390	14.73
WSP 1920	1965	Mar. 1, 1965	2,870	15.19
WRD	1966	Feb. 11, 1966	2,540	14.88
WRD	1967	Nov. 12, 1966	6,120	17.22
WRD	1968	Dec. 15, 1967	4,020	16.05

REVISED PEAK DISCHARGE.--1961: Mar. 18 (1430) 1,840 cfs (14.10 ft); Sept. 13 (2030) 1,820 cfs (14.08 ft).
 1964: Mar. 3 (0600) 1,590 cfs (13.79 ft); Apr. 18 (0930) 2,390 cfs (14.73 ft).
 1965: Dec. 11 (1300) 2,130 cfs (14.44 ft); Mar. 1 (1715) 2,870 cfs (15.19 ft).
 1966: Feb. 11 (0930) 2,540 cfs (14.88 ft); Apr. 27 (0415) 1,560 cfs (13.75 ft).
 1967: Nov. 12 (0045) 6,120 cfs (17.22 ft); Apr. 15 (1945) 2,130 cfs (14.44 ft).
 1968: Dec. 15 (1430) 4,020 cfs (16.05 ft); Jan. 10 (0600) 2,260 cfs (14.59 ft).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

MISSISSIPPI RIVER DELTA

07381800 Spring Creek near Glenmora, La.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	42	40	100	45	41	44	49	41	33	32	30
2	37	38	40	60	60	41	44	417	38	33	32	32
3	36	37	40	50	50	43	42	285	37	32	32	36
4	36	37	40	45	47	50	42	104	36	31	32	32
5	36	37	41	50	46	43	42	69	36	31	32	31
6	38	37	172	130	45	42	41	58	36	32	32	30
7	40	38	195	90	44	45	41	53	36	30	32	29
8	38	38	92	60	44	50	40	50	35	30	31	29
9	38	38	56	52	43	44	41	48	35	30	31	29
10	38	38	52	50	43	42	78	48	35	30	31	29
11	39	38	47	60	43	48	86	46	35	30	30	29
12	38	38	45	54	43	47	77	45	35	30	30	29
13	38	38	44	51	42	43	63	44	35	30	30	29
14	38	38	43	49	42	42	53	43	34	30	30	29
15	38	39	43	47	43	42	49	43	34	31	29	28
16	38	40	43	46	50	40	48	42	34	32	29	28
17	37	40	42	45	43	57	46	41	33	37	29	28
18	37	45	42	45	42	60	44	40	33	182	31	28
19	37	50	42	45	41	65	46	40	33	65	31	28
20	37	43	43	48	40	92	45	40	33	39	30	28
21	37	41	50	46	40	91	42	39	33	35	29	28
22	37	40	45	45	40	88	41	39	33	32	30	28
23	36	40	43	45	40	73	40	38	33	32	31	28
24	36	40	42	45	41	59	40	38	45	32	32	29
25	36	40	42	44	47	53	40	39	50	40	31	32
26	36	40	41	44	42	51	39	39	37	37	29	33
27	36	40	41	44	40	48	39	39	34	35	29	35
28	36	40	41	43	41	46	38	38	33	40	29	29
29	36	41	41	43	-----	46	38	37	31	38	30	28
30	36	40	60	43	-----	45	38	37	32	36	30	28
31	46	-----	150	43	-----	44	-----	38	-----	33	30	-----
TOTAL	1,159	1,191	1,798	1,662	1,227	1,621	1,407	2,026	1,065	1,208	946	889
MEAN	37.4	39.7	58.0	53.6	43.8	52.3	46.9	65.4	35.5	39.0	30.5	29.6
MAX	46	50	195	130	60	92	86	417	50	182	32	36
MIN	36	37	40	43	40	40	38	37	31	30	29	28
CFSM	.55	.58	.85	.78	.64	.77	.69	.96	.52	.57	.45	.43
IN.	.63	.65	.98	.91	.67	.88	.77	1.10	.58	.66	.52	.48
AC-FT	2,300	2,360	3,570	3,300	2,430	3,220	2,790	4,020	2,110	2,400	1,880	1,760

CAL YR 1969 TOTAL 29,038 MEAN 79.6 MAX 793 MIN 36 CFSM 1.17 IN 15.82 ACFT 57,600
WAT YR 1970 TOTAL 16,199 MEAN 44.4 MAX 417 MIN 28 CFSM .65 IN 8.82 ACFT 32,130

PEAK DISCHARGE (BASE, 1,100 CFS).--No peak above base.

NOTE.--No gage-height record Dec. 20 to Feb. 17.

07382000 Bayou Cocodrie near Clearwater, La.

LOCATION.--Lat 31°00'00", long 92°22'46", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.1 S., R.1 E., Louisiana meridian, Evangeline Parish, near right bank on downstream side of bridge on U. S. Highway 167, 1,000 ft downstream from Bayou Cocodrie Dam, 1.0 mile downstream from Chicago, Rock Island and Pacific Railroad Co. bridge, 1.5 miles east of Clearwater, 4 miles south of Meeker, and 5 miles downstream from Hurricane Creek.

DRAINAGE AREA.--240 sq mi.

PERIOD OF RECORD.--May 1922 to January 1925 (published as "near Meeker"), October 1957 to current year. Monthly discharge only for October 1957, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 40.00 ft above mean Gulf level (datum of Corps of Engineers), and 39.57 ft above mean sea level (levels by Louisiana Department of Public Works) May 1922 to January 1925, nonrecording gage 500 ft downstream at datum about 1.5 ft lower. October to December 1937, nonrecording gage at present site at datum 40.00 ft lower. Jan. 1, 1938, to Mar. 28, 1940, nonrecording gage at present site and datum. Since Jan. 23, 1945, nonrecording gage 6.6 miles downstream at datum 35.10 ft above mean sea level (Louisiana Geodetic Survey bench mark).

AVERAGE DISCHARGE.--35 years (1922-24, 1937-70), 404 cfs (22.86 inches per year, 292,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 925 cfs May 4 (gage height, 14.79 ft); minimum, 31 cfs Oct. 9 (gage height, 3.78 ft, result of temporary regulation), minimum daily unaffected by regulation, 59 cfs Sept. 24-25.

Period of record: Maximum discharge, 28,200 cfs May 18, 1955 (gage height, 26.72 ft); reverse flow Nov. 13-15, 1922, probably caused by heavy rains in basin below station; minimum discharge unaffected by backwater or temporary diversion upstream, 50 cfs June 18, 1960.

REMARKS.--Records good. Slight regulation at low flow by Lake Cocodrie (usable capacity, 9,000 acre-ft). Storage began Jan. 23, 1959. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1211: 1938, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	96	195	340	138	220	164	135	157	144	124	78
2	118	95	170	323	179	228	153	576	162	142	124	79
3	117	96	187	307	197	244	150	852	153	140	124	85
4	116	98	166	288	212	252	150	919	144	140	123	85
5	116	97	132	270	210	247	148	917	132	138	122	83
6	117	95	124	290	204	242	148	894	118	138	122	82
7	102	93	115	310	194	250	146	865	115	138	122	81
8	33	91	112	320	184	252	138	835	110	138	120	80
9	46	90	110	310	175	252	132	806	111	137	119	74
10	109	89	104	300	166	247	198	776	115	137	118	66
11	117	87	100	280	158	235	336	746	119	136	118	68
12	115	86	98	270	148	225	468	709	124	135	117	76
13	115	85	92	260	144	257	535	652	124	134	113	66
14	114	84	90	246	140	271	529	574	128	134	108	66
15	114	84	95	231	138	320	491	499	124	134	103	66
16	113	83	94	215	153	363	456	443	130	133	98	66
17	112	82	93	201	160	448	411	387	132	134	97	66
18	112	82	94	186	165	503	368	341	134	132	98	66
19	111	83	97	177	162	525	338	360	139	132	101	66
20	110	82	96	172	155	502	310	271	138	131	102	66
21	109	82	95	162	174	460	277	244	138	130	101	64
22	108	82	96	156	180	411	249	222	138	130	92	62
23	108	81	113	151	182	366	224	202	138	130	92	60
24	108	80	168	146	180	333	203	196	139	130	92	59
25	106	79	198	143	175	299	184	199	138	130	92	59
26	103	78	225	140	170	272	168	177	138	130	92	78
27	100	78	228	136	196	248	153	172	138	128	85	66
28	99	77	213	134	210	232	141	168	137	128	76	61
29	97	79	203	130	-----	211	131	159	136	127	76	60
30	98	232	224	124	-----	191	121	148	140	126	77	60
31	100	-----	299	120	-----	176	-----	145	-----	126	78	-----
TOTAL	3,262	2,726	4,426	6,838	4,849	9,282	7,620	14,525	3,989	4,142	3,226	2,096
MEAN	105	90.9	143	221	173	299	254	469	133	134	104	69.9
MAX	119	232	299	340	212	525	535	919	162	144	124	85
MIN	33	77	90	120	138	176	121	135	110	126	76	59
CFSM	.44	.38	.60	.92	.72	1.25	1.06	1.95	.55	.56	.43	.29
IN.	.51	.42	.69	1.06	.75	1.44	1.18	2.25	.62	.64	.50	.32
AC-FT	6,470	5,410	8,780	13,560	9,620	18,410	15,110	28,820	7,910	8,220	6,400	4,160
CAL YR 1969	TOTAL 121,319	MEAN 332	MAX 1,030	MIN 33	CFSM 1.38	IN 18.80	ACFT 240,600					
WAT YR 1970	TOTAL 66,985	MEAN 184	MAX 919	MIN 33	CFSM .77	IN 10.38	ACFT 132,900					

MISSISSIPPI RIVER DELTA

07382500 Bayou Courtableau at Washington, La.

LOCATION.--Lat 30°37'05", long 92°03'20", in lot 81, T.5 S., R.4 E., Louisiana meridian, St. Landry Parish, near center of span on downstream side of bridge on State Highway 10 at Washington, 0.2 mile upstream from Texas and New Orleans Railroad Co. bridge, 1.2 miles upstream from Bayou Carron, 3.5 miles downstream from confluence of Bayou Cocodrie and Bayou Boeuf, and 6 miles north of Opelousas.

DRAINAGE AREA.--715 sq mi (see REMARKS).

PERIOD OF RECORD.--July 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Louisiana Geodetic Survey bench mark). Prior to Aug. 23, 1948, non-recording gage at same site and datum. Auxiliary water-stage recorder 3.2 miles upstream. Datum of auxiliary gage is at mean Gulf level (Corps of Engineers bench mark). Prior to Feb. 28, 1949, auxiliary nonrecording gage at site 3.5 miles upstream at same datum.

AVERAGE DISCHARGE.--24 years, 990 cfs (717,300 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 3,600 cfs May 3; maximum elevation, 24.93 ft May 4; minimum daily discharge, 121 cfs; minimum elevation, 12.11 ft Aug. 15.

Period of record: Maximum discharge, 9,490 cfs May 21, 1953; maximum elevation, 35.29 ft May 22, 1953; minimum discharge, 71 cfs June 16, 1963; minimum elevation, 10.72 ft Oct. 18, 1956.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Some flow diverted from Bayou Boeuf into Chatlin Lake Canal through Bayou Lamourie. Since April 1952, floodflow is diverted from 76.1 sq mi in Bayou Rapides basin into Bayou Boeuf when stages of Red River makes it necessary to close gates at mouth of Bayou Rapides. In extreme floods, considerable flow bypasses the station. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	319	157	830	405	455	528	410	193	151	164	153
2	390	199	156	733	958	436	506	1,000	144	156	164	166
3	370	213	156	714	829	460	486	3,600	367	157	166	207
4	350	212	154	808	822	542	465	3,400	377	145	167	338
5	340	205	157	665	608	895	449	2,900	312	148	162	403
6	350	194	1,190	1,080	524	814	427	2,500	272	157	156	378
7	460	186	3,560	1,600	511	676	397	2,100	262	149	151	356
8	440	178	3,310	1,410	498	782	338	1,600	264	147	156	345
9	392	163	2,920	1,120	482	768	300	1,300	257	142	162	333
10	349	148	2,240	1,040	468	675	701	1,100	245	141	166	301
11	410	153	1,450	1,010	437	636	1,390	1,000	237	139	161	321
12	398	152	925	955	431	712	1,470	900	238	148	156	648
13	385	146	634	808	402	675	1,440	800	236	153	155	653
14	339	145	557	792	369	627	1,190	740	223	148	144	494
15	275	142	505	715	351	601	971	700	207	149	142	441
16	236	140	473	617	468	544	885	640	197	170	146	440
17	223	137	443	512	531	669	791	560	196	152	147	447
18	232	140	359	454	485	987	673	520	199	130	207	569
19	220	152	315	481	445	895	704	480	192	134	321	521
20	203	157	325	468	406	1,180	925	430	177	121	303	401
21	219	152	337	457	387	1,510	729	390	175	133	232	343
22	218	154	343	435	368	1,710	660	357	182	156	208	289
23	185	153	332	414	342	1,580	600	302	184	169	171	228
24	171	149	318	403	327	1,270	560	268	160	177	158	197
25	164	149	303	380	440	1,090	500	412	223	168	164	283
26	168	150	289	357	557	983	470	513	184	168	155	323
27	165	147	282	343	493	859	450	297	152	200	147	903
28	162	153	276	323	465	691	440	280	126	180	141	873
29	163	156	279	316	-----	639	430	263	128	169	126	643
30	159	159	401	303	-----	588	420	262	149	176	144	395
31	334	-----	896	279	-----	549	-----	223	-----	166	181	-----
TOTAL	8,900	5,003	24,042	20,862	13,809	25,898	20,295	30,307	6,458	4,799	5,333	12,352
MEAN	287	167	776	673	493	835	677	978	215	155	172	413
MAX	460	319	3,560	1,600	958	1,710	1,470	3,600	377	200	321	903
MIN	159	137	154	279	327	436	300	223	126	121	136	153
AC-FT	17,650	9,920	47,690	41,380	27,390	51,370	40,260	60,110	12,810	9,520	10,580	24,580

CAL YR 1969 TOTAL 328,077 MEAN 899 MAX 4,150 MIN 120 AC-FT 650,800
WTR YR 1970 TOTAL 177,098 MEAN 488 MAX 3,600 MIN 121 AC-FT 353,800

NOTE.--No auxiliary gage height, Apr. 22 to May 20.

MISSISSIPPI RIVER DELTA

99

07383500 Bayou des Glaisses diversion channel at Moreauville, La.

LOCATION.--Lat 31°01'59", long 91°58'57", in NE $\frac{1}{4}$ sec.29, T.1 N., R.5 E., Avoyelles Parish, near left bank on downstream side of bridge on State Highway 1 at Moreauville, and 150 ft downstream from point of diversion from Bayou des Glaisses.

DRAINAGE AREA.--270 sq mi (see REMARKS).

PERIOD OF RECORD.--July 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 23.46 ft above mean sea level, (levels by Louisiana Department of Public Works). Prior to Oct. 31, 1950, nonrecording gage at same site. Prior to Sept. 30, 1961 at datum 4.84 ft higher.

AVERAGE DISCHARGE.--27 years, 410 cfs (297,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,770 cfs May 2 (gage height, 14.61 ft); minimum daily, 13 cfs Nov. 14-16.

Period of record: Maximum discharge, 6,340 cfs May 18, 1953 (gage height, 22.68 ft present datum); minimum, 2.8 cfs Oct. 26, 27, 1964.

REMARKS.--Records good. Diversion channel carries natural flow of Bayou des Glaisses except when operation of floodgates, 12 miles downstream from point of diversion, regulates flow into or out of bayou depending on stage in Red River and Old River overflow area. Flow includes diversion from Bayou Boeuf into Chatlin Lake Canal and is occasionally affected by diversion into or out of Red River and Old River overflow area. Channel discharges into West Protection Levee borrow pit channel, 6 miles downstream. Records of water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	115	18	552	64	93	106	59	194	38	22	27
2	22	73	17	561	257	78	85	1,540	171	35	21	38
3	20	54	17	542	387	81	74	1,450	279	32	19	48
4	18	43	16	510	344	407	66	1,080	171	29	17	42
5	16	34	16	468	241	478	62	1,010	99	26	16	57
6	28	28	621	663	165	464	58	987	69	24	20	81
7	391	24	1,250	639	122	419	53	957	53	23	30	74
8	166	21	835	653	97	412	50	913	46	22	22	56
9	68	17	793	653	83	474	47	860	42	21	17	39
10	47	15	793	635	72	478	58	803	39	21	16	34
11	80	14	768	605	64	450	220	745	38	20	17	98
12	73	15	734	576	58	423	421	691	36	20	17	335
13	44	15	692	548	54	395	414	635	35	20	16	301
14	27	13	646	512	50	323	363	576	34	25	15	129
15	21	13	600	454	47	232	281	510	33	35	15	58
16	18	13	548	356	60	164	232	394	32	20	16	40
17	16	14	488	262	84	170	196	254	31	18	18	34
18	15	15	383	186	86	280	160	155	31	23	24	50
19	14	17	257	140	80	405	220	102	30	34	46	63
20	15	20	179	119	72	526	318	80	29	37	48	36
21	16	23	140	103	64	552	200	66	28	33	39	22
22	16	37	111	94	56	605	139	57	28	29	38	19
23	16	40	92	86	50	614	102	51	33	26	38	68
24	16	36	86	80	47	612	82	47	41	24	34	119
25	17	29	79	75	58	589	68	44	46	21	29	82
26	17	28	73	68	103	547	60	50	139	35	49	458
27	16	25	78	65	128	499	53	54	119	42	70	131
28	15	22	76	64	113	411	48	46	79	31	60	57
29	15	20	73	59	-----	287	44	42	55	26	45	44
30	18	19	244	57	-----	187	40	52	42	23	38	36
31	80	-----	498	53	-----	134	-----	72	-----	22	27	-----
TOTAL	1,365	852	11,221	10,438	3,106	11,789	4,320	14,382	2,102	835	899	2,676
MEAN	44.0	28.4	362	337	111	380	144	464	70.1	26.9	29.0	89.2
MAX	391	115	1,250	663	387	614	421	1,540	279	42	70	458
MIN	14	13	16	53	47	78	40	42	28	18	15	19
AC-FT	2,710	1,690	22,260	20,700	6,160	23,380	8,570	28,530	4,170	1,660	1,780	5,310
CAL YR 1969	TOTAL	115,188	MEAN	316	MAX	1,510	MIN	12	AC-FT	228,500		
WTR YR 1970	TOTAL	63,985	MEAN	173	MAX	1,540	MIN	13	AC-FT	126,900		

MISSISSIPPI RIVER DELTA

07383500 Bayou des Glaives diversion channel at Moreauville, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.01	4.42	2.87	7.73	3.64	4.09	4.26	3.47	5.10	(a)	2.80	2.93
2	2.96	3.87	2.85	7.79	5.55	3.89	3.99	13.48	4.88	(a)	2.78	3.17
3	2.90	3.57	2.83	7.66	6.55	3.92	3.83	13.20	5.76	(a)	2.72	3.38
4	2.86	3.37	2.82	7.43	6.24	6.67	3.70	11.36	4.91	(a)	2.67	3.25
5	2.82	3.21	2.81	7.13	5.47	7.20	3.62	10.87	4.17	(a)	2.64	3.53
6	3.09	3.07	7.60	8.52	4.86	7.10	3.55	10.75	3.74	(a)	2.77	3.93
7	6.69	3.00	12.19	8.35	4.44	6.78	3.47	10.55	3.47	(a)	2.99	3.82
8	4.92	2.93	9.74	8.45	4.15	6.73	3.40	10.25	3.32	(a)	2.81	3.51
9	3.82	2.84	9.46	8.45	3.95	7.17	3.35	9.90	3.26	(a)	2.67	3.19
10	3.44	2.79	9.45	8.32	3.79	7.20	3.56	9.52	(a)	(a)	2.63	3.08
11	3.95	2.77	9.28	8.11	3.66	7.00	5.22	9.11	(a)	(a)	2.65	4.15
12	3.86	2.78	9.03	7.90	3.54	6.81	6.79	8.72	(a)	(a)	2.66	6.14
13	3.38	2.78	8.73	7.70	3.49	6.61	6.74	8.32	(a)	(a)	2.63	5.91
14	3.05	2.73	8.40	7.44	3.41	6.08	6.38	7.90	(a)	(a)	2.59	4.50
15	2.93	2.71	8.07	7.03	3.35	5.40	5.77	7.43	(a)	(a)	2.57	3.54
16	2.87	2.72	7.70	6.33	3.59	4.85	5.40	6.60	(a)	2.77	2.63	3.20
17	2.82	2.73	7.27	5.62	3.97	4.90	5.12	5.56	(a)	2.71	2.71	3.09
18	2.79	2.78	6.52	5.03	4.00	5.75	4.82	4.77	(a)	2.82	2.84	3.38
19	2.77	2.85	5.59	4.63	3.91	6.68	5.25	4.20	(a)	3.10	3.33	3.64
20	2.77	2.90	4.97	4.41	3.79	7.54	6.05	3.92	(a)	3.15	3.36	3.12
21	2.81	2.97	4.63	4.22	3.65	7.73	5.14	3.70	(a)	3.07	3.19	2.80
22	2.82	3.26	4.32	4.11	3.51	8.11	4.62	3.53	(a)	2.98	3.18	2.74
23	2.82	3.32	4.09	4.00	3.40	8.17	4.21	3.42	(a)	2.92	3.17	3.73
24	2.82	3.24	4.00	3.92	3.35	8.16	3.94	3.35	3.23	2.85	3.09	4.37
25	2.83	3.11	3.90	3.83	3.55	7.99	3.73	3.29	3.31	2.78	2.98	3.84
26	2.83	3.09	3.81	3.73	4.21	7.69	3.59	3.39	4.61	3.09	3.38	7.05
27	2.81	3.03	3.88	3.68	4.51	7.35	3.47	3.49	4.40	3.25	3.75	4.48
28	2.79	2.96	3.85	3.65	4.34	6.72	3.36	3.33	3.90	3.03	3.59	3.54
29	2.77	2.91	3.80	3.59	-----	5.81	3.28	3.26	3.50	2.91	3.31	3.30
30	2.85	2.89	5.39	3.53	-----	5.04	3.22	3.44	3.26	2.83	3.16	3.13
31	3.89	-----	7.34	3.47	-----	4.56	-----	3.78	-----	2.80	2.92	-----
MAX	6.69	4.42	12.19	8.52	6.55	8.17	6.79	13.48	5.76	3.25	3.75	7.05
MIN	2.77	2.71	2.81	3.47	3.35	3.89	3.22	3.26		2.71	2.57	2.74

a No gage-height record.

MISSISSIPPI RIVER DELTA

101

07384400 State Canal near Krotz Springs, La.

LOCATION.--Lat 30°33'55", long 91°49'55", in NW¼ sec.2, T.6 S., R.7 E., at bridge on U.S. Highway 71, 1.7 miles upstream from Slow Bayou, 2 miles north of the junction of U.S. Highways 71 and 190 and 5.0 miles northwest of Krotz Springs.

PERIOD OF RECORD.--Annual peaks, water years 1960-67, October 1967 to current year (gage height only).

GAGE.--Water-stage recorder. Datum of gage is 2.55 ft above mean sea level.

EXTREMES.--Current year: Maximum gage height, 15.70 ft May 7; minimum, not determined.

Period of record: Maximum gage height, 18.03 ft Feb. 12, 1966; minimum, not determined.

GAGE HEIGHT, IN FEET, AT 0800, OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-----	10.21	-----	11.32	11.07	11.42	13.00	13.44	15.28	11.37	10.03	10.07
2	-----	10.22	-----	11.29	11.12	11.40	12.90	13.56	15.42	11.15	-----	10.05
3	-----	10.21	-----	11.25	11.16	11.39	12.80	14.06	15.41	11.02	-----	10.38
4	-----	10.20	-----	11.25	11.33	11.43	12.73	14.56	15.37	10.86	-----	10.41
5	-----	10.15	-----	11.47	11.69	11.57	12.65	15.49	15.28	10.70	-----	10.44
6	-----	10.10	-----	11.82	11.78	12.12	12.57	15.64	15.13	10.54	-----	10.48
7	-----	10.05	10.00	12.14	11.77	12.72	12.51	15.68	14.95	10.37	-----	10.51
8	10.04	10.07	13.82	12.63	11.74	13.13	12.45	15.67	14.77	10.19	-----	10.54
9	10.15	10.06	14.29	12.78	11.69	13.32	12.40	15.62	14.58	10.01	-----	10.56
10	10.16	10.06	14.82	12.80	11.63	13.31	12.53	15.58	14.39	-----	-----	10.57
11	10.26	10.00	14.64	12.87	11.57	13.33	12.68	15.55	14.19	-----	-----	10.57
12	10.40	-----	14.15	12.91	11.51	13.32	12.80	15.50	14.00	-----	-----	10.83
13	10.33	-----	13.73	12.85	11.43	13.27	13.25	15.52	13.79	-----	-----	10.91
14	10.34	-----	13.42	12.76	11.37	13.18	13.45	15.53	13.61	-----	-----	11.00
15	10.32	-----	13.19	12.69	11.32	13.07	13.46	15.53	13.41	-----	-----	11.00
16	10.30	-----	13.00	12.62	11.34	12.95	13.46	15.55	13.22	-----	-----	11.04
17	10.30	-----	12.83	12.50	11.30	12.88	13.48	15.56	13.11	-----	-----	11.07
18	10.29	-----	12.67	12.37	11.29	12.87	13.38	15.55	12.92	10.04	-----	11.04
19	10.28	-----	12.50	12.25	11.34	12.93	13.35	15.55	12.77	10.18	-----	11.02
20	10.27	-----	12.35	12.12	11.38	13.21	13.46	15.56	12.60	10.27	-----	10.99
21	10.26	-----	12.22	12.02	11.40	13.60	13.55	15.57	12.45	10.24	-----	10.98
22	10.25	-----	12.08	11.89	11.40	13.94	13.65	15.57	12.29	10.17	-----	10.99
23	10.23	-----	11.94	11.76	11.39	14.09	13.62	15.55	12.16	10.10	9.99	11.08
24	10.21	-----	11.81	11.65	11.38	14.07	13.55	15.52	12.03	10.02	10.08	11.48
25	10.20	-----	11.71	11.55	11.41	13.95	13.50	15.52	11.92	9.97	10.18	11.61
26	10.19	-----	11.60	11.47	11.40	13.82	13.46	15.49	12.00	9.94	10.22	11.67
27	10.16	-----	11.50	11.40	11.38	13.72	13.45	15.46	11.90	10.10	10.12	12.48
28	10.16	-----	11.41	11.30	11.41	13.53	13.44	15.42	11.83	10.19	10.05	12.92
29	10.00	-----	11.35	11.26	-----	13.36	13.44	15.37	11.83	10.20	9.99	13.07
30	-----	-----	11.38	11.18	-----	13.21	13.44	15.34	11.63	10.17	9.97	13.09
31	10.19	-----	11.35	11.12	-----	13.09	-----	15.28	-----	10.11	10.05	-----
MAX	10.40	10.22	14.82	12.91	11.78	14.09	13.65	15.68	15.42	11.37	10.22	13.09
MIN	-----	-----	-----	11.12	11.07	11.39	12.40	13.44	11.63	-----	-----	10.05

MISSISSIPPI RIVER DELTA

07385500 Bayou Teche at Arnaudville, La.

LOCATION.--Lat 30°23'50", long 91°55'50", in lot 63, T.7 S., R.5 E., Louisiana meridian, St. Landry Parish, near center of span on downstream side of bridge on State Highway 31 at Arnaudville, and 270 ft upstream from Bayou Fusilier.

DRAINAGE AREA.--1,531 sq mi (see REMARKS).

PERIOD OF RECORD.--April 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Louisiana Geodetic Survey bench mark). Prior to May 11, 1949, non-recording gage. May 12, 1949, to May 11, 1960, water-stage recorder, May 26, 1960, to Aug. 15, 1961, nonrecording gage. All gages at same site and datum. Auxiliary water-stage recorder 3.7 miles upstream at same datu.

AVERAGE DISCHARGE.--21 years, 811 cfs (587,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,300 cfs May 4; maximum elevation, 14.16 ft June 2; minimum, 101 cfs Aug. 14; minimum elevation, 9.44 ft Dec. 12.

Period of record: Maximum discharge, 4,630 cfs May 24, 1953; maximum elevation, 24.27 ft May 23, 1953; minimum discharge, 53 cfs Aug. 12, 1965; minimum elevation, 6.78 ft Oct. 28, 1956.

REMARKS.--Records good. Bayou Teche heads in Bayou Courtableau at Port Barre. At high stages, considerable flow bypasses station via Bayou Courtableau at Weirs near Krotz Springs. There is controlled diversion to or from Red River and Old River overflow area through Bayou des Glaisses floodgates and to or from West Atchafalaya floodway through Big Darbonne Bayou culvert and since April 1956 through Bayou Courtableau Drainage Structure. Since April 1952, floodflow is diverted from Bayou Rapides (drainage area, 76.1 sq mi) into Bayou Boeuf when stages of Red River make it necessary to close gates at mouth of Bayou Rapides. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	294	146	783	447	630	943	635	1,030	412	228	250
2	390	396	144	933	652	631	880	687	1,120	375	204	281
3	385	408	144	1,000	904	609	820	1,090	1,090	358	177	337
4	378	395	170	808	752	698	760	1,270	1,050	342	166	383
5	372	375	200	631	757	958	700	1,290	1,020	319	141	423
6	372	350	271	831	814	880	647	1,250	982	300	130	440
7	449	329	1,090	947	812	978	594	1,170	954	277	141	447
8	641	304	1,250	878	773	1,060	548	1,110	922	257	198	448
9	784	278	1,270	909	735	1,060	507	1,060	888	228	208	433
10	786	257	1,160	836	693	1,050	524	1,010	856	204	225	413
11	764	240	966	829	640	1,050	722	1,020	823	170	212	391
12	701	214	830	833	599	1,040	1,020	1,080	790	173	203	455
13	645	204	865	935	567	1,020	1,040	1,080	760	154	159	632
14	589	191	859	915	541	987	994	1,080	731	151	123	739
15	525	189	822	826	508	943	1,010	1,080	703	150	113	735
16	464	185	767	748	503	879	1,010	1,080	676	140	138	701
17	411	186	697	796	575	899	993	1,080	648	155	148	664
18	377	183	628	820	651	1,020	992	1,080	628	253	177	665
19	348	180	663	804	672	1,040	1,010	1,080	608	275	224	664
20	325	176	687	763	645	1,110	1,050	1,080	586	275	272	638
21	299	184	676	724	617	976	1,050	1,080	563	273	300	588
22	286	191	653	684	586	928	933	1,080	542	268	302	528
23	273	196	629	639	543	885	908	1,070	520	255	288	521
24	259	196	610	605	507	973	891	1,060	530	245	279	580
25	247	196	577	573	502	1,050	849	1,070	522	235	273	650
26	233	196	555	533	538	994	794	1,070	508	233	269	800
27	222	190	521	507	594	918	735	1,060	501	256	255	950
28	216	165	496	493	626	956	678	1,050	486	265	243	1,000
29	212	145	482	477	-----	990	637	1,040	480	262	239	900
30	208	145	476	455	-----	992	649	1,030	454	257	245	700
31	226	-----	560	433	-----	969	-----	1,020	-----	247	244	-----
TOTAL	12,770	7,138	19,864	22,948	17,753	29,173	24,888	32,942	21,971	7,764	6,524	17,356
MEAN	412	238	641	740	634	941	830	1,063	732	250	210	579
MAX	786	408	1,270	1,000	904	1,110	1,050	1,290	1,120	412	302	1,000
MIN	208	145	144	433	447	609	507	635	454	140	113	250
AC-FT	25,330	14,160	39,400	45,520	35,210	57,860	49,370	65,340	43,580	15,400	12,940	34,430
CAL YR 1969	TOTAL 273,632		MEAN 750	MAX 2,020	MIN 144	ACFT 542,700						
WAT YR 1970	TOTAL 221,091		MEAN 606	MAX 1,290	MIN 113	ACFT 438,500						

MISSISSIPPI RIVER DELTA

103

07385700 Bayou Teche at Keystone Lock, near St. Martinville, La.

LOCATION.--Lat 30°04'15", long 91°49'45", in line between lots 8 and 17, T.11 S., R.6 E., St. Martin Parish, on right bank of concrete lock and dam, 3.5 miles south of St. Martinville, and 11 miles upstream from Loreauville Canal.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1959 to current year. Daily gage heights since July 1913 in reports of Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is mean low Gulf level or 0.78 ft below mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--11 years, 430 cfs (311,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 971 cfs Dec. 15 (gage height, 10.91 ft); minimum, 48 cfs Dec. 2, 3, 4 (gage height, 9.66 ft).

Period of record: Maximum discharge, 3,590 cfs Feb. 12, 1966; maximum gage height, 15.59 ft Oct. 4, 1964; minimum discharge, no flow Aug. 10-29, 1962, June 12-16, 1963, July 24, 1964.

REMARKS.--Records good. Bayou Teche heads in Bayou Courtableau at Port Barre. At high stages, considerable flow bypasses station via Bayou Courtableau at weirs near Krotz Springs. There is controlled diversion to or from Red River and Old River overflow area through Bayou des Glaisses floodgates and to or from West Atchafalaya floodway through Big Darbonne Bayou culvert and since April 1956 through Bayou Courtableau Drainage Structure. Since April 1952, floodflow is diverted from Bayou Rapides (drainage area, 76.1 sq mi) into Bayou Boeuf when stages of Red River make it necessary to close gages at mouth of Bayou Rapides. Dependent upon its gradient, Bayou Fusillier interchanges flow between Bayou Teche and Vermilion River. Water for irrigation is diverted through Ruth Canal (see station 07386700) into Vermilion River. Crest of weir raised from 8.0 ft to 9.5 ft in June 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	233	51	417	329	430	217	159	262	120	99	202
2	310	290	49	515	403	432	235	183	469	122	89	268
3	333	339	48	572	503	556	172	346	474	141	84	301
4	334	343	50	550	550	695	151	452	356	154	87	306
5	325	333	56	472	503	524	140	446	268	136	80	312
6	329	310	222	559	514	430	136	387	200	112	72	330
7	466	293	486	460	534	525	107	303	160	107	78	356
8	420	274	758	463	526	563	94	253	165	116	128	377
9	504	253	872	446	505	495	102	277	184	103	176	397
10	565	235	865	438	459	431	153	217	192	131	230	385
11	582	208	729	422	417	431	183	212	170	115	169	362
12	540	206	609	402	397	376	294	231	170	127	148	388
13	509	195	554	407	390	328	342	230	176	107	106	482
14	463	178	570	510	374	282	280	221	176	143	93	574
15	420	159	552	575	363	253	253	236	168	159	96	585
16	377	159	517	520	344	226	269	244	161	98	119	593
17	330	150	480	516	347	335	270	248	175	91	120	572
18	293	151	438	539	397	363	241	254	164	108	128	616
19	273	159	436	547	444	347	281	244	160	140	144	549
20	269	138	466	533	442	399	296	250	157	154	171	533
21	268	142	528	515	428	401	281	256	160	195	195	518
22	247	145	432	489	413	314	224	267	150	192	213	493
23	235	155	412	470	398	244	185	250	145	147	225	674
24	229	164	390	431	386	228	178	247	155	131	291	676
25	222	167	483	403	413	286	165	245	171	127	232	635
26	215	164	366	389	366	299	172	241	190	121	207	611
27	212	143	326	350	381	241	141	214	180	162	193	724
28	205	86	312	326	410	243	111	217	160	162	178	770
29	200	54	292	343	-----	273	91	219	145	141	295	718
30	205	55	382	320	-----	257	110	220	134	138	237	637
31	223	-----	331	295	-----	246	-----	220	-----	130	196	-----
TOTAL	10,405	5,881	13,062	14,194	11,936	11,453	5,874	7,939	5,997	4,130	4,878	14,944
MEAN	336	196	421	458	426	369	196	256	200	133	157	498
MAX	582	343	872	575	550	695	342	452	474	195	295	770
MIN	200	54	48	295	329	226	91	159	134	91	72	202
AC-FT	20,640	11,660	25,910	28,150	23,680	22,720	11,650	15,750	11,900	8,190	9,680	29,640
CAL YR 1969	TOTAL 186,799		MEAN 512		MAX 2,580	MIN 48		AC-FT 370,500				
WTR YR 1970	TOTAL 110,693		MEAN 303		MAX 872	MIN 48		AC-FT 219,600				

MISSISSIPPI RIVER DELTA

07386500 Bayou Bourbeau at Shuteston, La.

LOCATION.--Lat 30°25'40", long 92°05'30", in lot 174, T.7 S., R.4 E., Louisiana meridian, St. Landry Parish, near center of span on downstream side of bridge on State Highway 178, 0.8 mile east of Shuteston, 1.8 miles northwest of Sunset, and 2 miles upstream from Bayou Sylvain and from Texas and New Orleans Railroad Co. bridge.

DRAINAGE AREA.--19.0 sq mi.

PERIOD OF RECORD.--October 1942 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 27.14 ft above mean sea level (Louisiana Geodetic Survey bench mark; levels by Louisiana Department of Public Works). Prior to Dec. 8, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--28 years, 25.8 cfs (18.44 inches per year, 18,690 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 220 cfs May 16 (gage height, 7.60 ft); no flow for many days.

Period of record: Maximum discharge, 2,840 cfs Jan. 14, 1947 (gage height, 10.8 ft, from graph based on gage readings), from rating curve extended above 1,400 cfs; no flow for many days each year.

REMARKS.--Records fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.02	0	1.1	6.6	1.9	.24	.62	1.2	.54	.69	17
2	0	.02	0	.87	43	1.3	.17	.82	87	.47	.56	11
3	0	.01	0	.65	16	.94	.14	3.4	70	.38	.43	14
4	0	0	0	.52	5.0	1.8	.14	4.6	19	.30	.41	7.2
5	0	0	0	6.4	2.7	3.3	.12	4.5	4.4	.45	.38	2.8
6	21	0	1.1	72	1.7	2.8	.14	7.4	1.8	.76	.28	1.3
7	78	0	3.7	41	1.0	32	.14	3.1	.63	.58	.19	.69
8	56	0	3.4	11	.58	58	.12	3.1	.62	.52	.17	.48
9	3.8	0	2.6	3.4	.36	18	.14	2.2	.56	.63	.20	.38
10	2.0	0	9.4	2.2	.30	6.2	8.8	1.4	.47	.65	.28	.34
11	2.7	0	5.8	16	.22	11	11	1.0	.40	.67	.40	.31
12	1.8	0	2.6	26	.18	17	5.0	.67	.31	.78	.54	.31
13	1.0	.02	1.2	10	.17	7.6	2.7	.52	.26	.89	.54	.30
14	.56	.02	.54	3.8	.16	3.6	1.5	.43	.22	2.0	.45	.26
15	.34	.01	.36	2.3	.19	2.5	2.1	.34	.22	10	7.4	.25
16	.24	0	.30	1.5	1.4	1.7	3.8	110	.19	4.9	34	.25
17	.16	0	.24	1.1	3.3	33	2.8	106	.17	2.6	8.1	.63
18	.11	0	.18	.76	2.8	45	1.5	27	.17	1.8	2.6	1.5
19	.08	.04	2.6	.56	2.0	18	12	8.4	.26	1.1	1.2	1.5
20	.06	.02	14	.40	1.3	40	22	7.7	.41	.85	.73	1.1
21	.06	.01	17	.31	.89	40	7.1	7.8	.45	1.4	1.9	.99
22	.04	0	14	.28	.58	35	2.8	10	.67	5.8	2.7	1.3
23	.03	0	29	.22	.40	15	1.6	6.0	1.3	3.0	3.4	20
24	.03	0	2.9	.19	.36	5.4	1.0	2.9	31	1.5	34	117
25	.02	0	1.6	.17	8.9	2.8	.73	2.4	60	.4	38	110
26	.02	0	.76	.18	11	1.7	.62	2.6	34	5.2	11	65
27	.02	0	.43	.18	4.7	1.0	.52	1.8	11	6.2	2.8	26
28	.02	0	.31	.18	2.9	.56	.47	1.1	2.9	2.8	1.1	6.0
29	.01	0	.28	.17	-----	.40	.48	.82	1.3	1.7	33	2.3
30	.01	0	.58	.16	-----	.31	.54	.69	.71	1.2	114	.94
31	.03	-----	1.2	.17	-----	.26	-----	.67	-----	.87	54	-----
TOTAL	168.15	0.17	116.08	203.77	118.69	408.07	90.41	329.98	331.62	61.48	355.45	411.13
MEAN	5.42	.006	3.74	6.57	4.24	13.2	3.01	10.6	11.1	1.98	11.5	13.7
MAX	78	.04	29	72	43	58	22	110	87	10	114	117
MIN	0	0	0	.16	.16	.26	.12	.34	.17	.30	.17	.25
CFSM	.29	.0003	.20	.35	.22	.69	.16	.56	.58	.10	.61	.72
IN.	.33	.0003	.23	.40	.23	.80	.18	.65	.65	.12	.70	.80
AC-FT	334	.34	230	404	235	809	179	655	658	122	705	815

CAL YR 1969: TOTAL 8,720.39 MEAN 23.9 MAX 1,150 MIN 0 CFSM 1.26 IN 17.07 AC-FT 17,300
WTR YR 1970: TOTAL 2,595 MEAN 7.11 MAX 117 MIN 0 CFSM .37 IN 5.08 AC-FT 5,150

PEAK DISCHARGE (BASE, 800 CFS).--No peak above base.

MISSISSIPPI RIVER DELTA

105

07386700 Ruth Canal near Ruth, La.

LOCATION.--Lat 30°14'35", long 91°53'05", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ lot 95, T.9 S., R.6 E., St. Martin Parish, near center of span on downstream side of bridge on State Highway 31, 1,200 ft above control structure, 1,500 ft downstream from point of diversion from Bayou Teche, 0.4 mile northwest of Ruth, and 2.2 miles south of Breaux Bridge.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1959 to current year. Gage heights only May 1945 to June 1946 (fragmentary), January 1947 to September 1960 in reports of Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark). Auxiliary water-stage recorder 150 ft below control structure at same datum.

AVERAGE DISCHARGE.--11 years, 162 cfs (117,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 802 cfs Apr. 21, 1966; minimum daily, 18 cfs Sept. 3-5, Oct. 22 to Nov. 7, 1963, July 27-30, 1965, July 4-9, 1969.

REMARKS.--Records fair. Total flow through control structure diverted from Bayou Teche. Diversions are for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	146	24	23	24	413	311	466	218	105	21
2	22	22	115	26	24	25	408	327	456	184	104	22
3	23	23	105	27	25	25	413	340	440	153	96	22
4	22	23	133	27	26	27	406	398	454	143	94	22
5	22	23	103	25	25	186	369	452	463	143	97	23
6	22	22	21	26	25	249	350	482	485	142	104	23
7	27	22	26	26	25	279	331	478	479	114	104	23
8	27	22	29	27	25	231	306	476	428	105	105	23
9	25	22	30	26	25	287	277	471	402	103	104	23
10	26	21	30	26	25	345	273	467	404	102	73	23
11	26	21	28	26	24	388	271	459	406	102	20	23
12	26	21	27	26	24	386	320	464	397	104	20	23
13	25	21	26	26	24	392	390	464	393	100	19	24
14	25	20	26	27	24	397	415	465	366	101	19	25
15	24	20	26	26	23	393	418	466	369	98	19	26
16	24	20	26	25	23	359	418	468	334	99	19	26
17	23	20	25	25	23	356	415	467	329	100	19	26
18	22	20	25	25	24	368	419	464	331	102	20	26
19	22	20	24	25	24	381	405	466	330	100	20	25
20	22	20	25	25	24	392	418	466	307	101	20	25
21	22	20	26	25	24	389	439	467	306	103	21	25
22	21	20	25	25	24	380	444	464	299	101	21	24
23	21	20	25	24	24	386	450	461	280	103	21	26
24	21	20	24	24	24	392	448	463	274	100	22	26
25	21	20	24	24	24	399	403	465	269	100	21	26
26	21	20	25	24	24	393	399	463	231	101	21	26
27	21	76	24	23	24	399	399	462	248	102	21	28
28	21	124	23	23	24	391	389	466	267	102	21	28
29	21	145	23	23	-----	407	360	465	273	102	22	28
30	21	147	23	22	-----	414	327	462	249	103	21	26
31	21	-----	24	22	-----	417	-----	466	-----	104	21	-----
TOTAL	709	1,036	1,262	775	677	9,857	11,493	13,958	10,736	3,535	1,414	737
MEAN	22.9	34.5	40.7	25.0	24.2	318.0	383.1	450.3	357.9	114.0	45.6	24.6
MAX	27	147	146	27	26	417	450	482	485	218	105	28
MIN	21	20	21	22	23	24	271	311	231	98	19	21
AC-FT	1,410	2,050	2,500	1,540	1,340	19,550	22,800	27,690	21,290	7,010	2,800	1,460
CAL YR 1969: TOTAL	31,880		MEAN	87.3	MAX	411	MIN	18	AC-FT	63,230		
WAT YR 1970: TOTAL	56,189		MEAN	154	MAX	485	MIN	19	AC-FT	111,500		

NOTE.--Auxiliary gage-height record based on once-daily staff gage readings Oct. 1 to Sept. 30.

08010000 Bayou des Cannes near Eunice, La.

LOCATION.--Lat 30°29'00", long 92°29'25", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T.6 S., R.1 W., Louisiana meridian, Evangeline Parish, on left bank at downstream side of bridge on U.S. Highway 190, 3 miles downstream from New Orleans, Texas and Mexico Railway Co. bridge, and 4 miles west of Eunice.

DRAINAGE AREA.--131 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 14.84 ft above mean sea level (Louisiana Geodetic Survey bench mark; levels by Corps of Engineers). Prior to Jan. 17, 1940, nonrecording gage at same site and datum. Auxiliary water-stage recorder 1.8 miles downstream. Datum of auxiliary gage is 13.70 ft above mean sea level. Oct. 1, 1943, to Nov. 1, 1950, auxiliary nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 252 cfs (26.12 inches per year, 182,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,340 cfs May 5 (gage height, 16.06 ft); minimum, 0.5 cfs Oct. 4 (gage height, 0.90 ft). Period of record: Maximum discharge, 11,900 cfs May 20, 1953 (gage height, 22.36 ft); no flow at times in 1939, 1948, 1955-56, 1963.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Small diversion above station. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1242: 1950(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	472	1.5	150	141	49	25	27	77	29	145	293
2	1.7	477	1.5	131	456	24	18	538	118	17	114	439
3	.80	269	1.3	78	722	15	13	899	132	7.5	88	584
4	.66	100	1.0	49	560	133	17	1,710	120	13	72	636
5	2.0	35	1.0	36	300	350	16	2,270	92	7.8	76	617
6	58	17	211	173	104	400	9.5	1,870	70	5.5	113	512
7	622	7.9	649	409	33	300	7.3	1,320	52	5.7	118	311
8	752	4.9	934	449	16	320	7.1	860	34	6.3	123	152
9	709	4.0	1,470	270	11	350	9.8	478	24	5.0	129	35
10	402	3.6	1,610	144	7.8	200	110	113	20	6.3	107	17
11	266	3.4	1,250	155	6.5	133	391	70	17	6.9	82	20
12	260	3.4	849	350	5.7	146	523	38	12	24	71	112
13	159	6.7	541	333	4.8	142	577	28	7.3	50	74	227
14	66	5.5	208	165	3.7	95	489	29	8.5	54	70	147
15	35	7.9	125	114	3.1	54	188	27	11	68	61	86
16	23	6.7	57	72	9.5	33	87	38	5.9	117	48	35
17	17	4.0	38	52	84	108	40	39	4.0	161	41	16
18	11	3.4	31	40	119	300	23	42	3.7	163	48	84
19	9.7	7.5	32	33	73	420	43	35	28	182	50	113
20	8.7	10	34	26	37	350	176	24	26	167	67	86
21	9.6	20	42	21	18	380	271	22	14	129	122	56
22	7.3	18	45	18	12	440	193	14	9.0	154	147	32
23	5.5	12	61	20	6.7	420	112	58	6.3	172	150	7.3
24	5.2	8.1	61	22	4.4	200	56	79	8.2	211	162	12
25	5.5	7.1	49	21	11	124	28	65	15	220	171	31
26	6.7	4.3	37	16	150	65	21	83	58	206	164	86
27	6.2	3.5	27	14	200	42	18	141	80	131	144	66
28	4.8	2.5	20	12	105	27	20	127	59	187	108	51
29	4.5	2.8	18	11	-----	36	14	94	43	220	74	56
30	4.5	2.5	66	9.8	-----	35	14	71	33	220	52	223
31	153	-----	152	8.5	-----	27	-----	57	-----	138	147	-----
TOTAL	3,620.56	1,529.7	8,623.7	3,402.3	3,204.2	5,718	3,516.7	11,266	1,187.9	3,094.4	3,140	5,142.3
MEAN	117	51.0	278	110	114	184	117	363	39.6	99.8	101	171
MAX	752	477	1,610	449	722	440	577	2,270	132	220	171	636
MIN	.66	2.5	1.0	8.5	3.1	15	7.1	14	3.7	5.0	41	7.3
CFSM	.89	.39	2.12	.84	.87	1.41	.89	2.77	.30	.76	.77	1.31
IN.	1.03	.43	2.45	.97	.91	1.62	1.00	3.20	.34	.88	.89	1.46
AC-FT	7,180	3,030	17,110	6,750	6,360	11,340	6,980	22,350	2,360	6,140	6,230	10,200
CAL YR 1969	TOTAL 101,425.26	MEAN 278	MAX 3,050	MIN .66	CFSM 2.12	IN 28.79	AC-FT 201,200					
WTR YR 1970	TOTAL 53,445.76	MEAN 146	MAX 2,270	MIN .66	CFSM 1.12	IN 15.17	AC-FT 106,000					

NOTE.--No auxiliary gage-height record Feb. 7 to Mar. 31.

MERMENTAU RIVER BASIN

107

08011500 Boggy Bayou near Pine Prairie, La.

LOCATION.--Lat 30°47'10", long 92°28'30", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.21, T.3 S., R.1 W., Louisiana meridian, Evangeline Parish, near right bank on downstream side of bridge on State Highway 106, 2.75 miles upstream from Beaver Creek, and $\frac{3}{4}$ miles west of Pine Prairie.

DRAINAGE AREA.--51.3 sq mi.

PERIOD OF RECORD.--Annual maximums, water years 1952-58, 1962-65 and occasional low-flow measurements, water years 1956, 1960, 1962-65. September 1948 to December 1951 (published as Cypress Creek near Pine Prairie), November 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 61.33 ft above mean sea level. Prior to Dec. 31, 1951, water-stage recorder, Jan. 28, 1952, to Oct. 14, 1958, and Aug. 2, 1961, to Nov. 9, 1965, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 1,690 cfs May 3 (gage height, 13.39 ft); no flow many days.
Period of record: Maximum discharge, 17,400 cfs Apr. 23, 1964 (gage height, 18.78 ft); no flow at times most years.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	10	0	31	13	12	3.0	3.6	2.1	0	4.6	1.9
2	0	3.7	0	12	93	8.4	2.8	666	3.3	0	2.8	4.8
3	0	1.4	0	6.7	65	40	2.5	1,490	1.6	0	1.9	6.0
4	0	.57	0	4.4	27	313	2.2	824	.67	0	.84	71
5	0	.19	0	3.8	14	206	1.9	384	.26	0	.76	54
6	0	.04	236	112	9.4	57	1.6	102	.09	0	1.0	17
7	43	0	625	134	6.8	32	1.3	18	0	0	2.5	6.6
8	22	0	479	44	5.2	50	1.2	9.1	0	0	3.0	3.8
9	2.3	0	90	21	4.2	41	1.3	6.1	0	0	3.5	2.3
10	1.1	0	18	12	3.3	23	210	4.5	0	0	3.9	1.5
11	2.5	0	8.7	12	2.8	23	355	3.4	0	0	3.0	1.0
12	7.1	0	5.6	16	2.3	49	238	2.6	0	0	1.9	9.0
13	2.7	0	4.3	15	1.9	58	196	2.1	0	0	.94	28
14	1.1	0	3.1	9.3	1.7	37	66	2.9	0	0	.45	8.9
15	.45	0	2.3	7.1	1.7	18	25	2.6	0	0	.36	4.9
16	.17	0	1.7	5.5	30	10	13	2.1	0	0	.15	2.6
17	.11	0	1.3	4.4	42	57	8.5	1.5	0	0	.54	1.4
18	.06	0	1.0	3.8	19	150	6.2	.82	0	0	.76	.80
19	0	0	.89	3.5	13	101	5.1	.71	0	0	4.6	.67
20	0	0	.99	3.2	8.7	169	7.4	.49	0	0	16	.49
21	0	0	1.2	3.0	6.2	195	8.5	.36	0	0	15	.29
22	0	0	9.4	3.2	4.7	240	5.7	.26	0	0	6.6	.17
23	0	0	6.3	2.8	3.8	139	3.9	.15	0	0	4.4	.13
24	0	0	3.3	2.6	3.4	58	2.7	.49	0	0	4.1	.13
25	0	0	2.4	2.4	34	27	1.9	1.9	0	0	3.4	.11
26	0	0	1.8	2.1	53	15	1.5	1.7	0	0	7.1	2.2
27	0	0	1.4	1.9	36	9.3	1.1	.81	0	0	5.0	75
28	0	0	1.2	1.7	21	6.6	.76	.45	0	0	3.3	46
29	0	0	1.6	1.6	-----	5.1	.53	.20	0	1.8	2.8	18
30	.05	0	18	1.8	-----	4.0	1.5	.09	0	.84	2.7	6.6
31	.85	-----	76	2.8	-----	3.4	-----	.15	-----	3.3	2.1	-----
TOTAL	83.49	15.90	1,600.48	486.6	526.1	2,156.8	1,226.09	3,533.08	8.02	5.94	110.00	375.29
MEAN	2.69	.53	51.6	15.7	18.8	69.6	40.9	114	.27	.19	3.55	12.5
MAX	43	10	625	134	93	313	355	1,490	3.3	3.3	16	75
MIN	0	0	0	1.6	1.7	3.4	.53	.09	0	0	.15	.11
CFSM	.052	.010	1.01	.31	.37	1.36	.80	2.22	.005	.004	.069	.24
IN.	.06	.01	1.16	.35	.38	1.56	.89	2.56	.005	.004	.08	.27
AC-FT	166	32	3,170	965	1,040	4,280	2,430	7,010	16	12	218	744

CAL YR 1969 TOTAL 21,514.63 MEAN 58.9 MAX 1,590 MIN 0 CFSM 1.15 IN 15.60 ACFT 42,670
WAT YR 1970 TOTAL 10,127.79 MEAN 27.7 MAX 1,490 MIN 0 CFSM .54 IN 7.34 ACFT 20,090

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-3	0500	13.39	1,690				

MERMENTAU RIVER BASIN

08012000 Bayou Nezpique near Basile, La.

LOCATION.--Lat 30°28'50", long 92°37'55", in NE¼NW¼ sec.1, T.7 S., R.3 W., Evangeline Parish, near left bank on downstream side of bridge on U.S. Highway 190, 0.25 mile downstream from New Orleans, Texas and Mexico Railway Co. bridge, and 2 miles west of Basile.

DRAINAGE AREA.--527 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 3.39 ft above mean sea level. Prior to July 17, 1947, nonrecording gage, at same site and datum. Since Apr. 10, 1945, auxiliary nonrecording gage 7.5 miles downstream. Datum of auxiliary gage is 1.03 ft below mean sea level (Louisiana Geodetic Survey bench mark).

AVERAGE DISCHARGE.--32 years, 757 cfs (19.51 inches per year, 548,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,690 cfs May 4; maximum gage height, 21.15 ft May 5; minimum, 1.0 cfs Oct. 5-8.
Period of record: Maximum discharge, 35,800 cfs May 20, 1953; maximum gage height, 34.39 ft May 20, 1953; minimum discharge, 0.1 cfs June 7-31, 1943, June 22-29, 1948; minimum gage height, 1.00 ft June 28, 1948.

REMARKS.--Records good. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1945-55. WRD La. 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	185	16	387	64	282	86	74	66	60	206	278
2	5.6	320	11	363	485	162	80	1,450	88	52	135	334
3	1.8	322	8.3	284	760	71	83	3,160	105	48	100	545
4	1.1	257	4.5	179	675	483	75	4,590	104	41	87	582
5	1.0	169	12	118	483	817	67	4,530	84	38	77	600
6	1.0	104	220	227	276	810	60	4,010	56	36	103	508
7	1.0	67	1,230	594	148	788	62	3,310	58	41	112	369
8	1.0	47	1,980	665	97	892	62	2,620	50	35	78	200
9	21	37	2,200	603	76	807	60	2,130	38	24	152	99
10	82	33	2,030	424	62	623	520	1,800	40	32	111	59
11	88	25	1,790	327	52	435	1,410	1,500	28	53	45	90
12	86	20	1,590	434	44	533	2,030	1,120	20	69	17	543
13	90	17	1,400	443	39	544	2,240	520	21	141	32	604
14	80	14	974	337	43	415	2,060	213	26	203	202	421
15	65	11	442	230	50	293	1,690	92	35	225	87	238
16	44	8.5	163	152	90	204	1,330	73	39	245	27	136
17	34	5.9	85	121	320	276	1,050	93	40	271	21	84
18	24	7.9	70	111	350	684	685	80	37	813	46	59
19	19	12	69	95	275	860	427	57	31	710	78	43
20	15	13	69	78	190	876	334	75	26	477	140	29
21	11	15	70	66	117	1,030	286	71	23	308	162	20
22	8.8	16	79	58	82	1,220	237	76	25	271	115	16
23	6.9	16	91	50	63	1,310	192	89	40	284	91	28
24	5.4	14	86	44	54	1,150	155	96	117	301	120	42
25	4.7	13	76	40	291	944	141	104	120	303	268	64
26	4.7	14	71	39	606	702	117	128	120	276	308	95
27	4.9	16	72	40	576	444	82	152	109	264	239	162
28	4.5	19	67	40	436	222	52	124	85	328	151	240
29	4.7	18	69	39	-----	134	81	81	72	356	98	416
30	7.1	10	89	33	-----	109	73	79	65	311	94	419
31	45	-----	268	27	-----	96	-----	68	-----	268	217	-----
TOTAL	777.2	1,826.3	15,401.8	6,648	6,804	18,216	15,827	32,565	1,768	6,884	3,719	7,323
MEAN	25.1	60.9	497	214	243	588	528	1,050	58.9	222	120	244
MAX	90	322	2,200	665	760	1,310	2,240	4,590	120	813	308	604
MIN	1.0	5.9	4.5	27	39	71	52	57	20	24	17	16
AC-FT	1,550	3,620	30,550	13,190	13,500	36,130	31,390	64,590	3,510	13,650	7,380	14,530
CAL YR 1969	TOTAL 281,614.9		MEAN 772		MAX 6,480		MIN 1.0		AC-FT 558,600			
WTR YR 1970	TOTAL 117,761.3		MEAN 323		MAX 4,590		MIN 1.0		AC-FT 233,600			

CALCASIEU RIVER BASIN

109

08013000 Calcasieu River near Glenmora, La.

LOCATION.--Lat 30°59'54", long 92°40'25", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.4, T.1 S., R.3 W., Louisiana meridian, Rapides Parish, on right bank on downstream side of bridge on State Highway 113, 1.0 mile upstream from Prairie Branch, and 4.6 miles northwest of Glenmora.

