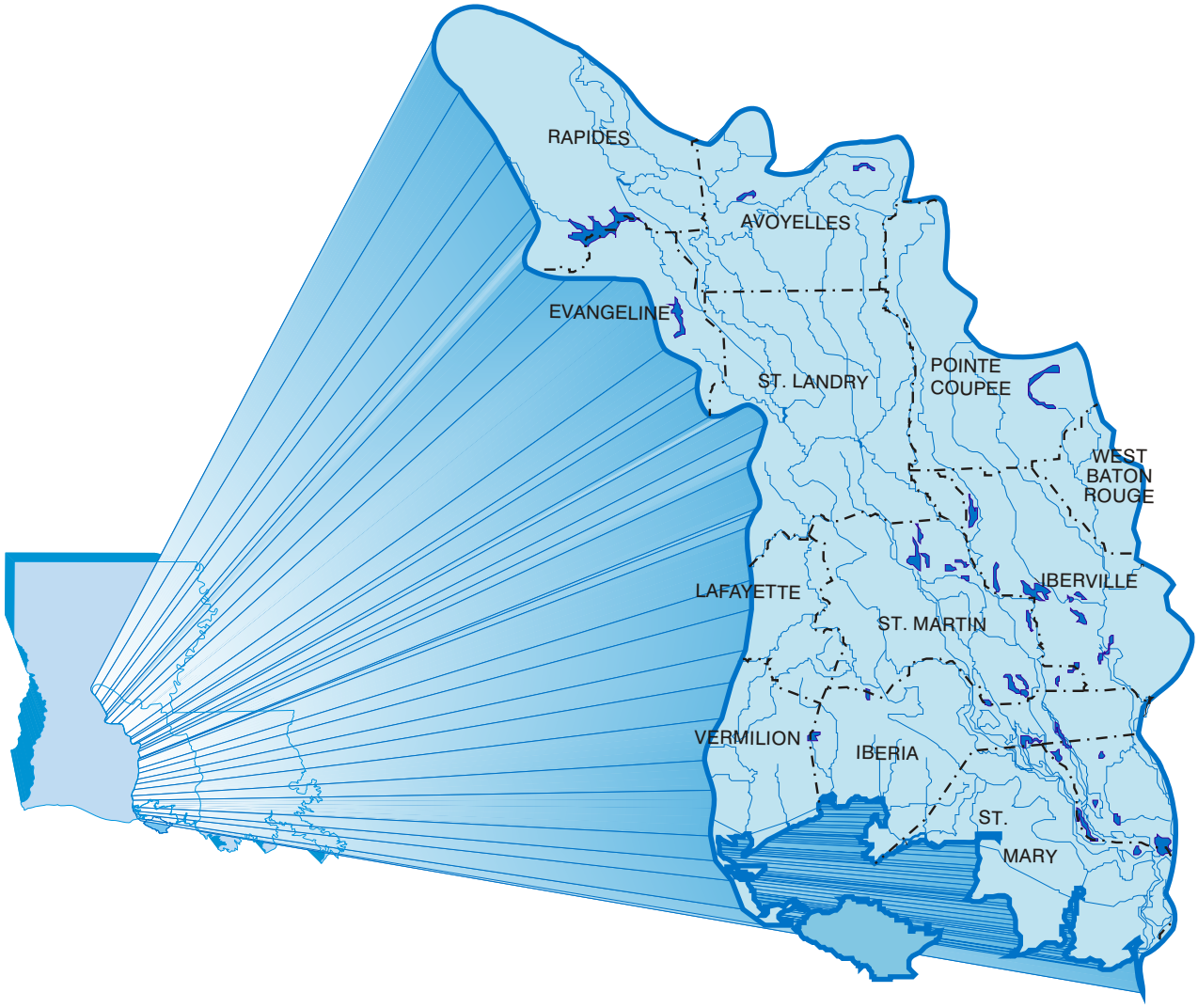
# Statistical Summary of Surface-Water Quality in Louisiana--Atchafalaya-Teche-Vermilion Basin, 1944-95

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
Water Resources Technical Report No. 55F




STATE OF LOUISIANA

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
PUBLIC WORKS AND WATER RESOURCES DIVISION
WATER RESOURCES SECTION
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WATER RESOURCES

TECHNICAL REPORT NO. 55F

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By

Charles R. Garrison

U.S. GEOLOGICAL SURVEY

Published by
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Baton Rouge, Louisiana

2001

STATE OF LOUISIANA

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## CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATED WATER-QUALITY UNITS

| Multiply | By | To obtain |
|---|---|---|
| inch (in.) | 25.4 | millimeter |
| foot (ft) | 0.3048 | meter |
| mile (mi) | 1.609 | kilometer |
| acre | 0.4047 | hectare |
| cubic foot per second ($ft^3/s$) | 0.0283 | cubic meter per second |
| million gallons per day (Mgal/d) | 0.04381 | cubic meter per second |

**Temperature** in degrees Celsius ($^oC$) can be converted to degrees Fahrenheit ($^oF$) as follows: $^oF = 1.8(^oC) + 32$.

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

**Abbreviated water-quality units:**

cells per milliliter (cells/mL)

colonies per 100 milliliters (cols/100 mL)

microsiemens per centimeter at 25 degrees Celsius (µS/cm)

micrograms per liter (µg/L)

milligrams per liter (mg/L)

nanograms per liter (ng/L)

# Statistical Summary of Surface-Water Quality in Louisiana--Atchafalaya-Teche-Vermilion Basin, 1944-95

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## ABSTRACT

A statistical summary of surface-water quality in the Atchafalaya-Teche-Vermilion basin was completed using available data from the U.S. Geological Survey Water-Data Storage and Retrieval System (WATSTORE), a computerized data base. Data for 33 water-quality properties and constituents for 67 sites in the Atchafalaya-Teche-Vermilion basin within Louisiana were statistically analyzed for water years 1944-95. Results are reported as boxplots, linear-regression plots, and tabulated data.

The data were summarized into seven categories: (1) physical properties--specific conductance, pH, water temperature, dissolved oxygen, and dissolved solids; (2) major inorganic cations--dissolved calcium, magnesium, sodium, and potassium; (3) major inorganic anions--total alkalinity as calcium carbonate, dissolved sulfate, and dissolved chloride; (4) trace metals--dissolved copper, iron, lead, and zinc; (5) nutrients--nitrogen and phosphorus constituents; (6) organic compounds--pesticides and PCB's; and (7) biological constituents--fecal coliform and fecal streptococcus bacteria and phytoplankton.

The physical properties varied for surface waters in the basin. The median values for specific conductance ranged from 31 to 8,290 microsiemens per centimeter at 25 degrees Celsius. Values for pH in water from the basin often were less than 6.5, the lower limit of the U.S. Environmental Protection Agency's recommended range for freshwater aquatic life. Median values for water temperatures ranged from 17.5 to 27.5 degrees Celsius.

The dissolved-oxygen concentrations were greater than the State's minimum water quality criterion of 5.0 mg/L (milligrams per liter) in more than 75 percent of the samples analyzed at most sites. The statistical data indicated that between 50 and 75 percent of the samples collected at Vermilion River at State Highway 3073 at Lafayette, Louisiana, typically had concentrations of dissolved oxygen that were less than or equal to 5.0 mg/L.

The data for major inorganic cations and anions indicated that concentrations of major ions were below recommended maximum levels for drinking water, for which such levels have been established. Concentrations of sodium and chloride were high at the coastal sites.

The data for trace metals indicated that dissolved copper, lead, and zinc concentrations were less than the maximum contaminant levels of the U.S. Environmental Protection Agency's primary and secondary drinking water regulations. The iron concentrations in water from the basin often were greater than the U.S. Environmental Protection Agency's secondary maximum contaminant level of 300 µg/L (micrograms per liter) for domestic water supplies, and concentrations occasionally exceeded the the agency's criterion of 1,000 µg/L for freshwater aquatic life.

The nutrient data indicated that the median concentrations of ammonia plus organic nitrogen as nitrogen ranged from 0.40 to 2.4 mg/L. However, the median concentrations at Yellow Bayou, Bayou Petite Prairie, Vermilion River, and Lake Henderson were generally greater than concentrations at the other sites.

The available organic-chemical data indicated that diazinon and 2,4-D were detected at more sites and with greater frequency than any of the other organic compounds that were analyzed.

The median ratios of fecal coliform to fecal streptococcus bacteria were less than 0.7 for most of the sites within the Atchafalaya-Teche-Vermilion basin, indicating that sources of fecal coliform bacteria were probably predominantly livestock or poultry wastes. Additional study is needed to confirm these results. Phytoplankton concentrations varied due to seasonal influence; concentrations ranged from 0 to 100,000 cells per milliliter.

## ACKNOWLEDGMENTS

The author extends his appreciation to Zahir "Bo" Bolourchi, Chief, Water Resources Section, of the Louisiana Department of Transportation and Development, for guidance and assistance provided during the study and his substantial contribution to the completion of this report. The Report Preparation Section of the Louisiana District was especially helpful in the completion of this report at early stages of preparation and different stages of review. The final preparation and layout of the report was a team effort. The team members were Mary L. Anderson, Sebastian R. Brazelton, Dorothy L. Collier, Judith B. Dillon, Cheryl A. Johnson, William C. Martin, Jason R. Moses, and Darlene M. Smothers.

## 1.0 INTRODUCTION

# THIS REPORT IS ORGANIZED INTO THREE PARTS AND PRESENTED IN "STOP" FORMAT[1]

*A single topic is presented in text and pictures on facing pages.*

This report, **"Statistical Summary of Surface-Water Quality in Louisiana--Atchafalaya-Teche-Vermilion Basin, 1944-95,"** is one of a series of reports in which surface-water-quality data for the major river basins in Louisiana will be statistically summarized. This report is organized into three parts (excluding the "Abstract"): the "Introduction," the "Atchafalaya-Teche-Vermilion Basin in Louisiana," and "Selected References."

The "Introduction" provides background information about the study, describes the hydrologic setting and land use in Louisiana, and presents a brief description of selected water-quality properties and constituents.

The section titled "Atchafalaya-Teche-Vermilion Basin in Louisiana," presents statistical analyses of the surface-water-quality data at selected representative sites in the basin. This basin summary section contains the following:

- Maps and text giving an overview of the basin, including location, areal extent, drainage area, major drainage and surface-water bodies, land use, and water use.
- Boxplots and text describing statistical summaries of selected physical properties of surface waters at representative sampling sites.
- Graphs and text describing the relation between specific conductance and dissolved solids and specific conductance and dissolved chloride, at representative sampling sites.
- Boxplots, tables, and text describing statistical summaries of major inorganic chemical constituents; selected trace metals, nutrients, and organic chemical concentrations; and selected biological constituents, usually bacteria.
- Summary and conclusions, which pertain only to the basin summary.

The "Selected References" lists all references that pertain to the water quality in the basin.

[1]This report is presented in "STOP" (Sequential Thematic Organization of Publications) format (Hobba, Jr., 1981, p. 1). In this format, topics are presented using text and illustrations on two facing pages. Generally, topics are presented on two facing pages in this report, but in a few places the information is continued on additional pages.

## 1.1 Background

# SURFACE-WATER QUALITY OF THE MAJOR DRAINAGE BASINS IN LOUISIANA

*A large amount of water-quality data is available for streams, rivers, and lakes in Louisiana.*

Water-quality samples from streams, rivers, and lakes in Louisiana have been collected and analyzed by the U.S. Geological Survey (USGS) since 1905, and the USGS, in cooperation with local, State, and other Federal agencies, systematically has operated water-quality sites on streams, rivers, and lakes in the State since 1943. Results of the analyses are stored in the USGS computerized water-quality files and often are used to answer data requests and provide a large source of information for the managers of Louisiana's surface-water resources. Even though these data have been published in the USGS series of annual reports entitled Water Resources Data for Louisiana (Garrison and others, 1995) and in many other reports that describe surface-water quality, descriptive statistics for these data are needed to make the data more useful for water managers, to allow more complete answers to be given for information requests from the public, to indicate the need for additional water-quality data at existing or new sites, and to indicate problem areas where interpretive studies are needed.

In response to the above needs, the USGS, in cooperation with the Louisiana Department of Transportation and Development, began a study in October 1987 to statistically analyze and summarize water-quality data from about 300 surface-water-quality sites in Louisiana and to present the data in such a manner that trends, overall quality, and basin-wide changes in water quality could be evaluated. The study focused on the surface-water quality of the Mississippi River mainstem and the major drainage basins in Louisiana: the Lake Pontchartrain-Lake Maurepas basin; the Mississippi River Delta basin; the Atchafalaya-Teche-Vermilion basin; and the Calcasieu-Mermentau, Ouachita, Pearl, Red, Sabine, and Tensas River basins (fig. 1.1-1).

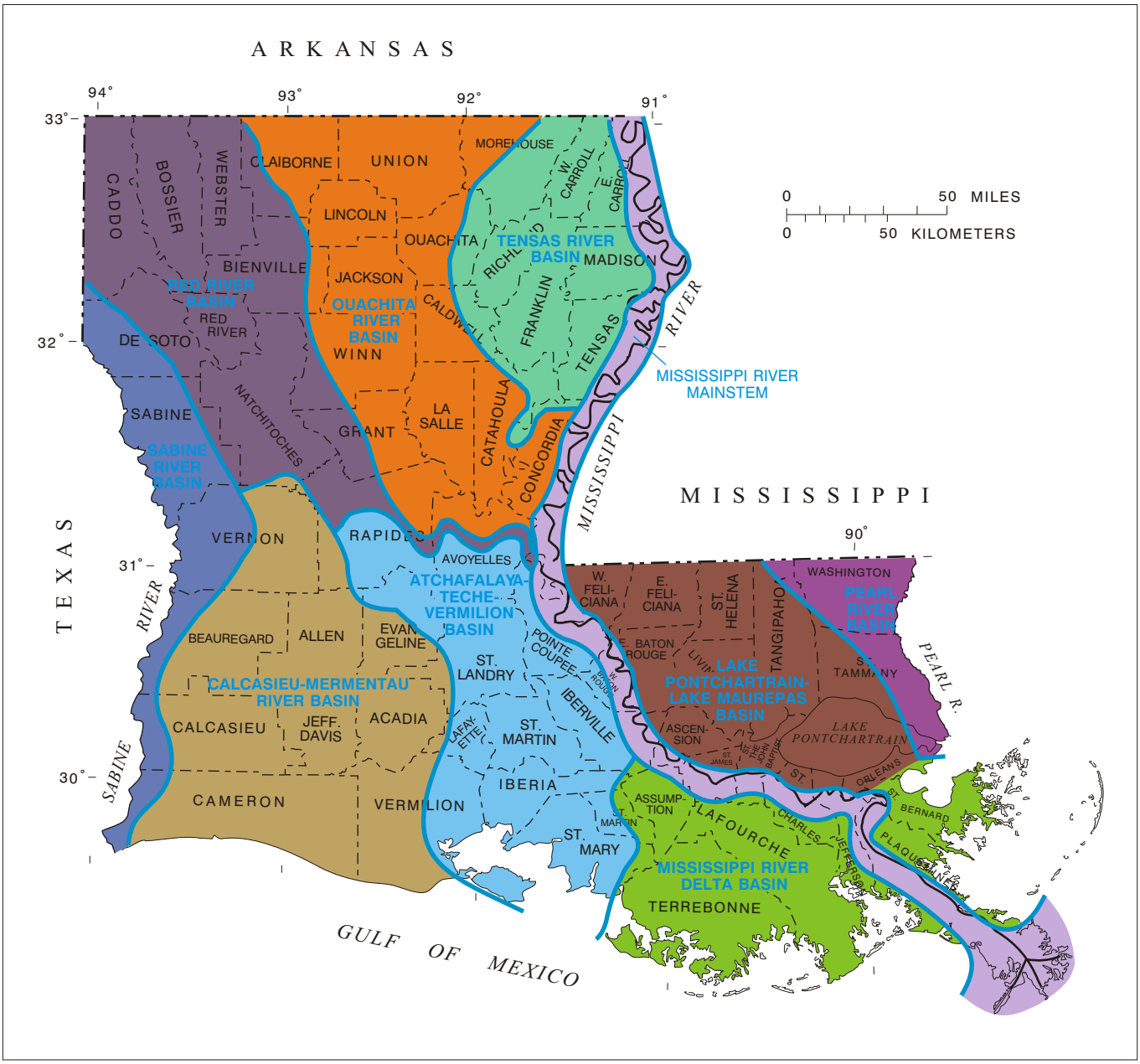


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**Figure 1.1-1.** Major surface-water basins in Louisiana.

### 1.2 Purpose and Scope

## ANALYZE AND SUMMARIZE SURFACE-WATER-QUALITY DATA

*Statistical analyses with illustrations describe water quality of the major drainage basins in Louisiana.*

Statistical analyses of water-quality data and corresponding illustrations are presented for each major drainage basin in Louisiana. Nine of the 10 basins described in this study are those delineated by the Louisiana Department of Transportation and Development (1984). The mainstem of the Mississippi River is discussed separately from the Mississippi River Delta basin to preserve continuity of data for the Mississippi River.

Data for about 300 sites in Louisiana for water years 1905-95 were included in these statistical analyses. The number of water-quality sites varied from basin to basin, and the number and type of samples varied from site to site within a given basin. Pesticides, and occasionally, trace metals and nutrients are presented in tables when there are more than 10 samples, and most, or all, of the concentrations are below the largest detection level for the analytical methods used. Daily sediment data were collected at Bayou Grand Cane near Stanley, Bayou Castor near Logansport, and Bayou San Patricio near Benson in the Sabine River basin, and Pearl River near Bogalusa in the Pearl River basin. This information is presented in tables in the Sabine River basin and the Pearl River basin reports. All water-quality data and streamflow data used for the statistical analyses are stored in the USGS Water-Data Storage and Retrieval System (WATSTORE), a computerized data base (fig. 1.2-1). Only WATSTORE data were used for the study.

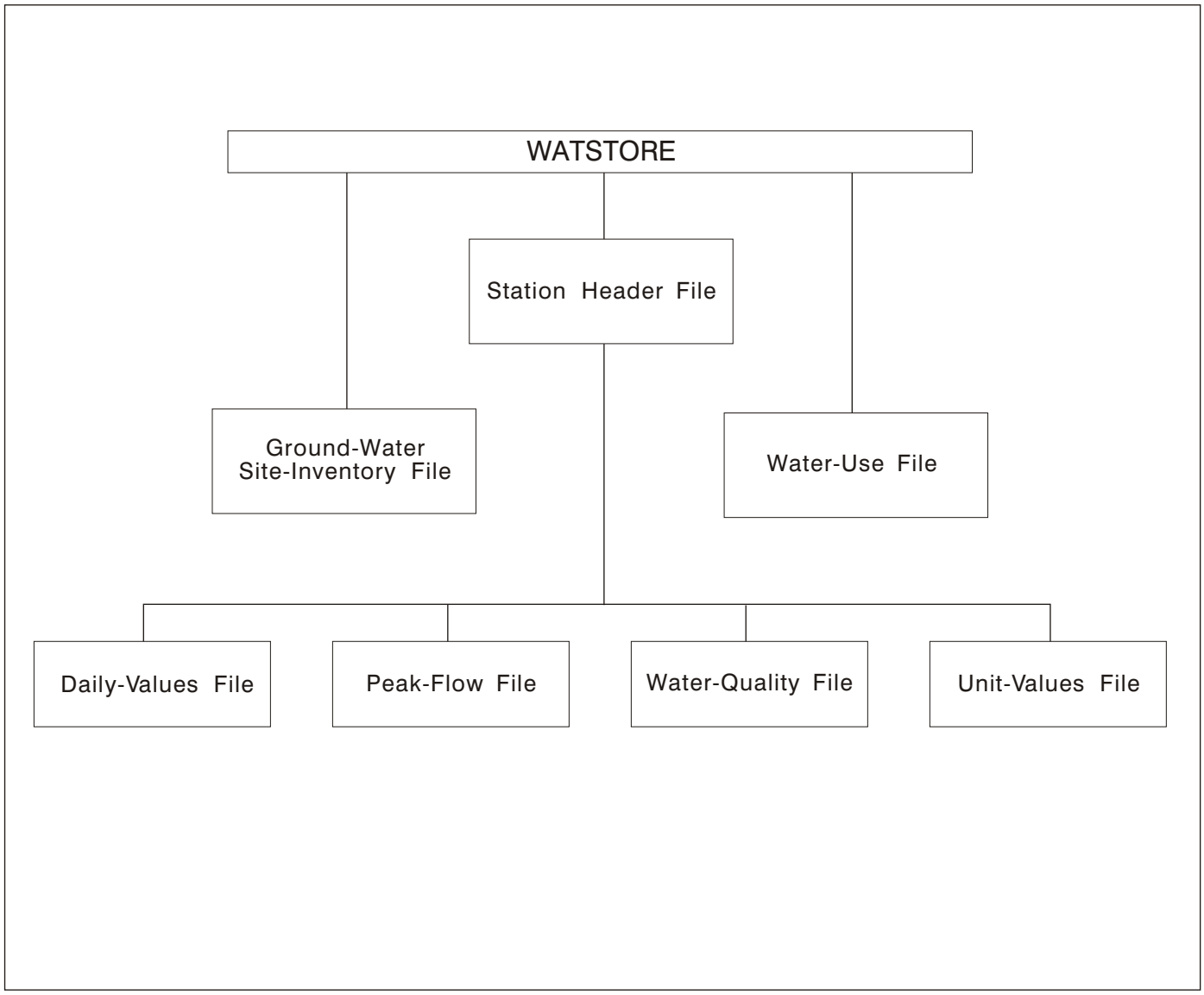


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**Figure 1.2-1.** Files in the U.S. Geological Survey's Water-Data Storage and Retrieval System (WATSTORE).

### 1.3 Methods of Study

## BOXPLOTS AND GRAPHS ILLUSTRATE WATER QUALITY AT SIX REPRESENTATIVE SITES IN A BASIN

*Tables list statistical information for selected water-quality properties and constituents.*

Data from six representative sites within a basin are presented graphically. Data from all sites within a basin that were sampled 10 or more times are summarized in tables for each basin. These tables list the following information and summary statistics for selected properties and constituents for each site: number of analyses; detection level; maximum, minimum, and mean values or concentrations; and values or concentrations representing the 5th, 25th, 50th, 75th, and 95th percentiles of the total sample population. The data for selected sites were used to generate boxplots and linear regression equations and graphs for selected properties and constituents.

Boxplots illustrate a statistical summary of water-quality data at a site (D.R. Helsel, U.S. Geological Survey, written commun., 1989) (fig. 1.3-1). Boxplots of specific conductance, pH, water temperature, dissolved oxygen, dissolved solids, major inorganic cations, major inorganic anions, trace metals, nutrients, bacteria, and phytoplankton (where data were available), were developed for selected sites in each basin.

A boxplot summarizes a data set by displaying the values or concentrations representing the 5th, 25th, 50th, 75th, and 95th percentiles of the data. This format allows comparison among streams in the basin. The term percentile as used in this report refers to a distribution of values in the total data set. For example, the 25th percentile is the data value below which 25 percent of the data values occur (Sokal and Rohlf, 1969, p. 45). The 50th percentile is also the median of the data. The interquartile range is between the 25th and 75th percentiles. Fifty percent of the data are within this range.

A boxplot is constructed so the top and bottom of the box are drawn at the 75th and 25th percentiles. A line across the box indicates the median. The 95th and 5th percentiles are indicated by a vertical line from the top of the box to the 95th percentile and from the bottom of the box to the 5th percentile.

A horizontal dashed line indicates the analytical detection level. Because of changes in analytical procedures the reporting level may have changed over time. When multiple reporting levels were used for some constituents, a dashed line was drawn across the boxplot at the largest reporting level used.

Another method used to evaluate water-quality data in this series of reports is linear regression (fig. 1.3-2). Linear regression equations were calculated in the form of $Y = aX + b$, where a is the slope of the regression line, b is the Y intercept, and Y and X are the dependent and independent variables (Sokal and Rohlf, 1969, p. 408). The number of data pairs, N, and the correlation coefficient, r, also are presented. The correlation coefficient indicates the degree of association between two variables. The closer the r value is to $\pm 1$, the better the association. Linear regression equations and graphs are presented for specific conductance and dissolved solids and for specific conductance and dissolved chloride. However, extrapolation of the equations beyond the data used to define the equation could result in incorrect values because the relation may not be linear in that range.

Water-quality samples were collected and analyzed using techniques and methods prescribed by the USGS. Collection procedures for chemical constituents are determined by the Office of Water Quality within the USGS. Methods for chemical analyses are presented in "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments" (Fishman and Friedman, 1989). Collection procedures and analytical methods for biological constituents are presented in "Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples" (Britton and Greeson, 1988). Collection procedures and analytical methods for organic constituents are presented in "Methods for the Determination of Organic Substances in Water and Fluvial Sediments" (Wershaw and others, 1983).

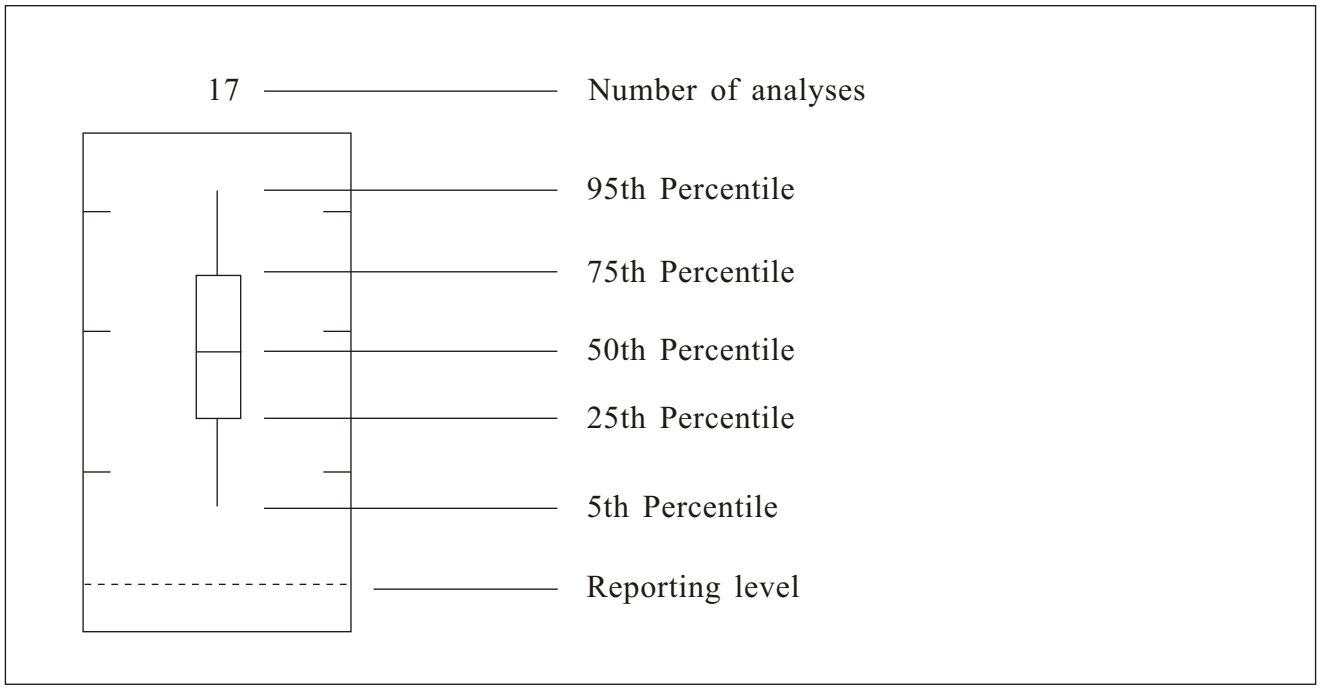


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**Figure 1.3-1.** Example and definition of boxplot.

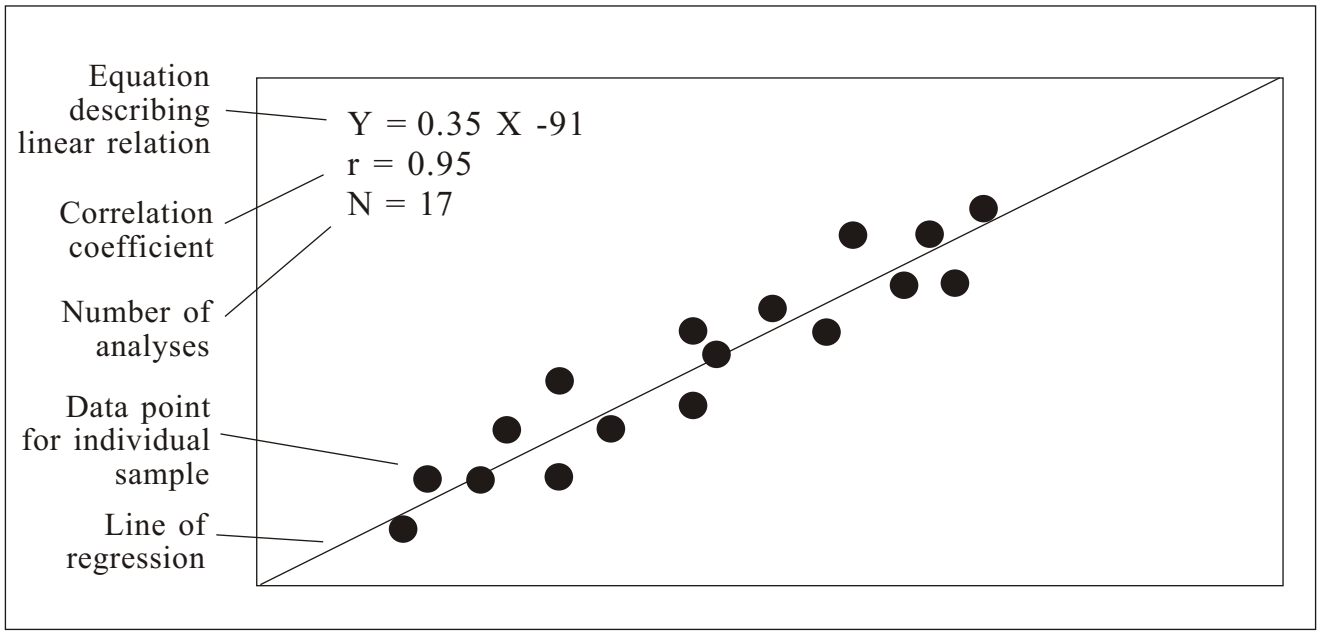


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**Figure 1.3-2.** Example and definition of linear regression.