DRAINAGE AREA.--499 sq mi.

PERIOD OF RECORD.--August 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 110.77 ft above mean sea level (Louisiana Geodetic Survey bench mark). Prior to Nov. 19, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--27 years, 697 cfs (18.97 inches per year, 505,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs Jan. 6 (gage height, unknown); minimum daily, 20 cfs Oct. 28-30, Nov. 17, 18, 21.

Period of record: Maximum discharge, 59,900 cfs May 19, 1953 (gage height, 21.55 ft); minimum, 15 cfs Sept. 27, 28, Oct. 7-9, 1954, Oct. 18, 1956; minimum gage height, 3.86 ft Oct. 18, 1956.

REMARKS.--Records good except those for period of no gage-height record which are fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (water years).--WSP 1118: 1944-47.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	24	23	30	100	141	339	225	91	89	57	44	26	
2	24	23	27	200	198	345	199	626	78	47	39	28	
3	24	23	25	400	282	321	180	1,120	63	40	34	34	
4	23	29	25	700	436	298	165	1,040	73	37	32	39	
5	23	40	23	1,300	590	282	155	950	125	33	32	39	
6	23	50	48	2,000	776	306	149	828	116	30	30	36	
7	24	58	100	1,900	1,020	404	139	665	86	28	27	38	
8	24	60	300	1,600	1,260	536	128	496	67	26	28	37	
9	25	50	550	1,350	1,120	644	118	280	56	24	27	35	
10	25	35	500	1,350	724	684	150	164	49	24	26	33	
11	25	30	320	1,460	356	635	392	120	44	22	26	30	
12	25	27	300	1,500	271	492	554	100	41	22	25	29	
13	26	25	400	1,320	230	414	716	88	38	22	25	27	
14	25	25	500	1,050	203	422	876	79	36	22	24	25	
15	25	23	600	895	186	446	1,000	72	34	22	21	24	
16	25	21	500	804	177	432	1,010	67	32	76	21	23	
17	25	20	350	680	167	392	728	63	31	123	21	23	
18	25	20	250	536	184	418	422	59	30	126	21	23	
19	25	21	200	388	233	488	281	56	28	106	21	23	
20	24	21	170	299	270	704	245	59	27	70	21	23	
21	24	20	150	256	282	885	257	63	26	58	22	31	
22	24	22	130	232	271	1,160	326	58	26	49	22	32	
23	22	30	120	218	240	1,350	424	53	25	43	23	28	
24	22	30	110	212	205	1,350	462	50	40	40	28	27	
25	21	27	130	191	187	1,230	379	48	69	68	44	30	
26	22	58	150	179	181	1,090	264	49	45	65	51	31	
27	21	60	130	168	194	930	170	51	49	48	40	35	
28	20	56	130	159	275	653	125	47	114	41	35	60	
29	20	45	120	152	-----	446	105	46	116	48	32	100	
30	20	35	120	144	-----	328	94	44	81	50	30	96	
31	25	-----	110	137	-----	267	-----	56	-----	48	27	-----	
TOTAL	730	1,007	6,618	21,880	10,659	18,691	10,438	7,588	1,734	1,515	899	1,065	
MEAN	23.5	33.6	213	706	381	603	348	245	57.8	48.9	29.0	35.5	
MAX	26	60	700	2,000	1,260	1,350	1,010	1,120	125	126	51	100	
MIN	20	20	23	100	141	267	94	44	25	22	21	23	
CFSM	.05	.07	.43	1.41	.76	1.21	.70	.49	.12	.10	.06	.07	
IN.	.05	.08	.49	1.63	.79	1.39	.78	.57	.13	.11	.07	.08	
AC-FT	1,450	2,000	13,130	43,400	21,140	37,070	20,700	15,050	3,440	3,010	1,780	2,110	
CAL YR 1969	TOTAL 197,250		MEAN 540		MAX 8,600		MIN 20		CFSM 1.08		IN 14.70		AC-FT 391,200
WTR YR 1970:	TOTAL 82,824		MEAN 227		MAX 2,000		MIN 20		CFSM .45		IN 6.17		AC-FT 164,300

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

NOTE.--No gage-height record Nov. 6 to Jan. 8.

CALCASIEU RIVER BASIN

08013500 Calcasieu River near Oberlin, La.

LOCATION.--Lat 30°38'25", long 92°48'50", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.7, T.5 S., R.4 W., Allen Parish, near right bank on downstream side of bridge on State Highway 26, 3 miles northwest of Oberlin, and 15 miles upstream from Whisky Chitto Creek.

DRAINAGE AREA.--753 sq mi.

PERIOD OF RECORD.--August 1922 to January 1925, September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 39.43 ft above mean sea level (Louisiana Geodetic Survey bench mark). August 1922 to January 1925 water-stage recorder at same site at datum about 2.5 ft higher. September 1938 to August 17, 1939, nonrecording gage at same site and present datum.

AVERAGE DISCHARGE.--34 years, (1922-24, 1938-70), 1,125 cfs (20.29 inches per year, 815,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,880 cfs May 4 (gage height, 11.53 ft); minimum, 34 cfs Aug. 17; minimum gage height, 1.68 ft Sept. 20, 21-22, 23.

Period of record: Maximum discharge, 72,800 cfs May 19, 1953 (gage height, 26.53 ft); minimum, 30 cfs Sept. 28, 29, Oct. 17-19, 1956; minimum gage height, 1.68 ft Sept. 20, 21-22, 23.

Flood in June 1886 reached a stage of between 22 and 23 ft, present datum.

REMARKS.--Records good. Paper mill at Elizabeth pumps about 11 cfs from wells which is later discharged into Mill Creek 20 miles above station. This discharge is continuous and fairly constant. Some small diversions from April to September for rice irrigation above station. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1923, 1939(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	68	54	252	288	288	550	218	114	127	65	71
2	36	58	52	288	467	326	445	1,340	114	114	62	90
3	36	48	52	412	625	379	379	2,290	134	88	64	159
4	36	47	50	562	562	434	326	2,840	135	72	56	234
5	36	46	52	740	478	478	288	2,610	122	62	53	141
6	37	45	296	1,010	478	467	252	1,930	117	57	51	95
7	37	48	695	1,280	550	434	234	1,280	148	53	54	81
8	39	53	401	1,730	625	423	226	1,010	160	49	53	71
9	38	55	202	2,090	710	500	226	860	145	47	44	65
10	37	52	218	2,050	830	562	600	725	127	46	42	66
11	39	51	297	1,690	920	680	1,310	550	113	43	40	113
12	39	48	412	1,340	890	830	1,730	368	104	42	40	145
13	39	47	525	1,220	638	890	1,730	261	96	44	38	92
14	39	45	638	1,190	434	755	1,310	210	89	56	37	66
15	39	44	740	1,190	326	600	950	188	82	58	38	58
16	39	44	830	1,160	346	525	860	181	77	62	36	56
17	39	44	770	1,040	346	600	890	169	74	58	36	54
18	39	47	500	920	306	770	950	157	69	120	47	52
19	39	50	279	800	279	860	950	144	64	121	71	48
20	39	52	210	725	270	920	770	133	61	134	62	47
21	39	50	188	625	288	1,130	575	125	59	134	48	46
22	39	48	168	512	306	1,490	434	120	58	111	40	46
23	38	48	155	445	316	1,610	379	119	57	93	38	50
24	38	50	145	390	306	1,450	379	114	58	80	89	59
25	38	57	140	357	368	1,310	434	115	62	76	99	78
26	39	60	137	336	357	1,220	467	121	70	76	75	100
27	39	62	139	326	297	1,190	467	142	82	98	63	141
28	38	60	142	306	279	1,130	401	127	83	94	66	173
29	38	58	145	288	-----	1,040	297	122	70	81	71	111
30	52	56	174	270	-----	890	234	118	90	69	69	98
31	76	-----	234	261	-----	725	-----	114	-----	64	72	-----
TOTAL	1,233	1,541	9,040	25,805	12,885	24,906	19,043	18,801	2,834	2,429	1,719	2,706
MEAN	39.8	51.4	292	832	460	803	635	606	94.5	78.4	55.5	90.2
MAX	76	68	830	2,090	920	1,610	1,730	2,840	160	134	99	234
MIN	36	44	50	252	270	288	226	114	57	42	36	46
CFSM	.053	.068	.388	1.10	.611	1.07	.843	.805	.125	.104	.074	.120
IN.	.06	.08	.45	1.27	.64	1.23	.94	.93	.14	.12	.08	.13
AC-FT	2,450	3,060	17,930	51,180	25,560	49,400	37,770	37,290	5,620	4,820	3,410	5,370

CAL YR 1969:	TOTAL	314,650	MEAN	862	MAX	8,150	MIN	36	CFSM	1.14	IN.	15.54	AC-FT	624,100
WTR YR 1970:	TOTAL	122,942	MEAN	337	MAX	2,840	MIN	36	CFSM	.448	IN.	6.07	AC-FT	243,900

PEAK DISCHARGE (BASE, 8,000 CFS).--No peak above base.

CALCASIEU RIVER BASIN

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08014500 Whiskey Chitto Creek near Oberlin, La.

LOCATION.--Lat 30°41'55", long 92°53'35", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.20, T.4 S., R.5 W., Allen Parish, near left bank on downstream side of bridge on State Highway 26, 1 mile downstream from Tenmile Creek, 8 miles upstream from Bundick Creek, and 10 miles northwest of Oberlin.

DRAINAGE AREA.--510 sq mi.

PERIOD OF RECORD.--January 1939 to current year. Prior to October 1963 published as Whiskey Chitto Creek near Oberlin.

GAGE.--Water-stage recorder. Datum of gage is 46.24 ft above mean sea level (Louisiana Geodetic Survey bench mark). Prior to Oct. 19, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 781 cfs (20.80 inches per year, 565,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,770 cfs Apr. 13 (gage height, 8.41 ft); minimum, 102 cfs Aug. 17 (gage height, 2.48 ft).
Period of record: Maximum discharge, 144,000 cfs May 18, 1953 (gage height, 32.8 ft, from floodmark), from rating curve extended above 35,000 cfs on basis of slope-area measurement of peak flow; minimum, 88 cfs Oct. 19, 20, 1956; minimum gage height, 2.48 ft Aug. 17, 1970.

Flood in June 1886 reached a stage of 25.7 ft, from floodmarks preserved by local residents.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	142	124	967	253	330	281	224	187	160	123	115
2	148	177	122	1,100	346	288	268	819	182	140	122	137
3	144	257	121	850	590	291	259	1,320	188	132	115	157
4	141	201	120	520	848	300	259	1,400	213	127	115	147
5	138	169	122	424	616	288	255	1,110	195	123	114	180
6	137	155	233	445	426	315	243	883	175	121	116	185
7	137	149	647	691	356	330	231	562	168	119	120	164
8	137	144	1,150	986	322	295	224	356	162	117	123	141
9	137	142	1,460	862	303	291	224	300	157	116	122	130
10	138	140	1,580	565	283	335	545	268	154	114	123	121
11	139	139	1,110	461	272	346	1,340	249	151	113	125	119
12	138	137	562	437	259	330	1,700	233	150	114	117	117
13	142	135	413	584	247	333	1,730	220	148	116	111	113
14	146	132	348	576	241	388	1,300	211	147	115	108	111
15	145	130	308	450	237	325	778	206	144	120	105	108
16	141	130	283	386	261	279	534	207	143	127	103	111
17	141	131	268	351	272	288	442	206	140	126	103	115
18	138	139	257	330	353	472	429	199	139	130	115	114
19	135	145	249	315	364	772	429	194	136	128	154	114
20	133	149	243	303	303	901	394	190	135	123	146	140
21	131	274	239	305	268	928	517	187	134	125	131	147
22	130	268	259	333	249	1,110	570	187	132	126	125	134
23	129	187	288	315	233	1,100	418	180	131	123	120	125
24	131	152	295	291	228	913	333	179	137	121	125	122
25	135	141	270	279	231	618	291	183	147	132	151	121
26	130	134	247	270	253	472	266	220	164	130	153	141
27	127	130	235	263	407	399	251	211	164	126	148	472
28	125	126	230	261	426	364	237	188	147	128	135	470
29	125	125	231	255	-----	343	226	192	140	143	126	399
30	131	122	249	247	-----	310	216	199	151	143	119	315
31	147	-----	472	241	-----	291	-----	192	-----	132	117	-----
TOTAL	4,248	4,702	12,735	14,663	9,447	14,345	15,190	11,475	4,661	3,910	3,830	5,085
MEAN	137	157	411	473	337	463	506	370	155	126	124	170
MAX	152	274	1,580	1,100	848	1,110	1,730	1,400	213	160	154	472
MIN	125	122	120	241	228	279	216	179	131	113	103	108
CFSM	.27	.31	.81	.93	.66	.91	.99	.73	.30	.25	.24	.33
IN.	.31	.34	.93	1.07	.69	1.05	1.11	.84	.34	.29	.28	.37
AC-FT	8,430	9,330	25,260	29,080	18,740	28,450	30,130	22,760	9,250	7,760	7,600	10,090
CAL YR 1969	TOTAL 230,454		MEAN 631		MAX 5,880	MIN 120		CFSM 1.24	IN 16.81	AC-FT 457,100		
WTR YR 1970:	TOTAL 104,291		MEAN 286		MAX 1,730	MIN 103		CFSM .56	IN 7.61	AC-FT 206,900		

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

CALCASIEU RIVER BASIN

08014800 Bundick Creek near De Ridder, La.

LOCATION.--Lat 30°49'09", long 93°13'51", in SW¹/₄ sec. 7, T.3 S., R.8 W., Beauregard Parish, near left bank on downstream side of bridge on State Highway 26, 1.1 miles downstream from Flat Creek, and 3.8 miles southeast of De Ridder.

DRAINAGE AREA.--120 sq mi.

PERIOD OF RECORD.--March 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.75 ft above mean sea level (Louisiana Geodetic Survey bench mark).

AVERAGE DISCHARGE.--14 years, 151 cfs (17.09 inches per year, 109,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,300 cfs Dec. 7 (gage height, 15.15 ft, observed); minimum, 12 cfs Oct. 2 (gage height, 2.14 ft).

Period of record: Maximum discharge, 7,090 cfs Nov. 12, 1966 (gage height, 20.79 ft); minimum, 8.8 cfs Oct. 16, 1956; minimum gage height, 1.90 ft Sept. 3, 4, 1965.

REMARKS.--Records good except those for periods of no gage-height record which are poor. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECCND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	35	19	90	50	50	50	100	29	16	19	20
2	13	25	19	50	150	48	47	250	35	16	17	34
3	13	20	25	40	100	46	45	130	34	15	17	41
4	13	20	40	37	70	60	43	80	26	15	18	50
5	13	17	150	37	54	80	42	60	22	14	31	42
6	13	17	450	45	47	72	42	50	20	14	34	31
7	14	16	1,200	200	45	60	45	40	20	13	20	21
8	14	16	400	170	43	64	60	35	18	13	26	18
9	14	15	106	94	43	88	300	32	18	13	15	17
10	15	15	73	74	41	76	700	30	18	14	18	16
11	18	15	59	80	40	73	600	28	18	14	15	15
12	17	14	50	119	39	66	300	26	18	15	14	16
13	17	14	46	113	38	60	200	25	17	20	14	18
14	17	14	42	81	37	54	130	25	17	19	13	16
15	16	13	40	66	37	50	90	25	17	18	13	15
16	16	13	38	60	110	50	70	28	16	18	14	17
17	15	13	37	56	90	150	54	30	16	18	14	25
18	14	15	37	54	75	130	50	34	16	21	15	32
19	14	40	48	53	62	110	70	30	15	18	17	24
20	14	100	100	59	54	200	62	27	15	16	16	22
21	14	50	70	65	47	400	56	25	15	16	15	17
22	14	38	50	59	46	300	52	25	15	19	16	17
23	14	30	45	52	44	200	48	25	15	21	16	16
24	13	25	40	50	44	150	45	23	39	20	15	18
25	13	23	39	48	110	120	40	22	30	21	15	33
26	13	22	38	47	70	100	37	24	22	45	14	85
27	13	21	37	47	50	90	34	26	20	49	14	188
28	13	20	37	46	45	80	33	27	20	36	14	71
29	15	20	50	45	-----	70	33	25	18	28	13	38
30	25	19	250	43	-----	60	35	24	16	21	13	27
31	50	-----	150	42	-----	54	-----	18	-----	19	14	-----
TOTAL	490	715	3,785	2,122	1,681	3,211	3,413	1,349	615	615	523	1,000
MEAN	15.8	23.8	122	68.5	60.0	104	114	43.5	20.5	19.8	16.9	33.3
MAX	50	100	1,200	200	150	400	700	250	39	49	34	188
MIN	13	13	19	37	37	46	33	18	15	13	13	15
CFSM	.13	.20	1.02	.57	.50	.86	.95	.36	.17	.17	.14	.28
IN.	.15	.22	1.17	.66	.52	1.00	1.06	.42	.19	.19	.16	.31
AC-FT	972	1,420	7,510	4,210	3,330	6,370	6,770	2,680	1,220	1,220	1,040	1,980
CAL YR 1969	TOTAL 45,162			MEAN 124	MAX 2,820	MIN 13	CFSM 1.03	IN 14.00	AC-FT 89,580			
WTR YR 1970:	TOTAL 19,519			MEAN 53.5	MAX 1,200	MIN 13	CFSM .45	IN 6.05	AC-FT 38,720			

PEAK DISCHARGE (BASE, 900 CFS)

NOTE.--No gage-height record Oct. 20 to Dec. 8, Mar. 12 to May 15.

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-7	unknown	15.15	1,300				

08015000 Bundick Creek near Dry Creek, La.

LOCATION.--Lat 30°40'55", long 93°02'15", in NW¼NW¼ sec.25, T.4 S., R.7 W., Beauregard Parish, near right bank on downstream side of bridge on State Highway 113, 1.1 miles north of town of Dry Creek, and 8 miles upstream from mouth.

DRAINAGE AREA.--238 sq mi.

PERIOD OF RECORD.--January 1939 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 56.92 ft above mean sea level (Louisiana Geodetic Survey bench mark). Prior to Nov. 20, 1943, nonrecording gage at same site at datum 7.16 ft lower. Nov. 20, 1943, to Oct. 19, 1944, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--31 years, 359 cfs (20.48 inches per year, 260,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, about 1,500 cfs Dec. 9 (gage height, unknown); minimum 24 cfs Nov. 14, 15-17, 18, 19 (gage height, 1.76 ft, result of temporary regulation), minimum unaffected by regulation, 27 cfs Jan. 30, 31 (gage height, 1.68 ft).
Period of record: Maximum discharge, 37,000 cfs May 19, 1953 (gage height, 23.67 ft, from floodmark), from rating curve extended above 15,000 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 20 cfs Dec. 4, 5, 6, 7, 8, 9, 1967.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Some effect from storage in Bundick Lake (capacity 9,200 acre-ft at 95.0 ft, spillway elevation) since August 1961. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	66	51	150	35	131	104	74	62	39	52	73
2	37	66	101	300	61	123	112	283	63	38	55	80
3	37	73	110	280	39	122	92	149	62	37	50	90
4	36	103	110	260	33	126	89	188	59	36	47	88
5	36	103	110	240	83	123	88	208	58	36	45	83
6	35	96	400	230	116	118	81	171	55	33	41	77
7	38	68	1,000	220	118	120	78	133	53	30	45	71
8	40	67	1,300	209	112	123	75	108	50	29	45	64
9	41	67	1,400	206	107	116	77	90	49	29	45	56
10	41	67	1,350	204	93	114	342	78	52	29	44	51
11	44	67	1,300	208	90	121	559	74	48	29	42	48
12	45	67	1,200	203	90	130	682	76	45	30	40	45
13	55	31	1,000	200	86	181	738	77	46	32	37	45
14	51	25	700	200	84	160	628	72	45	32	35	43
15	129	24	500	199	88	135	397	69	44	38	33	41
16	269	24	350	161	121	118	267	80	43	37	32	49
17	264	24	250	44	107	149	197	81	43	39	30	65
18	256	27	200	37	111	216	153	73	43	84	36	70
19	252	34	150	35	118	271	137	69	42	73	43	64
20	248	116	120	33	111	369	134	68	42	63	69	60
21	239	118	100	31	102	363	157	65	42	61	88	56
22	232	118	110	31	97	431	174	65	41	69	83	52
23	225	118	130	30	91	402	168	63	41	59	81	50
24	218	117	130	29	90	338	144	62	40	53	74	54
25	210	117	120	29	107	262	121	73	42	50	110	72
26	200	105	100	29	107	210	104	66	44	50	97	75
27	190	43	94	29	124	156	90	66	44	53	88	122
28	180	41	90	28	133	138	81	63	43	58	73	176
29	175	40	86	28	-----	128	74	62	42	59	63	165
30	64	40	84	27	-----	115	67	60	41	57	65	134
31	64	-----	86	27	-----	108	-----	60	-----	53	86	-----
TOTAL	3,989	2,072	12,832	3,937	2,654	5,717	6,210	2,926	1,424	1,415	1,774	2,219
MEAN	129	69.1	414	127	94.8	184	207	94.4	47.5	45.6	57.2	74.0
MAX	269	118	1,400	300	133	431	738	283	63	84	110	176
MIN	35	24	51	27	33	108	67	60	40	29	30	41
CFSM	.54	.29	1.74	.53	.40	.77	.87	.40	.20	.19	.24	.31
IN.	.62	.32	2.01	.62	.41	.89	.97	.46	.22	.22	.28	.35
AC-FT	7,910	4,110	25,450	7,810	5,260	11,340	12,320	5,800	2,820	2,810	3,520	4,400
CAL YR 1969	TOTAL 104,722			MEAN 287		MAX 2,540	MIN 24	CFSM 1.21	IN 16.36	AC-FT 207,700		
WTR YR 1970:	TOTAL 47,169			MEAN 129		MAX 1,400	MIN 24	CFSM .54	IN 7.37	AC-FT 93,560		

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE TIME G.H. DISCHARGE DATE TIME G.H. DISCHARGE NOTE.--No gage-height record Oct. 1-8, Dec. 3 to Jan. 8.

12-9 unknown unknown about 1,500

08015500 Calcasieu River near Kinder, La.

LOCATION.--Lat 30°30'10", long 92°54'55", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.30, T.6 S., R.5 W., Allen Parish, on left bank on downstream side of bridge on U. S. Highway 190, 0.5 mile downstream from Whisky Chitto Creek, and 4 miles west of Kinder.

DRAINAGE AREA.--1,700 sq mi.

PERIOD OF RECORD.--August 1922 to January 1925, October 1938 to September 1957, October 1961 to current year. October 1957 to September 1961 (annual maximums) from U. S. Weather Bureau records.

GAGE.--Water-stage recorder. Datum of gage is 11.95 ft above mean sea level (Louisiana Geodetic Survey bench mark). August 1922 to January 1925, water-stage recorder 400 ft downstream at datum 1.77 ft higher. October 1938 to July 9, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--30 years (1922-24, 1938-57, 1961-70), 2,493 cfs (1,806,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,780 cfs Apr. 13 (gage height, 11.35 ft); minimum, 226 cfs June 23.

Period of record: Maximum discharge, 182,000 cfs May 19, 1953 (gage height, 32.00 ft); minimum, 136 cfs Aug. 15, 1956; minimum gage height, 1.99 ft Aug. 17, 1951.

REMARKS.--Records good. Paper mill at Elizabeth pumps about 11 cfs from wells which is later discharged into Mill Creek 36 miles above station. This discharge is continuous and fairly constant. Water is diverted during period April to September at points just above station and 5 miles above station for the irrigation of about 7,500 acres of rice, part of which is below station. The maximum rate of withdrawal is about 100 cfs and this diversion results in marked regulation of the low-water flow. Records of water temperatures for the water year 1970 are published in Part 2 of this report. See following page for table of daily gage height.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	338	272	578	573	850	1,080	612	443	295	284	341
2	265	321	274	1,270	830	810	930	1,890	432	310	277	417
3	260	354	308	1,360	1,070	822	854	3,930	419	288	288	470
4	257	381	311	1,190	1,280	922	794	4,270	432	275	293	504
5	254	364	318	1,170	1,260	910	746	4,230	435	268	291	492
6	260	344	735	1,390	1,030	950	694	3,810	412	268	305	424
7	260	327	1,800	1,720	978	1,030	652	2,870	394	247	303	382
8	262	301	1,860	2,150	1,010	1,030	627	1,890	396	233	305	348
9	265	298	1,630	2,550	1,060	982	633	1,450	384	231	300	319
10	268	297	1,670	2,620	1,130	1,010	1,560	1,260	355	231	291	300
11	271	292	1,850	2,500	1,220	1,150	3,260	1,070	336	231	291	346
12	271	287	1,460	2,210	1,270	1,310	4,170	902	327	245	275	489
13	280	281	1,150	1,980	1,180	1,370	4,330	766	317	265	252	402
14	279	251	1,110	1,950	966	1,360	4,090	670	310	279	242	500
15	280	237	1,140	1,860	826	1,240	3,070	603	310	317	256	440
16	317	234	1,180	1,770	834	1,070	2,040	594	310	331	270	400
17	439	233	1,210	1,630	922	1,090	1,660	594	286	336	254	360
18	452	240	1,100	1,400	854	1,430	1,550	576	265	424	256	320
19	452	263	862	1,260	854	1,700	1,570	555	252	424	288	310
20	449	261	714	1,160	818	2,170	1,470	534	245	399	324	310
21	445	336	658	1,040	774	2,540	1,270	507	238	389	343	300
22	440	442	620	926	758	2,990	1,220	492	238	382	334	300
23	432	418	621	826	754	3,200	1,110	481	233	367	324	303
24	428	378	616	732	750	2,970	970	459	245	336	367	322
25	428	361	603	673	846	2,490	922	467	258	322	390	303
26	424	357	574	636	854	2,070	898	487	277	324	480	353
27	417	345	558	609	842	1,830	882	501	307	324	450	409
28	409	297	553	591	890	1,670	834	467	315	341	339	698
29	402	284	555	570	-----	1,570	743	445	295	327	319	690
30	373	277	588	546	-----	1,430	648	437	272	322	315	600
31	350	-----	654	531	-----	1,280	-----	437	-----	305	319	-----
TOTAL	10,659	9,399	27,554	41,798	26,433	47,246	45,277	38,256	9,738	9,636	9,625	12,152
MEAN	344	313	889	1,348	944	1,524	1,509	1,234	325	311	310	405
MAX	452	442	1,860	2,620	1,280	3,200	4,330	4,270	443	424	480	698
MIN	254	233	272	531	573	810	627	437	233	231	242	300
AC-FT	21,140	18,640	54,650	82,910	52,430	93,710	89,810	75,880	19,320	19,110	19,090	24,100
CAL YR 1969	TOTAL	722,460	MEAN	1,979	MAX	15,600	MIN	233	ACFT	1,433,000		
WAT YR 1970	TOTAL	287,773	MEAN	788	MAX	4,330	MIN	231	ACFT	570,800		

CALCASIEU RIVER BASIN

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08015500 Calcasieu River near Kinder, La.--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.50	2.76	2.51	4.88	3.46	4.09	4.77	3.38	2.96	2.54	2.36	2.60
2	2.48	2.70	2.52	5.66	4.19	3.96	4.35	6.50	2.93	2.59	2.33	2.91
3	2.46	2.82	2.65	5.88	4.79	4.00	4.10	10.73	2.89	2.49	2.38	3.11
4	2.45	2.93	2.66	5.44	5.32	4.32	3.90	11.24	2.95	2.42	2.40	3.23
5	2.44	2.86	2.68	5.40	5.28	4.29	3.79	11.18	2.97	2.38	2.39	3.19
6	2.45	2.79	4.09	5.95	4.70	4.41	3.63	10.57	2.89	2.38	2.45	2.94
7	2.46	2.72	6.88	6.71	4.57	4.61	3.51	9.01	2.83	2.27	2.44	2.77
8	2.46	2.62	7.03	7.64	4.64	4.63	3.43	6.84	2.86	2.20	2.45	2.63
9	2.48	2.61	6.51	8.44	4.77	4.50	3.45	5.75	2.82	2.18	2.43	2.51
10	2.49	2.60	6.60	8.58	4.95	4.59	5.82	5.25	2.72	2.17	2.38	2.43
11	2.50	2.58	6.99	8.29	5.16	4.96	9.68	4.74	2.66	2.16	2.39	2.62
12	2.50	2.56	6.10	7.64	5.28	5.39	11.10	4.26	2.63	2.21	2.32	3.18
13	2.54	2.54	5.34	7.07	5.04	5.54	11.33	3.83	2.60	2.29	2.22	2.85
14	2.54	2.43	5.24	7.00	4.46	5.53	10.99	3.57	2.58	2.34	2.18	3.30
15	2.54	2.37	5.32	6.77	4.01	5.22	9.34	3.37	2.58	2.50	2.24	3.05
16	2.68	2.36	5.44	6.54	4.04	4.73	7.21	3.35	2.58	2.56	2.30	2.90
17	3.14	2.36	5.49	6.19	4.33	4.80	6.27	3.36	2.50	2.58	2.23	2.70
18	3.19	2.38	5.21	5.63	4.12	5.70	6.01	3.31	2.43	2.94	2.24	2.51
19	3.19	2.47	4.56	5.28	4.12	6.38	6.04	3.25	2.39	2.94	2.38	2.48
20	3.18	2.46	4.11	5.02	3.99	7.54	5.80	3.19	2.37	2.84	2.53	2.47
21	3.17	2.75	3.92	4.73	3.85	8.39	5.28	3.11	2.35	2.80	2.61	2.40
22	3.15	3.16	3.79	4.44	3.81	9.23	5.14	3.07	2.35	2.77	2.57	2.43
23	3.12	3.07	3.80	4.19	3.80	9.58	4.84	3.04	2.34	2.71	2.53	2.44
24	3.10	2.91	3.78	3.95	3.79	9.20	4.47	2.97	2.40	2.58	2.71	2.52
25	3.10	2.85	3.73	3.78	4.09	8.28	4.32	3.00	2.44	2.52	2.80	2.46
26	3.09	2.83	3.63	3.67	4.12	7.31	4.25	3.07	2.51	2.53	3.15	2.65
27	3.06	2.79	3.57	3.58	4.08	6.70	4.20	3.13	2.63	2.53	3.10	2.88
28	3.03	2.60	3.55	3.52	4.23	6.31	4.05	3.02	2.65	2.60	2.59	3.84
29	3.01	2.55	3.56	3.45	-----	6.05	3.77	2.95	2.56	2.54	2.51	3.83
30	2.90	2.53	3.68	3.37	-----	5.71	3.50	2.93	2.45	2.52	2.49	3.55
31	2.81	-----	3.91	3.32	-----	5.29	-----	2.93	-----	2.45	2.51	-----
MAX	3.19	3.16	7.03	8.58	5.32	9.58	11.33	11.24	2.97	2.94	3.15	3.84
MIN	2.44	2.36	2.51	3.32	3.46	3.96	3.43	2.93	2.34	2.16	2.18	2.40

CALCASIEU RIVER BASIN

08016400 Beckwith Creek near De Quincy, La.

LOCATION.--Lat 30°28'15", long 93°21'35", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.11, T.7 S., R.10 W., Beauregard Parish, near right bank on downstream side of bridge on State Highway 12, 300 ft upstream from New Orleans, Texas and Mexico Railway bridge, 2.3 miles downstream from Hams Creek, and 4.4 miles northeast of De Quincy.

DRAINAGE AREA.--148 sq mi.

PERIOD OF RECORD.--August 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 25.29 ft above mean sea level. Prior to Oct. 28, 1950, nonrecording gage and Oct. 29, 1950, to Jan. 3, 1961, water-stage recorder 1,000 ft upstream at same datum.

AVERAGE DISCHARGE.--25 years, 193 cfs (17.71 inches per year, 139,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,530 cfs Dec. 7 (gage height, 15.22 ft); minimum, 0.16 cfs Oct. 5, 19; minimum gage height, 0.97 ft Oct. 28, 29, 30.

Period of record: Maximum discharge, 13,800 cfs May 21, 1955 (gage height, 24.45 ft); minimum, 0.1 cfs Sept. 27 to Oct. 30, 1956; minimum gage height, 0.87 ft Sept. 26, 1954.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (water years).--WSP 1118: 1946, 1947(M). WSP 1512: 1945.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	2.2	1.5	14	33	49	22	12	511	1.7	1.1	2.4
2	.32	6.9	1.3	33	166	30	20	66	1,120	1.6	1.0	102
3	.24	7.6	1.2	45	106	24	18	40	244	1.6	.94	84
4	.18	3.9	1.1	32	97	33	17	17	52	1.6	1.0	18
5	.17	2.4	1.4	26	109	41	15	51	31	1.5	.88	12
6	.17	1.6	801	74	60	32	13	63	22	2.2	.88	6.9
7	.18	1.2	1,360	76	34	30	12	33	16	1.9	1.8	4.3
8	.18	.88	640	62	25	36	11	18	13	1.7	5.5	3.0
9	.18	.70	361	68	20	31	22	12	10	1.6	2.0	2.4
10	.28	.60	326	50	16	25	772	9.2	8.8	1.2	1.0	1.9
11	.32	.55	206	59	15	75	851	7.2	7.4	1.1	1.2	2.1
12	.32	.45	58	59	12	108	576	5.8	6.5	1.1	1.6	3.6
13	.36	.41	33	33	11	61	511	5.0	5.6	1.1	1.1	3.1
14	.28	.37	24	28	9.8	39	529	4.1	4.8	1.4	.76	2.1
15	.26	.34	19	28	11	34	485	3.7	4.6	2.4	.65	1.9
16	.22	.31	17	25	13	24	184	6.3	3.9	2.9	.60	5.1
17	.18	.31	16	20	24	114	66	6.2	3.4	2.0	.60	18
18	.17	11	13	17	46	271	44	6.3	2.9	1.8	.60	44
19	.17	22	14	15	46	206	37	8.2	2.5	1.9	.70	14
20	.28	18	12	14	32	231	69	7.4	2.3	1.6	.76	5.8
21	.32	23	11	13	22	286	66	10	2.4	1.4	.76	14
22	.32	14	10	12	17	361	62	14	13	1.4	.70	6.7
23	.26	7.8	9.4	12	13	285	68	8.2	3.5	1.2	.70	5.1
24	.24	4.8	9.0	11	12	223	42	41	3.0	1.0	4.3	10
25	.22	3.1	8.8	11	49	164	26	105	3.3	1.0	1.9	22
26	.22	2.4	9.0	11	87	79	18	26	2.6	1.3	2.4	31
27	.22	1.8	9.0	11	78	48	15	18	2.3	1.4	9.0	81
28	.22	1.4	9.0	10	78	40	12	9.2	2.0	1.3	3.7	76
29	.22	1.5	9.6	10	-----	40	10	40	1.8	1.1	2.0	30
30	1.2	1.6	11	10	-----	33	8.8	30	1.7	1.2	1.6	11
31	7.6	-----	12	8.6	-----	26	-----	30	-----	1.1	1.2	-----
TOTAL	15.88	143.12	4,014.3	897.6	1,241.8	3,079	4,601.8	712.8	2,107.3	47.3	52.93	623.4
MEAN	.51	4.77	129	29.0	44.4	99.3	153	23.0	70.2	1.53	1.71	20.8
MAX	7.6	23	1,360	76	166	361	851	105	1,120	2.9	9.0	102
MIN	.17	.31	1.1	8.6	9.8	24	8.8	3.7	1.7	1.0	.60	1.9
CFSM	.003	.032	.87	.20	.30	.67	1.03	.16	.47	.010	.012	.14
IN.	.003	.04	1.01	.23	.31	.77	1.16	.18	.53	.01	.01	.16
AC-FT	32	284	7,960	1,780	2,460	6,110	9,130	1,410	4,180	94	105	1,240

CAL YR 1969 TOTAL 64,373.66 MEAN 176 MAX 2,470 MIN .17 CFSM 1.19 IN 16.18 ACFT 127,700
WAT YR 1970 TOTAL 17,537.23 MEAN 48.0 MAX 1,360 MIN .17 CFSM .32 IN 4.41 ACFT 34,790

PEAK DISCHARGE (BASE, 1,600 CFS).--No peak above base.

CALCASIEU RIVER BASIN

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08016800 Bear Head Creek near Starks, La.

LOCATION.--Lat 30°19'59", long 93°37'44", in sec.30, T.8 S., R.12 W., Calcasieu Parish, near right bank on downstream side of bridge on State Highway 12, 2.4 miles northeast of Starks, and 3.5 miles downstream from Green Island Marsh Creek.

DRAINAGE AREA.--177 sq mi.

PERIOD OF RECORD.--Annual maximums, water years 1954-56. March 1956 to current year. Prior to October 1962, published as Bearhead Creek near Starks.

GAGE.--Water-stage recorder. Datum of gage is 16.34 ft above mean sea level (Louisiana Geodetic Survey bench mark). Oct. 13, 1953, to Mar. 8, 1956, nonrecording gage at site 100 ft downstream at same datum.

AVERAGE DISCHARGE.--14 years, 214 cfs (16.42 inches per year, 155,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 675 cfs Apr. 13; maximum gage height, 12.21 ft Dec. 8; no flow many days.

Period of record: Maximum discharge, 8,000 cfs (revised) Sept. 22, 1958 (gage height, 17.00 ft); no flow at times most years.

REVISIONS.--The maximum discharge for the water year 1958 has been revised to 8,000 cfs Sept. 22, 1958 (gage height, 17.00 ft), superseding figure published in WSP 1562 and 1732.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1562: 1958(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	0	.01	0	5.7	26	80	16	4.1	94	.18	.06	.33			
2	0	0	0	6.9	78	56	15	5.2	157	.16	.06	5.7			
3	0	0	0	7.5	134	36	12	6.1	210	.16	.08	3.4			
4	0	0	.46	14	134	35	10	6.1	330	.14	.10	3.4			
5	0	0	1.8	20	111	35	8.5	4.7	261	.12	.08	3.6			
6	0	0	72	48	106	33	7.5	3.7	98	.08	.06	8.2			
7	0	0	255	73	70	36	7.1	3.7	28	.06	.39	28			
8	0	0	589	74	40	43	6.3	11	15	.05	.36	18			
9	0	0	521	56	27	42	6.3	8.0	8.5	.05	.12	9.5			
10	0	0	335	58	19	35	66	6.0	5.5	.04	.10	5.9			
11	0	0	233	58	15	42	270	4.5	3.7	.04	.10	4.7			
12	0	0	195	52	12	62	555	3.5	2.8	.10	.10	5.0			
13	.41	0	100	49	10	62	660	2.5	2.1	.12	.12	3.7			
14	.09	0	34	39	8.8	50	580	1.8	1.5	.10	.12	3.2			
15	.04	0	21	31	8.5	53	422	1.4	1.1	.14	.16	7.5			
16	.01	0	14	27	14	44	354	3.7	.80	.16	.21	7.8			
17	0	0	10	23	19	68	243	74	.60	.14	.18	7.8			
18	0	.03	9.2	18	25	135	96	101	.40	.10	.21	6.3			
19	0	.11	12	16	25	184	42	39	.30	.08	.30	4.6			
20	0	.05	13	14	32	200	31	14	.20	.06	.30	4.1			
21	0	.03	9.0	12	27	228	24	5.7	.10	.05	.30	5.7			
22	0	.01	6.7	11	20	274	22	3.4	.07	.05	.33	6.3			
23	0	.01	5.5	9.5	15	302	30	3.2	.05	.05	.39	6.3			
24	0	.01	4.7	8.8	14	274	38	4.7	.12	.04	.52	8.5			
25	0	.01	4.3	8.5	44	208	28	3.0	.16	.03	.47	9.2			
26	0	0	3.7	8.5	68	161	18	1.7	.14	.03	.47	12			
27	0	0	3.4	8.2	76	80	12	1.3	.12	.05	.47	25			
28	0	0	3.2	7.8	75	40	8.0	10	.14	.12	.39	62			
29	0	0	3.5	7.3	-----	28	5.9	14	.16	.10	.36	77			
30	0	0	5.0	6.7	-----	22	4.7	8.8	.18	.08	.30	94			
31	.02	-----	5.3	6.3	-----	18	-----	22	-----	.08	.24	-----			
TOTAL	0.57	0.27	2,469.76	784.7	1,253.3	2,966	3,598.3	381.8	1,221.74	2.76	7.45	446.73			
MEAN	.018	.009	79.7	25.3	44.8	95.7	120	12.3	40.7	.089	.24	14.9			
MAX	.41	.11	589	74	134	302	660	101	330	.18	.52	94			
MIN	0	0	0	5.7	8.5	18	4.7	1.3	.05	.03	.06	.33			
CFSM	.0001	0	.45	.14	.25	.54	.68	.07	.23	.0005	.001	.08			
IN.	.0001	0	.52	.16	.26	.62	.76	.08	.26	.0005	.002	.09			
AC-FT	1.1	.5	4,900	1,560	2,490	5,880	7,140	757	2,420	5.5	15	886			
CAL YR 1969	TOTAL	69,658.07		MEAN	191	MAX	2,970	MIN	0	CFSM	1.08	IN	14.64	AC-FT	138,200
WTR YR 1970:	TOTAL	13,133.38		MEAN	36.0	MAX	660	MIN	0	CFSM	.20	IN	2.76	AC-FT	26,050

08022000 Sabine River near Tatum, Tex.

LOCATION.--Lat 32°22'11", long 94°27'28", Rusk County, near right bank on downstream side of pier of bridge on State Highway 43, 5.1 miles northeast of Tatum, 5.2 miles upstream from Potters Creek, 5.6 miles downstream from Cherokee Bayou, and at mile 339.4.

DRAINAGE AREA.--3,493 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 204.18 ft above mean sea level (levels by Corps of Engineers). Prior to Sept. 21, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 2,463 cfs (1,784,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,300 cfs Mar. 19 (gage height, 21.73 ft); minimum observed, 24 cfs Aug. 23.

Period of record: Maximum discharge, 123,000 cfs Apr. 4, 1945 (gage height, 33.80 ft, from graph based on gage readings), from rating curve extended above 66,000 cfs on basis of partly estimated measurement of 88,900 cfs; minimum observed, 24 cfs Aug. 11-12, 1964.

Maximum stage since at least 1884, that of Apr. 4, 1945. Flood in May 1884 reached a stage of about 32 ft, from information by local residents.

REMARKS.--Records good. Flow partly regulated by Lake Tawakoni (station 08017400) located 175 miles upstream and six small reservoirs (combined capacity, 1,022,000 acre-ft). Several diversions above station and below Lake Tawakoni for oilfield operation, municipal, and industrial use. Records of chemical analyses and water temperatures for water year 1970 are published in reports of the U.S. Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	450	458	4,550	732	4,300	7,600	4,370	1,370	945	100	51
2	58	388	432	4,650	1,320	4,420	7,640	4,840	1,730	1,040	90	95
3	57	412	415	4,420	1,920	4,730	7,610	5,080	1,810	978	82	170
4	55	542	385	4,150	2,080	5,480	7,400	5,310	1,870	793	83	245
5	53	670	361	3,970	2,220	6,000	7,150	5,560	1,950	591	83	171
6	48	854	448	4,170	2,370	6,250	6,680	5,820	2,200	407	80	131
7	45	956	1,220	4,480	2,520	6,330	6,080	6,070	2,520	295	73	107
8	48	884	2,130	4,590	2,700	6,430	5,140	6,300	2,780	219	65	91
9	47	660	2,290	4,540	2,900	6,610	3,940	6,480	2,990	165	57	90
10	47	470	2,270	4,400	3,060	6,870	3,010	6,580	3,090	153	53	138
11	48	332	2,170	4,070	3,130	7,250	2,480	6,600	2,980	149	48	155
12	46	254	2,010	3,460	3,020	7,800	2,030	6,480	2,420	226	42	134
13	60	214	1,860	2,850	2,530	8,460	1,700	6,170	1,630	479	41	107
14	101	184	1,800	2,370	1,840	9,120	1,290	5,600	1,040	640	40	92
15	134	166	1,710	1,940	1,400	9,820	1,250	4,630	783	423	38	85
16	102	160	1,460	1,580	1,410	10,300	1,310	3,260	670	182	34	76
17	80	287	1,110	1,320	1,620	10,800	1,210	2,430	599	143	33	71
18	68	1,050	855	1,160	1,680	11,100	1,180	1,890	536	120	32	70
19	74	2,770	711	1,050	1,740	11,200	1,660	1,210	487	107	29	68
20	76	3,520	710	987	1,750	11,200	3,180	1,040	451	104	27	68
21	72	3,270	900	912	1,760	11,100	3,830	1,010	439	288	24	74
22	67	2,680	1,070	866	1,790	10,900	3,930	836	467	769	24	106
23	63	2,020	1,150	819	1,780	10,500	3,560	710	518	542	25	128
24	57	1,350	1,030	811	1,690	10,000	3,000	668	527	271	33	233
25	56	890	863	807	2,400	9,390	2,560	668	751	177	67	480
26	55	655	742	845	3,440	8,790	2,650	785	783	149	59	512
27	53	547	667	819	4,000	8,280	3,320	875	842	146	54	497
28	56	500	621	791	4,190	7,890	3,700	776	930	205	52	450
29	66	485	753	776	-----	7,690	3,820	692	865	183	50	356
30	101	473	2,070	755	-----	7,610	3,910	662	841	120	45	280
31	248	-----	3,820	705	-----	7,570	-----	905	-----	101	41	-----
TOTAL	2,194	28,093	38,491	73,613	62,992	254,190	113,820	104,307	40,869	11,110	1,604	5,331
MEAN	70.8	936	1,242	2,375	2,250	8,200	3,794	3,365	1,362	358	51.7	178
MAX	248	3,520	3,820	4,650	4,190	11,200	7,640	6,600	3,090	1,040	100	512
MIN	45	160	361	705	732	4,300	1,180	662	439	101	24	51
AC-FT	4,350	55,720	76,350	146,000	125,000	504,200	226,000	207,000	81,060	22,040	3,180	10,570
CAL YR	1969	TOTAL	1,181,822	MEAN	3,238	MAX	17,300	MIN	24	AC-FT	2,344,000	
WTR YR	1969-70	TOTAL	736,614	MEAN	2,018	MAX	11,200	MIN	24	AC-FT	1,461,000	

SABINE RIVER BASIN

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08022500 Sabine River at Logansport, La.

LOCATION.--Lat 31°58'20", long 94°00'22", on De Soto Parish, La.-Shelby County, Tex. State line at Logansport, just upstream from bridge on U.S. Highway 84, 3 miles upstream from Bayou Castor, 111 miles upstream from Toledo Bend Dam, and at mile 267.1.

PERIOD OF RECORD.--Gage-height record March 1968 to current year. Discharge record July 1903 to February 1968.

GAGE.--Water-stage recorder. Datum of gage is 147.72 ft above mean sea level. July 1, 1903, to Sept. 30, 1956, nonrecording gage. Oct. 1, 1956, to Jan. 16, 1964, water-stage recorder 4,600 ft upstream. Jan. 16, 1964, to Dec. 10, 1968, water-stage recorder 4,700 ft upstream. All gages to present datum except prior to Dec. 31, 1906, when datum was 2 ft lower.

AVERAGE DISCHARGE.--64 years (1903-67), 3,208 cfs (2,324,000 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 26.92 ft Mar. 25; minimum, 19.12 ft Nov. 14.

Period of gage-height record 1968-70: Maximum gage height, 32.50 ft Apr. 20, 1969; minimum since initial filling of Toledo Bend Reservoir in June 1968, 19.12 ft Nov. 14, 1969.

Period of discharge record 1903-67: Maximum discharge, 92,000 cfs Apr. 8, 1945 (gage height, 44.07 ft, from floodmark); minimum, 16 cfs Sept. 26-28, Oct. 3, 4, 1939.

Maximum stage since at least 1884, that of Apr. 8, 1945. Flood in May 1884 reached a stage of 39.4 ft, present site and datum.

REMARKS.--Records good. Station discontinued as daily streamflow station on Mar. 1, 1968, due to backwater from storage in Toledo Bend Reservoir (station 08025350). Eight major reservoirs, with a combined capacity of 1,068,000 acre-ft, largely regulate the flow. Numerous diversions above station for oilfield operations, municipal, and industrial use.

REVISIONS (WATER YEARS)-- WSP 1312: 1903-6 (monthly and annual means). WSP 1732: 1929(M), 1933(M).

Discharge measurements of Sabine River, in cubic feet per second, October 1969 to September 1970:

Mar. 4-----7,480
Apr. 7-----7,700

MONTHLY AND YEARLY SUMMARY OF GAGE HEIGHTS, IN FEET, OCTOBER 1969 TO SEPTEMBER 1970

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	CAL YR	WTR YR
MAX	19.70	21.60	21.20	22.72	24.02	26.85	25.46	24.83	23.93	23.57	22.62	22.21	32.50	26.85
MIN	19.32	19.19	19.70	21.56	21.80	24.20	23.00	23.34	23.51	22.65	22.08	21.12	19.19	19.19

SABINE RIVER BASIN

08023000 Bayou Castor near Logansport, La.

LOCATION.--Lat 31°58'25", long 93°58'10", in NE¼ sec.1, T.11 N., R.16 W., De Soto Parish, near center of span on downstream side of bridge on U. S. Highway 84, 1.7 miles east of Logansport, and 2.5 miles upstream from Bayou Grand Cane.

DRAINAGE AREA.--96.5 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 171.20 ft above mean sea level. Prior to Nov. 4, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 73.2 cfs (10.30 inches per year, 53,030 acre-ft per year); 14 years, (10.74 inches per year); figure published in Water Resources Data for Louisiana, 1969, in error.

EXTREMES.--Current year: Maximum discharge, 795 cfs May 3 (gage height, 9.25 ft); no flow many days.
Period of record: Maximum discharge, 8,030 cfs Apr. 6, 1956 (gage height, 23.33 ft); no flow at times most years.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.5	1.0	134	9.9	81	16	136	9.4	2.4	.38	.18
2	0	.86	.98	46	111	69	17	540	93	1.6	.32	.14
3	0	.50	.92	25	175	197	18	682	70	1.3	.20	.04
4	0	.44	.80	16	60	587	17	121	24	.89	.14	.03
5	0	.35	.80	13	31	735	17	41	10	.60	.11	.01
6	0	.29	2.4	58	20	334	13	26	6.2	.37	.10	0
7	0	.29	4.1	197	14	75	11	17	4.5	.22	.04	0
8	0	.20	8.3	86	11	52	10	13	3.6	.14	.03	0
9	0	.15	8.7	37	9.2	39	9.3	10	3.0	.11	.01	0
10	0	.12	7.7	22	8.0	31	15	8.8	2.7	.06	0	0
11	0	.12	6.4	16	7.0	27	24	7.6	2.5	.02	0	1.0
12	0	.12	4.6	15	6.0	25	28	6.7	2.2	.04	0	4.3
13	0	.12	3.4	14	5.6	22	23	5.9	1.8	.08	0	9.7
14	0	.11	2.7	13	5.2	20	16	5.5	1.6	.08	0	6.9
15	0	.10	2.2	11	7.0	17	12	5.2	1.5	.12	0	4.6
16	0	.08	1.7	9.0	61	15	10	5.0	1.3	.14	0	2.3
17	0	.18	1.6	7.5	184	30	9.2	4.5	1.2	.19	0	1.7
18	0	1.5	1.4	6.7	71	159	8.8	4.1	1.1	2.0	0	1.7
19	0	.97	1.5	6.1	38	167	57	3.6	.94	2.1	0	1.3
20	0	.89	1.6	5.9	25	102	151	3.3	.88	1.9	0	1.2
21	0	.33	1.7	5.6	17	145	97	3.0	.71	21	0	.98
22	0	.14	1.7	5.3	12	312	39	2.8	.60	55	0	.68
23	0	.75	2.1	5.3	10	225	22	2.6	.88	18	1.1	.50
24	0	.47	2.7	5.3	11	78	13	2.4	.96	7.5	202	.62
25	0	.35	2.3	5.1	275	50	10	2.2	1.4	4.1	62	.74
26	0	2.8	2.0	4.8	525	38	8.7	2.2	2.1	2.6	15	1.7
27	0	2.3	1.9	4.5	615	31	7.5	12	1.6	2.9	5.6	1.2
28	0	1.7	1.8	4.3	184	25	6.6	31	1.3	1.6	3.0	.86
29	0	1.4	2.7	4.1	-----	21	5.9	23	1.2	.98	1.7	.56
30	0	1.2	21	3.9	-----	19	5.4	12	2.3	.74	.86	.41
31	3.5	-----	159	3.6	-----	16	-----	6.1	-----	.50	.44	-----
TOTAL	3.5	266.5	261.70	790.0	2,507.9	3,744.0	697.4	1,745.5	254.47	129.28	293.03	43.35
MEAN	.11	8.87	8.44	25.5	89.6	121	23.2	56.3	8.48	4.17	9.45	1.44
MAX	3.5	.97	159	197	615	735	151	682	93	55	202	9.7
MIN	0	.08	.80	3.6	5.2	15	5.4	2.2	.60	.02	0	0
CFSM	.001	.09	.09	.26	.93	1.25	.24	.58	.09	.04	.10	.02
IN.	.001	.10	.10	.30	.97	1.44	.27	.67	.10	.05	.11	.02
AC-FT	6.9	528	519	1,570	4,970	7,430	1,380	3,460	505	256	581	86

CAL YR 1969: TOTAL 38,701.33 MEAN 106 MAX 2,150 MIN 0 CFSM 1.10 IN. 14.92 AC-FT 76,760
WTR YR 1970: TOTAL 10,736.26 MEAN 29.4 MAX 735 MIN 0 CFSM .30 IN. 4.14 AC-FT 21,300

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

LOCATION.--Lat 31°28'01", long 93°44'41", Sabine Parish, La.-Sabine County, Tex. State line, on right bank at bridge on Texas State Highway 21, 6.5 miles northeast of Milan, 38 miles upstream from Toledo Bend Dam, and at mile 194.8.

PERIOD OF RECORD.--Gage-height record, October 1966 to January 1968 (published as "Sabine River near Milan"), December 1968 to current year. Discharge record, October 1923 to September 1925 (published as "Sabine River at Sabinetown"), January 1939 to September 1966 (published as "Sabine River near Milan").

GAGE.--Water-stage recorder. Datum of gage is 97.96 ft above mean sea level.

EXTREMES.--Current year: Maximum gage height, 73.55 ft Mar. 28; minimum, 68.84 ft Nov. 16, 17.

Period of gage-height record: Maximum gage height, 75.22 ft Mar. 20, 1969; minimum, 68.84 ft Nov. 16, 17, 1969.

Period of discharge record 1923-25, 1939-66: Maximum discharge, 83,400 cfs Apr. 12, 1945 (gage height, 48.87 ft); minimum, 25 cfs Oct. 14-19, 1956.

REMARKS.--Midnight gage heights only published since October 1966. For data regarding dam, see Toledo Bend Reservoir near Burkeville (station 08025350).

MONTHLY AND YEARLY SUMMARY OF GAGE HEIGHTS, IN FEET, OCTOBER 1969 TO SEPTEMBER 1970

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	CAL YR	WTR YR
MAX	69.29	69.37	70.12	71.35	72.10	73.54	73.43	73.53	73.30	73.22	71.86	71.83	75.22	73.54
MIN	69.05	68.84	69.31	70.18	71.27	72.18	72.28	72.96	73.16	72.86	71.73	70.76	68.84	68.84

SABINE RIVER BASIN

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08025500 Bayou Toro near Toro, La.

LOCATION.--Lat 31°12'25", long 93°30'56", in SW $\frac{1}{4}$ sec.20, T.4 N., R.11 W., Sabine Parish, near right bank on downstream side of bridge on State Highway 473, 0.2 mile upstream from Hamby Creek, 2.5 miles northeast of Toro, and 7.8 miles west of Hornbeck.

DRAINAGE AREA.--148 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 158.00 ft above mean sea level (Louisiana Geodetic Survey bench mark; levels by Louisiana Department of Public Works).

AVERAGE DISCHARGE.--15 years, 116 cfs (10.64 inches per year, 84,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,280 cfs May 1 (gage height, 13.45 ft); minimum, 1.9 cfs Oct. 3; 4, 6 (gage height, 2.67 ft).

Period of record: Maximum discharge, 31,200 cfs Apr. 9, 1968 (gage height, 25.73 ft) from rating curve extended above 18,000 cfs; minimum, 0.1 cfs Sept. 29, 30, Oct. 1-3, 1956; minimum gage height, 2.40 ft Sept. 30, Oct. 1, 1956.

REMARKS.--Records good. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	6.8	8.8	116	99	32	46	1,180	26	7.3	6.0	3.6
2	2.2	12	8.8	55	270	30	43	1,930	32	7.0	5.2	4.3
3	2.0	9.8	8.9	36	170	158	38	1,660	26	6.6	4.8	4.8
4	2.0	6.8	9.0	27	78	697	34	638	22	6.1	5.6	5.4
5	2.0	5.5	9.2	29	51	502	32	140	18	5.8	5.2	6.6
6	1.9	4.9	345	267	40	163	29	90	15	5.4	5.8	5.0
7	2.2	4.8	286	214	34	118	27	66	14	5.1	6.4	4.0
8	2.2	4.6	117	95	31	128	25	54	12	4.8	6.4	3.4
9	2.3	4.6	43	53	28	107	27	46	11	4.6	5.5	3.1
10	2.9	4.4	27	39	26	72	419	41	10	4.5	4.8	2.8
11	4.0	4.4	21	94	25	57	406	37	9.7	4.3	4.8	2.7
12	3.7	4.6	18	91	23	51	204	34	9.7	4.3	4.3	2.6
13	3.4	4.6	16	60	22	46	119	31	9.3	4.7	3.9	2.6
14	3.4	4.4	14	41	22	39	72	28	8.7	4.5	3.7	2.4
15	3.4	3.9	13	34	23	34	52	28	8.7	5.1	3.5	2.5
16	3.4	3.9	12	30	42	31	53	125	8.2	6.7	3.4	2.5
17	3.4	4.0	12	28	60	226	61	70	7.8	6.4	3.5	2.6
18	3.4	11	12	27	48	388	53	48	7.6	7.0	3.8	2.7
19	3.2	25	12	26	37	208	90	34	7.3	7.0	3.3	2.9
20	3.2	42	14	26	29	134	179	28	7.0	6.0	4.7	6.7
21	4.2	27	16	25	25	613	112	25	6.8	7.2	4.8	4.8
22	3.9	17	18	24	22	1,030	55	23	7.3	9.3	4.1	3.8
23	3.4	13	18	24	22	492	37	24	6.6	7.8	4.2	3.1
24	3.2	11	15	22	22	172	29	23	11	8.2	4.6	3.1
25	3.2	10	13	22	34	115	26	34	13	7.8	5.1	3.1
26	3.2	9.9	12	22	56	86	23	48	11	7.4	5.5	2.8
27	3.0	9.8	12	22	52	65	21	34	14	8.2	7.6	2.6
28	2.9	9.4	12	21	38	54	19	29	10	16	5.4	2.5
29	2.8	9.1	36	21	-----	52	17	27	8.7	12	4.6	2.5
30	3.0	8.9	259	20	-----	59	16	22	7.8	8.5	4.0	2.4
31	7.1	-----	256	19	-----	53	-----	20	-----	7.0	3.8	-----
TOTAL	96.3	297.1	1,673.7	1,630	1,429	6,012	2,364	6,617	366.2	212.6	148.3	103.9
MEAN	3.11	9.90	54.0	52.6	51.0	194	78.8	213	12.2	6.86	4.78	3.46
MAX	7.1	42	345	267	270	1,030	419	1,930	32	16	7.6	6.7
MIN	1.9	3.9	8.8	19	22	30	16	20	6.6	4.3	3.3	2.4
CFSM	.021	.067	.36	.36	.34	1.31	.53	1.44	.082	.046	.032	.023
IN.	.02	.07	.42	.41	.36	1.51	.59	1.66	.09	.05	.04	.03
AC-FT	191	589	3,320	3,230	2,830	11,920	4,690	13,120	726	422	294	206

CAL YR 1969	TOTAL	53,768.6	MEAN	147	MAX	5,040	MIN	1.9	CFSM	.99	IN	13.51	ACFT	106,700
WAT YR 1970	TOTAL	20,950.1	MEAN	57.4	MAX	1,930	MIN	1.9	CFSM	.39	IN	5.27	ACFT	41,550

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
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5- 1	2000	13.45	2,280				
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SABINE RIVER BASIN

08026000 Sabine River below Toledo Bend, near Burkeville, Tex.

LOCATION.--Lat 31°03'50", long 93°31'10", Newton County, Tex.-Vernon Parish, La. State line, near left edge of low-water channel at downstream side of bridge on State Highway 63, about 200 ft downstream from Pearl Creek, 10 miles northeast of Burkeville, 16 miles downstream from Bayou Toro, and at mile 139.7.