### 1.4 Hydrologic Setting and Land Use in Louisiana

## CLIMATE AND PHYSIOGRAPHY INDIRECTLY AFFECT WATER QUALITY

*Climate and physiography are the primary factors that affect land use in Louisiana, and "the quality of Louisiana's streams, rivers, and lakes depends in large part on the uses of the land they drain" (U.S. Geological Survey, 1993, p. 293).*

#### 1.4.1 Climate

## HUMID, SUBTROPICAL CLIMATE PREVAILS IN LOUISIANA

*The mean annual precipitation ranges from about 48 inches in the northwestern part of the State to 64 inches in the southeastern part.*

The relatively high annual rainfall and the year-round moderate air temperatures account for the humid, subtropical climate in Louisiana (Lee, 1985b, p. 2). Annual rainfall ranges from about 48 in. in the northwestern part of the State to about 64 in. in the southeastern part (fig. 1.4.1-1) (Muller and others, 1984; McWreath and Lowe, 1986). The most intense rainfall occurs during localized thunderstorms that produce large amounts of rainfall but move rapidly through an area.

Other sources of heavy rainfall are tropical storms and hurricanes. These storms intensify over the warm waters of the Gulf of Mexico and move slowly inland. During this inland movement, extremely heavy rainfall can occur over most of the State in a short period of time and can cause major flooding.

Mean annual air temperatures range from 19.0$^{o}$C in the northern part of the State to 20.5$^{o}$C in the southern part. The lowest temperatures usually occur during January and February and the highest temperatures occur during July and August (Lee, 1985b, p. 2).

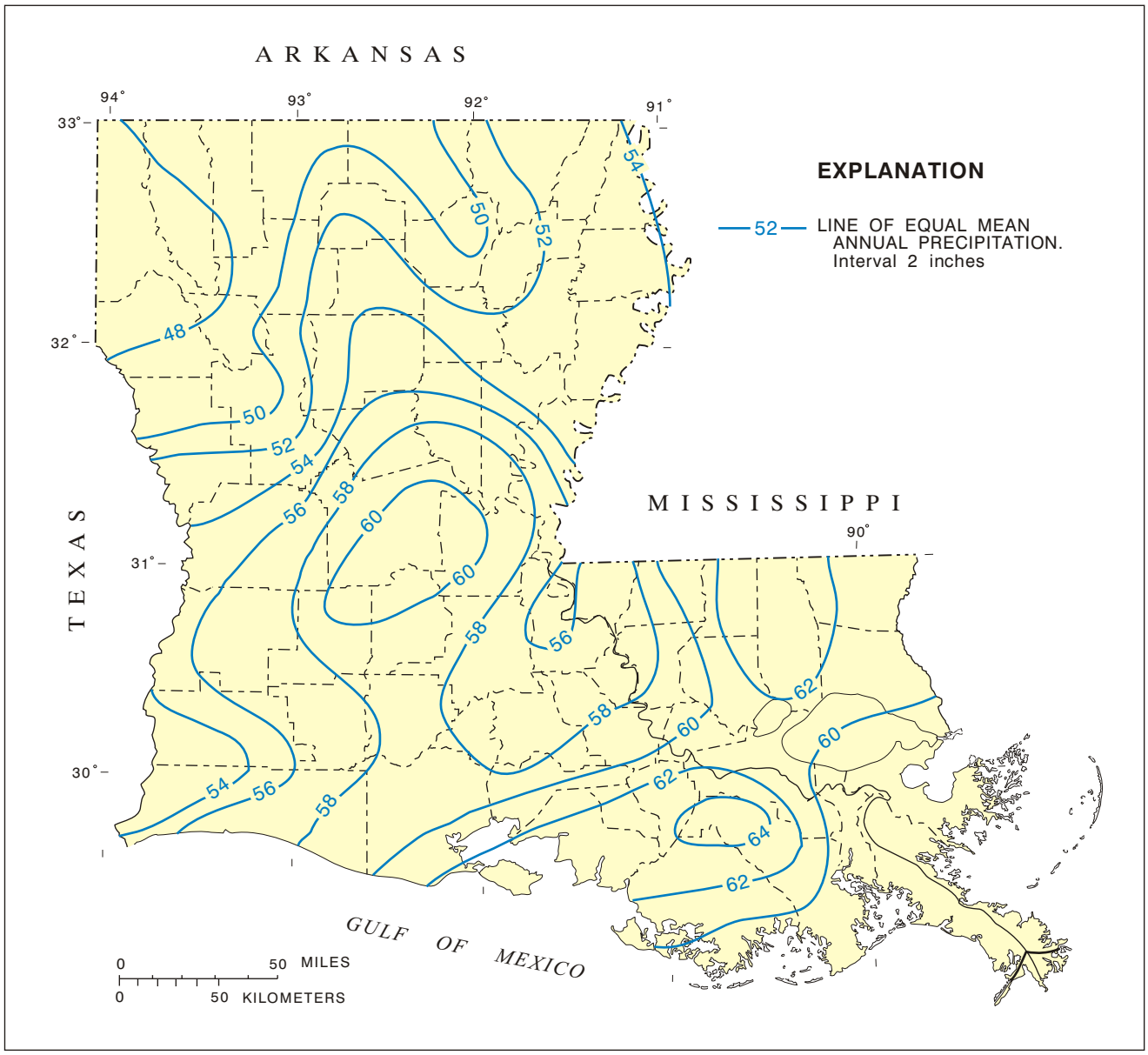


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**Figure 1.4.1-1.** Mean annual precipitation in Louisiana, 1951-80. (Source: Muller and others, 1984)

# LOUISIANA INCLUDES PARTS OF FOUR PHYSIOGRAPHIC DIVISIONS--PINE HILLS, PRAIRIES, COASTAL MARSHES, AND ALLUVIAL PLAINS

*Major land uses include forests and agricultural lands.*

Louisiana lies within the Coastal Plain Physiographic Province, and includes parts of four physiographic divisions--the Pine Hills, the Prairies, the Coastal Marshes, and the Alluvial Plains (Fenneman, 1938). These physiographic divisions are shown in figure 1.4.2-1. Parts of north-central, western, and southeastern Louisiana are in the Pine Hills division. The topography of this division is undulating hills with extensive pine and hardwood forests. Parts of southern and southwestern Louisiana are in the Prairies physiographic division. The land surface elevations in the Prairies range from 20 to 30 ft above sea level. This area generally is treeless except along streams. Much of coastal Louisiana is in the Coastal Marshes division. These areas are flat and subject to tidal flooding from the Gulf of Mexico. The flood plains adjacent to the Mississippi, Ouachita, and Red Rivers are in the Alluvial Plains physiographic division. The topography of these areas is flat with interconnecting streams that allow flow between the river basins (Lee, 1985b, p. 3).

The major land uses in the State include forests, cropland, grazing land, and wetlands (Louisiana Department of Transportation and Development, 1984, p. 24-28). Even though most land is well suited to agriculture, some areas support industry, oil and gas production, and aquaculture (U.S. Geological Survey, 1993, p. 293).

The principal rivers draining the State are the Pearl, Mississippi, Atchafalaya, Ouachita, Sabine, and Red Rivers. The Pearl River forms part of the eastern boundary between Louisiana and Mississippi and drains only a small part of the State. The Mississippi River is the largest river in the State but few streams within the State are tributary to it. The Atchafalaya River is a controlled distributary of the Mississippi River, and carries flow from the Red, Mississippi, and Ouachita Rivers to the Gulf of Mexico. The Sabine River forms part of the western boundary between Louisiana and Texas and drains only a small part of the State.

All other streams in the State are tributary to these rivers with the exception of two groups. The first group consists of streams east of the Mississippi River and west of the Pearl River. This group includes the Tchefuncte, Tangipahoa, Natalbany, and Amite Rivers. These rivers eventually flow into the Gulf of Mexico by way of Lake Pontchartrain and Lake Maurepas. The second group includes rivers west of the Mississippi River and east of the Sabine River. Major streams in this group are Bayou Teche and the Vermilion, Mermentau, and Calcasieu Rivers. These rivers flow into the Gulf of Mexico.

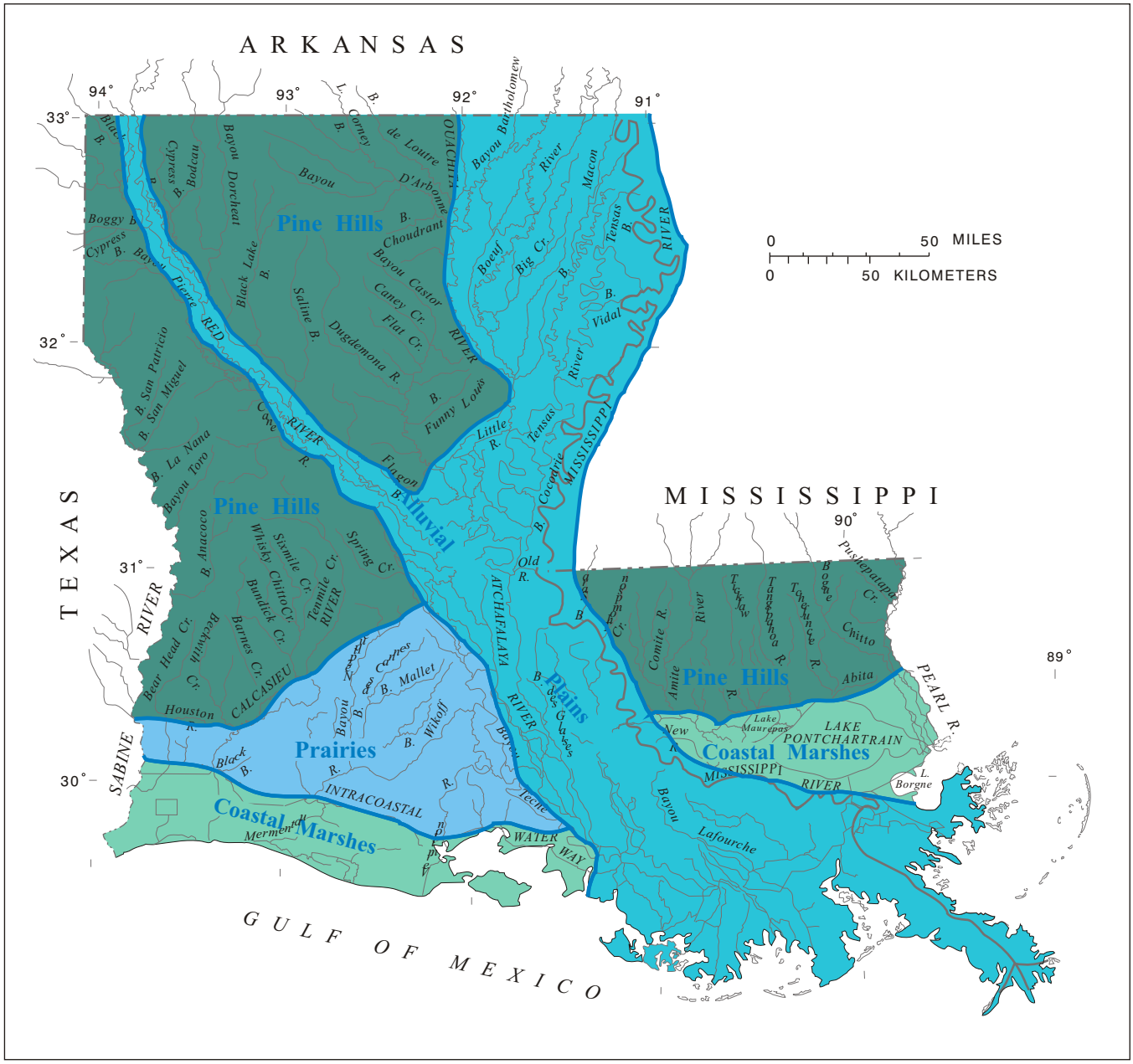


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**Figure 1.4.2-1.** Physiographic divisions and streams in Louisiana. (Source: Lee, 1985b, p. 4.)

## 1.5 Surface-Water-Quality Properties and Constituents

# TABLE INCLUDES COMMON SOURCES OF SELECTED PROPERTIES AND CONSTITUENTS

*Federal regulations and State criteria have been established for selected properties and constituents analyzed.*

Table 1.5-1 describes selected water-quality properties and constituents discussed in this report. The table lists common sources of the properties and constituents and their environmental significance, and where established, the Federal regulations and State criteria are presented.

In addition to the information presented in this table, it may be noted that values for fecal coliform and fecal streptococcus bacteria have a special importance when compared to each other. "When the ratio (fecal coliform bacteria to fecal streptococcus bacteria) is greater than or equal to 4, it may be taken as strong evidence that pollution derives from human wastes. When the ratio is less than or equal to 0.7, it may be taken as strong evidence that pollution derives predominantly or entirely from livestock or poultry wastes. When the ratio lies between 2 and 4, it can indicate a predominance of human wastes in mixed pollution. When the ratio is between 0.7 and 1.0, it can indicate a predominance of livestock and poultry wastes in mixed pollution. When the ratio falls on values from 1 to 2, it represents a 'grey area' of uncertain interpretation" (Millipore Corporation, 1972, p. 36). This interpretation of ratios is most reliable when the two counts describe samples collected at the same site within 24 hours of flow downstream from the source of pollution. Because the source of contamination in most instances is unknown, the interpretation of these ratios presented in this report should be used with caution.

## *Table 1.5-1. Common sources of properties and constituents, their environmental significance, and Federal regulations and State criteria*

[Source: U.S.Environmental Protection Agency (USEPA), 1976; 1986; 1994; 1996; Louisiana Department of Environmental Quality (DEQ), 1984; Hem, 1985; Tobin and Youger, 1977.
NE, no established criteria; SMCL, secondary maximum contaminant level; °C, degrees Celsius; mg/L, milligrams per liter; µg/L, micrograms per liter;
MCL, maximum contaminant level; Proposed MCL, proposed maximum contaminant level; ng/L, nanograms per liter; cols/100 mL, colonies per 100 milliliters]

| Property or constituent | Common source | Environmental significance | USEPA Federal water-quality regulations[1] | DEQ State water-quality criteria |
|---|---|---|---|---|
| **Physical properties** | | | | |
| Specific conductance | Ions within the water. | Indicates the presence of precipitation, dilution, evaporation, and metabolic uptake and release of chemicals. | NE | NE |
| pH | Hydrogen-ion activity. | May indicate oxidation of some form of sulfur or iron. | SMCL is 6.5-8.5 and 6.5-9.0 is the recommended range for freshwater aquatic life. | 6.0-9.0 and no effluent will cause pH to vary by more than 1.0. |
| Water temperature | Seasonal changes; daily variance outside discharges into waterbody. | Affects migration patterns and colonization characteristics; accelerates biodegradation; decreases maximum oxygen concentration. | See U.S. Environmental Protection Agency (1976, p. 218). | Freshwater:<br>(1) Maximum of 2.8 °C rise above ambient for streams.<br>(2) Maximum of 1.7 °C rise above ambient for lakes.<br>(3) Maximum temperature of 32.2 °C except where otherwise listed.<br>Estuarine and coastal waters:<br>(1) Maximum of 2.2 °C rise above ambient October through May.<br>(2) Maximum of 0.83 °C rise during June through September.<br>(3) Maximum temperature of 35.0 °C except when natural conditions elevate temperature above this level. |
| Dissolved oxygen | Transferred from the atmosphere; photosynthesis by aquatic plants. | Inadequate dissolved oxygen can have adverse effect on aquatic life. | For freshwater aquatic life and coastal marine water, 5.0 mg/L. | For freshwater and coastal marine water, 5.0 mg/L. |
| Total dissolved solids. | Inorganic salts and some organic materials. | Excess can cause pipe corrosion or have detrimental effects on sensitive crops if used for irrigation. | SMCL is 500 mg/L. 250 mg/L for chlorides and sulfates in domestic water supplies (welfare). | State criteria vary from stream to stream. |
| **Major inorganic cations** | | | | |
| Calcium, dissolved | Occurs in igneous-rock minerals, silicate minerals, and as carbonates in sedimentary rocks. | Important for animal and plant nutrition. | NE | NE |
| Magnesium, dissolved | Carbonate sedimentary rock forms such as limestone. | Important for animal and plant nutrition. | NE | NE |
| Sodium, dissolved | Occurs in igneous and sedimentary rocks, especially evaporites. | Excessive sodium in drinking or irrigation water can have detrimental effects on plants and consumers. | No water-quality contaminant level is recommended for home drinking water. | NE |
| Potassium, dissolved | More abundant in sedimentary rocks than igneous rocks. | Essential plant nutrient. | NE | NE |
| **Major inorganic anions** | | | | |
| Alkalinity, as calcium carbonate | Caused by the presence of bicarbonates, carbonates, and hydroxides. Function of pH and temperature. | Buffers water against pH changes. | For freshwater aquatic life, 20 mg/L. | NE |
| Sulfate, dissolved | Can be dissolved from gypsum, sodium sulfate, and some types of shales. Mining activities, industrial waste, and organic matter. | Concentrations exceeding a natural, background level indicate contamination from human activity; in sufficient quantity, can cause water to be unsuitable for public supply; can harm aquatic organisms. | SMCL is 250 mg/L. | Maximum contaminant level is 250 mg/L. |
| Chloride, dissolved | Common in brine and a primary constituent in seawater; evaporite sediment. | Associated with sodium and, if present in excess, can be detrimental in water used for drinking or irrigation. | SMCL is 250 mg/L | For instream concentration, 250 mg/L. |
| **Trace metals** | | | | |
| Copper, dissolved | Malachite and cuprite. Oxides and sulfates are used in algicides, pesticides, and fungicides. | Important for the synthesis of chlorophyll. | SMCL is 1,000 µg/L. | NE |
| Iron, dissolved | Present in igneous-rock minerals and in sedimentary rocks. | Important for plant and animal nutrition. | SMCL is 300 µg/L. | NE |
| Lead, dissolved | Often result from mining, smelting, and other industrial operations. May occur naturally as lead sulfide. | Toxic, bioaccumulative. Has no nutritional value. | MCL is 15 µg/L at the tap. For sensitive freshwater resident species, 0.01 times the 96-hour $LC_{50}$ value, using the receiving or comparable water as the diluent and soluble lead measurements (using an 0.45 micron filter). | NE |
| Zinc, dissolved | Used in the metallurgy, paint, rubber, and photo-engraving industries. | Important for animal metabolism. However, small quantities can be toxic to aquatic plants, animals, and bacteria. | SMCL is 5,000 µg/L. | NE |
| **Nutrients** | | | | |
| Ammonia plus organic nitrogen, total | Sewerage or industrial contamination. | Ammonia reactions with chlorine can result in the formation of chloramine compounds. Organic nitrogen can be an indicator of organic pollution. | NE | NE |
| Nitrite plus nitrate, nitrate, and nitrite as nitrogen, total. | Fertilizers and animal and human wastes. | Plant nutrient that can be an indication of wastes. | MCL for nitrite plus nitrate is 10 mg/L, nitrate is 10 mg/L, and nitrite 1.0 mg/L. | NE |
| Phosphorus, total | Results from leaching of rocks and soil, decomposition of plants and animals, from fertilizers, sewerage, and industrial waste. | Although it is not toxic to man, it is bioaccumulative and toxic to certain forms of aquatic life. High concentrations promote undesirable plant growth causing eutrophication of lakes. | NE | NE |
| **Pesticides and other organics** | | | | |
| DDT, total | Insecticides. | Bioaccumulative and toxic. | For freshwater and marine aquatic life, 0.001 µg/L. | For freshwater, 1.1 µg/L. For public water supply, 0.24 ng/L. |
| PCB, total | Found in capacitors and transformers used in the electrical industry. | Bioaccumulative and toxic. | For freshwater aquatic life, 0.014 µg/L. Ingestion of contaminated water and aquatic organisms should be zero. | For freshwater, 2.0 µg/L. For public water supply, 0.79 ng/L. |
| Diazinon, total | Insecticides. | Bioaccumulative and toxic. | NE | NE |
| Lindane, total | Insecticides. | Bioaccumulative and toxic. | For domestic water supply, 0.2 µg/L. For fresh-water aquatic life, 0.01 µg/L. | NE |
| Chlordane, total | Insecticides. | Bioaccumulative and toxic. | For freshwater aquatic life, 2.4 µg/L. | For freshwater, 2.4 µg/L. For public water supply, 4.6 ng/L. |
| Malathion, total | Insecticides. | Bioaccumulative and toxic. | For freshwater and marine aquatic life, 0.1 µg/L. | NE |
| Endrin, total | Insecticides. | Bioaccumulative and toxic. | For freshwater aquatic life, 0.18 µg/L. MCL is 2.0 µg/L. | For freshwater, 0.18 µg/L. For public water supply, 1.0 µg/L. |
| Parathion, total | Insecticides. | Bioaccumulative and toxic. | For freshwater and marine aquatic life, 0.04 µg/L. | NE |
| Endosulfan, total | Insecticides. | Bioaccumulative and toxic. | For freshwater aquatic life, 0.22 µg/L. To protect public health, 74 µg/L. | NE |
| 2,4-D, total | Herbicides. | Bioaccumulative and toxic. | For domestic water supply, 70 µg/L. | For public water supply, 100 µg/L. |
| **Biological constituents** | | | | |
| Fecal coliform | Human wastes. | Indicator of pathogens. | Based on minimum of 5 samples collected over a 30-day period, the level should not exceed a log mean of 200 cols/100 mL, nor should more than 10 percent of the total samples collected during any 30-day period exceed 400 cols/100 mL. | Based on a minimum of 5 samples collected over a 30-day period, the level should not exceed a log mean of 200 cols/100 mL, nor should more than 10 percent of the total samples collected during any 30-day period exceed 400 cols/100 mL. |
| Fecal streptococcus | Livestock and poultry wastes. | Indicator of pathogens. | NE | NE |
| **Suspended sediment** | | | | |
| Suspended sediment | Sand, silt, clay, and organic material which enter a stream either from hillslope erosion or directly from the streambed. | Long periods of high concentrations of sediment can interfere with photosynthesis, bury benthic organisms, inhibit respiration of gilled organisms, and ultimately alter the aquatic ecosystem. | NE | NE |

[1] *Primary Drinking-Water Regulations maximum contaminant level (February 1996):* Enforceable, health-based regulation that is to be set as close to the maximum contaminant level goal as is feasible. The definition of feasible means the use of best technology, treatment techniques, and other means that the Administrator of USEPA finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are generally available (taking cost into consideration).

*Proposed maximum contaminant leve*l: Not enforceable.

*Secondary Drinking-Water Regulations secondary maximum contaminant level:* Contaminants that affect the aesthetic quality of drinking water. At high concentrations or values, health implications as well as aesthetic degradation may also exist. SMCLs are not federally enforced, but are intended as guidelines for the states.

## 2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA

# STATISTICAL SUMMARY OF SURFACE-WATER QUALITY IN THE ATCHAFALAYA-TECHE-VERMILION BASIN

*Data from 67 sites were analyzed.*

Statistical analyses of surface-water-quality data for the Atchafalaya-Teche-Vermilion basin are presented in this part of the report. Text, maps, boxplots, graphs, and tables are used to describe the surface-water quality. Data are presented for 33 water-quality properties and constituents for analyses stored in the USGS WATSTORE files. The data were collected from 67 sites (table 2.0-1 and fig. 2.0-1) in the basin during water years 1944-95. This information is useful to Federal, State, and local planners; hydrologists; engineers; scientists; and others who have water-resources management responsibilities for the Atchafalaya-Teche-Vermilion basin.

***Table 2.0-1. Surface-water-quality data-collection sites in the Atchafayala-Teche-Vermilion basin, Louisiana, 1944-95***

| Map no. (fig. 2.0-1) | Site name and location | Map no. (fig. 2.0-1) | Site name and location |
|---|---|---|---|
| 1 | Lake Buhlow (site 2) at Pineville | 36 | Wax Lake (west) Drainage Area at Control Structure |
| 2 | Lake Buhlow (site 1) at Pineville | 37 | Vermilion Bay at Cypremort Point |
| 3 | Lake Buhlow (site 3) at Pineville | 38 | Vermilion Bay at Redfish Point near Henry |
| 4 | Lake Buhlow (site 4) at Pineville | 39 | Flat Lake 2.6 miles north-northeast near Morgan City |
| 5 | Bayou Rapides near Hot Wells | 40 | Flat Lake 3.0 miles north-northeast near Morgan City |
| 6 | False River at New Roads | 41 | Flat Lake 3.6 miles north of Morgan City |
| 7 | False River near Erwinville | 42 | Intracoastal Waterway at Vermilion Lock (east) near Intracoastal City |
| 8 | Bayou Grosse Tete at Rosedale | | |
| 9 | Lower Grand River at Bayou Sorrel | 43 | Intracoastal Waterway at Vermilion Lock (west) near Intracoastal City |
| 10 | Atchafalaya River at Simmesport | | |
| 11 | Atchafalaya River at Melville | 44 | Duck Lake near Morgan City |
| 12 | Atchafalaya River at Krotz Springs | 45 | Little Bayou Sorrel near Morgan City |
| 13 | Chicot Pass at Myette Point near Charenton | 46 | Vermilion River near Bancker |
| 14 | Wax Lake Outlet at Calumet | 47 | Atchafalaya River Basin Station WF |
| 15 | Lower Atchafalaya River at Morgan City | 48 | Atchafalaya River Basin Station WC |
| 16 | Spring Creek near Glenmora | 49 | Atchafalaya River Basin Station WD |
| 17 | Bayou Cocodrie near Clearwater | 50 | Buffalo Cove Station WBI near Charenton |
| 18 | Bayou Courtableau at Washington | 51 | Atchafalaya River Basin Station WAI |
| 19 | Bayou Des Glaises Diversion Channel at Moreauville | 52 | Atchafalaya River above mouth near Bayou Sorrel |
| 20 | Bayou Teche at Arnaudville | 53 | Lake Henderson near Henderson |
| 21 | Bayou Teche at Keystone Lock near St. Martinville | 54 | Lake Henderson near Atchafalaya |
| 22 | Bayou Teche near Olivier | 55 | Bayou Courtableau at Drainage Structure east near Courtableau |
| 23 | Bayou Teche near Franklin | | |
| 24 | Bayou Teche near Patterson | 56 | Bayou Courtableau at Drainage Structure west near Courtableau |
| 25 | Vermilion River at Surrey Street at Lafayette | | |
| 26 | Vermilion River at Lafayette | 57 | Bayou Petite Prairie Center Station 3B |
| 27 | Vermilion River at State Highway 3073 at Lafayette | 58 | Bayou Petite Prairie West Shore Station 3A |
| 28 | Vermilion River at Perry | 59 | Bayou Petite Prairie (Second Lake) near Melville Station 2B |
| 29 | Vermilion River at Bancker Ferry near Abbeville | 60 | Keith Lake Station 1B at center near Melville |
| 30 | Bayou Teche at Verdunville | 61 | Bayou Petite Prairie Station 4 |
| 31 | Atchafalaya Bay Station LBBH | 62 | Yellow Bayou near Odenburg |
| 32 | Atchafalaya Bay 9.9 miles south near North Bend | 63 | Yellow Bayou (station YB-2) near Simmesport |
| 33 | East Cote Blanche Bay Station ECB 3 | 64 | Yellow Bayou (station YB-1) near Simmesport |
| 34 | East Cote Blanche Bay Station ECB 5 | 65 | Lower Grand River at Pigeon |
| 35 | Intracoastal Waterway at Wax Lake East Control Structure near Calumet | 66 | Loving Creek near Woodworth |
| | | 67 | Upper Clear Bayou near Woodworth |


**Figure 2.0-1.** Surface-water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, 1944-95.

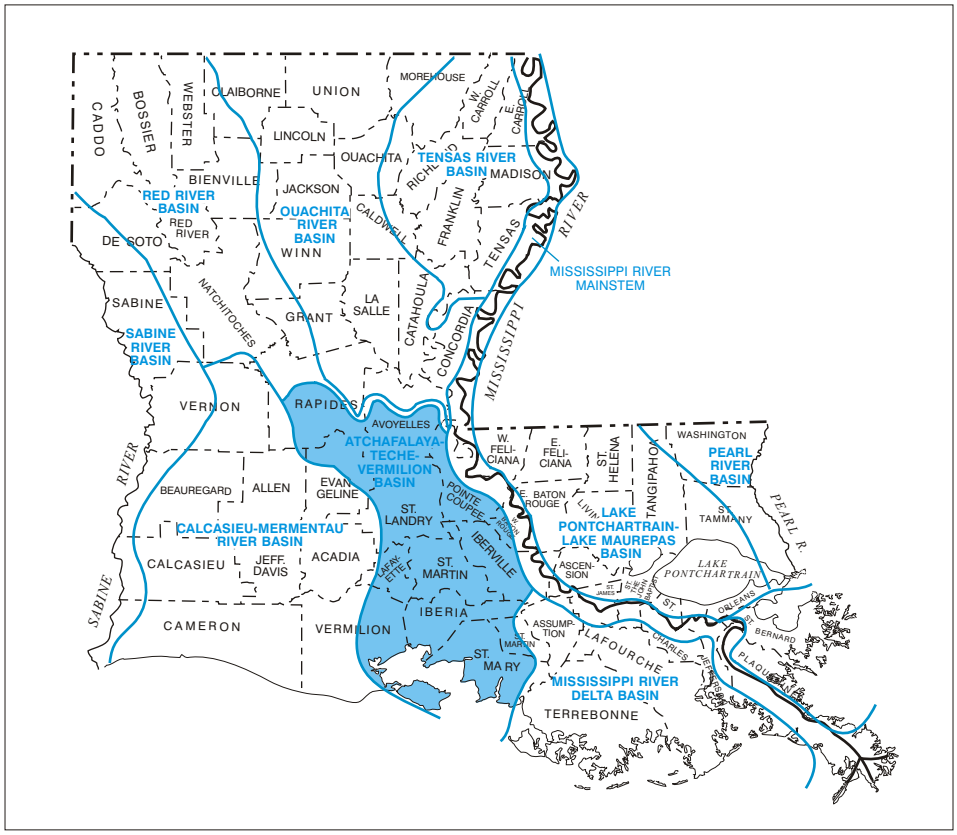
## 2.1 Overview

# ATCHAFALAYA AND VERMILION RIVERS AND BAYOU TECHE ARE PRINCIPAL SOURCES OF SURFACE WATER

*Surface water within the Atchafalaya-Teche-Vermilion basin is used mainly for power generation and rice irrigation.*

The Atchafalaya-Teche-Vermilion basin in Louisiana (fig. 2.0-1) is about 130 mi long and 65 mi wide at its widest point. The Atchafalaya and Vermilion Rivers and Bayou Teche are principal sources of fresh surface water in the basin, and most of the water is used for power generation and rice irrigation (fig. 2.1-1) (Lovelace and Johnson, 1996, p. 103).

The other principal sources of fresh surface water in the basin are Bayou Cocodrie, Big Wax Bayou, Charenton Canal, and Intracoastal Waterway. The minimum average discharge for sites where data were available within the basin was 93.3 $ft^3/s$ at Spring Creek near Glenmora for the period, 1956-86 (Carlson and others, 1987), and the maximum average discharge was 1,120 $ft^3/s$ at Bayou Courtableau at Washington for the period 1946-94 (Garrison and others, 1995). Other bodies of fresh surface water in the basin include Atchafalaya Bay; Bayou Des Glaises Diversion Channel Bayous Boeuf, Grosse Tete, Petite Prairie, and Rapides; Buffalo Cove; Chicot Pass; Duck Lake; East Cote Blanche Bay; False River; Flat Lake; Keith Lake; Lake Buhlow; Lake Henderson; Little Bayou Sorrel; Lower Grand River; Clear Bayou; Wax Lake; Yellow Bayou; and additional sites given in fig. 2.1-1.