DRAINAGE AREA.--7,482 sq mi.

PERIOD OF RECORD.--September 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 70.59 ft above mean sea level. Prior to Aug. 23, 1958, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 4,410 cfs (3,195,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,800 cfs Apr. 19 (gage height, 19.14 ft); minimum daily, 54 cfs Oct. 17. Period of record: Maximum discharge, 52,900 cfs May 15, 1957 (gage height, 32.43 ft); minimum daily, 38 cfs Sept. 14-15, 1967. Maximum stage since at least 1860, 35.9 ft in May 1884, from information by local resident. Flood of Apr. 15, 1945, reached a stage of 35.8 ft, and flood of May 23, 1953, reached a stage of 35.3 ft, from floodmarks.

REMARKS.--Records good. Flow regulated by Toledo Bend Reservoir (station 08025350), 16.8 miles upstream (capacity, 4,660,000 acre-ft). Records of chemical analyses and water temperatures for the water year 1970 are published by the U.S. Geological Survey.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,900	1,390	141	528	478	289	12,100	1,280	285	1,700	3,770	1,870
2	157	1,340	171	461	2,170	1,490	12,500	6,190	268	3,520	379	761
3	249	1,330	195	320	3,120	4,770	11,600	8,380	231	1,400	471	670
4	1,020	1,350	783	244	3,890	10,000	11,400	8,070	211	829	998	1,630
5	1,200	1,350	698	293	2,620	10,300	12,400	6,900	300	219	998	1,410
6	129	1,350	1,300	2,430	1,940	10,500	12,400	6,480	400	289	1,160	203
7	74	1,170	1,800	2,050	865	8,290	12,400	6,500	450	880	2,250	815
8	66	235	697	475	246	6,240	12,100	6,450	350	1,580	1,270	1,780
9	62	138	437	307	654	1,950	7,640	6,410	250	871	208	1,880
10	62	127	331	251	2,460	6,570	7,300	6,360	360	2,600	1,350	2,930
11	121	274	270	312	2,960	8,240	7,380	6,320	376	1,010	2,260	3,130
12	137	1,330	1,010	356	2,970	9,370	7,290	6,420	441	178	754	2,840
13	67	2,390	759	1,240	2,370	8,730	8,590	6,410	365	750	461	2,660
14	59	1,960	280	652	861	7,440	14,200	6,440	157	3,500	935	3,240
15	57	352	257	240	224	6,590	14,800	7,490	271	5,000	895	3,270
16	56	193	235	210	1,640	8,030	15,300	9,590	433	1,300	961	3,200
17	54	176	229	196	2,370	9,720	14,300	12,500	542	360	2,460	2,770
18	64	229	229	188	2,260	8,750	14,900	7,040	470	309	927	3,050
19	105	287	211	1,680	2,290	9,710	15,600	6,370	502	177	389	3,140
20	112	1,110	218	1,620	2,920	10,100	13,000	6,340	497	245	939	2,950
21	115	619	221	689	1,950	7,930	5,940	6,320	150	358	737	3,580
22	104	224	224	216	270	8,070	1,580	6,400	744	235	369	5,540
23	98	215	288	200	1,490	8,020	3,210	3,810	762	183	167	3,930
24	96	206	229	193	2,050	9,420	1,860	2,060	540	320	171	1,710
25	96	198	214	177	2,360	11,000	451	461	424	369	156	2,950
26	94	1,460	1,090	1,070	2,370	12,500	367	850	525	190	149	1,410
27	92	1,610	659	1,860	2,480	12,800	334	1,300	432	3,600	154	220
28	156	1,350	232	2,100	998	12,700	319	660	215	13,300	1,390	166
29	377	780	308	2,010	-----	12,700	304	523	293	13,700	1,040	699
30	1,500	174	797	2,480	-----	12,900	292	318	751	9,520	231	1,910
31	1,570	-----	775	1,560	-----	11,700	-----	293	-----	8,220	956	-----
TOTAL	10,049	24,917	15,288	26,608	53,276	266,819	251,857	160,935	11,995	76,712	29,355	66,314
MEAN	324	831	493	858	1,903	8,607	8,395	5,191	400	2,475	947	2,210
MAX	1,900	2,390	1,800	2,480	3,890	12,900	15,600	12,500	762	13,700	3,770	5,540
MIN	54	127	141	177	224	289	292	293	150	177	149	166
AC-FT	19,930	49,420	30,320	52,780	105,700	529,200	499,600	319,200	23,790	152,200	58,230	131,500
CAL YR	1969	TOTAL	2,880,475	MEAN	7,892	MAX	40,200	MIN	54	AC-FT	5,713,000	
WTR YR	1970	TOTAL	994,125	MEAN	2,724	MAX	15,600	MIN	54	AC-FT	1,972,000	

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LOCATION.--Lat 30°57'10", long 93°21'10", on line between secs. 25 and 26, T.1 S., R.10 W., Vernon Parish, near center of span on downstream side of bridge on parish road from Rosepine to Evans, just downstream from Pocosin Creek, and 4.8 miles northwest of Rosepine.

REVISIONS.--WSP 1732: Drainage area.

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.2	90	17	1,520	180	191	167	144	47	15	13	9.5		
2	8.2	46	17	812	900	174	167	1,110	57	13	13	21		
3	8.2	29	16	572	1,300	167	157	1,500	52	12	13	28		
4	8.2	22	16	432	1,000	278	139	1,330	39	11	15	24		
5	8.2	15	17	359	600	625	129	958	33	9.5	13	19		
6	8.2	17	553	609	450	682	115	644	28	9.0	12	15		
7	8.8	16	1,620	911	360	599	103	449	25	295	12	11		
8	10	16	874	698	300	541	93	327	22	615	12	9.5		
9	11	15	300	535	250	452	87	242	21	626	13	8.4		
10	11	14	123	423	200	380	537	194	19	617	10	7.8		
11	15	14	88	430	183	365	1,100	159	17	605	9.0	7.3		
12	18	14	72	531	171	413	838	133	17	613	7.8	7.3		
13	27	14	62	483	150	372	602	113	16	652	7.3	7.8		
14	22	12	56	383	136	288	467	94	15	546	8.4	7.8		
15	19	12	51	325	132	232	359	82	15	430	9.0	6.8		
16	15	13	49	283	196	195	303	139	13	415	9.5	10		
17	14	14	45	250	216	306	257	165	13	400	15	15		
18	13	27	42	222	205	825	222	115	13	367	64	12		
19	12	65	41	214	193	752	359	83	12	102	25	11		
20	11	61	53	201	180	616	814	71	12	44	16	9.5		
21	14	39	55	187	147	557	628	60	12	34	13	9.5		
22	20	29	52	163	126	742	434	55	12	38	11	9.5		
23	20	24	50	147	119	725	330	52	24	35	13	8.4		
24	18	22	45	139	115	580	270	44	32	26	17	17		
25	15	20	41	132	192	460	222	46	24	24	15	44		
26	14	18	38	132	251	411	181	53	29	26	15	32		
27	13	18	36	132	239	366	151	53	21	25	11	29		
28	12	17	36	123	205	292	129	51	20	22	10	20		
29	11	17	197	119	-----	245	109	44	29	20	9.5	13		
30	14	17	1,510	130	-----	221	96	40	19	19	9.0	11		
31	63	-----	1,700	112	-----	187	-----	38	-----	15	9.0	-----		
TOTAL	470.0	747	7,872	11,709	8,699	13,239	9,565	8,588	708	6,680.5	433.5	441.1		
MEAN	15.2	24.9	254	378	311	427	319	277	23.6	216	14.0	14.7		
MAX	63	90	1,700	1,520	1,300	825	1,100	1,500	57	652	64	44		
MIN	8.2	12	16	112	115	167	87	38	12	9.0	7.3	6.8		
CFSM	.04	.07	.70	1.04	.85	1.17	.87	.76	.06	.59	.04	.04		
IN.	.05	.08	.80	1.19	.89	1.35	.97	.88	.07	.68	.04	.04		
AC-FT	932	1,480	15,610	23,220	17,250	26,260	18,970	17,030	1,400	13,250	860	875		
CAL YR 1969	TOTAL	143,912.2	MEAN	394	MAX	7,170	MIN	8.2	CFSM	1.08	IN	14.67	AC-FT	285,400
WTR YR 1970:	TOTAL	69,152.1	MEAN	189	MAX	1,700	MIN	6.8	CFSM	.52	IN	7.05	AC-FT	137,200

LOCATION.--Lat 30°52'14", long 93°30'38", in SE $\frac{1}{4}$ sec.20, T.2 S., R.11 W., on line between Beauregard-Vernon Parish, near right bank of low-water channel at downstream side of bridge on State Highway 111, 4.9 miles southwest of Knight and 5.2 miles upstream from mouth.

DRAINAGE AREA.--425 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1956-64. August 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 68.61 ft above mean sea level.

EXTREMES.--August to September 1969: Maximum discharge during period, 181 cfs Aug. 1 (gage height, 7.14 ft); minimum, 28 cfs Sept. 15 (gage height, 5.90 ft).

Water year 1970: Maximum discharge, 1,600 cfs Dec. 31 (gage height, 12.47 ft); minimum, 26 cfs Oct. 4, 5, 6, 7 (gage height, 5.86 ft).

REMARKS.--Records good. Some effect from storage in Anacoco Lake (usable capacity, 41,300 acre-ft) except January 1956 to September 1958 and Upper Anacoco Lake (usable capacity, 58,000 acre-ft) since May 1963. Records of chemical analyses and water temperatures for the water year 1970 are published in Part 2 of this report.

[illegible]

SABINE RIVER BASIN

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08028200 Bayou Anacoco near Knight, La.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	97	35	1,510	200	253	253	196	115	55	80	48
2	27	101	36	1,090	758	239	243	766	123	48	76	58
3	27	64	36	713	1,310	229	229	1,320	120	44	79	93
4	26	49	36	542	1,030	249	215	1,330	95	43	91	83
5	26	42	38	449	677	472	200	1,110	91	42	108	65
6	26	39	291	522	587	695	229	822	34	41	88	51
7	26	37	1,460	853	475	553	184	595	84	43	79	57
8	26	35	1,200	833	425	609	167	460	79	249	61	47
9	27	34	625	636	379	534	165	362	74	594	61	45
10	28	33	260	519	342	459	455	303	73	619	63	46
11	28	32	183	477	299	426	1,130	269	67	535	60	46
12	29	31	148	541	254	461	1,020	237	66	544	54	47
13	38	33	128	557	236	451	756	211	60	574	60	47
14	43	30	114	468	216	387	597	185	58	561	56	45
15	39	29	105	401	207	314	486	169	59	560	56	43
16	36	30	98	366	218	276	415	175	61	484	54	47
17	33	30	95	328	276	309	362	259	65	460	56	56
18	31	37	87	301	265	671	322	211	71	445	142	49
19	30	82	84	281	253	847	343	177	54	343	139	49
20	29	98	85	273	247	704	719	156	48	181	91	46
21	30	80	93	255	225	613	769	137	50	149	68	43
22	29	61	91	240	200	690	563	128	51	143	59	41
23	33	53	67	218	191	777	439	118	51	133	59	40
24	35	46	83	207	187	682	369	105	61	121	69	48
25	34	43	97	199	210	562	316	119	68	129	66	74
26	32	40	91	191	285	495	271	109	58	107	65	118
27	29	39	82	189	290	465	247	126	58	100	57	123
28	29	38	77	204	267	419	218	125	67	94	54	104
29	28	37	118	198	-----	354	195	121	57	87	51	80
30	30	36	969	195	-----	304	183	109	59	81	50	66
31	40	-----	1,570	194	-----	283	-----	107	-----	81	49	-----
TOTAL	951	1,435	8,502	13,950	10,509	14,882	12,040	10,622	2,127	7,690	2,191	1,897
MEAN	30.7	47.8	274	450	375	480	401	343	70.9	248	70.7	60.2
MAX	43	101	1,570	1,510	1,310	847	1,130	1,330	123	619	142	123
MIN	26	29	35	189	187	229	164	105	48	41	49	40
CFSM	.07	.11	.64	1.06	.88	1.13	.94	.81	.17	.58	.17	.14
IN.	.03	.13	.74	1.22	.92	1.30	1.05	.93	.19	.67	.19	.16
AC-FT	1,390	2,850	16,860	27,670	20,840	29,520	23,880	21,070	4,220	15,250	4,350	3,580

WAT YR 1970 TOTAL 86,706 MEAN 238 MAX 1,570 MIN 26 CFSM .56 IN 7.59 ACFT 172,000

SABINE RIVER BASIN

08028500 Sabine River near Bon Wier, Tex.

LOCATION.--Lat 30°44'49", long 93°36'30", Beauregard Parish, La.--Newton County, Tex. State line, near left bank at downstream side of bridge on U.S. Highway 190, 0.7 mile upstream from Quicksand Creek, 0.8 mile upstream from Gulf, Colorado and Santa Fe Railway Co. bridge, 2.0 miles east of Bon Wier, 2.4 miles upstream from Caney Creek, and at mile 97.7.

DRAINAGE AREA.--8,229 sq mi.

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1312. Gage-height records collected in this vicinity since 1913 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 46.42 ft above mean sea level. Prior to July 8, 1931, nonrecording gage at site 0.8 mile downstream at same datum. July 8, 1931, to Oct. 15, 1958, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--47 years, 6,632 cfs (4,805,000 acre-ft year).

EXTREMES.--Current year: Maximum discharge, 15,600 cfs Apr. 20 (gage height, 13.94 ft); minimum daily, 208 cfs Oct. 19. Period of record: Maximum discharge, 115,000 cfs May 19, 1953 (gage height, 25.70 ft); minimum daily, 134 cfs Nov. 9, 1966.

Maximum stage since at least 1833, 30.5 ft Apr. 23 or 24, 1913, from information by Gulf, Colorado and Santa Fe Railway Co. and local residents. Flood in May 1884 reached a stage of 26 ft. Floods occurring about 1844 and 1860 were higher than flood in May 1884, from information by local residents.

REMARKS.--Records fair. Flow regulated by Toledo Bend Reservoir (station 08025350) located 58.8 miles upstream.

REVISIONS (WATER YEARS).--WSP 1342: 1953. WSP 1442: 1924, 1926-27(M), 1929(M), 1939. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,830	1,870	501	2,950	2,060	1,670	11,700	850	850	831	5,300	1,100
2	1,850	1,790	376	2,340	2,500	1,030	11,700	5,720	875	2,470	2,270	2,130
3	624	1,710	368	1,680	4,140	2,030	11,900	9,600	780	2,850	1,080	1,250
4	589	1,690	391	1,330	4,930	6,250	10,500	10,200	680	1,670	1,000	1,100
5	1,370	1,690	812	1,110	4,750	9,300	10,300	8,510	850	1,110	1,100	2,060
6	1,240	1,690	1,690	1,240	3,330	9,700	11,300	7,430	925	540	1,200	1,610
7	488	1,690	5,130	3,740	2,850	9,990	11,600	7,400	592	477	1,200	640
8	315	1,350	4,290	3,010	1,790	8,080	11,800	7,180	584	1,230	2,000	1,000
9	278	627	2,210	1,750	1,130	5,690	10,700	7,050	499	1,990	900	2,060
10	270	401	1,320	1,360	1,340	3,680	8,560	6,930	509	1,760	640	2,410
11	267	342	948	1,220	3,100	6,990	10,000	6,830	640	2,680	1,500	3,300
12	288	417	787	1,320	3,410	8,250	9,320	6,800	640	1,710	2,000	3,460
13	367	1,480	1,250	1,390	3,230	9,090	8,400	6,740	640	1,040	1,000	3,220
14	287	2,570	1,240	2,030	2,870	8,250	10,500	6,770	680	1,240	700	3,060
15	250	1,900	731	1,570	1,540	7,110	13,600	6,840	468	2,980	1,000	3,620
16	235	746	639	1,060	922	6,600	14,100	7,850	401	4,750	875	3,700
17	225	458	604	941	2,170	8,170	14,400	10,600	500	2,500	720	3,620
18	215	455	580	873	2,910	9,960	13,800	10,500	750	1,130	1,790	3,220
19	208	575	568	832	2,820	8,960	14,500	7,330	640	998	1,310	3,460
20	243	676	549	2,180	2,800	9,980	15,400	6,820	692	659	680	3,540
21	314	1,230	562	2,060	3,650	9,790	12,000	6,730	751	574	1,120	3,380
22	310	1,030	567	1,270	2,180	8,490	6,170	6,680	403	728	1,020	4,240
23	287	537	548	867	968	8,480	3,100	6,150	746	660	720	5,900
24	271	452	598	768	1,950	8,640	4,180	4,270	995	900	468	3,700
25	266	425	556	760	2,620	9,660	2,270	2,140	819	850	443	2,340
26	266	412	541	712	2,970	11,000	1,110	994	670	640	436	3,620
27	264	1,520	1,190	1,380	2,960	12,000	911	2,070	702	1,300	408	1,730
28	257	1,670	1,060	2,280	3,030	12,100	815	2,000	706	6,000	394	900
29	260	1,530	695	2,560	-----	12,100	750	1,240	484	12,000	1,150	620
30	575	1,170	1,680	2,470	-----	12,000	703	1,000	432	14,000	1,310	1,050
31	1,770	-----	3,280	3,040	-----	12,100	-----	800	-----	9,000	600	-----
TOTAL	18,279	34,103	36,261	52,093	74,920	257,140	266,089	182,024	19,903	81,267	36,334	77,040
MEAN	590	1,137	1,170	1,680	2,676	8,295	8,870	5,872	663	2,622	1,172	2,568
MAX	3,830	2,570	5,130	3,740	4,930	12,100	15,400	10,600	995	14,000	5,300	5,900
MIN	208	342	368	712	922	1,030	703	800	401	477	394	620
AC-FT	36,260	67,640	71,920	103,300	148,600	510,000	527,800	361,000	39,480	161,200	72,070	152,800
CAL YR 1969	TOTAL		3,131,856	MEAN		8,580	MAX	42,000	MIN	208	AC-FT	6,212,000
WTR YR 1970	TOTAL		1,135,453	MEAN		3,111	MAX	15,400	MIN	208	AC-FT	2,252,000

08028700 Hoosier Creek near Merryville, La.

LOCATION.--Lat 30°43'32", long 93°33'36", in SE $\frac{1}{4}$ sec.11, T.4 S., R.12 W., Beauregard Parish, near right bank on downstream side of bridge on State Highway 389, 2 miles upstream from Pullem Branch, and 2 miles south of Merryville.

DRAINAGE AREA.--13.1 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 60.53 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 14.1 cfs (14.62 inches per year, 10,220 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 256 cfs Dec. 7 (gage height, 7.05 ft); minimum daily, 0.88 cfs Aug. 12-14, 22; minimum gage height, 0.53 ft Sept. 23, 24.

Period of record: Maximum discharge, 1,030 cfs Apr. 14, 1967 (gage height, 11.07 ft); minimum, 0.80 cfs Sept. 14, 15, 16, 17, 18, 19, 1965.

REMARKS.--Records good, except those for period of no gage-height record which are fair. Records of water temperatures for the water year 1970 are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.1	2.8	8.6	6.2	4.0	3.5	3.0	24	1.5	1.2	.96
2	1.5	1.8	2.7	5.3	25	4.0	3.6	13	15	1.4	1.1	2.6
3	1.5	1.6	2.7	4.2	9.7	3.8	3.3	9.9	4.9	1.3	1.1	8.0
4	1.4	1.4	2.8	4.0	4.9	4.4	3.2	4.9	3.0	1.3	1.1	3.3
5	1.4	1.4	2.9	4.2	4.0	4.4	3.1	3.2	2.7	1.2	1.0	1.4
6	1.4	1.4	70	18	3.6	3.8	3.0	2.7	2.3	1.2	1.0	1.0
7	1.4	1.4	125	16	3.5	3.7	2.9	2.3	2.1	1.2	.94	.96
8	1.4	1.4	14	7.3	3.4	4.9	2.8	2.2	2.0	1.1	.94	.96
9	1.4	1.4	6.4	5.0	3.2	4.2	3.4	2.2	2.0	1.1	.92	1.0
10	1.5	1.3	4.9	4.4	3.2	3.7	81	2.2	2.0	1.1	.92	1.0
11	1.5	1.3	4.1	5.8	3.2	3.6	85	2.2	2.0	1.1	.90	1.0
12	1.5	1.3	3.7	7.4	2.9	5.7	23	2.1	2.0	1.3	.88	.96
13	1.6	1.3	3.6	5.5	3.0	4.3	11	2.1	2.0	1.2	.88	1.0
14	1.6	1.3	3.4	4.2	3.0	3.7	7.3	2.1	2.0	1.2	.88	1.0
15	1.5	1.3	3.3	3.8	3.1	3.3	5.2	2.1	2.1	1.1	.92	1.0
16	1.5	1.3	3.3	3.6	4.8	3.2	4.3	2.1	2.1	1.4	.92	1.1
17	1.5	1.3	3.3	3.4	5.4	9.8	4.1	2.5	2.1	1.2	.92	1.2
18	1.5	2.4	3.3	3.3	4.0	18	3.6	5.0	2.1	1.2	.92	1.1
19	1.5	15	3.2	3.4	3.6	7.6	11	2.5	1.7	1.1	.96	1.1
20	1.5	8.0	3.2	3.6	3.4	9.1	24	1.8	1.8	1.1	.96	1.2
21	1.4	3.6	3.2	3.6	3.2	14	8.3	1.8	1.7	1.1	1.0	1.2
22	1.4	2.8	3.2	3.3	3.2	23	4.4	1.8	1.8	1.3	.88	1.2
23	1.4	2.5	3.2	3.2	3.2	10	3.5	1.8	1.6	1.2	.92	1.2
24	1.4	2.4	3.2	3.3	3.2	5.8	3.0	1.8	1.6	1.2	.96	1.4
25	1.4	2.4	3.2	3.2	7.8	4.7	2.8	1.8	1.8	3.0	.96	1.6
26	1.4	2.5	3.2	3.2	8.3	4.9	2.6	2.2	1.7	7.0	1.0	3.9
27	1.4	2.5	3.1	3.2	4.6	5.2	2.6	19	1.7	2.5	1.0	48
28	1.4	2.6	3.1	3.2	3.9	4.1	2.5	12	1.6	1.5	1.0	7.7
29	1.4	2.7	7.3	3.2	-----	3.8	2.5	3.6	1.6	1.3	1.0	2.4
30	1.5	2.7	30	3.1	-----	3.7	2.5	2.4	1.5	1.2	1.0	1.7
31	2.0	-----	20	2.8	-----	3.6	-----	13	-----	1.2	.96	-----
TOTAL	45.7	77.4	351.3	156.3	140.5	192.0	323.0	131.3	96.5	46.8	30.04	102.14
MEAN	1.47	2.58	11.3	5.04	5.02	6.19	10.8	4.24	3.22	1.51	.97	3.40
MAX	2.0	15	125	18	25	23	85	19	24	7.0	1.2	48
MIN	1.4	1.3	2.7	2.8	2.9	3.2	2.5	1.8	1.5	1.1	.88	.96
CFSM	.11	.20	.86	.38	.38	.47	.82	.32	.25	.12	.074	.26
IN.	.13	.22	1.00	.44	.40	.55	.92	.37	.27	.13	.09	.29
AC-FT	91	154	697	310	279	381	641	260	191	93	60	203

CAL YR 1969 TOTAL 4,273.30 MEAN 11.7 MAX 396 MIN 1.3 CFSM .89 IN 12.13 ACFT 8,480
WAT YR 1970 TOTAL 1,692.98 MEAN 4.64 MAX 125 MIN .88 CFSM .35 IN 4.81 ACFT 3,360

PEAK DISCHARGE (BASE, 400 CFS).--No peak above base.

NOTE.--No gage-height record June 23 to Aug. 12.

SABINE RIVER BASIN

08030500 Sabine River near Ruliff, Tex.

LOCATION.--Lat 30°18'13", long 93°44'37", Calcasieu Parish, La.--Newton County, Tex. State line, at downstream side of bridge on Texas State Highway 12, 2.4 miles north of Ruliff, 4.2 miles upstream from the Kansas City Southern Railway Co. bridge, 4.5 miles downstream from Cypress Creek, and at mile 40.2.

DRAINAGE AREA.--9,329 sq mi.

PERIOD OF RECORD.--October 1924 to current year.

GAGE.--Water-stage recorder and Water Quality Monitor System. Datum of gage is 4.08 ft above mean sea level. Prior to Mar. 1, 1941, nonrecording gage at Kansas City Southern Railway Co. bridge, 4.2 miles downstream and at datum 2.02 ft lower. Mar. 1, 1941, to Dec. 8, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--46 years, 8,189 cfs (5,933,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 16,700 cfs Apr. 22 (gage height, 13.92 ft); minimum daily, 398 cfs Oct. 21, 29.

Period of record: Maximum discharge, 121,000 cfs May 22, 1953 (gage height, 19.98 ft); minimum, 270 cfs Sept. 27-30, Oct. 1-3, 17-20, 1956.

Maximum stage since at least 1835, 22.2 ft in May or June 1884 (adjusted to present site and datum on basis of slope of flood of June 8-9, 1950); flood of Apr. 26-29, 1913, reached a stage of 19.5 ft, present site and datum, from information by local resident.

REMARKS.--Records fair. Flow partly regulated by Toledo Bend Reservoir (station 08025350) 116.3 miles upstream. Records of chemical analyses and water temperatures for the water year 1970 are published by the U.S. Geological Survey.

REVISIONS (WATER YEAR).--WSP 1282: 1941(M), 1942. WSP 1442: 1925-29, 1937-39, 1943. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,500	1,170	1,760	3,030	3,130	3,800	14,600	1,690	2,210	890	8,880	1,360
2	3,050	1,960	1,240	3,750	3,380	3,180	14,600	1,900	2,190	923	9,970	1,280
3	3,070	2,160	800	3,530	3,600	2,140	14,500	4,630	2,490	1,590	9,790	2,160
4	1,730	2,110	635	2,830	4,590	2,080	14,400	7,780	2,280	3,030	6,270	2,220
5	910	2,060	605	2,260	5,530	4,130	14,300	10,200	1,880	2,620	3,010	1,690
6	1,040	2,010	1,050	2,010	6,020	6,590	14,200	12,000	1,680	1,950	1,970	1,890
7	1,570	2,010	2,600	2,000	5,600	8,510	14,000	12,900	1,870	1,270	2,040	2,460
8	1,180	2,010	4,820	3,280	4,550	10,000	13,900	12,500	1,580	871	1,930	1,720
9	732	1,960	6,400	4,150	3,500	11,100	14,000	11,300	1,370	886	2,540	1,120
10	622	1,440	5,940	3,490	2,350	11,300	14,900	10,300	1,250	1,790	2,800	1,790
11	538	975	4,270	2,580	1,860	9,790	15,400	9,530	1,150	1,910	1,800	2,340
12	486	748	2,650	2,130	2,690	8,340	15,600	9,070	1,200	2,410	1,450	3,180
13	486	650	1,840	2,030	3,680	8,470	15,400	8,770	1,270	2,520	2,650	3,740
14	496	1,010	1,580	2,080	3,960	9,230	15,000	8,550	1,260	1,780	2,310	3,850
15	532	2,060	1,870	2,250	3,720	10,000	14,200	8,480	1,300	1,380	1,610	3,740
16	485	2,540	1,540	2,440	2,960	10,400	13,700	8,720	1,160	2,080	1,390	3,920
17	455	1,760	1,210	1,930	1,960	10,400	13,900	9,010	987	3,660	1,760	4,260
18	425	1,200	1,050	1,580	2,010	10,600	14,600	9,710	1,040	3,850	1,580	4,370
19	412	1,010	991	1,430	3,080	10,500	15,500	10,700	1,160	2,470	2,650	4,160
20	412	970	928	1,330	3,370	11,300	16,000	11,200	1,260	1,590	2,730	4,050
21	398	1,040	883	1,660	3,400	12,200	16,400	11,100	1,210	1,200	1,790	4,160
22	425	1,260	843	2,570	3,680	12,800	16,600	10,300	1,280	906	1,520	4,130
23	470	1,660	829	2,140	3,610	13,000	16,400	9,410	1,160	860	1,680	4,320
24	485	1,290	815	1,600	2,310	13,000	14,200	8,880	953	889	1,530	5,280
25	455	950	808	1,300	2,010	12,600	10,200	7,970	1,390	800	1,180	5,730
26	440	818	811	1,180	2,890	12,100	7,070	5,990	1,490	748	928	4,480
27	425	756	778	1,120	3,450	12,100	4,310	3,630	1,320	840	837	4,010
28	412	894	847	1,200	3,790	12,500	2,770	3,000	1,160	826	780	3,620
29	398	1,930	1,400	2,080	-----	13,000	2,130	3,690	1,200	2,050	747	2,140
30	412	1,670	1,330	2,660	-----	13,800	1,850	3,140	1,080	5,480	853	1,350
31	492	-----	1,510	2,830	-----	14,300	-----	2,590	-----	7,430	1,760	-----
TOTAL	24,943	44,081	54,633	70,450	96,480	302,760	384,630	248,640	42,830	61,499	82,735	94,520
MEAN	805	1,469	1,762	2,273	3,446	9,766	12,820	8,021	1,428	1,984	2,669	3,151
MAX	3,070	2,540	6,400	4,150	6,020	14,300	16,600	12,900	2,490	7,430	9,970	5,730
MIN	398	650	605	1,120	1,860	2,080	1,850	1,690	953	748	747	1,120
AC-FT	49,470	87,430	108,400	139,700	191,400	600,500	762,900	493,200	84,950	122,000	164,100	187,500
CAL YR	1969	TOTAL	3,930,917	MEAN	10,770	MAX	40,900	MIN	398	AC-FT	7,797,000	
WTR YR	1970	TOTAL	1,508,201	MEAN	4,132	MAX	16,600	MIN	398	AC-FT	2,992,000	

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of peak elevations at flood-profile stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a fourth table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during the periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1970

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Red River basin						
08023270	Bull Bayou near Hunter, La.	Lat 31°53'10", long 93°52'30", at bridge 1.1 miles southeast of Hunter.	8.54	1963-70	2-18-70 3-26-70 6-23-70 8-11-70	1.64 3.28 a.02 0
08024070	San Jose Creek at Many, La.	Lat 31°33'20", long 93°28'15", at bridge on U.S. Highway 171, 1.1 miles southeast of Many Post Office.	6.82	1958, 1963-70	10-1-69 2-18-70 3-26-70 8-13-70	0 1.17 2.37 .12
08025606	Bayou Toro near Toledo Bend, near Toro, La.	Lat 31°12'12", long 93°32'39", at bridge on Toledo Bend Dam road, 1 3/4 miles above mouth, and 5 1/2 miles south of Toro.	b193	1966-70	10-1-69 11-25-69 2-20-70 6-29-70 8-10-70	5.23 13.1 43.9 14.7 7.44
08025620	Mill Creek near Toro, La.	Lat 31°11'27", long 93°31'50", 0.1 mile below bridge, 6.3 miles south of Toro.	2.08	1964-70	10-1-69 2-20-70 3-25-70 6-26-70 8-10-70	3.09 2.64 3.33 2.28 2.25
08025800	Yellow Branch near Burr Ferry, La.	Lat 31°06'05", long 93°29'45", at bridge 2.4 miles north of Burr Ferry.	2.08	1963-70	10-1-69 2-20-70 3-25-70 6-26-70 8-10-70	.88 1.28 1.25 .68 .72
08026300	Mill Creek near Evans, La.	Lat 30°56'40", long 93°30'25", at bridge 3.1 miles south of Evans.	6.30	1963-70	10-2-69 2-17-70 5-19-70 8-12-70	1.18 3.47 1.98 .87
08030400	Bess Branch near Starks, La.	Lat 30°22'50", long 93°41'55", at bridge 5.0 miles northwest of Starks.	8.77	1963-70	10-7-69 2-18-70 5-11-70 8-13-70	0 1.02 .13 0

a Estimated.

b Approximately.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1970

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Pearl River basin							
2-4912	Silver Creek near Clifton, La.	Lat 30°55'30", long 90°14'30", at bridge 3.6 miles west of Clifton.	50.1	1966-70	1970	<3.4	(+)
2-4913.5	Hays Creek near Franklinton, La.	Lat 30°53'16", long 90°11'28", at bridge 3.4 miles northwest of Franklinton water tower.	42.2	1966-70	1970	<8.6	(+)
2-4917	Lawrence Creek near Franklinton, La.	Lat 30°51'40", long 90°06'55", at bridge 2.0 miles east of Franklinton.	44.2	1964-70	1970	<6.5	(+)
Red River basin							
7-3469.5	Kelly Bayou near Ida, La.	Lat 33°00'05", long 93°51'55", at bridge on State Highway 168, 1.8 miles east of Ida.	73	1968-70	4-25-70	37.03	(+)
7-3487.25	Indian Creek at Shongaloo, La.	Lat 32°55'55", long 93°17'30", at bridge 0.8 mile southeast of Shongaloo.	-----	1966-70	3- 3-70	43.68	(+)
7-3509.9	Boggy Bayou at Woolworth Road, near Keithville, La.	Lat 32°22'35", long 93°54'00", at bridge 4.8 miles northwest of Keithville.	-----	1963-65, 1966-70	3- 4-70	41.29	(+)
7-3513	Brush Bayou near Shreveport, La.	Lat 32°23'25", long 93°46'15", at bridge 2.5 miles south of Shreveport.	27.1	1960-70	11-17-69	162.91	(+)
7-3515	Cypress Bayou near Keithville, La.	Lat 32°18'00", long 93°49'40", at bridge 2.0 miles south of Keithville.	66	1939-57†, 1958-70	3- 4-70	11.01	5,950
7-3516.7	Rambin Bayou near Frierson, La.	Lat 32°13'25", long 93°42'10", at bridge 1.5 miles south of Frierson.	59.6	1966-70	5- 1-70	12.30	(+)
7-3517	Bayou Na Bonchasse near Mansfield, La.	Lat 32°06'05", long 93°41'45", at bridge on State Highway 175, 4.2 miles north of Mansfield.	19.5	1957-68†, 1969-70	5- 1-70	11.90	1,120
7-3519.8	Saline Bayou near Bienville, La.	Lat 32°24'10", long 92°56'45", at bridge 4 miles northeast of Bienville.	-----	1966-70	5- 3-70	43.65	(+)
7-3520.6	Mill Creek at Saline, La.	Lat 32°10'15", long 92°58'35", at bridge 0.5 mile north of Saline.	12.8	1964-70	5- 1-70	43.19	(+)
7-3522.95	Black Lake Creek at Gibsland, La.	Lat 32°33'15", long 93°03'05", at bridge 0.6 mile north of Gibsland.	-----	1968-70	5- 1-70	46.34	(+)
7-3525	Black Lake Bayou near Castor, La.	Lat 32°15'40", long 93°12'50", at bridge 2.8 miles northwest of Castor.	423	1941-57†, 1958-70	5- 2-70	9.25	2,600
7-3527.3	Antoine Creek near Ashland, La.	Lat 32°05'50", long 93°06'10", at bridge 3.0 miles south of Ashland.	17.7	1964-70	5- 2-70	44.34	(+)
7-3539.9	Kisatchie Bayou at Kisatchie, La.	Lat 31°25'20", long 93°10'14", at bridge 0.6 mile north of Kisatchie.	-----	1966-70	5- 1-70	17.82	(+)
7-3647.4	Bayou de Loutre near Farmerville, La.	Lat 32°52'25", long 92°23'40", at bridge 7 miles north of Farmerville.	-----	1966-70	5- 2-70	43.36	(+)
7-3648.7	Sugar Creek near Arcadia, La.	Lat 32°41'20", long 92°51'30", at bridge 10.3 miles northeast of Arcadia.	47	1966-70	5- 1-70	44.14	1,650
7-3660	Corney Bayou near Lillie, La.	Lat 32°53'15", long 92°39'25", at bridge 3.0 miles south of Lillie.	462	1941-57†, 1958-70	5- 3-70	15.22	6,600
7-3664.2	Bayou Coudrant near Calhoun, La.	Lat 32°32'30", long 92°22'45", at bridge 2.5 miles northwest of Calhoun.	-----	1966-70	5- 2-70	41.16	1,350
7-3705.3	Black Bayou at Kelly, La.	Lat 31°58'20", long 92°10'00", at bridge 0.9 mile southeast of Kelly.	-----	1966-70	11-30-69	39.41	(+)
7-3705.75	Caney Creek near Chatham, La.	Lat 32°13'00", long 92°29'10", at bridge 6.5 miles southwest of Chatham.	-----	1966-70	5- 2-70	43.38	(+)
7-3706.6	Flat Creek near Olla, La.	Lat 32°00'55", long 92°21'50", at bridge 10.2 miles northwest of Olla.	-----	1966-70	3-22-70	45.23	(+)
7-3707.5	Chickasaw Creek near Olla, La.	Lat 31°52'30", long 92°13'35", at bridge 2 miles southeast of Olla.	47.6	1954-70	5- 2-70	36.13	(+)

< Less than amount shown.

† Discharge not determined.

‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1970--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Red River basin--Continued							
7-3708.2	Dugdemona River near Quitman, La.	Lat 32°20'40", long 92°44'40", at bridge 1.7 miles west of Quitman.	117	1964-70	5- 2-70	40.61	1,380
7-3708.4	Choctaw Creek near Hodge, La.	Lat 32°22'05", long 92°48'45", at bridge 8.5 miles northwest of Hodge.	-----	1966-70	5- 1-70	42.60	(+)
7-3709.3	Cypress Creek at Quitman, La.	Lat 32°20'45", long 92°42'55", at bridge 0.8 mile southeast of Quitman.	46	1966-70	5- 2-70	40.30	1,900
7-3709.8	Little Dugdemona River near Hodge, La.	Lat 32°16'20", long 92°41'40", at bridge 1.7 miles east of Hodge.	20	1964-70	5- 1-70	44.57	690
*7-3721.1	Brushy Creek near Joyce, La.	See previous table.	24	1964-70	5- 3-70	42.15	(+)
7-3729	Dyson Creek near Pollock, La.	Lat 31°32'20", long 92°25'00" at bridge 1.6 miles northwest of Pollock.	12	1964-70	12-29-69	41.25	(+)
Mississippi River Delta							
7-3751.7	Bogue Falaya at Covington, La.	Lat 30°29'50", long 90°05'04", at bridge 1.0 mile northeast of Covington.	88.2	1964-70	1970	6.20	(+)
7-3752.22	Abita River north of Abita Springs, La.	Lat 30°28'55", long 92°02'20", at bridge 0.2 mile north of Abita Springs.	-----	1966-70	3- 4-70	14.14	(+)
7-3753.07	Terrys Creek near Kentwood, La.	Lat 30°57'23", long 90°30'13", at bridge 1.5 miles northeast of Kentwood.	-----	1966-70	1970	8.40	(+)
7-3754.65	Chappeeela Creek near Husser, La.	Lat 30°39'35", long 90°18'45", at bridge 1.9 miles southeast of Husser.	-----	1966-70	3- 4-70	22.60	(+)
7-3754.8	Chappeeela Creek southeast of Loranger, La.	Lat 30°36'22", long 90°19'56", at bridge 4.5 miles southeast of Loranger.	91.0	1964-70	3- 4-70	6.90	1,480
7-3756	Washley Creek near Robert, La.	Lat 30°30'20", long 90°18'30", at bridge 2 miles east of Robert.	25.3	1951-70	1970	6.70	1,020
7-3758	Tickfaw River near Liverpool, La.	Lat 32°55'47", long 90°40'41", at bridge on State Highway 38, 1.0 mile north of Liverpool.	89.7	1956-68†, 1969-70	5- 2-70	8.74	1,320
7-3762.9	Blood River near Springfield, La.	Lat 30°26'19", long 90°36'37", at bridge 3.7 miles northwest of Springfield.	26.6	1964-70	1970	N. R.	-----
*7-3765.2	Little Natalbany River at Albany, La.	Lat 30°30'15", long 90°34'40", at bridge 0.3 mile east of Albany.	40.6	1966-70	3- 4-70	20.92	1,870
7-3766	Ponchatoula Creek at Natalbany, La.	Lat 30°33'40", long 90°28'55", at bridge 1.0 mile north of Natalbany.	13.8	1951-70	3- 4-70	8.60	1,350
7-3771.9	Sandy Creek southeast of Clinton, La.	Lat 30°50'05", long 90°57'50", at bridge 5.9 miles southeast of Clinton.	-----	1966-70	1970	7.80	(+)
7-3773	Amite River at Magnolia, La.	Lat 30°32'05", long 90°58'50", at bridge 0.4 mile east of Magnolia.	884	1949-70	10- 8-69	39.10	12,300
7-3777	Redwood Creek near Slaughter, La.	Lat 30°43'44", long 91°06'54", at bridge on State Highway 412, 2.0 miles northeast of Slaughter.	41.1	1966-68†, 1969-70	10- 7-69	15.80	1,760
7-3801.6	Middle Colyell Creek near Walker, La.	Lat 30°29'45", long 90°50'30", at bridge 1.3 miles east of Walker.	20.3	1951-70	3- 3-70	1.42	720
Mermentau River basin							
*8-0118	Castor Creek near Oberlin, La.	Lat 30°37'10", long 92°37'10", at bridge 8.5 miles east of Oberlin.	43.9	1964-70	5- 3-70	8.35	700
Calcasieu River basin							
8-0138	Little Sixmile Creek near Pitkin, La.	Lat 30°58'05", long 93°00'45", at bridge 5.0 miles west of Pitkin.	10.4	1954-70	12- 6-69	12.41	(+)
8-0139.5	Big Brushy Creek near Pitkin, La.	Lat 30°54'55", long 92°53'30", at bridge 3.0 miles southeast of Pitkin.	34.4	1964-70	12- 6-69	11.72	(+)
8-0140	Sixmile Creek near Sugartown, La.	Lat 30°48'52", long 92°55'34", at bridge 5.5 miles east of Sugartown.	171	1956-65†, 1966-70	1970	10.94	1,310
8-0142	Tenmile Creek near Elizabeth, La.	Lat 30°50'11", long 92°52'26", at bridge 5.3 miles southwest of Elizabeth.	94.2	1950-65†, 1966-70	5- 3-70	9.92	562
8-0146	Flat Creek near De Ridder, La.	Lat 30°51'05", long 93°14'45", at bridge 2.4 miles east of De Ridder.	26.3	1964-70	12- 7-69	10.40	(+)

† Operated as a continuous-record gaging station.

* Also a low-flow partial-record station.

† Discharge not determined.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1970--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Calcasieu River basin--Continued							
8-0166	Hickory Branch at Kernan, La.	Lat 30°30'05", long 93°16'45", at bridge 0.7 mile southwest of Kernan.	82.2	1946-57†, 1958-70	1970	16.90	2,340
Sabine River basin							
*8-0232.7	Bull Bayou near Hunter, La.	See previous table.	8.54	1964-70	5- 3-70	10.77	(+)
8-0240.6	Blackwell Creek at Many, La.	Lat 31°34'50", long 93°27'45", at bridge on State Highway 6, 0.2 mile northeast of Many.	3.16	1959-68†, 1969-70	3- 4-70	10.22	496
8-0258.5	Pearl Creek at State Highway 111, at Burr Ferry, La.	Lat 31°04'32", long 93°29'22", at bridge 0.8 mile northeast of Burr Ferry.	9.7	1967-70	12- 7-69	6.15	(+)
8-0262	Red Bank Creek at Evans, La.	Lat 30°59'30", long 93°29'55", at bridge 0.4 mile northeast of Evans.	17.2	1966-70	12- 7-69	12.95	(+)

‡ Operated as a continuous-record gaging station.

* Also a low-flow partial-record station.

† Discharge not determined.

The following table contains annual maximum elevation for flood profile stations. A flood profile gage is a device which will register the peak elevation occurring between inspections. The date of the maximum elevation is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum elevation for each year is given. Information on some lower floods may have been obtained, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum elevation at flood-profile partial-record stations during water year 1970

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Flood peak	
					Date	Elevation (feet above mean sea level)
Pearl River basin						
2-4901.09	Bogue Lusa Creek at Bogalusa, La.	Lat 30°46'59", long 89°51'52", at bridge on State Highway 60, 1.1 miles southeast of Bogalusa water tower.	-----	1969-70	10- 8-69	3.22
2-4901.12	Bogue Lusa Creek at Bogalusa, La.	Lat 30°46'53", long 89°51'18", at bridge on Richmond St., 1.3 miles southeast of Bogalusa water tower.	-----	1969-70	1970	<10.40
2-4901.13	Bogue Lusa Creek at Bogalusa, La.	Lat 30°46'52", long 89°51'07", at bridge on State Highway 21, 1.4 miles southeast of Bogalusa water tower.	-----	1969-70	1970	<4.90
2-4901.25	Coburn Creek at Bogalusa, La.	Lat 30°47'45", long 89°51'58", at bridge on Van Buren St., 0.4 mile southeast of Bogalusa water tower.	-----	1969-70	10- 8-69 3- 4-70	6.14 4.80
2-4901.26	Coburn Creek at Bogalusa, La.	Lat 30°47'44", long 89°51'43", at bridge on Memorial Drive, 0.3 mile south of Bogalusa water tower.	-----	1969-70	1970	<2.60
2-4901.27	Coburn Creek at Bogalusa, La.	Lat 30°47'37", long 89°51'33", at bridge on Austin St., 0.4 mile southeast of Bogalusa water tower.	-----	1969-70	10- 8-69 3- 4-70	<9.50 10.01
2-4901.29	Coburn Creek at Bogalusa, La.	Lat 30°47'41", long 89°51'10", at bridge on Poplar St., 0.6 mile southeast of Bogalusa water tower.	-----	1969-70	10- 8-69 3- 4-70	(††) 4.15
2-4901.30	Coburn Creek at Bogalusa, La.	Lat 30°47'32", long 89°50'12", at bridge on State Highway 21, 1.0 mile southeast of Bogalusa water tower.	7.9	1969-70	1970	<1.60
2-4901.33	Coburn Creek at Bogalusa, La.	Lat 30°47'32", long 89°50'12", at bridge on State Highway 10, 1.6 miles southeast of Bogalusa water tower.	-----	1969-70	1970	<2.40
2-4926.63	French Branch near Slidell, La.	Lat 30°17'40", long 89°44'10", at bridge 3.5 miles northeast of Slidell.	-----	1966-70	1970	<6.40
Red River basin						
7-3480.1	Twelvemile Bayou below Dixie, La.	Lat 32°36'25", long 93°48'35", at bridge 6.0 miles southeast of Dixie.	-----	1962-70	5- 1-70	156.62
7-3481.05	McCain Creek at Pine Hills Road, near Shreveport, La.	Lat 32°35'01", long 93°49'34", at bridge 6.7 miles northwest of Shreveport court house.	-----	1963-70	1970	<175.80
7-3481.2	McCain Creek at Cooper Rd., near Shreveport, La.	Lat 32°33'11", long 93°47'30", at bridge 3.7 miles northwest of Shreveport court house.	-----	1963-70	1970	<157.70
7-3493.6	Flat River near Blenheim, La.	Lat 32°28'15", long 93°38'05", at bridge 2.5 miles east of Blenheim.	74.1	1960-62a, 1963-70	1970	<148.10
7-3493.63	Macks Bayou tributary No. 2, at Bossier City, La.	Lat 32°32'33", long 93°42'30", at bridge on Airline Dr., 2.1 miles northeast of Bossier City Post Office.	-----	1963-70	5- 1-70	163.93
7-3493.65	Macks Bayou at Bossier City, La.	Lat 32°31'59", long 93°40'24", at bridge on U.S. Highway 80, 3.3 miles northeast of Bossier City Post Office.	-----	1963-70	1970	<160.90
7-3493.68	Macks Bayou tributary No. 3, at Bossier City, La.	Lat 32°31'20", long 93°41'31", at bridge on Old Minden Road, 2.1 miles east of Bossier City Post Office.	-----	1963-70	1970	<162.90
7-3493.69	Macks Bayou at North Gate Road, at Bossier City, La.	Lat 32°30'39", long 93°40'56", 500 ft west of Barksdale Air Force Base fence at North Gate Road at Bossier City.	-----	1966-70	1970	<158.80
7-3493.8	Flat River at Taylortown, La.	Lat 32°23'20", long 93°35'15", at bridge 0.5 mile east of Taylortown.	95.8	1960-62a, 1963-70	1970	<†143.00
7-3494	Flat River near Elm Grove, La.	Lat 32°19'45", long 93°31'20", at bridge 2.2 miles southeast of Elm Grove.	112	1960-70	1970	<140.00

< Less than amount shown.

a Operated as a crest-stage partial-record station.

† Gage datum; mean sea level of gage not determined.

†† No record.

PEAK ELEVATIONS AT FLOOD-PROFILE PARTIAL-RECORD STATIONS

Annual maximum elevation at flood-profile partial-record stations during water year 1970--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Flood peak	
					Date	Elevation (feet above mean sea level)
Red River basin--Continued						
7-3495.9	Ivan Lake near Cotton Valley, La.	Lat 32°49'45", long 93°29'20", at bridge 4.0 miles west of Cotton Valley.	37.8	1960-65a, 1966-70	3- 3-70	201.19
7-3497.85	Little Cypress Bayou at State Highway 3, at Plain Dealing, La.	Lat 32°54'55", long 93°42'15", at bridge 0.6 mile northwest of Plain Dealing.	-----	1963-70	1970	<276.20
7-3497.87	Little Cypress Bayou tributary at Plain Dealing, La.	Lat 32°54'30", long 93°42'15", at bridge on State Highway 3, 0.7 mile northwest of Plain Dealing.	-----	1963-70	1970	<265.30
7-3497.9	Little Cypress Bayou at Plain Dealing, La.	Lat 32°54'05", long 93°41'55", at bridge 0.3 mile southeast of Plain Dealing.	-----	1963-70	1970	<257.40
7-3498.6	Red Chute Bayou at Sligo, La.	Lat 32°26'50", long 93°35'40", at bridge 0.5 mile west of Sligo.	980	1960-62a, 1963-70	5- 1-70	+147.45
7-3498.9	Red Chute Bayou near Elm Grove, La.	Lat 32°21'45", long 93°30'10", at bridge 3.0 miles northeast of Elm Grove.	1,004	1960-70	5- 1-70	137.00
7-3499	Swan Lake near Elm Grove, La.	Lat 32°16'55", long 93°27'05", at bridge 7.5 miles southeast of Elm Grove.	1,020	1961-70	5- 1-70	134.66
7-3503	Coushatta Bayou near Crichton, La.	Lat 32°07'10", long 93°24'10", at bridge 1.8 miles east of Crichton.	15.9	1960-70	1970	<129.00
7-3507	Bayou Pierre at Shreveport, La.	Lat 32°27'20", long 93°44'05", at bridge on Pierremont Road, 3.4 miles southeast of Shreveport city hall.	-----	1960-70	11-17-69	154.07
7-3508	Bayou Pierre at Forbing, La.	Lat 32°23'35", long 93°43'25", at bridge 0.6 mile northeast of Forbing, and 8.1 miles south of Shreveport Post Office.	19	1960-65a, 1967-70	11-17-69	146.17
7-3508.2	Sand Beach Bayou at Shreveport, La.	Lat 32°26'35", long 93°43'27", at bridge on East 70th St., 4.3 miles southeast of Shreveport city hall.	-----	1963-64, 1967-70	1970	<142.60
7-3508.4	Sand Beach Bayou near Shreveport, La.	Lat 32°24'03", long 93°42'26", at bridge on State Highway 526, 7.4 miles southeast of Shreveport city hall.	-----	1963-70	1970	<150.40
7-3509	Bayou Pierre near Robson, La.	Lat 32°22'25", long 93°40'30", at bridge 2.0 miles northwest of Robson.	26.0	1960-70	5- 1-70	136.72
7-3512	Brush Bayou at Shreveport, La.	Lat 32°26'23", long 93°46'52", at Southern Pacific Railway bridge, 4.9 miles southwest of Shreveport city hall.	3.4	1960-70	11-17-69	185.04
7-3512.1	Brush Bayou tributary at Shreveport, La.	Lat 32°26'19", long 93°47'49", at bridge on Jewella Road, 4.8 miles wouthwest of Shreveport city hall.	-----	1963-70	1970	<191.80
7-3515.8	Bayou Pierre near Abington, La.	Lat 32°08'10", long 93°31'05", at bridge 2.9 miles northwest of Abington.	406	1960-65a, 1966-70	5- 1-70	122.92
7-3716	Dugdemonia River near Dodson, La.	Lat 32°07'22", long 92°48'24", at bridge 9.1 miles northwest of Dodson.	412	1959-70	3- 9-70	116.71
7-3517.4	Bayou Pierre at Evelyn, La.	Lat 31°59'20", long 93°26'30", at bridge 0.2 mile northeast of Evelyn.	707	1950-65a, 1966-70	1970	<116.20
7-3517.5	Bayou Pierre near Lake End, La.	Lat 31°53'40", long 93°20'30", at bridge 2.9 miles southwest of Lake End.	860	1950-70	5- 1-70	110.10
7-3521.5	Saline Lake near Clarence, La.	Lat 31°51'10", long 92°56'10", 100 ft left of spillway, 5.9 miles northeast of Clarence.	421	1960-70	1970	<107.00
7-3524.1	Kepler Lake near Castor, La.	Lat 32°18'40", long 93°09'30", at dam on Kepler Lake, 5.0 miles north of Castor.	46.2	1960-65+, 1966-70	5- 2-70	176.94
7-3529	Saline Bayou at Allen Dam, near Clarence, La.	Lat 31°51'05", long 92°56'45", on right bank 5.3 miles northeast of Clarence.	1,349	1960-70	5- 4-70	110.56
7-3547.4	Old River at Montrose, La.	Lat 31°34'25", long 92°59'40", at bridge at Montrose.	471	1960-65+, 1966-70	1970	<95.00

< Less than amount shown.

† Gage datum; mean sea level of gage not determined.

‡ Operated as a continuous-record gaging station..

a Operated as a crest-stage partial-record station.

Annual maximum elevation at flood-profile partial-record stations during water year 1970--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Flood peak	
					Date	Elevation (feet above mean sea level)
Red River basin--Continued						
7-3547.6	Cane River Lake near Montrose, La.	Lat 31°34'10", long 92°58'30", at floodgate, 1.2 miles southeast of Montrose.	34	1960-70	12- 8-69	98.25
7-3547.8	Cane River near Cloutierville, La.	Lat 31°33'15", long 92°53'20", on left bank 2.2 miles northeast of Clutierville.	582	1960-70	1970	<95.20
7-3554	Bayou Marteau near Rock Hill, La.	Lat 31°25'30", long 92°35'50", at bridge 2.2 miles southwest of Rock Hill, and 5.0 miles northeast of Boyce.	-----	1960-70	12- 7-69	75.26
7-3554.75	Bayou Rapides near Alexandria, La.	Lat 31°18'43", long 92°33'38", at bridge 6.9 miles west of Alexandria city hall.	-----	1963-65, 1968-70	1970	<81.90
7-3554.9	Bayou Rapides at control structure at Alexandria, La.	Lat 31°17'59", long 92°29'42", at control structure, 3.1 miles west of Alexandria city hall.	-----	1963-70	1970	<73.90
Bayou Baton Rouge basin						
7-3739.7	Baker Canal at Baker, La.	Lat 30°35'19", long 91°10'24", at bridge on parish road, 0.3 mile west of Baker.	-----	1962-70	10- 7-69	71.41
7-3739.8	Baker Canal near Baker, La.	Lat 30°34'49", long 91°12'43", at bridge on U.S. Highway 61, 2.7 miles southwest of Baker.	-----	1962-70	1970	<58.50
Mississippi River Delta						
7-3745.7	Oakes diversion channel at Slidell, La.	Lat 30°17'35", long 89°46'00", at culvert on Roberts Road, 0.4 mile north of Couss Road at Slidell.	-----	1966-70	1970	<3.60
7-3754.1	Tangipahoa River at Tangipahoa, La.	Lat 30°52'36", long 90°29'44", at bridge 1.0 mile east of Tangipahoa.	340	1959-65 1967-70	1970	<115.10
7-3754.2	Tangipahoa River at Arcola, La.	Lat 30°46'36", long 90°29'53", at bridge 0.7 mile east of Arcola.	381	1959-65, 1967-70	1970	<118.80
7-3771.5	Amite River at Grangeville, La.	Lat 30°44'10", long 90°50'30", at bridge 0.5 mile southwest of Grangeville.	741	1951-63 [±] , 1964-70	1970	<109.90
7-3774	Comite River near Clinton, La.	Lat 30°51'30", long 91°02'20", at bridge 1.3 miles west of Clinton.	all 12	1949-65 [±] , 1969-70	1970	<11.00
7-3777.5	Comite River near Zachary, La.	Lat 30°38'35", long 91°05'40", at bridge 3.7 miles east of Zachary.	230	1951-63 [±] , 1964-70	10- 7-69 3-21-70	84.41 <79.40
7-3777.6	Comite River at Comite Drive, near Baton Rouge, La.	Lat 30°33'24", long 91°05'53", at bridge 9.0 miles northeast of Baton Rouge Post Office.	-----	1962-70	10- 7-69 3-21-70	54.20 57.66
7-3777.8	White Bayou at State Highway 64, near Zachary, La.	Lat 30°38'56", long 91°07'53", at bridge on State Highway 64, 1.1 miles east of Zachary.	-----	1962-70	10- 7-69	90.44
7-3778.4	White Bayou near Baton Rouge, La.	Lat 30°35'06", long 91°07'31", at bridge on Plank Road, 10.0 miles northeast of Baton Rouge Post Office.	-----	1962-70	1970	<68.60
7-3778.9	Cypress Bayou at Baker, La.	Lat 30°34'31", long 91°10'01", at bridge on Lavey Lane, 0.2 mile east of State Highway 19 at Baker.	-----	1967-70	1970	<6.80
7-3779	Cypress Bayou at Plank Road, near Baton Rouge, La.	Lat 30°32'32", long 91°08'18", at bridge 6.9 miles northeast of Baton Rouge Post Office.	-----	1962-65, 1967-70	1970	<54.70
7-3779.2	Cypress Bayou at Hooper Rd., near Baton Rouge, La.	Lat 30°31'42", long 91°06'35", at bridge 7.0 miles northeast of Baton Rouge Post Office.	-----	1962-70	1970	(††)
7-3779.4	Blackwater Bayou near Baton Rouge, La.	Lat 30°32'06", long 91°04'53", at bridge on Hooper Rd., 8.5 miles northeast of Baton Rouge Post Office.	14.1	1962-70	1970	<50.40
7-3780.08	Hurricane Creek at Baton Rouge, La.	Lat 30°28'55", long 91°07'41", at bridge on East Brookstown Dr., 3.9 miles northeast of Baton Rouge Post Office.	-----	1967-70	1970	<15.00
7-3780.1	Hurricane Creek near Baton Rouge, La.	Lat 30°29'14, long 91°05'20", at bridge on Joor Rd., 6.2 miles northeast of Baton Rouge Post Office	-----	1962-70	1970	<40.60

< Less than amount shown.

† Gage datum; mean sea level of gage not determined.

‡ Operated as a continuous-record gaging station.

a Including Pretty Creek.

†† No record.

Annual maximum elevation at flood-profile partial-record stations during water year 1970--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Flood peak	
					Date	Elevation (feet above mean sea level)
Mississippi River Delta--Continued						
7-3780.15	Roberts Canal at Baton Rouge, La.	Lat 30°30'22", long 91°07'31", at bridge on Silver Leaf Ave., 5.3 miles northeast of Baton Rouge Post Office.	-----	1967-70	10- 7-69	+9.34
7-3780.2	Roberts Canal near Baton Rouge, La.	Lat 30°29'55", long 91°05'17", at bridge on Joor Rd., 6.6 miles northeast of Baton Rouge Post Office.	-----	1962-70	10- 7-69	44.59
7-3780.5	Comite River at Greenwell Springs Rd. near Baton Rouge, La.	Lat 30°30'20", long 91°02'24", at bridge 9.4 miles northeast of Baton Rouge Post Office.	-----	1962-70	10- 7-69 3-21-70	38.55 33.10
7-3785.95	Jones Creek at Airline Highway, at Baton Rouge, La.	Lat 30°27'12", long 91°05'15", at culvert 5.1 miles northeast of Baton Rouge Post Office.	-----	1967-70	10- 7-69	+5.80
7-3786	Jones Creek at Florida Blvd., at Baton Rouge, La.	Lat 30°27'21", long 91°04'29", at bridge 6.5 miles east of Baton Rouge Post Office.	-----	1962-70	10- 7-69	40.98
7-3786.35	Lively Bayou northeast of Baton Rouge, La.	Lat 30°28'14", long 91°02'04", at bridge on Flannery Rd., 9.0 miles northeast of Baton Rouge Post Office.	-----	1967-70	10- 7-69	+9.44
7-3786.4	Lively Bayou east of Baton Rouge, La.	Lat 30°27'40", long 91°02'04", at bridge on Flannery Rd., 8.9 miles east of Baton Rouge Post Office.	-----	1967-70	10- 7-69	+7.39
7-3786.45	Lively Bayou southeast of Baton Rouge, La.	Lat 30°26'47", long 91°02'04", at bridge on Flannery Rd., 8.8 miles southeast of Baton Rouge Post Office.	-----	1967-70	10- 7-69	+4.78
7-3786.5	Jones Creek at Old Hammond Hwy., near Baton Rouge, La.	Lat 30°26'26", long 91°02'40", at bridge 8.4 miles east of Baton Rouge Post Office.	-----	1962-70	10- 7-69	36.05
7-3786.7	Weiner Creek near Baton Rouge, La.	Lat 30°25'08", long 91°03'55", at bridge on Aubin Lane, 7.3 miles southeast of Baton Rouge Post Office.	-----	1967-70	10- 7-69	+9.07
7-3787	Jones Creek near Woodlawn School, near Baton Rouge, La.	Lat 30°24'50", long 91°00'50", at bridge 1.6 miles north of Woodlawn School, 10.5 miles east of Baton Rouge Post Office.	19.5	1967-70	10- 7-69	+12.14
7-3787.1	Amite River near Baton Rouge, La.	Lat 30°23'52", long 91°58'23", 3,400 ft downstream from Jones Creek and 13 miles southeast of Baton Rouge Post Office.	-----	1968-70	10- 7-69	+6.42
7-3787.2	Clay Cut Bayou at Siegen Lane, near Baton Rouge, La.	Lat 30°23'46", long 91°03'20", at bridge 7.9 miles southeast of Baton Rouge Post Office.	-----	1967-70	3- 3-70	+10.06
7-3787.25	Clay Cut Bayou near Hope Villa, La.	Lat 30°22'23", long 90°58'10", at bridge on Tiger Bend Rd., 2.3 miles northeast of Hope Villa.	-----	1967-70	1970	(++)
7-3787.8	Bayou Fountain at Ben Hur Rd., at Baton Rouge, La.	Lat 30°23'30", long 91°09'36", at bridge 4.2 miles southeast of Baton Rouge Post Office	-----	1962-70	2-12-66 4-16-67 1968 4-13-69 1970	c18.28 c19.07 c17.30 c18.83 17.30
7-3788	Bayou Fountain at Gardere Lane, near Baton Rouge, La.	Lat 30°21'52", long 91°07'16", at bridge 6.9 miles southeast of Baton Rouge Post Office.	-----	1962-66, 1969-70	4-13-69 3- 3-70	c15.18 13.25
7-3788.05	Bayou Fountain tributary near Baton Rouge, La.	Lat 30°21'00", long 91°04'54", at culvert on Highland Road, 9.1 miles southeast of Baton Rouge Post Office.	-----	1967-70	4-14-67 8-12-68 4-13-69 3- 3-70	c13.16 c 7.76 c11.84 9.66
7-3790.1	Ward Creek at College Drive, at Baton Rouge, La.	Lat 30°26'08", long 91°07'59", at bridge 3.5 miles southeast of Baton Rouge Post Office.	-----	1967, 1969-70	10- 7-69 3- 3-70	3.75 .91
7-3790.5	Ward Creek at Essen Lane, near Baton Rouge, La.	Lat 30°24'17", long 91°06'12", at bridge 5.7 miles southeast of Baton Rouge Post Office.	-----	1962-70	10- 7-69 3- 3-70	22.75 22.90

< Less than amount shown

+ Gage datum; mean sea level of gage not determined.

Annual maximum elevation at flood-profile partial-record stations during water year 1970--Continued

Annual maximum elevation at flood-profile partial-record stations during water year 1970--Continued						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Flood peak	
					Date	Elevation (feet above mean sea level)
Mississippi River Delta--Continued						
7-3790.9	North Branch Ward Creek at Goodwood Blvd., at Baton Rouge, La.	Lat 30°26'34", long 91°05'57", at bridge 5.5 miles southeast of Baton Rouge Post Office.	-----	1967-70	10- 7-69 3- 3-70	b14.20 11.92
7-3791	North Branch Ward Creek at Baton Rouge, La.	Lat 30°25'04", long 91°05'29", at bridge on Jefferson Highway, 5.9 miles southeast of Baton Rouge Post Office.	-----	1962-70	1970	<28.50
7-3794	Dawson Creek at Perkins Road, at Baton Rouge, La.	Lat 30°24'37", long 91°07'53", at bridge 4.1 miles southeast of Baton Rouge Post Office.	-----	1962-70	1970	<20.60
7-3795.5	Bayou Duplanier at Lee Drive, at Baton Rouge, La.	Lat 30°24'05", long 91°09'09", at bridge 3.8 miles south of Baton Rouge Post Office.	-----	1962-70	1970	<19.40
7-3799.5	Dawson Creek at Staring Lane, near Baton Rouge, La.	Lat 30°23'19", long 91°06'42", at bridge 6.0 miles southeast of Baton Rouge Post Office.	-----	1962-70	1970	<19.9
7-3802.23	New River at Gonzales, La.	Lat 30°14'12", long 90°54'43", at bridge on U.S. Highway 61, 0.5 mile northeast of Gonzales water tower.	-----	1963-70	1970	<7.80
7-3802.26	Bayou Francois near Gonzales, La.	Lat 30°13'57", long 90°56'49", at bridge on State Highway 429, 1.8 miles west of Gonzales water tower.	-----	1963-70	1970	(††)
7-3802.27	Bayou Francois at Gonzales, La.	Lat 30°13'35", long 90°55'14", at bridge on State Highway 44, 0.4 mile southwest of Gonzales water tower.	-----	1963-70	1970	<6.80
7-3822.56	Bayou Rapides-Boeuf-Cocodrie diversion channel at Alexandria, La.	Lat 31°17'43", long 92°29'38", at bridge on State Highway 28, 3.2 miles west of Alexandria city hall.	-----	1963-70	1970	<76.70
7-3822.57	Bayou Rapides-Boeuf-Cocodrie diversion channel at State Highway 488, near Alexandria, La.	Lat 31°15'37", long 92°31'13", at bridge 5.7 miles southwest of Alexandria city hall.	-----	1963-70	1970	<67.30
7-3822.58	Bayou Rapides-Boeuf-Cocodrie diversion channel at U.S. Highway 165, near Alexandria, La.	Lat 31°13'39", long 92°29'49", at bridge 6.5 miles southwest of Alexandria city hall.	-----	1963-70	1970	<69.20
7-3828.4	Hynson Bayou at Bringham Park, at Alexandria, La.	Lat 31°17'19", long 92°27'16", on right bank just below bridge on Masonic Drive, 1.7 miles south of Alexandria city hall.	-----	1963-70	1970	<75.40
7-3828.45	Horseshoe Drainage Canal at Prescott Rd., at Alexandria, La.	Lat 31°16'14", long 92°28'22", at bridge 3.3 miles southwest of Alexandria city hall.	-----	1960-70	6-24-70	70.58
7-3828.5	Horseshoe Drainage Canal at Packing House Rd., at Alexandria, La.	Lat 31°16'25", long 92°26'15", at bridge 2.6 miles south of Alexandria city hall.	-----	1960-70	12- 7-69	69.68
7-3828.55	Hynson Bayou at Midway St., at Alexandria, La.	Lat 31°16'15", long 92°25'22", at bridge 3.1 miles southeast of Alexandria city hall.	-----	1963-70	12- 7-69	71.88
7-3828.65	Persimmon Bayou near Alexandria, La.	Lat 31°13'45", long 92°22'51", at Texas and Pacific Railway bridge, just downstream from State Highway 1, 6.7 miles southeast of Alexandria city hall.	-----	1963-70	1970	<64.60
7-3830	Chatlin Lake Canal near LeCompte, La.	Lat 31°07'10", long 92°20'40", at bridge on State Highway 457, 3.7 miles northeast of LeCompte.	75.9	1943-58†, 1960, 1962-70	5- 3-70	58.33

< Less than amount shown.

†† No record.

‡ Operated as a continuous-record gaging station.

b From high-water mark.

PEAK ELEVATIONS AT FLOOD-PROFILE PARTIAL-RECORD STATIONS

Annual maximum elevation at flood-profile partial-record stations during water year 1970--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Flood peak	
					Date	Elevation (feet above mean sea level)
Mermentau River basin						
8-0110	Bayou Plaquemine Brule near Crowley, La.	Lat 30°14'05", long 92°23'44", at bridge 1.2 miles northwest of Crowley.	252	1942-47†, 1965-70	1970	<†4.40
8-0124.45	Bayou Chene near Welsh, La.	Lat 30°09'24", long 92°46'06", at bridge on parish road, 6.0 miles southeast of Welsh.	-----	1969-70	1970	<16.00
8-0124.7	Bayou Lacassine near Lake Arthur, La.	Lat 30°04'12", long 92°52'43", at bridge on State Highway 14, 12.9 miles west of Lake Arthur.	-----	1969-70	1970	<10.80
Calcasieu River Basin						
8-0126	Calcasieu River near Slagle, La.	Lat 31°13'30", long 93°06'05", at bridge on State Highway 8, 2.2 miles northeast of Slagle.	48.1	1959-70	12- 7-69	†13.40
8-0159.8	Kayouche Coulee at Prien Lake Road, at Lake Charles, La.	Lat 30°11'53", long 93°10'01", at bridge 3.6 miles southeast of Lake Charles city hall.	-----	1963-70	1970	(††)
8-0159.9	Kayouche Coulee at U.S. Highway 90, at Lake Charles, La.	Lat 30°13'39", long 93°10'28", at bridge 2.6 miles east of Lake Charles city hall.	-----	1963-70	1970	<5.80
8-0170.6	Bayou Contraband at Common St., at Lake Charles, La.	Lat 30°10'37", long 93°12'50", at bridge 3.4 miles south of Lake Charles city hall.	-----	1963-70	1970	<8.10
8-0170.65	Bayou Contraband at Lake St., at Lake Charles, La.	Lat 30°10'55", long 93°13'56", at bridge 3.1 miles southwest of Lake Charles city hall.	-----	1963-70	1970	<6.80
8-0170.7	Bayou Contraband tributary at Lake St., at Lake Charles, La.	Lat 30°13'29", long 93°12'56", at bridge 1.5 miles southwest of Lake Charles city hall.	-----	1963-70	1970	<4.90
Sabine River basin						
8-0257	Sand Creek near Burr Ferry, La.	Lat 31°08'30", long 93°31'10", at bridge on State Highway 111, 5.3 miles northwest of Burr Ferry, La.	33.7	1964-70	1970	<108.20

† Operated as a continuous-record gaging station.

< Less than amount shown.

† Gage datum; mean sea level of gage not determined.

†† No record.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1970

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Red River basin						
Black Lake	Twelvemile Bayou	Lat 32°52'56", long 93°53'50", at dam 75 ft above bridge on State Highway 2, 1.25 miles west of Hosston.	-	-	11-19-69 1-21-70	0 108
Lake Bistineau	Loggy Bayou	Lat 32°19'46", long 93°26'10", at dam on Lake Bistineau, 8.5 miles west of Ringgold.	1,458	1968-69a	11-18-69	0
Little Bayou de Loutre	Bayou de Loutre	Lat 32°56'54", long 92°25'36", at bridge 1.3 miles west of Truxno.	-	-	5-2-70 5-2-70 5-3-70	939 843 369
Bayou D'Arbonne	Ouachita River	Lat 32°40'50", long 92°39'10", at bridge 1.5 miles south of Dubach.	355	1940-68b	11-17-69	0
Middle Fork Bayou D'Arbonne	Bayou D'Arbonne	Lat 32°53'04", long 92°53'41", at bridge on State Highway 115, 4.3 miles southwest of Summerfield.	-	1947	5-2-70	1,790
Corney Bayou	Bayou D'Arbonne	Lat 32°59'07", long 92°50'58", at bridge on parish road, 2.1 miles south of Ark.-La. State line.	-	-	10-1-69	0
Little Corney Bayou	Corney Bayou	Lat 32°58'49", long 92°51'14", at bridge on parish road, 2.6 miles south of Ark.-La. State line.	-	-	10-1-69	0
Three Creeks	Corney Bayou	Lat 32°59'12", long 92°50'07", at bridge on parish road, 2.0 miles south of Ark.-La. State line.	-	-	10-1-69	0
Corney Bayou	Bayou D'Arbonne	Lat 32°53'55", long 92°39'39", at bridge 3.0 miles south of Lillie.	462	1940-57b 1957-69c	10-14-69	.01
Bayou D'Arbonne Lake	Ouachita River	Lat 32°45'25", long 92°24'55", at bridge 0.6 miles southwest of Farmerville.	1,470	1939,57, 58,1964- 70d	11-17-69 2-11-70 6-22-70	0 1,710 90.9
Mississippi River Delta						
Spring Creek	Bayou Cocodrie	Lat 31°05'55", long 92°38'12", at bridge on unmarked parish road, 0.5 mile south of Melder.	-	1969a	6-16-70 8-17-70	5.21 4.69
Rocky Branch	Spring Creek	Lat 31°05'53", long 92°37'39", at bridge on State Highway 112, 0.7 mile southeast of Melder.	-	1969a	6-16-70 8-17-70	.36 .12
Barber Creek	do.....	Lat 31°00'39", long 92°33'39", at culvert on U.S. Highway 165, 2.7 miles northeast of Glenmora.	-	-	8-31-70	4.43
Spring Creek	Cocodrie Lake	Lat 30°59'32", long 92°31'19", at pipeline crossing, 3.8 miles east of McNary.	-	-	8-27-70	40.5
Little Spring Creek	do.....	Lat 30°58'43", long 92°31'47", at pipeline crossing, 3.3 miles east of McNary.	-	-	8-27-70	.84
Do.....	do.....	Lat 30°58'06", long 92°30'20", 4.8 miles southeast of Glenmora.	-	-	8-27-70	2.81
Clear Creek	do.....	Lat 30°57'14", long 92°31'04", 5.0 miles east of Glenmora.	-	-	8-27-70	1.60
Do.....	do.....	Lat 30°57'06", long 92°30'16", 5.8 miles east of Glenmora.	-	-	8-27-70	2.59
Bayou Cocodrie	Bayou Boeuf-Cocodrie diversion channel	Lat 30°53'29", long 92°18'40", at bridge on State Highway 271 at Centerville.	-	-	8-21-70	110
Do.....	do.....	Lat 30°50'28", long 92°15'31", 0.2 mile south of St. Landry.	-	-	8-21-70 8-27-70 8-27-70	120 78.0 76.9

a Measured during October 1968 and May 1969 Spring Creek seepage investigations.

b Operated as a continuous-record gaging station.

c Operated as a crest-stage station.

d Operated as a continuous stage station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1970

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Mississippi River Delta--Continued						
Castor Creek	Bayou Boeuf	Lat 31°12'12", long 92°35'56", at bridge on unmarked parish road, 8.5 miles southwest of Alexandria.	-	1969a	10-29-69	6.58
Do.....	do.....	Lat 31°12'25", long 92°35'11", 7.9 miles southwest of Alexandria.	-	-	10-29-69	6.36
Do.....	do.....	Lat 31°12'28", long 92°34'58", 7.8 miles southwest of Alexandria.	-	-	10-29-69	15.4
Do.....	do.....	Lat 31°12'37", long 92°34'28", 7.7 miles southwest of Alexandria.	-	-	10-29-69	16.1
Do.....	do.....	Lat 31°12'36", long 92°34'46", 7.6 miles southwest of Alexandria.	-	-	10-29-69	16.1
Loving Creek	Castor Creek	Lat 31°12'34", long 92°34'22", 7.5 miles southwest of Alexandria.	-	-	10-29-69	4.02
Calcasieu River basin						
Calcasieu River	Gulf of Mexico	Lat 31°07'35", long 92°46'00", at bridge 1.0 mile south of Hineston.	436	-	10-28-69	4.91
Do.....	do.....	Lat 31°94'35", long 92°43'04", at bridge on State Highway 21, 1.0 mile southeast of Calcasieu Post Office.	-	1954	10-28-69	11.5
Sixmile Creek	Whisky Chitto Creek	Lat 30°55'25", long 92°56'40", at bridge 1.0 mile southwest of Pitkin.	88.6	1955-63e	7-21-70	11.7
Do.....	do.....	Lat 30°48'52", long 92°55'34", at bridge 5.5 miles east of Sugartown.	171	1956-65b	7-21-70	40.3
Calcasieu River	Gulf of Mexico	Lat 30°23'02", long 92°05'30", 10 miles west of Fenton.	-	-	2-20-70 9-30-70	1,130 799
Sabine River basin						
Bayou Anacoco	Sabine River	Lat 30°54'15", long 93°23'44", at bridge 5.0 miles northwest of De Ridder.	-	-	11-17-69	260

a Measured during October 1968 and May 1969 Spring Creek seepage investigations.

b Operated as a continuous-record gaging station.

e Operated as a low-flow partial-record station.

SEEPAGE INVESTIGATIONS

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Hemphill Creek seepage investigation

On Aug. 20, 1970, a series of related discharge measurements were made in the Hemphill Creek basin, beginning with Devils Creek southwest of Nebo and ending with Hemphill Creek southeast of Nebo. The investigations were made during a period of low flow to obtain information on gains and losses within the reach.

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Devils Creek	Catahoula Lake	Lat 31°34'15", long 92°09'34", in sec.22, T.6 N., R.3 E., at bridge on State Highway 127, 1.8 miles southwest of Nebo.	-	-	8-20-70	.87
Do.....	do.....	Lat 31°32'58", long 92°08'08", in sec.26, T.6 N., R.3 E., at bridge 1.2 miles southeast of Nebo School, 3.5 miles south of Nebo.	-	-	8-20-70	1.43
Hemphill Creek	do.....	Lat 31°41'38", long 92°07'30", in sec.1, T.9 N., R.3 E., at bridge 0.2 mile north of Jena.	-	-	8-20-70	0
Do.....	do.....	Lat 31°40'56", long 92°07'33", in sec.37, T.9 N., R.3 E., at bridge on U. S. Highway 84, at Jena.	-	-	8-20-70	.25
Do.....	do.....	Lat 31°40'24", long 92°07'37", in sec.38, T.9 N., R.3 E., 0.4 mile south of Jena.	3.56	-	8-20-70	.29
West Prong Creek	Hemphill Creek	Lat 31°40'53", long 92°08'04", in sec.37, T.9 N., R.3 E., at bridge on State Highway 127, at Jena.	-	-	8-20-70	.85
Do.....	do.....	Lat 31°40'24", long 92°07'40", in sec.38, T.9 N., R.3 E., 0.4 mile south of Jena.	3.25	-	8-20-70	1.35
Hair Creek	do.....	Lat 31°41'44", long 92°05'55", in sec.6, T.8 N., R.4 E., at bridge 0.6 mile northeast of Jena.	-	-	8-20-70	.10
Do.....	do.....	Lat 31°40'45", long 92°06'03", in sec.18, T.8 N., R.4 E., at bridge 0.3 mile east of Jena.	-	-	8-20-70	1.07
Do.....	do.....	Lat 31°40'25", long 92°06'20", in sec.18, T.8 N., R.4 E., at bridge on U. S. Highway 84, 0.5 mile east of Jena.	-	-	8-20-70	2.21
Do.....	do.....	Lat 31°39'20", long 92°07'02", on line of irregular sections 39 and 24, T.8 N., R.3 E., 1.3 miles south of Jena.	8.59	-	8-20-70	2.49
Hemphill Creek	Catahoula Lake	Lat 31°39'13", long 92°07'04", on line of irregular sections 39 and 24, T.8 N., R.3 E., 1.4 miles south of Jena.	19.0	-	8-20-70	7.37
Do.....	do.....	Lat 31°37'13", long 92°07'04", in sec.23, T.7 N., R.3 E., 2.6 miles north of Nebo.	-	-	8-20-70	7.18
Mill Creek	Hemphill Creek	Lat 31°37'01", long 92°08'40", in sec.3, T.7 N., R.3 E., at bridge on State Highway 127, 2.0 miles north of Nebo.	-	-	8-20-70	5.80
Hemphill Creek	Catahoula Lake	Lat 31°35'05", long 92°07'55", in lot 39, T.7 N., R.3 E., at bridge 0.6 mile east of Nebo.	35.3	1962, 1956-64a, 1966, 1967b	8-20-70	12.7
Masons Branch	Hemphill Creek	Lat 31°35'01", long 92°08'30", in sec.39, T.7 N., R.3 E., at bridge on State Highway 127, 0.2 mile south of Nebo.	2.01	-	8-20-70	.42
Little Jordan Branch	do.....	Lat 31°34'57", long 92°08'33", in sec.39, T.7 N., R.3 E., at bridge on State Highway 127, 0.5 mile south of Nebo.	1.69	-	8-20-70	.14
Hemphill Creek	Catahoula Lake	Lat 31°33'20", long 92°06'30", near mouth 3 miles southeast of Nebo.	39	1962, 1963, 1964-66a, 1967b	8-20-70	13.1

a Low-flow partial-record station.

b Measured during Little River seepage investigation.

SEEPAGE INVESTIGATIONS

Trout Creek seepage investigation

On Aug. 20, 1970, a series of related discharge measurements were made in the Trout Creek basin, beginning with Trout Creek south of Trout and ending with Trout Creek northeast of Pollock. The investigations were made during a period of low flow to obtain information on gains and losses within the reach.

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Trout Creek	Little River	Lat 31°40'34", long 92°11'09", in sec.17, T.8 N., R.3 E., at bridge 1.4 miles south of Trout.	-	-	8-20-70	.18
Clear Fork	Trout Creek	Lat 31°39'32", long 92°12'58", in sec.24, T.8 N., R.2 E., 5.1 miles southwest of Jena.	6.03	-	8-20-70	1.16
Trout Creek	Little River	Lat 31°39'34", long 92°13'07", in sec.24, T.8 N., R.2 E., at bridge 3.4 miles southwest of Trout.	13.1	-	8-20-70	2.34
Riley Branch	Trout Creek	Lat 31°38'47", long 92°13'39", in sec.25, T.8 N., R.2 E., at bridge on State Highway 8, 4.5 miles southwest of Trout.	-	-	8-20-70	1.74
Trout Creek	Little River	Lat 31°38'19", long 92°15'05", in sec.27, T.8 N., R.2 E., 5.7 miles southwest of Trout.	-	-	8-20-70	4.22
Mack Branch	Trout Creek	Lat 31°37'19", long 92°15'22", in sec.34, T.8 N., R.2 E., at bridge on State Highway 8, 6.9 miles southwest of Trout.	2.19	-	8-20-70	1.50
Trout Creek	Little River	Lat 31°36'32", long 92°17'02", in sec.5, T.7 N., R.2 E., at bridge 9.3 miles northeast of Pollock.	29	1964-67b	8-20-70	5.38

a Low-flow partial-record station.

b Measured during Little River seepage investigation.

Big Creek seepage investigation

On Aug. 21, 1970, a series of related discharge measurements were made in the Big Creek basin, beginning with an unnamed stream at Dry Prong and ending with Big Creek northeast of Fishville. The investigations were during a period of low flow to obtain information on gains and losses within the reach.

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Unnamed No. 3	Big Creek	Lat 31°34'39", long 92°32'20", in sec. 23, T. 7 N., R. 2 W., at bridge on State Highway 123, at Dry Prong.	-	-	8-21-70	.15
Big Creek	Little River	Lat 31°34'12", long 92°31'34", in sec. 24, T. 7 N., R. 2 W., at bridge on U. S. Highway 167, 0.1 mile south of Dry Prong.	-	-	8-21-70	.92
Dry Prong	Big Creek	Lat 31°36'57", long 92°31'10", in sec. 1, T. 7 N., R. 2 W., at bridge, 1.7 miles north of Dry Prong.	-	-	8-21-70	.97
Black Lick Creek	Dry Prong Creek	Lat 31°36'17", long 92°31'02", in sec. 7, T. 7 N., R. 1 W., at bridge, 0.9 mile northwest of Dry Prong.	-	-	8-21-70	.07
Dry Prong	Big Creek	Lat 31°36'40", long 92°30'08", in sec. 6, T. 7 N., R. 1 W., at bridge on State Highway 123, 2.5 miles northwest of Dry Prong.	-	-	8-21-70	1.28
Do.....	do.....	Lat 31°36'01", long 92°29'27", in sec. 8, T. 7 N., R. 1 W., at bridge, 8.5 miles northwest of Pollock.	-	-	8-21-70	1.31
Do.....	do.....	Lat 31°34'15", long 92°27'29", in sec. 22, T. 7 N., R. 1 W., at bridge, 4.5 miles northeast of Bentley.	-	-	8-21-70	7.73
Do.....	do.....	Lat 31°33'49", long 92°26'17", in sec. 23, T. 7 N., R. 1 W., at bridge, 4.5 miles north of Pollock.	-	-	8-21-70	10.4
Flem Branch	Big Creek	Lat 31°34'06", long 92°25'53", in sec. 24, T. 7 N., R. 1 W., at bridge, 5.8 miles northwest of Pollock.	-	-	8-21-70	.47
Dyson Creek	do.....	Lat 31°32'25", long 92°27'53", in sec. 34, T. 7 N., R. 1 W., at bridge, 2.5 miles northeast of Bentley.	-	-	8-21-70	1.04
Haw Creek	Dyson Creek	Lat 31°31'10", long 92°26'38", in sec. 2, T. 6 N., R. 1 W., at bridge on State Highway 8, 1.8 miles west of Pollock.	-	-	8-21-70	1.05
Dyson Creek	Big Creek	Lat 31°32'23", long 92°25'39", in sec. 36 T. 7 N., R. 1 W., at bridge, 1.6 miles northwest of Pollock.	12	1964-69a	8-21-70	6.51
Sandy Creek	do.....	Lat 31°31'22", long 92°23'58", in sec. 6, T. 6 N., R. 1 E., at bridge, 0.5 mile east of Pollock.	6.5	1941, 1964-69a	8-21-70	6.12
Big Creek	Little River	Lat 31°31'25", long 92°21'45", in sec. 3, T. 6 N., R. 1 E., at bridge on State Highway 8, 0.3 mile north of Fishville.	66.5	1966, 1967b	8-21-70	35.8
Do.....	do.....	Lat 31°32'05", long 92°19'55", in sec. 35, T. 7 N., R. 1 E., 2 miles northeast of Fishville.	-	1962	8-21-70	34.7

a Low-flow partial-record station.

b Measured during Little River seepage investigation.

PART 2. WATER QUALITY RECORDS

WATER-QUALITY RECORDS

PEARL RIVER BASIN

02489500 PEARL RIVER NEAR BOGALUSA, LA.

LOCATION.--Lat 30°47'35", long 89°49'15", on line between secs. 17 and 18, T.3 S., R.14 E., Washington Parish, at gaging station at bridge on State Highway 10, 2 miles east of Bogalusa, and 2 miles upstream from Bogue Lusa Creek.

DRAINAGE AREA.--6,630 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: November 1962 to September 1970.

Water temperatures: November 1962 to September 1970.

Sediment records: April 1967 to September 1970.

EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 266 mg/l Jan. 5; minimum daily, 2 mg/l Nov. 11-13.

Sediment loads: Maximum daily, 20,400 tons Apr. 7, 8; minimum daily, 7 tons Nov. 11-13.

EXTREMES, 1962-70.--Specific conductance: Maximum daily, 180 micromhos Sept. 10, 1965; minimum daily, 31 micromhos Feb. 15-17, 1966.

Water temperatures: Maximum, 34°C July 14, 1967; minimum, 2°C Dec. 21, 1963.

Sediment concentrations (1967-70): Maximum daily, 522 mg/l Dec. 17, 1967; minimum daily, 2 mg/l Nov. 11-13, 1970.

Sediment loads (1967-70): Maximum daily, 32,700 tons May 7, 1967; minimum daily, 7 tons Nov. 11-13, 1970.

REMARKS.--When discharge is greater than 11,300 cfs, there are 5 overflow channels. On these days sediment concentrations in the overflow channels are computed as 10 percent of the concentration in the main channel. This is used as a basis for computing total concentration and load.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
NOV. 18	1210	11	10	3.8	1.8	12	1.8	20	9.6	12
JAN. 15	10700	6.5	190	6.0	.5	5.6	2.6	4	18	6.1
MAR. 18	9060	6.6	20	4.5	.9	6.7	2.1	12	10	7.9
MAY 27	2030	6.5	120	3.5	.8	9.6	1.5	16	9.4	9.0
JULY 15	--	8.6	10	3.1	1.0	9.4	2.2	13	11	11
SEPT. 30	1750	8.1	260	2.9	1.2	10	2.3	15	8.0	11

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
NOV. 18	0.1	0.4	62	62	17	1	95	18.0	5	7.2
JAN. 15	.3	1.2	72	49	17	14	75	7.5	30	6.1
MAR. 18	.1	.7	71	46	15	5	79	15.5	35	6.7
MAY 27	.1	.5	50	49	12	0	78	27.5	20	6.4
JULY 15	.1	.1	72	52	12	1	85	28.0	0	6.2
SEPT. 30	.1	1.2	71	52	12	0	85	23.0	30	6.7

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
NOV. 18	9.4	0.0	--	--	--	--	--	--	--
JAN. 15	12.0	.7	19	--	--	--	--	--	--
MAR. 18	9.1	.0	--	--	--	--	--	--	--
MAY 27	6.1	1.9	0	--	--	--	--	--	--
JULY 15	--	--	19	--	--	--	--	--	--
SEPT. 30	7.9	1.3	0	--	--	--	--	--	--

02489500 PEARL RIVER NEAR BOGALUSA, LA.--Continued

Suspended sediment, water year October 1969 to September 1970

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day
1..	1,520	15	62	1,250	3	a10	1,240	4	a13
2..	1,460	13	51	1,250	3	a10	1,230	3	a10
3..	1,410	10	38	1,260	4	a14	1,240	3	a10
4..	1,370	10	a37	1,260	4	a14	1,240	3	a10
5..	1,330	10	a36	1,250	4	a14	1,220	3	a10
6..	1,320	10	a36	1,270	4	a14	1,270	4	a14
7..	1,330	11	a40	1,280	4	14	1,680	10	45
8..	1,680	18	a82	1,250	5	17	2,740	35	a259
9..	1,900	17	a87	1,240	6	20	3,360	54	a490
10..	1,750	16	a76	1,250	4	14	3,360	52	a472
11..	1,660	16	a72	1,270	2	7	3,300	49	a437
12..	1,580	15	a64	1,260	2	7	2,750	35	260
13..	1,460	13	a51	1,250	2	7	2,240	25	151
14..	1,370	13	a48	1,220	3	10	2,020	16	87
15..	1,330	12	43	1,210	4	13	1,940	12	63
16..	1,300	9	32	1,200	4	13	1,860	12	60
17..	1,290	6	21	1,200	3	10	1,800	12	58
18..	1,290	4	14	1,200	3	10	1,780	14	67
19..	1,280	4	14	1,270	5	17	1,780	14	67
20..	1,270	4	14	1,370	10	a37	1,820	14	69
21..	1,260	4	14	1,500	14	a57	1,940	14	73
22..	1,280	7	24	1,540	20	a83	2,060	16	89
23..	1,290	7	24	1,540	32	133	2,140	16	92
24..	1,290	5	17	1,560	26	110	2,210	18	107
25..	1,350	4	15	1,440	13	50	2,680	30	a217
26..	1,390	3	11	1,330	7	25	2,960	34	a271
27..	1,340	3	11	1,270	6	21	3,380	31	283
28..	1,280	4	14	1,260	4	14	3,720	42	422
29..	1,250	7	24	1,260	4	14	4,110	69	766
30..	1,240	6	20	1,240	4	13	4,390	72	853
31..	1,240	3	10	-----	--	---	4,630	63	788
Total	43,110	--	1,102	38,950	--	792	74,090	--	6,613
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day
1..	5,120	62	857	3,030	19	a155	5,160	33	460
2..	6,750	118	2,150	3,940	30	319	6,550	54	955
3..	8,170	204	4,500	5,660	36	550	7,220	68	1,330
4..	8,630	256	a5,970	6,270	50	846	9,090	94	2,310
5..	8,940	266	a6,420	6,790	91	1,670	13,200	139	4,960
6..	9,540	256	a6,590	6,570	94	1,670	15,400	209	8,690
7..	10,700	242	a7,000	6,510	87	1,530	17,000	255	11,700
8..	11,600	226	a7,070	6,510	77	1,350	17,300	212	9,930
9..	12,700	200	6,860	6,350	66	1,130	16,200	247	10,800
10..	13,000	178	6,230	6,080	50	821	14,400	124	4,800
11..	13,200	155	5,530	5,710	38	586	12,900	102	3,570
12..	13,800	132	4,920	5,160	31	432	11,800	82	2,630
13..	13,100	109	3,840	4,390	23	273	11,700	94	2,980
14..	11,700	86	2,730	3,680	22	219	12,900	117	4,070
15..	10,600	84	2,390	3,180	22	189	13,200	112	3,990
16..	9,600	72	1,870	3,080	21	175	12,100	95	3,120
17..	8,800	62	1,470	3,790	28	287	10,300	80	2,220
18..	8,170	53	1,170	4,320	26	303	9,020	69	1,680
19..	7,580	45	921	3,860	20	208	8,140	56	1,230
20..	6,930	38	711	3,480	18	a169	7,790	52	1,090
21..	6,330	36	615	3,270	16	a141	9,170	114	a2,820
22..	5,910	34	543	2,810	15	a114	13,700	213	a7,890
23..	5,370	31	449	2,530	14	96	16,800	226	10,300
24..	4,610	29	361	2,560	14	97	17,600	171	8,140
25..	4,030	27	294	2,690	14	102	17,300	145	6,750
26..	3,740	25	252	3,040	17	140	17,000	125	5,740
27..	3,520	23	219	3,060	16	132	16,700	118	5,340
28..	3,180	21	180	3,360	18	163	16,800	118	5,360
29..	2,930	23	182	-----	--	-----	17,100	118	5,430
30..	2,970	29	233	-----	--	-----	17,600	132	6,270
31..	3,090	26	a217	-----	--	-----	18,200	133	6,530
Total	244,310	---	82,734	121,680	--	13,867	409,340	---	153,085

a Estimated.

02489500 PEARL RIVER NEAR BOGALUSA, LA.--Continued

Suspended sediment, water year October 1969 to September 1970

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day
1..	19,000	149	7,640	9,520	75	1,930	2,630	16	114
2..	19,400	104	a5,440	8,700	66	1,550	3,070	25	207
3..	19,500	91	a4,800	9,380	132	3,340	3,430	32	296
4..	19,400	83	a4,360	14,100	216	8,230	3,940	38	404
5..	18,300	79	a3,890	18,200	194	9,560	4,400	41	487
6..	14,800	78	3,130	19,800	170	9,040	4,500	45	547
7..	10,100	77	2,100	20,400	136	a7,510	4,080	38	419
8..	7,360	68	1,350	20,400	123	a6,770	3,750	35	354
9..	5,950	66	1,060	20,200	114	6,220	3,840	34	353
10..	5,440	62	911	19,700	111	5,880	3,740	35	353
11..	5,740	60	930	18,800	100	5,060	3,580	34	329
12..	6,730	57	1,040	18,100	90	4,420	3,420	30	277
13..	8,250	69	1,540	16,500	91	4,050	3,020	25	204
14..	10,100	118	3,210	15,100	87	3,550	2,640	20	143
15..	11,300	113	3,440	13,100	82	a2,880	2,420	15	98
16..	10,000	64	1,730	10,200	60	a1,650	2,270	12	74
17..	8,340	42	a946	7,330	45	a891	2,150	9	52
18..	6,950	39	a732	5,360	37	a535	2,090	7	40
19..	6,380	40	a689	4,540	34	a417	2,010	7	38
20..	6,570	47	834	4,210	32	a364	1,920	8	41
21..	6,900	47	876	3,980	30	a322	1,870	6	30
22..	7,920	65	1,390	3,780	28	a286	1,810	5	24
23..	8,920	92	2,220	3,520	26	a247	1,760	5	24
24..	9,000	84	2,040	3,260	26	a229	1,820	6	29
25..	8,790	70	1,660	2,990	22	a178	2,090	14	79
26..	8,910	72	1,730	2,800	19	a144	2,620	22	156
27..	9,270	72	1,800	2,670	18	a130	2,850	24	185
28..	9,680	69	1,800	2,620	18	a127	2,900	22	172
29..	9,900	74	1,980	2,630	17	a121	2,620	16	113
30..	9,860	80	2,130	2,630	16	a114	2,270	16	98
31..	-----	---	-----	2,520	15	a102	-----	--	---
Total	308,760	---	67,398	307,040	---	85,847	85,510	--	5,740
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day		Mean concentration (mg/l)	Tons per day
1..	2,000	21	113	2,050	12	66	3,140	27	229
2..	1,840	20	99	2,220	16	96	2,680	25	181
3..	1,740	17	80	2,020	9	49	2,420	20	131
4..	1,670	13	59	1,860	7	35	2,250	18	109
5..	1,590	10	43	1,770	5	24	2,250	18	109
6..	1,590	14	60	1,920	7	36	2,210	18	107
7..	1,580	21	90	2,040	13	72	1,970	16	85
8..	1,580	22	94	2,290	31	a192	1,790	12	58
9..	1,580	16	68	3,120	53	a446	1,720	10	46
10..	1,660	7	31	3,260	43	a378	1,850	12	60
11..	1,870	16	81	2,750	31	230	1,810	12	59
12..	2,450	36	a238	2,660	28	201	1,860	17	85
13..	2,310	24	150	3,040	34	279	1,980	17	91
14..	2,190	27	160	2,610	23	162	1,850	14	70
15..	2,400	31	201	2,190	13	77	1,870	14	71
16..	2,340	22	139	2,120	8	46	1,950	12	63
17..	2,070	14	78	2,180	8	47	1,800	8	39
18..	2,070	10	56	2,450	17	112	1,720	8	37
19..	2,060	12	67	2,590	14	98	1,650	8	36
20..	2,180	7	41	2,480	14	94	1,560	10	42
21..	2,330	13	82	2,380	23	148	1,510	8	33
22..	2,390	22	142	2,440	21	138	1,490	6	24
23..	2,620	29	205	2,480	19	127	1,490	3	12
24..	2,570	21	146	2,460	12	80	1,520	6	25
25..	2,570	17	118	2,870	30	232	1,640	9	40
26..	2,510	15	102	3,450	48	447	1,920	10	52
27..	2,400	9	58	3,400	45	413	2,380	22	141
28..	2,200	6	36	3,650	57	562	2,200	18	107
29..	1,980	6	32	4,020	62	673	1,950	12	63
30..	2,020	5	27	4,000	53	572	1,920	10	52
31..	2,000	6	32	3,610	31	302	-----	--	---
Total	64,360	---	2,928	82,380	---	6,434	58,350	--	2,257

a Estimated

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SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C) WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

[illegible]

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

[illegible]

07344400 RED RIVER NEAR HOSSTON, LA.

LOCATION.--Lat 32°53'35", long 93°49'20", in SW¼ sec.16, T.22 N., R.14 W., Caddo Parish, at gaging station near left bank on downstream side of bridge on State Highway 2, at Millers Bluff, 1.8 miles downstream from Dry Prong Bayou and 3.2 miles east of Hosston.

DRAINAGE AREA.--57,041 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1957 to September 1970.

Water temperatures: March 1957 to September 1970.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 1,260 micromhos Oct. 18; minimum daily, 185 micromhos May 12.

Water temperatures: Maximum 32°C Aug. 15; minimum, 2°C Jan. 8-10.

EXTREMES, 1957-70.--Dissolved solids (1957-67): Maximum, 1,190 mg/l Aug. 15-20, 1964; minimum, 117 mg/l Apr 1 26-30, 1964, Feb. 15-22, 1965.

Hardness (1957-67): Maximum, 395 mg/l Sept. 10-22, 1961, Aug. 15-20, 1964; minimum, 62 mg/l Feb. 15-22, 1965.

Specific conductance: Maximum daily, 1,950 micromhos Aug. 15, 1964; minimum daily, 152 micromhos May 15, 1961.

Water temperatures: Maximum, 34°C July 12, 13, 21, 1969; minimum, 1°C Jan. 11, 1962, Jan. 28, 1963, Dec. 24, 1964, Jan. 7, 8, 14, 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
NOV. 20	10200	7.9	10	55	11	73	4.9	143	67	112
JAN. 16	16800	6.0	20	45	7.2	66	3.3	94	65	99
FEB. 18	22000	5.7	0	27	5.5	22	3.5	91	26	31
APR. 9	16300	6.4	0	35	5.5	26	3.5	109	31	36
MAY 21	14000	7.9	10	35	5.7	18	3.8	124	22	21
JULY 16	4220	2.8	0	81	24	115	5.7	251	98	168
SEPT. 2	5600	6.7	30	54	13	69	3.7	155	54	108

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEMP- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
NOV. 20	0.5	4.3	438	406	183	66	727	11.0	30	7.2
JAN. 16	.2	1.0	367	339	142	65	621	4.0	10	7.3
FEB. 18	.1	.3	176	166	90	15	294	12.0	10	7.2
APR. 9	.1	.4	215	198	110	21	355	16.0	10	7.5
MAY 21	.2	1.0	183	176	111	9	307	26.0	15	7.6
JULY 16	.3	.6	654	619	300	94	1100	31.0	5	7.9
SEPT. 2	.2	.3	414	385	188	61	684	27.0	10	7.3

07344400 RED RIVER NEAR HOSSTON, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	869	751	756	365	1,020	475	267	230	766	906	1,030	668
2	875	721	997	346	927	414	261	186	637	980	1,070	703
3	893	736	1,120	272	764	306	238	185	663	837	1,080	701
4	885	735	976	254	524	303	274	227	444	751	1,030	744
5	847	715	826	266	393	294	275	331	380	682	829	758
6	861	572	927	286	368	228	289	284	434	702	1,060	820
7	913	561	947	321	341	235	337	228	605	752	1,110	995
8	882	538	798	347	302	191	319	197	651	828	1,240	1,030
9	859	518	726	297	245	245	351	201	676	929	1,210	1,130
10	860	528	752	255	278	234	393	214	490	921	1,140	1,060
11	898	504	678	297	388	231	404	207	445	884	1,140	1,130
12	992	716	717	309	411	250	321	185	530	1,130	1,120	1,160
13	927	827	802	312	387	253	310	245	447	1,210	1,340	1,140
14	865	892	805	506	371	296	327	317	526	1,160	1,180	1,140
15	873	868	756	559	346	331	339	235	654	1,100	1,200	1,120
16	963	981	656	638	352	336	496	227	766	1,110	1,190	1,060
17	1,050	950	643	673	321	322	760	247	849	1,100	1,160	1,130
18	1,260	812	717	639	298	348	607	272	438	1,130	1,110	1,050
19	593	633	815	609	396	424	567	297	380	1,010	1,140	1,160
20	392	717	896	614	366	471	451	307	383	956	1,030	1,210
21	295	722	936	610	366	358	402	306	388	999	1,010	1,240
22	366	677	960	663	337	295	313	366	310	1,110	803	1,160
23	429	634	926	660	308	223	505	429	317	1,100	378	1,160
24	441	577	920	674	285	204	383	422	396	1,210	311	1,270
25	414	558	838	695	276	221	290	439	405	1,060	403	998
26	379	566	1,040	733	357	255	207	478	481	1,200	396	498
27	334	619	1,080	814	433	263	246	504	494	1,200	461	458
28	316	693	887	992	479	244	342	549	625	1,160	529	458
29	323	654	590	1,070	--	249	339	571	632	1,160	533	572
30	451	717	580	1,080	--	247	274	571	760	1,200	550	529
31	645	--	431	1,050	--	244	--	738	--	1,170	565	--
AVERAGE	708	690	823	555	416	287	363	329	532	1,020	914	942

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	13	10	6	9	11	12	19	25	29	31	27
2	23	15	10	4	9	11	11	18	24	29	31	27
3	23	18	10	4	8	12	11	19	24	29	31	26
4	23	17	9	4	8	12	12	19	24	28	31	26
5	23	16	9	5	9	12	14	20	25	28	32	26
6	23	16	9	4	10	12	14	21	25	28	31	27
7	22	16	9	3	11	12	16	21	25	28	31	27
8	22	17	5	2	11	13	16	21	25	29	31	27
9	23	17	7	2	10	13	17	21	26	29	31	27
10	23	16	7	2	11	13	17	21	26	29	31	27
11	22	16	7	3	10	13	17	21	26	28	31	27
12	23	16	7	4	10	12	17	22	27	28	31	27
13	20	16	8	4	11	10	18	22	27	29	31	27
14	20	14	8	5	10	9	19	22	27	29	31	28
15	19	13	9	6	9	9	19	22	27	29	31	28
16	19	13	8	6	9	9	19	21	27	29	29	28
17	18	14	8	7	9	9	19	22	28	29	31	27
18	16	13	9	5	10	10	20	23	28	28	30	28
19	16	10	8	4	10	10	19	23	28	29	30	28
20	16	10	8	3	10	10	19	24	28	29	29	28
21	17	10	7	4	10	9	19	24	28	28	28	28
22	17	11	6	3	10	9	19	24	28	28	26	27
23	16	12	6	4	11	10	20	24	28	28	26	26
24	16	11	6	5	10	10	20	25	28	29	26	26
25	16	12	5	8	10	11	19	25	28	28	25	25
26	16	12	5	10	9	10	19	26	28	28	26	23
27	16	11	4	10	10	10	19	24	28	27	26	23
28	16	9	4	11	11	11	20	24	28	28	26	22
29	15	9	4	10	--	11	20	25	28	29	26	22
30	14	9	4	9	--	11	21	25	28	29	27	21
31	14	--	4	9	--	12	--	26	--	29	27	--
AVERAGE	19	13	7	5	10	11	17	22	27	28	29	26

RED RIVER BASIN

07348700 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.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, October 1961 to September 1962, October 1967 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 21	1,7	9,0	10	62	19	345	9,9	90	17	626
NOV, 18	270	5,1	0	13	3,3	65	5,2	12	9,2	107
JAN, 15	513	12	0	16	4,1	50	3,5	6	9,6	108
MAR, 2	767	8,6	0	14	4,1	41	3,2	6	9,4	89
APR, 2	--	--	--	--	--	--	--	--	--	--
APR, 14	165	11	0	16	2,9	53	3,4	12	4,0	112
APR, 28	1650	--	--	--	--	--	--	--	--	--
MAY 20	67	12	30	18	3,2	56	3,2	12	2,2	123
JULY 8	3,1	12	20	38	9,7	158	4,0	28	2,0	323
JULY 23	3,2	12	20	140	30	662	6,1	32	4,4	1330
SEPT, 9	16	9,9	20	30	5,8	108	3,8	20	6,2	224

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 21	0,4	8,2	--	1140	234	160	2240	20,0	15	6,6
NOV, 18	,1	,6	272	204	46	36	416	15,0	30	6,1
JAN, 15	,1	,0	217	206	57	52	400	7,0	0	6,2
MAR, 2	,1	,0	184	172	52	47	335	13,0	5	6,4
APR, 2	--	--	--	--	--	--	261	15,0	--	--
APR, 14	,1	,0	220	208	52	42	418	17,0	0	6,1
APR, 28	--	--	--	--	--	--	209	23,0	--	--
MAY 20	,1	,8	276	224	58	48	419	23,0	10	5,9
JULY 8	,1	,3	683	561	135	115	1110	26,0	10	6,3
JULY 23	,2	,2	2470	2200	474	448	4230	23,5	10	6,4
SEPT, 9	,1	,4	516	398	99	83	790	25,0	15	6,2

RED RIVER BASIN

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07348700 BAYOU DORCHEAT NEAR SPRINGHILL, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							220	170	460	--	3,500	640
2							230	150	320	--	3,450	660
3							240	120	300	--	3,400	700
4							270	110	290	--	3,320	710
5							290	100	300	--	3,300	740
6							310	100	310	--	3,150	740
7							320	120	300	--	3,150	740
8							350	140	380	1,350	3,100	740
9							380	160	380	1,400	3,050	720
10							395	175	--	1,450	2,950	760
11							410	190	--	1,550	2,900	810
12							410	200	--	1,700	2,900	840
13							410	260	--	1,800	2,800	860
14							400	280	--	1,800	2,700	900
15							430	300	--	1,850	2,600	1,200
16							440	320	--	1,850	2,500	1,700
17							450	340	--	1,880	2,600	2,000
18							440	350	--	2,120	2,700	2,600
19							460	370	--	2,450	2,650	2,800
20							370	390	--	2,450	2,700	2,750
21							310	470	--	2,900	500	2,600
22							295	495	--	4,000	110	2,500
23							270	530	--	4,000	140	2,400
24							260	560	--	4,000	170	2,150
25							255	630	--	3,950	170	2,050
26							245	680	--	3,900	220	2,000
27							240	820	--	3,850	400	1,950
28							240	610	--	3,800	540	1,600
29							200	300	--	3,750	600	1,500
30							185	320	--	3,620	720	1,500
31							--	400	--	3,580	800	--
AVERAGE							324	328	--	--	2,060	2,290

07349000 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 & Arkansas Railway Co. bridge, 3 miles west of Minden, and 28 miles upstream from Bistineau Dam.

DRAINAGE AREA.--1,097 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 29	--	14	20	11	4.0	54	3.2	54	5.4	81
DEC. 3	--	8.7	10	14	2.9	50	6.3	11	16	98
JAN. 7	--	7.3	50	6.6	1.1	25	2.5	6	9.0	45
JAN. 21	--	13	50	14	3.6	51	2.6	6	6.6	107
FEB. 19	--	11	90	13	1.8	46	3.1	8	9.2	89
MAR. 25	--	8.6	70	7.2	.7	21	1.6	6	6.2	40
APR. 22	--	13	140	9.3	1.4	35	2.4	10	6.4	64
MAY 27	--	14	280	14	2.4	42	2.5	22	2.2	76
JUNE 23	--	12	110	10	5.8	52	2.6	19	4.8	101
JULY 22	--	12	10	12	3.4	38	2.7	29	3.2	68
SEPT. 2	--	3.3	240	8.6	2.6	28	2.8	18	9.8	49
SEPT. 30	--	9.2	20	17	4.0	54	4.2	28	6.6	101

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 29	0.1	0.2	217	200	44	0	368	18.0	5	7.2
DEC. 3	.0	.6	232	202	47	38	387	10.0	30	6.4
JAN. 7	.1	.5	124	100	21	16	178	2.5	10	5.9
JAN. 21	.1	.3	250	201	50	45	387	3.5	30	6.1
FEB. 19	.1	1.7	210	179	40	33	319	10.5	60	6.7
MAR. 25	.2	.5	131	89	21	16	162	15.5	57	6.1
APR. 22	.1	.5	178	131	29	21	231	21.0	80	5.9
MAY 27	.1	.5	213	165	45	27	299	25.5	70	6.6
JUNE 23	.1	.4	265	198	49	33	361	29.0	60	6.5
JULY 22	.1	.4	183	154	44	20	273	27.0	60	6.6
SEPT. 2	.2	.7	152	114	32	17	217	26.0	50	6.8
SEPT. 30	.2	.4	264	211	59	36	417	23.0	20	6.7

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT. 29	6.2	2.5	30	0.11	0.20	8	50	--	--
DEC. 3	9.1	.0	20	.00	.20	1	380	52	--
JAN. 7	10.0	.2	97	--	.19	19	920	120	--
JAN. 21	11.0	.2	3	--	.12	30	110	26	49
FEB. 19	9.3	.1	24	.00	.43	21	150	100	--
MAR. 25	7.6	3.4	0	.00	.30	0	350	120	--
APR. 22	5.7	1.8	29	.01	.50	8	410	140	55
MAY 27	4.2	.0	21	.00	.29	0	10	--	8
JUNE 23	4.3	1.7	33	.06	.29	0	4000	56	1500
JULY 22	4.1	--	30	--	.23	22	140	44	5
SEPT. 2	4.2	--	38	.00	.33	7	140	44	5
SEPT. 30	6.4	1.7	11	.23	.10	11	200	40	36

07350500 RED RIVER AT COUSHATTA, LA.

LOCATION.--Lat 32°00'45", long 93°21'10", Red River Parish, at bridge on U.S. Highway 84 at Coushatta and 11 miles downstream from Coushatta Bayou.

DRAINAGE AREA.--63,362 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 29	--	4.9	40	32	5.8	32	3.7	96	33	48
DEC, 3	--	7.2	0	48	7.1	70	2.9	132	47	102
JAN, 7	--	5.8	10	26	4.1	28	2.2	73	20	32
JAN, 21	--	7.2	10	37	5.7	56	3.1	78	51	83
FEB, 19	--	9.7	30	26	5.6	24	2.9	75	26	38
MAR, 25	--	6.8	40	24	1.4	14	2.1	66	16	19
APR, 22	--	7.0	10	35	7.2	43	3.1	95	36	64
MAY 27	--	7.4	20	36	4.6	33	3.0	104	30	43
JUNE 23	--	5.7	30	30	3.7	33	2.7	85	30	43
JULY 22	--	4.7	0	77	22	100	4.6	238	85	153
SEPT, 2	--	3.6	10	38	10	57	4.1	106	48	89
SEPT, 30	--	5.8	10	28	10	46	4.7	102	34	66

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 29	0.2	0.2	224	207	104	25	378	19.5	15	7.1
DEC, 3	.1	1.1	349	350	149	42	620	12.0	30	7.5
JAN, 7	.2	.6	158	155	82	22	255	3.5	--	7.6
JAN, 21	.2	.7	296	282	116	52	493	4.0	--	7.5
FEB, 19	.2	3.0	177	172	88	26	293	10.5	--	7.7
MAR, 25	.3	.6	124	117	63	9	201	14.0	--	7.6
APR, 22	.2	.2	266	243	117	39	435	23.0	10	7.4
MAY 27	.2	.2	219	208	109	24	356	27.0	40	7.8
JUNE 23	.2	.4	210	191	90	20	318	29.5	30	7.7
JULY 22	.2	.2	592	564	284	89	979	25.0	10	8.1
SEPT, 2	.2	.1	334	302	136	49	559	28.0	15	7.5
SEPT, 30	.3	1.2	248	246	113	29	451	24.0	20	7.4

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT, 29	8.4	3.4	54	0.23	0.40	299	8000	--	--
DEC, 3	10.0	1.8	23	.00	.50	56	9200	1200	--
JAN, 7	10.0	2.8	53	.00	.54	934	19300	2600	1300
JAN, 21	11.0	--	20	.00	.50	386	49000	410	2400
FEB, 19	10.0	1.2	60	.00	.84	587	58000	2000	--
MAR, 25	9.7	5.1	20	.00	1.4	623	66000	520	--
APR, 22	7.7	1.9	16	.00	.59	276	23000	180	2900
MAY 27	7.4	5.3	22	.00	.32	169	44000	62	5600
JUNE 23	6.2	2.4	20	.00	.10	250	26000	270	6000
JULY 22	7.8	--	24	--	.31	52	36000	60	20000
SEPT, 2	7.2	--	11	.00	.51	1	36000	60	20000
SEPT, 30	8.5	1.8	0	.57	.30	34	68000	280	20000

RED RIVER BASIN

07353000 SALINE BAYOU NEAR CLARENCE, LA.

LOCATION.--Lat 31°49'05", long 93°56'55", in SE¼ sec.26, T.10 N., R.6 W., Natchitoches Parish, at gaging station, near center of span on downstream side of bridge on U.S. Highway 84, 1.8 miles downstream from Bayou Bourbeaux, 4.0 miles downstream from Saline Lake conservation dam, 4.6 miles east of Clarence, and 6.7 miles upstream from mouth.

DRAINAGE AREA.--1,386 sq mi.