Louisiana Department of Transportation and Development-U.S. Geological Survey Water Resources Cooperative Program

***Withdrawals by Category***

| Category | Amount (Mgal/d) |
|---|---|
| Public supply | 11.49 |
| Industry | 54.53 |
| Power generation | 250.59 |
| Rural domestic | .00 |
| Livestock | .46 |
| Rice irrigation | 65.82 |
| General irrigation | .00 |
| Aquaculture | 55.48 |
| TOTAL | 438.38 |

***Withdrawals by Parish***

| Parish | Amount (Mgal/d) |
|---|---|
| Avoyelles | 2.56 |
| Evangeline | 108.20 |
| Iberia | 17.53 |
| Iberville | 10.15 |
| Lafayette | .88 |
| Pointe Coupee | 2.18 |
| Rapides | 8.97 |
| St. Landry | 5.21 |
| St. Martin | 8.71 |
| St. Mary | 202.73 |
| Vermilion | 70.73 |
| West Baton Rouge | .53 |

***Withdrawals by Major Water Body***

| Water Body | Amount (Mgal/d) |
|---|---|
| Atchafalaya River | 7.02 |
| Bayou Blue | 1.07 |
| Bayou Boeuf | 5.17 |
| Bayou Cocodrie | 108.20 |
| Bayou Petite Anse | 1.34 |
| Bayou Portage | 2.11 |
| Bayou Robert | 1.15 |
| Bayou Teche | 7.22 |
| Big Wax Bayou | 42.05 |
| Cavern Lake | 1.23 |
| Charenton Canal | 143.19 |
| Chatlin Lake Canal | 2.31 |
| Grand Lake | 1.40 |
| Intracoastal Waterway | 6.98 |
| Lower Grand River | 1.04 |
| Six Mile Lake | 1.10 |
| Vermilion River | 71.16 |

**Figure 2.1-1.** Surface-water withdrawals (in million gallons per day) from the Atchafalaya-Teche-Vermilion River basin, Louisiana, 1995. (Source: Lovelace and Johnson, 1996, p. 103)

## 2.2 Surface-Water Quality

# SELECTED PROPERTIES AND CONSTITUENTS

*Physical, chemical, and biological data describe the surface-water quality of the Atchafalaya-Teche-Vermilion basin.*

Figure 2.2-1 shows 1 of the 67 water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin. The data for this and other water-quality sites in the basin are presented alphabetically by site name in table 2.2-1 at the back of this report. The table includes selected water-quality properties and constituents, number of analyses, reporting levels, and values or concentrations for the percentiles used to generate the boxplots shown for 6 of the 67 sites in the Atchafalaya-Teche-Vermilion basin. The format of the data in these tables allows easy comparison among sites within the basin. Results of analyses used for statistical computations are in the files of the USGS.

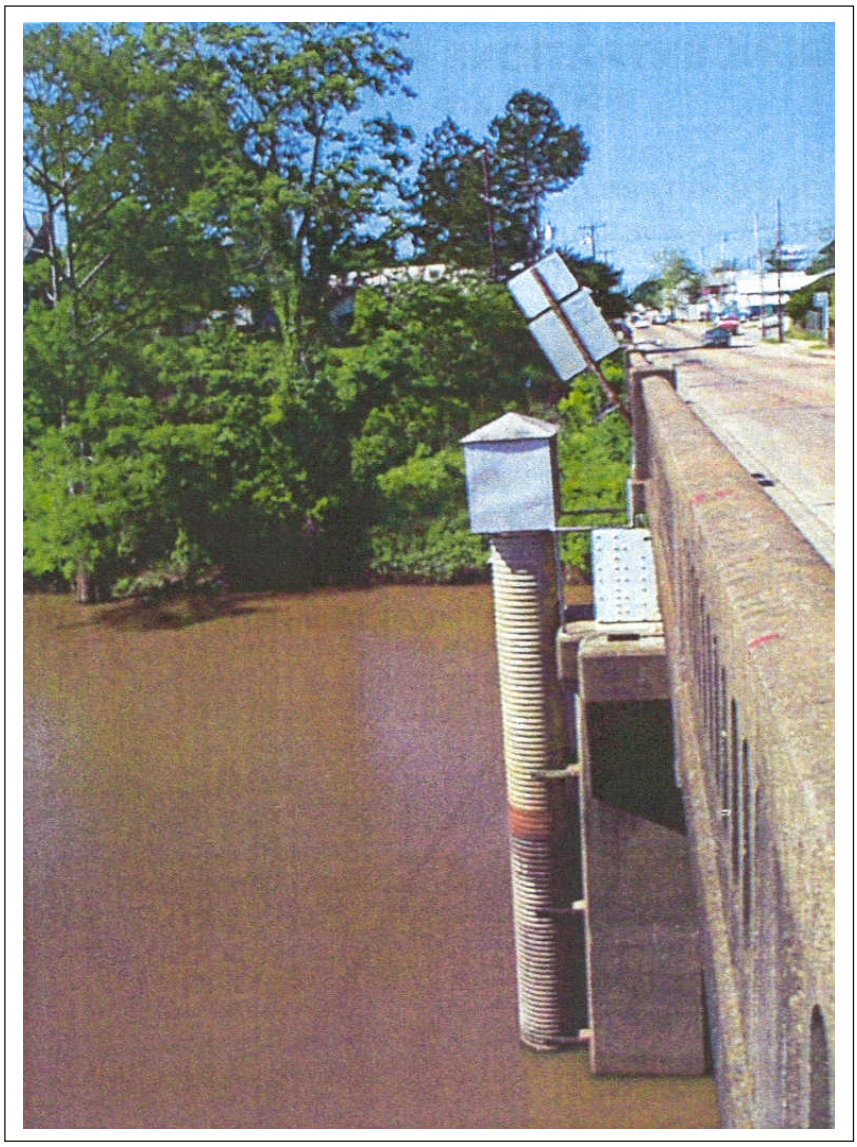


**Figure 2.2-1.** Water-quality data-collection site at Bayou Courtableau at Washington, Louisiana. (Photograph by Todd E. Bauman, U.S. Geological Survey.)

### 2.2.1 Physical Properties--Specific Conductance, pH, Water Temperature, and Dissolved Oxygen

## MEDIAN CONCENTRATIONS FOR DISSOLVED OXYGEN RANGED FROM 2.6 TO 9.7 MG/L

*Values for dissolved oxygen at Mermentau River at Mermentau were above the State's minimum water-quality criterion of 5.0 mg/L.*

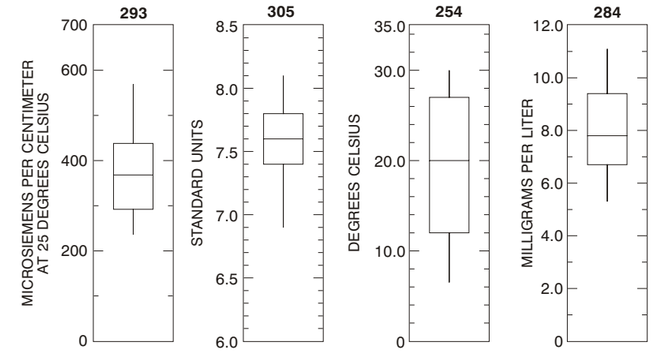
Statistical summaries of water-quality data at 67 sites in the basin are presented in table 2.2-1 at the back of this report, and boxplots summarizing the specific conductance, pH, water temperature, and dissolved-oxygen concentration data are presented in figure 2.2.1-1 for six of the sites. Specific conductance values for all sites in the Atchafalaya-Teche-Vermilion basin ranged from 17 µS/cm at Upper Clear Bayou near Woodworth to 20,300 µS/cm at Vermilion Bay at Cypremort Point (table 2.2-1). The median values for specific conductance ranged from 31 to 8,290 µS/cm for all sites. The boxplots for specific conductance in figure 2.2.1-1 indicate the median values for specific conductance at Bayou Teche and Vermilion River are lower than the values measured at the Atchafalaya River.

Values for pH in water from all sites in the basin ranged from 4.6 at Upper Clear Bayou near Woodworth to 9.9 at False River at New Roads. In addition to Upper Clear Bayou and False River, on two occasions Lake Buhlow at Pineville was outside the secondary maximum contaminant level (SMCL) range of 5.0 to 9.0 for domestic water supply (U.S. Environmental Protection Agency, 1976; 1986). Median pH values in the Atchafalaya-Teche-Vermilion basin ranged from 6.3 to 8.3. The boxplots indicate that pH was less than 6.5, the lower limit of the U.S. Environmental Protection Agency recommended range for freshwater aquatic life (U.S. Environmental Protection Agency, 1976; 1986) in fewer than 25 percent of the samples from Bayou Teche at Arnaudville, Bayou Teche at Keystone Lock near St. Martinville, and Vermilion River at State Highway 3073 at Lafayette.

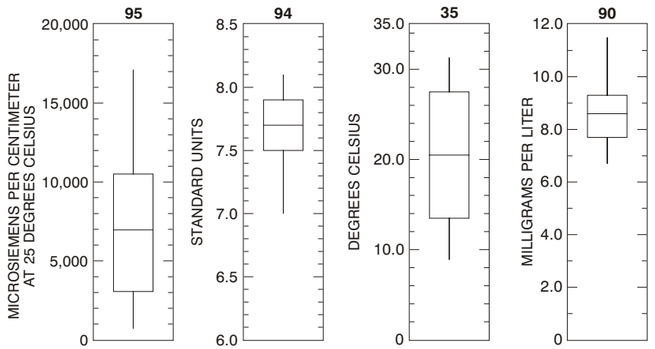
Values for water temperatures at all sites in the basin ranged from 1.0°C at Chicot Pass at Myette Point near Charenton to 37.0°C at Bayou Teche near Franklin. Median values ranged from 17.5 to 27.5°C. Maximum water temperatures at several sites were greater than the State's criterion of 32.2°C. These temperatures probably occurred during extreme low flow or on very hot days (Louisiana Department of Environmental Quality, 1984, p. 12). Boxplots for water temperatures in figure 2.2.1-1 indicate that median water temperatures were approximately the same, regardless of the water body's size or location.

Dissolved-oxygen concentrations in water from the basin ranged from 0.0 mg/L at Lake Buhlow (site 4) at Pineville, Atchafalaya River Basin Station WAI, and Yellow Bayou Station YB-2 near Simmesport to 19.8 mg/L at Yellow Bayou Station YB-2 near Simmesport. The median concentrations for dissolved oxygen ranged from 2.6 to 9.7 mg/L. Dissolved-oxygen concentrations were greater than the State's minimum water-quality criterion of 5.0 mg/L in more than 75 percent of the samples analyzed at most sites. The U.S. Environmental Protection Agency's criterion for dissolved oxygen is 5.0 mg/L for freshwater aquatic life (U.S. Environmental Protection Agency, 1976; 1986). Values for dissolved oxygen at Mermentau River at Mermentau were above the State's minimum water-quality criterion of 5.0 mg/L. However, the boxplots for dissolved-oxygen concentrations in figure 2.2.1-1 indicate that between 50 and 75 percent of the values were less than 5.0 mg/L at Vermilion River at State Highway 3073 at Lafayette.

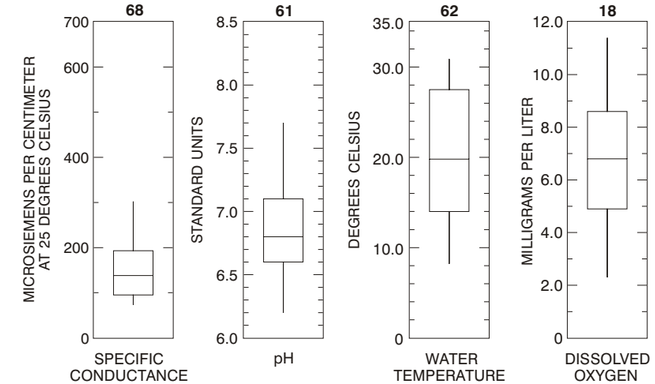
## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

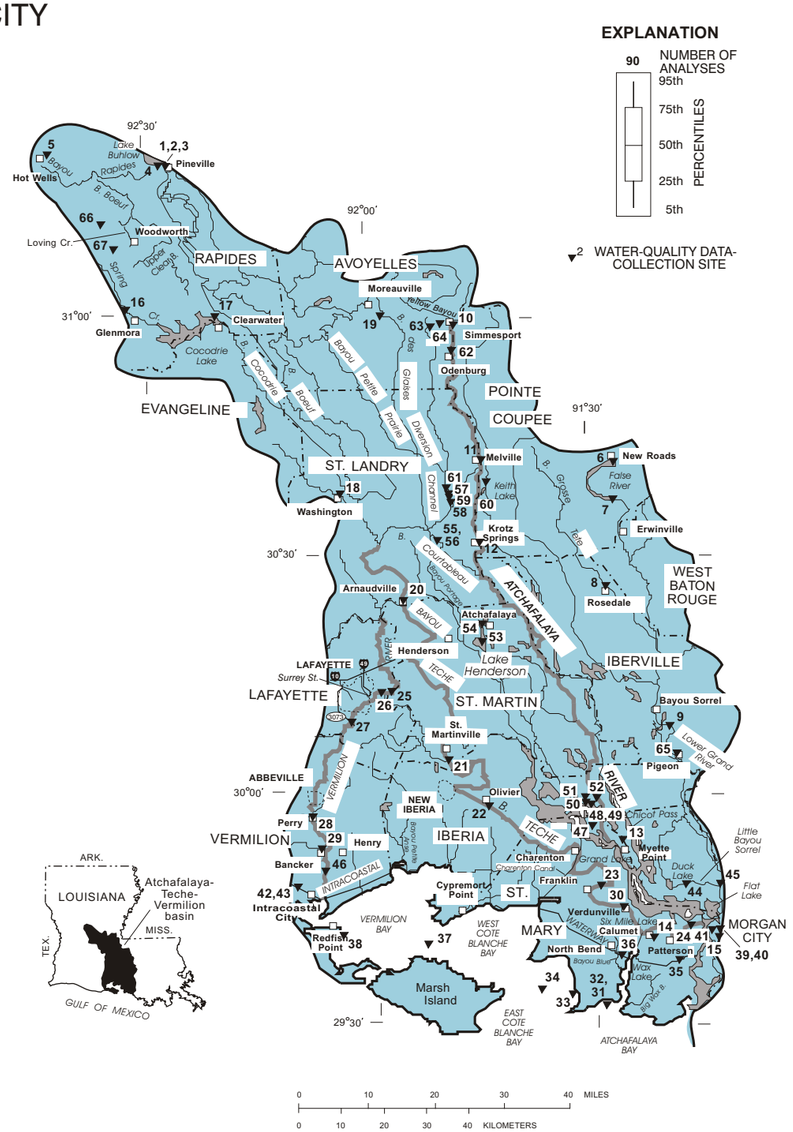



## 37 VERMILION BAY AT CYPREMORT POINT



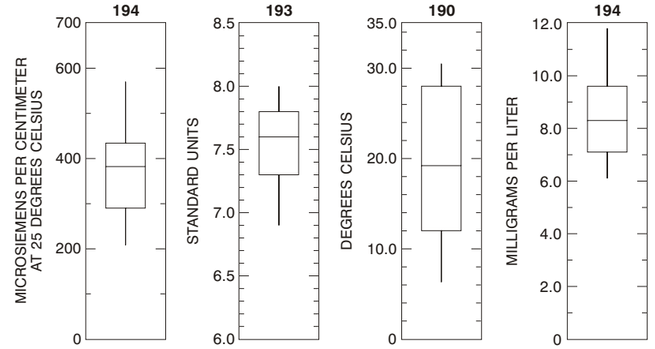

## 20 BAYOU TECHE AT ARNAUDVILLE



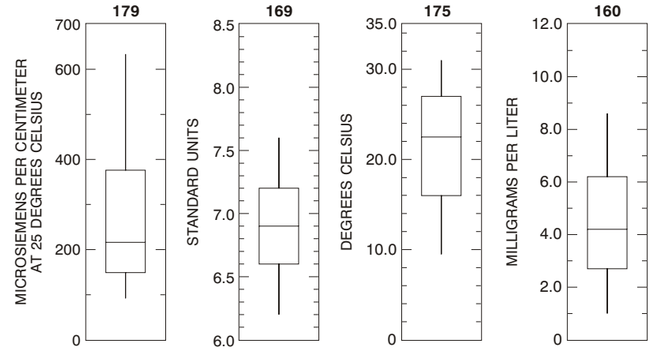




**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

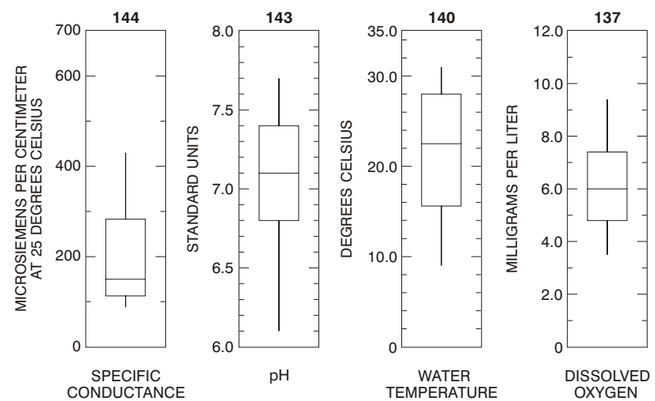



**Figure 2.2.1-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots summarizing specific conductance, pH, water temperature, and dissolved-oxygen data for selected sites.

### 2.2.2 Relation Between Specific Conductance and Dissolved Solids

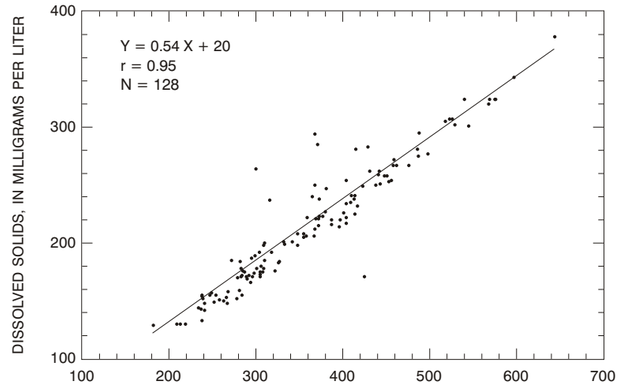
## DISSOLVED SOLIDS CONCENTRATIONS CAN BE ESTIMATED FROM SPECIFIC CONDUCTANCE VALUES

*Dissolved solids concentrations in water from the basin met the U.S. Environmental Protection Agency's secondary drinking water regulations for dissolved solids in irrigation water.*

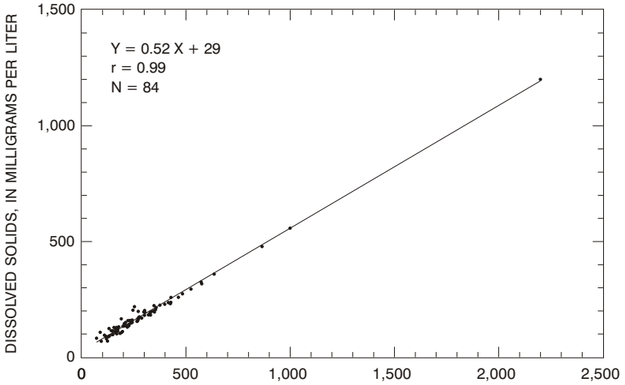
Linear regression equations relating dissolved-solids concentrations to specific conductance were calculated for six sites in the Atchafalaya-Teche-Vermilion basin (fig. 2.2.2-1). The correlation coefficient values, r, ranged from 0.95 at Lower Atchafalaya River at Morgan City to 0.99 at Vermilion River at Perry, Vermilion River at State Highway 3073 at Lafayette, and Bayou Teche at Keystone Lock near St. Martinville. The relatively strong correlation between specific conductance and dissolved solids concentrations indicates that dissolved solids concentrations can be estimated from specific conductance values with a reasonable degree of accuracy.

The regression equation for Vermilion River at State Highway 3073 at Lafayette, which was based on 162 chemical analyses, indicates that dissolved solids concentrations at that site can exceed 500 mg/L when specific conductance values exceed 913 µS/cm. The boxplot for specific conductance for Vermilion River at State Highway 3073 at Lafayette (fig. 2.2.1-1) indicates that 913 µS/cm was exceeded in less than five percent of the samples analyzed. Although no State criteria for the quality of irrigation water are established for these streams or for the other streams for which regression equations were developed, the regression equations indicated that the streams in the basin generally met the U.S. Environmental Protection Agency's (1976) criterion for dissolved solids in irrigation water (500 mg/L).

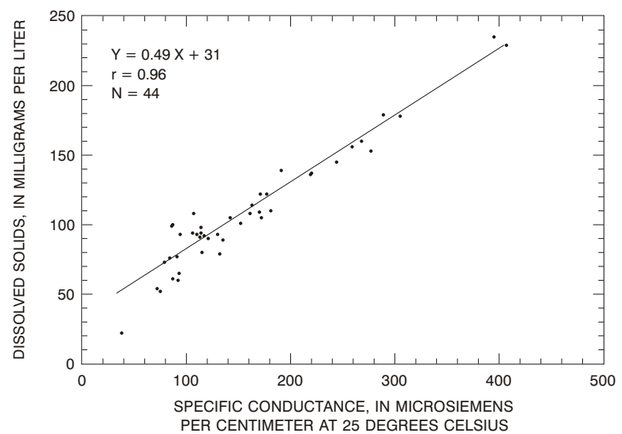
## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

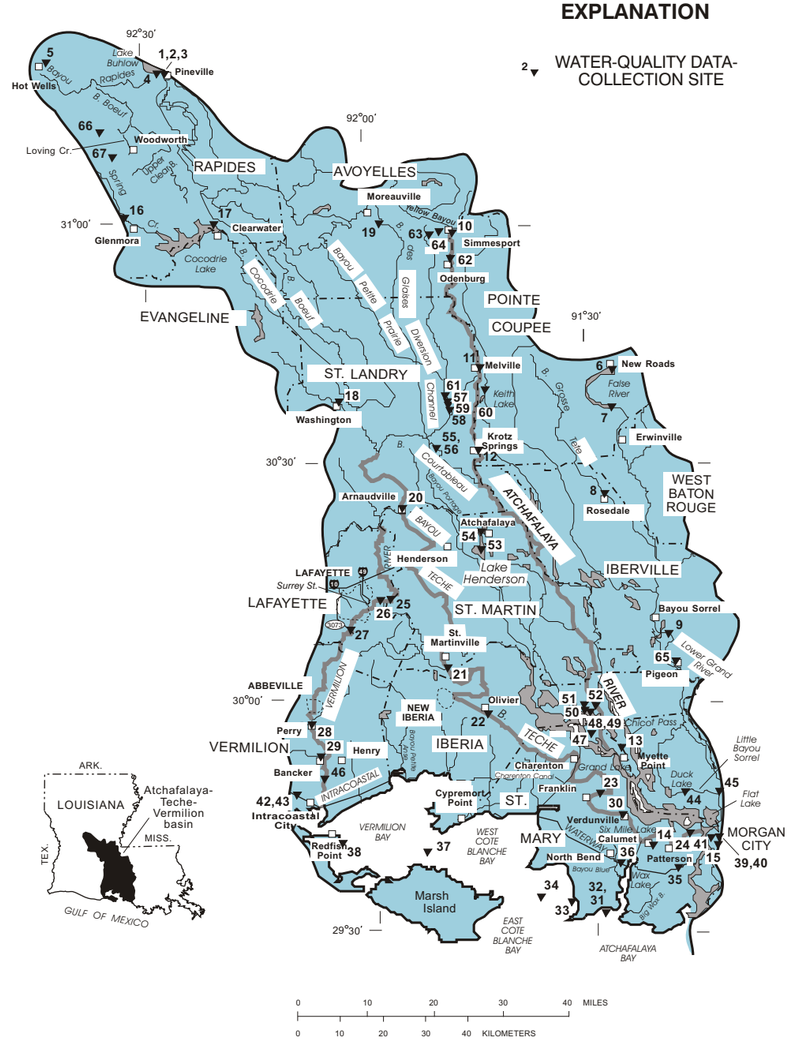



## 28 VERMILION RIVER AT PERRY



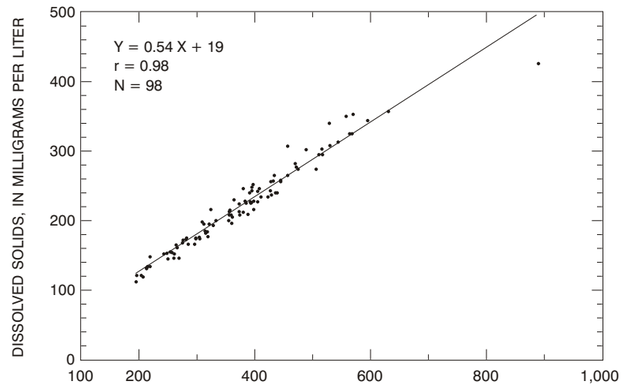

## 20 BAYOU TECHE AT ARNAUDVILLE



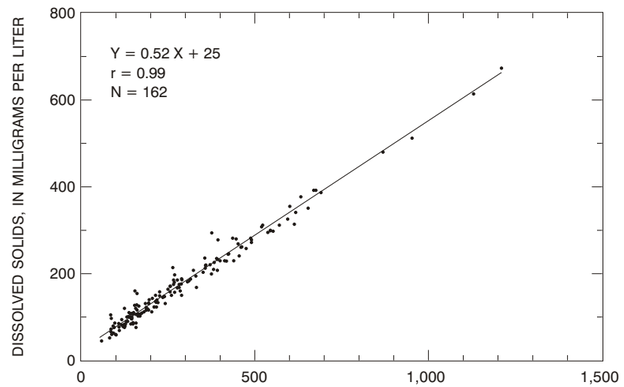




**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

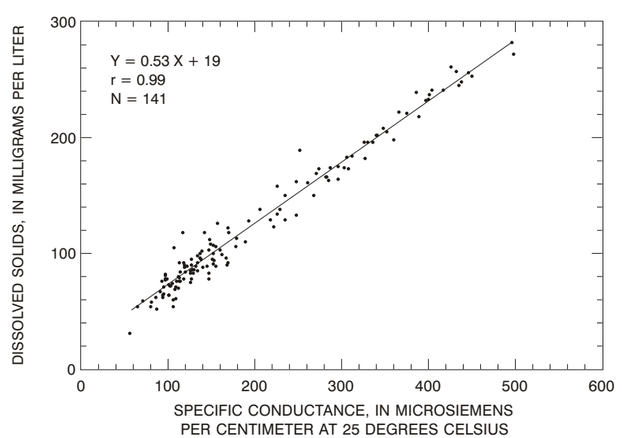



**Figure 2.2.2-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and graphs showing relation between specific conductance and dissolved solids in water from selected sites.

# HIGHEST CONCENTRATIONS OF DISSOLVED CALCIUM, MAGNESIUM, SODIUM, AND POTASSIUM IN THE BASIN OCCURRED AT VERMILION BAY AT CYPREMORT POINT

*Highest sodium concentration was 3,800 mg/L at Vermilion Bay at Cypremort Point.*

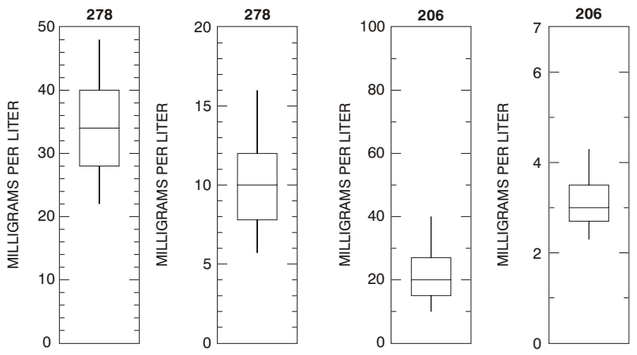
Calcium concentrations at all sites in the Atchafalaya-Teche-Vermilion basin ranged from 0.80 mg/L at Bayou Cocodrie near Clearwater to 180 mg/L at Vermilion Bay at Cypremort Point. Boxplots for six representative sites in the basin (fig. 2.2.3-1) show that the median value for calcium at Vermilion Bay at Cypremort Point was significantly higher than at other sites. The median value for calcium at Atchafalaya River at Melville was 35 mg/L. However, the median value at Vermilion Bay at Cypremort Point was 65 mg/L.

Magnesium concentrations in the basin ranged from less than 0.20 mg/L at Spring Creek near Glenmora to 480 mg/L at Vermilion Bay at Cypremort Point. Boxplots from six representative sites (fig. 2.2.3-1) show wide variance of the magnesium values in the samples collected at these sites. The median values for magnesium ranged from 0.70 to 180 mg/L for all sites.

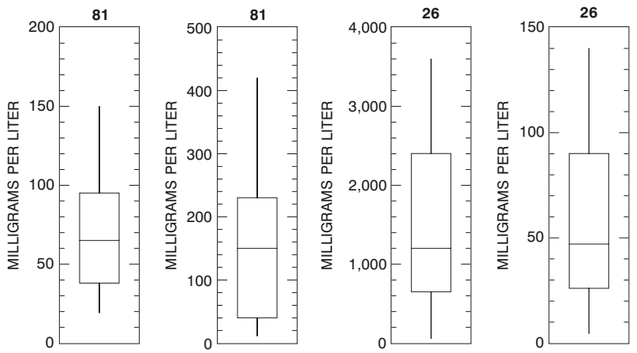
The highest sodium concentration in water from the basin was at Vermilion Bay at Cypremort Point (3,800 mg/L). The minimum sodium concentration (1.8 mg/L) occurred at Bayou Teche at Arnaudville. Boxplots for six representative sites shown in fig. 2.2.3-1 show that at least 75 percent of the samples collected at Bayou Teche at Keystone Lock near St. Martinville and Bayou Teche at Arnaudville had sodium concentrations less than 20 mg/L. The median concentrations at the sites ranged from 5.0 to 1,400 mg/L.

Concentrations of potassium in water from the basin ranged from 0.10 mg/L at Spring Creek near Glenmora to 260 mg/L at Vermilion River near Bancker. Boxplots for six representative sites (fig. 2.2.3-1) show a significant difference between the values for potassium at the coastal site of Vermilion Bay at Cypremort Point and the values at the other sites.