PERIOD OF RECORD.--Chemical analyses: February 1953 to March 1954, October 1964 to September 1970 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 8	--	9.2	10	58	25	740	7.3	240	11	1220
OCT, 23	--	14	10	80	36	604	6.0	369	18	956
NOV, 19	--	11	10	71	32	1020	6.8	266	13	1650
JAN, 29	--	5.1	50	6.1	1.7	16	1.8	22	5.4	24
FEB, 26	--	17	10	5.5	1.0	18	1.9	12	6.8	30
MAR, 26	--	7.8	0	4.2	1.3	16	2.1	11	7.8	26
APR, 30	--	7.8	50	5.2	1.2	14	1.7	17	8.0	40
MAY 27	--	7.5	100	6.1	7.0	16	1.7	20	5.6	23
JUNE 25	--	9.6	10	6.1	1.2	16	2.2	23	4.6	24
JULY 23	--	8.5	10	6.6	1.1	23	2.2	26	2.8	35
SEPT, 11	65	11	30	14	4.4	112	3.0	58	4.8	169

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 8	0.3	1.6	2350	2190	248	51	4220	24.0	5	7.8
OCT, 23	.4	.2	--	1900	349	46	3540	19.0	10	7.6
NOV, 19	.4	2.0	--	2940	308	90	5520	12.5	15	7.5
JAN, 29	.0	.1	81	71	22	4	131	14.0	15	6.5
FEB, 26	.1	.1	82	71	18	8	138	12.0	15	6.5
MAR, 26	.1	.2	77	70	16	7	127	14.0	10	6.1
APR, 30	.1	.3	83	86	18	7	110	26.0	25	6.6
MAY 27	.1	.3	84	77	18	2	124	26.0	30	6.7
JUNE 25	.1	.5	83	75	20	1	128	28.0	15	6.3
JULY 23	.1	1.3	111	94	21	0	176	25.5	15	6.4
SEPT, 11	.1	.4	369	348	53	5	660	30.0	20	6.9

RED RIVER BASIN

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07353000 SALINE BAYOU NEAR CLARENCE, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,900	3,600	180	--	105	110	100	85	95	85	165	370
2	--	3,600	165	--	100	110	95	80	95	90	170	460
3	--	3,550	165	--	100	110	150	80	95	95	190	400
4	--	3,500	170	--	100	110	160	80	95	105	190	--
5	--	3,500	180	--	100	115	280	80	95	110	190	--
6	--	3,500	160	--	100	115	630	80	95	120	195	--
7	3,500	3,400	130	--	100	115	880	80	95	125	205	--
8	3,800	3,350	135	--	100	120	940	80	95	135	180	--
9	3,850	3,300	150	--	100	120	460	85	90	145	185	--
10	3,850	3,350	195	--	100	120	660	85	90	155	200	--
11	3,700	3,350	205	--	100	120	780	85	95	175	210	660
12	3,550	3,400	210	--	100	120	740	85	95	195	235	780
13	3,700	3,450	210	--	100	120	330	90	100	200	235	--
14	3,850	3,600	215	--	105	200	310	90	100	225	--	--
15	3,050	4,000	220	110	100	180	400	90	100	235	--	--
16	4,100	4,250	230	120	100	360	380	90	105	220	--	--
17	3,100	4,100	240	150	105	480	350	90	110	210	--	--
18	3,050	4,000	250	175	105	540	200	90	110	190	--	--
19	3,700	4,500	270	180	105	560	115	90	110	185	--	--
20	4,050	4,600	280	190	105	530	140	90	110	200	--	--
21	3,400	4,250	290	195	110	550	210	90	110	180	--	--
22	3,200	4,000	295	200	110	610	290	95	115	160	--	--
23	3,300	4,000	300	210	110	560	350	95	115	160	--	--
24	3,300	4,050	305	225	120	290	--	95	110	150	350	--
25	3,250	4,000	315	240	115	250	--	95	110	155	290	--
26	3,600	3,000	315	220	115	190	--	95	100	160	220	--
27	3,850	1,400	310	180	110	370	--	100	100	155	190	990
28	3,750	850	315	140	110	280	--	100	100	150	200	970
29	3,800	320	310	100	--	110	--	95	95	145	210	910
30	3,700	200	290	100	--	125	85	100	90	155	260	870
31	3,600	--	285	100	--	260	--	95	--	160	310	--
AVERAGE	--	3,230	235	--	105	256	--	89	101	159	--	--

RED RIVER BASIN

07364521 BAYOU BARTHOLOMEW NEAR STERLINGTON, LA.

LOCATION.--Lat 32°43'21", Long 92°02'26", Morehouse Parish, at bridge on parish road near Sterlington and 5.4 miles from junction of U.S. Highway 165 and State Highway 2.

DRAINAGE AREA.--1,662 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SiO ₂) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLORIDE (CL) (MG/L)
DEC. 3	--	8.1	70	8.3	2.0	6.0	4.0	34	7.4	8.0
JAN. 6	--	6.0	50	3.3	1.4	4.4	2.7	15	6.6	4.4
JAN. 20	--	6.7	80	5.0	1.1	3.7	2.7	19	6.4	3.5
FEB. 19	--	7.1	110	5.1	1.0	4.7	2.8	21	7.0	4.1
APR. 1	--	4.9	60	3.4	1.1	2.5	2.0	15	4.8	2.0
APR. 21	--	5.2	80	5.2	1.2	2.1	2.6	17	6.2	1.8
JUNE 3	--	7.5	80	4.9	2.4	3.2	2.1	26	4.2	2.5
JUNE 23	--	15	70	11	3.5	10	2.7	58	6.2	7.3
JULY 21	--	14	0	13	3.5	9.0	3.2	63	5.8	9.4
SEPT. 2	--	14	10	20	5.6	16	3.1	100	6.2	15
SEPT. 30	--	11	0	19	11	22	4.1	132	6.2	21

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO ₃) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
DEC. 3	0.0	1.0	72	62	29	1	99	10.0	60	7.0
JAN. 6	.1	.6	48	36	14	2	52	4.5	--	6.5
JAN. 20	.1	.3	60	38	17	1	52	4.0	--	6.9
FEB. 19	.0	1.9	60	44	17	0	57	8.5	--	6.5
APR. 1	.2	.5	--	28	13	1	43	16.0	--	6.6
APR. 21	.1	.6	72	33	18	4	55	20.5	--	6.3
JUNE 3	.1	.8	66	41	22	1	63	24.5	40	6.8
JUNE 23	.2	1.2	106	86	42	0	121	27.5	80	7.2
JULY 21	.1	1.1	108	90	47	0	138	27.0	50	7.2
SEPT. 2	.2	.4	136	130	73	0	216	28.5	20	7.7
SEPT. 30	.3	.2	154	159	94	0	281	23.5	5	7.9

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO ₄) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
DEC. 3	9.0	0.0	28	0.00	0.60	68	100	72	--
JAN. 6	11.0	7.3	21	--	.34	132	830	560	--
JAN. 20	11.0	1.8	18	--	.51	77	650	140	--
FEB. 19	9.9	.0	38	--	.75	71	520	92	1600
APR. 1	8.0	3.8	32	.00	.17	20	--	85	--
APR. 21	6.3	1.4	32	.06	.81	44	620	200	95
JUNE 3	4.8	.0	29	.00	1.1	42	200	58	62
JUNE 23	5.7	.6	23	.15	1.0	65	16000	110	1500
JULY 21	6.5	--	7	--	.49	51	250	20	--
SEPT. 2	6.2	--	7	.00	.40	5	250	20	--
SEPT. 30	4.5	2.6	36	.00	.30	5	50	32	--

RED RIVER BASIN

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07364700 BAYOU DE LOUITRE NEAR LARAN, LA.

LOCATION.--Lat 32°57'20", long 92°30'00", in NW¼ sec.29, T.23 N., R.1 W., Union Parish, at gaging station at bridge, 1.5 miles downstream from Lion Creek, and 3 miles upstream from bridge on State Highway 550.

DRAINAGE AREA.--141 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, October 1967 to September 1970.

Water temperatures: October 1967 to September 1970.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 8,700 micromhos Sept. 9.

Water temperatures: Maximum daily, 29°C Aug. 1-11.

EXTREMES, 1967-70.--Specific conductance: Maximum daily, 11,600 micromhos July 24, 1969; minimum daily, 115 micromhos Jan. 11, 1968.

Water temperatures: Maximum, 30°C Aug. 19, 20, 1969; minimum, 1°C Jan. 11-13, Feb. 22, 1968, Jan. 10, 20, Feb. 4, 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 14	27	6.3	20	246	13	760	21	62	87	1570
DEC. 4	50	15	10	118	16	415	14	19	49	860
JAN. 22	72	12	10	97	16	365	8.6	8	37	750
MAR. 2	404	4.9	20	29	5.5	126	3.2	16	19	241
APR. 13	71	7.0	20	67	12	275	4.8	32	22	549
MAY 25	20	2.1	10	70	13	270	7.1	62	33	521
JULY 22	42	7.6	20	132	22	602	6.3	49	66	1140
AUG. 26	17	1.8	30	122	22	600	6.3	112	64	1090

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 14	0.8	0.2	--	2740	667	616	5060	19.0	15	6.8
DEC. 4	.4	.1	--	1500	360	344	2900	6.0	15	6.5
JAN. 22	.3	.1	1660	1290	307	300	2510	5.0	5	6.0
MAR. 2	.2	.1	502	437	95	82	867	15.0	10	6.4
APR. 13	.3	.2	1140	953	216	190	1890	18.0	15	6.7
MAY 25	.5	.1	1110	947	226	175	1890	28.0	15	7.2
JULY 22	.4	.2	2290	2000	420	380	3910	22.0	20	7.0
AUG. 26	.8	.2	2260	1960	395	303	3790	27.0	20	7.3

RED RIVER BASIN

07364700 BAYOU DE LOUITRE NEAR LARAN, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,340	--	3,640	878	2,220	916	1,310	254	1,540	2,700	4,830	5,100
2	6,650	--	3,670	881	1,260	868	1,340	249	1,430	2,620	4,890	5,460
3	7,070	--	3,080	747	2,960	867	1,400	250	1,630	2,620	4,930	5,490
4	7,360	--	2,900	757	960	529	1,470	260	1,470	2,600	4,900	6,110
5	7,410	--	3,310	944	1,000	336	1,400	259	1,460	2,590	5,250	6,170
6	6,330	--	3,570	1,040	748	342	1,320	290	1,610	2,620	5,250	7,120
7	6,480	--	3,820	1,240	744	359	1,310	682	1,630	2,640	5,170	7,090
8	6,870	--	3,540	1,230	1,070	394	1,220	743	1,650	2,710	5,400	8,590
9	6,950	--	3,450	1,400	1,340	540	1,240	873	1,660	2,780	5,650	8,700
10	6,990	--	3,480	1,300	2,030	813	1,520	875	1,720	2,800	5,870	8,550
11	6,740	--	3,460	1,290	2,040	798	1,530	1,100	1,710	2,790	6,090	8,450
12	6,060	--	3,060	1,590	2,170	792	1,720	1,150	1,780	2,820	6,390	8,170
13	5,300	--	2,790	1,650	1,490	899	1,900	1,370	1,760	4,730	6,430	8,270
14	5,130	--	2,790	1,830	1,470	893	2,350	1,100	1,770	4,770	4,570	8,110
15	5,580	--	2,940	1,800	1,450	935	2,360	1,350	1,780	3,240	4,550	8,160
16	5,310	--	3,080	1,880	1,180	986	551	1,570	1,850	3,170	4,030	6,060
17	5,050	4,520	3,470	2,020	917	825	522	1,560	1,860	3,490	4,080	6,090
18	5,080	1,170	3,850	2,040	911	803	865	1,790	1,990	3,430	3,780	5,100
19	5,300	677	4,080	1,930	909	291	871	1,840	2,020	3,680	3,830	5,090
20	5,600	504	2,810	2,170	914	302	749	1,880	2,050	3,670	3,830	6,930
21	5,740	1,110	2,550	2,480	1,510	211	734	1,880	2,010	3,770	3,810	6,900
22	5,510	1,060	2,000	2,610	1,520	213	839	1,870	1,730	3,860	3,630	6,870
23	5,540	928	2,390	2,750	1,510	409	848	1,910	1,690	3,900	3,610	6,890
24	5,430	1,110	1,940	2,740	742	407	784	2,020	1,920	3,750	3,560	4,660
25	5,540	1,530	2,320	2,990	718	672	845	1,940	2,160	4,340	3,530	4,700
26	5,370	1,960	2,200	3,060	868	682	847	1,860	2,340	2,790	3,730	2,600
27	--	2,420	2,190	3,070	873	927	983	1,790	2,570	2,890	6,060	2,650
28	--	2,500	1,260	2,830	899	929	990	1,710	2,820	3,260	6,100	2,410
29	--	2,580	1,250	2,990	--	1,030	981	1,370	2,840	3,340	5,240	2,390
30	--	--	818	2,720	--	1,140	354	1,490	2,780	4,650	5,200	2,520
31	--	--	829	2,170	--	1,330	--	1,610	--	4,720	5,080	--
AVERAGE	--	--	2,790	1,900	1,300	692	1,170	1,260	1,910	3,350	4,820	6,050

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	--	8	8	6	12	13	21	23	28	29	27
2	24	--	6	9	4	13	14	17	21	28	29	27
3	24	--	7	8	2	13	14	17	19	27	28	27
4	23	--	7	7	1	16	18	21	19	27	29	27
5	25	--	6	6	4	13	18	21	18	27	29	27
6	25	--	6	4	6	13	19	20	19	26	29	27
7	23	--	8	3	8	13	20	20	19	26	29	27
8	21	--	6	4	9	13	19	21	20	26	29	27
9	22	--	6	4	9	14	19	21	21	27	29	28
10	23	--	7	1	9	16	19	21	22	28	29	28
11	23	--	7	2	9	14	19	21	23	27	29	24
12	20	--	5	2	9	15	19	22	25	27	28	26
13	18	--	8	2	11	15	18	22	26	27	27	26
14	16	--	10	3	10	12	18	21	26	28	27	26
15	18	--	12	5	7	11	16	21	26	27	26	26
16	16	--	13	7	7	12	18	20	26	27	27	24
17	16	13	10	8	9	12	18	20	27	27	28	24
18	16	13	12	6	9	12	21	21	27	27	28	24
19	18	11	10	4	8	9	21	21	27	27	28	24
20	19	11	9	1	8	11	19	22	26	28	28	27
21	18	9	7	3	9	7	18	22	27	26	28	26
22	18	11	6	2	9	8	18	22	26	27	28	26
23	18	13	7	2	11	12	20	22	26	28	27	26
24	15	13	8	4	9	13	20	22	26	25	26	25
25	16	15	9	6	10	13	20	22	26	25	26	24
26	18	14	8	8	9	13	20	23	26	24	22	22
27	--	12	6	8	10	12	21	23	26	26	23	19
28	--	10	7	10	10	12	22	21	27	27	24	19
29	--	9	7	12	--	11	22	22	27	27	24	18
30	--	8	6	9	--	12	21	22	27	28	26	18
31	--	--	5	9	--	14	--	23	--	28	26	--
AVERAGE	--	--	8	5	8	13	19	21	24	27	27	25

RED RIVER BASIN

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07366000 CORNEY BAYOU NEAR LILLIE, LA.

LOCATION.--Lat 32°53'55", long 92°39'39", Union Parish, at bridge on U.S. Highway 167, 3.0 miles south of Lillie.

DRAINAGE AREA.--462 square miles.

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1957, October 1959 to September 1960, October 1967 to September 1970.

Water temperatures: October 1967 to September 1970.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 622 micromhos Aug. 27; minimum daily, 120 micromhos Nov. 18.

Water temperatures: Maximum, 30°C July 14 and many days in Aug.

EXTREMES, 1967-70.--Specific conductance: Maximum daily, 834 micromhos Mar. 3, 4, 1968; minimum daily, 75 micromhos Jan. 10, 1968.

Water temperatures: Maximum, 30°C June 16, 17, 19, Aug. 11, 1968, July 14 and many days in Aug. 1970; minimum, 2°C Jan. 14, 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 14	0,10	2,3	10	24	4,4	58	3,5	23	2,2	133
DEC. 3	45	6,2	0	23	4,0	57	5,1	2	13	130
JAN. 21	170	12	0	22	4,1	50	3,5	3	10	120
MAR. 2	785	7,4	0	21	4,3	50	3,0	4	8,2	119
APR. 23	2200	7,4	10	10	1,9	23	3,2	8	4,8	54
MAY 19	100	3,4	0	10	1,7	22	2,2	9	4,2	50
JULY 17	18	2,5	0	23	4,3	55	3,5	8	3,6	132
AUG. 28	23	1,4	0	26	5,1	65	4,0	6	2,4	156

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 14	0,1	0,1	356	239	78	59	498	18,0	5	6,5
DEC. 3	,1	,1	328	239	74	72	480	10,0	10	5,1
JAN. 21	,1	,0	332	223	72	70	439	6,0	3	5,4
MAR. 2	,1	,0	337	--	70	67	441	16,0	10	5,7
APR. 23	,1	,1	148	--	33	26	208	20,0	15	5,9
MAY 19	,1	,1	156	--	32	25	199	24,0	5	6,3
JULY 17	,1	,1	--	228	75	72	483	28,0	10	6,0
AUG. 28	,1	,0	--	263	86	81	557	25,0	10	5,8

RED RIVER BASIN

07366000 CORNEY BAYOU NEAR LILLIE, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	505	449	456	232	549	391	213	230	215	456	472	554
2	506	434	474	537	552	446	290	233	214	450	497	553
3	507	444	447	536	416	250	310	239	213	467	497	552
4	508	472	447	536	373	284	287	144	212	468	495	554
5	506	472	446	371	440	285	363	128	213	474	491	556
6	505	470	446	371	367	220	312	153	229	482	486	555
7	500	473	440	552	367	199	310	252	249	478	488	555
8	501	470	439	319	375	272	310	166	321	470	482	559
9	502	472	453	311	440	237	299	171	321	470	485	565
10	501	471	452	318	527	234	335	171	324	465	505	560
11	502	475	454	460	410	306	212	172	322	460	504	562
12	502	473	464	277	408	234	227	171	351	461	510	562
13	503	400	470	357	409	214	304	171	354	476	508	563
14	497	330	478	357	406	233	225	182	376	475	532	564
15	496	260	466	358	490	227	224	183	391	465	529	570
16	499	190	478	473	372	235	224	179	401	530	529	567
17	497	123	477	485	446	222	225	185	401	492	531	558
18	502	120	448	368	485	245	224	193	394	488	530	559
19	506	121	452	484	497	277	224	194	406	481	516	561
20	494	126	454	495	530	251	221	198	405	422	516	561
21	495	171	454	491	530	402	222	199	409	424	512	567
22	495	178	332	--	454	176	227	196	414	418	531	566
23	501	178	420	--	454	173	160	206	410	481	509	558
24	504	136	419	--	396	164	162	206	410	484	509	558
25	501	150	420	--	383	231	255	205	421	483	507	548
26	500	229	421	--	383	242	257	192	421	486	504	549
27	500	231	460	--	415	256	220	196	426	384	622	549
28	499	227	455	--	447	187	185	144	414	392	555	553
29	439	459	456	--	--	253	151	145	421	400	554	553
30	449	459	237	--	--	221	237	192	421	458	554	558
31	446	--	234	--	--	257	--	193	--	471	553	--
AVERAGE	496	322	434	--	440	252	247	187	349	462	517	558

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	10	8	6	12	13	24	25	29	28	28
2	--	--	10	8	6	12	12	23	26	29	30	28
3	--	--	10	8	5	13	11	22	25	29	30	28
4	--	--	10	8	5	13	12	23	24	29	29	29
5	--	--	9	7	6	13	13	24	23	29	29	29
6	--	--	10	6	7	14	13	24	23	29	30	28
7	--	--	9	7	8	14	14	24	23	29	30	29
8	--	--	9	3	7	10	14	25	24	29	29	29
9	--	--	9	3	7	10	14	25	24	29	29	28
10	--	--	9	4	8	10	15	25	24	29	30	29
11	--	--	9	5	8	10	15	25	24	29	29	28
12	--	--	9	8	9	10	16	26	27	29	29	28
13	--	--	9	6	10	11	20	26	28	29	29	28
14	--	--	9	6	11	11	20	26	28	30	29	28
15	--	--	9	7	12	12	20	26	29	29	29	28
16	--	--	9	7	12	12	19	25	29	29	30	29
17	--	9	9	4	12	10	20	26	29	28	30	28
18	--	9	9	8	10	11	21	27	29	28	30	28
19	--	10	9	6	9	12	20	28	29	27	30	29
20	--	10	9	6	10	12	22	28	29	27	30	26
21	--	10	9	6	10	10	22	29	29	26	30	27
22	--	10	9	8	12	12	22	29	29	26	30	28
23	--	10	9	6	12	12	21	26	29	28	30	26
24	--	10	9	7	11	13	22	26	29	28	30	26
25	--	10	9	8	11	11	21	25	29	27	29	25
26	--	10	9	10	10	11	21	25	29	27	29	24
27	--	10	9	10	11	12	21	26	29	27	28	24
28	--	10	9	10	12	12	22	26	29	28	29	24
29	--	9	8	9	--	12	22	26	29	28	29	24
30	--	9	8	9	--	13	24	26	29	29	29	24
31	--	--	8	5	--	13	--	24	--	29	29	--
AVERAGE	--	--	9	6	9	11	18	25	26	28	29	27

07367000 OUACHITA RIVER AT MONROE, LA.

LOCATION.--Lat 32°30'19", long 92°07'32", in log 50, T.18 N., R.3 E., Ouachita Parish, at gaging station at bridge on U.S. Highway 80 at Monroe, 0.4 miles upstream from Illinois Central Railroad bridge, and 5.5 miles upstream from Lock and Dam No. 4.

DRAINAGE AREA.--15,298 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1954 to September 1970.

Water temperatures: August 1954 to September 1958; October 1968 to September 1970.

EXTREMES, 1954-58, 1965-67, 1968-69.--Specific conductance: Maximum daily, 6,070 micromhos Oct. 17, 1954; minimum daily, 47 micromhos May 21, 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 8	--	3,3	30	14	4,1	43	2,6	30	9,6	78
OCT, 23	--	3,1	40	16	3,4	48	2,6	18	8,2	90
NOV, 6	--	6,0	0	18	3,2	55	1,5	34	13	86
NOV, 19	--	4,9	10	22	4,6	76	3,2	36	13	136
DEC, 4	--	6,9	0	13	2,1	33	4,0	23	14	56
DEC, 18	--	8,0	20	16	2,0	40	3,5	25	15	69
DEC, 31	--	--	--	--	--	--	--	--	--	--
JAN, 16	--	5,6	40	5,6	1,5	13	2,4	12	9,2	21
JAN, 30	--	7,3	30	8,3	1,8	20	2,2	14	9,2	37
FEB, 13	--	8,5	20	9,5	1,0	26	2,3	16	13	42
FEB, 27	--	--	--	--	--	--	--	--	--	--
MAR, 12	--	--	--	--	--	--	--	--	--	--
MAR, 27	--	7,0	40	8,2	1,1	11	1,9	19	8,6	19
APR, 16	--	--	--	--	--	--	--	--	--	--
APR, 30	--	7,4	40	7,8	1,1	15	2,0	18	5,2	27
MAY 14	--	7,1	100	6,3	,8	10	2,1	16	6,2	16
MAY 27	--	--	--	--	--	--	--	--	--	--
JUNE 11	--	7,2	160	8,7	1,3	16	2,1	22	7,2	27
JUNE 25	--	9,1	20	11	1,8	27	2,4	37	8,4	39
JULY 9	--	12	10	14	1,7	36	2,7	46	11	45
JULY 24	--	9,2	10	14	2,2	42	3,1	38	12	59
AUG, 4	--	8,9	0	15	3,1	51	3,2	44	14	76
AUG, 19	--	8,8	30	18	2,7	66	3,7	55	16	93
SEPT, 11	--	8,5	30	15	3,1	50	2,7	33	10	81
SEPT, 26	--	6,9	50	20	3,7	74	3,0	36	6,8	131

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 8	0,1	9,1	209	179	52	27	360	26,0	15	7,2
OCT, 23	,2	18	248	198	54	39	397	22,0	15	6,9
NOV, 6	,2	16	249	216	58	30	421	15,0	50	6,4
NOV, 19	,2	11	348	289	74	44	572	11,0	25	6,6
DEC, 4	,2	2,9	168	143	41	22	279	10,5	35	6,6
DEC, 18	,2	4,3	198	170	48	27	320	10,0	20	6,6
DEC, 31	--	--	--	--	--	--	273	6,0	--	--
JAN, 16	,1	,3	77	65	20	10	114	4,0	20	6,1
JAN, 30	,1	,2	123	93	28	17	176	10,0	10	6,2
FEB, 13	,1	,4	121	111	28	15	194	9,0	20	6,6
FEB, 27	--	--	--	--	--	--	165	11,0	--	--
MAR, 12	--	--	--	--	--	--	127	13,5	--	--
MAR, 27	,1	,5	81	66	25	9	115	14,0	40	7,0
APR, 16	--	--	--	--	--	--	137	18,0	--	--
APR, 30	,1	,5	93	75	24	9	138	23,0	40	6,4
MAY 14	,1	,6	66	57	19	6	93	23,0	50	6,3
MAY 27	--	--	--	--	--	--	96	25,0	--	--
JUNE 11	,1	6,0	108	87	27	9	144	25,0	50	6,5
JUNE 25	,1	9,0	135	126	35	5	214	32,0	20	6,5
JULY 9	,7	18	182	164	42	4	266	31,0	20	6,4
JULY 24	,1	9,7	179	170	44	13	308	29,0	30	6,6
AUG, 4	,1	16	224	209	50	14	374	36,0	30	6,5
AUG, 19	,1	9,8	261	245	56	11	450	34,0	50	6,7
SEPT, 11	,1	9,4	230	196	50	23	367	31,0	20	6,5
SEPT, 26	,1	4,0	326	268	65	35	526	29,0	30	7,0

RED RIVER BASIN

07367000 OUACHITA RIVER AT MONROE, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	--	173	440	190	326	--	104	--	314	356	--
2	246	--	161	455	175	333	--	96	--	301	363	--
3	218	--	156	200	138	256	--	81	--	307	360	--
4	225	--	159	150	142	146	--	70	--	314	370	--
5	222	--	286	115	154	141	--	--	--	300	372	--
6	215	421	340	100	204	151	--	--	88	306	384	--
7	227	433	365	155	223	149	--	--	114	324	371	--
8	215	457	441	145	185	141	--	--	117	330	366	--
9	290	501	377	135	100	134	--	--	113	345	356	--
10	284	567	310	115	98	129	--	--	98	--	332	--
11	305	595	314	125	94	123	--	--	98	--	338	320
12	378	592	322	--	119	114	--	--	116	--	365	285
13	429	555	422	--	197	101	--	--	124	--	403	317
14	451	511	409	--	300	94	--	--	145	--	420	320
15	--	483	453	--	358	94	--	--	160	--	420	331
16	--	520	--	--	351	--	--	--	164	--	419	337
17	--	569	--	--	340	--	--	--	186	--	414	329
18	--	610	--	--	340	--	100	--	210	--	416	340
19	--	659	--	90	409	--	110	--	247	--	421	338
20	--	600	--	119	447	--	126	--	262	--	--	307
21	--	706	--	122	321	--	135	--	273	--	--	321
22	--	805	--	121	287	--	124	--	271	--	--	344
23	--	450	--	128	279	--	123	--	298	--	--	413
24	--	186	--	133	291	--	152	--	274	312	--	465
25	--	150	--	91	303	--	157	--	294	308	--	493
26	--	145	--	87	307	--	147	--	240	299	--	486
27	--	147	--	165	289	--	126	--	242	294	--	506
28	--	173	--	127	293	--	116	--	259	308	--	451
29	--	171	--	125	--	--	106	--	276	309	--	399
30	--	181	--	193	--	--	98	--	293	320	--	372
31	--	--	--	188	--	--	--	--	--	328	--	--
AVERAGE	--	--	--	--	248	--	--	--	--	--	--	--

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	--	6.1	--	--	7.7	6.5	4.5	1.2	3.2	--	--
2	3.8	--	6.1	--	10.3	7.4	--	4.9	1.3	2.8	--	--
3	3.2	--	5.9	--	9.2	6.3	--	5.8	2.0	2.7	--	--
4	2.8	--	6.0	--	10.5	5.5	--	5.7	2.4	2.8	3.0	--
5	2.5	--	--	--	10.9	6.5	--	5.2	2.5	2.8	2.5	--
6	2.6	2.4	--	--	10.2	6.4	--	4.6	2.7	2.5	1.7	--
7	1.9	1.8	--	--	--	6.2	--	4.3	2.9	2.2	1.7	--
8	1.6	2.3	--	--	--	5.8	--	4.2	2.9	1.3	1.3	--
9	2.4	2.4	--	--	--	5.7	--	4.0	2.8	.9	1.3	--
10	3.0	2.0	--	--	--	5.3	--	4.1	2.9	--	1.9	--
11	3.0	1.7	--	--	--	5.1	--	4.3	3.3	--	1.6	4.4
12	--	2.1	--	--	--	4.9	--	4.2	4.1	--	1.0	4.2
13	--	1.9	--	--	--	6.5	--	4.0	4.1	--	.9	3.7
14	--	2.9	--	--	8.4	6.9	--	3.6	3.8	--	.8	3.8
15	--	2.6	--	--	8.3	6.6	--	3.5	3.5	--	--	3.8
16	--	3.5	--	10.3	8.4	6.5	1.8	3.6	3.0	--	1.2	2.8
17	--	3.0	--	8.7	8.5	6.4	2.4	3.9	2.5	--	.9	--
18	--	2.8	--	9.2	8.7	6.7	3.8	4.2	2.3	--	--	--
19	--	4.3	--	10.3	9.0	6.5	4.3	4.1	1.6	--	--	--
20	--	6.3	--	10.4	9.0	6.6	4.3	3.9	1.9	--	--	--
21	--	6.5	--	10.6	9.0	6.8	4.3	3.7	2.3	--	--	--
22	--	6.2	--	10.7	9.1	6.9	4.2	3.3	2.0	--	--	--
23	6.7	6.1	--	9.9	8.9	7.0	4.1	3.2	1.1	--	--	--
24	6.5	5.7	--	10.1	8.4	6.9	3.8	2.8	1.6	3.9	--	--
25	6.1	6.1	--	8.9	7.9	6.7	3.7	2.6	1.0	2.0	--	--
26	3.4	6.0	--	--	8.2	6.8	2.0	2.6	1.6	2.0	--	.9
27	4.3	5.8	--	--	8.2	7.0	3.4	2.5	2.2	1.7	--	1.3
28	4.1	5.5	--	--	8.0	7.5	3.2	2.1	2.9	1.5	--	1.9
29	4.4	5.5	--	--	--	7.2	3.4	2.0	2.8	1.7	--	2.2
30	--	5.6	--	--	--	7.1	3.5	2.0	3.2	2.0	--	1.6
31	--	--	--	--	--	7.1	--	1.9	--	--	--	--
AVERAGE	--	--	--	--	--	6.5	--	3.7	2.5	--	--	--

RED RIVER BASIN

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07367000 OUACHITA RIVER AT MONROE, LA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	21.0	--	6.0	9.5	12.5	--	23.5	25.0	33.0	31.5	--
2	25.0	21.0	--	5.2	9.0	13.5	--	23.0	25.0	33.5	32.5	--
3	24.5	20.5	--	4.7	8.0	14.0	--	21.5	24.5	33.5	33.0	--
4	24.5	20.0	10.5	4.0	7.0	13.0	--	21.0	24.0	33.0	--	--
5	24.5	20.0	12.0	3.3	6.0	12.5	--	21.0	24.0	33.5	--	--
6	25.0	20.0	12.0	--	6.0	13.0	--	21.0	23.5	33.5	--	--
7	25.0	--	12.0	--	6.0	13.0	--	21.0	23.5	33.0	--	--
8	25.0	--	12.0	--	6.5	13.0	--	21.0	24.0	33.0	--	--
9	25.0	--	11.5	--	7.0	13.0	--	21.0	24.5	32.5	--	--
10	25.0	--	10.5	--	7.0	13.5	--	21.0	24.5	--	--	--
11	25.0	--	10.5	--	7.0	13.5	--	21.5	25.0	--	--	31.0
12	25.0	--	10.5	--	8.0	14.0	--	21.5	25.0	--	--	31.0
13	25.0	--	10.0	--	9.5	12.5	--	22.0	25.5	--	--	31.5
14	24.5	--	10.0	--	11.0	12.0	--	22.5	26.5	--	--	31.5
15	23.5	--	10.0	--	12.5	12.0	--	22.5	27.0	--	--	31.5
16	23.0	--	--	4.3	12.5	12.0	17.0	23.0	28.0	--	--	31.5
17	22.5	--	--	5.1	12.0	12.0	17.0	23.0	28.5	--	--	31.0
18	22.0	--	--	5.5	11.5	12.0	17.5	23.0	30.0	--	--	30.0
19	22.0	--	--	6.0	12.0	12.5	17.5	22.5	30.0	--	--	30.5
20	21.5	--	--	6.0	12.0	12.5	17.5	22.5	31.0	--	--	30.5
21	22.0	--	--	5.4	11.5	12.5	18.0	23.0	31.5	--	--	31.0
22	21.5	--	--	5.2	11.5	12.0	18.0	23.0	32.0	--	--	31.0
23	21.5	--	--	5.2	12.0	11.5	18.5	23.5	32.0	--	--	31.0
24	22.0	--	--	4.9	12.5	11.5	19.5	23.5	32.0	29.0	--	31.0
25	21.5	--	--	5.7	13.5	12.0	20.0	23.5	32.0	29.5	--	31.0
26	21.0	--	--	5.5	13.5	12.5	19.5	24.5	32.0	30.0	--	30.5
27	21.5	--	--	7.2	12.5	13.0	19.5	24.5	32.0	30.0	--	28.5
28	21.0	--	--	7.5	12.5	--	19.5	24.5	32.5	30.0	--	27.0
29	21.0	--	--	8.7	--	--	20.0	24.5	32.5	30.5	--	26.5
30	21.0	--	--	11.1	--	--	20.5	24.5	33.0	30.5	--	25.5
31	21.5	--	--	10.0	--	--	--	24.5	--	31.0	--	--
AVERAGE	23.2	--	--	--	10.0	--	--	22.7	28.0	--	--	--

07367515 OUACHITA RIVER AT MAIDCO, LA.

LOCATION.--Lat 32°24'48", long 92°06'19", in sec.1, T.16 N., R.3 E., Ouachita Parish, at pier on left bank at Maidco, 100 yards west of U.S. Highway 165, and 6.3 miles south of U.S. Highway 165 and State Highway 15.

DRAINAGE AREA.--15,575 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE		DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 30		--	4.1	140	22	0.3	62	3.2	49	19	90
DEC, 2		--	7.3	70	15	7.4	78	5.2	27	29	138
JAN, 6		--	7.8	40	6.7	1.8	22	2.1	14	9.6	37
JAN, 20		--	6.3	90	5.7	1.4	14	2.2	14	10	23
FEB, 18		--	8.3	120	9.5	1.8	25	2.5	21	12	40
OCT, 30		--	--	--	--	--	--	--	--	--	--
FEB, 18		--	--	--	--	--	--	--	--	--	--
APR, 1		--	7.2	70	5.5	1.5	11	2.0	13	8.4	19
APR, 21		--	7.7	80	8.3	1.3	20	2.1	16	8.8	35
JUNE 3		--	6.6	340	7.8	1.3	16	1.8	26	6.2	23
JUNE 22		--	8.2	220	11	1.6	31	2.4	41	12	40
JULY 22		--	9.1	50	10	3.2	36	2.8	45	13	50
SEPT, 2		--	9.6	160	16	4.9	72	4.0	68	24	92
SEPT, 30		--	8.1	140	24	3.4	85	5.3	46	15	140

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 30	0.2	7.5	256	232	--	--	--	--	30	--
DEC, 2	.1	2.4	305	296	68	46	565	12.5	60	6.7
JAN, 6	.2	1.1	100	94	24	13	140	5.0	--	6.5
JAN, 20	.1	.8	89	70	20	9	123	5.0	10	6.5
FEB, 18	.1	1.1	131	110	31	14	195	11.0	--	6.6
OCT, 30	--	--	--	--	56	16	451	19.5	--	7.1
FEB, 18	--	--	--	--	--	--	--	--	--	--
APR, 1	.2	.6	91	61	20	9	104	16.5	70	6.4
APR, 21	.1	.5	120	92	26	13	165	22.0	90	6.2
JUNE 3	.1	.6	103	76	25	4	128	24.5	60	6.7
JUNE 22	.1	1.1	160	127	34	0	217	30.0	100	6.8
JULY 22	.1	3.0	164	149	38	1	262	27.0	60	7.0
SEPT, 2	.3	4.0	279	260	60	4	481	31.0	60	7.2
SEPT, 30	.2	2.7	355	307	74	36	594	26.5	35	6.9

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT, 30	4.5	2.6	36	--	0.50	5	--	--	--
DEC, 2	8.2	2.7	42	--	.30	--	--	--	--
JAN, 6	10.0	.8	27	--	.20	74	--	--	--
JAN, 20	10.0	2.1	24	--	.47	24	--	--	--
FEB, 18	--	--	--	--	.52	--	--	--	--
OCT, 30	--	--	--	--	--	--	--	--	--
FEB, 18	8.8	.7	29	--	--	33	--	--	--
APR, 1	7.4	4.0	49	--	.04	15	--	--	--
APR, 21	5.0	1.6	21	--	.26	24	--	--	--
JUNE 3	4.3	.3	36	--	.25	0	--	--	--
JUNE 22	2.9	2.7	40	--	.51	0	--	--	--
JULY 22	2.9	--	29	--	.86	9	--	--	--
SEPT, 2	2.4	--	28	--	.46	--	--	--	--
SEPT, 30	4.8	2.2	11	--	.20	--	--	--	--

07368000 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.7E., Richland Parish, at gaging station at Illinois Central Railroad bridge, 0.5 mile east of Girard.

DRAINAGE AREA.--1,226 sq mi, arbitrarily determined.

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1957, October 1967 to September 1970.

Water temperatures: October 1967 to September 1969.

EXTREMES, 1967-69.--Specific conductance: Maximum daily, 921 micromhos Dec. 7, 1967; minimum daily, 47 micromhos Jan. 11, 19, 1968.

Water temperatures: Maximum, 32°C June 23, June 28 to July 1, 1969; minimum, 2°C Jan. 11, 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SiO ₂) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 1	26	15	10	53	18	40	4,3	228	27	62
DEC, 3	30	14	90	25	6.2	14	4,9	94	22	17
JAN, 20	122	8,9	10	19	4,8	8,9	5,4	66	16	12
APR, 1	90	8,5	250	14	4.1	5,5	5,0	62	8,0	5,5
JUNE 3	--	8,3	110	16	4,4	6,3	2,8	71	5,4	5,0
JULY 21	--	11	20	31	9,9	24	4,8	128	18	41
SEPT, 30	24	14	20	59	16	39	5,3	232	26	60

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO ₃) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 1	0,3	0,4	365	332	208	21	594	21,0	5	7,5
DEC, 3	,1	1,3	155	151	88	11	244	10,0	80	7,0
JAN, 20	,4	2,1	110	110	67	13	185	5,0	20	7,4
APR, 1	,3	1,0	122	83	52	1	135	18,5	120	7,1
JUNE 3	,1	1,7	102	85	58	0	145	23,5	30	7,0
JULY 21	,2	,2	223	203	118	13	370	--	20	7,1
SEPT, 30	,3	,6	343	334	215	25	594	26,0	10	7,6

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO ₄) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT, 1	--	--	--	--	--	--	--	--	--
DEC, 3	6,2	1,0	0	--	--	--	--	--	--
JAN, 20	9,6	7,0	23	--	--	--	--	--	--
APR, 1	6,3	4,3	34	--	--	--	--	--	--
JUNE 3	4,4	,0	0	--	--	--	--	--	--
JULY 21	--	--	--	--	--	--	--	--	--
SEPT, 30	6,9	,8	0	--	--	--	--	--	--

07369000 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., at Ouachita-Richland Parish line, at gaging station at 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, arbitrarily determined.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1955, October 1967 to September 1970.

Water temperatures: October 1967 to September 1970.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 929 micromhos Nov. 22; minimum daily, 96 micromhos Apr. 24.

Water temperatures: Maximum, 33°C July 11; minimum not determined.

EXTREMES, 1967-70.--Specific conductance: Maximum daily, 2,270 micromhos Mar. 20, 1969; minimum daily, 50 micromhos Jan. 15, 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 9	72	13	10	50	17	42	4.9	212	26	62
NOV. 17	53	13	10	61	24	49	4.4	268	36	75
JAN. 15	1380	2.4	80	14	4.6	13	4.6	58	12	19
FEB. 19	7690	2.9	50	33	7.7	54	5.2	154	23	64
APR. 8	562	4.0	20	12	3.6	8.1	3.9	56	5.8	10
MAY 21	370	1.9	10	17	5.2	7.6	3.8	77	8.0	8.4
JULY 29	833	5.2	10	18	6.6	13	4.1	80	8.4	20
AUG. 20	247	11	20	37	12	30	4.5	164	14	44

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 9	0.3	0.1	336	319	194	20	570	22.0	15	8.0
NOV. 17	.3	.0	414	395	250	30	709	14.0	15	7.6
JAN. 15	.1	.1	126	99	54	6	183	7.0	30	7.4
FEB. 19	.2	.6	290	267	114	0	497	9.0	65	7.5
APR. 8	.1	.2	109	76	45	0	135	17.0	50	7.2
MAY 21	.1	.2	104	86	64	1	170	24.0	20	7.4
JULY 29	.1	1.3	132	116	72	6	212	29.0	20	7.3
AUG. 20	.2	.2	253	234	143	16	428	29.0	15	7.2

RED RIVER BASIN

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07369000 BAYOU LAFOURCHE NEAR CREW LAKE, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1969
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	525	--	136	267	237	195	132	122	312	504	341	407
2	526	--	155	293	390	203	220	188	332	502	342	406
3	525	670	174	410	566	205	223	187	354	501	343	400
4	523	667	189	418	510	177	224	160	334	503	337	507
5	587	675	169	403	460	365	151	162	335	525	359	506
6	590	666	189	143	402	373	148	163	336	546	363	507
7	589	676	260	146	115	324	149	101	327	598	366	496
8	583	674	240	153	117	319	149	101	236	545	217	496
9	569	666	591	143	116	244	150	98	219	553	408	496
10	573	664	591	138	137	243	150	98	217	544	310	509
11	578	674	253	190	137	322	150	121	239	547	223	509
12	581	698	146	249	137	205	154	124	238	455	398	513
13	585	696	144	352	143	204	246	124	236	446	435	502
14	600	700	656	182	153	203	153	123	231	450	450	509
15	600	700	146	161	166	242	133	122	263	416	541	528
16	609	694	145	160	179	215	160	159	261	371	547	579
17	608	716	184	165	190	174	188	160	268	428	515	570
18	611	926	190	241	267	224	188	160	265	250	485	560
19	627	925	223	225	342	325	192	159	270	234	452	557
20	626	454	256	210	306	275	213	170	338	257	448	563
21	618	203	182	195	304	265	209	180	331	245	425	583
22	660	929	291	180	305	122	207	190	335	199	400	592
23	543	650	562	179	227	133	98	200	353	200	375	600
24	648	526	597	161	234	120	96	203	361	204	347	610
25	623	170	186	181	128	210	101	204	366	213	285	615
26	652	168	284	182	124	202	144	198	419	222	224	622
27	--	660	496	196	125	110	139	203	445	232	--	621
28	--	178	498	195	179	115	145	241	466	228	--	597
29	--	136	438	194	--	120	123	241	470	223	--	597
30	--	181	449	331	--	126	120	272	470	260	--	590
31	--	--	451	266	--	126	--	292	--	300	--	--
AVERAGE	--	--	306	223	239	216	162	168	321	377	--	538

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	--	9	8	6	10	13	24	26	--	27	30
2	26	--	7	5	10	11	17	21	26	--	--	28
3	27	14	11	6	9	11	16	20	26	--	30	31
4	24	16	9	5	10	8	17	19	26	--	32	31
5	27	18	11	4	7	14	16	21	26	--	30	31
6	26	20	9	5	10	9	16	21	25	--	31	30
7	24	15	7	3	9	11	19	21	26	--	31	29
8	22	19	7	3	8	14	18	22	26	--	31	31
9	23	16	8	4	8	12	18	21	27	--	32	31
10	21	18	9	2	8	16	18	23	26	29	32	31
11	26	19	9	3	8	15	18	22	27	33	27	31
12	23	19	10	3	6	14	19	21	27	28	31	31
13	24	15	7	4	4	12	17	23	27	27	--	29
14	18	14	9	8	10	11	19	24	28	27	--	28
15	16	14	11	8	8	11	20	23	26	27	--	29
16	21	14	8	6	11	12	20	23	29	29	--	29
17	20	17	11	7	14	13	19	--	29	26	--	29
18	21	14	9	7	14	11	18	--	--	--	32	29
19	23	13	10	3	14	9	20	--	--	--	29	28
20	21	13	9	4	12	11	23	27	--	27	28	29
21	24	12	11	4	12	10	22	27	29	27	--	28
22	21	13	10	3	12	12	21	27	28	27	--	29
23	21	13	10	6	12	12	20	27	28	26	--	29
24	22	12	8	8	12	10	22	28	27	26	26	29
25	22	11	11	10	9	12	22	28	--	--	--	28
26	--	11	8	13	11	13	22	28	--	--	26	--
27	--	11	9	11	11	13	23	27	--	27	--	--
28	--	11	8	9	9	12	24	28	--	--	--	--
29	--	11	9	10	--	8	25	29	--	29	--	--
30	--	10	8	8	--	--	26	27	--	29	--	--
31	--	--	8	9	--	16	--	--	--	--	--	--
AVERAGE	--	--	9	6	10	--	20	--	--	--	--	--

RED RIVER BASIN

07369500 TENSAS RIVER AT TENDAL, LA.

LOCATION.--Lat 32°25'55", long 91°22'00", in NW¼ sec.29, T.17 N., R.11 E., Madison Parish at gaging station at bridge on U.S. Highway 80 at Tendal, 200 feet upstream from Illinois Central Railroad bridge, and 3 miles east of Waverly.

DRAINAGE AREA.--309 sq mi, arbitrarily determined.

RECORDS AVAILABLE.--Chemical analyses: October 1955 to September 1957, October 1967 to September 1970.

Water temperatures: October 1967 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	SULFATE (S04) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 8	14	21	0	68	23	40	5.0	372	9.0	28
DEC. 3	12	22	10	67	25	35	3.5	376	10	23
JAN. 20	100	10	30	21	5.2	5.6	5.1	82	16	3.1
APR. 1	195	8.9	40	22	5.6	5.3	4.9	93	10	3.3
JUNE 3	65	8.3	30	18	3.4	5.2	3.9	68	8.8	5.2
JULY 21	--	11	20	44	12	18	4.5	223	6.4	10
SEPT. 30	617	16	40	46	18	20	6.3	260	4.8	13

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEMP- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 8	0.1	0.1	385	377	264	0	645	22.0	15	7.9
DEC. 3	.2	.1	378	371	270	0	636	11.5	10	7.5
JAN. 20	.2	1.9	129	108	74	7	181	5.5	15	7.4
APR. 1	.3	1.2	125	108	78	2	183	16.0	80	7.3
JUNE 3	.3	3.9	107	90	59	3	143	24.0	40	7.1
JULY 21	.2	.2	231	216	158	0	376	--	5	7.7
SEPT. 30	.3	.4	267	253	191	0	427	25.0	10	7.6

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (P04) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT. 8	--	--	--	--	--	--	--	--	--
DEC. 3	9.3	1.5	0	--	--	--	--	--	--
JAN. 20	9.8	2.3	23	--	--	--	--	--	--
APR. 1	7.5	4.4	36	--	--	--	--	--	--
JUNE 3	4.2	.0	10	--	--	--	--	--	--
JULY 21	4.6	--	--	--	--	--	--	--	--
SEPT. 30	5.0	2.2	39	--	--	--	--	--	--

07372000 DUGDEMONA RIVER NEAR WINNFELD, LA.

LOCATION.--Lat 31°58'30", long 92°39'10", on line between secs.34 and 35, T.12 N., R.3 W., on right bank just downstream from bridge on U.S. Highway 167, 300 ft upstream from Chicago, Rock Island and Pacific Railroad Co. bridge, 2.4 miles downstream from Kyiaies Creek, and 3.5 miles north of Winnfield.

DRAINAGE AREA.--654 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 13	13	--	--	--	--	185	7.0	366	54	--
OCT, 23	13	--	--	--	--	--	--	--	--	--
NOV, 19	25	--	--	--	--	160	8.2	339	49	--
DEC, 3	22	--	--	8.5	3.3	100	5.0	172	42	--
DEC, 30	321	8.3	--	4.2	.9	16	2.7	33	15	6.0
JAN, 21	140	16	--	5.5	1.5	48	4.2	99	28	13
FEB, 18	213	14	--	5.7	1.4	26	2.5	49	21	12
MAR, 25	--	13	--	4.2	1.3	18	2.4	42	14	6.3
APR, 22	--	13	--	7.5	1.3	32	3.4	74	18	13
MAY, 27	--	20	--	4.8	2.4	35	3.0	78	18	12
JUNE, 23	--	20	--	8.6	.9	43	4.4	97	30	12
JULY, 22	--	18	--	10	.5	52	4.6	117	22	15
SEPT, 2	--	26	--	13	4.3	92	5.5	204	34	30
SEPT, 30	16	--	--	14	1.2	132	7.7	275	56	37

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 13	--	--	670	--	40	0	788	17.0	1100	7.5
OCT, 23	--	--	--	--	--	--	839	17.0	--	--
NOV, 19	--	--	599	--	34	0	728	12.0	800	7.5
DEC, 3	--	--	361	--	35	0	425	10.0	400	7.3
DEC, 30	0.1	0.8	97	70	14	0	114	9.0	100	6.8
JAN, 21	.3	.5	197	166	20	0	263	5.0	200	7.5
FEB, 18	.1	1.3	127	108	20	0	168	11.5	90	6.9
MAR, 25	.2	1.0	115	81	16	0	120	15.0	130	6.8
APR, 22	.3	.6	158	125	24	0	197	21.5	65	7.4
MAY, 27	.2	2.6	190	136	22	0	205	25.0	250	7.1
JUNE, 23	.4	.2	228	168	25	0	237	29.0	250	7.5
JULY, 22	.2	2.3	228	183	27	0	284	--	300	6.9
SEPT, 2	.5	4.8	368	310	50	0	474	--	380	7.3
SEPT, 30	.7	--	574	--	40	0	632	24.0	700	7.8

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT, 13	--	--	--	--	--	--	--	--	--
OCT, 23	6.5	--	--	--	--	--	--	--	--
NOV, 19	7.5	--	--	--	--	--	--	--	--
DEC, 3	7.6	2.8	81	--	--	--	--	--	--
DEC, 30	11.0	--	--	--	--	--	--	--	--
JAN, 21	9.9	3.3	68	--	--	--	--	--	--
FEB, 18	--	.0	--	--	--	--	--	--	--
MAR, 25	6.5	3.4	5	--	--	--	--	--	--
APR, 22	5.1	1.5	96	--	--	--	--	--	--
MAY, 27	4.8	.4	21	--	--	--	--	--	--
JUNE, 23	3.6	2.4	110	--	--	--	--	--	--
JULY, 22	5.5	--	67	--	--	--	--	--	--
SEPT, 2	5.4	--	44	--	--	--	--	--	--
SEPT, 30	5.1	1.5	175	--	--	--	--	--	--

07372000 DUGDEMONA RIVER NEAR WINNFIELD, LA.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	5.3	5.6	8.2	4.6	9.9	5.5	--	--	--	5.2	--
2	--	5.8	5.2	8.4	6.5	9.7	5.3	--	--	--	5.0	--
3	--	6.1	5.1	8.4	6.5	9.4	5.2	--	--	--	5.0	--
4	--	6.4	5.6	8.0	6.5	9.1	4.1	--	--	4.5	5.0	--
5	--	6.5	6.0	7.8	6.9	8.7	3.7	--	--	4.0	5.0	--
6	--	6.6	5.7	7.9	7.1	8.0	3.8	--	--	4.0	--	--
7	--	5.8	5.0	7.4	7.4	9.0	--	--	--	2.8	--	--
8	--	5.6	--	7.2	8.6	8.7	--	--	--	2.7	5.0	--
9	--	5.3	--	7.2	8.4	8.2	--	--	--	6.3	5.5	--
10	5.5	5.4	--	7.1	8.7	7.5	--	--	--	5.0	--	--
11	5.7	--	--	--	8.1	7.0	--	--	--	4.3	--	--
12	5.9	--	7.6	--	7.7	7.5	--	--	--	4.2	--	--
13	5.9	--	7.7	--	7.4	8.2	4.5	--	--	4.2	--	--
14	5.8	--	7.3	--	7.5	8.0	3.9	--	--	4.4	--	--
15	5.5	--	7.4	--	8.5	7.9	3.6	--	--	--	--	--
16	5.3	6.4	8.7	10	8.7	8.0	3.3	--	--	--	--	--
17	5.3	6.5	8.2	9.7	8.7	--	4.2	--	--	--	--	--
18	5.7	6.5	8.0	9.0	8.5	--	3.6	--	--	--	--	--
19	6.0	6.4	7.3	8.1	8.2	--	--	--	--	--	--	--
20	6.6	6.4	6.7	7.3	8.2	--	--	--	--	--	--	--
21	6.3	6.5	5.6	6.5	--	--	--	--	--	--	--	--
22	5.7	6.1	5.1	6.5	--	8.3	--	--	--	--	--	--
23	5.8	5.3	5.2	6.7	--	10	--	--	--	--	--	--
24	5.5	4.7	5.7	6.7	--	10	--	--	--	6.1	--	--
25	--	4.9	6.0	7.2	--	8.5	--	--	--	6.3	--	--
26	--	4.9	6.2	7.0	--	9.0	--	--	--	5.4	--	--
27	--	4.9	6.9	6.9	--	9.3	--	--	--	5.9	--	--
28	--	5.0	7.5	6.6	--	7.5	--	--	--	5.7	--	--
29	--	5.5	7.8	6.6	--	6.4	--	--	--	5.1	--	--
30	--	5.9	8.2	5.9	--	5.8	--	--	--	5.4	--	--
31	--	--	8.2	5.4	--	5.7	--	--	--	5.3	--	--
AVERAGE	--	5.8	6.6	7.5	--	8.2	--	--	--	--	--	--

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

[illegible]

RED RIVER BASIN

175

07372150 DUGDEMONA RIVER NEAR TULLOS, LA.

LOCATION.--Lat 31°49'10", long 92°26'45", SE¼SW¼ sec.23, T.10 N., R.1 W., Louisiana meridian, Winn Parish, at bridge on parish road, 1.0 mile downstream from Mine Creek, and 7 miles west of Tullus.

DRAINAGE AREA.--893 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
DEC, 2	--	--	--	12	1.2	90	6.6	305	49	--
JAN, 20	--	--	--	--	--	74	4.8	117	39	33
FEB, 18	--	14	100	9.8	1.6	44	3.0	55	32	38
MAR, 25	--	9.8	190	6.0	1.2	17	1.9	26	18	13
APR, 22	--	12	220	8.5	1.2	23	2.8	38	18	21
MAY 27	--	18	730	7.9	2.5	73	3.1	77	15	80
JUNE 23	--	18	660	7.0	1.3	58	3.8	73	15	55
JULY 22	--	13	510	8.2	.6	75	4.1	87	18	72
SEPT, 2	--	11	390	17	2.1	65	5.0	100	44	43
SEPT, 30	--	--	--	18	.3	133	7.4	218	42	84

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
DEC, 2	--	--	614	--	35	0	720	12.0	900	7.7
JAN, 20	--	--	257	--	26	0	373	6.5	250	7.5
FEB, 18	0.1	1.1	197	171	31	0	288	12.0	95	6.7
MAR, 25	.3	.8	112	81	20	0	127	15.0	100	6.6
APR, 22	.3	.2	121	106	26	0	171	21.5	50	6.8
MAY 27	.1	2.4	308	240	30	0	427	25.0	240	7.0
JUNE 23	.4	.2	224	195	23	0	330	30.5	180	7.2
JULY 22	.2	1.8	262	236	23	0	415	--	140	6.9
SEPT, 2	.2	2.7	260	239	51	0	407	--	120	6.9
SEPT, 30	.6	--	571	--	46	0	684	24.0	600	7.7

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
DEC, 2	7.4	0.9	182	--	--	--	--	--	--
JAN, 20	9.1	--	--	--	--	--	--	--	--
FEB, 18	8.9	1.2	--	--	--	--	--	--	--
MAR, 25	7.4	3.2	56	--	--	--	--	--	--
APR, 22	6.2	2.0	70	--	--	--	--	--	--
MAY 27	4.7	1.3	0	--	--	--	--	--	--
JUNE 23	4.7	2.4	70	--	--	--	--	--	--
JULY 22	5.6	--	77	--	--	--	--	--	--
SEPT, 2	4.1	--	46	--	--	--	--	--	--
SEPT, 30	5.6	1.2	119	--	--	--	--	--	--

07372200 LITTLE RIVER NEAR ROCHELLE, La.

LOCATION.--Lat 31°45'15", long 92°20'40", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.9 N., R.1 E., Grant Parish, at gaging station at bridge on State Highway 500, 1.1 miles northeast of Zenoria, and 3 miles southeast of Rochelle.

DRAINAGE AREA.--1,880 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1959, October 1964 to September 1970.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 5,200 micromhos Nov. 22; minimum daily, 65 micromhos May 7, 8.

EXTREMES, 1966-70.--Specific conductance: Maximum daily, 26,800 micromhos Dec. 4, 1965; minimum daily, 55 micromhos Dec. 7, 1968.