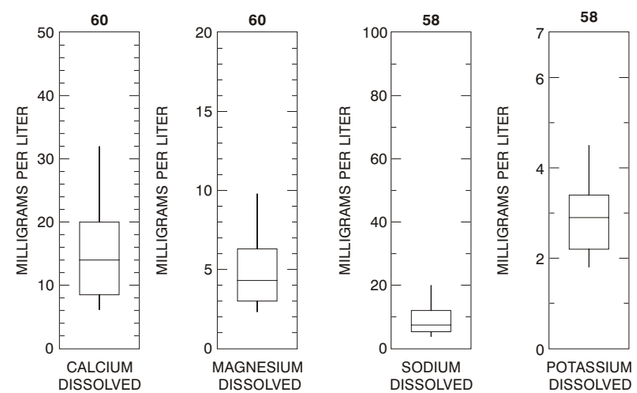
## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

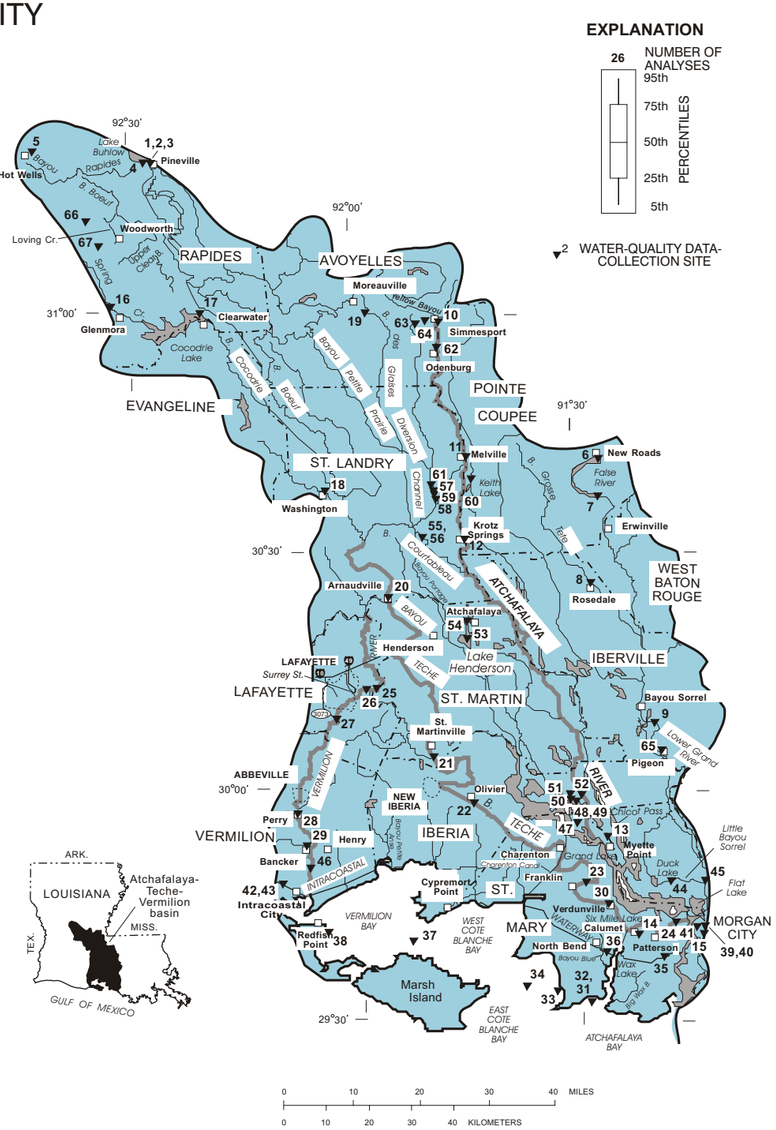



## 37 VERMILION BAY AT CYPREMORT POINT



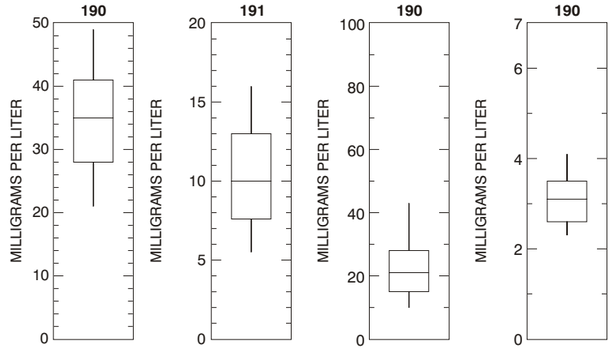

## 20 BAYOU TECHE AT ARNAUDVILLE



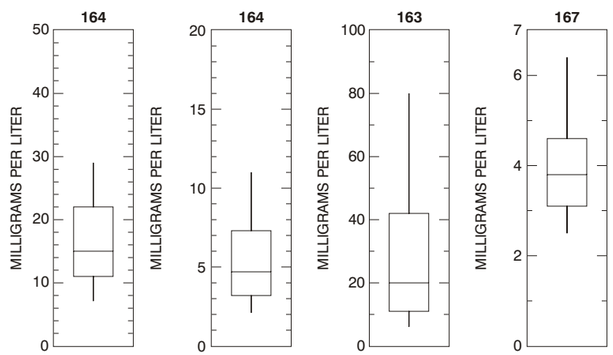




**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

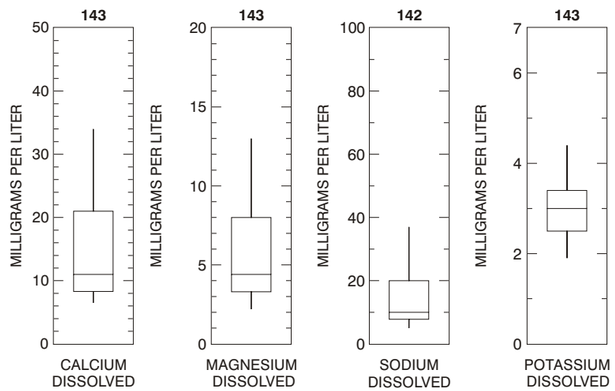



**Figure 2.2.3-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots summarizing data for dissolved calcium, magnesium, sodium, and potassium concentrations in water from selected sites.

### 2.2.4 Major Inorganic Anions--Total Alkalinity as Calcium Carbonate, Dissolved Sulfate, and Dissolved Chloride

# CHLORIDE CONCENTRATIONS IN WATER FROM THE BASIN RANGED FROM 1.2 TO 7,000 MG/L

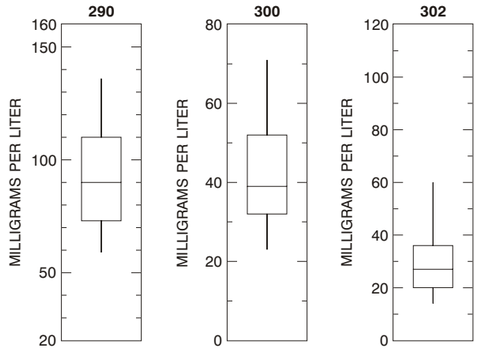
*Median concentrations ranged from 3.9 mg/L at Spring Creek near Glenmora to 2,200 mg/L at Vermilion Bay at Cypremort Point.*

Alkalinity as calcium carbonate in water from the Atchafalaya-Teche-Vermilion basin ranged from less than 1 mg/L at Spring Creek near Glenmora to 317 mg/L at Bayou Des Glaises Diversion Channel at Moreauville. The lowest median concentration (11 mg/L) occurred at Upper Clear Bayou near Woodworth. The maximum median alkalinity in the basin was 149 mg/L, which occurred at Yellow Bayou Station YB-1 near Simmesport. The boxplots for six representative sites (fig. 2.2.4-1) show that alkalinity values in 95 percent of the samples analyzed were generally 20 mg/L or greater. The U.S. Environmental Protection's Agency's minimum alkalinity criterion for freshwater aquatic life is 20 mg/L except where alkalinities for natural waters commonly are less (U.S. Environmental Protection Agency, 1976).

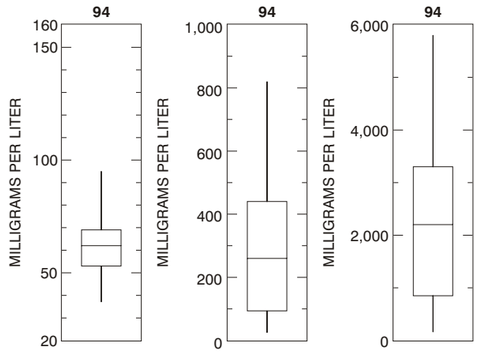
Concentrations of sulfate in water from the basin ranged from less than 0.1 mg/L at Bayou Rapides near Hot Wells, Spring Creek near Glenmora, and Bayou Courtableau at Washington, to 960 mg/L at Vermilion Bay at Cypremort Point. The SMCL for drinking water is 250 mg/L (U.S. Environmental Protection Agency, 1986; Louisiana Department of Environmental Quality, 1984). The boxplots for six representative sites (fig. 2.2.4-1) show that the sulfate concentrations on the Vermilion River and Bayou Teche were much lower than at the other sites.

Chloride concentrations in water from the basin ranged from 1.2 mg/L at False River at New Roads to 7,000 mg/L at Vermilion Bay at Cypremort Point. The SMCL for drinking water is 250 mg/L (U.S. Environmental Protection Agency, 1986; Louisiana Department of Environmental Quality, 1984). Median concentrations ranged from 3.9 mg/L at Spring Creek near Glenmora to 2,200 mg/L at Vermilion Bay at Cypremort Point. The boxplots summarizing the data for six representative sites in the basin (fig. 2.2.4-1) show that chloride concentrations at Bayou Teche at Arnaudville were significantly lower than at the other sites.

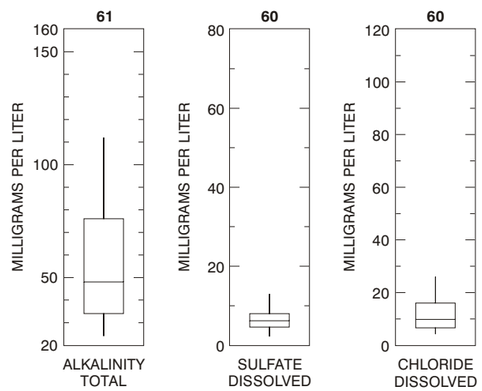
## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

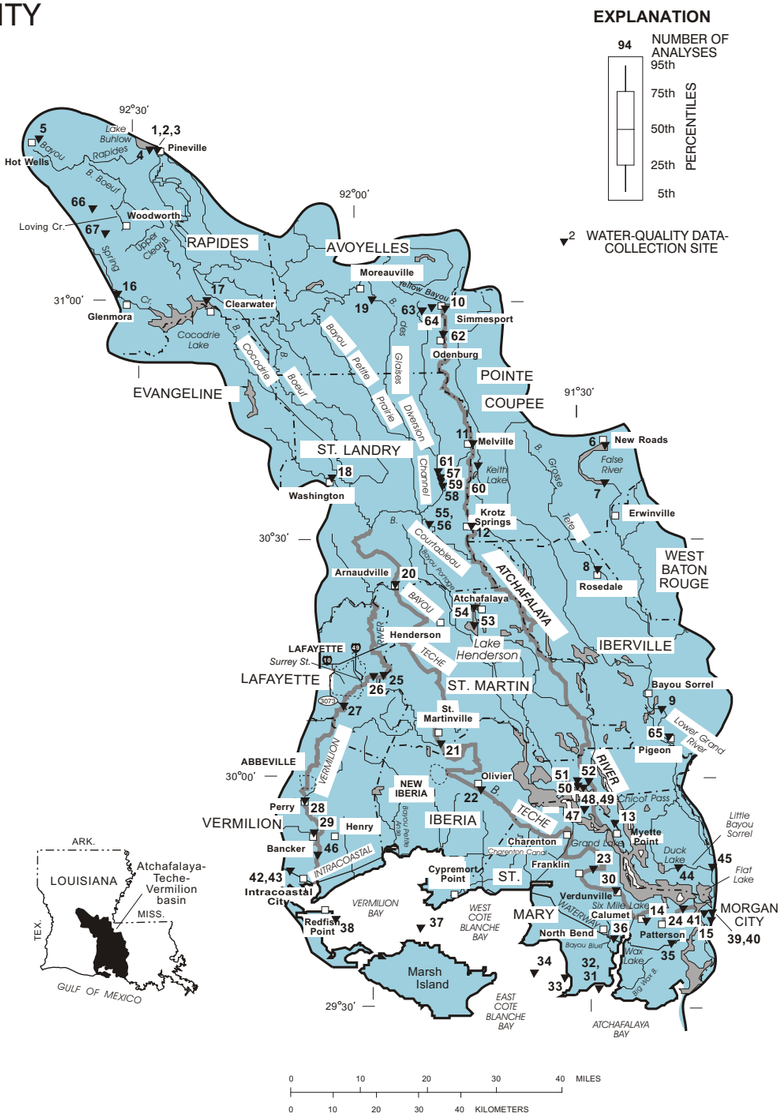



## 37 VERMILION BAY AT CYPREMORT POINT



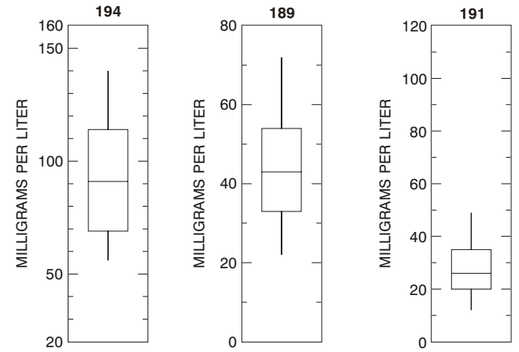

## 20 BAYOU TECHE AT ARNAUDVILLE



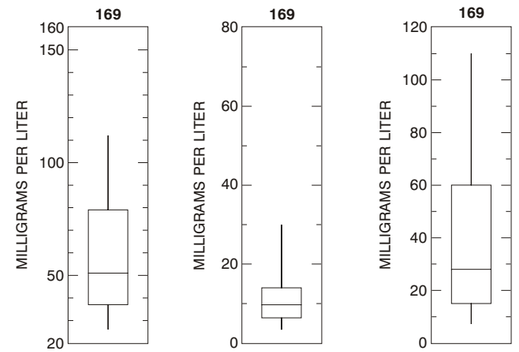




**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

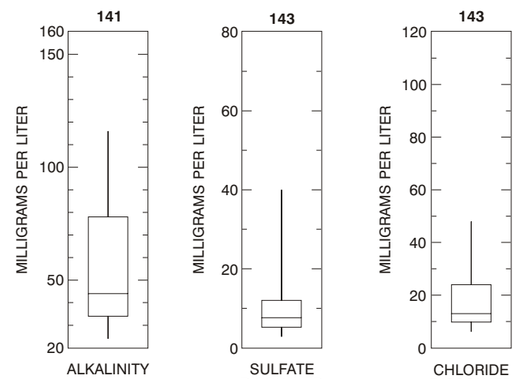



**Figure 2.2.4-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots summarizing data for total alkalkalinity as calcium carbonate and dissolved sulfate and chloride concentrations in water from selected sites.

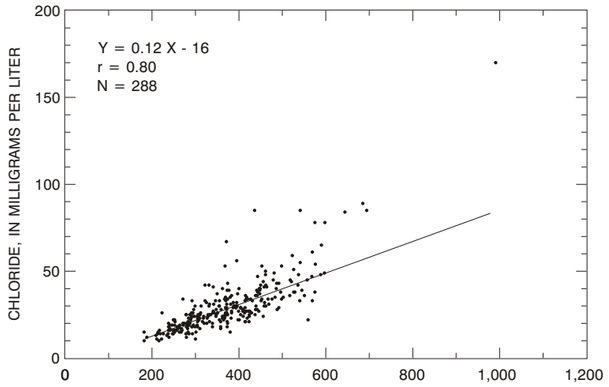
### 2.2.5 Relation between Specific Conductance and Dissolved Chloride

## A DIRECT RELATION EXISTS BETWEEN SPECIFIC CONDUCTANCE AND DISSOLVED CHLORIDE

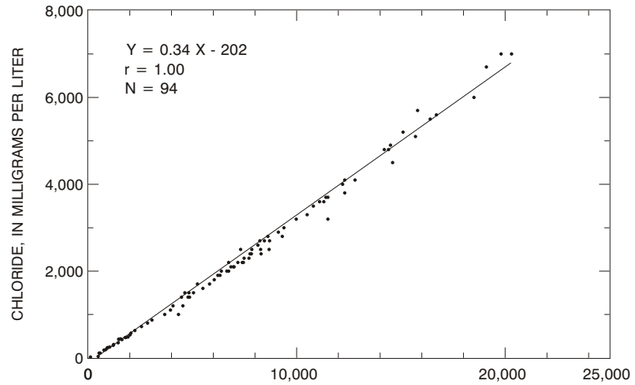
*Linear regression equations indicate that dissolved chloride can be estimated from specific conductance for selected streams in the Atchafalaya-Teche-Vermilion basin.*

Regression equations relating chloride concentrations to specific conductance values were calculated for six sites in the Atchafalaya-Teche-Vermilion basin (fig. 2.2.5-1). The correlation coefficient values, r, ranged from 0.80 at Lower Atchafalaya River at Morgan City and Atchafalaya River at Melville to 1.00 at Vermilion Bay at Cypremort Point. These equations can be used to estimate chloride concentrations from specific conductance for water uses such as irrigation of chloride sensitive crops. The regression equations indicate that chloride constitutes a greater percentage of the dissolved solids in water from Vermilion River at State Highway 3073 at Lafayette than in water from the other five sites. For example, application of the regression equations to specific conductance of 200 µS/cm yields an estimated chloride concentration of 23 mg/L for Vermilion River at State Highway 3073 at Lafayette but 8.0 mg/L for Lower Atchafalaya River at Morgan City.

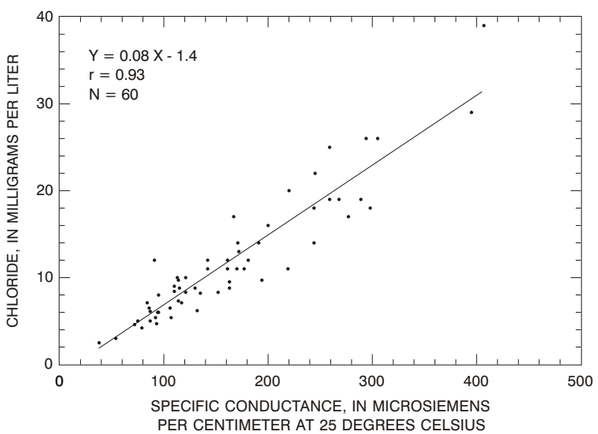
## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

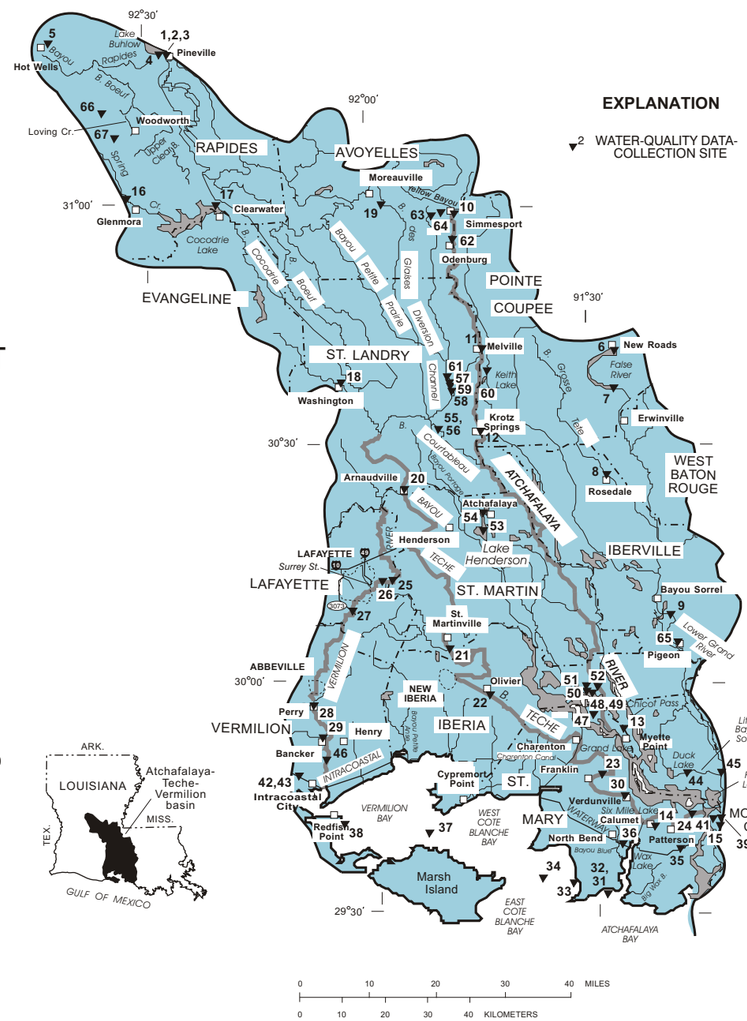



## 37 VERMILION BAY AT CYPREMORT POINT




## 20 BAYOU TECHE AT ARNAUDVILLE



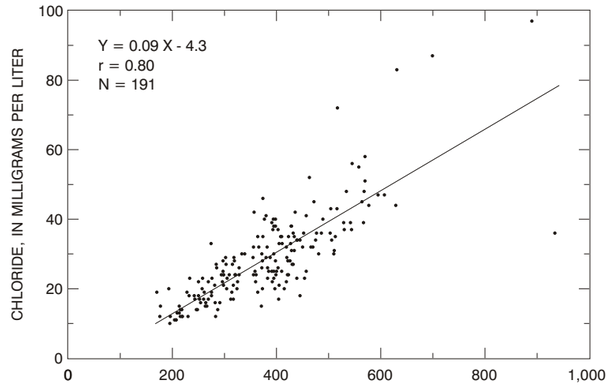





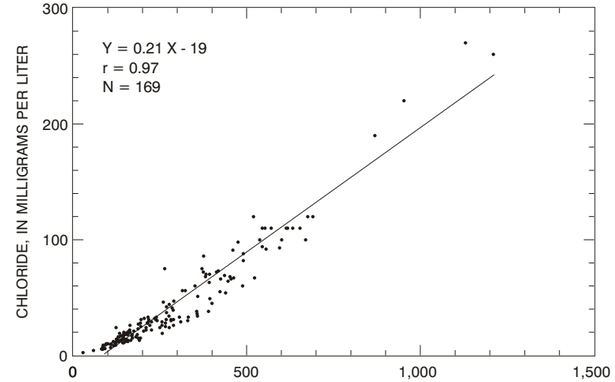


**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

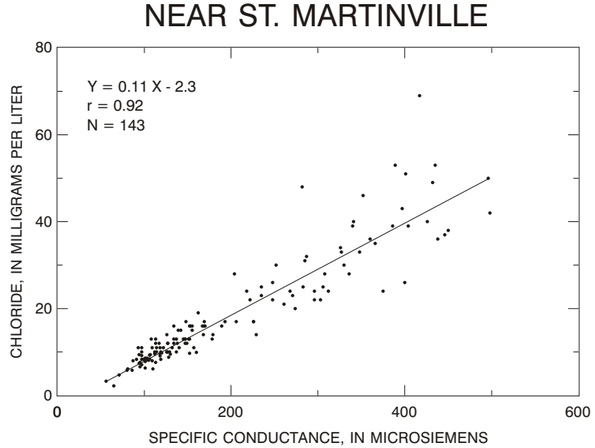



**Figure 2.2.5-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and graphs showing relation between specific conductance and dissolved chloride in water from selected sites.

### 2.2.6 Trace Metals[2]--Dissolved Copper, Iron, Lead, and Zinc

## CONCENTRATIONS OF SELECTED DISSOLVED TRACE METALS WERE WITHIN THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S RECOMMENDED LEVEL

*Median concentrations of dissolved iron ranged from 20 to 140 µg/L.*

Concentrations of copper in water samples collected in the Atchafalaya-Teche-Vermilion basin ranged from less than the detection level at many sites to 140 µg/L at Bayou Courtableau at Drainage Structure (west) near Courtableau. The median copper concentrations ranged from 3 to 7 µg/L at the 15 sites for which 10 or more samples were analyzed. Copper concentrations for six representative sites are summarized using boxplots in figure 2.2.6-1. The boxplots (fig. 2.2.6-1) illustrate that at the sites, at least 95 percent of the samples analyzed had copper concentrations of less than 20 µg/L.

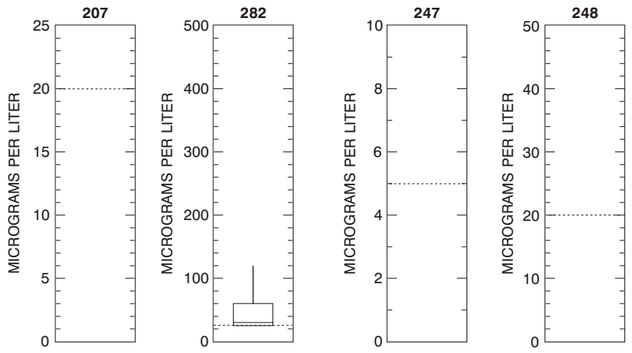
Iron concentrations ranged from less than the detection level at many sites to 2,800 µg/L at Atchafalaya River at Melville. Median iron concentrations in the basin ranged from 20 to 140 µg/L. Boxplots and tables (fig. 2.2.6-1) summarizing data for six representative sites within the basin show that 95 percent of iron concentrations were less than 500 µg/L.

Concentrations of lead in water from the basin were generally low at all sites. The concentrations ranged from less than the detection level at many sites to 74 µg/L at Atchafalaya River at Melville. The median concentrations were less than the detection level at all of the sites for which 10 or more samples were analyzed, except Lower Grand River at Bayou Sorrel. Boxplots for six representative sites (fig. 2.2.6-1) show that at least 95 percent of the samples analyzed had lead concentrations of less than or equal to 10 µg/L.

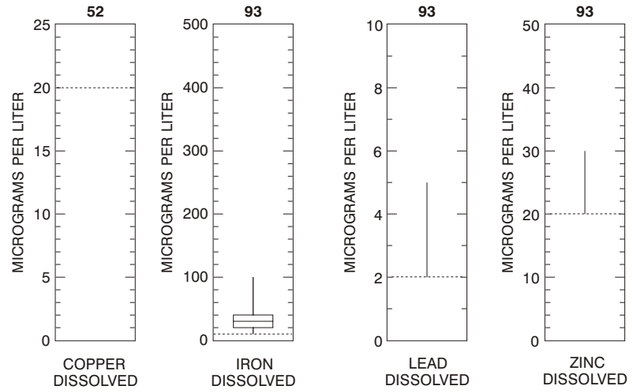
Zinc concentrations in water from the Atchafalaya-Teche-Vermilion basin generally were low at all sites. However, the maximum zinc concentration at Intracoastal Waterway at Vermilion Lock (west) near Intracoastal City was 260 µg/L. Zinc concentrations in the basin ranged from less than the detection level at many sites to 260 µg/L at Intracoastal Waterway at Vermilion Lock (west) near Intracoastal City. Median zinc concentrations were less than the detection level at several sites for which 10 or more samples were analyzed. Boxplots for six representative sites (fig. 2.2.6-1) show that less than 25 percent of the zinc concentrations were greater than 20 µg/L in most of the samples analyzed.

[2]"Traditionally, dissolved trace-element concentrations have been reported at the micrograms per liter level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Present data above the micrograms per liter level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols after the period of record associated with this report."

## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

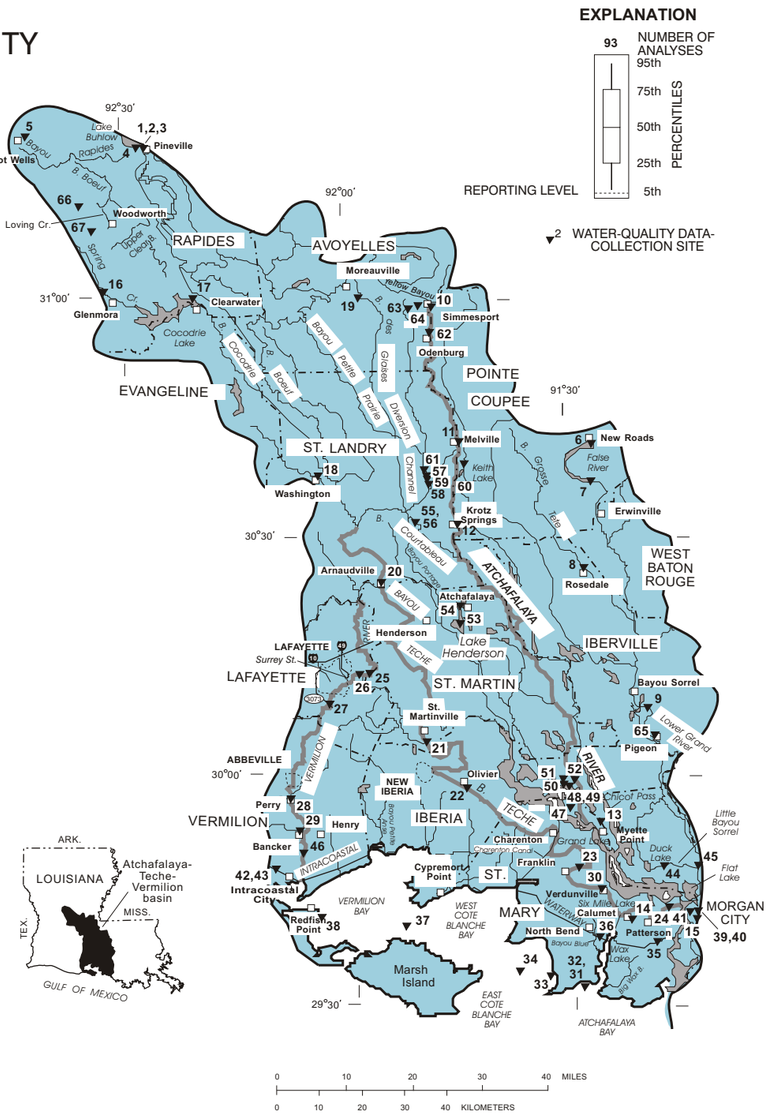



## 37 VERMILION BAY AT CYPREMORT POINT



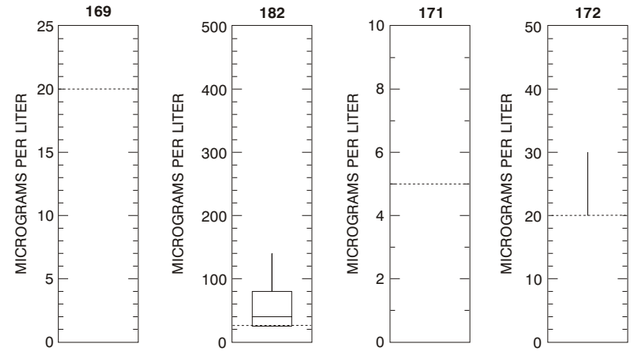

## 20 BAYOU TECHE AT ARNAUDVILLE

| DISSOLVED CONSTITUENT | TOTAL NUMBER OF ANALYSES | REPORTING LEVEL (µg/L) | NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL |
|---|---|---|---|
| COPPER | 3 | 5 | 2 |
| IRON | 3 | 10 | 3 |
| LEAD | 3 | 2 | 1 |
| ZINC | 3 | 20 | 0 |

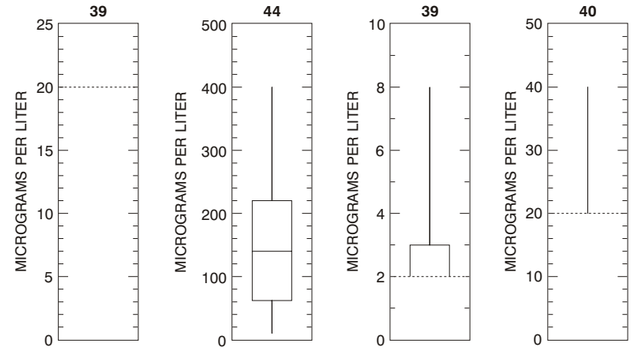



**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

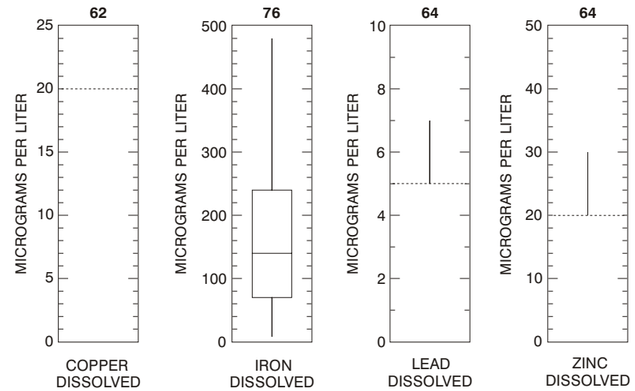



**Figure 2.2.6-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots and tables summarizing data for dissolved copper, iron, lead, and zinc concentrations in water from selected sites.

# MEDIAN CONCENTRATIONS OF AMMONIA PLUS ORGANIC NITROGEN RANGED FROM 0.40 TO 2.4 MG/L

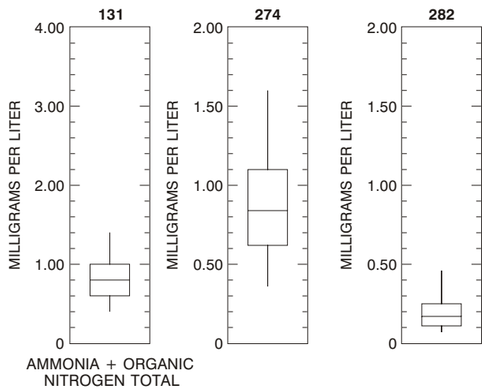
*Median concentrations of ammonia plus organic nitrogen at Vermilion River at State Highway 3073 at Lafayette were generally greater than concentrations at the other sites.*

Concentrations of ammonia plus organic nitrogen in water from the basin ranged from 0.12 mg/L at Atchafalaya River at Simmesport to 7.0 mg/L at Yellow Bayou Station YB-2 near Simmesport. Median concentrations ranged from 0.40 to 2.4 mg/L. However, median concentrations of ammonia plus organic nitrogen as nitrogen at Vermilion River at State Highway 3073 at Lafayette were generally greater than concentrations at the other sites. Concentrations of ammonia plus organic nitrogen in water from the six representative sites for which boxplots are shown generally were less than 4.0 mg/L (fig. 2.2.7-1).

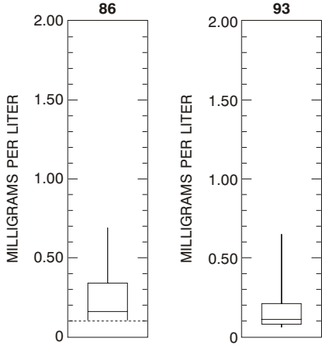
Concentrations of nitrite plus nitrate as nitrogen in the Atchafalaya-Teche-Vermilion basin ranged from less than 0.01 mg/L at Spring Creek near Glenmora to 3.0 mg/L at Bayou Courtableau at Drainage Structure (East) near Courtableau. Median nitrite plus nitrate nitrogen concentrations ranged from 0.01 to 0.96 mg/L. Boxplots at six representative sites show that median concentrations at the sites on the Atchafalaya River were approximately twice the median concentrations at the other sites (fig. 2.2.7-1).

Concentrations of total phosphorus in water in the Atchafalaya-Teche-Vermilion basin ranged from less than 0.01 mg/L at several sites to 6.1 mg/L at Intracoastal Waterway at Vermilion Lock (East) near Intracoastal City. Median concentrations ranged from 0.02 to 0.58 mg/L. Boxplots for six representative sites show that phosphorus concentrations at Vermilion River at State Highway 3073 at Lafayette were considerably higher than at the other sites (fig. 2.2.7-1).

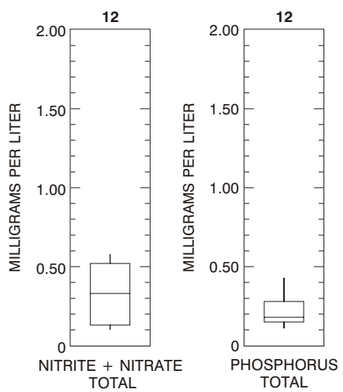
## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

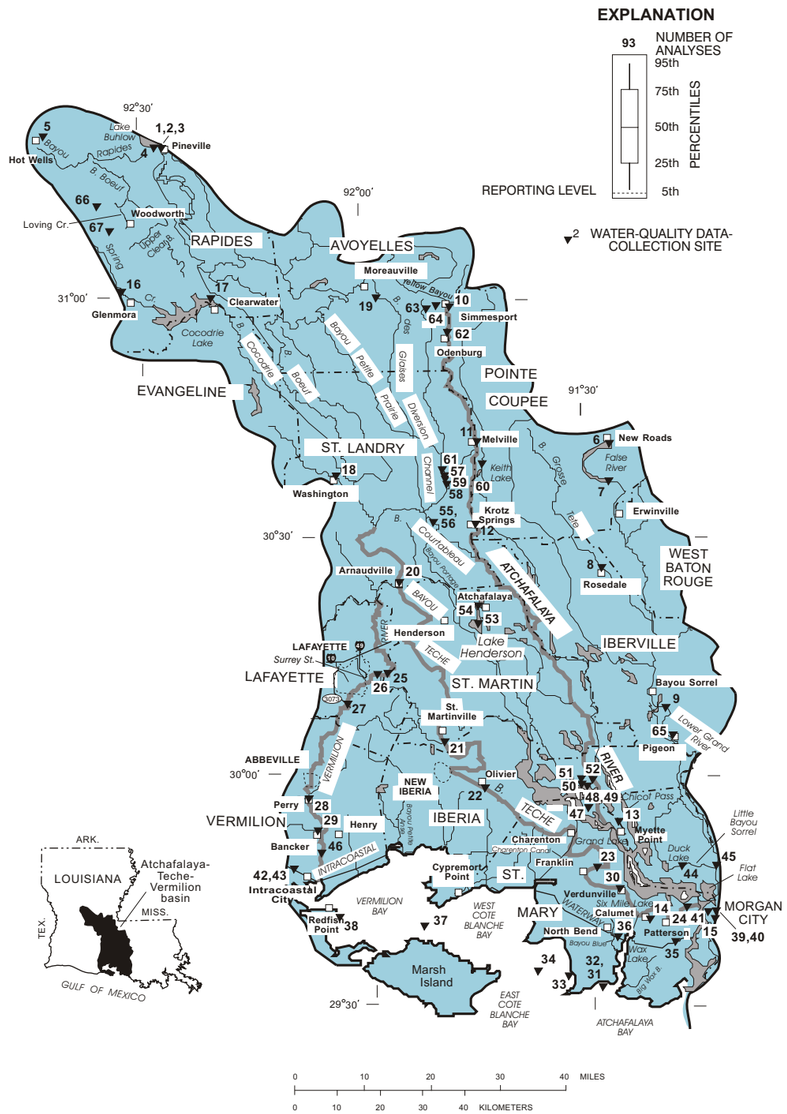



## 37 VERMILION BAY AT CYPREMORT POINT

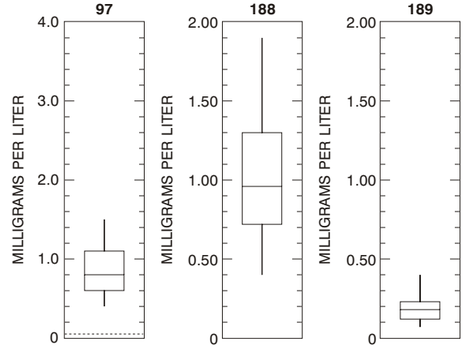



## 20 BAYOU TECHE AT ARNAUDVILLE

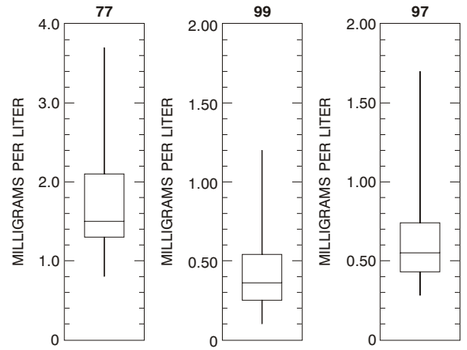



## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

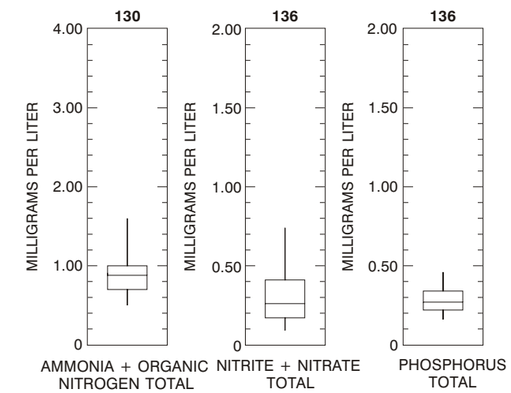



**Figure 2.2.7-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots and tables summarizing data for concentrations of nutrients in water from selected sites.

# ORGANIC COMPOUNDS DETECTED IN SURFACE WATERS IN THE BASIN

*The most commonly occurring organic compounds in the Atchafalaya-Teche-Vermilion basin were diazinon and 2,4-D.*

Although low-level concentrations of organic compounds were occasionally detected in the Atchafalaya-Teche-Vermilion basin, diazinon was detected at more sites and with greater frequency than any of the other organic compounds that were analyzed, with the exception of 2,4-D. The highest diazinon concentration was 1.8 µg/L in a sample collected at Bayou Courtableau at Drainage Structure (west) near Courtableau. Diazinon was detected at least once at all of the 13 sites for which 10 or more samples were analyzed for the compound. Tables rather than boxplots are used to summarize occurrences of diazinon at six representative sites in figure 2.2.8-1, because the total number of samples analyzed for each site was less than 10 or the number of samples that contained organic compounds in concentrations greater than the reporting level was equal to or less than 10. Of these six sites, diazinon was detected at every site for which it was analyzed.

The herbicide 2,4-D was detected at all of the 13 sites for which 10 or more samples were analyzed for the compound. The maximum concentration of 2,4-D in water from the basin was 12 µg/L, at Bayou Courtableau at Drainage Structure (west) near Courtableau. The tables listing the number of samples in which organic compounds were detected for six representative sites in the basin indicate that 2,4-D was detected in 88 percent of the samples collected at Vermilion River at State Highway 3073 at Lafayette (fig. 2.2.8-1).

## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

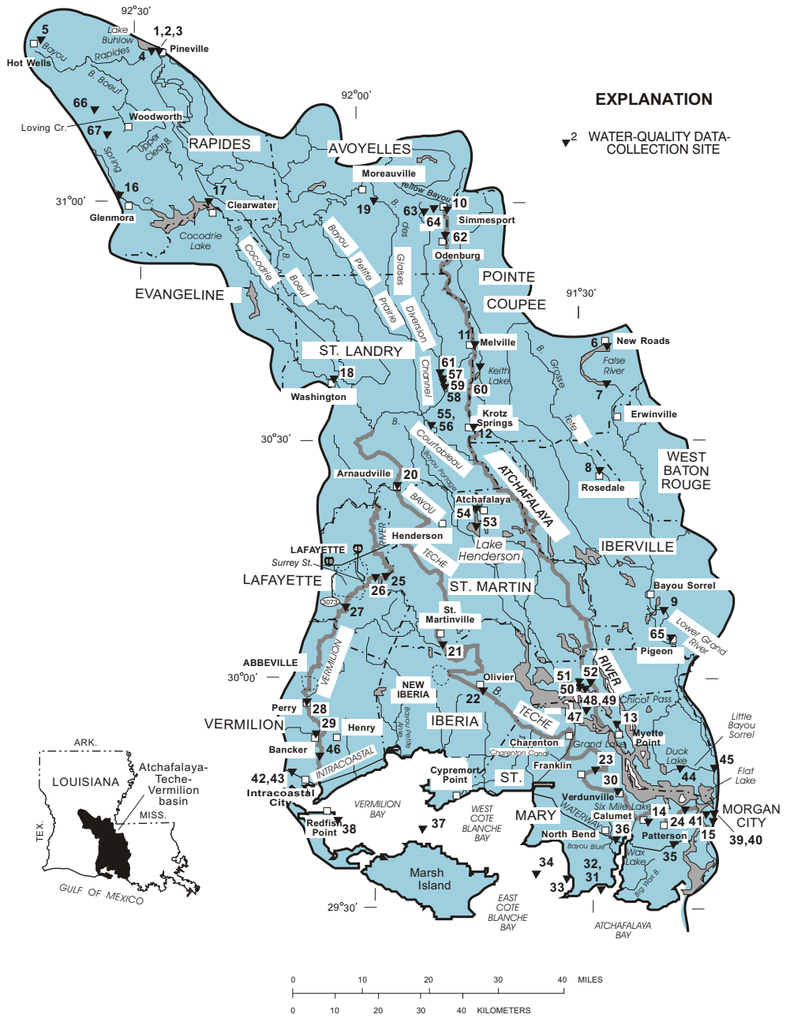
| ORGANIC COMPOUND TOTAL | TOTAL NUMBER OF ANALYSES | REPORTING LEVEL (µg/L) | NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL |
|---|---|---|---|
| DDT | 267 | 0.01 | 5 |
| PCB | 266 | 0.1 | 3 |
| DIAZINON | 243 | 0.01 | 71 |
| LINDANE | 267 | 0.01 | 1 |
| CHLORDANE | 267 | 0.1 | 0 |
| MALATHION | 243 | 0.01 | 3 |
| ENDRIN | 267 | 0.01 | 7 |
| PARATHION | 243 | 0.01 | 1 |
| DIELDRIN | 267 | 0.01 | 13 |
| ENDOSULFAN | 202 | 0.01 | 0 |
| 2,4-D | 213 | 0.5 | 0 |

## 37 VERMILION BAY AT CYPREMORT POINT

| ORGANIC COMPOUND TOTAL | TOTAL NUMBER OF ANALYSES | REPORTING LEVEL (µg/L) | NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL |
|---|---|---|---|
| DDT | 92 | 0.001 | 2 |
| PCB | 92 | 0.1 | 2 |
| DIAZINON | 68 | 0.01 | 19 |
| LINDANE | 92 | 0.001 | 5 |
| CHLORDANE | 92 | 0.1 | 1 |
| MALATHION | 68 | 0.01 | 2 |
| ENDRIN | 92 | 0.01 | 1 |
| PARATHION | 68 | 0.01 | 0 |
| DIELDRIN | 92 | 0.01 | 1 |
| ENDOSULFAN | 31 | 0.001 | 0 |
| 2,4-D | 39 | 0.01 | 26 |

## 20 BAYOU TECHE AT ARNAUDVILLE

| ORGANIC COMPOUND TOTAL | TOTAL NUMBER OF ANALYSES | REPORTING LEVEL (µg/L) | NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL |
|---|---|---|---|
| DDT | 3 | 0.01 | 0 |
| PCB | 3 | 0.1 | 0 |
| DIAZINON | 3 | 0.01 | 1 |
| LINDANE | 3 | 0.01 | 0 |
| CHLORDANE | 3 | 0.1 | 0 |
| MALATHION | 3 | 0.01 | 0 |
| ENDRIN | 3 | 0.01 | 0 |
| PARATHION | 3 | 0.01 | 0 |
| DIELDRIN | 3 | 0.01 | 0 |
| ENDOSULFAN | 1 | 0.01 | 0 |
| 2,4-D | 2 | 0.01 | 1 |




**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE

| ORGANIC COMPOUND TOTAL | TOTAL NUMBER OF ANALYSES | REPORTING LEVEL (µg/L) | NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL |
|---|---|---|---|
| DDT | 185 | 0.01 | 2 |
| PCB | 185 | 0.1 | 3 |
| DIAZINON | 187 | 0.01 | 46 |
| LINDANE | 185 | 0.01 | 0 |
| CHLORDANE | 185 | 0.1 | 0 |
| MALATHION | 187 | 0.01 | 0 |
| ENDRIN | 185 | 0.01 | 1 |
| PARATHION | 187 | 0.01 | 3 |
| DIELDRIN | 184 | 0.01 | 2 |
| ENDOSULFAN | 182 | 0.01 | 0 |
| 2,4-D | 185 | 0.5 | 0 |

## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE

| ORGANIC COMPOUND TOTAL | TOTAL NUMBER OF ANALYSES | REPORTING LEVEL (µg/L) | NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL |
|---|---|---|---|
| DDT | 34 | 0.01 | 7 |
| PCB | 33 | 0.1 | 1 |
| DIAZINON | 33 | 0.01 | 30 |
| LINDANE | 34 | 0.01 | 2 |
| CHLORDANE | 34 | 0.1 | 0 |
| MALATHION | 33 | 0.01 | 1 |
| ENDRIN | 34 | 0.01 | 0 |
| PARATHION | 33 | 0.01 | 0 |
| DIELDRIN | 34 | 0.01 | 11 |
| ENDOSULFAN | 15 | 0.01 | 0 |
| 2,4-D | 33 | 0.01 | 29 |

## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

| ORGANIC COMPOUND TOTAL | TOTAL NUMBER OF ANALYSES | REPORTING LEVEL (µg/L) | NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL |
|---|---|---|---|
| DDT | 1 | 0.01 | 0 |
| PCB | 1 | 0.1 | 0 |
| DIAZINON | 1 | 0.01 | 1 |
| LINDANE | 1 | 0.01 | 0 |
| CHLORDANE | 1 | 0.1 | 0 |
| MALATHION | 1 | 0.01 | 0 |
| ENDRIN | 1 | 0.01 | 0 |
| PARATHION | 1 | 0.01 | 0 |
| DIELDRIN | 1 | 0.01 | 0 |
| 2,4-D | 1 | 0.01 | 0 |

**Figure 2.2.8-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and tables listing organic compounds detected in water from selected sites.

### 2.2.9 Biological Constituents--Fecal Coliform and Fecal Streptococcus Bacteria and Phytoplankton

## FECAL COLIFORM AND FECAL STREPTOCOCCUS BACTERIA CONCENTRATIONS VARIED GREATLY THROUGHOUT THE BASIN

*Median fecal coliform bacteria concentrations ranged from <5 to 2,300 cols/100 mL.*

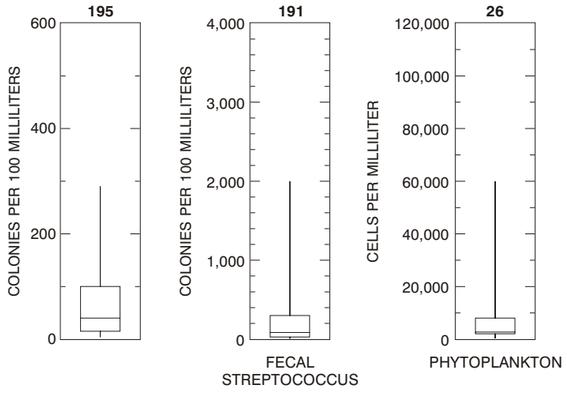
Concentrations of fecal coliform bacteria varied greatly at the 28 sites in the Atchafalaya-Teche-Vermilion basin for which data are available. Concentrations ranged from the detection level at many sites to 54,000 cols/100 mL at Vermilion River at State Highway 3073 at Lafayette. Median concentrations ranged from <5 to 2,300 cols/100 mL. Although fecal coliform concentrations were greater than 200 cols/100 mL some of the time at most of the sites, additional data are needed to determine if the U.S. Environmental Protection Agency's (1976; 1986) maximum contaminant level is being exceeded. Boxplots of fecal coliform, fecal streptococcus bacteria, and phytoplankton concentrations at six representative sites in the basin show that the samples collected at Vermilion River at State Highway 3073 at Lafayette generally had higher fecal coliform concentrations than at the other sites (fig. 2.2.9-1).

Concentrations of fecal streptococcus bacteria also varied greatly at sites in the basin. Concentrations ranged from 2 cols/100 mL at Lower Atchafalaya River at Morgan City to 74,000 cols/100 mL at Bayou Grosse Tete at Rosedale. Median fecal streptococcus concentrations, which ranged from 40 to 1,800 cols/100 mL, generally were higher than the median fecal coliform concentrations. Boxplots of fecal streptococcus concentrations at six representative sites show that the samples collected at Vermilion River at State Highway 3073 at Lafayette generally had higher fecal streptococcus concentrations than at the other sites (fig. 2.2.9-1).

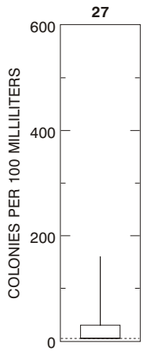
The median ratios of fecal coliform to fecal streptococcus bacteria was less than 0.7 at most of the sites sampled for analysis of bacteria concentrations within the Atchafalaya-Teche-Vermilion basin, indicating that sources of fecal coliform bacteria probably were predominantly livestock or poultry wastes (Millipore Corporation, 1972, p. 36). Additional study is needed to confirm these results.

Concentrations of phytoplankton varied greatly at sites in the basin due to the seasonal influence. Concentrations ranged from 0 cells/mL at Bayou Teche at Keystone Lock near St. Martinville to 100,000 cells/mL at Atchafalaya River at Melville. Median concentrations ranged from 240 to 5,800 cells/mL. Boxplots of phytoplankton concentrations at two representative sites show that less than 25 percent of the samples analyzed at Bayou Teche at Keystone Lock near St. Martinville had concentrations greater than 1,000 cells/mL (fig. 2.2.9-1).

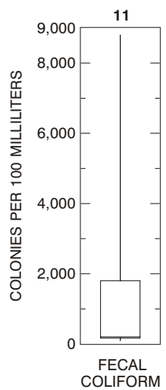
## 15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY

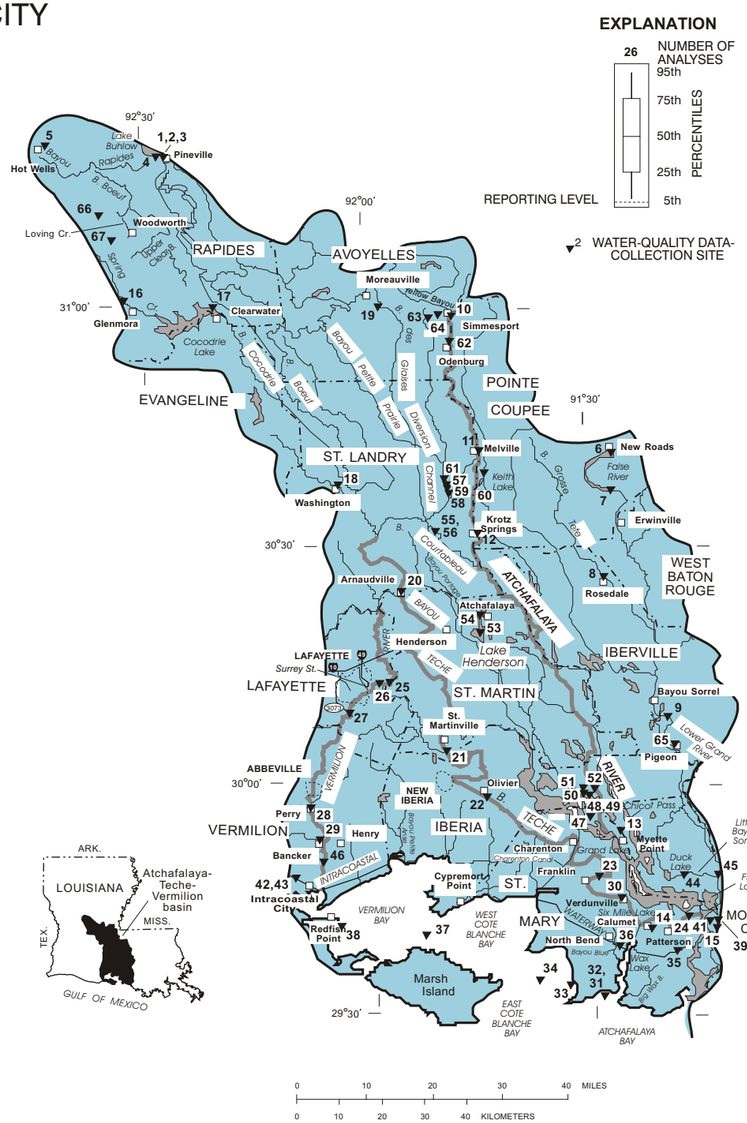



## 37 VERMILION BAY AT CYPREMORT POINT




## 20 BAYOU TECHE AT ARNAUDVILLE



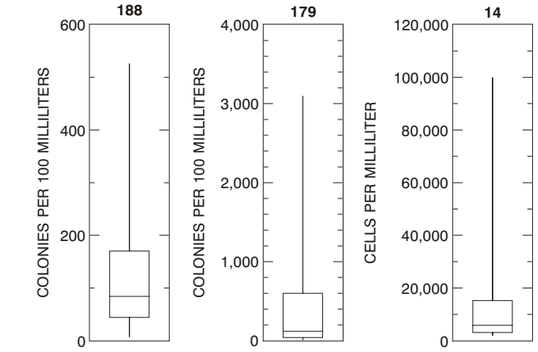





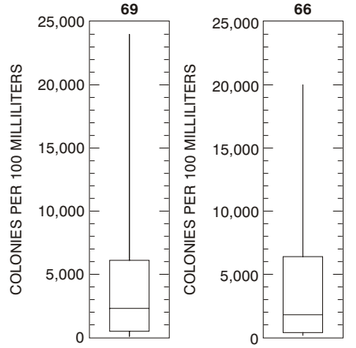


**ATCHAFALAYA-TECHE-VERMILION BASIN**

## 11 ATCHAFALAYA RIVER AT MELVILLE




## 27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE




## 21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

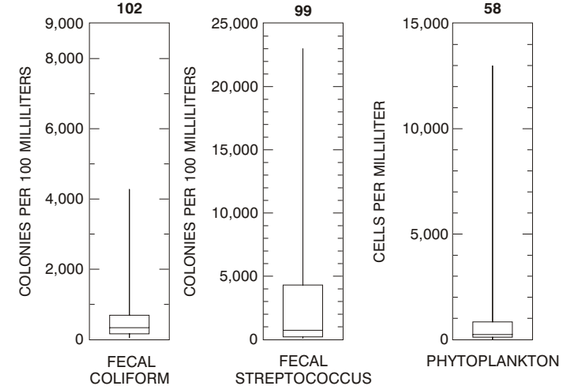



**Figure 2.2.9-1.** Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots and tables summarizing data for concentrations of fecal coliform, fecal streptococcus bacteria, and phytoplankton in water from selected sites.

## 2.3 Summary and Conclusions

# VALUES FOR pH OUTSIDE THE U.S. ENVIRONMENTAL PROTECTION AGENCY RANGE FOR FRESHWATER AQUATIC LIFE

*Values for pH often were less than 6.5, the lower limit of the U.S. Environmental Protection Agency recommended range for freshwater aquatic life.*

The Atchafalaya-Teche-Vermilion basin in Louisiana is about 130 miles long and 65 miles wide at its widest point. Surface waters in the basin are primarily used for power generation, aquaculture, industry, and rice irrigation. The principal sources of fresh surface water in the basin include the Atchafalaya River, Bayou Cocodrie, Bayou Teche, Intracoastal Waterway, and Vermilion River.

Water quality in the Atchafalaya-Teche-Vermilion basin in Louisiana was investigated as part of a statewide investigation to evaluate water-quality conditions in the major surface-water drainage basins in Louisiana. The water-quality conditions in the Atchafalaya-Teche-Vermilion basin were evaluated using data collected from 67 sites during the water years 1944-95. Data for 33 water-quality properties and constituents from water-quality analyses stored in the U.S. Geological Survey Water-Data Storage and Retrieval System (WATSTORE), a computerized data base, were used for the evaluation. Results are reported as boxplots, linear regression plots, and tabulated data.

The data were statistically analyzed and summarized into seven categories of water-quality properties and constituents: (1) physical properties--specific conductance, pH, water temperature, dissolved oxygen, and dissolved solids; (2) major inorganic cations--dissolved calcium, magnesium, sodium, and potassium; (3) major inorganic anions--total alkalinity as calcium carbonate, dissolved sulfate, and dissolved chloride; (4) trace metals--dissolved copper, iron, lead, and zinc; (5) nutrients--nitrogen and phosphorus constituents; (6) organic compounds--pesticides and PCB's; (7) biological constituents--fecal coliform and fecal streptococcus bacteria and phytoplankton.

The physical properties varied for waters in the basin. The median values for specific conductance ranged from 31 to 8,290 microsiemens per centimeter at 25 degrees Celsius.

Values for pH in water from the basin often were less than 6.5, the lower limit of the U.S. Environmental Protection Agency recommended range for freshwater aquatic life. Median values for water temperatures ranged from 17.5 to 27.5 degrees Celsius.

Dissolved-oxygen concentrations were greater than the State's minimum water quality criterion of 5.0 mg/L (milligrams per liter) in more than 75 percent of the samples analyzed at most sites. However, the statistical data indicated that between 50 and 75 percent of the samples collected at Vermilion River at State Highway 3073 at Lafayette, Louisiana, typically had dissolved oxygen concentrations that were less than or equal to 5.0 mg/L.

The data for major inorganic cations and anions in water from the basin indicated that concentrations of major ions were below recommended maximum levels for drinking water, for which such levels have been established. However, concentrations of sodium and chloride were high at the coastal sites.

The available data for trace metals indicated that dissolved copper, lead, and zinc were less than the maximum contaminant levels of the U.S. Environmental Protection Agency's primary and secondary drinking water regulations. Iron concentrations in water from the basin often were greater than 300 µg/L (micrograms per liter), which is the criterion for domestic water supplies, and concentrations occasionally exceeded the agency's criterion of 1,000 µg/L for freshwater aquatic life.