REMARKS.--Daily mean specific conductance values are reported in the daily conductance table.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SiO ₂) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 22	20	--	--	--	--	379	6,8	262	36	--
NOV, 19	32	--	--	--	--	340	8,8	240	38	--
DEC, 2	72	--	--	11	1,8	165	5,2	201	36	--
DEC, 30	3730	4,3	70	8,0	1,5	100	3,4	23	6,6	153
JAN, 20	755	13	150	7,6	2,2	81	4,2	80	27	82
JAN, 29	2160	16	120	10	2,2	94	3,9	64	25	118
FEB, 18	402	11	120	9,0	1,8	80	2,8	32	18	114
FEB, 26	956	--	--	--	--	--	--	--	--	187
MAR, 25	4180	8,2	140	3,1	1,3	9,6	2,0	15	10	9,2
MAR, 26	3920	--	--	--	--	--	--	--	--	--
APR, 21	--	12	210	9,0	2,1	58	1,7	38	12	82
APR, 30	1540	--	--	--	--	--	--	--	--	--
MAY 26	--	--	--	--	--	--	--	--	--	--
MAY 27	2630	14	550	6,6	1,8	34	2,6	56	11	30
JUNE 23	--	18	900	10	2,4	77	3,6	70	14	96
JUNE 25	549	--	--	--	--	--	--	--	--	--
JULY 22	--	13	200	8,4	3,4	63	3,5	50	13	82
JULY 23	182	--	--	--	--	--	--	--	--	--
AUG, 19	74	--	--	--	--	--	--	--	--	--
SEPT, 2	--	12	670	12	3,9	86	4,5	96	31	84
SEPT, 25	24	--	--	--	--	--	--	--	--	--
SEPT, 30	28	--	--	15	4,8	180	6,8	132	30	221

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO ₃) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 22	--	--	--	--	76	0	1770	21,0	500	7,2
NOV, 19	--	--	--	--	70	0	1750	13,0	450	7,4
DEC, 2	--	--	556	--	35	0	773	11,0	500	7,6
DEC, 30	0,1	0,5	348	288	26	7	572	10,0	100	6,7
JAN, 20	,2	,6	295	257	28	0	457	6,5	140	7,3
JAN, 29	,1	1,0	323	302	34	0	548	13,5	100	6,8
FEB, 18	,1	1,1	294	254	30	4	480	12,0	80	6,7
FEB, 26	--	--	--	--	--	--	715	--	--	--
MAR, 25	,2	,7	85	51	13	1	81	14,0	100	6,3
MAR, 26	--	--	--	--	--	--	89	14,0	--	--
APR, 21	,2	,4	225	196	31	0	375	22,0	80	7,1
APR, 30	--	--	--	--	--	--	169	26,0	--	--
MAY 26	--	--	--	--	--	--	223	29,0	--	--
MAY 27	,1	1,7	162	130	24	0	220	25,0	150	6,8
JUNE 23	,3	,2	303	256	35	0	461	28,0	160	7,2
JUNE 25	--	--	--	--	--	--	570	27,5	--	--
JULY 22	,1	,7	232	212	35	0	380	--	60	6,7
JULY 23	--	--	--	--	--	--	507	25,0	--	--
AUG, 19	--	--	--	--	--	--	1000	29,0	--	--
SEPT, 2	,2	1,3	314	282	46	0	500	--	120	6,9
SEPT, 25	--	--	--	--	--	--	1100	28,0	--	--
SEPT, 30	,4	--	646	--	57	0	972	22,0	300	7,4

07372200 LITTLE RIVER NEAR ROCHELLE, LA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT. 22	--	--	--	--	--	--	--	--	--
NOV. 19	--	--	--	--	--	--	--	--	--
DEC. 2	7.9	0.2	111	--	--	--	--	--	--
DEC. 30	--	--	--	--	--	--	--	--	--
JAN. 20	9.1	4.6	75	--	--	--	--	--	--
JAN. 29	--	--	--	--	--	--	--	--	--
FEB. 18	--	--	--	--	--	--	--	--	--
FEB. 26	--	--	--	--	--	--	--	--	--
MAR. 25	8.3	5.0	0	--	--	--	--	--	--
MAR. 26	--	--	--	--	--	--	--	--	--
APR. 21	3.7	1.9	68	--	--	--	--	--	--
APR. 30	--	--	--	--	--	--	--	--	--
MAY 26	--	--	--	--	--	--	--	--	--
MAY 27	.5	3.6	12	--	--	--	--	--	--
JUNE 23	.0	3.2	81	--	--	--	--	--	--
JUNE 25	--	--	--	--	--	--	--	--	--
JULY 22	4.9	--	33	--	--	--	--	--	--
JULY 23	--	--	--	--	--	--	--	--	--
AUG. 19	--	--	--	--	--	--	--	--	--
SEPT. 2	4.8	--	24	--	--	--	--	--	--
SEPT. 25	--	--	--	--	--	--	--	--	--
SEPT. 30	6.1	1.5	103	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	900	--	880	110	640	165	180	180	400	1,000	540	525
2	940	--	740	115	1,200	180	195	380	440	620	740	525
3	980	--	715	130	650	250	220	260	465	750	780	560
4	970	--	700	130	220	380	245	110	460	580	700	465
5	970	--	690	130	200	140	225	80	455	420	740	520
6	990	--	800	340	155	115	235	75	420	410	1,180	520
7	1,080	--	1,100	260	160	110	230	65	380	470	950	630
8	1,350	--	800	165	165	120	240	65	360	520	1,400	620
9	1,680	--	400	170	170	130	235	70	350	570	1,400	585
10	1,350	--	300	170	175	135	250	80	300	605	900	590
11	1,300	--	300	280	170	155	215	100	275	640	800	610
12	1,380	--	310	300	180	195	370	130	270	720	810	600
13	1,550	--	280	210	205	210	440	155	280	1,000	805	600
14	1,850	--	220	190	210	155	360	170	295	820	800	560
15	2,100	--	210	230	220	140	260	180	310	700	795	470
16	2,150	--	230	240	340	135	230	210	325	1,150	960	410
17	2,050	--	250	260	440	180	240	195	340	1,080	960	405
18	1,900	--	240	290	500	320	255	185	350	920	1,050	420
19	1,820	2,100	270	350	470	180	290	185	360	880	870	550
20	1,720	1,650	380	410	370	175	370	185	370	800	940	950
21	1,680	2,450	600	405	330	190	415	190	395	900	1,460	1,000
22	1,650	5,200	840	400	315	220	340	190	420	430	1,220	1,070
23	--	4,800	1,150	410	290	120	260	195	460	450	930	1,100
24	--	3,950	2,150	410	270	95	220	200	510	390	1,220	1,120
25	--	3,900	1,350	400	520	85	215	210	570	390	1,560	1,150
26	--	2,950	900	420	600	90	225	220	700	360	560	980
27	--	2,500	830	455	280	90	240	225	900	450	575	990
28	--	2,000	780	500	200	100	250	235	1,380	480	430	950
29	--	4,100	800	550	--	115	220	260	1,500	510	410	930
30	--	1,800	550	550	--	130	190	320	800	480	495	940
31	--	--	165	570	--	155	165	370	--	490	490	--
AVERAGE	--	--	643	308	344	160	259	183	495	645	885	712

07373000 BIG CREEK AT POLLOCK, LA.

LOCATION.--Lat 31°32'10", long 92°24'30", in SW 1/4 Sec. 31, T.7 N., R.1 E, Grant Parish, at gaging station at bridge on U.S. Highway 165, 0.8 mile north of Pollock, and 1.3 miles downstream from Dyson Creek.

DRAINAGE AREA.--51 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1970.

Water temperatures: October 1964 to September 1970.

EXTREMES, 1969-70.--Water temperatures: Maximum, 26°C on many days during June, July, August, and September; minimum, 4°C Jan. 10, 11, 22, 23.

EXTREMES, 1964-70.--Water temperatures: Maximum, 28°C July 10-13, 1965; minimum, 4°C Jan. 30, 31, 1966, Dec. 16, 1968, Jan. 10, 11, 22, 23, 1970.

REMARKS.--Daily mean temperatures reported in table; maximum and minimum temperatures are available on request.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SiO ₂) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 22	12	19	30	2.3	0.5	5.0	1.3	17	1.2	4.6
DEC. 2	13	25	110	1.5	.8	5.5	1.3	16	.2	5.0
JAN. 20	36	18	180	2.0	.2	4.3	1.2	11	1.2	4.2
FEB. 18	31	18	50	1.2	.7	4.1	1.1	12	.2	4.0
MAR. 25	31	19	80	1.6	.7	3.9	1.1	13	.2	4.0
APR. 21	25	18	150	2.0	.7	4.2	1.2	15	2.2	3.9
JUNE 3	14	21	360	1.8	.9	4.0	1.3	16	.4	4.1
JUNE 23	--	14	100	1.0	.6	3.8	1.7	12	.2	3.1
JULY 22	--	14	40	1.6	1.0	2.6	1.6	13	.4	3.2
SEPT. 2	--	21	70	1.8	.9	4.7	1.8	16	.6	3.9
SEPT. 17	10	20	70	2.6	1.6	3.6	1.6	17	.2	4.9

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO ₃) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 22	0.0	0.6	47	42	8	0	41	18.5	5	7.7
DEC. 2	.0	.1	54	48	7	0	45	9.5	20	6.6
JAN. 20	.2	.9	53	37	6	0	38	6.5	20	6.7
FEB. 18	.0	.4	46	36	6	0	37	11.0	35	7.2
MAR. 25	.0	.4	50	37	7	0	37	15.5	40	6.7
APR. 21	.1	.3	53	40	8	0	41	19.5	40	6.5
JUNE 3	.0	.3	47	42	8	0	40	23.0	40	6.8
JUNE 23	.2	.4	48	31	5	0	35	26.0	35	6.8
JULY 22	.0	.1	53	30	8	0	36	24.0	10	6.4
SEPT. 2	.0	.4	54	43	8	0	39	24.2	15	6.7
SEPT. 17	.0	.3	46	43	13	0	43	--	15	6.3

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO ₄) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT. 22	8.9	0.0	--	--	--	--	--	--	--
DEC. 2	11.0	.0	0	--	--	--	--	--	--
JAN. 20	12.0	1.9	0	--	0.04	--	--	--	--
FEB. 18	11.0	1.7	0	--	.06	--	--	--	--
MAR. 25	8.6	4.5	0	--	.06	--	--	--	--
APR. 21	7.9	1.5	7	--	.15	--	--	--	--
JUNE 3	8.4	.0	4	--	.06	--	--	--	--
JUNE 23	5.7	2.1	61	--	--	--	--	--	--
JULY 22	7.6	--	33	--	.70	--	--	--	--
SEPT. 2	6.9	--	19	--	.01	--	--	--	--
SEPT. 17	6.6	.5	--	--	--	--	--	--	--

RED RIVER BASIN

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07373000 BIG CREEK AT POLLOCK, LA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.9	15.5	7.2	6.6	8.3	12.8	16.1	21.1	21.6	25.5	25.5	24.4
2	19.9	13.9	6.6	6.1	8.3	14.4	16.1	17.2	21.8	25.5	26.1	23.9
3	20.0	12.8	6.6	6.1	7.2	15.5	14.4	17.2	21.1	--	26.1	23.9
4	20.5	12.2	7.2	5.5	5.0	15.5	14.4	16.6	20.0	--	26.1	25.0
5	21.1	11.1	6.6	5.0	5.5	15.5	14.4	16.6	19.4	--	25.5	25.0
6	21.1	11.1	7.8	5.5	7.2	14.4	14.4	18.3	19.4	--	25.0	25.5
7	21.1	12.8	8.3	6.1	8.3	14.4	15.5	18.9	19.4	--	25.0	25.5
8	21.1	13.9	8.3	6.1	8.9	12.8	16.6	18.9	20.0	--	23.9	25.5
9	20.5	14.4	8.3	5.0	8.9	12.8	16.6	19.4	20.5	--	25.0	25.5
10	20.5	14.4	8.9	4.4	7.8	13.3	16.6	20.5	21.1	--	25.5	23.9
11	21.6	15.0	8.9	4.4	7.8	13.9	16.1	21.6	21.1	--	25.5	24.4
12	22.8	16.1	7.8	5.5	8.3	12.8	16.1	22.8	21.6	--	25.0	23.9
13	21.8	16.6	7.8	6.1	8.3	10.0	17.8	22.8	23.3	--	23.9	24.4
14	18.9	14.4	8.3	6.1	9.4	9.4	17.2	21.8	25.0	--	23.9	24.4
15	15.0	10.5	9.4	6.1	11.1	10.0	16.6	21.6	23.9	--	23.9	24.4
16	15.0	9.4	10.0	6.6	10.0	11.1	16.6	21.1	23.9	--	25.0	23.9
17	15.0	11.1	9.4	7.8	7.8	11.6	18.9	21.1	23.3	--	25.0	23.9
18	15.0	14.4	9.4	8.3	8.3	12.2	20.0	21.1	23.3	--	24.4	23.3
19	15.5	13.5	9.4	7.8	11.1	13.3	20.0	20.0	23.3	--	24.4	23.3
20	17.2	10.0	10.0	6.1	11.1	13.3	18.9	21.1	23.3	--	24.4	23.3
21	18.3	9.4	10.0	5.0	9.4	11.1	18.9	21.6	23.3	--	24.4	23.9
22	18.3	9.4	9.4	3.9	10.0	9.4	20.0	21.8	22.8	--	25.0	23.3
23	16.6	10.5	8.3	4.4	11.6	10.0	21.1	21.8	23.3	--	25.0	22.8
24	15.0	12.2	8.3	5.0	11.6	11.1	21.1	21.8	23.3	22.8	24.4	21.8
25	16.1	13.3	8.3	6.6	11.6	13.3	21.1	21.8	23.9	23.3	23.3	21.8
26	16.6	13.3	8.3	9.4	11.6	12.8	21.6	22.8	25.0	22.8	22.8	21.1
27	17.2	13.3	7.8	11.6	10.5	11.1	21.8	21.8	25.0	23.3	23.3	20.0
28	16.6	12.8	7.8	13.3	11.1	11.6	22.8	21.1	24.4	23.9	23.3	17.8
29	15.0	10.5	10.5	13.9	--	11.6	23.3	21.6	25.5	25.0	23.3	16.6
30	15.5	9.4	10.0	12.2	--	11.1	23.3	22.8	26.1	25.5	23.3	16.1
31	16.1	--	8.3	8.9	--	14.4	--	22.8	--	25.5	24.4	--
AVERAGE	18.2	12.6	8.5	6.9	9.1	12.5	18.3	20.4	22.6	--	24.5	23.1

07373420 MISSISSIPPI RIVER NEAR ST. FRANCISVILLE, LA.

LOCATION.--Lat 30°45'30", long 91°23'45", in lot 31, T.3 S., R.11 E., West Feliciana Parish, at ferry at State Highway 10 crossing, 2 miles southwest of St. Francisville.

DRAINAGE AREA.--1,243,000 sq mi, arbitrarily determined.

PERIOD OF RECORD.--chemical analyses August 1954 to September 1970.

Water temperatures: August 1954 to September 1969.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 558 micromhos Oct. 21; minimum daily, 261 micromhos Jan. 20.

Water temperatures: Maximum, 30°C Aug. 13, 14, 16; minimum, 2°C Jan. 23.

EXTREMES, 1954-70.--Dissolved solids (1954-67): Maximum, 342 mg/l Nov. 11-20, 1963; minimum, 111 mg/l Feb. 11-19, 1957.

Hardness (1954-67): Maximum, 204 mg/l Dec. 21-31, 1965; minimum, 75 mg/l Feb. 11-19, 1957.

Specific conductance: Maximum daily, 683 micromhos Oct. 16, 1955; minimum daily, 173 micromhos Apr. 15, 1955.

Water temperatures: Maximum, 31°C on several days during July and August 1955, August 1956, July 1962, July 1965, and July and August 1966; minimum, 1°C Jan. 29, 30, 1961.

REMARKS.--Records of discharge are given for Mississippi River at Tarbert Landing, and furnished by U.S. Corps of Engineers.

Flow at Tarbert Landing is considered representative of flow at St. Francisville.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 22	--	4.9	10	52	15	43	4.4	169	77	46
OCT, 31	--	16	20	29	12	17	4.2	110	44	17
NOV, 19	--	8.0	10	45	18	27	3.4	168	69	23
DEC, 19	--	7.7	0	49	14	27	3.9	157	68	27
DEC, 22	--	8.2	0	48	13	25	4.0	146	68	27
JAN, 15	--	5.4	0	33	5.7	16	2.3	85	40	20
JAN, 19	--	--	--	--	--	--	--	--	--	--
FEB, 16	--	7.3	20	39	9.9	20	3.5	108	55	24
MAR, 3	--	--	--	--	--	--	--	--	--	--
MAR, 18	--	6.7	20	38	8.0	17	2.4	106	49	19
APR, 10	--	--	--	--	--	--	--	--	--	--
APR, 27	--	6.0	20	40	10	22	3.1	112	52	27
MAY, 8	--	--	--	--	--	--	--	--	--	--
MAY, 25	--	5.9	20	38	8.0	16	3.0	117	41	16
JUNE, 9	--	9.0	0	43	13	11	4.4	143	48	16
JUNE, 17	--	5.1	10	43	11	18	3.2	132	54	17
JULY, 8	--	7.3	0	42	11	17	4.0	135	45	21
AUG, 7	--	--	--	--	--	--	--	--	--	--
AUG, 13	--	.9	0	47	14	32	4.1	154	70	27
SEPT, 8	--	6.5	20	43	13	18	5.1	147	63	19
SEPT, 28	--	3.9	0	48	12	30	5.1	143	79	25

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 22	0.3	2.0	336	328	190	51	578	20.5	0	7.5
OCT, 31	.2	3.5	201	197	120	30	327	17.0	5	7.5
NOV, 19	.3	4.3	289	282	188	50	481	12.0	5	7.9
DEC, 19	.4	3.5	287	278	178	49	470	8.5	15	7.5
DEC, 22	.2	3.7	275	269	174	54	418	8.5	5	7.6
JAN, 15	.2	3.2	169	168	106	36	283	4.5	--	7.5
JAN, 19	--	--	--	--	--	--	268	3.0	--	--
FEB, 16	.2	5.1	221	217	138	49	364	5.0	--	7.3
MAR, 3	--	--	--	--	--	--	325	7.5	--	--
MAR, 18	.3	4.7	204	197	128	41	332	11.5	--	7.6
APR, 10	--	--	--	--	--	--	338	12.5	--	--
APR, 27	.2	19	250	234	142	50	377	20.0	10	7.4
MAY, 8	--	--	--	--	--	--	327	20.0	--	--
MAY, 25	.2	2.7	198	189	128	32	318	26.0	20	7.7
JUNE, 9	.3	6.1	261	221	160	43	386	29.0	5	7.3
JUNE, 17	.3	7.0	248	224	152	44	364	26.0	20	8.0
JULY, 8	.2	5.0	245	215	150	39	392	--	10	7.3
AUG, 7	--	--	--	--	--	--	468	31.5	--	--
AUG, 13	.3	2.6	287	274	174	48	478	30.0	5	7.4
SEPT, 8	.3	1.8	--	242	162	41	425	30.5	5	7.3
SEPT, 28	.4	2.5	291	279	170	53	470	25.0	0	7.7

07373420 MISSISSIPPI RIVER NEAR ST. FRANCISVILLE, LA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT, 22	--	--	--	--	--	--	--	--	--
OCT, 31	8.6	3.1	27	0.23	0.70	249	1600	120	480
NOV, 19	9.9	1.5	14	.00	1.0	134	490	60	150
DEC, 19	--	--	--	--	--	--	--	--	--
DEC, 22	11.0	7.5	62	.00	.08	95	2000	180	--
JAN, 15	12.0	4.4	16	.00	.40	278	600	190	360
JAN, 19	--	--	--	--	--	--	--	--	--
FEB, 16	11.0	.1	24	.00	1.2	285	1200	180	180
MAR, 3	--	--	--	--	--	--	--	--	--
MAR, 18	9.6	.6	0	.20	.60	193	1200	180	180
APR, 10	--	--	--	--	--	--	--	--	--
APR, 27	7.6	4.2	16	.00	.62	146	900	75	140
MAY, 8	--	--	--	--	--	--	--	--	--
MAY, 25	4.2	2.6	7	.00	.41	144	230	35	180
JUNE, 9	--	--	--	--	--	--	--	--	--
JUNE, 17	7.5	4.5	19	.00	.36	398	16000	62	600
JULY, 8	--	--	--	--	--	--	--	--	--
AUG, 7	--	--	--	--	--	--	--	--	--
AUG, 13	7.2	--	9	--	.93	--	--	--	--
SEPT, 8	--	--	--	--	--	--	--	--	--
SEPT, 28	6.9	1.8	9	--	.20	--	--	--	--

MISSISSIPPI RIVER BASIN

07373420 MISSISSIPPI RIVER NEAR ST. FRANCISVILLE, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C) WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	489	353	456	391	328	326	320	375	305	344	480	388
2	443	355	451	372	330	325	323	375	312	364	475	395
3	453	375	448	359	332	314	321	321	303	365	465	403
4	454	379	459	406	336	315	320	322	339	356	464	395
5	452	400	453	408	335	306	322	316	341	356	482	414
6	451	398	451	358	348	308	328	316	351	381	481	414
7	444	413	450	357	348	305	315	308	352	378	484	422
8	454	411	459	323	347	308	318	305	351	377	479	423
9	482	459	460	296	360	314	318	328	337	391	479	422
10	480	415	459	298	392	318	317	330	371	395	469	438
11	518	418	470	298	392	319	349	328	374	394	468	441
12	502	438	472	293	390	322	344	328	387	391	483	437
13	523	443	472	291	388	322	347	313	388	404	458	437
14	483	442	482	292	388	342	345	313	372	404	425	431
15	486	457	487	288	393	341	348	307	369	402	400	432
16	524	443	476	286	390	335	347	307	414	425	375	439
17	483	479	484	284	389	336	322	308	390	427	360	425
18	476	469	483	283	384	337	325	315	388	418	349	421
19	513	474	431	263	379	335	312	316	390	427	350	429
20	522	482	438	261	373	337	312	318	388	427	360	440
21	558	470	405	267	370	339	316	317	374	441	358	438
22	537	464	413	268	368	339	317	314	379	438	441	436
23	480	487	444	267	349	339	349	316	359	449	445	455
24	430	486	452	280	348	333	344	313	360	452	459	439
25	380	488	456	278	322	334	367	317	374	470	425	431
26	308	476	495	303	323	337	366	317	375	477	401	468
27	318	461	485	302	313	337	396	314	341	462	389	469
28	312	463	474	307	319	321	397	311	347	462	387	468
29	319	465	487	309	--	318	383	316	348	470	360	453
30	312	466	448	308	--	322	382	316	348	469	379	467
31	314	--	441	359	--	320	--	319	--	478	375	--
AVERAGE	449	445	459	311	358	326	339	329	331	416	426	432

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	15	13	6	6	6	12	18	23	27	29	27
2	24	15	12	6	6	6	12	18	23	27	29	27
3	24	15	12	6	5	7	11	17	22	27	29	27
4	24	14	12	6	4	8	11	18	23	28	29	27
5	23	14	10	6	4	8	11	18	23	27	29	27
6	23	14	9	6	7	8	11	18	23	28	29	27
7	23	15	10	6	7	8	11	19	23	28	29	27
8	23	15	9	4	7	8	12	19	24	28	29	27
9	24	14	8	5	7	8	13	19	23	28	29	27
10	24	14	8	6	6	8	14	20	24	28	29	27
11	24	14	8	6	6	8	13	20	24	28	29	27
12	24	15	8	4	6	10	13	21	25	28	29	27
13	24	15	8	4	6	10	13	21	25	28	30	27
14	21	14	7	5	6	8	13	22	25	28	30	27
15	21	13	7	6	6	8	13	22	25	28	29	27
16	24	14	8	5	6	8	13	21	26	28	30	27
17	21	14	8	4	5	9	13	20	26	28	28	27
18	21	13	8	3	5	9	14	21	26	28	28	27
19	21	13	8	4	6	9	14	21	26	29	28	27
20	21	12	8	4	5	9	15	22	26	29	27	27
21	21	12	9	3	4	10	17	22	26	28	27	27
22	19	12	8	3	4	8	17	23	26	28	27	27
23	19	12	8	2	5	8	18	23	26	26	27	26
24	19	12	8	3	4	8	18	24	26	26	27	27
25	18	12	8	3	4	8	17	23	27	26	27	27
26	17	12	8	6	4	9	18	23	27	26	27	26
27	17	11	9	6	4	9	18	23	27	27	27	26
28	16	10	9	7	6	9	18	23	27	27	27	26
29	16	9	9	7	--	9	19	24	27	27	27	26
30	16	11	6	7	--	9	19	24	27	27	27	24
31	16	--	6	7	--	10	--	22	--	27	27	--
AVERAGE	21	13	9	5	5	8	14	21	25	28	28	27

07373420 MISSISSIPPI RIVER NEAR ST. FRANCISVILLE, LA.--Continued

SULFATE (SO₄) IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	51	71	60	37	45	44	47	34	41	72	--
2	62	58	71	59	40	46	48	47	35	48	74	--
3	67	58	75	55	39	46	45	42	36	48	68	--
4	66	60	72	50	39	45	46	42	40	41	67	--
5	69	65	73	45	39	46	46	42	40	44	69	--
6	67	68	75	44	41	46	45	42	40	45	74	--
7	58	65	72	43	41	46	45	42	38	44	74	--
8	62	62	73	39	42	44	46	43	41	44	73	--
9	71	74	73	38	46	43	46	43	41	42	72	--
10	68	71	73	38	50	43	45	43	40	48	67	--
11	77	70	74	38	55	43	50	42	45	48	67	--
12	83	73	76	39	61	41	50	44	48	48	71	--
13	77	68	71	40	61	41	49	43	49	50	74	--
14	76	72	75	41	61	46	50	41	44	53	73	--
15	76	80	76	44	60	47	50	40	46	54	73	--
16	78	74	72	48	60	46	51	40	45	49	73	--
17	71	80	72	40	56	46	47	40	48	52	--	--
18	69	81	71	40	57	45	46	40	46	53	--	--
19	75	85	68	35	55	46	46	39	48	58	--	--
20	76	88	68	36	55	45	46	40	44	54	--	--
21	77	84	64	36	53	45	48	38	45	57	--	--
22	81	85	65	35	54	44	48	38	47	59	--	--
23	71	83	71	36	52	45	49	38	42	60	--	--
24	65	82	70	36	52	46	50	39	44	58	--	--
25	51	85	74	37	47	48	50	39	48	62	--	--
26	42	83	78	39	47	46	50	38	46	66	--	--
27	42	85	81	39	45	47	51	38	40	64	--	--
28	41	81	76	38	45	47	51	38	44	64	--	--
29	41	83	80	38	--	47	50	38	43	67	--	--
30	41	81	70	37	--	47	50	38	44	64	--	--
31	42	--	68	37	--	46	--	39	--	68	--	--
AVERAGE	65	74	72	42	50	45	48	41	43	55	--	--

CHLORIDE (CL) IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	17	25	20	17	18	18	27	13	15	24	15
2	25	17	24	26	18	18	19	28	13	17	26	17
3	26	19	24	30	19	18	18	20	14	17	25	18
4	26	18	29	29	18	17	19	19	14	17	25	18
5	26	19	28	29	18	16	18	17	14	16	25	19
6	26	19	28	28	20	16	21	17	14	20	24	18
7	32	20	29	28	18	16	17	17	14	21	24	19
8	34	20	28	30	19	16	16	17	15	21	26	19
9	32	21	29	25	21	18	17	19	14	19	26	19
10	36	18	29	19	23	18	16	19	16	19	24	18
11	35	19	29	19	24	18	17	18	16	18	26	24
12	34	19	30	19	25	18	17	19	16	20	27	22
13	34	20	29	20	25	18	17	17	16	20	23	24
14	26	20	30	20	25	18	17	16	16	21	23	21
15	28	21	31	29	25	18	16	15	15	20	22	23
16	34	20	29	28	25	18	18	15	18	22	20	21
17	28	24	29	20	25	18	16	15	19	22	17	23
18	24	24	30	20	25	18	16	15	18	22	15	24
19	31	24	28	16	27	18	16	15	18	20	16	21
20	36	26	28	17	26	16	17	15	18	21	17	22
21	47	19	27	16	24	18	16	15	17	20	17	21
22	36	20	26	16	24	19	16	15	18	21	20	21
23	31	23	30	18	23	19	21	15	16	23	22	23
24	26	22	29	16	23	20	20	14	16	24	20	21
25	21	24	32	16	18	20	26	15	16	26	16	22
26	16	22	33	17	19	19	26	14	16	25	18	24
27	17	24	30	16	21	19	29	14	15	25	17	23
28	17	23	30	17	20	18	30	14	15	25	18	25
29	18	25	31	16	--	18	30	14	15	25	20	22
30	15	26	30	16	--	17	30	14	16	26	19	24
31	17	--	28	27	--	18	--	13	--	25	19	--
AVERAGE	28	21	29	21	22	18	20	17	16	21	21	21

07373423 MISSISSIPPI RIVER BELOW ST. FRANCISVILLE, LA.

LOCATION.--Lat 30°42'05", long 91°20'38", in lot 49, T.4 S., R.11 E., West Feliciana Parish at Crown Zellerbach Corp. paper mill, 5.7 miles southeast of St. Francisville.

DRAINAGE AREA.--1,243,000 sq mi, arbitrarily determined.

PERIOD OF RECORD.--Chemical analyses November 1968 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 7	--	4.7	10	42	12	26	4.1	146	58	29
OCT. 21	--	4.2	10	50	15	41	4.9	167	75	46
NOV. 7	--	6.7	10	45	11	21	4.3	149	56	19
NOV. 21	--	7.2	10	51	15	26	3.6	170	70	22
DEC. 2	--	7.7	10	45	14	24	3.9	147	67	24
DEC. 19	--	--	--	--	--	--	--	--	--	--
JAN. 6	--	7.1	10	35	9.9	24	3.5	114	46	30
JAN. 19	--	5.9	40	27	6.5	13	2.3	81	32	17
FEB. 2	--	--	--	--	--	--	--	--	--	--
FEB. 17	--	6.2	20	40	11	20	3.0	108	61	26
MAR. 3	--	--	--	--	--	--	--	--	--	--
MAR. 16	--	7.0	60	38	9.0	17	2.6	112	49	20
APR. 13	--	7.0	30	40	9.3	16	2.4	116	52	17
APR. 27	--	--	--	--	--	--	--	--	--	--
MAY 11	--	6.2	30	37	7.9	14	2.7	108	42	18
JUNE 3	--	8.3	0	38	11	8.0	4.3	129	39	13
JUNE 24	--	8.9	10	40	14	10	4.5	139	46	15
AUG. 3	--	--	--	--	--	--	--	--	--	--
AUG. 18	--	1.8	10	43	14	20	4.8	142	70	23
SEPT. 2	--	6.2	10	40	12	18	5.0	134	62	18
SEPT. 22	--	2.6	0	42	14	25	3.8	148	65	21

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 7	0.3	2.1	296	250	155	35	442	24.0	0	7.7
OCT. 21	.3	2.0	333	320	186	49	566	20.0	0	7.6
NOV. 7	.3	1.5	245	238	158	36	413	15.0	10	6.8
NOV. 21	.3	3.2	294	282	190	51	486	11.0	5	7.2
DEC. 2	.4	3.4	279	261	172	51	457	10.0	10	7.5
DEC. 19	--	--	--	--	--	--	476	8.0	--	--
JAN. 6	.3	.6	230	212	128	34	377	--	10	7.1
JAN. 19	.0	.6	156	144	94	28	267	3.0	5	7.8
FEB. 2	--	--	--	--	--	--	341	6.0	--	--
FEB. 17	.2	5.9	247	226	144	55	403	5.0	0	7.6
MAR. 3	--	--	--	--	--	--	320	7.5	--	--
MAR. 16	.2	3.6	211	201	132	40	349	10.0	5	7.7
APR. 13	.2	3.6	215	204	138	43	363	12.5	5	7.7
APR. 27	--	--	--	--	--	--	394	18.5	--	--
MAY 11	.2	2.4	197	183	125	36	330	21.0	5	7.5
JUNE 3	.2	2.8	209	189	140	34	334	24.5	5	7.1
JUNE 24	.2	5.2	249	212	158	44	369	27.5	5	7.2
AUG. 3	--	--	--	--	--	--	471	29.5	--	--
AUG. 18	.3	1.4	258	248	167	51	442	29.0	0	7.2
SEPT. 2	.3	1.9	239	229	150	40	405	28.0	5	7.3
SEPT. 22	.2	.4	258	247	162	41	432	29.0	15	7.8

MISSISSIPPI RIVER MAIN STEM

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07373423 MISSISSIPPI RIVER BELOW ST. FRANCISVILLE, LA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT. 7	7.2	--	--	--	--	--	--	--	--
OCT. 21	7.8	--	--	--	--	--	--	--	--
NOV. 7	8.5	--	--	--	--	--	--	--	--
NOV. 21	--	--	--	--	--	--	--	--	--
DEC. 2	10.0	--	--	--	--	--	--	--	--
DEC. 19	11.0	--	--	--	--	--	--	--	--
JAN. 6	--	--	--	--	--	--	--	--	--
JAN. 19	11.8	--	--	--	--	--	--	--	--
FEB. 2	12.0	--	--	--	--	--	--	--	--
FEB. 17	10.5	--	--	--	--	--	--	--	--
MAR. 3	--	--	--	--	--	--	--	--	--
MAR. 16	10.4	--	--	--	--	--	--	--	--
APR. 13	9.1	--	--	--	--	--	--	--	--
APR. 27	7.5	--	--	--	--	--	--	--	--
MAY 11	6.3	--	--	--	--	--	--	--	--
JUNE 3	--	--	--	--	--	--	--	--	--
JUNE 24	--	--	--	--	--	--	--	--	--
AUG. 3	6.8	--	--	--	--	--	--	--	--
AUG. 18	--	--	--	--	--	--	--	--	--
SEPT. 2	--	--	--	--	--	--	--	--	--
SEPT. 22	6.6	--	--	--	--	--	--	--	--

PH (UNITS), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	7.3	--	--	--	7.6	--	7.6	--	7.8	8.2	--
2	8.0	7.2	7.5	--	7.4	7.4	--	7.4	--	7.8	8.2	7.9
3	8.0	7.3	6.9	--	7.2	7.3	--	7.4	7.4	7.8	8.3	--
4	7.9	7.3	6.9	--	7.3	7.3	--	7.3	--	7.9	8.0	--
5	7.8	7.4	6.8	--	7.4	7.4	--	7.2	--	7.8	8.1	--
6	7.7	7.5	6.9	7.4	7.4	7.4	--	7.2	--	7.8	8.2	--
7	7.6	7.6	6.8	--	7.4	7.5	--	7.2	--	8.0	8.1	--
8	7.6	--	6.8	--	7.6	7.5	--	7.2	7.8	8.0	7.8	7.2
9	7.6	--	6.9	--	7.6	7.5	--	7.3	7.8	7.7	7.9	7.3
10	7.7	--	6.9	--	7.6	7.4	--	7.3	7.8	7.7	7.9	7.4
11	7.9	--	6.8	--	7.8	7.4	--	7.3	7.9	7.6	8.0	7.4
12	8.0	--	6.9	--	7.8	7.3	--	7.3	7.9	7.6	8.0	7.4
13	8.0	--	7.0	--	7.6	6.8	7.3	7.3	7.9	8.1	8.0	7.5
14	7.9	--	7.0	--	7.7	7.4	7.3	7.3	7.9	8.2	7.9	7.5
15	7.9	--	6.9	--	7.6	7.4	7.1	7.3	7.8	8.2	7.9	7.5
16	8.0	--	7.0	--	7.6	7.4	7.0	7.3	7.8	8.1	7.9	7.6
17	8.0	7.4	7.0	--	7.7	7.6	7.2	7.4	7.9	8.0	7.9	7.6
18	8.1	7.9	7.0	--	--	7.6	7.2	7.1	7.9	8.4	7.9	7.6
19	8.2	6.9	7.4	7.8	--	7.6	7.2	7.3	7.9	8.4	--	7.5
20	8.2	7.2	7.3	--	--	7.7	7.2	7.0	7.9	8.2	--	7.5
21	7.7	7.4	7.3	--	--	7.7	7.3	--	7.9	8.5	--	7.5
22	7.2	7.3	7.2	--	--	7.6	7.4	--	7.9	8.6	--	7.5
23	7.6	7.5	7.3	--	--	--	7.5	--	7.9	8.6	--	7.6
24	7.5	7.6	7.2	--	--	--	7.5	--	7.6	8.7	--	7.6
25	7.5	--	7.2	--	--	--	7.5	--	7.7	8.6	--	7.6
26	7.4	--	7.3	--	--	--	7.6	--	7.8	8.6	--	7.7
27	7.3	--	7.3	--	7.5	--	7.6	--	7.7	8.6	--	7.6
28	7.3	--	7.2	--	7.5	--	7.6	--	7.6	8.5	--	7.3
29	7.2	--	7.1	--	--	--	7.6	--	7.7	8.3	--	--
30	7.2	--	7.2	--	--	--	7.7	--	7.6	8.2	--	--
31	7.3	--	7.0	--	--	--	--	--	--	8.2	--	--
AVERAGE	7.7	--	--	--	--	--	--	--	--	8.1	--	--

MISSISSIPPI RIVER BASIN

07373423 MISSISSIPPI RIVER BELOW ST. FRANCISVILLE, LA.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	10.9	--	6.9	--	5.4	6.8	--
2	--	--	--	--	11.0	10.7	--	7.1	--	5.4	6.7	6.4
3	--	--	--	--	11.9	10.7	--	7.1	6.0	5.3	6.7	--
4	--	--	--	--	11.7	10.6	--	7.0	6.2	5.4	6.9	--
5	--	--	--	--	11.2	10.5	--	7.0	6.1	5.8	7.1	--
6	--	--	--	12.0	11.8	10.5	--	6.8	5.9	5.9	6.8	--
7	7.2	8.5	--	--	11.2	10.5	--	6.7	6.1	5.5	5.9	--
8	--	--	--	--	11.7	10.5	--	6.6	6.4	5.8	4.6	5.2
9	--	--	--	--	11.8	10.0	--	6.7	6.6	6.8	4.5	5.2
10	--	--	--	--	11.4	9.8	--	6.6	6.7	7.0	4.5	4.7
11	--	--	--	--	11.9	9.4	--	6.5	6.7	7.2	4.8	4.6
12	--	--	--	--	12.0	9.6	--	6.4	6.4	7.2	5.2	4.7
13	--	--	--	--	11.9	9.4	9.1	6.3	6.3	7.0	5.4	4.7
14	--	--	--	--	11.8	9.4	8.9	6.2	6.1	7.2	5.2	4.6
15	--	--	--	--	11.2	9.3	8.6	6.2	5.6	7.2	5.3	4.7
16	--	--	--	--	11.0	9.4	8.4	6.3	5.7	7.1	5.1	--
17	--	--	--	--	10.5	10.3	8.2	6.3	5.6	7.1	4.9	--
18	--	--	--	--	--	8.4	8.2	--	5.5	7.0	4.5	--
19	--	--	--	11.8	--	7.9	8.4	--	5.5	6.9	--	--
20	--	--	--	--	--	9.2	8.3	--	5.7	6.8	--	--
21	7.8	--	--	--	--	10.3	8.2	--	5.5	6.9	--	--
22	--	--	--	--	--	10.4	8.1	--	5.4	6.9	--	6.6
23	--	--	--	--	--	--	8.1	--	5.5	6.7	--	--
24	--	--	--	--	--	--	8.0	--	6.0	6.7	--	--
25	--	--	--	--	--	--	7.7	--	5.7	6.3	--	--
26	--	--	--	--	--	--	7.6	--	5.3	5.7	--	--
27	--	--	--	--	11.1	--	7.6	--	5.4	5.5	--	--
28	--	--	--	--	11.1	--	7.5	--	5.2	5.5	--	--
29	--	--	--	--	--	--	7.4	--	5.0	5.9	--	--
30	--	--	--	--	--	--	7.2	--	5.0	6.1	--	--
31	--	--	--	--	--	--	--	--	--	6.7	--	--
AVERAGE	--	--	--	--	--	--	--	--	--	6.4	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	14.0	8.5	--	--	7.5	--	18.5	24.0	27.5	28.0	--
2	23.0	14.0	8.0	--	6.0	7.5	--	17.5	24.5	28.0	28.5	28.0
3	23.0	13.5	10.0	--	4.5	8.0	--	17.5	24.5	28.0	28.5	--
4	23.5	13.5	9.5	--	4.5	8.0	--	18.0	24.5	27.5	29.5	--
5	23.0	13.0	8.0	--	5.0	7.5	--	18.0	24.5	27.5	30.0	--
6	23.0	13.0	8.5	4.5	5.0	8.0	--	18.5	24.5	28.0	30.0	--
7	23.0	13.5	8.0	--	5.0	7.5	--	19.0	24.5	28.0	30.5	--
8	23.0	--	8.0	--	5.0	7.5	--	19.5	24.5	28.5	30.5	29.0
9	22.5	--	8.0	--	4.5	8.0	--	20.0	24.5	28.0	30.5	29.5
10	23.0	--	8.5	--	4.0	8.5	--	20.5	24.5	28.0	30.5	30.0
11	23.0	--	7.5	--	4.0	10.0	--	20.5	24.5	27.5	30.0	29.5
12	23.0	--	7.5	--	4.0	9.5	--	20.5	25.0	27.5	29.5	29.5
13	22.5	--	8.0	--	4.0	9.0	12.0	20.5	25.0	27.5	30.0	29.5
14	21.5	--	9.0	--	5.0	9.5	12.0	21.0	25.5	28.0	29.0	29.5
15	20.5	11.5	9.0	--	5.5	9.5	13.0	21.0	25.0	28.0	29.0	29.5
16	21.0	11.5	8.5	--	5.0	9.0	13.5	21.5	25.0	28.5	28.5	29.0
17	20.5	12.0	8.5	--	5.0	10.0	14.0	21.5	25.0	28.5	28.5	29.0
18	20.0	12.0	8.5	--	--	9.0	14.0	21.5	25.5	28.0	28.5	29.0
19	20.0	10.0	9.0	3.0	--	8.0	14.5	21.5	25.5	28.0	--	29.0
20	20.5	10.0	8.0	--	--	8.5	14.5	22.0	26.0	28.5	--	29.5
21	20.0	9.9	9.0	--	--	9.0	15.0	22.5	26.5	28.5	--	29.5
22	19.0	9.7	8.0	--	--	10.0	16.0	22.5	27.0	28.0	--	29.5
23	18.5	9.6	8.0	--	--	--	16.5	23.0	27.0	28.0	--	29.0
24	17.5	9.5	7.5	--	--	--	17.0	23.0	27.0	27.5	--	28.5
25	17.0	10.0	8.0	--	--	--	17.5	23.5	27.0	27.0	--	28.5
26	16.5	9.9	7.0	--	--	--	18.0	23.5	27.5	27.0	--	28.0
27	16.0	9.8	7.5	--	6.0	--	18.0	23.5	27.5	27.0	--	27.0
28	15.0	9.6	8.5	--	6.0	--	18.5	23.5	27.5	27.0	--	26.0
29	15.0	9.0	8.5	--	--	--	18.5	24.0	27.5	27.5	--	--
30	15.0	8.6	6.5	--	--	--	19.0	24.0	27.5	27.5	--	--
31	15.0	--	6.0	--	--	--	--	24.0	--	28.0	--	--
AVERAGE	20.2	--	8.2	--	--	--	--	21.0	25.6	24.8	--	--

07374400 MISSISSIPPI RIVER AT LULING FERRY, LA.

LOCATION.--Lat 29°56'19", long 90°21'49", St. Charles Parish, at Ferry at Luling-to-Destrehan crossing, 17 miles west of New Orleans.

DRAINAGE AREA.--1,243,600 sq mi, arbitrarily determined.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1970.

Water temperatures: October 1957 to September 1970.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 565 micromhos Oct 1; minimum daily, 287 micromhos Jan. 21.

Water temperatures: Maximum, 31°C Aug. 10, 13-15; minimum, 4°C Jan. 15, 22.

EXTREMES, 1957-70.--Dissolved solids (1957-67): Maximum, 344 mg/l Dec. 21-31, 1965; minimum, 126 mg/l Mar. 21-31, 1964.

Hardness (1956-67): Maximum, 210 mg/l Dec. 21-31, 1965; minimum, 86 mg/l Mar. 21-31, 1964.

Specific conductance: Maximum daily, 636 micromhos Oct. 12, 1959; minimum daily, 219 micromhos Mar. 27, 28, 30, 1964.

Water temperatures: Maximum, 32°C July 21, 24, Aug. 14, 1962, July 2, 3, 5, 6, 1969; minimum, 3°C Jan. 12, 1962.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	SULFATE (S04) (MG/L)	CHLORIDE (CL) (MG/L)
OCT, 28	--	5.7	20	46	11	33	4.4	146	65	33
NOV, 19	--	7.7	0	54	12	30	4.3	160	73	30
JAN, 9	--	6.0	0	36	9.7	26	3.0	109	49	35
FEB, 16	--	7.0	0	41	11	22	3.1	112	65	28
APR, 1	--	7.3	0	36	8.8	18	2.6	101	52	25
MAY 13	--	6.8	0	36	8.8	17	2.8	112	44	21
JUNE 22	--	7.9	40	44	12	15	4.6	133	53	24
JULY 28	--	5.3	10	52	14	29	4.1	165	66	35
SEPT, 2	--	6.4	0	42	10	26	4.0	128	58	30

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT, 28	0.4	0.1	326	271	160	40	470	18.5	10	6.9
NOV, 19	.6	4.2	304	295	186	55	504	14.0	10	7.1
JAN, 9	.2	.7	230	220	130	41	403	4.0	5	7.6
FEB, 16	.2	3.7	253	236	149	57	415	5.5	5	7.8
APR, 1	.3	.1	211	200	126	43	353	12.0	5	7.2
MAY 13	.2	.2	193	192	126	34	337	--	5	7.5
JUNE 22	.4	5.2	271	232	158	49	406	--	10	7.2
JULY 28	.5	.4	307	287	186	60	508	--	5	7.1
SEPT, 2	.6	.4	254	240	148	43	420	--	10	7.2

MISSISSIPPI RIVER BASIN

07374400 MISSISSIPPI RIVER AT LULING FERRY, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C) WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	565	362	524	538	375	338	360	392	335	374	537	407
2	553	364	507	532	375	343	361	394	339	377	540	414
3	529	384	499	510	375	334	360	412	340	385	543	424
4	--	397	512	481	378	345	360	386	341	398	541	448
5	--	412	501	469	375	345	365	349	356	403	539	447
6	--	433	522	461	372	344	362	344	361	393	548	457
7	--	444	526	453	386	345	358	333	371	388	540	458
8	--	437	530	434	392	340	352	333	381	395	535	468
9	--	448	516	412	387	343	363	338	387	396	527	468
10	--	452	512	389	395	337	361	348	400	407	534	469
11	--	461	499	318	411	344	358	346	401	412	521	467
12	--	473	503	321	418	346	366	347	409	417	520	479
13	--	470	525	321	424	332	376	341	413	418	526	476
14	--	475	528	321	423	357	377	335	416	432	537	479
15	--	485	544	314	422	367	388	331	413	439	530	478
16	--	497	547	329	421	366	389	328	437	448	529	492
17	--	498	538	318	420	370	376	325	419	451	510	507
18	--	494	537	311	416	385	364	322	383	462	500	488
19	--	513	536	299	428	386	357	318	401	475	508	496
20	--	525	527	292	412	400	348	324	410	483	497	501
21	--	536	531	287	385	379	348	329	422	483	483	497
22	--	538	519	290	409	377	348	329	412	486	486	503
23	--	547	524	298	376	384	349	391	426	489	492	502
24	--	547	516	304	385	386	355	337	398	495	466	500
25	--	545	504	306	385	388	356	338	395	504	468	500
26	--	536	524	314	375	380	364	338	391	505	421	485
27	--	509	534	325	371	399	372	343	389	511	415	493
28	442	529	542	339	360	378	422	356	407	511	410	493
29	482	534	556	349	--	382	429	347	403	525	413	512
30	364	524	548	350	--	373	411	343	390	537	402	511
31	362	--	548	376	--	361	--	334	--	534	407	--
AVERAGE	--	479	525	366	395	363	369	346	391	449	497	477

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	17	12	8	6	8	12	19	24	28	29	28
2	26	17	12	8	7	8	12	19	24	28	29	28
3	25	16	11	7	6	8	12	18	24	29	29	29
4	--	16	11	7	6	8	12	18	25	28	29	29
5	--	16	11	7	6	9	12	19	24	29	29	29
6	--	16	11	7	7	9	13	19	24	29	29	28
7	--	16	11	6	7	9	13	19	24	29	30	29
8	--	16	11	6	7	10	13	20	25	28	30	29
9	--	16	10	6	7	10	13	21	25	29	30	29
10	--	17	10	5	8	10	13	21	25	28	31	29
11	--	16	10	6	7	11	13	21	25	29	30	29
12	--	16	9	5	7	11	14	22	25	28	30	29
13	--	16	9	5	7	11	14	22	26	28	31	29
14	--	16	9	5	7	11	14	22	26	28	31	29
15	--	14	10	4	7	11	14	22	26	28	31	29
16	--	15	9	5	7	11	14	22	26	28	30	29
17	--	15	9	5	7	11	15	22	26	28	29	29
18	--	16	9	5	7	11	16	22	26	28	29	29
19	--	14	9	5	7	12	15	22	26	28	29	29
20	--	14	9	5	7	11	15	22	26	28	29	29
21	--	14	9	5	7	11	16	22	26	28	29	29
22	--	14	9	4	7	11	16	22	26	28	28	29
23	--	14	9	6	7	11	17	22	26	28	28	29
24	--	13	9	5	7	11	17	23	27	28	29	29
25	--	13	9	6	7	11	17	23	27	28	29	29
26	--	13	9	6	7	11	18	23	27	28	29	28
27	--	12	9	5	7	10	19	23	27	28	29	28
28	18	12	9	6	7	11	18	24	27	29	29	27
29	17	12	9	6	--	12	19	24	28	29	29	27
30	17	12	9	6	--	12	19	24	28	29	29	27
31	17	--	9	6	--	11	--	24	--	29	28	--
AVERAGE	--	15	10	6	7	10	14	21	26	28	29	29

LOCATION.--Lat 29°57'03", long 90°08'17", at Orleans-Jefferson Parish line at Carrollton Street Municipal Water Plant.
DRAINAGE AREA.--1,243,600 sq mi, arbitrarily determined.
PERIOD OF RECORD.--Chemical analyses: May 1967 to September 1970.

DATE		DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT.	3	--	3.0	10	49	14	37	4.6	157	80	35
OCT.	28	--	4.2	20	44	13	34	4.1	153	64	36
NOV.	12	--	7.8	10	48	12	29	2.0	142	66	34
DEC.	5	--	6.8	0	51	13	31	4.0	152	75	32
JAN.	2	--	5.8	40	57	12	35	3.6	140	86	42
JAN.	13	--	6.5	0	32	9.3	18	2.6	99	41	24
FEB.	3	--	5.7	20	40	8.8	22	2.5	120	46	26
MAR.	2	--	--	--	--	--	--	--	--	--	--
APR.	7	--	6.2	0	36	9.7	17	2.6	100	52	23
APR.	20	--	--	--	--	--	--	--	--	--	--
MAY	12	--	6.2	0	37	9.1	16	2.8	114	46	21
JUNE	8	--	8.1	0	42	11	11	4.3	132	46	18
JULY	1	--	8.0	30	40	12	14	4.3	131	50	20
JULY	15	--	--	--	--	--	--	--	--	--	--
JULY	29	--	--	--	--	--	--	--	--	--	--
AUG.	21	--	3.6	20	45	14	25	4.9	147	70	31

DATE		FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT.	3	0,6	0,3	309	300	178	51	513	25,0	5	8,1
OCT.	28	,5	,3	288	275	165	39	492	18,5	5	7,3
NOV.	12	,7	4,0	282	274	168	52	466	16,0	10	7,0
DEC.	5	,5	2,7	300	291	179	54	500	10,0	5	7,2
JAN.	2	,5	4,4	320	315	190	75	537	7,0	0	7,4
JAN.	13	,2	1,8	192	184	118	37	327	3,5	0	7,7
FEB.	3	,5	2,4	224	213	136	38	376	5,0	10	7,4
MAR.	2	--	--	--	--	--	--	352	6,0	--	--
APR.	7	,3	4,0	224	200	130	48	354	11,5	0	7,7
APR.	20	--	--	--	--	--	--	347	15,0	--	--
MAY	12	,3	,2	206	195	130	36	346	21,0	5	7,5
JUNE	8	,2	3,8	240	209	151	43	371	25,0	5	7,2
JULY	1	,4	,2	227	214	148	41	378	28,0	5	7,0
JULY	15	--	--	--	--	--	--	432	28,0	--	--
JULY	29	--	--	--	--	--	--	514	28,5	--	--
AUG.	21	,5	,2	279	266	170	49	476	29,5	5	7,2

[illegible]

MISSISSIPPI RIVER BASIN

07374508 MISSISSIPPI RIVER AT NEW ORLEANS, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	558	--	--	421	363	357	378	--	374	362	--	375
2	572	--	--	410	363	354	338	--	374	364	--	--
3	553	--	--	388	353	354	333	--	342	372	--	--
4	537	--	--	368	346	358	341	--	347	383	--	--
5	532	--	435	407	354	340	342	--	352	377	--	--
6	560	--	440	377	358	326	336	--	357	381	--	--
7	586	--	384	325	364	338	345	--	360	367	--	--
8	588	--	389	303	368	315	348	--	374	379	--	--
9	546	--	445	276	360	318	357	--	382	394	--	--
10	528	--	451	270	363	335	374	--	394	385	--	--
11	511	--	400	301	381	333	376	--	408	414	475	--
12	494	--	381	244	389	330	361	340	410	429	--	--
13	500	--	404	236	401	318	365	353	419	437	--	--
14	505	--	420	--	419	321	359	343	419	431	--	--
15	509	--	431	--	442	339	380	337	409	450	--	--
16	545	--	426	--	430	336	382	345	438	410	--	--
17	557	--	425	--	401	362	369	336	445	403	--	--
18	--	--	423	--	408	371	369	328	400	426	--	--
19	--	--	416	--	405	379	364	341	381	439	--	--
20	--	--	431	--	379	354	358	344	398	445	--	--
21	--	--	436	240	375	370	--	343	416	467	460	--
22	--	--	405	281	379	346	--	343	403	475	--	--
23	--	--	443	289	371	350	--	341	399	455	--	--
24	--	--	412	299	395	359	--	335	398	463	--	--
25	--	--	433	327	383	364	--	365	390	463	--	--
26	--	--	386	330	348	349	--	349	378	461	--	--
27	--	--	418	340	352	335	--	362	397	480	--	--
28	480	--	470	351	346	357	--	371	397	480	--	--
29	--	--	493	360	--	352	--	368	387	479	--	--
30	--	--	489	334	--	373	--	350	385	--	--	--
31	--	--	439	335	--	378	--	349	--	--	--	--
AVERAGE	--	--	--	--	378	347	--	--	391	--	--	--

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	--	--	11.8	12.2	11.4	10.6	--	6.4	5.3	--	5.1
2	6.6	6.5	--	11.8	12.1	11.4	10.6	--	6.5	5.3	--	--
3	6.4	7.3	--	11.8	12.1	--	10.7	--	6.4	5.3	--	--
4	6.2	8.4	--	11.8	11.7	--	10.5	--	6.1	5.2	--	--
5	6.2	7.8	10.6	11.6	11.4	--	10.3	--	6.3	5.3	--	--
6	6.6	--	10.8	11.9	11.4	--	10.0	--	6.5	5.3	--	--
7	6.7	--	10.9	12.1	11.3	--	9.9	--	6.4	5.1	--	--
8	6.8	--	10.9	12.0	11.2	--	9.6	--	6.5	5.1	--	--
9	6.8	--	10.8	11.9	11.2	--	9.4	--	5.9	5.0	--	--
10	6.7	--	10.9	12.0	11.2	--	9.3	--	6.0	5.1	--	--
11	6.7	--	10.7	12.2	11.3	--	9.2	--	6.2	5.0	5.8	--
12	6.0	8.2	11.0	12.4	11.3	--	9.2	6.4	6.3	5.0	--	--
13	6.0	--	11.0	12.4	11.4	--	9.0	--	6.4	5.0	--	--
14	6.1	--	11.1	12.3	11.4	--	8.5	--	6.5	5.2	--	--
15	6.0	--	11.1	12.3	11.4	--	8.4	--	6.4	5.3	--	--
16	6.2	--	11.1	12.4	11.4	--	8.0	--	6.1	5.5	--	--
17	6.4	--	11.1	12.5	11.3	--	7.5	--	5.9	5.4	--	--
18	--	--	11.1	12.5	11.2	--	7.1	--	5.8	5.4	--	--
19	--	--	10.9	12.5	11.2	--	7.4	--	5.8	5.5	--	--
20	--	--	10.9	12.6	11.2	10.4	7.2	--	5.6	5.6	--	--
21	--	--	10.9	12.5	11.3	10.6	--	--	5.7	5.7	5.5	--
22	--	--	11.0	12.1	11.4	10.6	--	--	5.6	5.5	--	--
23	--	--	11.0	11.9	11.3	10.6	--	--	5.5	5.6	--	--
24	--	--	10.8	11.8	11.3	10.5	--	--	5.6	5.6	--	--
25	--	--	11.0	11.9	11.4	10.5	--	5.7	5.6	5.6	--	--
26	--	--	11.1	11.9	11.5	10.9	--	6.2	5.5	5.7	--	--
27	--	--	11.2	11.9	11.4	11.1	--	6.2	5.6	5.8	--	--
28	6.8	--	11.3	11.9	11.4	11.1	--	6.1	5.6	5.9	--	--
29	--	--	11.4	11.9	--	11.0	--	6.2	5.5	5.9	--	--
30	6.4	--	11.7	12.2	--	10.8	--	6.3	5.4	--	--	--
31	--	--	11.7	12.3	--	10.6	--	6.3	--	--	--	--
AVERAGE	--	--	--	12.1	11.4	--	--	--	6.0	--	--	--

07381500 ATCHAFALAYA RIVER AT KROTZ SPRINGS, LA.

LOCATION.--Lat 30°32'48", long 91°45'04", in sec.7, T.6 S., R.7 E., Louisiana meridian, St. Landry-Pointe Coupee Parish line, at first pier from west bank on bridge on U.S. Highway 190, 0.5 mile north of town of Krotz Springs, 0.6 mile upstream from New Orleans, Texas and Mexico Railway Co. bridge, 10 miles upstream from Bayou Courtableau, and 42 miles downstream from confluence of Red River and Old River (head of Atchafalaya River).

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Chemical analyses: August 1952 to September 1955, November 1965 to September 1970.

Water temperatures: August 1952 to September 1955.

EXTREMES, 1969-70.--Specific conductance: Maximum daily, 600 micromhos Oct. 21; minimum daily, 240 micromhos Jan. 19, 20.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 10	--	5.8	0	49	12	40	4.6	158	62	45
NOV. 7	--	5.8	10	42	11	25	2.0	144	53	24
DEC. 2	--	7.2	10	46	11	30	3.9	140	63	33
JAN. 8	--	6.5	30	32	8.3	26	2.8	107	37	33
FEB. 2	--	8.3	10	30	8.0	22	3.0	96	35	30
MAR. 3	--	8.2	0	31	6.7	17	2.8	88	40	21
APR. 10	--	8.1	0	30	7.6	15	2.8	88	39	17
MAY 8	--	8.3	10	31	7.9	14	3.2	99	35	17
JUNE 9	--	8.9	50	37	9.1	16	3.5	117	38	19
JULY 6	--	6.4	20	37	12	18	4.5	127	41	22
AUG. 7	--	.3	0	49	14	30	4.5	160	67	33
SEPT. 8	--	4.0	10	41	12	27	4.6	137	59	28

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 10	0.3	3.1	312	300	170	40	518	24.0	10	7.5
NOV. 7	.3	.7	240	235	151	33	424	17.0	10	6.7
DEC. 2	.3	.5	283	264	161	46	461	10.5	10	7.3
JAN. 8	.2	.7	203	200	114	26	353	5.0	10	7.1
FEB. 2	.2	1.1	198	185	108	29	325	8.0	10	7.5
MAR. 3	.2	2.0	183	172	105	33	298	10.0	15	7.1
APR. 10	.2	3.2	180	166	106	34	287	13.5	15	7.0
MAY 8	.2	3.5	181	169	110	29	295	20.5	20	7.2
JUNE 9	.2	4.7	204	194	130	34	333	25.0	30	7.2
JULY 6	.2	5.4	232	210	140	36	367	29.5	10	7.1
AUG. 7	.2	1.6	303	279	180	49	497	31.5	5	7.5
SEPT. 8	.2	2.9	270	246	150	38	435	29.5	15	7.6

MISSISSIPPI RIVER DELTA

07381500 ATCHAFALAYA RIVER AT KROTZ SPRINGS, LA.--Continued

SPECIFIC CONDUCTANCE (MIRCOMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	530	380	480	450	315	320	270	355	285	340	490	405
2	550	385	470	410	320	320	275	345	290	345	490	400
3	540	395	460	380	330	310	275	330	295	345	485	415
4	510	400	470	425	335	300	270	315	300	340	480	425
5	500	410	470	405	340	320	265	300	300	340	480	420
6	495	415	465	370	345	335	270	290	300	340	480	410
7	495	420	465	350	360	325	275	285	310	355	480	400
8	500	415	460	335	375	310	280	290	320	360	490	400
9	510	425	460	295	385	305	280	300	330	360	495	430
10	520	430	455	265	390	300	275	300	340	365	500	440
11	560	440	450	265	375	285	295	305	340	375	500	440
12	590	455	450	265	370	285	305	300	340	385	500	445
13	595	465	455	270	370	290	310	295	355	395	495	445
14	590	470	465	270	370	290	315	290	355	400	480	450
15	560	485	475	265	360	295	310	290	330	420	485	450
16	560	495	485	260	345	300	310	285	335	425	480	455
17	550	495	495	255	345	300	310	280	340	435	465	460
18	550	500	495	245	350	300	305	280	355	440	460	460
19	555	500	490	240	360	300	300	280	350	440	460	470
20	570	500	470	240	360	300	300	280	350	440	455	485
21	600	500	465	250	345	300	305	280	340	450	440	490
22	595	500	470	255	340	300	310	290	340	455	425	485
23	565	500	490	270	340	305	320	290	340	460	430	480
24	560	525	500	280	335	320	335	290	350	465	420	490
25	450	540	505	280	325	330	370	295	380	470	410	510
26	400	525	500	285	325	310	400	300	380	480	405	530
27	395	520	500	285	325	285	385	300	350	480	430	520
28	360	520	500	295	325	270	365	290	340	480	470	495
29	340	530	495	300	--	265	360	285	330	480	510	470
30	340	505	495	300	--	260	360	285	340	485	480	455
31	365	--	485	305	--	260	--	285	--	485	430	--
AVERAGE	510	453	477	302	348	300	310	296	323	414	468	454

07386935 VERMILION RIVER AT STATE HIGHWAY 3073, AT LAFAYETTE, LA.

LOCATION.--Lat 30°04'40", long 92°03'20", Lafayette Parish, at bridge on State Highway 3073, 4.1 miles downstream from Coulee Mine, 5.1 miles downstream from Pinhook Bridge, and 4.8 miles southwest of Central School at Lafayette.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 1	--	20	20	27	7.9	79	6.6	160	7.0	101
OCT. 15	--	10	30	20	7.3	76	6.9	90	10	114
OCT. 29	--	20	40	33	11	85	8.3	180	16	103
NOV. 25	--	19	10	27	11	96	7.5	145	18	123
DEC. 10	--	7.8	10	11	2.6	25	5.1	45	11	33
DEC. 23	--	13	30	18	5.6	48	5.5	68	15	70
JAN. 7	--	--	--	--	--	--	--	--	--	--
JAN. 23	--	12	40	16	4.6	76	3.7	54	12	122
FEB. 19	--	12	20	19	6.0	46	3.7	75	12	70
MAR. 18	--	8.7	50	17	4.5	12	3.3	64	10	18
MAR. 30	--	--	--	--	--	--	--	--	--	--
APR. 8	--	11	70	20	5.8	22	3.4	93	9.6	26
APR. 23	--	--	--	--	--	--	--	--	--	--
MAY 7	--	--	--	--	--	--	--	--	--	--
MAY 20	--	7.3	100	14	3.4	9.1	3.8	58	6.2	11
JUNE 9	--	8.0	90	14	5.1	20	4.4	62	6.2	31
JUNE 19	--	9.9	360	22	6.3	60	4.9	81	7.8	98
JULY 2	--	12	30	24	9.2	23	4.6	114	10	33
JULY 16	--	10	20	21	6.7	51	4.7	101	10	73
JULY 30	--	12	20	24	9.2	69	4.7	108	10	103
AUG. 14	--	16	10	26	11	130	5.5	124	17	194
SEPT. 3	--	11	190	16	4.9	30	6.1	69	7.8	44
SEPT. 18	--	10	10	26	8.5	16	4.4	115	10	24

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEMPERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 1	0.3	2.4	355	330	100	0	601	26.5	15	7.1
OCT. 15	.2	2.7	298	291	80	6	553	23.0	15	7.5
OCT. 29	.4	10	392	376	128	0	670	20.0	20	7.0
NOV. 25	.4	7.7	387	381	111	0	691	17.0	20	7.2
DEC. 10	.2	1.7	134	119	38	1	216	13.5	30	6.5
DEC. 23	.3	3.8	226	212	68	12	383	15.0	40	6.8
JAN. 7	--	--	--	--	--	--	197	8.0	--	--
JAN. 23	.1	1.0	308	274	59	15	520	9.0	20	7.1
FEB. 19	.2	4.1	233	210	72	11	393	15.0	10	7.2
MAR. 18	.1	1.0	131	107	61	9	185	18.0	40	7.0
MAR. 30	--	--	--	--	--	--	165	18.5	--	--
APR. 8	.1	.4	171	144	74	0	256	22.0	40	6.9
APR. 23	--	--	--	--	--	--	181	28.0	--	--
MAY 7	--	--	--	--	--	--	148	22.0	--	--
MAY 20	.1	1.1	100	85	49	1	146	25.0	55	6.9
JUNE 9	.1	2.3	139	122	56	5	218	25.5	30	6.6
JUNE 19	.3	2.9	258	252	81	15	475	30.0	30	6.9
JULY 2	.1	2.1	181	174	98	5	306	32.5	15	7.0
JULY 16	.1	.3	229	227	80	0	418	31.0	15	6.6
JULY 30	.1	2.0	295	287	98	9	538	31.0	15	6.8
AUG. 14	.1	2.9	480	464	110	8	869	31.5	15	6.8
SEPT. 3	.1	1.8	185	156	60	3	277	28.0	40	6.7
SEPT. 18	.4	.5	167	157	100	6	277	30.0	20	6.8

MISSISSIPPI RIVER DELTA

07386980 VERMILION RIVER AT PERRY, LA.

LOCATION.--Lat 29°57'04", long 92°09'22", Vermilion Parish, at bridge on State Highway 82 at Perry, and 2 miles south of Abbeville.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Chemical analyses: November 1965 to September 1970.

EXTREMES, 1966-70.--Specific conductance: Maximum daily, 2,170 micromhos Nov. 19, 1965; minimum daily, 45 micromhos Feb. 13, 17, 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SiO ₂) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 30	--	11	20	18	5.1	52	7.0	93	8.2	72
NOV. 26	--	18	20	35	12	122	9.2	181	10	170
DEC. 24	--	7.9	190	15	.4	22	6.1	41	13	29
JAN. 23	--	11	40	14	4.9	48	4.6	48	15	73
FEB. 20	--	11	30	20	3.7	41	4.0	73	17	55
MAR. 30	--	9.9	100	16	4.4	14	3.6	64	10	20
APR. 23	--	11	100	16	5.6	24	5.2	78	10	30
MAY 20	--	9.2	120	13	4.0	13	4.0	56	8.0	17
JUNE 19	--	11	20	21	11	26	3.8	113	12	34
JULY 30	--	11	30	18	7.1	37	3.1	102	8.4	45
SEPT. 18	--	12	90	20	5.8	33	5.3	73	6.4	58

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO ₃) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 30	0.2	2.6	231	222	66	0	425	21.0	20	7.0
NOV. 26	.2	5.5	479	471	136	0	865	17.0	15	7.5
DEC. 24	.2	5.4	145	119	39	5	204	14.5	70	7.2
JAN. 23	.1	2.2	214	197	55	16	357	9.5	30	7.1
FEB. 20	.1	4.9	223	193	65	5	347	13.0	15	7.1
MAR. 30	.1	.5	166	110	58	6	190	18.5	50	7.2
APR. 23	.3	2.5	218	144	63	0	253	25.0	70	7.0
MAY 20	.1	.8	120	97	49	3	163	25.5	50	6.9
JUNE 19	.2	.3	194	175	96	3	303	31.0	15	6.7
JULY 30	.1	.2	183	180	74	0	320	31.0	10	6.8
SEPT. 18	.4	2.7	196	180	74	15	332	--	45	6.9

07386980 VERMILION RIVER AT PERRY, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	620	400	655	320	325	340	215	240	200	270	330	--
2	620	425	690	310	290	340	210	255	140	260	330	--
3	630	440	680	270	300	320	200	235	115	260	325	--
4	610	445	700	295	330	180	205	250	160	--	335	--
5	580	440	675	300	310	170	215	235	150	--	335	--
6	600	440	690	330	395	300	275	320	180	--	340	--
7	600	460	720	195	425	--	310	250	195	--	345	--
8	625	520	840	240	370	--	270	195	230	--	335	--
9	630	530	760	280	280	--	280	190	245	--	330	--
10	635	550	480	340	290	--	285	180	255	--	330	--
11	640	560	580	310	270	--	270	170	260	--	360	--
12	650	540	460	260	265	--	245	170	255	--	210	--
13	590	565	340	185	275	--	240	175	265	--	310	--
14	420	680	325	195	310	--	260	175	275	--	325	--
15	400	680	335	210	280	--	300	175	285	--	340	--
16	410	680	380	260	280	--	330	180	285	--	370	--
17	405	675	410	240	260	--	320	170	285	--	390	--
18	420	680	380	230	270	--	275	180	290	--	425	350
19	410	710	300	260	280	--	270	160	300	--	430	360
20	400	710	380	320	380	--	270	175	305	--	400	385
21	--	730	230	320	350	--	220	180	300	--	390	395
22	--	820	190	280	320	--	230	175	290	--	--	400
23	--	880	200	355	370	--	250	180	275	--	--	320
24	--	860	275	250	360	--	255	200	255	--	--	345
25	--	800	280	245	370	--	250	230	210	--	--	275
26	--	780	310	270	390	--	250	215	200	--	--	270
27	--	790	280	315	370	--	230	220	120	--	--	230
28	--	710	280	315	380	--	225	210	190	--	--	250
29	--	680	290	300	--	--	235	220	230	--	--	235
30	390	655	305	350	--	200	230	210	280	315	--	220
31	385	--	300	370	--	205	--	205	--	320	--	--
AVERAGE	--	628	439	281	325	--	254	204	241	--	--	--

MERMENTAU RIVER BASIN

08012400 MERMENAU RIVER AT LAKE ARTHUR, LA.

LOCATION.--Lat 30°04'22", long 92°39'30", Jefferson Davis Parish, at bridge on State Highway 14, 0.5 mile east of Lake Arthur.
PERIOD OF RECORD.--Chemical analyses: January 1949 to September 1970 (discontinued).

Water temperatures: October 1949 to September 1951, September 1959 to September 1969 (discontinued).

Water temperatures: October 1949 to September 1951, September 1959 to September 1969 (discontinued).
EXTREMES, 1949-69.--Specific conductance: Maximum daily, 6,330 micromhos June 30, 1952; minimum daily, 22 micromhos Sept. 12, 1957, Jan. 7, 1962.

Water temperatures (1959-69): Maximum, 32°C July 24, 1962, July 21, 1966, July 5, 8, 13, 16, Aug. 6, 7, 9, 1969; minimum, 1°C Jan. 12, 1962.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE		DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
NOV.	17	1470	9.8	80	11	2.8	21	5.8	54	6.2	27
JAN.	13	--	9.4	60	12	3.9	37	6.2	55	11	52
JAN.	29	--	11	--	10	3.6	34	6.0	45	12	48
FEB.	17	--	4.1	150	9.4	2.8	36	4.7	41	8.8	54
MAR.	31	1050	7.4	140	10	.7	16	3.4	30	7.6	24
MAY	14	199	5.1	60	4.5	1.6	5.5	2.9	20	5.0	10
JUNE	25	4150	9.0	90	12	3.6	25	3.6	75	7.8	24
JULY	17	--	11	--	16	4.9	29	3.3	96	7.6	24
JULY	29	--	16	30	21	7.2	35	3.3	128	6.2	35
SEPT.	1	--	12	90	17	6.5	23	5.4	98	5.2	27

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
NOV, 17	0.2	0.2	121	111	39	0	198	17.0	50	6.7
JAN, 13	.2	1.7	--	160	46	1	293	8.0	135	6.8
JAN, 29	.3	1.9	--	149	40	3	264	--	135	6.8
FEB, 17	.0	.2	162	140	35	1	261	11.5	35	6.7
MAR, 31	.0	.2	110	84	28	3	139	16.0	30	6.3
MAY 14	.2	.4	60	45	18	2	73	23.0	20	6.4
JUNE 25	.1	.3	127	122	45	0	207	27.5	30	6.6
JULY 17	.7	.6	144	144	60	0	245	--	15	6.9
JULY 29	.2	.8	184	188	82	0	321	29.5	25	8.0
SEPT, 1	.2	.4	152	145	69	0	250	27.0	30	6.6

[illegible]

CALCASIEU RIVER BASIN

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08013500 CALCASIEU RIVER NEAR OBERLIN, LA.

LOCATION.--Lat 30°28'25", long 92°48'50", in NW¼NE¼ sec.7, T.5 S., R.4 W., Allen Parish, at gaging station at bridge on State Highway 26, 3 miles northeast of Oberlin, and 15 miles upstream from Whisky Chitto Creek.

DRAINAGE AREA.--753 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1970 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 1	37	23	70	11	1.8	29	2.4	102	7.2	8.0
OCT. 16	40	--	--	--	--	--	--	--	--	--
OCT. 28	39	--	--	--	--	--	--	--	--	--
OCT. 30	40	--	--	--	--	--	--	--	--	--
NOV. 13	47	--	--	--	--	--	--	--	--	--
NOV. 26	63	24	10	10	.7	26	2.8	76	14	7.9
DEC. 11	261	12	10	3.9	.3	6.5	2.2	19	7.2	3.6
DEC. 30	172	--	--	--	--	47	3.5	124	10	10
JAN. 8	--	6.4	20	2.4	.5	5.0	1.9	12	6.2	2.9
JAN. 27	--	17	40	3.6	1.0	17	1.8	45	9.8	2.6
FEB. 25	--	14	30	5.8	.4	19	1.5	49	9.6	5.8
MAR. 19	--	9.5	50	5.0	1.3	12	1.3	34	9.0	5.2
MAR. 31	--	13	90	3.9	.5	8.7	1.2	22	4.4	5.0
APR. 9	--	18	70	6.3	.6	17	1.8	50	5.4	7.0
APR. 24	--	15	10	5.5	.6	9.8	1.1	28	7.4	5.7
MAY 6	--	6.2	70	2.8	.5	4.4	1.0	11	5.2	3.4
MAY 19	--	21	90	7.2	.5	25	1.9	71	7.8	6.3
MAY 26	--	22	--	9.6	.3	33	1.8	93	10	8.2
JUNE 18	--	20	250	8.4	.7	36	2.5	101	12	6.7
JULY 16	50	14	20	12	.6	21	3.3	74	8.2	9.3
JULY 30	55	--	--	--	--	--	--	--	--	--
SEPT. 3	110	--	--	--	--	--	--	--	--	--
SEPT. 18	30	19	90	12	1.0	37	3.7	115	13	7.8

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 1	0.1	1.1	153	134	35	0	214	23.0	80	8.0
OCT. 16	--	--	--	--	--	--	183	18.0	--	--
OCT. 28	--	--	--	--	--	--	206	21.0	--	--
OCT. 30	--	--	--	--	--	--	225	19.0	--	--
NOV. 13	--	--	--	--	--	--	199	20.0	--	--
NOV. 26	.1	1.9	130	124	28	0	179	15.0	40	6.7
DEC. 11	.1	.3	54	45	11	0	65	10.0	30	6.2
DEC. 30	--	--	213	--	21	0	242	12.0	300	7.1
JAN. 8	.2	.5	50	32	8	0	43	4.5	35	6.7
JAN. 27	.2	.9	104	76	13	0	109	13.0	90	7.1
FEB. 25	.2	.9	102	81	16	0	113	12.5	90	7.1
MAR. 19	.2	.8	84	61	18	0	89	16.0	80	6.7
MAR. 31	.2	2.4	78	50	12	0	70	15.5	80	6.5
APR. 9	.2	.6	102	82	18	0	112	18.5	55	6.8
APR. 24	.2	.4	70	60	16	0	78	23.0	45	6.6
MAY 6	.1	.5	35	29	9	0	37	19.0	40	6.3
MAY 19	.2	1.0	125	106	20	0	149	26.0	100	6.9
MAY 26	.2	1.3	164	132	25	0	188	28.0	110	7.1
JUNE 18	.2	1.3	161	138	24	0	202	32.0	160	7.4
JULY 16	.2	.2	111	105	33	0	165	26.5	5	6.8
JULY 30	--	--	--	--	--	--	215	31.0	--	--
SEPT. 3	--	--	--	--	--	--	158	27.0	--	--
SEPT. 18	.1	.3	172	151	34	0	227	31.0	100	7.2

08017090 CALCASIEU RIVER NEAR SULPHUR, LA.

LOCATION.--Lat 30°06'09", long 93°19'39", NE¼SW¼ sec. 18, T.11 s., R.9 W., Calcasieu Parish, mid-channel of river at Burton Landing, 3.3 miles east of State Highway 77, and 9 miles south of Sulphur.

DRAINAGE AREA.--3,235 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 28	--	3.8	20	286	725	5600	326	128	117	10900
NOV. 21	--	4.8	0	--	--	--	--	142	120	12500
DEC. 22	--	8.3	--	--	--	--	--	76	241	5590
JAN. 13	--	7.8	20	--	--	--	--	83	820	5810
FEB. 12	--	9.4	10	--	--	4200	150	104	1060	7460
MAR. 17	--	4.8	20	--	--	3120	140	82	720	5440
APR. 23	--	5.4	20	--	--	1300	54	50	306	2360
MAY 28	--	4.2	20	168	260	2600	--	76	678	4600
JUNE 23	--	2.8	10	--	--	--	--	99	365	8000
JULY 28	--	6.5	0	--	--	6000	300	116	918	11100
AUG. 20	--	8.0	10	278	706	--	--	119	152	10800
SEPT. 29	--	8.7	10	244	452	--	--	100	127	6000

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 28	1.0	--	--	18000	3700	3590	29000	23.0	10	7.4
NOV. 21	1.0	--	--	--	4400	4280	33900	14.5	5	8.1
DEC. 22	--	--	10700	--	1980	1920	16800	--	10	7.0
JAN. 13	--	--	11700	--	1980	1910	17200	10.0	50	7.1
FEB. 12	--	--	14500	--	2580	2490	22000	15.0	--	6.9
MAR. 17	--	--	10900	--	1860	1790	16500	17.5	52	7.2
APR. 23	--	--	4390	--	744	703	7030	25.0	60	6.9
MAY 28	.4	--	9020	--	1490	1430	14100	28.0	15	7.4
JUNE 23	--	--	15600	--	2660	2580	22800	31.5	35	7.7
JULY 28	--	--	21800	--	--	3770	30400	30.0	10	7.6
AUG. 20	.8	--	10400	--	3600	3500	29200	30.5	5	7.2
SEPT. 29	.7	--	11600	--	2470	2390	16100	23.0	15	7.3

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT. 28	7.1	5.5	230	0.00	0.40	10	230	--	--
NOV. 21	5.0	.6	170	.00	.40	245	10	4	--
DEC. 22	3.2	2.3	80	.00	.78	379	550	1	--
JAN. 13	7.3	3.1	53	.00	.29	--	3600	100	210
FEB. 12	4.6	.7	110	.00	.48	364	860	6	8
MAR. 17	7.2	.7	74	.75	.51	110	350	32	17
APR. 23	6.6	3.4	93	1.0	.25	98	650	170	80
MAY 28	2.0	.0	59	2.8	.21	178	30	3	2
JUNE 23	2.6	.0	110	2.5	.17	122	0	1	0
JULY 28	4.7	--	--	--	.20	688	50	4	--
AUG. 20	4.7	--	110	1.2	.32	88	50	4	--
SEPT. 29	4.0	2.7	77	2.0	.50	2630	170	7	30

SABINE RIVER BASIN

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08028200 BAYOU ANACOCO NEAR KNIGHT, LA.

LOCATION.--Lat 30°52'14", long 93°30'38", in SE¼ sec.20, T.2 S., R.11 W., on line between Beauregard and Vernon Parishes, near right bank of low-water channel at downstream side of bridge on State Highway 111, 4.9 miles southwest of Knight and 5.2 miles upstream from mouth.

DRAINAGE AREA.--425 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
NOV. 20	97	14	50	4.5	0.7	6.8	2.0	21	4.2	7.2
JAN. 13	572	10	50	3.3	.9	5.6	1.5	16	4.8	5.0
FEB. 12	253	10	60	4.0	.5	19	1.5	40	14	4.9
MAR. 19	1010	6.4	20	3.7	1.2	10	1.7	24	10	5.0
APR. 23	439	9.1	160	4.5	.9	23	1.8	31	10	22
MAY 28	122	14	80	6.9	1.2	41	2.0	42	39	27
JUNE 23	--	20	240	7.4	.9	61	2.8	83	42	32
JULY 27	--	16	120	7.6	2.7	56	3.8	47	78	25
AUG. 20	--	15	150	9.2	1.2	75	4.1	44	102	34
SEPT. 29	65	19	330	10	2.2	76	5.6	79	90	31

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEMP- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
NOV. 20	0.1	0.4	52	50	14	0	68	13.0	30	6.5
JAN. 13	.1	.8	55	40	12	0	58	7.0	20	6.4
FEB. 12	.1	.1	100	74	12	0	110	11.0	45	7.0
MAR. 19	.2	.6	79	51	14	0	79	16.0	70	6.6
APR. 23	.1	.7	102	87	15	0	133	24.0	80	6.8
MAY 28	.2	1.0	194	153	22	0	254	25.5	90	6.7
JUNE 23	.3	.2	234	208	22	0	339	28.0	60	7.7
JULY 27	.1	.7	256	213	30	0	348	--	50	6.9
AUG. 20	.2	1.0	299	264	28	0	443	--	80	6.7
SEPT. 29	.3	1.7	314	275	34	0	445	20.0	110	7.1

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
NOV. 20	10.0	0.6	17	--	--	--	--	--	--
JAN. 13	12.0	3.5	26	--	--	--	--	--	--
FEB. 12	10.0	.7	44	--	--	--	--	--	--
MAR. 19	8.7	.6	17	--	--	--	--	--	--
APR. 23	7.3	2.5	57	--	--	--	--	--	--
MAY 28	6.6	1.7	10	--	--	--	--	--	--
JUNE 23	6.3	1.3	65	--	--	--	--	--	--
JULY 27	6.4	--	37	--	--	--	--	--	--
AUG. 20	5.5	--	37	--	--	--	--	--	--
SEPT. 29	7.1	2.4	28	--	--	--	--	--	--

SABINE RIVER BASIN

08028200 BAYOU ANACOCO NEAR KNIGHT, LA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			--	40	131	138	214	104	328	307	486	425
2			--	43	115	140	205	76	326	329	519	402
3			--	45	68	147	156	76	337	136	492	400
4			--	46	41	161	183	73	361	111	530	429
5			--	48	41	100	199	98	332	137	461	331
6			--	51	112	85	206	105	373	136	448	385
7			--	52	91	80	200	115	410	242	392	378
8			--	47	123	85	199	138	361	217	400	561
9			--	42	130	86	282	163	370	412	463	520
10			47	51	115	100	127	192	379	417	455	476
11			54	52	142	111	114	219	436	244	440	478
12			62	52	104	128	85	245	438	250	537	585
13			65	57	98	119	88	335	384	369	537	598
14			64	49	120	133	119	281	418	272	473	573
15			65	51	127	130	146	293	494	301	474	484
16			67	66	133	103	151	294	480	148	419	515
17			69	61	108	125	158	368	504	148	394	468
18			86	65	109	82	174	289	451	217	384	481
19			70	63	121	78	177	316	154	198	433	489
20			69	61	124	90	115	368	157	298	442	472
21			76	67	135	62	92	317	333	356	386	484
22			70	67	152	64	121	324	325	395	510	428
23			73	68	184	65	145	301	323	246	510	407
24			70	77	175	87	155	284	323	338	387	456
25			69	81	170	105	247	274	250	251	392	262
26			147	87	118	125	155	411	171	308	412	476
27			129	69	127	133	249	365	138	356	434	505
28			110	116	135	186	274	411	117	348	467	475
29			86	143	--	204	255	318	125	306	480	445
30			52	146	--	197	374	231	95	446	495	490
31			42	137	--	221	--	294	--	468	450	--
AVERAGE			--	68	120	118	179	248	323	281	455	463

COLOR (PLATINUM-COBALT UNITS), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			--	70	40	60	98	140	80	80	55	100
2			--	50	40	50	80	80	80	90	75	100
3			--	30	50	45	80	65	70	40	65	100
4			--	30	40	60	90	70	80	20	55	110
5			--	30	40	55	90	50	80	10	100	80
6			--	100	40	42	110	35	80	20	75	100
7			--	40	40	45	40	45	90	50	45	110
8			--	50	30	50	90	55	110	30	40	80
9			--	50	50	55	100	90	80	100	55	100
10			50	40	40	55	120	95	80	100	64	120
11			40	30	40	55	110	95	80	55	60	110
12			30	40	40	90	110	100	110	45	90	140
13			20	50	30	70	90	110	130	65	80	200
14			20	50	30	80	50	110	110	40	80	140
15			20	50	40	90	58	110	120	60	90	120
16			20	50	40	55	90	100	140	20	60	120
17			20	50	50	55	68	250	120	20	50	140
18			20	40	50	60	90	75	150	25	55	160
19			15	40	50	70	80	110	130	25	100	140
20			20	50	50	65	80	130	5	35	100	160
21			40	50	60	58	62	130	10	40	90	120
22			15	50	60	55	72	110	80	90	120	110
23			20	50	60	55	90	100	90	140	110	120
24			20	50	50	55	80	100	80	55	120	140
25			15	50	60	55	85	90	70	120	50	80
26			20	50	60	65	85	140	20	60	75	160
27			20	30	40	65	90	120	5	60	100	240
28			20	40	40	90	105	110	5	55	120	110
29			20	50	--	90	110	100	5	50	110	100
30			60	50	--	90	180	45	5	75	110	100
31			70	40	--	90	--	100	--	80	100	--

SABINE RIVER BASIN

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08028200 BAYOU ANACOCO NEAR KNIGHT, LA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			--	12.0	12.0	16.0	19.0	25.0	24.0	31.0	25.0	28.0
2			--	9.0	9.0	17.0	20.0	24.0	24.0	33.0	28.0	28.0
3			--	12.0	10.0	18.0	19.0	22.0	26.0	31.0	30.0	29.0
4			--	11.0	10.0	20.0	20.0	18.0	27.0	27.0	32.0	32.0
5			--	11.0	9.0	20.0	19.0	20.0	27.0	31.0	31.0	28.0
6			--	9.0	9.0	17.0	20.0	21.0	29.0	32.0	32.0	26.0
7			--	8.0	10.0	16.0	21.0	25.0	29.0	28.0	31.0	27.0
8			--	8.0	12.0	16.0	18.0	21.0	29.0	28.0	31.0	30.0
9			--	7.0	9.0	15.0	15.0	24.0	30.0	30.0	30.0	29.0
10			14.0	7.0	9.0	18.0	16.0	24.0	29.0	32.0	29.0	28.0
11			15.0	10.0	10.0	19.0	17.0	23.0	31.0	30.0	27.0	31.0
12			12.0	10.0	12.0	15.0	19.0	25.0	31.0	28.0	29.0	31.0
13			15.0	10.0	12.0	16.0	17.0	25.0	32.0	30.0	27.0	30.0
14			16.0	10.0	14.0	16.0	21.0	27.0	32.0	29.0	31.0	30.0
15			18.0	10.0	14.0	17.0	20.0	28.0	33.0	27.0	28.0	28.0
16			15.0	10.0	11.0	14.0	22.0	25.0	31.0	29.0	31.0	30.0
17			16.0	10.0	9.0	16.0	25.0	25.0	30.0	31.0	32.0	30.0
18			16.0	12.0	12.0	16.0	24.0	28.0	28.0	30.0	27.0	28.0
19			16.0	9.0	13.0	18.0	22.0	28.0	28.0	32.0	31.0	30.0
20			14.0	9.0	14.0	15.0	20.0	23.0	30.0	32.0	28.0	29.0
21			16.0	8.0	17.0	14.0	22.0	27.0	29.0	--	28.0	31.0
22			14.0	9.0	18.0	13.0	24.0	29.0	28.0	--	27.0	28.0
23			16.0	12.0	15.0	12.0	24.0	25.0	28.0	--	28.0	28.0
24			13.0	10.0	15.0	14.0	22.0	25.0	27.0	--	27.0	29.0
25			13.0	15.0	16.0	16.0	23.0	25.0	28.0	27.0	30.0	29.0
26			17.0	13.0	15.0	17.0	24.0	28.0	27.0	28.0	29.0	25.0
27			15.0	17.0	15.0	17.0	24.0	25.0	28.0	29.0	29.0	25.0
28			15.0	18.0	14.0	17.0	26.0	25.0	32.0	28.0	31.0	25.0
29			13.0	18.0	--	16.0	26.0	24.0	32.0	32.0	29.0	25.0
30			12.0	15.0	--	15.0	27.0	26.0	33.0	30.0	30.0	25.0
31			10.0	12.0	--	19.0	--	22.0	--	28.0	29.0	--
AVERAGE			--	11.0	12.5	16.0	21.0	23.5	28.0	--	29.0	28.5

08028500 SABINE RIVER NEAR BON WIER, TEX.

LOCATION.--Lat 30°45'00", long 93°36'30", Newton County, at gaging station at bridge on U.S. Highway 190, 0.7 mile upstream from Quicksand Creek, 0.8 mile upstream from Gulf, Colorado and Santa Fe Railway Co. bridge, 2.0 miles east of Bon Wier, and 2.4 miles upstream from Caney Creek.

DRAINAGE AREA.--8,229 sq mi.

PERIOD OF RECORD.--Chemical Analyses: October 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
OCT. 28	--	20	90	9.5	4.0	28	3.3	46	12	41
NOV. 20	--	12	40	8.5	1.9	13	2.2	38	9.0	15
DEC. 10	--	7.7	30	3.0	1.1	5.0	3.0	13	5.8	6.0
JAN. 13	--	13	50	5.3	1.2	13	1.8	20	7.6	9.3
FEB. 12	--	4.3	70	9.6	2.2	46	4.8	35	19	70
MAR. 19	--	2.3	40	8.9	1.9	15	3.0	32	11	20
APR. 23	--	5.4	40	8.5	2.1	28	3.4	32	15	39
MAY 28	--	8.2	50	9.7	2.6	18	2.8	38	16	20
JUNE 23	--	10	60	11	2.3	18	2.9	49	10	20
JULY 27	--	12	70	9.7	1.9	22	3.2	42	16	21
AUG. 20	--	5.3	10	8.2	7.2	12	3.5	41	14	21
SEPT. 29	--	8.4	80	10	3.6	28	4.8	51	25	26

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
OCT. 28	0.1	0.1	151	141	40	2	235	21.5	5	7.1
NOV. 20	.1	.7	72	82	29	0	121	13.5	10	7.2
DEC. 10	.1	.5	76	38	12	1	48	11.5	30	6.4
JAN. 13	.1	.4	84	62	18	4	73	8.0	125	6.9
FEB. 12	.1	1.2	197	174	33	4	152	11.0	80	6.4
MAR. 19	.2	.3	101	79	30	4	143	15.5	52	7.1
APR. 23	.1	.3	--	118	30	4	137	22.5	55	6.5
MAY 28	.1	.2	103	97	35	4	187	25.0	20	7.1
JUNE 23	.1	.1	110	98	37	0	165	30.0	25	7.3
JULY 27	.1	.5	122	107	32	0	162	28.5	20	6.8
AUG. 20	.2	.4	109	92	50	16	168	29.0	15	7.2
SEPT. 29	.2	.5	145	132	40	0	222	21.0	50	7.1

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
OCT. 28	9.3	0.0	24	--	0.30	33	--	--	--
NOV. 20	9.9	.0	21	--	.30	90	--	--	--
DEC. 10	9.3	8.0	19	--	.28	175	--	--	--
JAN. 13	11.0	2.8	17	--	.36	24	--	--	--
FEB. 12	11.0	.0	18	--	.31	--	--	--	--
MAR. 19	9.7	.0	0	--	.34	22	--	--	--
APR. 23	8.5	2.3	30	--	.22	2	--	--	--
MAY 28	7.8	.0	15	--	.15	14	--	--	--
JUNE 23	6.3	2.2	10	--	.17	0	--	--	--
JULY 27	6.2	--	31	--	.19	22	--	--	--
AUG. 20	7.3	--	9	--	.19	--	--	--	--
SEPT. 29	7.7	1.9	12	--	.20	18	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
YAZOO RIVER BASIN--CONTINUED										
07288928	EAGLE LAKE AT EAGLE BEND, MISS.					(LAT 32 29 18 LONG 089 59 57)				
JAN. 31	0.1	0.0	149	133	112	0	250	--	5	7.9
RED RIVER BASIN--CONTINUED										
07343610	CADD0 LAKE NEAR MOOKINGSPOET, LA.					(LAT 32 42 18 LONG 093 55 10)				
FEB. 16	0.1	0.3	89	80	23	12	129	--	10	6.3
JULY 13	.1	.2	90	76	27	7	124	--	10	6.4
07344470	CROSS LAKE NEAR SHREVEPORT, LA.					(LAT 32 30 28 LONG 093 51 37)				
FEB. 16	0.1	0.2	137	117	37	16	216	--	10	6.5
JULY 13	.1	1.4	139	132	52	16	246	--	10	6.7
07346490	BLACK LAKE NEAR HOSSTON, LA.					(LAT 32 53 08 LONG 093 53 56)				
NOV. 19	0.1	0.7	230	191	40	27	361	15.0	15	6.1
JAN. 21	.1	.1	220	171	44	37	339	5.0	5	6.4
FEB. 16	.1	.1	167	131	33	26	234	--	10	6.3
FEB. 18	.0	.5	159	127	34	26	252	13.0	15	6.4
APR. 9	.1	.4	141	115	30	21	227	18.0	10	6.2
MAY 21	.1	2.0	167	134	40	26	261	27.0	10	6.3
JULY 13	.1	.9	176	141	38	22	264	--	5	6.2
SEPT. 2	.1	.5	200	155	38	18	289	27.0	15	6.2
07347500	BLACK BAYOU NEAR GILLIAM, LA.					(LAT 32 48 55 LONG 093 52 15)				
OCT. 29	0.4	0.1	710	685	400	19	1230	16.0	5	7.0
NOV. 19	.2	4.0	125	106	60	8	197	14.0	30	6.5
JAN. 22	.1	.0	243	187	58	37	363	4.0	5	6.8
FEB. 18	.1	1.1	148	122	38	23	230	12.0	15	6.5
APR. 9	.1	.5	180	146	57	25	277	19.0	10	7.0
MAY 22	.2	.2	317	266	145	28	505	25.0	10	7.3
JULY 16	.3	3.2	554	526	332	29	933	28.0	10	8.2
SEPT. 2	.2	.1	204	176	86	13	327	26.0	20	6.8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
RED RIVER BASIN--CONTINUED										
07348000 TWELVEMILE BAYOU NEAR DIXIE, LA. (LAT 32 38 45 LONG 093 52 40)										
NOV. 19	1450	6.6	0	23	6.2	42	6.2	68	16	75
JAN. 23	2250	11	10	8.5	2.1	24	2.7	15	15	40
FEB. 18	2860	11	0	7.5	2.7	21	2.9	15	14	35
APR. 8	2740	9.4	20	8.0	2.9	14	2.7	18	15	26
MAY 22	695	8.9	20	12	4.6	21	3.1	31	14	44
JULY 17	11	14	0	48	31	90	4.6	132	69	190
SEPT. 2	19	12	0	42	19	86	4.6	116	43	170
07349250 LAKE BISTINEAU NEAR RINGGOLD, LA. (LAT 32 19 20 LONG 093 25 02)										
NOV. 18	--	1.4	0	9.3	1.9	28	1.9	16	5.8	53
JAN. 21	846	2.2	0	9.5	2.0	32	2.1	17	6.0	58
FEB. 17	--	8.4	--	9.8	1.8	32	3.0	8	7.8	62
FEB. 20	1100	5.7	10	11	1.6	35	3.2	12	10	67
APR. 28	1000	5.4	20	8.3	1.0	20	2.1	13	5.6	39
MAY 20	360	6.5	10	7.4	.9	16	2.3	16	4.2	30
JULY 8	--	8.0	10	8.5	1.2	15	2.2	21	3.2	28
JULY 14	--	8.0	--	8.7	1.0	18	2.4	22	3.6	32
SEPT. 1	300	9.9	20	9.9	.8	19	2.4	27	3.4	33
07349400 FLAT RIVER NEAR ELM GROVE (AT MCDADE), LA. (LAT 32 19 45 LONG 093 31 20)										
NOV. 18	1370	8.9	10	23	5.0	56	5.7	70	5.2	99
JAN. 29	4.2	8.3	10	73	27	196	5.9	306	50	372
FEB. 26	50	3.9	20	24	8.8	188	4.8	78	6.8	310
APR. 29	3.0	9.1	20	80	33	178	4.7	393	52	244
MAY 22	.50	3.8	20	64	34	134	4.4	337	67	156
07349450 BODCAU BAYOU NEAR SPRINGHILL, LA. (LAT 32 54 18 LONG 093 28 55)										
NOV. 18	300	8.9	10	6.8	1.2	14	2.7	14	11	23
JAN. 21	366	1.1	10	7.4	1.8	20	1.8	14	5.2	37
FEB. 20	360	4.4	0	7.5	2.2	25	2.6	9	7.2	48
APR. 28	2000	4.4	70	7.3	2.1	10	2.3	21	6.6	19
MAY 20	180	5.8	30	6.0	1.5	14	1.7	14	5.4	26
JULY 8	100	5.8	40	6.7	.6	11	1.7	15	2.6	21
SEPT. 1	132	5.5	80	7.2	1.5	11	1.8	21	2.0	22
07349650 BODCAU BAYOU RES. NEAR SHREVEPORT, LA. (LAT 32 43 20 LONG 092 30 23)										
FEB. 15	--	6.0	--	25	3.3	104	6.1	92	35	139
07349850 RED CHUTE BAYOU NEAR SHREVEPORT, LA. (LAT 32 33 15 LONG 093 37 30)										
DEC. 2	800	--	--	--	--	155	8.0	125	25	205
JAN. 23	1430	6.4	130	20	2.0	78	4.6	76	21	101
FEB. 19	1040	5.1	30	22	3.2	83	5.2	84	25	118
APR. 10	1360	3.5	10	11	2.3	25	2.8	34	11	38
MAY 21	1700	--	20	6.2	3.0	11	2.3	23	3.4	21
JULY 17	50	9.7	20	11	2.6	17	2.6	36	11	25
SEPT. 9	20	5.1	30	14	3.2	18	2.8	44	7.8	31
07350000 LOGGY BAYOU NEAR NINOCK, LA. (LAT 32 14 10 LONG 093 25 35)										
NOV. 18	720	9.8	0	31	6.0	15	5.0	80	43	20
JAN. 28	1200	5.6	40	17	2.1	62	4.0	60	21	85
FEB. 26	4280	3.9	10	14	1.7	40	3.2	32	14	66
APR. 10	2600	4.8	40	11	2.1	25	2.2	30	11	41
MAY 22	2020	5.9	20	10	3.2	8.9	2.5	27	5.6	21
JULY 14	640	11	0	49	16	40	3.2	193	33	60
SEPT. 3	960	11	0	26	6.6	24	2.9	91	14	42
07351000 BOGGY BAYOU NEAR KEITHVILLE, LA. (LAT 32 22 35 LONG 093 49 20)										
NOV. 18	574	5.7	60	5.0	1.8	23	5.7	33	31	10
FEB. 4	81	9.2	20	6.5	1.9	18	2.6	24	23	15
FEB. 17	98	8.6	0	7.4	3.3	19	3.4	30	21	20
APR. 7	11	11	0	13	6.7	38	3.1	72	36	36
MAY 21	3.5	21	10	17	5.5	34	3.8	80	20	38
SEPT. 1	5.9	1.2	0	8.0	5.1	15	3.2	48	10	16

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
RED RIVER BASIN--CONTINUED										
07348000	TWELVEMILE BAYOU NEAR DIXIE, LA.					(LAT 32 38 45 LONG 093 52 40)				
NOV. 19	0.2	3.0	244	211	83	27	412	14.0	30	6.8
JAN. 23	.1	.0	123	110	30	18	195	4.0	8	6.4
FEB. 18	.1	.0	119	101	30	18	181	13.0	5	7.1
APR. 8	.1	.2	107	87	32	17	154	16.0	5	6.7
MAY 22	.1	.1	146	123	49	24	232	26.0	10	6.7
JULY 17	.1	.1	--	512	247	139	971	29.0	5	7.3
SEPT. 2	.1	.4	456	434	185	90	803	27.0	15	6.9
07349250	LAKE BISTINEAU NEAR RINGGOLD, LA.					(LAT 32 19 20 LONG 093 25 02)				
NOV. 18	0.1	0.4	142	110	31	18	226	15.0	10	6.6
JAN. 21	.1	.2	158	120	32	18	252	4.0	5	6.5
FEB. 17	.1	.3	166	129	32	25	253	--	20	6.2
FEB. 20	.1	.5	170	140	34	24	274	12.0	15	6.3
APR. 28	.1	.9	112	88	25	14	172	24.0	20	6.2
MAY 20	.1	.7	94	76	22	9	137	26.0	20	6.5
JULY 8	.1	.6	96	77	26	9	140	29.0	20	6.4
JULY 14	.1	.3	101	85	26	8	150	--	15	6.4
SEPT. 1	.2	.6	114	92	28	6	163	29.0	15	6.5
07349400	FLAT RIVER NEAR ELM GROVE (AT MCDADE), LA.					(LAT 32 19 45 LONG 093 31 20)				
NOV. 18	0.1	6.1	288	243	78	21	471	18.0	50	7.0
JAN. 29	.3	.0	976	--	263	122	1720	7.0	5	7.6
FEB. 26	.1	.8	601	585	96	32	1150	10.0	20	7.1
APR. 29	.4	.2	816	795	336	14	1460	26.0	20	7.7
MAY 22	.4	1.5	652	654	300	24	1160	26.0	15	8.5
07349450	BODCAU BAYOU NEAR SPRINGHILL, LA.					(LAT 32 54 18 LONG 093 28 55)				
NOV. 18	0.1	0.2	84	75	22	11	134	14.0	20	6.1
JAN. 21	.1	.0	102	81	26	15	160	5.0	5	6.5
FEB. 20	.1	.0	120	101	28	21	198	9.0	5	6.4
APR. 28	.1	.5	77	62	27	10	110	23.0	30	6.7
MAY 20	.1	.2	74	68	21	10	120	24.0	10	6.3
JULY 8	.1	.4	65	57	19	70	105	27.0	10	6.2
SEPT. 1	.1	.6	73	62	24	7	113	31.0	15	6.3
07349650	BODCAU BAYOU RES. NEAR SHREVEPORT, LA.					(LAT 32 43 20 LONG 092 30 23)				
FEB. 15	0.4	0.6	385	364	76	1	668	--	175	7.3
07349850	RED CHUTE BAYOU NEAR SHREVEPORT, LA.					(LAT 32 33 15 LONG 093 37 30)				
DEC. 2	--	--	560	--	96	--	916	9.0	350	7.7
JAN. 23	0.2	0.2	310	270	58	0	497	6.0	160	7.0
FEB. 19	.1	.5	340	303	68	0	570	11.0	130	7.5
APR. 10	.1	.4	135	111	37	9	215	18.0	60	7.1
MAY 21	.1	.2	73	58	28	9	114	23.0	30	6.7
JULY 17	.1	.2	120	97	38	8	174	28.0	55	6.3
SEPT. 9	.1	.3	129	104	48	12	193	31.0	50	6.4
07350000	LOGGY BAYOU NEAR NINOCK, LA.					(LAT 32 14 10 LONG 093 25 35)				
NOV. 18	0.2	4.3	185	173	102	36	298	18.0	25	6.6
JAN. 28	.1	1.1	264	228	51	2	423	8.0	100	7.1
FEB. 26	.1	.2	170	159	42	15	302	10.0	20	7.0
APR. 10	.1	.3	121	112	36	11	209	16.0	20	6.8
MAY 22	.1	.6	72	70	38	16	127	22.0	25	6.4
JULY 14	.3	3.0	328	310	190	32	562	29.0	15	7.2
SEPT. 3	.3	.4	172	172	92	17	310	26.0	15	6.9
07351000	BOGGY BAYOU NEAR KEITHVILLE, LA.					(LAT 32 22 35 LONG 093 49 20)				
NOV. 18	0.2	2.4	142	101	20	0	174	17.0	60	6.5
FEB. 4	.1	.1	103	88	24	4	148	7.0	20	6.6
FEB. 17	.1	.2	111	98	32	7	164	12.0	10	6.8
APR. 7	.1	.3	180	179	60	1	329	18.0	5	7.0
MAY 21	.1	2.4	183	181	65	0	298	22.0	10	7.4
SEPT. 1	.1	.3	84	83	36	0	157	29.0	5	6.7

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	
RED RIVER BASIN--CONTINUED											
07351550		WALLACE LAKE NEAR FRIERSON, LA.					(LAT 32 19 07 LONG 093 40 13)				
FEB. JULY	17 13	-- --	7.5 5.0	-- --	10 11	2.9 3.0	28 28	3.5 3.3	38 58	31 15	27 26
07352150		SALINE LAKE NEAR CLARENCE, LA.					(LAT 31 51 10 LONG 092 56 10)				
FEB. JULY	17 9	-- --	2.2 2.2	-- --	4.7 6.0	0.5 1.2	19 12	1.5 2.0	12 22	6.0 4.4	29 18
07352890		CLEAR LAKE NEAR CLARENCE, LA.					(LAT 31 53 40 LONG 093 00 10)				
FEB. JULY	17 9	-- --	5.9 7.9	-- --	4.3 5.0	1.3 .9	17 10	1.6 2.0	12 20	8.6 3.8	26 15
07355300		IATT LAKE NEAR COLFAX, LA.					(LAT 31 32 57 LONG 092 39 15)				
FEB. JULY	18 8	-- --	5.8 .7	-- --	3.4 6.1	0.6 1.2	3.7 4.3	1.6 1.7	12 22	5.0 6.0	4.3 5.0
07355450		BAYOU RAPIDES NEAR HOT WELLS, LA.					(LAT 31 20 12 LONG 092 42 36)				
OCT. DEC. JAN. MAR. MAR. MAY JUNE JULY SEPT.	14 10 21 2 23 22 3 24 21	6.0 6.2 5.9 .50 .50 2.0 1.7 1.3 .20	7.0 5.6 5.4 2.7 4.6 4.9 5.0 5.6 5.8	20 40 20 20 20 30 10 20 20	6.5 7.7 10 14 17 11 10 10 26	1.2 1.2 2.2 2.7 3.8 1.1 1.2 1.2 7.8	11 10 12 61 81 24 16 19 210	1.4 1.6 1.9 2.6 2.6 2.1 2.1 2.5 4.5	26 30 45 50 60 40 38 38 56	1.0 1.4 2.2 3.6 2.6 7.2 4.6 .6 .0	14 14 16 93 125 34 23 27 360
07355650		LARTO LAKE AT DAM NEAR ACME, LA.					(LAT 31 22 52 LONG 091 54 52)				
FEB. JULY	24 8	-- --	4.4 4.7	-- --	12 11	1.9 2.3	27 28	3.3 3.3	38 42	8.8 7.4	43 38
DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)		
07351550		WALLACE LAKE NEAR FRIERSON, LA.					(LAT 32 19 07 LONG 093 40 13)				
FEB. JULY	17 13	-- --	1.7 .0	-- --	0.00 --	-- --	-- --	-- --	-- --	-- --	
07352150		SALINE LAKE NEAR CLARENCE, LA.					(LAT 31 51 10 LONG 092 56 10)				
FEB. JULY	17 9	-- --	2.1 .6	-- --	0.00 --	-- --	-- --	-- --	-- --	-- --	
07352890		CLEAR LAKE NEAR CLARENCE, LA.					(LAT 31 53 40 LONG 093 00 10)				
FEB. JULY	17 9	-- --	0.0 2.7	-- --	0.00 --	-- --	-- --	-- --	-- --	-- --	
07355300		IATT LAKE NEAR COLFAX, LA.					(LAT 31 32 57 LONG 092 39 15)				
FEB. JULY	18 8	-- --	2.2 2.7	-- --	0.06 --	-- --	-- --	-- --	-- --	-- --	
07355650		LARTO LAKE AT DAM NEAR ACME, LA.					(LAT 31 22 52 LONG 091 54 52)				
FEB. JULY	24 8	-- --	0.8 3.0	-- --	0.00 --	-- --	-- --	-- --	-- --	-- --	

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
RED RIVER BASIN--CONTINUED										
07351550	WALLACE LAKE NEAR FRIERSON, LA.					(LAT 32 19 07 LONG 093 40 13)				
FEB. 17	0.2	0.3	142	129	37	6	228	--	30	6.4
JULY 13	.2	1.9	125	121	40	0	214	--	15	7.1
07352150	SALINE LAKE NEAR CLARENCE, LA.					(LAT 31 51 10 LONG 092 56 10)				
FEB. 17	0.1	0.2	73	69	14	4	137	--	10	6.3
JULY 9	.1	.4	61	57	20	2	105	--	15	6.4
07352890	CLEAR LAKE NEAR CLARENCE, LA.					(LAT 31 53 40 LONG 093 00 10)				
FEB. 17	0.1	0.2	79	71	16	6	127	--	10	6.4
JULY 9	.1	1.1	66	56	16	0	92	--	10	6.4
07355300	IATT LAKE NEAR COLFAX, LA.					(LAT 31 32 57 LONG 092 39 15)				
FEB. 18	0.1	0.3	46	31	11	1	51	--	30	6.3
JULY 8	.1	.5	48	37	20	2	68	--	15	6.5
07355450	BAYOU RAPIDES NEAR HOT WELLS, LA.					(LAT 31 20 12 LONG 092 42 36)				
OCT. 14	0.1	3.5	72	59	21	0	107	21.0	10	6.2
DEC. 10	.1	1.0	68	58	24	0	112	14.0	20	6.5
JAN. 21	.0	.1	77	72	34	0	127	7.0	15	6.8
MAR. 2	.0	.2	206	205	46	5	396	13.0	15	7.0
MAR. 23	.1	.2	267	267	58	9	520	17.0	15	7.0
MAY 22	.1	.5	106	105	32	0	184	26.0	15	6.9
JUNE 3	.1	.1	82	81	30	0	144	30.0	15	6.9
JULY 24	.1	1.9	94	87	30	0	162	25.0	15	6.7
SEPT. 21	.1	.5	707	643	97	51	1270	27.0	20	6.9
07355650	LARTO LAKE AT DAM NEAR ACME, LA.					(LAT 31 22 52 LONG 091 54 52)				
FEB. 24	0.1	0.3	164	120	38	7	227	--	80	6.8
JULY 8	.2	.4	122	118	37	3	211	--	25	6.7

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SIU2) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
RED RIVER BASIN--CONTINUED										
07364200 BAYOU BARTHOLOMEW NEAR JONES, LA. (LAT 32 59 25 LONG 091 39 20)										
OCT. 6	161	14	0	23	6.2	15	3.1	107	4.4	16
NOV. 20	365	11	10	20	4.6	13	4.2	100	5.4	11
JAN. 12	3430	5.1	60	3.1	1.0	2.8	2.9	17	6.2	3.0
MAR. 6	2050	2.4	120	3.3	1.4	3.8	2.6	16	6.2	2.6
APR. 16	3800	3.7	90	4.6	1.8	2.8	2.5	20	5.6	2.7
MAY 26	2360	2.6	170	5.4	2.1	2.7	3.6	26	3.2	4.4
JULY 24	245	13	10	14	3.6	8.5	3.5	67	4.8	6.8
AUG. 13	206	18	0	22	4.4	14	3.4	103	6.6	12
07364840 LAKE CLAIBORNE NEAR ATCOCK, LA. (LAT 32 44 10 LONG 092 54 15)										
FEB. 2	--	6.0	--	5.5	1.5	4.0	2.7	26	3.8	5.0
JULY 12	--	3.3	--	5.2	.7	3.2	2.6	20	4.4	4.0
07365000 BAYOU D'ARBONNE NEAR DUBACH, LA. (LAT 32 40 50 LONG 092 39 10)										
APR. 22	600	7.7	0	4.4	1.7	8.5	2.2	18	5.6	14
JULY 22	1.0	7.8	0	13	4.7	38	3.3	48	6.4	63
07365500 MIDDLE FORK BAYOU D'ARBONNE NEAR BERNICE, LA. (LAT 32 45 50 LONG 092 39 30)										
APR. 22	601	13	20	4.6	0.6	7.3	1.5	8	4.4	15
JULY 22	.08	7.9	0	15	3.1	24	2.3	39	1.4	51
07366200 LITTLE CORNEY BAYOU NEAR LILLIE, LA. (LAT 32 55 40 LONG 092 37 55)										
OCT. 14	6.2	14	50	35	4.8	98	5.0	15	2.8	214
DEC. 3	43	20	30	9.2	1.5	21	2.9	12	8.6	42
JAN. 21	60	18	10	12	2.4	33	2.4	19	8.2	66
MAR. 24	1020	6.5	30	4.1	1.2	9.6	1.6	5	8.0	18
APR. 23	960	6.6	0	6.1	1.7	13	2.3	8	4.6	30
MAY 19	22	14	0	9.6	2.2	23	2.5	15	1.2	51
JULY 17	13	10	0	16	2.9	40	3.1	21	7.4	81
AUG. 28	9.1	12	70	15	1.8	34	2.8	18	5.8	71
07366300 BAYOU D'ARBONNE LAKE AT FARMERVILLE, LA. (LAT 32 47 22 LONG 092 27 16)										
FEB. 14	--	11	--	16	1.7	34	2.9	4	7.2	80
07366300 BAYOU D'ARBONNE LAKE AT FARMERVILLE, LA. (LAT 32 45 46 LONG 092 28 28)										
FEB. 14	--	9.5	--	5.4	1.1	12	1.9	11	8.2	21
07366300 BAYOU D'ARBONNE LAKE AT FARMERVILLE, LA. (LAT 32 45 25 LONG 092 24 55)										
NOV. 17	--	4.7	20	11	1.6	21	1.3	18	5.6	42
FEB. 14	--	9.4	--	10	2.2	23	2.8	8	8.6	51
APR. 22	8500	4.4	10	7.0	1.8	10	1.9	10	4.2	25
JULY 12	--	6.4	--	6.6	1.6	11	2.3	17	4.4	22
JULY 22	85	6.4	10	7.9	.6	11	2.7	19	2.0	22
07367500 CHENIERE CREEK NEAR BAWCOMVILLE, LA. (LAT 32 27 15 LONG 092 11 25)										
FEB. 2	--	9.9	--	3.4	0.1	5.2	2.2	10	4.2	7.1
JULY 12	--	1.8	--	4.4	.7	5.7	2.0	18	3.4	7.5
07367700 BOEUF RIVER NEAR ARK.-LA. STATE LINE (LAT 32 58 25 LONG 091 26 25)										
OCT. 7	75	13	10	50	24	46	4.7	236	29	77
NOV. 19	6650	8.4	50	16	3.9	11	5.0	59	13	14
JAN. 9	650	7.2	0	12	3.9	6.6	4.3	55	10	8.8
MAR. 5	6600	5.0	0	7.4	2.3	3.2	4.3	32	4.4	2.4
APR. 15	122	1.5	10	20	6.8	11	3.7	88	12	17
MAY 21	87	10	0	25	9.1	15	4.4	110	15	23
JULY 23	385	7.7	10	25	8.6	21	4.0	97	18	37
AUG. 14	204	11	20	20	6.0	15	5.0	81	10	22
07369700 BAYOU MACON NEAR KILBOURNE, LA. (LAT 32 59 35 LONG 091 15 45)										
OCT. 7	133	8.4	130	52	7.8	21	4.1	195	16	26
NOV. 19	477	8.5	10	27	7.4	13	7.0	101	22	19
JAN. 9	1700	6.7	10	22	6.3	9.6	3.3	88	12	14
APR. 9	1000	5.7	40	16	2.4	3.6	2.8	60	4.6	3.4
MAY 21	608	7.7	20	21	4.0	5.3	3.0	82	6.8	4.9
JULY 23	273	12	30	30	6.8	9.5	3.0	124	11	8.0
AUG. 14	137	14	30	43	9.4	14	3.1	181	12	13