Median concentrations of ammonia plus organic nitrogen as nitrogen ranged from 0.40 to 2.4 mg/L. However, the median concentrations at Yellow Bayou, Bayou Petite Prairie, Vermilion River, and Lake Henderson were generally greater than the other sites. Median concentrations of total phosphorus at the rivers and bayous ranged from less than 0.01 to 6.1 mg/L.

Analysis of the available organic-chemical data indicated that diazinon and 2,4-D were detected at more sites and with greater frequency than any of the other organic compounds that were analyzed. However, low-level concentrations of other organic compounds were occasionally detected at other sites. Diazinon and 2,4-D were detected at least once at all of the 13 sites for which 10 or more samples were analyzed for organic compounds.

The median ratios of fecal coliform to fecal streptococcus bacteria were less than 0.7 for most of the sites within the Atchafalaya-Teche-Vermilion basin, indicating that sources of fecal bacteria probably were predominantly livestock or poultry wastes. However, additional samples closer to the potential source of contamination need to be collected and analyzed to confirm these results. Phytoplankton concentrations varied greatly at sites in the basin due to the seasonal influence. Concentrations ranged from 0 to 100,000 cells per milliliter.

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TABLE 2.2-1. STATISTICAL SUMMARY OF WATER-QUALITY DATA FOR THE ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA, 1944-95

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95*

[Number in parentheses with the site name is the map number shown in figure 2.0-1. Specific conductance is in microsiemens per centimeter at 25 degrees Celsius, water temperature is in degrees Celsius, and other units are given; <, less than]

**Atchafalaya Bay 9.9 miles south near North Bend (32)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 16 | (a) | (a) | 466 | 240 | 346 | 240 | 294 | 326 | 426 | 466 |
| pH (standard units) | 16 | (a) | (a) | 8.3 | 7.0 | 7.6 | 7.0 | 7.4 | 7.6 | 7.6 | 8.3 |
| Water temperature | 16 | (a) | (a) | 30.5 | 8.0 | 23.2 | 8.0 | 19.1 | 25.0 | 28.1 | 30.5 |
| Dissolved oxygen (milligrams per liter) | 15 | (a) | (a) | 10.9 | 3.7 | 6.9 | 3.7 | 5.2 | 7.1 | 8.7 | 10.9 |
| Dissolved solids (milligrams per liter) | 16 | (a) | (a) | 272 | 149 | 207 | 149 | 174 | 202 | 249 | 272 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 16 | 0.01 | 16 | 42 | 22 | 33 | 22 | 27 | 32 | 39 | 42 |
| Magnesium, dissolved | 16 | .01 | 16 | 14 | 7.4 | 10 | 7.4 | 8.3 | 9.9 | 12 | 14 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 16 | 1 | 16 | 111 | 72 | 87 | 72 | 78 | 82 | 97 | 111 |
| Sulfate, dissolved | 16 | .1 | 16 | 68 | 23 | 38 | 23 | 29 | 31 | 50 | 68 |
| Chloride, dissolved | 16 | .1 | 16 | 41 | 11 | 28 | 11 | 22 | 29 | 34 | 41 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 14 | 0.01 | 14 | 1.2 | 0.25 | 0.63 | 0.25 | 0.48 | 0.62 | 0.69 | 1.2 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 15 | .01 | 15 | .73 | .16 | .42 | .16 | .26 | .39 | .60 | .73 |
| Phosphorus, total as phosphorus | 16 | .01 | 16 | .21 | .06 | .13 | .06 | .08 | .13 | .17 | .21 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 16 | 10 | 10 | 250 | <10 | (c) | <10 | <10 | 20 | 40 | 250 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya Bay Station LBBH (31)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 18 | (a) | (a) | 623 | 240 | 350 | 240 | 278 | 334 | 401 | 623 |
| pH (standard units) | 18 | (a) | (a) | 8.4 | 7.3 | 7.7 | 7.3 | 7.5 | 7.7 | 7.8 | 8.4 |
| Water temperature | 18 | (a) | (a) | 32.0 | 9.5 | 23.6 | 9.5 | 20.2 | 25.2 | 28.1 | 32.0 |
| Dissolved oxygen (milligrams per liter) | 17 | (a) | (a) | 10.8 | 4.1 | 7.5 | 4.1 | 5.4 | 8.1 | 8.9 | 10.8 |
| Dissolved solids (milligrams per liter) | 18 | (a) | (a) | 270 | 146 | 209 | 146 | 172 | 204 | 242 | 270 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 18 | 0.01 | 18 | 46 | 26 | 35 | 26 | 28 | 36 | 40 | 46 |
| Magnesium, dissolved | 18 | .01 | 18 | 26 | 6.9 | 11 | 6.9 | 7.8 | 9.4 | 12 | 26 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 18 | 1 | 18 | 112 | 68 | 87 | 68 | 74 | 85 | 101 | 112 |
| Sulfate, dissolved | 18 | .1 | 18 | 73 | 25 | 39 | 25 | 30 | 36 | 51 | 73 |
| Chloride, dissolved | 18 | .1 | 18 | 36 | 11 | 22 | 11 | 15 | 20 | 29 | 36 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 14 | 0.01 | 14 | 1.2 | 0.32 | 0.55 | 0.32 | 0.44 | 0.50 | 0.62 | 1.2 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 17 | .01 | 17 | .97 | .01 | .58 | .01 | .42 | .54 | .82 | .97 |
| Phosphorus, total as phosphorus | 18 | .01 | 18 | .23 | .06 | .14 | .06 | .10 | .14 | .18 | .23 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 18 | 10 | 13 | 160 | <10 | (c) | <10 | <10 | 20 | 40 | 160 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River above mouth near Bayou Sorrel (52)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 14 | (a) | (a) | 466 | 237 | 317 | 237 | 251 | 302 | 363 | 466 |
| pH (standard units) | 14 | (a) | (a) | 8.1 | 7.3 | 7.8 | 7.3 | 7.5 | 8.0 | 8.1 | 8.1 |
| Water temperature | 13 | (a) | (a) | 29.5 | 4.5 | 19.5 | 4.5 | 13.0 | 21.5 | 26.8 | 29.5 |
| Dissolved oxygen (milligrams per liter) | 12 | (a) | (a) | 8.3 | 4.4 | 6.6 | 4.4 | 5.8 | 6.6 | 7.6 | 8.3 |
| Dissolved solids (milligrams per liter) | 14 | (a) | (a) | 262 | 146 | 190 | 146 | 164 | 180 | 212 | 262 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 14 | 0.01 | 14 | 48 | 25 | 34 | 25 | 26 | 34 | 38 | 48 |
| Magnesium, dissolved | 14 | .01 | 14 | 13 | 6.1 | 9.4 | 6.1 | 8.1 | 8.7 | 11 | 13 |
| Sodium, dissolved | 1 | .01 | 1 | 33 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 1 | .01 | 1 | 3.2 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 14 | 1 | 14 | 111 | 65 | 87 | 65 | 74 | 83 | 102 | 111 |
| Sulfate, dissolved | 14 | .1 | 14 | 60 | 25 | 36 | 25 | 31 | 36 | 42 | 60 |
| Chloride, dissolved | 14 | .1 | 14 | 38 | 10 | 21 | 10 | 14 | 19 | 26 | 38 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 2 | 0.01 | 2 | 0.56 | 0.50 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 5 | .01 | 5 | 1.2 | .43 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 13 | .01 | 13 | .72 | .06 | .33 | .06 | .20 | .34 | .44 | .72 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River above mouth near Bayou Sorrel (52)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 1 | 20 | 0 | <20 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 12 | 10 | 8 | 70 | <10 | (c) | <10 | <10 | 20 | 40 | 70 |
| Lead, dissolved | 1 | 5 | 1 | 5 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 1 | 20 | 1 | 20 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 2 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 2 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 1 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 2 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 1 | .02 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River at Krotz Springs (12)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 87 | (a) | (a) | 599 | 187 | 387 | 266 | 312 | 390 | 444 | 560 |
| pH (standard units) | 87 | (a) | (a) | 8.1 | 6.5 | 7.2 | 6.6 | 6.9 | 7.2 | 7.4 | 7.7 |
| Dissolved solids (milligrams per liter) | 83 | (a) | (a) | 351 | 120 | 234 | 160 | 197 | 230 | 271 | 325 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 87 | 0.1 | 87 | 58 | 12 | 38 | 28 | 32 | 37 | 42 | 51 |
| Magnesium, dissolved | 87 | .1 | 87 | 18 | 2.4 | 9.9 | 5.0 | 7.7 | 9.7 | 12 | 15 |
| Sodium, dissolved | 87 | .1 | 87 | 50 | 11 | 24 | 12 | 17 | 23 | 30 | 44 |
| Potassium, dissolved | 82 | .1 | 82 | 4.6 | 1.2 | 2.8 | 1.4 | 2.4 | 2.8 | 3.2 | 4.4 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 87 | 1 | 87 | 141 | 34 | 98 | 68 | 80 | 98 | 115 | 131 |
| Sulfate, dissolved | 87 | .1 | 87 | 80 | 12 | 47 | 27 | 36 | 46 | 58 | 75 |
| Chloride, dissolved | 87 | .1 | 87 | 66 | 13 | 29 | 15 | 20 | 26 | 33 | 57 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Copper, dissolved | 4 | 10 | 4 | 30 | 10 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 4 | 10 | 3 | 10 | <10 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 4 | 10 | 3 | 20 | <10 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River at Melville (11)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 194 | (a) | (a) | 934 | 170 | 379 | 208 | 290 | 382 | 434 | 570 |
| pH (standard units) | 193 | (a) | (a) | 8.3 | 6.4 | 7.5 | 6.9 | 7.3 | 7.6 | 7.8 | 8.0 |
| Water temperature | 190 | (a) | (a) | 33.0 | 3.5 | 19.3 | 6.3 | 12.0 | 19.2 | 28.0 | 30.5 |
| Dissolved oxygen (milligrams per liter) | 194 | (a) | (a) | 16.0 | 4.5 | 8.5 | 6.1 | 7.1 | 8.3 | 9.6 | 11.8 |
| Dissolved solids (milligrams per liter) | 98 | (a) | (a) | 426 | 112 | 221 | 130 | 174 | 216 | 256 | 344 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 190 | 0.01 | 190 | 54 | 14 | 35 | 21 | 28 | 35 | 41 | 49 |
| Magnesium, dissolved | 191 | .01 | 191 | 20 | 1.5 | 10 | 5.5 | 7.6 | 10 | 13 | 16 |
| Sodium, dissolved | 190 | .01 | 190 | 62 | 8.2 | 23 | 9.9 | 15 | 21 | 28 | 43 |
| Potassium, dissolved | 190 | .01 | 190 | 4.6 | 1.8 | 3.1 | 2.3 | 2.6 | 3.1 | 3.5 | 4.1 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 194 | 1 | 194 | 152 | 37 | 94 | 56 | 69 | 91 | 114 | 140 |
| Sulfate, dissolved | 189 | .1 | 189 | 110 | 14 | 44 | 22 | 33 | 43 | 54 | 72 |
| Chloride, dissolved | 191 | .1 | 191 | 97 | 10 | 29 | 12 | 20 | 26 | 35 | 49 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 97 | 0.1 | 97 | 3.4 | 0.3 | 0.9 | 0.4 | 0.6 | 0.8 | 1.1 | 1.5 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 188 | .01 | 188 | 2.6 | .22 | 1.0 | .40 | .72 | .96 | 1.3 | 1.9 |
| Phosphorus, total as phosphorus | 189 | .01 | 189 | 1.3 | .04 | .20 | .07 | .12 | .18 | .23 | .40 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River at Melville (11)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Biological constituents** | | | | | | | | | | | |
| Fecal coliform (colonies per 100 milliliters) | 188 | 1 | 188 | 4,800 | 2 | 160 | 7 | 44 | 84 | 170 | 530 |
| Fecal streptococcus (colonies per 100 milliliters) | 179 | 1 | 179 | 20,000 | 4 | 710 | 8 | 40 | 120 | 600 | 3,100 |
| Phytoplankton (cells per milliliter) | 14 | 0 | 14 | 100,000 | 1,900 | 15,000 | 1,900 | 3,100 | 5,800 | 15,000 | 100,000 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Copper, dissolved | 169 | 20 | 3 | 62 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 182 | 25 | 114 | 2,800 | <25 | (c) | <25 | <25 | 40 | 80 | 140 |
| Lead, dissolved | 171 | 5 | 31 | 74 | <5 | (c) | <5 | <5 | <5 | <5 | 5 |
| Zinc, dissolved | 172 | 20 | 25 | 120 | <20 | (c) | <20 | <20 | <20 | <20 | 30 |
| **Organic compounds (micrograms per liter)** | | | | | | | | | | | |
| DDT, total | 185 | 0.01 | 2 | 0.31 | <0.01 | (c) | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| PCB, total | 185 | .1 | 3 | 2.0 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 187 | .01 | 46 | .07 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .03 |
| Lindane, total | 185 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Chlordane, total | 185 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 187 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 185 | .01 | 1 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 187 | .01 | 3 | .20 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 184 | .01 | 2 | .04 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endosulfan, total | 182 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| 2,4-D, total | 185 | .5 | 0 | <.5 | <.5 | (c) | <.5 | <.5 | <.5 | <.5 | <.5 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River at Simmesport (10)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 60 | (a) | (a) | 780 | 254 | 345 | 248 | 279 | 325 | 425 | 495 |
| pH (standard units) | 62 | (a) | (a) | 8.8 | 6.6 | 7.6 | 6.8 | 7.3 | 7.6 | 7.9 | 8.2 |
| Water temperature | 55 | (a) | (a) | 31.5 | 3.5 | 18.5 | 6.4 | 11.0 | 17.5 | 27.0 | 30.1 |
| Dissolved oxygen (milligrams per liter) | 55 | (a) | (a) | 11.6 | 5.9 | 8.4 | 6.0 | 7.3 | 8.0 | 9.5 | 11.3 |
| Dissolved solids (milligrams per liter) | 61 | (a) | (a) | 426 | 147 | 212 | 153 | 168 | 197 | 246 | 294 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 58 | 0.01 | 58 | 55 | 20 | 33 | 25 | 27 | 32 | 38 | 46 |
| Magnesium, dissolved | 59 | .01 | 59 | 17 | 5.1 | 9.6 | 6.2 | 7.5 | 9.3 | 12 | 14 |
| Sodium, dissolved | 58 | .01 | 58 | 75 | 10 | 22 | 11 | 14 | 20 | 29 | 35 |
| Potassium, dissolved | 59 | .01 | 59 | 4.9 | 2.0 | 3.0 | 2.2 | 2.6 | 2.9 | 3.3 | 4.4 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 59 | 1 | 59 | 124 | 57 | 88 | 65 | 73 | 86 | 102 | 119 |
| Sulfate, dissolved | 62 | .1 | 62 | 91 | 20 | 41 | 25 | 30 | 36 | 52 | 67 |
| Chloride, dissolved | 62 | .1 | 62 | 110 | 14 | 27 | 14 | 18 | 24 | 35 | 46 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 37 | 0.01 | 37 | 1.4 | 0.12 | 0.68 | 0.19 | 0.53 | 0.68 | 0.77 | 1.4 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 42 | .01 | 42 | 1.4 | .29 | .76 | .34 | .52 | .70 | .95 | 1.4 |
| Phosphorus, total as phosphorus | 39 | .01 | 39 | .40 | .06 | .18 | .07 | .13 | .18 | .21 | .38 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River at Simmesport (10)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Biological constituents** | | | | | | | | | | | |
| Fecal coliform (colonies per 100 milliliters) | 10 | 5 | 9 | 620 | <5 | (c) | 25 | 70 | 100 | 270 | 620 |
| Fecal streptococcus (colonies per 100 milliliters) | 9 | 1 | 9 | 1,100 | 18 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phytoplankton (cells per milliliter) | 31 | 0 | 31 | 48,000 | 540 | 5,900 | 570 | 1,000 | 2,400 | 3,900 | 38,000 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Copper, dissolved | 15 | 20 | 0 | <20 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 16 | 10 | 10 | 130 | <10 | (c) | <10 | <10 | 30 | 40 | 130 |
| Lead, dissolved | 17 | 2 | 5 | 8 | <2 | (c) | <2 | <2 | <2 | 2 | 8 |
| Zinc, dissolved | 17 | 20 | 3 | 40 | <20 | (c) | <20 | <20 | <20 | <20 | 40 |
| **Organic compounds (micrograms per liter)** | | | | | | | | | | | |
| DDT, total | 17 | 0.01 | 2 | 0.02 | <0.01 | (c) | <0.01 | <0.01 | <0.01 | <0.01 | 0.02 |
| PCB, total | 15 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 17 | .01 | 10 | .12 | <.01 | (c) | <.01 | <.01 | .01 | .02 | .12 |
| Lindane, total | 17 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Chlordane, total | 17 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 16 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 17 | .01 | 3 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Parathion, total | 17 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 17 | .01 | 7 | .03 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .03 |
| 2,4-D, total | 17 | .01 | 13 | .07 | <.01 | (c) | <.01 | <.01 | .02 | .04 | .07 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River Basin Station WAI (51)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 18 | (a) | (a) | 417 | 235 | 304 | 235 | 249 | 288 | 358 | 417 |
| pH (standard units) | 18 | (a) | (a) | 8.1 | 7.0 | 7.4 | 7.0 | 7.1 | 7.3 | 7.8 | 8.1 |
| Water temperature | 17 | (a) | (a) | 29.0 | 10.5 | 20.3 | 10.5 | 14.2 | 22.0 | 25.8 | 29.0 |
| Dissolved oxygen (milligrams per liter) | 17 | (a) | (a) | 6.9 | 0.0 | 3.7 | 0.0 | 1.2 | 4.4 | 5.6 | 6.9 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 238 | 143 | 179 | 143 | 150 | 171 | 204 | 238 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 14 | 0.01 | 14 | 40 | 20 | 33 | 20 | 29 | 33 | 37 | 40 |
| Magnesium, dissolved | 14 | .01 | 14 | 13 | 5.6 | 9.3 | 5.6 | 7.8 | 9.6 | 11 | 13 |
| Sodium, dissolved | 1 | .01 | 1 | 26 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 1 | .01 | 1 | 11 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 14 | 1 | 14 | 123 | 64 | 93 | 64 | 80 | 88 | 110 | 123 |
| Sulfate, dissolved | 14 | .1 | 14 | 46 | 6.1 | 29 | 6.1 | 26 | 32 | 34 | 46 |
| Chloride, dissolved | 14 | .1 | 14 | 36 | 10 | 21 | 10 | 14 | 18 | 29 | 36 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 8 | 0.01 | 8 | 0.72 | 0.29 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 18 | .01 | 18 | .90 | .01 | .36 | .01 | .06 | .41 | .51 | .90 |
| Phosphorus, total as phosphorus | 17 | .01 | 17 | .18 | .02 | .10 | .02 | .08 | .10 | .14 | .18 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 12 | 10 | 7 | 420 | <10 | (c) | <10 | <10 | 20 | 60 | 420 |
| **Organic compounds (micrograms per liter)** | | | | | | | | | | | |
| 2,4-D, total | 2 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River Basin Station WC (48)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 12 | (a) | (a) | 387 | 237 | 298 | 237 | 256 | 290 | 325 | 387 |
| pH (standard units) | 12 | (a) | (a) | 8.1 | 7.2 | 7.7 | 7.2 | 7.6 | 7.7 | 8.0 | 8.1 |
| Water temperature | 11 | (a) | (a) | 27.5 | 7.0 | 19.5 | 7.0 | 12.0 | 21.5 | 26.0 | 27.5 |
| Dissolved oxygen (milligrams per liter) | 10 | (a) | (a) | 9.0 | 2.9 | 6.1 | 2.9 | 4.9 | 6.5 | 7.4 | 9.0 |
| Dissolved solids (milligrams per liter) | 12 | (a) | (a) | 238 | 146 | 182 | 146 | 156 | 178 | 203 | 238 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 12 | 0.01 | 12 | 45 | 24 | 33 | 24 | 28 | 34 | 35 | 45 |
| Magnesium, dissolved | 12 | .01 | 12 | 13 | 6.0 | 8.8 | 6.0 | 7.3 | 8.4 | 10 | 13 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 12 | 1 | 12 | 103 | 66 | 86 | 66 | 79 | 84 | 99 | 103 |
| Sulfate, dissolved | 12 | .1 | 12 | 44 | 14 | 32 | 14 | 27 | 32 | 37 | 44 |
| Chloride, dissolved | 12 | .1 | 12 | 31 | 11 | 19 | 11 | 14 | 17 | 24 | 31 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 2 | 0.01 | 2 | 0.62 | 0.40 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 5 | .01 | 5 | 1.0 | .27 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 12 | .01 | 12 | .46 | .06 | .27 | .06 | .16 | .26 | .37 | .46 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Copper, dissolved | 1 | 1 | 1 | 5 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 11 | 10 | 6 | 120 | <10 | (c) | <10 | <10 | 30 | 50 | 120 |
| Lead, dissolved | 1 | 10 | 1 | 2 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 1 | 10 | 0 | <10 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River Basin Station WD (49)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 18 | (a) | (a) | 418 | 245 | 326 | 245 | 276 | 324 | 385 | 418 |
| pH (standard units) | 18 | (a) | (a) | 8.2 | 7.0 | 7.6 | 7.0 | 7.2 | 7.6 | 7.9 | 8.2 |
| Water temperature | 17 | (a) | (a) | 31.0 | 11.0 | 21.6 | 11.0 | 17.2 | 23.0 | 26.5 | 31.0 |
| Dissolved oxygen (milligrams per liter) | 15 | (a) | (a) | 7.6 | .9 | 5.0 | .9 | 3.0 | 5.5 | 6.9 | 7.6 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 246 | 147 | 191 | 147 | 158 | 192 | 226 | 246 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 17 | 0.01 | 17 | 41 | 22 | 32 | 22 | 29 | 32 | 38 | 41 |
| Magnesium, dissolved | 16 | .01 | 16 | 12 | 6.6 | 9.4 | 6.6 | 8.4 | 9.3 | 11 | 12 |
| Sodium, dissolved | 2 | .01 | 2 | 27 | 26 | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 2 | .01 | 2 | 10 | 7.2 | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 17 | 1 | 17 | 128 | 68 | 93 | 68 | 82 | 91 | 105 | 128 |
| Sulfate, dissolved | 17 | .1 | 17 | 45 | 11 | 31 | 11 | 25 | 31 | 38 | 45 |
| Chloride, dissolved | 17 | .1 | 17 | 48 | 10 | 24 | 10 | 15 | 22 | 30 | 48 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 8 | 0.01 | 8 | 1.2 | 0.36 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 11 | .10 | 6 | .56 | <.10 | (c) | <.10 | <.10 | .11 | .50 | .56 |
| Phosphorus, total as phosphorus | 17 | .01 | 17 | .29 | .04 | .13 | .04 | .11 | .12 | .14 | .29 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River Basin Station WD (49)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 1 | 1 | 1 | 5 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 14 | 10 | 7 | 90 | <10 | (c) | <10 | <10 | <10 | 30 | 90 |
| Lead, dissolved | 1 | 1 | 1 | 2 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 1 | 20 | 0 | <20 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 1 | 0.01 | 0 | <0.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 1 | .03 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River Basin Station WF (47)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 15 | (a) | (a) | 412 | 243 | 320 | 243 | 289 | 319 | 343 | 412 |
| pH (standard units) | 15 | (a) | (a) | 8.2 | 7.3 | 7.7 | 7.3 | 7.5 | 7.8 | 8.0 | 8.2 |
| Water temperature | 15 | (a) | (a) | 28.5 | 11.0 | 20.5 | 11.0 | 16.0 | 22.0 | 26.5 | 28.5 |
| Dissolved oxygen (milligrams per liter) | 14 | (a) | (a) | 8.8 | 3.6 | 6.5 | 3.6 | 5.8 | 6.5 | 7.4 | 8.8 |
| Dissolved solids (milligrams per liter) | 15 | (a) | (a) | 238 | 147 | 190 | 147 | 172 | 193 | 210 | 238 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 15 | 0.01 | 15 | 40 | 25 | 33 | 25 | 30 | 32 | 35 | 40 |
| Magnesium, dissolved | 15 | .01 | 15 | 17 | 7.1 | 10 | 7.1 | 7.9 | 10 | 12 | 17 |
| Sodium, dissolved | 1 | .01 | 1 | 20 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 1 | .01 | 1 | 3.0 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 15 | 1 | 15 | 116 | 70 | 90 | 70 | 79 | 84 | 103 | 116 |
| Sulfate, dissolved | 15 | .1 | 15 | 47 | 23 | 35 | 23 | 27 | 33 | 42 | 47 |
| Chloride, dissolved | 15 | .1 | 15 | 42 | 11 | 23 | 11 | 15 | 22 | 28 | 42 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 5 | 0.01 | 5 | 0.67 | 0.46 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 8 | .10 | 8 | 1.0 | .45 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 15 | .01 | 15 | .47 | .11 | .22 | .11 | .16 | .18 | .26 | .47 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Atchafalaya River Basin Station WF (47)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 1 | 1 | 1 | 5 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 13 | 10 | 9 | 50 | <10 | (c) | <10 | <10 | 30 | 40 | 50 |
| Lead, dissolved | 1 | 1 | 1 | 3 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 1 | 10 | 0 | <10 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 2 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 2 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 2 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 2 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 3 | .01 | 3 | .05 | .02 | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Cocodrie near Clearwater (17)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 123 | (a) | (a) | 362 | 25 | 72 | 35 | 50 | 61 | 73 | 150 |
| pH (standard units) | 123 | (a) | (a) | 8.2 | 5.2 | 7.0 | 6.1 | 6.9 | 7.1 | 7.4 | 7.8 |
| Water temperature | 15 | (a) | (a) | 28.5 | 8.0 | 19.0 | 8.0 | 15.0 | 19.0 | 24.0 | 28.5 |
| Dissolved oxygen (milligrams per liter) | 8 | (a) | (a) | 9.2 | 2.9 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved solids (milligrams per liter) | 16 | (a) | (a) | 68 | 34 | 48 | 34 | 41 | 47 | 55 | 68 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 123 | 0.01 | 123 | 36 | 0.80 | 4.7 | 1.8 | 2.2 | 2.9 | 4.6 | 16 |
| Magnesium, dissolved | 123 | .01 | 123 | 16 | .30 | 1.9 | .50 | 1.1 | 1.3 | 2.0 | 4.3 |
| Sodium, dissolved | 103 | .01 | 103 | 10 | 2.1 | 5.7 | 2.7 | 4.0 | 6.0 | 7.1 | 8.9 |
| Potassium, dissolved | 65 | .01 | 65 | 3.3 | .40 | 1.6 | .80 | 1.2 | 1.5 | 1.9 | 3.1 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 123 | 1 | 123 | 173 | 6 | 22 | 7 | 11 | 16 | 20 | 51 |
| Sulfate, dissolved | 122 | .1 | 122 | 30 | .2 | 3.0 | .8 | 1.4 | 2.0 | 3.2 | 8.6 |
| Chloride, dissolved | 123 | .1 | 123 | 10 | 2.2 | 5.9 | 2.8 | 4.8 | 6.0 | 7.0 | 8.2 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 8 | 0.01 | 8 | 1.1 | 0.23 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 8 | .10 | 8 | .08 | .01 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 8 | .01 | 8 | .61 | .03 | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Cocodrie near Clearwater (17)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 8 | 5 | 7 | 420 | <5 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Fecal streptococcus | 8 | 1 | 8 | 3,000 | 12 | (b) | (b) | (b) | (b) | (b) | (b) |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 2 | 1 | 2 | 6 | 2 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 2 | 10 | 2 | 620 | 40 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 2 | 5 | 1 | 5 | <5 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 2 | 20 | 1 | 20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 2 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Courtableau at Drainage Structure east near Courtableau (55)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 184 | (a) | (a) | 818 | 70 | 283 | 90 | 140 | 232 | 428 | 536 |