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
RED RIVER BASIN--CONTINUED										
07364200 BAYOU BARTHOLOMEW NEAR JONES, LA. (LAT 32 59 25 LONG 091 39 20)										
OCT. 6	0.2	0.3	143	135	83	0	233	24.0	10	7.3
NOV. 20	.2	.1	123	118	69	0	207	9.0	5	7.1
JAN. 12	.0	.1	48	32	12	0	49	4.0	30	6.8
MAR. 6	.1	.1	57	30	14	1	55	14.0	50	7.0
APR. 16	.1	.1	51	34	19	3	55	18.0	45	7.2
MAY 26	.1	1.2	65	38	22	1	63	26.0	50	6.8
JULY 24	.1	1.8	99	89	50	0	140	26.0	15	6.5
AUG. 13	.1	2.2	130	134	73	0	212	30.0	15	7.0
07364840 LAKE CLAIBORNE NEAR AYCOCK, LA. (LAT 32 44 10 LONG 092 54 15)										
FEB. 2	0.1	1.5	57	43	20	0	69	--	5	7.0
JULY 12	.1	.6	44	34	16	0	57	--	5	6.3
07365000 BAYOU D'ARBONNE NEAR DUBACH, LA. (LAT 32 40 50 LONG 092 39 10)										
APR. 22	0.1	0.2	54	53	18	3	83	18.0	20	6.8
JULY 22	.2	.4	157	161	52	13	292	24.0	20	7.0
07365500 MIDDLE FORK BAYOU D'ARBONNE NEAR BERNICE, LA. (LAT 32 45 50 LONG 092 39 30)										
APR. 22	0.0	0.2	71	51	14	7	79	20.0	20	6.2
JULY 22	.1	.1	160	124	50	18	241	21.0	10	6.9
07366200 LITTLE CORNEY BAYOU NEAR LILLIE, LA. (LAT 32 55 40 LONG 092 37 55)										
OCT. 14	0.1	0.1	543	381	107	95	748	17.0	10	6.4
DEC. 3	.1	.2	139	111	29	18	184	7.0	20	6.3
JAN. 21	.1	.1	181	151	40	24	254	5.0	5	7.2
MAR. 24	.1	.1	69	--	15	11	85	12.0	20	5.9
APR. 23	.1	.3	106	--	22	15	131	20.0	20	5.9
MAY 19	.1	.2	154	--	33	21	207	19.0	10	6.1
JULY 17	.2	.2	223	--	52	35	337	29.0	10	6.6
AUG. 28	.1	.2	221	--	45	30	286	22.0	30	6.2
07366300 BAYOU D'ARBONNE LAKE AT FARMERVILLE, LA. (LAT 32 47 22 LONG 092 27 16)										
FEB. 14	0.1	0.2	221	155	47	44	308	--	15	5.9
07366300 BAYOU D'ARBONNE LAKE AT FARMERVILLE, LA. (LAT 32 45 46 LONG 092 28 28)										
FEB. 14	0.0	0.1	81	64	18	9	113	--	10	6.2
07366300 BAYOU D'ARBONNE LAKE AT FARMERVILLE, LA. (LAT 32 45 25 LONG 092 24 55)										
NOV. 17	0.1	2.5	128	99	34	19	195	13.0	15	6.3
FEB. 14	.1	.1	147	111	34	27	212	--	15	6.1
APR. 22	.2	.3	77	60	25	17	121	20.0	15	6.5
JULY 12	.1	.4	75	63	23	9	110	--	10	6.4
JULY 22	.1	.6	80	62	22	6	110	28.0	15	6.4
07367500 CHENIERE CREEK NEAR BAWCOMVILLE, LA. (LAT 32 27 15 LONG 092 11 25)										
FEB. 2	0.0	0.6	58	38	9	1	55	--	35	6.5
JULY 12	.1	.4	40	35	14	0	61	--	25	6.2
07367700 BOEUF RIVER NEAR ARK.-LA. STATE LINE (LAT 32 58 25 LONG 091 26 25)										
OCT. 7	0.3	0.1	377	360	224	30	658	24.0	10	7.6
NOV. 19	.2	5.6	130	106	56	8	185	12.0	50	6.9
JAN. 9	.1	.1	88	80	46	1	139	1.0	15	6.8
MAR. 5	.2	3.6	--	49	28	20	80	14.0	30	6.6
APR. 15	.1	.2	114	115	78	6	221	18.0	15	7.0
MAY 21	.2	.1	161	156	100	10	281	24.0	15	7.2
JULY 23	.2	.2	193	170	98	18	318	27.0	15	6.9
AUG. 14	.2	2.6	162	131	74	8	230	27.0	20	7.0
07369700 BAYOU MACON NEAR KILBOURNE, LA. (LAT 32 59 35 LONG 091 15 45)										
OCT. 7	0.3	0.1	235	232	162	2	413	24.0	10	6.9
NOV. 19	.2	2.4	170	156	98	15	280	12.0	15	6.9
JAN. 9	.1	.9	130	118	81	9	212	3.0	15	7.5
APR. 9	.1	.2	98	70	50	1	118	18.0	35	6.8
MAY 21	.1	.7	107	94	69	2	162	24.0	30	7.2
JULY 23	.2	.2	168	142	103	1	246	27.0	20	6.7
AUG. 14	.2	.3	208	198	146	0	336	27.0	15	7.4

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SiO ₂) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLORIDE (CL) (MG/L)
RED RIVER BASIN--CONTINUED										
07370000 BAYOU MACON NEAR DELHI, LA. (LAT 32 27 25 LONG 091 28 30)										
OCT. 8	220	11	10	58	15	28	4.1	244	23	33
DEC. 3	430	9.8	50	41	12	20	4.2	169	24	26
JAN. 20	900	8.0	50	20	6.1	9.5	5.1	83	14	12
APR. 1	2150	6.4	160	11	3.5	4.4	5.9	56	6.6	3.1
JUNE 3	1170	7.3	40	13	3.3	3.6	4.1	47	8.2	4.0
JULY 21	--	17	40	52	18	23	4.2	238	26	25
SEPT. 30	219	17	50	60	17	29	5.6	261	23	34
07370190 TENSAS RIVER AT CLAYTON, LA. (LAT 31 43 57 LONG 091 32 40)										
DEC. 11	2120	9.9	20	34	11	21	4.1	149	16	28
JAN. 21	3380	8.6	60	14	3.6	6.0	4.2	57	11	6.9
MAR. 2	2400	8.1	20	21	4.0	8.3	4.0	81	11	9.0
MAR. 23	--	8.4	90	18	3.7	6.4	4.5	69	9.4	6.6
MAY 11	2390	8.4	80	16	3.4	4.9	4.7	61	8.0	5.0
JULY 6	980	14	0	38	10	19	4.6	170	10	19
JULY 22	493	18	10	57	16	28	4.6	263	17	30
SEPT. 21	--	19	20	55	15	28	5.0	254	14	32
07373267 BLACK RIVER AT JONESVILLE, LA. (LAT 31 37 25 LONG 091 48 45)										
DEC. 11	19250	7.0	0	14	3.2	27	4.4	42	13	43
JAN. 21	57300	6.4	60	7.2	1.5	12	2.7	20	10	19
MAR. 2	16800	5.4	20	11	1.8	21	2.2	32	10	33
MAR. 23	44100	1.5	10	14	1.2	11	2.1	43	11	14
MAY 12	40000	4.0	40	7.7	1.2	10	2.0	20	4.4	17
JULY 6	11000	8.4	20	15	2.8	25	3.0	58	8.6	35
JULY 22	5820	8.2	30	20	4.1	30	3.0	73	14	40
SEPT. 21	6340	8.8	100	25	6.0	74	3.9	96	23	98
07373292 RACCOURCI LAKE (OLD RIVER) NEAR BATCHELOR, LA. (LAT 30 50 17 LONG 091 33 46)										
FEB. 25	--	3.0	--	41	9.9	13	3.1	139	36	17
JULY 8	--	4.4	--	32	8.8	14	3.5	107	36	17

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO ₄) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
07370000 BAYOU MACON NEAR DELHI, LA. (LAT 32 27 25 LONG 091 28 30)									
OCT. 8	--	--	--	--	--	--	--	--	--
DEC. 3	9.7	0.6	0	--	--	--	--	--	--
JAN. 20	9.8	2.6	41	--	--	--	--	--	--
APR. 1	9.0	4.7	38	--	--	--	--	--	--
JUNE 3	7.2	.0	9	--	--	--	--	--	--
JULY 21	5.2	--	--	--	--	--	--	--	--
SEPT. 30	6.6	1.3	22	--	--	--	--	--	--
07373292 RACCOURCI LAKE (OLD RIVER) NEAR BATCHELOR, LA. (LAT 30 50 17 LONG 091 33 46)									
FEB. 25	--	0.0	--	0.00	--	--	--	--	--
JULY 8	--	6.6	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
RED RIVER BASIN--CONTINUED										
07370000	BAYOU MACON NEAR DELHI, LA.					(LAT 32 27 25 LONG 091 28 30)				
OCT. 8	0.3	0.0	298	292	207	7	517	24.0	10	7.6
DEC. 3	.1	1.2	235	221	152	13	392	11.0	20	7.3
JAN. 20	.2	2.2	126	118	75	7	203	5.5	15	7.5
APR. 1	.4	1.5	--	71	42	0	119	16.5	160	7.4
JUNE 3	.3	4.9	82	72	46	7	113	24.5	25	6.9
JULY 21	.2	.2	295	283	206	11	475	--	5	7.5
SEPT. 30	.3	.7	332	316	218	40	536	26.5	10	7.8
07370190	TENSAS RIVER AT CLAYTON, LA.					(LAT 31 43 57 LONG 091 32 40)				
DEC. 11	0.2	3.2	217	200	131	9	368	11.0	15	7.2
JAN. 21	.1	.2	99	83	50	3	141	4.0	35	6.5
MAR. 2	.1	.3	125	106	69	9	184	12.0	15	7.0
MAR. 23	.1	1.4	120	92	60	0	156	15.0	30	6.9
MAY 11	.1	3.1	139	84	54	4	135	21.0	35	6.9
JULY 6	.2	.2	205	199	136	0	342	30.0	10	7.2
JULY 22	.3	.3	309	301	208	0	512	26.0	15	7.5
SEPT. 21	.2	.2	302	293	200	0	504	--	15	7.7
07373267	BLACK RIVER AT JONESVILLE, LA.					(LAT 31 37 25 LONG 091 48 45)				
DEC. 11	0.2	2.0	150	135	48	14	253	10.0	30	6.3
JAN. 21	.1	.6	93	70	24	8	129	4.0	50	6.4
MAR. 2	.1	.2	115	101	35	9	185	12.0	20	6.7
MAR. 23	.1	.2	93	76	40	5	141	15.0	20	6.8
MAY 12	.1	.7	77	57	24	8	107	21.0	35	6.5
JULY 6	.1	.3	135	127	49	1	230	29.0	25	6.6
JULY 22	.2	3.0	166	155	67	7	290	26.0	20	6.8
SEPT. 21	.2	5.7	310	286	87	8	538	27.0	60	7.3
07373292	RACCOURCI LAKE (OLD RIVER) NEAR BATCHELOR, LA.					(LAT 30 50 17 LONG 091 33 46)				
FEB. 25	0.2	0.2	209	191	143	29	352	--	10	7.5
JULY 8	.2	3.0	172	169	116	28	298	--	10	7.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
MISSISSIPPI RIVER DELTA										
07375500	TANGIPAHOA RIVER AT ROBERT, LA.					(LAT 30 30 23 LONG 090 21 42)				
NOV. 18	298	14	0	1.7	0.9	5.2	1.5	13	3.2	6.2
JAN. 15	625	11	10	2.5	.9	5.6	2.3	16	.0	8.0
MAR. 18	904	8.4	10	2.1	1.2	5.1	2.4	12	2.2	7.2
MAY 27	322	14	60	1.4	.6	5.7	1.0	12	1.4	5.9
JULY 15	--	8.6	10	2.6	.4	2.9	2.4	11	.2	5.0
SEPT. 30	500	14	220	2.4	1.2	5.3	1.8	18	2.4	6.9
07375770	LAKE FAUSSE POINTE NEAR CHARENTON, LA.					(LAT 29 57 53 LONG 091 35 36)				
FEB. 7	--	6.0	--	24	6.1	25	4.7	80	22	39
JULY 16	--	7.1	--	30	7.1	28	3.6	109	14	42
07378500	AMITE RIVER NR. DENHAM SPRINGS, LA.					(LAT 30 27 50 LONG 090 59 25)				
NOV. 17	354	14	10	3.0	0.1	6.8	1.2	17	2.4	6.2
JAN. 16	718	11	10	2.6	.6	5.2	1.9	14	3.6	5.8
MAR. 31	901	12	20	3.2	1.0	5.8	1.7	18	2.6	6.2
MAY 11	564	10	10	3.4	1.3	3.9	2.0	19	.8	6.7
JUNE 22	363	12	10	2.6	1.1	4.5	1.9	19	.8	6.9
JULY 31	504	9.1	20	2.5	1.4	2.6	2.5	16	.2	5.1
07378740	BAYOU BRAUD NEAR ST. GABRIEL, LOUISIANA					(LAT 30 15 16 LONG 091 03 00)				
NOV. 17	--	6.1	10	51	12	33	6.7	182	50	33
JAN. 13	16	13	10	38	11	17	6.4	156	24	19
FEB. 16	17	8.8	10	70	23	37	4.3	260	32	44
MAR. 30	--	13	10	59	17	33	4.2	249	26	35
MAY 11	--	10	0	48	16	35	4.8	216	29	37
JUNE 24	--	18	0	41	15	43	4.0	208	14	50
AUG. 10	--	16	0	41	13	42	4.8	216	21	36
AUG. 31	--	15	0	35	12	35	4.8	156	23	36

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
07375500	TANGIPAHOA RIVER AT ROBERT, LA.					(LAT 30 30 23 LONG 090 21 42)			
NOV. 18	9.3	0.0	10	--	--	--	--	--	--
JAN. 15	11.0	1.8	8	--	--	--	--	--	--
MAR. 18	8.6	.5	--	--	--	--	--	--	--
MAY 27	7.1	.3	0	--	--	--	--	--	--
JULY 15	--	--	11	--	--	--	--	--	--
SEPT. 30	8.8	.9	0	--	--	--	--	--	--
07375770	LAKE FAUSSE POINTE NEAR CHARENTON, LA.					(LAT 29 57 53 LONG 091 35 36)			
FEB. 7	--	1.2	--	0.00	--	--	--	--	--
JULY 16	--	8.4	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
MISSISSIPPI RIVER DELTA--CONTINUED										
07375500	TANGIPAHOA RIVER AT ROBERT, LA.					(LAT 30 30 23 LONG 090 21 42)				
NOV. 18	0.0	0.1	38	39	8	0	47	--	5	6.8
JAN. 15	.0	.5	43	39	10	0	61	12.0	5	6.4
MAR. 18	.1	1.9	47	37	10	0	54	16.0	15	6.2
MAY 27	.0	.3	36	36	6	0	41	25.0	5	6.5
JULY 15	.1	.6	36	28	8	0	42	--	7	6.1
SEPT. 30	.1	.5	56	44	11	0	52	22.0	10	6.8
07375770	LAKE FAUSSE POINTE NEAR CHARENTON, LA.					(LAT 29 57 53 LONG 091 35 36)				
FEB. 7	0.2	1.8	193	168	85	19	310	--	50	7.6
JULY 16	.2	2.2	198	188	104	15	344	--	10	7.2
07378500	AMITE RIVER NR. DENHAM SPRINGS, LA.					(LAT 30 27 50 LONG 090 59 25)				
NOV. 17	0.0	0.1	42	42	8	0	51	15.0	5	7.2
JAN. 16	.1	.1	39	38	9	0	48	12.0	10	6.3
MAR. 31	.2	.2	44	42	12	0	57	17.8	5	6.7
MAY 11	.0	.1	59	37	14	0	55	25.6	0	6.4
JUNE 22	.0	.1	56	39	11	0	52	30.0	0	6.2
JULY 31	.0	.1	55	32	12	0	45	29.0	5	6.2
07378740	BAYOU BRAUD NEAR ST. GABRIEL, LOUISIANA					(LAT 30 15 16 LONG 091 03 00)				
NOV. 17	1.7	8.0	312	292	177	28	511	18.5	20	7.5
JAN. 13	.5	.1	233	206	142	12	354	8.0	70	7.8
FEB. 16	.6	.1	388	372	269	16	657	12.0	15	8.6
MAR. 30	.7	.1	335	318	218	2	554	20.5	40	8.4
MAY 11	.8	1.3	310	288	186	9	505	--	20	7.2
JUNE 24	1.1	2.3	308	290	164	0	505	--	35	7.7
AUG. 10	.8	.3	286	281	156	0	471	29.0	20	7.3
AUG. 31	.9	11	260	250	136	8	427	31.0	30	7.9

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
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MISSISSIPPI RIVER DELTA

07378820 BAYOU MANCHAC NEAR KLEINPETER, LA. (LAT 30 20 08 LONG 091 00 43)										
NOV. 17	91	10	20	38	8.3	158	6.6	121	36	253
JAN. 8	289	8.4	30	45	14	240	6.3	119	20	395
FEB. 7	20	11	10	39	9.9	83	5.5	149	67	89
MAR. 30	62	10	40	31	5.5	54	3.2	105	20	79
MAY 11	30	10	20	31	6.7	79	6.3	84	32	130
JUNE 24	144	12	110	28	4.6	57	3.6	85	22	82
AUG. 10	86	10	20	35	6.5	140	4.5	117	14	214
SEPT. 3	81	12	20	28	5.1	137	5.2	96	11	205
07379000 WARD CR. AT GOVERNMENT ST. AT BATON ROUGE, LA. (LAT 30 16 35 LONG 090 55 15)										
NOV. 19	3.6	13	20	20	2.2	37	1.9	119	28	11
JAN. 14	1.4	18	20	22	6.1	68	3.8	219	22	18
JAN. 28	--	14	20	25	6.0	81	3.4	272	20	18
FEB. 27	--	16	0	14	3.4	77	2.4	211	23	15
APR. 3	--	16	410	20	2.9	82	1.9	162	22	21
JUNE 2	--	6.1	90	13	1.3	5.5	3.0	49	8.0	2.9
07380230 PASS MANCHAC SOUTH OF PONCHATOULA, LA. (LAT 30 14 20 LONG 090 33 30)										
MAR. 5	--	6.3	--	20	45	410	20	30	97	722
JULY 18	--	3.8	--	24	57	520	32	3	121	920
07380290 LAC DES ALLEMENDS NEAR DES ALLEMENDS, LA. (LAT 29 54 07 LONG 090 34 06)										
JAN. 17	--	7.6	--	27	11	98	5.8	80	24	167
JULY 7	--	7.7	--	35	25	210	25	94	41	390
07381459 LAKE VERRET NEAR BELLWOOD, LA. (LAT 29 52 56 LONG 091 10 20)										
JAN. 26	--	6.5	--	37	11	33	4.3	112	53	47
JULY 16	--	7.2	--	34	10	23	4.1	130	20	34

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
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07379000 WARD CR. AT GOVERNMENT ST. AT BATON ROUGE, LA. (LAT 30 16 35 LONG 090 55 15)									
NOV. 19	--	--	--	--	--	--	--	--	--
JAN. 14	--	--	--	--	--	--	--	--	--
JAN. 28	--	--	--	--	--	--	--	--	--
FEB. 27	--	--	--	--	--	--	--	--	--
APR. 3	--	--	61	--	4.0	--	--	--	--
JUNE 2	6.7	2.8	0	--	--	--	--	--	--
07380230 PASS MANCHAC SOUTH OF PONCHATOULA, LA. (LAT 30 14 20 LONG 090 33 30)									
MAR. 5	--	0.2	--	0.00	--	--	--	--	--
JULY 18	--	.7	--	--	--	--	--	--	--
07380290 LAC DES ALLEMENDS NEAR DES ALLEMENDS, LA. (LAT 29 54 07 LONG 090 34 06)									
JAN. 17	--	4.9	--	0.00	--	--	--	--	--
JULY 7	--	9.6	--	--	--	--	--	--	--
07381459 LAKE VERRET NEAR BELLWOOD, LA. (LAT 29 52 56 LONG 091 10 20)									
JAN. 26	--	2.1	--	0.00	--	--	--	--	--
JULY 16	--	12	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
MISSISSIPPI RIVER DELTA--CONTINUED										
07378820	BAYOU MANCHAC NEAR KLEINPETER, LA.					(LAT 30 20 08 LONG 091 00 43)				
NOV. 17	0.3	0.3	592	570	129	3	1100	16.5	20	7.2
JAN. 8	.6	4.3	870	793	168	70	1510	8.0	25	7.1
FEB. 7	.3	2.3	406	380	138	16	667	10.5	15	7.5
MAR. 30	.2	.5	292	255	100	14	466	17.0	60	7.0
MAY 11	.3	1.2	--	338	105	36	665	--	15	6.9
JUNE 24	.2	.7	308	252	89	19	458	--	100	6.7
AUG. 10	.3	.4	513	483	114	18	916	29.0	40	7.0
SEPT. 3	.2	6.2	479	457	91	12	871	29.0	50	7.1
07379000	WARD CR. AT GOVERNMENT ST. AT BATON ROUGE, LA.					(LAT 30 16 35 LONG 090 55 15)				
NOV. 19	0.4	0.6	190	173	59	0	293	17.0	20	7.4
JAN. 14	.3	6.6	284	273	80	0	450	13.0	10	7.6
JAN. 28	.3	.1	304	302	87	0	504	20.0	5	7.5
FEB. 27	.4	.5	269	256	49	0	424	21.0	25	8.0
APR. 3	.4	.0	319	281	62	0	460	26.0	10	9.4
JUNE 2	.1	1.8	83	66	38	0	118	23.0	55	6.8
07380230	PASS MANCHAC SOUTH OF PONCHATOUA, LA.					(LAT 30 14 20 LONG 090 33 30)				
MAR. 5	0.3	0.1	1470	1340	236	211	2550	--	25	6.8
JULY 18	.2	--	1830	1680	296	294	3200	--	15	5.5
07380290	LAC DES ALLEMENDS NEAR DES ALLEMANDS, LA.					(LAT 29 54 07 LONG 090 34 06)				
JAN. 17	0.3	0.2	428	380	113	47	735	--	32	7.2
JULY 7	.3	--	868	780	190	113	1480	--	20	7.0
07381459	LAKE VERRET NEAR BELLWOOD, LA.					(LAT 29 52 56 LONG 091 10 20)				
JAN. 26	0.2	1.6	271	249	138	46	445	--	10	7.8
JULY 16	.2	2.6	220	199	127	20	360	--	25	7.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
MISSISSIPPI RIVER DELTA--CONTINUED										
07381465	LAKE PALOURDE NEAR AMELIA, LA.						(LAT 29 43 33 LONG 091 08 00)			
JAN. 26	--	6.4	--	40	9.3	34	4.1	129	40	49
JULY 16	--	7.0	--	35	7.4	22	4.1	115	23	32
07381477	BAYOU BLACK AT WATERPROOF, LOUISIANA						(LAT 29 33 47 LONG 090 47 42)			
NOV. 18	39	7.1	10	62	21	210	14	198	33	370
JAN. 7	79	9.6	30	33	10	56	7.2	112	20	99
APR. 2	43	9.1	20	37	12	60	4.7	100	24	116
JUNE 23	80	9.2	10	26	9.0	30	4.7	116	8.6	48
JULY 29	--	11	0	31	5.7	36	4.9	110	11	54
SEPT. 1	20	12	10	28	4.9	23	4.5	100	8.0	38
07381545	OPELOUSAS BAY AT NEW HENDERSON LANDING, LA.						(LAT 30 20 20 LONG 091 45 00)			
JAN. 29	--	8.6	--	24	1.0	11	4.1	63	19	14
JULY 17	--	10	--	24	5.0	10	4.8	101	6.2	12
07381580	SIX MILE LAKE AT VERDUNVILLE, LA.						(LAT 29 47 42 LONG 091 21 52)			
FEB. 7	--	6.5	--	32	7.8	24	2.9	95	38	33
JULY 16	--	6.9	--	48	11	21	4.0	148	47	25
07381593	FLAT LAKE AT DREW'S PASS NR, MORGAN CITY, LA.						(LAT 29 44 31 LONG 091 11 56)			
JULY 16	--	7.2	--	39	10	22	3.6	135	35	28
07381950	COCODRIE LAKE NEAR CLEARWATER, LA.						(LAT 30 57 33 LONG 092 27 17)			
FEB. 8	--	19	--	2.5	0.4	6.0	1.9	15	1.8	5.9
JULY 9	--	16	--	3.1	.5	7.2	1.4	21	2.2	6.0

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
07381465	LAKE PALOURDE NEAR AMELIA, LA.						(LAT 29 43 33 LONG 091 08 00)		
JAN. 26	--	2.2	--	0.00	--	--	--	--	--
JULY 16	--	10	--	--	--	--	--	--	--
07381545	OPELOUSAS BAY AT NEW HENDERSON LANDING, LA.						(LAT 30 20 20 LONG 091 45 00)		
JAN. 29	--	4.2	--	0.00	--	--	--	--	--
JULY 17	--	2.8	--	--	--	--	--	--	--
07381580	SIX MILE LAKE AT VERDUNVILLE, LA.						(LAT 29 47 42 LONG 091 21 52)		
FEB. 7	--	0.0	--	0.00	--	--	--	--	--
JULY 16	--	2.1	--	--	--	--	--	--	--
07381593	FLAT LAKE AT DREW'S PASS NR, MORGAN CITY, LA.						(LAT 29 44 31 LONG 091 11 56)		
JULY 16	--	3.0	--	--	--	--	--	--	--
07381950	COCODRIE LAKE NEAR CLEARWATER, LA.						(LAT 30 57 33 LONG 092 27 17)		
FEB. 8	--	0.6	--	0.00	--	--	--	--	--
JULY 9	--	5.7	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
MISSISSIPPI RIVER DELTA--CONTINUED										
07381465	LAKE PALOURDE NEAR AMELIA, LA.					(LAT 29 43 33 LONG 091 08 00)				
JAN. 26	0.3	0.8	258	248	138	32	442	--	10	7.5
JULY 16	.3	3.4	203	191	118	24	343	--	20	7.1
07381477	BAYOU BLACK AT WATERPROOF, LOUISIANA					(LAT 29 33 47 LONG 090 47 42)				
NOV. 18	0.3	1.3	872	817	243	81	1570	17.0	40	7.2
JAN. 7	.2	1.0	332	291	125	33	544	20.0	--	6.8
APR. 2	.2	.7	370	313	142	60	586	20.0	65	6.7
JUNE 23	.2	.8	200	194	102	7	344	--	55	7.0
JULY 29	.2	2.0	224	210	101	11	377	31.0	30	6.7
SEPT. 1	.1	1.9	186	169	90	8	296	29.0	35	6.8
07381545	OPELOUSAS BAY AT NEW HENDERSON LANDING, LA.					(LAT 30 20 20 LONG 091 45 00)				
JAN. 29	0.2	0.3	134	113	64	12	189	--	47	7.1
JULY 17	.1	.6	142	123	80	0	208	--	20	6.8
07381580	SIX MILE LAKE AT VERDUNVILLE, LA.					(LAT 29 47 42 LONG 091 21 52)				
FEB. 7	0.2	2.2	205	194	112	34	352	--	10	7.1
JULY 16	.3	4.0	246	240	166	45	415	--	5	6.9
07381593	FLAT LAKE AT DREW'S PASS NR. MORGAN CITY, LA.					(LAT 29 44 31 LONG 091 11 56)				
JULY 16	0.2	1.4	220	212	140	29	375	--	10	7.1
07381950	COCODRIE LAKE NEAR CLEARWATER, LA.					(LAT 30 57 33 LONG 092 27 17)				
FEB. 8	0.1	0.3	70	44	8	0	51	--	40	6.8
JULY 9	.0	.3	49	47	10	0	58	--	15	6.4

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	SULFATE (S04) (MG/L)	CHLORIDE (CL) (MG/L)
MISSISSIPPI RIVER DELTA--CONTINUED										
07385500		BAYOU TECHE AT ARNAUDVILLE, LA.				(LAT 30 23 50 LONG 091 55 50)				
NOV. 20	179	16	20	16	3.9	11	3.0	75	6.6	11
JAN. 15	758	10	80	8.2	3.5	6.3	3.3	35	8.0	10
FEB. 14	656	9.7	20	15	5.0	9.0	3.4	63	10	12
APR. 6	640	9.2	10	18	5.1	13	3.4	82	8.0	14
MAY 19	1120	7.2	40	16	3.2	5.8	3.4	63	6.6	8.2
JULY 1	390	14	10	42	12	24	4.9	194	10	29
JULY 30	254	14	30	16	5.8	11	3.4	82	6.0	12
SEPT. 10	394	11	30	18	3.4	12	3.4	80	4.2	13
07385900		BAYOU TECHE NEAR PATTERSON, LA.				(LAT 29 42 24 LONG 091 17 58)				
NOV. 19	754	6.7	10	42	10	27	3.5	138	53	28
JAN. 14	537	5.7	20	26	7.6	17	2.5	85	37	22
FEB. 20	891	5.9	0	36	9.3	23	3.8	97	59	30
APR. 1	1270	3.9	20	35	7.2	19	3.1	96	39	29
MAY 18	378	1.0	30	36	8.3	19	3.2	112	37	28
JUNE 29	--	3.7	10	37	7.0	20	3.2	117	34	26
JULY 30	172	4.3	20	34	11	20	3.2	118	38	25
SEPT. 9	--	2.7	10	40	9.3	28	3.9	124	48	36
MERMENTAU RIVER BASIN										
08010500		BAYOU WIKOFF NEAR RAYNE, LA.				(LAT 30 17 05 LONG 092 15 45)				
MAR. 13	3.0	6.2	30	21	6.0	21	3.5	69	28	26
CALCASIEU RIVER BASIN										
08013450		MILL CREEK NEAR OBERLIN, LA.				(LAT 30 40 50 LONG 092 48 15)				
NOV. 24	11	--	--	--	--	90	5.9	256	55	--
JAN. 14	18	--	--	--	--	160	6.5	384	49	--
FEB. 19	29	--	--	--	--	110	5.2	321	--	--
APR. 3	24	--	--	--	--	240	9.1	657	--	--
MAY 11	18	--	--	--	--	182	7.4	380	--	--
JUNE 22	13	--	--	--	--	190	7.2	530	--	--
JULY 27	12	--	--	--	--	110	5.5	404	--	--
SEPT. 25	12	--	--	--	--	165	6.8	484	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
MISSISSIPPI RIVER DELTA--CONTINUED										
07385500	BAYOU TECHE AT ARNAUDVILLE, LA.					(LAT 30 23 50		LONG 091 55 50)		
NOV. 20	0.1	0.0	109	105	56	0	170	14.0	20	6.6
JAN. 15	.1	.7	91	67	35	6	113	8.0	80	6.6
FEB. 14	.1	.1	108	95	58	6	161	13.0	15	7.1
APR. 6	.1	.9	139	112	66	0	191	18.0	15	7.0
MAY 19	.0	.2	89	82	53	1	135	25.0	20	6.8
JULY 1	.1	.3	235	232	153	0	395	--	10	7.0
JULY 30	.1	1.9	110	110	64	0	181	29.5	30	7.7
SEPT. 10	.1	.3	105	104	59	0	172	30.5	10	6.8
07385900	BAYOU TECHE NEAR PATTERSON, LA.					(LAT 29 42 24		LONG 091 17 58)		
NOV. 19	0.3	0.8	247	239	148	35	429	16.5	15	7.0
JAN. 14	.1	.5	166	160	96	26	289	4.0	5	6.8
FEB. 20	.2	1.6	210	217	128	48	355	--	5	7.0
APR. 1	.0	1.3	188	184	117	38	327	20.0	5	7.0
MAY 18	.1	.2	190	188	124	32	340	24.0	5	6.9
JUNE 29	.1	.4	188	189	121	25	334	--	0	7.1
JULY 30	.1	1.6	194	195	131	34	340	29.0	15	8.1
SEPT. 9	.1	.3	237	230	138	36	411	--	5	7.0
MERMENTAU RIVER BASIN--CONTINUED										
08010500	BAYOU WIKOFF NEAR RAYNE, LA.					(LAT 30 17 05		LONG 092 15 45)		
MAR. 13	0.2	0.2	152	146	77	20	266	17.0	15	6.4
CALCASIEU RIVER BASIN--CONTINUED										
08013450	MILL CREEK NEAR OBERLIN, LA.					(LAT 30 40 50		LONG 092 48 15)		
NOV. 24	--	--	389	--	86	0	531	13.0	225	7.2
JAN. 14	--	--	648	--	35	0	691	7.0	900	7.6
FEB. 19	--	--	--	--	38	0	608	13.0	270	7.3
APR. 3	--	--	--	--	50	0	1040	15.0	1500	7.2
MAY 11	--	--	--	--	38	0	677	23.0	220	7.3
JUNE 22	--	--	--	--	50	0	900	--	315	7.6
JULY 27	--	--	--	--	76	0	715	24.0	110	7.6
SEPT. 25	--	--	--	--	48	0	830	26.0	350	7.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SiO ₂) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	SULFATE (SO ₄) (MG/L)	CHLORIDE (CL) (MG/L)
SABINE RIVER BASIN										
08025350	TOLEDO BEND RESERVOIR NEAR BURKEVILLE, TEX.						(LAT 31 11 47 LONG 093 34 25)			
FEB. 9	--	2.1	--	10	2.7	15	3.1	34	12	23
JULY 18	--	1.3	--	11	2.8	15	3.7	44	9.0	22
08027450	UPPER ANACOCO LAKE NEAR LEESVILLE, LA.						(LAT 31 10 50 LONG 093 21 50)			
FEB. 8	--	4.2	--	2.3	0.5	2.0	1.4	10	2.2	2.5
JULY 17	--	1.7	--	2.7	.3	2.6	1.5	10	2.6	3.0

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO ₄) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
08025350	TOLEDO BEND RESERVOIR NEAR BURKEVILLE, TEX.						(LAT 31 11 47 LONG 093 34 25)		
FEB. 9	--	2.9	--	0.00	--	--	--	--	--
JULY 18	--	--	--	--	--	--	--	--	--
08027450	UPPER ANACOCO LAKE NEAR LEESVILLE, LA.						(LAT 31 10 50 LONG 093 21 50)		
FEB. 8	--	0.4	--	0.00	--	--	--	--	--
JULY 17	--	1.9	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
SABINE RIVER BASIN--CONTINUED										
08025350 TOLEDO BEND RESERVOIR NEAR BURKEVILLE, TEX. (LAT 31 11 47 LONG 093 34 25)										
FEB. 9	0.1	0.9	106	86	36	8	177	--	30	7.4
JULY 18	.1	.3	94	88	39	3	163	--	10	6.6
08027450 UPPER ANACOCO LAKE NEAR LEESVILLE, LA. (LAT 31 10 50 LONG 093 21 50)										
FEB. 8	0.1	1.4	29	22	8	0	36	--	10	6.6
JULY 17	.1	.3	29	20	8	0	37	--	10	6.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DISCHARGE (CFS)	SILICA (SI02) (MG/L)	IRON (FE) (UG/L)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
SABINE RIVER BASIN										
08028000 BAYOU ANACOCO NEAR ROSEPINE						(LAT 30 57 10 LONG 093 21 10)				
MAR. 13	--	13	50	4.5	0.4	2.8	1.2	17	1.8	4.9
MAR. 19	--	14	70	5.0	.9	3.1	1.7	20	2.8	4.1
JUNE 23	--	18	110	9.0	1.3	7.8	2.1	39	3.8	7.8
JULY 27	--	14	30	6.2	.9	4.2	1.1	24	3.8	5.4
AUG. 20	--	12	40	6.3	1.3	5.2	1.9	23	3.8	6.8

DATE	FLUORIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CON- STITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CAR- BONATE HARDNESS (MG/L)	SPECIFIC CON- DUCTANCE (MICRO- MHOS)	TEM- PERATURE (DEG C)	COLOR (PLATINUM- COBALT UNITS)	PH (UNITS)
MAR. 13	0.1	0.4	52	37	13	0	40	--	38	6.7
MAR. 19	.0	.6	58	42	16	0	57	--	33	6.6
JUNE 23	.2	.2	74	69	28	0	98	28.0	15	7.2
JULY 27	.0	.5	57	48	19	0	64	27.0	15	6.5
AUG. 20	.1	1.0	63	49	21	2	71	27.0	15	6.4

DATE	DISSOLVED OXYGEN (DO) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	SUSPENDED SOLIDS (MG/L)	COLIFORM (COLONIES PER 100 ML)	STREP- TOCOCCI (COLONIES PER 100 ML)	FECAL COLIFORM (COLONIES PER 100 ML)
MAR. 13	--	--	--	--	--	--	--	--	--
MAR. 19	--	--	--	--	--	--	--	--	--
JUNE 23	5.8	0.9	39	--	--	--	--	--	--
JULY 27	6.6	--	30	--	--	--	--	--	--
AUG. 20	6.0	--	18	--	--	--	--	--	--

DISSOLVED OXYGEN, IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	DISSOLVED OXYGEN	DATE OF COLLECTION	DISSOLVED OXYGEN
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RED RIVER BASIN

07367000 OUACHITA RIVER AT MONROE

OCT. 8.....	3.0	APR. 16.....	5.5
OCT. 23.....	4.8	APR. 30.....	4.3
NOV. 6.....	3.8	MAY 14.....	4.0
DEC. 4.....	8.6	MAY 27.....	2.7
DEC. 18.....	10.0	JUNE 11.....	4.1
DEC. 31.....	11.0	JUNE 25.....	1.9
JAN. 16.....	11.1	JULY 9.....	1.5
JAN. 30.....	9.6	JULY 24.....	2.6
FEB. 13.....	8.8	AUG. 4.....	3.9
FEB. 27.....	8.4	AUG. 19.....	2.7
MAR. 12.....	5.1	SEPT. 11.....	3.5
MAR. 27.....	8.0	SEPT. 26.....	4.1

MISSISSIPPI RIVER DELTA

07386935 VERMILION RIVER AT STATE HIGHWAY 3073, AT LAFAYETTE

OCT. 15.....	2.6	APR. 23.....	4.7
OCT. 29.....	.2	MAY 7.....	4.5
NOV. 25.....	.3	MAY 20.....	4.2
DEC. 10.....	3.1	JUNE 9.....	2.8
DEC. 23.....	2.8	JUNE 19.....	2.4
JAN. 7.....	10.0	JULY 2.....	1.2
JAN. 23.....	8.4	JULY 16.....	.7
FEB. 19.....	5.2	JULY 30.....	4.7
MAR. 18.....	7.0	AUG. 14.....	3.6
MAR. 30.....	6.5	SEPT. 3.....	.8
APR. 8.....	5.6	SEPT. 18.....	1.0

CALCASIEU RIVER BASIN

08013500 CALCASIEU RIVER NEAR OBERLIN

OCT. 16.....	9.0	APR. 9.....	7.4
OCT. 30.....	8.8	APR. 24.....	6.5
NOV. 13.....	6.6	MAY 6.....	7.2
NOV. 26.....	7.8	MAY 19.....	6.0
DEC. 11.....	9.0	MAY 26.....	6.1
DEC. 30.....	6.8	JUNE 18.....	5.5
JAN. 8.....	11.5	JULY 16.....	6.7
JAN. 27.....	7.8	JULY 30.....	6.2
FEB. 25.....	7.0	SEPT. 3.....	5.2
MAR. 19.....	7.5	SEPT. 18.....	5.6
MAR. 31.....	8.2		

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

CONCENTRATIONS (mg/l)

DATE OF COLLECTION	CONCENTRATION	DATE OF COLLECTION	CONCENTRATION
RED RIVER BASIN			
07373000 BIG CREEK AT POLLOCK			
OCT. 10, 1969.....	9	APR. 3.....	44
NOV. 21.....	4	APR. 30.....	14
DEC. 15.....	8	JULY 23.....	17
JAN. 21, 1970.....	17	SEPT. 22.....	13
MAR. 4.....	13		
MISSISSIPPI RIVER DELTA			
07380400 BAYOU LAFOURCHE AT DONALDSONVILLE			
OCT. 2, 1969.....	96	MAY 18.....	121
NOV. 18.....	68	JUNE 23.....	77
JAN. 7, 1970.....	434	JULY 29.....	44
FEB. 17.....	203	SEPT. 1.....	90
APR. 2.....	184		
07380450 BAYOU LAFOURCHE AT BELLE ROSE			
OCT. 2, 1969.....	53	MAY 18.....	137
NOV. 18.....	52	JUNE 23.....	415
JAN. 7, 1970.....	59	JULY 29.....	65
FEB. 17.....	92	SEPT. 1.....	82
APR. 2.....	103		
07380500 BAYOU LAFOURCHE AT NAPOLEONVILLE			
OCT. 2, 1969.....	20	MAY 18.....	133
NOV. 18.....	31	JUNE 23.....	302
JAN. 7, 1970.....	60	JULY 29.....	35
FEB. 17.....	51	SEPT. 1.....	234
APR. 2.....	115		
07380800 BAYOU LAFOURCHE AT LABADIEVILLE			
OCT. 2, 1969.....	25	MAY 18.....	452
NOV. 18.....	37	JUNE 23.....	386
JAN. 7, 1970.....	390	JULY 29.....	54
FEB. 17.....	80	SEPT. 1.....	79
APR. 2.....	56		
07381000 BAYOU LAFOURCHE AT THIBODAUX			
OCT. 2, 1969.....	23	MAY 18.....	120
NOV. 18.....	24	JUNE 23.....	62
JAN. 7, 1970.....	38	JULY 29.....	33
FEB. 17.....	50	SEPT. 1.....	58
APR. 2.....	56		
07381100 BAYOU LAFOURCHE AT RACELAND			
OCT. 2, 1969.....	44	MAY 18.....	98
NOV. 18.....	19	JUNE 23.....	61
JAN. 7, 1970.....	45	JULY 29.....	23
FEB. 17.....	254	SEPT. 1.....	99
APR. 2.....	50		

DATE OF COLLECTION	TEMPERATURE	DATE OF COLLECTION	TEMPERATURE
PEARL RIVER BASIN			
02489500 PEARL RIVER NEAR BOGALUSA			
OCT. 16, 1969.....	19	JULY 15.....	28
NOV. 19.....	13	JULY 20.....	29
MAR. 10, 1970.....	14	AUG. 31.....	27
02490105 BOGUE LUSA CREEK AT STATE HIGHWAY 439, AT BOGALUSA			
OCT. 15, 1969.....	18	MAY 13.....	22.5
NOV. 20.....	11	JUNE 24.....	25.5
JAN. 14, 1970.....	7	JULY 30.....	26.0
FEB. 17.....	12	AUG. 31.....	24.5
MAR. 31.....	14		
02492000 BOGUE CHITTO NEAR BUSH			
OCT. 13, 1969.....	25	FEB. 17.....	11
NOV. 19.....	13	MAY 13.....	25.0
JAN. 14, 1970.....	13	AUG. 31.....	26
RED RIVER BASIN			
07344400 RED RIVER NEAR HOSSTON			
SEPT. 24, 1969.....	25	JULY 16, 1970.....	31
073444500 PAW PAW BAYOU NEAR GREENWOOD			
NOV. 18, 1969.....	16	APR. 8.....	15
JAN. 23, 1970.....	7	MAY 20.....	25
FEB. 19.....	11	JULY 14.....	25
07347500 BLACK BAYOU NEAR GILLIAM			
OCT. 29, 1969.....	16	MAR. 19.....	15.0
NOV. 19.....	14	APR. 9.....	19
JAN. 22, 1970.....	4	MAY 22.....	25
FEB. 3.....	2.0	JULY 16.....	28
FEB. 18.....	12	SEPT. 2.....	26
MAR. 9.....	13		
07348000 TWELVEMILE BAYOU NEAR DIXIE			
OCT. 29, 1969.....	17	MAR. 9.....	16
NOV. 19.....	14	APR. 8.....	16
JAN. 23, 1970.....	4	MAY 4.....	22
FEB. 18.....	13	SEPT. 2.....	27
07348700 BAYOU DORCHEAT NEAR SPRINGHILL			
OCT. 21, 1969.....	20	MAY 5.....	19
NOV. 18.....	15	MAY 20.....	23
JAN. 15, 1970.....	07	JULY 8.....	26
MAR. 2.....	13	SEPT. 9.....	25
APR. 14.....	17		
07348800 FLAT LICK BAYOU NEAR LETON			
NOV. 19, 1969.....	11	APR. 14.....	18
JAN. 5, 1970.....	6	MAY 21.....	24
FEB. 20.....	11		
07349000 BAYOU DORCHEAT NEAR MINDEN			
FEB. 27, 1970.....	10	MAY 22.....	23
MAR. 9.....	16	JULY 9.....	27
MAY 4.....	20	SEPT. 10.....	27
07349500 BODCAU BAYOU NEAR SAREPTA			
OCT. 22, 1969.....	19	MAR. 19.....	16
NOV. 20.....	11	APR. 9.....	18
JAN. 15, 1970.....	5	MAY 21.....	22
FEB. 3.....	4	JULY 15.....	28
MAR. 2.....	14		

DATE OF COLLECTION	TEMPERATURE	DATE OF COLLECTION	TEMPERATURE
RED RIVER BASIN--Continued			
07349800 CYPRESS BAYOU NEAR BENTON			
NOV. 19, 1969.....	13	APR. 28.....	23
JAN. 16, 1970.....	5	MAY 20.....	21
APR. 10.....	18		
07351000 BOGGY BAYOU NEAR KEITHVILLE			
OCT. 1, 1969.....	30	FEB. 17.....	13
OCT. 9.....	25	APR. 7.....	18
NOV. 18.....	17	MAY 21.....	22
NOV. 19.....	11	JULY 14.....	25
FEB. 4, 1970.....	7	SEPT. 1.....	29
07352000 SALINE BAYOU NEAR LUCKY			
OCT. 9, 1969.....	23	APR. 24.....	14
OCT. 27.....	16	MAY 25.....	20
NOV. 4.....	25	JUNE 8.....	19
NOV. 24.....	11	JUNE 15.....	21
DEC. 1.....	6	JUNE 23.....	22
DEC. 8.....	11	JULY 15.....	27
JAN. 27, 1970.....	7	AUG. 10.....	26
MAR. 20.....	8	SEPT. 24.....	21
07352800 GRAND BAYOU NEAR COUSHATTA			
NOV. 18, 1969.....	16	MAY 20.....	22
JAN. 28, 1970.....	4	JULY 15.....	28
FEB. 17.....	10	SEPT. 1.....	25
APR. 10.....	18		
07353000 SALINE BAYOU NEAR CLARENCE			
FEB. 23, 1970.....	16	JULY 2.....	32
APR. 3.....	16	AUG. 13.....	23
07354000 LITTLE SANDY CREEK AT KISATCHIE			
NOV. 17, 1969.....	17	MAR. 27.....	15
JAN. 9, 1970.....	1	MAY 21.....	20
FEB. 19.....	9	JUNE 25.....	25
MAR. 11.....	12		
07364100 OUACHITA RIVER NEAR ARKANSAS-LOUISIANA STATE LINE			
OCT. 24, 1969.....	18	FEB. 12, 1970.....	10
DEC. 18.....	17	AUG. 11.....	29
07364200 BAYOU BARTHOLOMEW NEAR JONES			
OCT. 6, 1969.....	24	MAY 26.....	26
NOV. 20.....	9	JULY 24.....	26
JAN. 12, 1970.....	4	AUG. 13.....	30
MAR. 6.....	14		
07364300 CHEMIN-A-HAUT BAYOU NEAR BEEKMAN			
OCT. 6, 1969.....	24	JULY 24.....	27
NOV. 20.....	11	AUG. 13.....	25
JAN. 12, 1970.....	2		
07364700 BAYOU DE LOUTRE NEAR LARAN			
OCT. 14, 1969.....	18	MAY 25.....	28
DEC. 4.....	16	JULY 22.....	22
JAN. 22, 1970.....	5	AUG. 26.....	27
APR. 13.....	18		
07365500 MIDDLE FORK BAYOU D'ARBONNE NEAR BERNICE			
JAN. 21, 1970.....	5	JULY 17.....	25
MAY 19.....	18		

TEMPERATURES OF STREAMS IN LOUISIANA DURING 1970 WATER YEAR

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RED RIVER BASIN--Continued

07366200 LITTLE CORNEY BAYOU NEAR LILLIE

OCT. 14, 1969.....	17	APR. 23.....	20
DEC. 3.....	7	MAY 19.....	19
JAN. 21, 1970.....	5	JULY 17.....	25
MAR. 24.....	8	AUG. 28.....	22

07367700 BOEUF RIVER NEAR ARKANSAS-LOUISIANA STATE LINE

OCT. 7, 1969.....	23	MAY 21.....	24
APR. 15, 1970.....	18	AUG. 14.....	27

07368000 BOEUF RIVER NEAR GIRARD

OCT. 1, 1969.....	21	JAN. 14, 1970.....	6
NOV. 17.....	11	APR. 8.....	18

07368500 BIG COLEWA BAYOU NEAR OAK GROVE

NOV. 19, 1969.....	13	MAR. 5.....	9
JAN. 13, 1970.....	4	AUG. 18.....	27

07369000 BAYOU LAFOURCHE NEAR CREW LAKE

OCT. 9, 1969.....	22	MAY 4.....	19
NOV. 17.....	14	MAY 7.....	19
JAN. 15, 1970.....	6	MAY 21.....	24
FEB. 9.....	9	JUNE 11.....	20
APR. 8.....	17	JULY 29.....	29
APR. 28.....	21	AUG. 20.....	29

07369500 TENSAS RIVER AT TENDAL

OCT. 8, 1969.....	22	APR. 9.....	18
NOV. 17.....	12	JULY 14.....	26
JAN. 13, 1970.....	5	AUG. 19.....	27

073697 BAYOU MACON NEAR KILBOURNE

DEC. 17, 1969.....	9	AUG. 14, 1970.....	27
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07370000 BAYOU MACON NEAR DELHI

OCT. 14, 1969.....	21	APR. 28.....	21
NOV. 17.....	12	JULY 14.....	27
JAN. 14, 1970.....	4	AUG. 19.....	30

07370500 CASTOR CREEK NEAR GRAYSON

DEC. 2, 1969.....	6	MAY 20.....	23
JAN. 14, 1970.....	12	JUNE 24.....	26
FEB. 4.....	5	AUG. 18.....	23
FEB. 19.....	11	SEPT. 1.....	23
APR. 1.....	15		

07371000 GARRETT CREEK AT JONESBORO

DEC. 5, 1969.....	6	JUNE 15.....	22
MAR. 4, 1970.....	15	JUNE 29.....	23
APR. 24.....	19	JULY 23.....	22
MAY 1.....	29	AUG. 31.....	29

07372000 DUGDEMONA RIVER NEAR WINNFIELD

OCT. 13, 1969.....	17	MAY 27.....	25
DEC. 1.....	8	JULY 23.....	23
JAN. 28, 1970.....	14	AUG. 21.....	24
JAN. 30.....	12		

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RED RIVER BASIN--Continued

07372200 LITTLE RIVER NEAR ROCHELLE

OCT. 1, 1969.....	22	MAY 5.....	22
DEC. 3.....	9	JUNE 23.....	20
FEB. 18, 1970.....	10	JULY 13.....	28
MAR. 31.....	15	AUG. 18.....	24
APR. 30.....	21		

07372500 BAYOU FUNNY LOUIS NEAR TROUT

OCT. 3, 1969.....	22	AUG. 17.....	24
JAN. 15, 1970.....	7	SEPT. 1.....	26
JUNE 24.....	24		

THOMPSON CREEK BASIN

07373500 WEST FORK THOMPSON CREEK NEAR WAKEFIELD

NOV. 18, 1969.....	17	JUNE 23.....	29.0
JAN. 19, 1970.....	8.5	JULY 27.....	29.0
APR. 1.....	23.5	SEPT. 1.....	28.5
MAY 12.....	29.5		

MISSISSIPPI RIVER DELTA

07375000 TCHEFUNCTA RIVER NEAR FOLSOM

OCT. 3, 1969.....	19	MAY 18.....	19.5
NOV. 18.....	14	JUNE 23.....	24.0
JAN. 13, 1970.....	8	JULY 27.....	23.5
APR. 1.....	17	SEPT. 2.....	24

07375500 TANGIPAHOA RIVER AT ROBERT

OCT. 1, 1969.....	21	FEB. 16.....	12
NOV. 17.....	15	MAY 13.....	23.0
JAN. 14, 1970.....	8	SEPT. 3.....	28

07376000 TICKFAW RIVER AT HOLDEN

OCT. 1, 1969.....	22	JAN. 27.....	14
OCT. 3.....	21	FEB. 16.....	11.5
NOV. 8.....	14	MAY 11.....	24.5
JAN. 14, 1970.....	7	SEPT. 1.....	27

07376500 NATALBANY RIVER AT BAPTIST

NOV. 21, 1969.....	10.1	MAR. 12.....	14
JAN. 27, 1970.....	15	MAY 13.....	21
FEB. 19.....	16	SEPT. 3.....	24.5

07377000 AMITE RIVER NEAR DARLINGTON

OCT. 2, 1969.....	21	MAY 12.....	24
NOV. 20.....	12	AUG. 4.....	28.5
JAN. 13, 1970.....	8.0	SEPT. 2.....	26
FEB. 18.....	11		

07377500 COMITE RIVER NEAR OLIVE BRANCH

NOV. 18, 1969.....	18	APR. 1.....	20.5
JAN. 19, 1970.....	10.0	JUNE 23.....	27
FEB. 18.....	13	SEPT. 2.....	25.0

07378000 COMITE RIVER NEAR COMITE

OCT. 7, 1969.....	30	MAR. 31.....	20.5
NOV. 17.....	18	JUNE 22.....	28
JAN. 20, 1970.....	6.5	JULY 29.....	27.5
FEB. 19.....	12		

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MISSISSIPPI RIVER DELTA--Continued

07378500 AMITE RIVER NEAR DENHAM SPRINGS

OCT. 6, 1969.....	27	MAY 11.....	25.6
NOV. 17.....	15	JUNE 22.....	30
JAN. 16, 1970.....	12.0	JULY 31.....	29
MAR. 31.....	17.8	SEPT. 3.....	26.6

07380400 BAYOU LAFOURCHE AT DONALDSONVILLE

OCT. 1, 1969.....	23	FEB. 17.....	9.5
NOV. 18.....	14	MAR. 31.....	10
JAN. 15, 1970.....	3.0		

07381800 SPRING CREEK NEAR GLENMORA

NOV. 20, 1969.....	8	MAY 12.....	21
JAN. 7, 1970.....	7	JUNE 29.....	23
FEB. 17.....	12	AUG. 17.....	23

07382000 BAYOU COCODRIE NEAR CLEARWATER

OCT. 15, 1969.....	19	AUG. 11.....	23
NOV. 18.....	13	AUG. 21.....	27
JAN. 13, 1970.....	7	SEPT. 14.....	27
FEB. 16.....	11	SEPT. 16.....	27
JULY 1.....	25		

07382500 BAYOU COURTABLEAU AT WASHINGTON

OCT. 8, 1969.....	21	APR. 7.....	20
NOV. 18.....	17.5	MAY 20.....	24
JAN. 12, 1970.....	4.0	JULY 28.....	27
FEB. 19.....	10.5	SEPT. 8.....	28

07383500 BAYOU DES GLAISES DIVERSION CHANNEL AT MOREAUVILLE

OCT. 9, 1969.....	23	APR. 8.....	19
NOV. 25.....	17	JUNE 26.....	26
JAN. 13, 1970.....	6	AUG. 11.....	22
FEB. 12.....	18	SEPT. 3.....	26

07385500 BAYOU TECHE AT ARNAUDVILLE

OCT. 14, 1969.....	29	MAY 19.....	25
NOV. 20.....	14	JULY 1.....	31
JAN. 15, 1970.....	8	JULY 30.....	29.5
FEB. 19.....	13	SEPT. 10.....	30.5
APR. 6.....	18		

07386500 BAYOU BOURBEAU NEAR SHUTESTON

OCT. 14, 1969.....	20	APR. 6.....	18
NOV. 18.....	18.0	MAY 13.....	26
JAN. 13, 1970.....	9	JUNE 30.....	29
FEB. 18.....	12	SEPT. 11.....	29

MERMENTAU RIVER BASIN

08010000 BAYOU DES CANNES NEAR EUNICE

NOV. 17, 1969.....	17	MAY 11.....	24
JAN. 9, 1970.....	4	JUNE 23.....	28
FEB. 18.....	10	JULY 28.....	27.5
MAR. 31.....	16.5	AUG. 31.....	27.5

08010200 BAYOU PLAQUEMINE BRULE AT CHURCH POINT

OCT. 7, 1969.....	23.0	MAY 13.....	25.5
NOV. 18.....	19	JUNE 30.....	28
JUNE 13, 1970.....	7	AUG. 3.....	28.5
FEB. 18.....	10.5	SEPT. 3.....	27
APR. 6.....	18.0		

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MERMENTAU RIVER BASIN--Continued

08010500 BAYOU WIKOFF NEAR RAYNE

OCT. 8, 1969.....	20.6	MAY 13.....	26
JAN. 13, 1970.....	7	JUNE 30.....	30
FEB. 18.....	9	SEPT. 3.....	27.5
APR. 3.....	19		

08011500 BOGGY BAYOU NEAR PINE PRAIRIE

JAN. 15, 1970.....	8	MAY 13.....	22
FEB. 16.....	11	AUG. 12.....	24
APR. 6.....	20		

08012000 BAYOU NEZPIQUE NEAR BASILE

OCT. 7, 1969.....	28	MAR. 30.....	18
NOV. 17.....	17	JUNE 23.....	27.5
JAN. 9, 1970.....	4	JULY 29.....	26.5
FEB. 17.....	12	AUG. 31.....	28

CALCASIEU RIVER BASIN

08013000 CALCASIEU RIVER NEAR GLENMORA

OCT. 2, 1969.....	21	FEB. 17.....	13
OCT. 28.....	18	APR. 6.....	24
NOV. 17.....	20	MAY 12.....	22
JAN. 23, 1970.....	13	JUNE 29.....	27
JAN. 30.....	14	AUG. 12.....	26
FEB. 5.....	12		

08013500 CALCASIEU RIVER NEAR OBERLIN

OCT. 1, 1969.....	23	MAR. 25.....	15
OCT. 28.....	21	APR. 27.....	14
NOV. 24.....	13	JUNE 25.....	26
DEC. 23.....	12	JULY 26.....	26
JAN. 27, 1970.....	11	AUG. 31.....	24
FEB. 2.....	16	SEPT. 25.....	26
FEB. 5.....	12		

08014500 WHISKY CHITTO CREEK NEAR OBERLIN

OCT. 1, 1969.....	21	APR. 3.....	15
NOV. 24.....	12	MAY 15.....	19
JAN. 14, 1970.....	6	JUNE 22.....	26
FEB. 19.....	12	AUG. 11.....	27

08014800 BUNDICK CREEK NEAR DE RIDDER

OCT. 7, 1969.....	21	MAY 15.....	22
FEB. 17, 1970.....	12	JUNE 22.....	25
APR. 2.....	17	AUG. 11.....	26

08015000 BUNDICK CREEK NEAR DRY CREEK

OCT. 6, 1969.....	24	MAR. 31.....	18
NOV. 20.....	11	MAY 12.....	23
FEB. 5, 1970.....	11	JUNE 24.....	25
FEB. 16.....	12	AUG. 11.....	28

08015500 CALCASIEU RIVER NEAR KINDER

OCT. 8, 1969.....	22	MAY 13.....	22
NOV. 18.....	16	JUNE 24.....	26
JAN. 14, 1970.....	5	AUG. 10.....	30
FEB. 6.....	15		

08016400 BECKWITH CREEK NEAR DE QUINCY

JAN. 9, 1970.....	3	MAY 12.....	21
FEB. 18.....	12	JUNE 24.....	24
MAR. 31.....	17	AUG. 13.....	27

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CALCASIEU RIVER BASIN--Continued

08016800 BEAR HEAD CREEK NEAR STARKS

JAN. 9, 1970.....	3	MAY 11.....	22
FEB. 18.....	12	JUNE 23.....	26
APR. 1.....	17	AUG. 13.....	26

SABINE RIVER BASIN

08022750 BAYOU CASTOR TRIBUTARY NEAR LOGANSFORT

NOV. 19, 1969.....	13	MAR. 26.....	14
JAN. 7, 1970.....	0	MAY 19.....	19
FEB. 18.....	11	JUNE 23.....	25

08025500 BAYOU TORO NEAR TORO

NOV. 20, 1969.....	10	MAR. 25.....	19
JAN. 8, 1970.....	6	MAY 20.....	18
FEB. 19.....	12	JUNE 24.....	25

08028000 BAYOU ANACOCO NEAR ROSEFINE

NOV. 19, 1969.....	12	MAY 19.....	23
JAN. 8, 1970.....	6	JUNE 23.....	24
FEB. 11.....	9	AUG. 12.....	27
APR. 1.....	18		

08028200 BAYOU ANACOCO NEAR KNIGHT

OCT. 7, 1969.....	24	MAY 19.....	27
NOV. 19.....	14	JUNE 23.....	27
FEB. 17, 1970.....	13	AUG. 12.....	29
APR. 2.....	15		

08028700 HOOSIER CREEK NEAR MERRYVILLE

OCT. 7, 1969.....	20	APR. 2.....	16
NOV. 19.....	12	MAY 20.....	22
JAN. 7, 1970.....	4	JUNE 23.....	24
FEB. 6.....	12	AUG. 12.....	24
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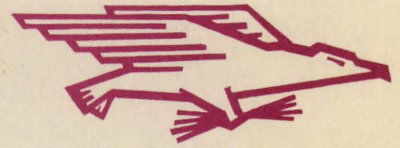
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