| pH (standard units) | 184 | (a) | (a) | 8.5 | 6.1 | 7.4 | 6.5 | 7.1 | 7.4 | 7.7 | 8.1 |
| Water temperature | 62 | (a) | (a) | 30.0 | 8.0 | 21.5 | 10.0 | 16.0 | 22.8 | 28.0 | 30.0 |
| Dissolved oxygen (milligrams per liter) | 178 | (a) | (a) | 12.8 | .7 | 6.6 | 3.0 | 4.9 | 6.8 | 8.0 | 10.0 |
| Dissolved solids (milligrams per liter) | 1 | (a) | (a) | 277 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 183 | 0.01 | 183 | 69 | 4.9 | 26 | 8.2 | 13 | 23 | 39 | 50 |
| Magnesium, dissolved | 182 | .01 | 182 | 25 | 2.5 | 9.6 | 3.4 | 5.1 | 8.3 | 13 | 18 |
| Sodium, dissolved | 174 | .01 | 174 | 64 | 2.2 | 15 | 3.1 | 5.5 | 10 | 23 | 36 |
| Potassium, dissolved | 176 | .01 | 176 | 6.9 | 1.9 | 3.4 | 2.2 | 2.8 | 3.3 | 3.9 | 4.7 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 183 | 1 | 183 | 259 | 28 | 94 | 33 | 49 | 85 | 127 | 201 |
| Sulfate, dissolved | 182 | .1 | 182 | 71 | .8 | 19 | 3.1 | 7.1 | 12 | 28 | 54 |
| Chloride, dissolved | 182 | .1 | 182 | 91 | 2.1 | 18 | 3.3 | 6.2 | 12 | 27 | 41 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 2 | 0.01 | 2 | 1.4 | 1.3 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 181 | .01 | 181 | 3.0 | .01 | .42 | .05 | .12 | .24 | .55 | 1.5 |
| Phosphorus, total as phosphorus | 181 | .01 | 180 | 1.0 | <.01 | (c) | .08 | .15 | .23 | .31 | .43 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Courtableau at Drainage Structure east near Courtableau (55)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 175 | 1 | 175 | 11,000 | 2 | 640 | 12 | 56 | 160 | 460 | 3,300 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 179 | 1 | 179 | 42 | 1 | 5 | 1 | 3 | 4 | 5 | 8 |
| Iron, dissolved | 182 | 25 | 131 | 1,100 | <25 | (c) | <25 | <25 | 80 | 180 | 350 |
| Lead, dissolved | 181 | 5 | 9 | 8 | <5 | (c) | <5 | <5 | <5 | <5 | <5 |
| Zinc, dissolved | 179 | 20 | 68 | 180 | <20 | (c) | <20 | <20 | <20 | 20 | 40 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 182 | 0.01 | 10 | 0.10 | <0.01 | (c) | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| PCB, total | 182 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 181 | .01 | 50 | .91 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .02 |
| Lindane, total | 182 | .01 | 2 | .61 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Chlordane, total | 182 | .1 | 1 | .1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 181 | .01 | 6 | .05 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 182 | .01 | 1 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 181 | .01 | 4 | .15 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 182 | .01 | 6 | .04 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endosulfan, total | 181 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| 2,4-D, total | 177 | .5 | 9 | 4.5 | <.5 | (c) | <.5 | <.5 | <.5 | <.5 | .5 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Courtableau at Drainage Structure west near Courtableau, (56)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 184 | (a) | (a) | 794 | 71 | 298 | 96 | 145 | 266 | 431 | 550 |
| pH (standard units) | 184 | (a) | (a) | 8.6 | 6.1 | 7.4 | 6.5 | 7.1 | 7.4 | 7.8 | 8.1 |
| Water temperature | 63 | (a) | (a) | 30.0 | 8.0 | 21.3 | 10.0 | 16.0 | 22.0 | 27.0 | 30.0 |
| Dissolved oxygen (milligrams per liter) | 182 | (a) | (a) | 12.0 | 2.0 | 6.9 | 3.6 | 5.3 | 7.2 | 8.1 | 10.2 |
| Dissolved solids (milligrams per liter) | 2 | (a) | (a) | 268 | 237 | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 186 | 0.01 | 186 | 72 | 7.0 | 28 | 8.8 | 14 | 26 | 40 | 52 |
| Magnesium, dissolved | 186 | .01 | 186 | 27 | 2.7 | 10 | 3.3 | 5.2 | 9.3 | 14 | 19 |
| Sodium, dissolved | 179 | .01 | 179 | 59 | 2.4 | 16 | 3.2 | 6.0 | 12 | 24 | 37 |
| Potassium, dissolved | 179 | .01 | 179 | 6.0 | 1.6 | 3.4 | 2.2 | 2.8 | 3.4 | 4.0 | 4.7 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 184 | 1 | 184 | 262 | 28 | 99 | 33 | 50 | 94 | 131 | 212 |
| Sulfate, dissolved | 185 | .1 | 185 | 66 | .2 | 20 | 3.6 | 6.9 | 13 | 32 | 52 |
| Chloride, dissolved | 186 | .1 | 186 | 98 | 1.8 | 19 | 3.2 | 7.1 | 14 | 28 | 48 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 1 | 0.01 | 1 | 1.4 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 183 | .01 | 183 | 2.4 | .01 | .45 | .03 | .13 | .24 | .67 | 1.5 |
| Phosphorus, total as phosphorus | 184 | .01 | 184 | .70 | <.01 | (c) | .08 | .14 | .20 | .31 | .41 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Courtableau at Drainage Structure west near Courtableau (56)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 176 | 1 | 176 | 9,000 | 5 | 470 | 16 | 55 | 130 | 300 | 2,500 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 177 | 20 | 2 | 140 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 185 | 25 | 116 | 2,000 | <25 | (c) | <25 | <25 | 70 | 170 | 270 |
| Lead, dissolved | 182 | 5 | 12 | 16 | <5 | (c) | <5 | <5 | <5 | <5 | 5 |
| Zinc, dissolved | 180 | 20 | 70 | 170 | <20 | (c) | <20 | <20 | <20 | 30 | 70 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 182 | 0.01 | 9 | 0.09 | <0.01 | (c) | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| PCB, total | 182 | .1 | 1 | .3 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 181 | .01 | 44 | 1.8 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .02 |
| Lindane, total | 182 | .01 | 4 | .44 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Chlordane, total | 182 | .1 | 1 | .9 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 181 | .01 | 10 | .06 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 182 | .01 | 3 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 181 | .01 | 4 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 182 | .01 | 11 | .09 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Endosulfan, total | 181 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| 2,4-D, total | 180 | .5 | 108 | 12 | <.5 | (c) | <.5 | <.5 | <.5 | <.5 | <.5 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Courtableau at Washington (18)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 24 | (a) | (a) | 269 | 69 | 122 | 71 | 97 | 110 | 138 | 246 |
| pH (standard units) | 24 | (a) | (a) | 7.5 | 6.3 | 6.8 | 6.3 | 6.4 | 6.8 | 7.2 | 7.5 |
| Water temperature | 21 | (a) | (a) | 29.5 | 6.5 | 19.0 | 6.6 | 11.8 | 19.5 | 26.8 | 29.5 |
| Dissolved oxygen (milligrams per liter) | 7 | (a) | (a) | 10.4 | 5.6 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved solids (milligrams per liter) | 12 | (a) | (a) | 109 | 52 | 80 | 52 | 70 | 81 | 94 | 109 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 24 | 0.01 | 24 | 14 | 4.8 | 9.5 | 5.0 | 7.8 | 9.2 | 12 | 14 |
| Magnesium, dissolved | 24 | .01 | 24 | 4.6 | 1.9 | 3.2 | 1.9 | 2.7 | 3.1 | 4.0 | 4.6 |
| Sodium, dissolved | 24 | .01 | 24 | 31 | 3.3 | 8.7 | 3.4 | 5.8 | 7.0 | 8.8 | 27 |
| Potassium, dissolved | 24 | .01 | 24 | 3.3 | 1.4 | 2.2 | 1.4 | 2.0 | 2.1 | 2.5 | 3.2 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 24 | 1 | 24 | 49 | 23 | 36 | 24 | 30 | 34 | 44 | 49 |
| Sulfate, dissolved | 24 | .1 | 23 | 11 | <.1 | (c) | .2 | 1.7 | 3.4 | 4.8 | 10 |
| Chloride, dissolved | 24 | .1 | 24 | 52 | 4.5 | 12 | 4.6 | 7.2 | 9.2 | 12 | 44 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 2 | 0.1 | 2 | 0.5 | 0.4 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 8 | .01 | 2 | .38 | .08 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 8 | .01 | 8 | .37 | .09 | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Courtableau at Washington (18)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 4 | 1 | 4 | 3,500 | 80 | (b) | (b) | (b) | (b) | (b) | (b) |
| Fecal streptococcus | 2 | 1 | 2 | 12,000 | 620 | (b) | (b) | (b) | (b) | (b) | (b) |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 2 | 1 | 2 | 21 | 9 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 2 | 25 | 2 | 890 | 60 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 2 | 1 | 2 | 11 | 2 | (b) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 2 | 20 | 2 | 30 | 20 | (b) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 2 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 2 | .01 | 2 | .01 | .01 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 1 | .03 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Des Glaises Diversion Channel at Moreauville (19)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 19 | (a) | (a) | 830 | 107 | 380 | 107 | 221 | 294 | 601 | 830 |
| pH (standard units) | 19 | (a) | (a) | 7.7 | 6.4 | 7.1 | 6.4 | 6.9 | 7.2 | 7.4 | 7.7 |
| Water temperature | 9 | (a) | (a) | 30.0 | 10.0 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved solids (milligrams per liter) | 19 | (a) | (a) | 510 | 59 | 231 | 59 | 131 | 181 | 367 | 510 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 19 | 0.01 | 19 | 89 | 12 | 39 | 12 | 24 | 34 | 60 | 89 |
| Magnesium, dissolved | 19 | .01 | 19 | 31 | 3.4 | 12 | 3.4 | 6.1 | 8.8 | 21 | 31 |
| Sodium, dissolved | 19 | .01 | 19 | 58 | 2.5 | 21 | 2.5 | 6.9 | 11 | 37 | 58 |
| Potassium, dissolved | 19 | .01 | 19 | 6.4 | 1.5 | 4.0 | 1.5 | 3.3 | 3.9 | 5.0 | 6.4 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 8 | 1 | 8 | 317 | 80 | (b) | (b) | (b) | (b) | (b) | (b) |
| Sulfate, dissolved | 19 | .1 | 19 | 57 | 3.2 | 21 | 3.2 | 12 | 15 | 32 | 57 |
| Chloride, dissolved | 19 | .1 | 19 | 56 | 2.9 | 20 | 2.9 | 9.0 | 12 | 36 | 56 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Grosse Tete at Rosedale (8)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 40 | (a) | (a) | 462 | 140 | 282 | 153 | 205 | 296 | 328 | 403 |
| pH (standard units) | 40 | (a) | (a) | 7.7 | 6.2 | 7.2 | 6.2 | 6.9 | 7.2 | 7.6 | 7.7 |
| Water temperature | 39 | (a) | (a) | 32.0 | 6.5 | 20.0 | 7.0 | 13.5 | 20.0 | 26.5 | 31.5 |
| Dissolved oxygen (milligrams per liter) | 36 | (a) | (a) | 10.8 | .1 | 5.2 | .5 | 3.8 | 5.0 | 6.8 | 10.5 |
| Dissolved solids (milligrams per liter) | 40 | (a) | (a) | 266 | 75 | 169 | 100 | 127 | 180 | 204 | 240 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 40 | 0.01 | 40 | 49 | 14 | 30 | 17 | 22 | 29 | 36 | 45 |
| Magnesium, dissolved | 40 | .01 | 40 | 16 | 5.0 | 9.7 | 5.1 | 6.8 | 9.9 | 12 | 16 |
| Sodium, dissolved | 40 | .01 | 40 | 42 | 4.8 | 12 | 4.8 | 6.8 | 9.1 | 14 | 29 |
| Potassium, dissolved | 40 | .01 | 40 | 8.4 | 2.2 | 4.3 | 2.7 | 3.7 | 4.1 | 4.5 | 6.6 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 40 | 1 | 40 | 186 | 54 | 117 | 55 | 77 | 123 | 146 | 177 |
| Sulfate, dissolved | 40 | .1 | 40 | 32 | 2.4 | 13 | 5.7 | 8.4 | 12 | 16 | 30 |
| Chloride, dissolved | 40 | .1 | 40 | 33 | 3.0 | 8.7 | 4.5 | 5.6 | 7.9 | 9.5 | 22 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 38 | 0.01 | 38 | 4.3 | 0.17 | 1.2 | 0.50 | 0.70 | 1.0 | 1.4 | 2.7 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 38 | .10 | 26 | 2.9 | <.10 | (c) | <.10 | <.10 | .20 | .40 | 2.5 |
| Phosphorus, total as phosphorus | 38 | .01 | 38 | .73 | .01 | .29 | .10 | .17 | .24 | .38 | .68 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Grosse Tete at Rosedale (8)-continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 33 | 1 | 33 | 9,200 | 5 | 1,400 | 61 | 210 | 380 | 1,400 | 8,500 |
| Fecal streptococcus | 34 | 1 | 34 | 74,000 | 120 | 8,800 | 200 | 720 | 1,600 | 8,500 | 74,000 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 9 | 1 | 8 | 12 | <1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 9 | 3 | 8 | 180 | <3 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 9 | 5 | 1 | 6 | <5 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 9 | 4 | 8 | 40 | <4 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 9 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 9 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 9 | .01 | 4 | .02 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 9 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 9 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 9 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 9 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 9 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 9 | .01 | 2 | .04 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 9 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 9 | .01 | 7 | .48 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Petite Prairie (Second Lake) near Melville Station 2B (59)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 17 | (a) | (a) | 494 | 153 | 294 | 153 | 220 | 291 | 351 | 494 |
| pH (standard units) | 17 | (a) | (a) | 8.2 | 7.2 | 7.7 | 7.2 | 7.6 | 7.8 | 7.9 | 8.2 |
| Water temperature | 17 | (a) | (a) | 30.5 | 9.5 | 22.2 | 9.5 | 15.2 | 22.5 | 28.5 | 30.5 |
| Dissolved oxygen (milligrams per liter) | 17 | (a) | (a) | 10.6 | 4.7 | 6.8 | 4.7 | 5.6 | 6.3 | 7.8 | 10.6 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 287 | 100 | 182 | 100 | 146 | 167 | 214 | 287 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 12 | 0.01 | 12 | 45 | 17 | 32 | 17 | 26 | 32 | 38 | 45 |
| Magnesium, dissolved | 12 | .01 | 12 | 18 | 6.0 | 12 | 6.0 | 8.7 | 12 | 14 | 18 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 17 | 1 | 17 | 204 | 62 | 119 | 62 | 89 | 118 | 135 | 204 |
| Sulfate, dissolved | 12 | .1 | 12 | 15 | 5.1 | 7.7 | 5.1 | 5.2 | 6.8 | 10 | 15 |
| Chloride, dissolved | 12 | .1 | 12 | 37 | 4.4 | 17 | 4.4 | 8.1 | 14 | 25 | 37 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 17 | 0.01 | 17 | 1.9 | 0.80 | 1.1 | 0.80 | 0.90 | 1.0 | 1.3 | 1.9 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 17 | .01 | 13 | .60 | <.10 | (c) | <.10 | <.10 | <.10 | .17 | .60 |
| Phosphorus, total as phosphorus | 17 | .01 | 17 | .36 | .09 | .20 | .09 | .14 | .19 | .23 | .36 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 12 | 10 | 10 | 110 | <10 | (c) | <10 | 20 | 30 | 50 | 110 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Petite Prairie West Shore Station 3A (58)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 16 | (a) | (a) | 402 | 56 | 195 | 56 | 100 | 162 | 288 | 402 |
| pH (standard units) | 16 | (a) | (a) | 8.1 | 6.5 | 7.3 | 6.5 | 7.0 | 7.4 | 7.8 | 8.1 |
| Water temperature | 16 | (a) | (a) | 28.0 | 7.5 | 19.7 | 7.5 | 13.4 | 21.5 | 25.8 | 28.0 |
| Dissolved oxygen (milligrams per liter) | 16 | (a) | (a) | 8.4 | 1.5 | 4.5 | 1.5 | 3.2 | 4.2 | 5.9 | 8.4 |
| Dissolved solids (milligrams per liter) | 16 | (a) | (a) | 227 | 48 | 127 | 48 | 82 | 112 | 184 | 227 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 11 | 0.01 | 11 | 37 | 6.9 | 24 | 6.9 | 13 | 25 | 36 | 37 |
| Magnesium, dissolved | 11 | .01 | 11 | 14 | 2.8 | 8.6 | 2.8 | 4.4 | 7.4 | 14 | 14 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 16 | 1 | 16 | 167 | 21 | 77 | 21 | 39 | 61 | 114 | 167 |
| Sulfate, dissolved | 11 | .1 | 11 | 11 | 3.7 | 6.0 | 3.7 | 4.2 | 5.3 | 7.4 | 11 |
| Chloride, dissolved | 11 | .1 | 11 | 28 | 2.0 | 15 | 2.0 | 4.6 | 16 | 24 | 28 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 16 | 0.01 | 16 | 1.3 | 0.78 | 1.1 | 0.78 | 0.96 | 1.1 | 1.3 | 1.3 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 16 | .01 | 16 | .26 | .01 | .05 | .01 | .01 | .02 | .05 | .26 |
| Phosphorus, total as phosphorus | 16 | .01 | 16 | .37 | .12 | .20 | .12 | .15 | .20 | .23 | .37 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 11 | 10 | 9 | 470 | <10 | (c) | <10 | 30 | 100 | 200 | 470 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Petite Prairie Center Station 3B (57)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 17 | (a) | (a) | 420 | 103 | 274 | 103 | 206 | 274 | 338 | 420 |
| pH (standard units) | 17 | (a) | (a) | 8.2 | 7.0 | 7.6 | 7.0 | 7.4 | 7.6 | 7.9 | 8.2 |
| Water temperature | 17 | (a) | (a) | 28.0 | 9.5 | 20.8 | 9.5 | 15.0 | 22.0 | 26.2 | 28.0 |
| Dissolved oxygen (milligrams per liter) | 17 | (a) | (a) | 9.7 | 1.3 | 4.7 | 1.3 | 2.8 | 5.0 | 5.8 | 9.7 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 243 | 62 | 166 | 62 | 137 | 168 | 194 | 243 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 12 | 0.01 | 12 | 41 | 10 | 30 | 10 | 25 | 32 | 37 | 41 |
| Magnesium, dissolved | 12 | .01 | 12 | 16 | 5.1 | 11 | 5.1 | 8.9 | 12 | 14 | 16 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 17 | 1 | 17 | 161 | 41 | 109 | 41 | 84 | 108 | 132 | 161 |
| Sulfate, dissolved | 12 | .1 | 12 | 14 | 4.2 | 8.0 | 4.2 | 5.6 | 6.8 | 11 | 14 |
| Chloride, dissolved | 12 | .1 | 12 | 30 | 2.9 | 15 | 2.9 | 8.4 | 12 | 24 | 30 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 17 | 0.01 | 17 | 1.1 | 0.74 | 0.96 | 0.74 | 0.90 | 1.0 | 1.0 | 1.1 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 17 | .01 | 7 | .89 | <.10 | (c) | <.10 | <.10 | <.10 | .17 | .89 |
| Phosphorus, total as phosphorus | 17 | .01 | 17 | .38 | .10 | .22 | .10 | .16 | .22 | .26 | .38 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 12 | 10 | 9 | 100 | <10 | (c) | <10 | <10 | 40 | 70 | 100 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Petite Prairie Station 4 (61)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 23 | (a) | (a) | 485 | 212 | 351 | 228 | 310 | 334 | 392 | 483 |
| pH (standard units) | 23 | (a) | (a) | 8.3 | 7.5 | 8.0 | 7.5 | 7.7 | 8.0 | 8.1 | 8.3 |
| Water temperature | 23 | (a) | (a) | 32.0 | 9.5 | 22.1 | 10.2 | 20.0 | 22.5 | 23.5 | 31.8 |
| Dissolved oxygen (milligrams per liter) | 23 | (a) | (a) | 13.3 | 4.7 | 9.6 | 5.0 | 7.6 | 9.6 | 12.0 | 13.2 |
| Dissolved solids (milligrams per liter) | 16 | (a) | (a) | 277 | 154 | 211 | 154 | 177 | 215 | 229 | 277 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 11 | 0.01 | 11 | 50 | 31 | 40 | 31 | 33 | 40 | 46 | 50 |
| Magnesium, dissolved | 11 | .01 | 11 | 17 | 11 | 14 | 11 | 12 | 14 | 16 | 17 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 23 | 1 | 23 | 194 | 91 | 144 | 97 | 130 | 136 | 161 | 193 |
| Sulfate, dissolved | 11 | .1 | 11 | 13 | 3.0 | 7.0 | 3.0 | 4.3 | 6.7 | 8.7 | 13 |
| Chloride, dissolved | 11 | .1 | 11 | 34 | 13 | 20 | 13 | 15 | 17 | 25 | 34 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 16 | 0.01 | 16 | 3.3 | 0.66 | 1.5 | 0.66 | 1.0 | 1.3 | 1.5 | 3.3 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 16 | .01 | 4 | .26 | <.10 | (c) | <.10 | <.10 | <.10 | <.10 | .26 |
| Phosphorus, total as phosphorus | 16 | .01 | 16 | .51 | .12 | .23 | .12 | .15 | .18 | .32 | .51 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 11 | 10 | 6 | 60 | <10 | (c) | <10 | <10 | 20 | 30 | 60 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Rapides near Hot Wells (5)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 29 | (a) | (a) | 1,700 | 94 | 599 | 96 | 140 | 441 | 1,020 | 1,680 |
| pH (standard units) | 29 | (a) | (a) | 7.1 | 6.0 | 6.6 | 6.0 | 6.2 | 6.6 | 6.9 | 7.0 |
| Water temperature | 16 | (a) | (a) | 30.0 | 7.0 | 19.3 | 7.0 | 13.2 | 21.0 | 25.8 | 30.0 |
| Dissolved solids (milligrams per liter) | 29 | (a) | (a) | 956 | 65 | 340 | 66 | 83 | 249 | 577 | 902 |
| Major cations (milligrams per liter) | | | | | | | | | | | |
| Calcium, dissolved | 29 | 0.01 | 29 | 39 | 6.0 | 17 | 6.2 | 9.6 | 19 | 23 | 35 |
| Magnesium, dissolved | 29 | .01 | 29 | 11 | .60 | 4.7 | .80 | 1.2 | 3.8 | 7.6 | 11 |
| Sodium, dissolved | 29 | .01 | 29 | 290 | 8.6 | 91 | 9.0 | 15 | 61 | 160 | 280 |
| Potassium, dissolved | 29 | .01 | 29 | 12 | 1.4 | 3.2 | 1.4 | 2.0 | 2.6 | 3.6 | 9.6 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 29 | 1 | 29 | 103 | 20 | 39 | 20 | 30 | 37 | 46 | 87 |
| Sulfate, dissolved | 29 | .1 | 28 | 28 | <.1 | (c) | .2 | 1.5 | 2.6 | 4.4 | 19 |
| Chloride, dissolved | 29 | .1 | 29 | 520 | 12 | 160 | 13 | 22 | 93 | 280 | 500 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche at Arnaudville (20)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 68 | (a) | (a) | 407 | 38 | 157 | 73 | 95 | 138 | 193 | 302 |
| pH (standard units) | 61 | (a) | (a) | 7.8 | 5.9 | 6.9 | 6.2 | 6.6 | 6.8 | 7.1 | 7.7 |
| Water temperature | 62 | (a) | (a) | 31.0 | 6.5 | 20.0 | 8.2 | 14.0 | 19.8 | 27.5 | 30.9 |
| Dissolved oxygen (milligrams per liter) | 18 | (a) | (a) | 11.4 | 2.3 | 6.8 | 2.3 | 4.9 | 6.8 | 8.6 | 11.4 |
| Dissolved solids (milligrams per liter) | 44 | (a) | (a) | 235 | 22 | 109 | 52 | 82 | 100 | 132 | 216 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 60 | 0.01 | 60 | 42 | 2.9 | 15 | 6.1 | 8.5 | 14 | 20 | 32 |
| Magnesium, dissolved | 60 | .01 | 60 | 14 | .60 | 4.9 | 2.3 | 3.0 | 4.3 | 6.3 | 9.8 |
| Sodium, dissolved | 58 | .01 | 58 | 27 | 1.8 | 9.3 | 3.7 | 5.3 | 7.4 | 12 | 20 |
| Potassium, dissolved | 58 | .01 | 58 | 4.9 | 1.4 | 2.9 | 1.8 | 2.2 | 2.9 | 3.4 | 4.5 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 61 | 1 | 61 | 159 | 9 | 57 | 24 | 34 | 48 | 76 | 112 |
| Sulfate, dissolved | 60 | .1 | 60 | 14 | 1.0 | 6.6 | 2.2 | 4.6 | 6.2 | 8.0 | 13 |
| Chloride, dissolved | 60 | .1 | 60 | 39 | 2.5 | 12 | 4.2 | 6.6 | 9.8 | 16 | 26 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 9 | 0.01 | 9 | 2.5 | 0.51 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 12 | .01 | 12 | .58 | .10 | .32 | .10 | .13 | .33 | .52 | .58 |
| Phosphorus, total as phosphorus | 12 | .01 | 12 | .43 | .11 | .22 | .11 | .15 | .18 | .28 | .43 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche at Arnaudville (20)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 11 | 1 | 11 | 8,800 | 95 | 1,400 | 95 | 170 | 200 | 1,800 | 8,800 |
| Fecal streptococcus | 9 | 1 | 9 | 12,000 | 150 | (b) | (b) | (b) | (b) | (b) | (b) |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 3 | 5 | 2 | 11 | <5 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 3 | 10 | 3 | 270 | 70 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 3 | 2 | 1 | 2 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 3 | 20 | 0 | <20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 3 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 3 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 1 | .09 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche at Keystone Lock near St. Martinville (21)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 144 | (a) | (a) | 498 | 56 | 199 | 88 | 113 | 150 | 283 | 430 |
| pH (standard units) | 143 | (a) | (a) | 8.3 | 5.9 | 7.1 | 6.1 | 6.8 | 7.1 | 7.4 | 7.7 |
| Water temperature | 140 | (a) | (a) | 32.5 | 5.0 | 21.4 | 9.0 | 15.6 | 22.5 | 28.0 | 31.0 |
| Dissolved oxygen (milligrams per liter) | 137 | (a) | (a) | 12.1 | 2.8 | 6.2 | 3.5 | 4.8 | 6.0 | 7.4 | 9.4 |
| Dissolved solids (milligrams per liter) | 141 | (a) | (a) | 282 | 31 | 124 | 59 | 78 | 99 | 168 | 248 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 143 | 0.01 | 143 | 41 | 4.5 | 15 | 6.5 | 8.3 | 11 | 21 | 34 |
| Magnesium, dissolved | 143 | .01 | 143 | 14 | 1.3 | 5.7 | 2.2 | 3.3 | 4.4 | 8.0 | 13 |
| Sodium, dissolved | 142 | .01 | 142 | 45 | 3.4 | 15 | 5.0 | 7.8 | 10 | 20 | 37 |
| Potassium, dissolved | 143 | .01 | 143 | 5.8 | 1.6 | 3.0 | 1.9 | 2.5 | 3.0 | 3.4 | 4.4 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 141 | 1 | 141 | 131 | 18 | 57 | 24 | 34 | 44 | 78 | 116 |
| Sulfate, dissolved | 143 | .1 | 143 | 57 | 1.2 | 11 | 2.8 | 5.2 | 7.6 | 12 | 40 |
| Chloride, dissolved | 143 | .1 | 143 | 69 | 2.2 | 19 | 6.1 | 9.8 | 13 | 24 | 48 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 130 | 0.01 | 130 | 2.3 | 0.26 | 0.91 | 0.50 | 0.70 | 0.88 | 1.0 | 1.6 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 136 | .01 | 136 | 1.4 | .02 | .32 | .09 | .17 | .26 | .41 | .74 |
| Phosphorus, total as phosphorus | 136 | .01 | 136 | .83 | .09 | .29 | .16 | .22 | .27 | .34 | .46 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche at Keystone Lock near St. Martinville (21)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Biological constituents** | | | | | | | | | | | |
| Fecal coliform (colonies per 100 milliliters) | 102 | 1 | 102 | 27,000 | 6 | 1,000 | 41 | 160 | 340 | 690 | 4,300 |
| Fecal streptococcus (colonies per 100 milliliters) | 99 | 1 | 99 | 59,000 | 10 | 4,500 | 80 | 200 | 720 | 4,300 | 23,000 |
| Phytoplankton (cells per liter) | 58 | 0 | 58 | 16,000 | 0 | 1,400 | 0 | 110 | 240 | 840 | 13,000 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Copper, dissolved | 62 | 20 | 0 | <20 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 76 | 1 | 76 | 770 | 3 | 170 | 9 | 70 | 140 | 240 | 480 |
| Lead, dissolved | 64 | 5 | 8 | 17 | <5 | (c) | <5 | <5 | <5 | <5 | 7 |
| Zinc, dissolved | 64 | 20 | 17 | 45 | <20 | (c) | <20 | <20 | <20 | 20 | 30 |
| **Organic compounds (micrograms per liter)** | | | | | | | | | | | |
| DDT, total | 1 | 0.01 | 0 | <0.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 1 | .01 | 1 | .02 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche at Verdunville (30)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Water temperature | 293 | (a) | (a) | 31.5 | 5.0 | 21.5 | 9.8 | 16.0 | 23.0 | 28.0 | 30.0 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Chloride, dissolved | 303 | .1 | 303 | 110 | 6.4 | 29 | 10 | 20 | 26 | 35 | 58 |

**Bayou Teche near Franklin (23)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Water temperature | 290 | (a) | (a) | 37.0 | 5.0 | 21.7 | 10.5 | 16.0 | 23.0 | 28.0 | 30.0 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Chloride, dissolved | 301 | .1 | 301 | 100 | 6.6 | 30 | 12 | 22 | 26 | 35 | 59 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche near Olivier (22)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 33 | (a) | (a) | 360 | 104 | 224 | 110 | 154 | 206 | 306 | 356 |
| pH (standard units) | 31 | (a) | (a) | 7.1 | 6.2 | 6.9 | 6.3 | 6.7 | 6.9 | 7.2 | 7.5 |
| Dissolved oxygen (milligrams per liter) | 17 | (a) | (a) | 9.6 | 1.0 | 5.0 | 1.0 | 3.8 | 4.8 | 6.2 | 9.6 |
| Dissolved solids (milligrams per liter) | 16 | (a) | (a) | 208 | 72 | 133 | 72 | 92 | 131 | 172 | 208 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 31 | 0.1 | 31 | 31 | 9.6 | 19 | 9.8 | 14 | 19 | 25 | 31 |
| Magnesium, dissolved | 31 | .1 | 31 | 11 | 2.7 | 5.8 | 2.8 | 4.2 | 5.0 | 8.2 | 11 |
| Sodium, dissolved | 31 | .1 | 31 | 34 | 5.9 | 15 | 6.1 | 8.7 | 13 | 19 | 32 |
| Potassium, dissolved | 31 | .1 | 31 | 5.5 | 1.6 | 3.4 | 1.9 | 2.9 | 3.4 | 3.8 | 5.2 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 31 | 1 | 31 | 118 | 31 | 71 | 33 | 50 | 63 | 100 | 113 |
| Sulfate, dissolved | 31 | .1 | 31 | 12 | .6 | 6.5 | 1.6 | 4.2 | 6.2 | 8.0 | 12 |
| Chloride, dissolved | 31 | .1 | 31 | 56 | 8.2 | 21 | 8.6 | 13 | 19 | 26 | 47 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 13 | 0.1 | 13 | 2.0 | 0.8 | 1.3 | 0.8 | 1.0 | 1.3 | 1.5 | 2.0 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 16 | .10 | 11 | 0.95 | <0.10 | (c) | <.10 | <.10 | .18 | .27 | .95 |
| Phosphorus, total as phosphorus | 16 | .01 | 16 | 2.2 | .24 | .51 | .24 | .30 | .36 | .44 | 2.2 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche near Olivier (22)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents | | | | | | | | | | | |
| Fecal coliform (colonies per 100 milliliters) | 12 | 5 | 11 | 15,000 | <5 | (c) | 80 | 270 | 1,400 | 2,400 | 15,000 |
| Fecal streptococcus (colonies per 100 milliliters) | 9 | 1 | 9 | 14,000 | 380 | (b) | (b) | (b) | (b) | (b) | (b) |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 4 | 20 | 0 | <20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 4 | 25 | 4 | 160 | 60 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 4 | 2 | 2 | 3 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 4 | 20 | 1 | 20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 4 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 4 | .01 | 2 | .08 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 4 | ..01 | 3 | .4 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Bayou Teche near Patterson (24)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 15 | (a) | (a) | 446 | 289 | 350 | 289 | 318 | 335 | 400 | 446 |
| pH (standard units) | 15 | (a) | (a) | 8.1 | 6.6 | 7.0 | 6.6 | 6.8 | 7.0 | 7.0 | 8.1 |
| Dissolved solids (milligrams per liter) | 15 | (a) | (a) | 270 | 163 | 204 | 163 | 188 | 194 | 233 | 270 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 15 | 0.1 | 15 | 50 | 26 | 37 | 26 | 33 | 36 | 41 | 50 |
| Magnesium, dissolved | 15 | .1 | 15 | 11 | 2.0 | 8.1 | 2.0 | 7.2 | 8.3 | 9.6 | 11 |
| Sodium, dissolved | 15 | .1 | 15 | 28 | 14 | 20 | 14 | 17 | 20 | 23 | 28 |
| Potassium, dissolved | 15 | .1 | 15 | 4.0 | 2.5 | 3.3 | 2.5 | 3.0 | 3.2 | 3.8 | 4.0 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 15 | 1 | 15 | 128 | 70 | 92 | 70 | 80 | 87 | 102 | 128 |
| Sulfate, dissolved | 15 | .1 | 15 | 59 | 27 | 42 | 27 | 36 | 38 | 48 | 59 |
| Chloride, dissolved | 330 | .1 | 330 | 84 | 12 | 32 | 18 | 25 | 29 | 36 | 50 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Buffalo Cove Station WBI near Charenton (50)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 17 | (a) | (a) | 416 | 218 | 310 | 218 | 262 | 304 | 350 | 416 |
| pH (standard units) | 17 | (a) | (a) | 8.2 | 6.6 | 7.6 | 6.6 | 7.2 | 7.6 | 7.8 | 8.2 |
| Water temperature | 16 | (a) | (a) | 32.0 | 6.5 | 21.0 | 6.5 | 13.4 | 22.2 | 26.9 | 32.0 |
| Dissolved oxygen (milligrams per liter) | 13 | (a) | (a) | 8.5 | 1.5 | 4.7 | 1.5 | 2.2 | 4.0 | 7.1 | 8.5 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 242 | 129 | 184 | 129 | 156 | 174 | 214 | 242 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 17 | 0.01 | 17 | 39 | 24 | 32 | 24 | 27 | 33 | 36 | 39 |
| Magnesium, dissolved | 17 | .01 | 17 | 12 | 5.5 | 8.7 | 5.5 | 7.2 | 8.0 | 11 | 12 |
| Sodium, dissolved | 2 | .01 | 2 | 22 | 20 | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 2 | .01 | 2 | 6.0 | 4.0 | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 17 | 1 | 17 | 117 | 67 | 89 | 67 | 80 | 87 | 104 | 117 |
| Sulfate, dissolved | 17 | .1 | 17 | 45 | 5.4 | 30 | 5.4 | 28 | 31 | 38 | 45 |
| Chloride, dissolved | 17 | .1 | 17 | 38 | 11 | 22 | 11 | 15 | 20 | 29 | 38 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 6 | 0.01 | 6 | 0.66 | 0.42 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 9 | .10 | 7 | .68 | <.10 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 17 | .01 | 17 | .24 | .10 | .15 | .10 | .12 | .14 | .16 | .24 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Buffalo Cove Station WBI near Charenton (50)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 2 | 2 | 1 | 5 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 13 | 10 | 9 | 180 | <10 | (c) | <10 | <10 | 30 | 50 | 180 |
| Lead, dissolved | 2 | 3 | 1 | 3 | <3 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 2 | 20 | 0 | <20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 3 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 3 | .01 | 1 | .02 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 3 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 3 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 2 | .21 | .02 | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Chicot Pass at Myette Point near Charenton (13)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 93 | (a) | (a) | 2,940 | 161 | 431 | 224 | 313 | 382 | 465 | 631 |
| pH (standard units) | 94 | (a) | (a) | 8.2 | 6.5 | 7.7 | 7.1 | 7.4 | 7.7 | 8.0 | 8.1 |
| Water temperature | 39 | (a) | (a) | 31.5 | 1.0 | 19.1 | 5.5 | 9.0 | 22.0 | 28.5 | 31.5 |
| Dissolved oxygen (milligrams per liter) | 89 | (a) | (a) | 13.5 | 3.8 | 8.1 | 5.6 | 6.6 | 7.8 | 9.6 | 12.4 |
| Dissolved solids (milligrams per liter) | 2 | (a) | (a) | 264 | 252 | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 92 | 0.01 | 92 | 58 | 15 | 36 | 21 | 29 | 35 | 42 | 50 |
| Magnesium, dissolved | 92 | .01 | 92 | 52 | 4.4 | 12 | 6.0 | 8.6 | 11 | 14 | 18 |
| Sodium, dissolved | 49 | .01 | 49 | 56 | 8.5 | 26 | 11 | 17 | 24 | 32 | 48 |
| Potassium, dissolved | 50 | .01 | 50 | 8.1 | 2.2 | 3.4 | 2.3 | 2.8 | 3.4 | 3.6 | 5.0 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 94 | 1 | 94 | 141 | 39 | 93 | 55 | 77 | 92 | 110 | 135 |
| Sulfate, dissolved | 91 | .1 | 91 | 120 | 5.9 | 49 | 22 | 35 | 45 | 61 | 93 |
| Chloride, dissolved | 91 | .1 | 91 | 860 | 9.2 | 46 | 18 | 23 | 31 | 40 | 78 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 1 | 0.01 | 1 | 0.47 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 91 | .01 | 91 | 2.1 | .10 | .92 | .31 | .61 | .88 | 1.1 | 1.7 |
| Phosphorus, total as phosphorus | 91 | .01 | 91 | 2.1 | .06 | .22 | .09 | .13 | .18 | .22 | .51 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Chicot Pass at Myette Point near Charenton (13)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 48 | 5 | 42 | 38,000 | <5 | (c) | <5 | 20 | 47 | 100 | 470 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 76 | 2 | 66 | 14 | <2 | (c) | <2 | 2 | 3 | 5 | 8 |
| Iron, dissolved | 91 | 10 | 64 | 200 | <10 | (c) | <10 | <10 | 30 | 50 | 120 |
| Lead, dissolved | 91 | 2 | 22 | 12 | <2 | (c) | <2 | <2 | <2 | <2 | 4 |
| Zinc, dissolved | 90 | 20 | 13 | 45 | <20 | (c) | <20 | <20 | <20 | <20 | 20 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 87 | 0.01 | 4 | 0.11 | <0.01 | (c) | <0.01 | <0.01 | <0.01 | <0.01 | 0.01 |
| PCB, total | 87 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 87 | .01 | 53 | .29 | <.01 | (c) | <.01 | <.01 | .01 | .01 | .03 |
| Lindane, total | 87 | .001 | 4 | .003 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| Chlordane, total | 87 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 87 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 87 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 87 | .01 | 2 | .26 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Dieldrin, total | 87 | .01 | 5 | .03 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Endosulfan, total | 51 | .001 | 0 | <.001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| 2,4-D, total | 60 | .01 | 48 | .11 | <.01 | (c) | <.01 | .01 | .02 | .03 | .06 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Duck Lake near Morgan City (44)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 20 | (a) | (a) | 422 | 240 | 324 | 240 | 280 | 313 | 376 | 421 |
| pH (standard units) | 20 | (a) | (a) | 8.2 | 6.7 | 7.6 | 6.7 | 7.4 | 7.6 | 7.9 | 8.2 |
| Water temperature | 19 | (a) | (a) | 29.5 | 9.0 | 21.0 | 9.0 | 14.5 | 23.0 | 26.5 | 29.5 |
| Dissolved oxygen (milligrams per liter) | 19 | (a) | (a) | 10.2 | .7 | 5.2 | .7 | 3.4 | 5.2 | 6.7 | 10.2 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 257 | 143 | 192 | 143 | 164 | 184 | 211 | 257 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 17 | 0.01 | 17 | 39 | 24 | 32 | 24 | 30 | 32 | 34 | 39 |
| Magnesium, dissolved | 17 | .01 | 17 | 14 | 6.1 | 9.7 | 6.1 | 8.7 | 9.1 | 12 | 14 |
| Sodium, dissolved | 1 | .01 | 1 | 24 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 1 | .01 | 1 | 3.2 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 18 | 1 | 18 | 125 | 67 | 91 | 67 | 78 | 90 | 102 | 125 |
| Sulfate, dissolved | 17 | .1 | 17 | 49 | 18 | 32 | 18 | 26 | 33 | 36 | 49 |
| Chloride, dissolved | 17 | .1 | 17 | 40 | 10 | 24 | 10 | 15 | 22 | 32 | 40 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 8 | 0.01 | 8 | 1.0 | 0.22 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 11 | .01 | 11 | .93 | .01 | .26 | .01 | .07 | .11 | .45 | .93 |
| Phosphorus, total as phosphorus | 18 | .01 | 18 | .79 | .06 | .16 | .06 | .10 | .12 | .16 | .79 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Duck Lake near Morgan City (44)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 3 | 2 | 2 | 6 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 16 | 10 | 9 | 70 | <10 | (c) | <10 | <10 | 20 | 30 | 70 |
| Lead, dissolved | 3 | 2 | 2 | 5 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 3 | 4 | 2 | 30 | <4 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 4 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 5 | .01 | 3 | .30 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**East Cote Blanche Bay Station ECB 3 (33)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 35 | (a) | (a) | 1,740 | 280 | 759 | 327 | 455 | 745 | 962 | 1,572 |
| pH (standard units) | 35 | (a) | (a) | 8.3 | 7.0 | 7.9 | 7.3 | 7.6 | 8.0 | 8.1 | 8.2 |
| Dissolved oxygen (milligrams per liter) | 33 | (a) | (a) | 11.2 | 5.3 | 7.5 | 5.4 | 7.0 | 7.4 | 8.1 | 10.0 |
| Dissolved solids (milligrams per liter) | 19 | (a) | (a) | 974 | 184 | 379 | 184 | 229 | 296 | 460 | 974 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 19 | 0.1 | 19 | 45 | 24 | 31 | 24 | 27 | 28 | 35 | 45 |
| Magnesium, dissolved | 19 | .1 | 19 | 32 | 7.6 | 12 | 7.6 | 8.4 | 10 | 13 | 32 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 35 | 1 | 35 | 97 | 66 | 77 | 67 | 71 | 75 | 80 | 96 |
| Sulfate, dissolved | 19 | .1 | 19 | 92 | 22 | 40 | 22 | 28 | 31 | 42 | 92 |
| Chloride, dissolved | 19 | .1 | 19 | 410 | 30 | 120 | 30 | 43 | 72 | 180 | 410 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 17 | 0.01 | 17 | 1.2 | 0.39 | 0.61 | 0.39 | 0.53 | 0.59 | 0.66 | 1.2 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 19 | .1 | 13 | 0.7 | <.1 | (c) | <.1 | <.1 | .2 | .3 | .7 |
| Phosphorus, total as phosphorus | 19 | .01 | 19 | .17 | .06 | .10 | .06 | .06 | .08 | .15 | .17 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 19 | 10 | 14 | 190 | <10 | (c) | <10 | <10 | <10 | 30 | 190 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**East Cote Blanche Bay Station ECB 5 (34)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 43 | (a) | (a) | 4,750 | 250 | 2,890 | 276 | 1,150 | 3,390 | 4,150 | 4,550 |
| pH (standard units) | 43 | (a) | (a) | 8.5 | 7.3 | 8.2 | 7.7 | 8.0 | 8.3 | 8.4 | 8.4 |
| Water temperature | 41 | (a) | (a) | 30.0 | 8.0 | 26.1 | 17.0 | 25.5 | 27.0 | 28.5 | 29.0 |
| Dissolved oxygen (milligrams per liter) | 40 | (a) | (a) | 11.4 | 6.6 | 8.3 | 7.4 | 7.8 | 8.1 | 8.6 | 9.8 |
| Dissolved solids (milligrams per liter) | 19 | (a) | (a) | 2,820 | 132 | 843 | 132 | 169 | 528 | 1,170 | 2,820 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 19 | 0.01 | 19 | 62 | 21 | 37 | 21 | 25 | 36 | 43 | 62 |
| Magnesium, dissolved | 19 | .01 | 19 | 89 | 6.9 | 28 | 6.9 | 7.9 | 15 | 35 | 89 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 43 | 1 | 43 | 99 | 62 | 79 | 68 | 75 | 79 | 80 | 97 |
| Sulfate, dissolved | 19 | .1 | 19 | 190 | 20 | 65 | 20 | 30 | 35 | 93 | 190 |
| Chloride, dissolved | 19 | .1 | 19 | 1,300 | 20 | 340 | 20 | 28 | 190 | 470 | 1,300 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 17 | 0.01 | 17 | 1.2 | 0.29 | 0.56 | 0.29 | 0.42 | 0.48 | 0.62 | 1.2 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 19 | .10 | 15 | .77 | <.10 | (c) | <.10 | .15 | .38 | .60 | .77 |
| Phosphorus, total as phosphorus | 19 | .01 | 91 | .33 | .04 | .11 | .04 | .06 | .11 | .14 | .33 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 19 | 10 | 10 | 250 | <10 | (c) | <10 | <10 | 20 | 40 | 250 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**False River at New Roads (6)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 12 | (a) | (a) | 288 | 194 | 248 | 194 | 218 | 255 | 275 | 288 |
| pH (standard units) | 17 | (a) | (a) | 9.9 | 6.9 | 7.8 | 6.9 | 7.4 | 7.6 | 8.0 | 9.9 |
| Water temperature | 11 | (a) | (a) | 34.0 | 7.5 | 22.2 | 7.5 | 11.5 | 23.0 | 32.5 | 34.0 |
| Dissolved oxygen (milligrams per liter) | 12 | (a) | (a) | 15.8 | 6.8 | 10.5 | 6.8 | 8.2 | 9.7 | 12.6 | 15.8 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 184 | 119 | 148 | 119 | 130 | 146 | 162 | 184 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 12 | 0.01 | 12 | 35 | 17 | 28 | 17 | 24 | 30 | 34 | 35 |
| Magnesium, dissolved | 12 | .01 | 12 | 11 | 8.1 | 9.5 | 8.1 | 8.9 | 9.7 | 10 | 11 |
| Sodium, dissolved | 12 | .01 | 12 | 7.6 | 5.7 | 6.5 | 5.7 | 6.0 | 6.4 | 7.0 | 7.6 |
| Potassium, dissolved | 12 | .01 | 12 | 5.8 | 3.9 | 4.5 | 3.9 | 4.1 | 4.4 | 4.7 | 5.8 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 12 | 1 | 12 | 135 | 79 | 116 | 79 | 110 | 120 | 130 | 135 |
| Sulfate, dissolved | 17 | .1 | 17 | 10 | .2 | 6.4 | .2 | 4.6 | 6.2 | 8.4 | 10 |
| Chloride, dissolved | 17 | .1 | 17 | 5.2 | 1.2 | 4.4 | 1.2 | 4.3 | 4.7 | 4.9 | 5.2 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 10 | 0.01 | 10 | 1.5 | 0.68 | 1.0 | 0.68 | 0.73 | 0.92 | 1.3 | 1.5 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 11 | .10 | 2 | .38 | <.10 | (c) | <.10 | <.10 | <.10 | <.10 | .38 |
| Phosphorus, total as phosphorus | 11 | .01 | 10 | .24 | <.01 | (c) | .02 | .07 | .08 | .18 | .24 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**False River at New Roads (6)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 10 | 5 | 5 | 60 | <5 | (c) | <5 | <5 | <5 | 20 | 60 |
| Fecal streptococcus | 11 | 5 | 9 | 2,600 | <5 | (c) | <5 | 10 | 60 | 260 | 2,600 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 3 | 2 | 2 | 4 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 3 | 10 | 2 | 30 | <10 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 3 | 10 | 0 | <10 | <10 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 3 | 20 | 1 | 50 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 3 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 3 | .01 | 1 | .11 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**False River near Erwinville (7)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 10 | (a) | (a) | 278 | 211 | 248 | 211 | 228 | 249 | 265 | 278 |
| pH (standard units) | 11 | (a) | (a) | 8.9 | 6.6 | 7.6 | 6.6 | 7.1 | 7.6 | 8.0 | 8.9 |
| Water temperature | 9 | (a) | (a) | 34.0 | 8.0 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved oxygen (milligrams per liter) | 8 | (a) | (a) | 14.5 | 6.0 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved solids (milligrams per liter) | 9 | (a) | (a) | 158 | 127 | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 10 | 0.01 | 10 | 35 | 18 | 29 | 18 | 26 | 30 | 33 | 35 |
| Magnesium, dissolved | 10 | .01 | 10 | 10 | 8.4 | 9.3 | 8.4 | 9.1 | 9.4 | 9.8 | 10 |
| Sodium, dissolved | 10 | .01 | 10 | 10 | 5.5 | 7.4 | 5.5 | 6.2 | 6.8 | 8.8 | 10 |
| Potassium, dissolved | 10 | .01 | 10 | 5.1 | 4.0 | 4.5 | 4.0 | 4.2 | 4.5 | 5.0 | 5.1 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 10 | 1 | 10 | 126 | 100 | 116 | 100 | 110 | 116 | 124 | 126 |
| Sulfate, dissolved | 11 | .1 | 11 | 11 | 4.2 | 7.2 | 4.2 | 4.8 | 6.0 | 9.7 | 11 |
| Chloride, dissolved | 11 | .1 | 11 | 6.3 | 3.1 | 4.8 | 3.1 | 4.2 | 4.7 | 5.3 | 6.3 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 8 | 0.01 | 8 | 1.3 | 0.56 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 8 | .01 | 8 | .72 | .01 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 8 | .01 | 8 | .15 | .05 | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**False River near Erwinville (7)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 6 | 5 | 4 | 130 | <5 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Fecal streptococcus | 8 | 10 | 7 | 150 | <10 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 2 | 2 | 2 | 8 | 2 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 2 | 10 | 1 | 20 | <10 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 2 | 2 | 1 | 2 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 2 | 2 | 2 | 40 | 7 | (b) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 2 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Flat Lake 2.6 miles north northeast near Morgan City (39)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 94 | (a) | (a) | 449 | 215 | 316 | 246 | 269 | 335 | 348 | 405 |
| pH (standard units) | 94 | (a) | (a) | 8.1 | 6.8 | 7.3 | 6.9 | 7.0 | 7.2 | 7.6 | 7.9 |
| Water temperature | 93 | (a) | (a) | 30.0 | 10.5 | 23.2 | 12.8 | 22.0 | 25.0 | 27.5 | 28.5 |
| Dissolved oxygen (milligrams per liter) | 94 | (a) | (a) | 9.0 | 2.0 | 5.8 | 3.4 | 4.6 | 6.0 | 7.1 | 8.5 |
| Dissolved solids (milligrams per liter) | 17 | (a) | (a) | 302 | 86 | 197 | 86 | 160 | 188 | 245 | 302 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 17 | 0.01 | 17 | 40 | 25 | 33 | 25 | 30 | 34 | 36 | 40 |
| Magnesium, dissolved | 17 | .01 | 17 | 13 | 6.2 | 9.7 | 6.2 | 8.4 | 9.4 | 12 | 13 |
| Sodium, dissolved | 1 | .01 | 1 | 31 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 1 | .01 | 1 | 3.2 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 77 | 1 | 77 | 120 | 62 | 91 | 68 | 88 | 94 | 98 | 116 |
| Sulfate, dissolved | 17 | .1 | 17 | 51 | 22 | 35 | 22 | 28 | 35 | 40 | 51 |
| Chloride, dissolved | 17 | .1 | 17 | 85 | 11 | 31 | 11 | 16 | 27 | 38 | 85 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 67 | 0.01 | 67 | 0.81 | 0.23 | 0.42 | 0.24 | 0.31 | 0.40 | 0.48 | 0.76 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 70 | .10 | 21 | .49 | <.10 | (c) | <.10 | <.10 | .18 | .29 | .41 |
| Phosphorus, total as phosphorus | 77 | .01 | 77 | .30 | .04 | .09 | .04 | .05 | .09 | .11 | .18 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Flat Lake 2.6 miles north northeast near Morgan City (39)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 3 | 2 | 3 | 5 | 3 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 17 | 10 | 12 | 80 | <10 | (c) | <10 | <10 | 20 | 40 | 80 |
| Lead, dissolved | 3 | 2 | 2 | 4 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 3 | 20 | 1 | 20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 4 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 4 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 5 | .01 | 1 | .04 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Flat Lake 3.0 miles north northeast near Morgan City (40)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 75 | (a) | (a) | 380 | 255 | 310 | 264 | 289 | 320 | 340 | 346 |
| pH (standard units) | 75 | (a) | (a) | 7.9 | 7.0 | 7.3 | 7.0 | 7.1 | 7.2 | 7.4 | 7.6 |
| Water temperature | 76 | (a) | (a) | 30.0 | 12.0 | 23.3 | 12.9 | 21.0 | 25.0 | 26.9 | 28.5 |
| Dissolved oxygen (milligrams per liter) | 75 | (a) | (a) | 8.9 | 4.6 | 6.0 | 4.8 | 5.1 | 5.5 | 6.6 | 8.7 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 60 | 1 | 60 | 113 | 66 | 90 | 68 | 84 | 94 | 95 | 112 |
| Nutrients (milligrams per liter) | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 60 | 0.01 | 60 | 0.88 | 0.27 | 0.43 | 0.30 | 0.35 | 0.40 | 0.47 | 0.67 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 60 | .01 | 60 | .47 | .03 | .34 | .06 | .24 | .36 | .40 | .46 |
| Phosphorus, total as phosphorus | 60 | .01 | 60 | .25 | .05 | .10 | .06 | .08 | .09 | .09 | .21 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Flat Lake 3.6 miles north of Morgan City (41)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 49 | (a) | (a) | 370 | 250 | 339 | 258 | 345 | 350 | 352 | 365 |
| pH (standard units) | 49 | (a) | (a) | 7.9 | 6.9 | 7.5 | 7.0 | 7.1 | 7.6 | 7.7 | 7.9 |
| Water temperature | 49 | (a) | (a) | 29.0 | 11.0 | 23.2 | 11.0 | 22.0 | 24.0 | 26.8 | 28.8 |
| Dissolved oxygen (milligrams per liter) | 49 | (a) | (a) | 10.0 | 4.9 | 7.1 | 5.0 | 6.1 | 6.6 | 8.5 | 9.7 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 38 | 1 | 38 | 113 | 68 | 95 | 69 | 92 | 97 | 98 | 112 |
| Nutrients (milligrams per liter) | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 38 | 0.01 | 38 | 0.81 | 0.34 | 0.54 | 0.37 | 0.46 | 0.50 | 0.60 | 0.77 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 38 | .10 | 20 | .95 | <.10 | (c) | <.10 | .23 | .71 | .89 | .92 |
| Phosphorus, total as phosphorus | 38 | .01 | 38 | .26 | .05 | .14 | .05 | .12 | .14 | .18 | .25 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Intracoastal Waterway at Vermilion Lock (East) near Intracoastal City (42)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 75 | (a) | (a) | 14,800 | 110 | 3,110 | 132 | 333 | 1,800 | 5,320 | 9,240 |
| pH (standard units) | 75 | (a) | (a) | 8.1 | 6.3 | 7.2 | 6.5 | 7.0 | 7.2 | 7.5 | 7.8 |
| Water temperature | 31 | (a) | (a) | 33.5 | 10.5 | 22.2 | 11.1 | 16.5 | 23.5 | 28.5 | 32.0 |
| Dissolved oxygen (milligrams per liter) | 71 | (a) | (a) | 10.3 | .8 | 6.9 | 4.4 | 5.5 | 6.9 | 8.3 | 9.6 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 74 | 0.01 | 74 | 130 | 4.8 | 34 | 5.4 | 8.0 | 25 | 57 | 88 |
| Magnesium, dissolved | 74 | .01 | 74 | 340 | 2.4 | 60 | 3.0 | 6.2 | 27 | 85 | 200 |
| Sodium, dissolved | 32 | .01 | 32 | 2,700 | 13 | 640 | 16 | 73 | 450 | 840 | 2,400 |
| Potassium, dissolved | 32 | .01 | 32 | 93 | 2.3 | 25 | 2.7 | 5.6 | 17 | 29 | 84 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total as $CaCO_3$ | 75 | 1 | 75 | 90 | 16 | 42 | 21 | 30 | 41 | 52 | 67 |
| Sulfate, dissolved | 74 | .1 | 74 | 740 | 5.1 | 140 | 6.4 | 13 | 72 | 200 | 520 |
| Chloride, dissolved | 73 | .1 | 73 | 4,900 | 12 | 960 | 17 | 68 | 550 | 1,600 | 3,000 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 1 | 0.01 | 1 | 1.3 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 75 | .10 | 55 | .85 | <.10 | (c) | <.10 | <.10 | .20 | .33 | .51 |
| Phosphorus, total as phosphorus | 73 | .01 | 73 | 6.1 | .03 | .33 | .05 | .10 | .16 | .28 | 1.1 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Intracoastal Waterway at Vermilion Lock (East) near Intracoastal City (42)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 33 | 1 | 33 | 4,000 | 5 | 370 | 10 | 76 | 160 | 300 | 2,200 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 60 | 20 | 0 | <20 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 74 | 10 | 62 | 460 | <10 | (c) | <10 | 30 | 60 | 130 | 300 |
| Lead, dissolved | 74 | 2 | 16 | 19 | <2 | (c) | <2 | <2 | <2 | <2 | 5 |
| Zinc, dissolved | 74 | 20 | 27 | 60 | <20 | (c) | <20 | <20 | <20 | 20 | 40 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 74 | 0.001 | 1 | 0.001 | <0.001 | (c) | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| PCB, total | 74 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 74 | .01 | 28 | .04 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .02 |
| Lindane, total | 74 | .001 | 4 | .001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | .001 |
| Chlordane, total | 74 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 74 | .01 | 4 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Endrin, total | 74 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 74 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 74 | .01 | 7 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Endosulfan, total | 37 | .001 | 2 | .002 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | .002 |
| 2,4-D, total | 45 | .01 | 11 | .31 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .19 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Intracoastal Waterway at Vermilion Lock (west) near Intracoastal City (43)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 68 | (a) | (a) | 14,900 | 79 | 2,760 | 103 | 299 | 1,340 | 4,410 | 8,870 |
| pH (standard units) | 68 | (a) | (a) | 8.1 | 6.3 | 7.3 | 6.5 | 7.1 | 7.3 | 7.6 | 7.9 |
| Water temperature | 25 | (a) | (a) | 33.5 | 11.0 | 21.6 | 11.3 | 16.0 | 23.0 | 26.8 | 32.8 |
| Dissolved oxygen (milligrams per liter) | 65 | (a) | (a) | 11.0 | 4.3 | 7.3 | 4.8 | 6.2 | 7.3 | 8.3 | 10.2 |
| Major cations (milligrams per liter) | | | | | | | | | | | |
| Calcium, dissolved | 64 | 0.01 | 64 | 99 | 3.6 | 31 | 4.1 | 8.9 | 18 | 50 | 84 |
| Magnesium, dissolved | 64 | .01 | 64 | 230 | 1.6 | 53 | 2.0 | 6.0 | 24 | 77 | 190 |
| Sodium, dissolved | 23 | .01 | 23 | 1,900 | 9.5 | 560 | 9.6 | 38 | 330 | 1,100 | 1,800 |
| Potassium, dissolved | 23 | .01 | 23 | 74 | 1.7 | 23 | 1.7 | 3.3 | 14 | 34 | 73 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 67 | 1 | 67 | 70 | 15 | 39 | 16 | 30 | 36 | 49 | 66 |
| Sulfate, dissolved | 66 | .1 | 66 | 440 | 5.9 | 110 | 6.4 | 14 | 54 | 170 | 380 |
| Chloride, dissolved | 65 | .1 | 65 | 3,600 | 11 | 820 | 14 | 68 | 390 | 1,300 | 2,800 |
| Nutrients (milligrams per liter) | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 64 | 0.01 | 64 | 0.82 | 0.01 | 0.25 | 0.02 | 0.10 | 0.23 | 0.35 | 0.57 |
| Phosphorus, total as phosphorus | 62 | .01 | 62 | 1.3 | .04 | .24 | .05 | .12 | .19 | .27 | .77 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Intracoastal Waterway at Vermilion Lock (west) near Intracoastal City (43)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 27 | 1 | 27 | 3,300 | 4 | 390 | 4 | 52 | 110 | 210 | 2,900 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 49 | 20 | 0 | <20 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 66 | 10 | 60 | 510 | <10 | (c) | <10 | 30 | 50 | 100 | 270 |
| Lead, dissolved | 66 | 2 | 8 | 4 | <2 | (c) | <2 | <2 | <2 | <2 | 2 |
| Zinc, dissolved | 66 | 20 | 22 | 260 | <20 | (c) | <20 | <20 | <20 | 20 | 30 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 66 | 0.001 | 2 | 0.002 | <0.001 | (c) | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| PCB, total | 66 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 63 | .01 | 21 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .01 |
| Lindane, total | 65 | .001 | 5 | .004 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | .001 |
| Chlordane, total | 66 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 66 | .01 | 1 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Endrin, total | 66 | .001 | 0 | <.001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| Parathion, total | 64 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 64 | .01 | 8 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .02 |
| Endosulfan, total | 30 | .001 | 2 | .002 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | .001 |
| 2,4-D, total | 39 | .01 | 5 | .31 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .18 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Intracoastal Waterway at Wax Lake East Control Structure near Calumet (35)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 1 | (a) | (a) | 431 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| pH (standard units) | 1 | (a) | (a) | 8.0 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Water temperature | 272 | (a) | (a) | 32.0 | 5.0 | 20.6 | 8.5 | 14.1 | 21.2 | 28.0 | 30.0 |
| Dissolved oxygen (milligrams per liter) | 1 | (a) | (a) | 7.4 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 1 | 0.01 | 1 | 39 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Magnesium, dissolved | 1 | .01 | 1 | 12 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 1 | 1 | 1 | 95 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Sulfate, dissolved | 1 | .1 | 1 | 50 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Chloride, dissolved | 294 | .1 | 294 | 210 | 11 | 34 | 16 | 23 | 30 | 40 | 58 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 1 | 0.01 | 1 | 1.2 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 1 | .01 | 1 | .14 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Intracoastal Waterway at Wax Lake East Control Structure near Calumet (35)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 1 | 2 | 1 | 6 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 1 | 10 | 0 | <10 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 1 | 10 | 0 | <10 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 1 | 10 | 0 | <10 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 1 | 0.001 | 0 | <0.001 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 1 | .01 | 1 | .01 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 1 | .001 | 0 | <.001 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 1 | .001 | 0 | <.001 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 1 | .01 | 1 | .25 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Keith Lake Station 1B at center near Melville (60)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 54 | (a) | (a) | 542 | 212 | 371 | 260 | 296 | 342 | 448 | 541 |
| pH (standard units) | 54 | (a) | (a) | 8.4 | 7.2 | 7.9 | 7.3 | 7.8 | 8.0 | 8.1 | 8.3 |
| Water temperature | 54 | (a) | (a) | 34.0 | 9.5 | 22.6 | 10.4 | 15.2 | 23.2 | 29.5 | 32.6 |
| Dissolved oxygen (milligrams per liter) | 54 | (a) | (a) | 15.0 | 2.2 | 8.0 | 2.3 | 5.0 | 8.4 | 10.8 | 13.8 |
| Dissolved solids (milligrams per liter) | 22 | (a) | (a) | 310 | 136 | 213 | 137 | 171 | 198 | 269 | 308 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 13 | 0.01 | 13 | 44 | 21 | 35 | 21 | 28 | 37 | 41 | 44 |
| Magnesium, dissolved | 13 | .01 | 13 | 17 | 7.6 | 13 | 7.6 | 10 | 13 | 16 | 17 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 50 | 1 | 50 | 207 | 91 | 150 | 103 | 118 | 144 | 187 | 207 |
| Sulfate, dissolved | 13 | .1 | 13 | 14 | 3.3 | 6.8 | 3.3 | 4.8 | 6.1 | 9.2 | 14 |
| Chloride, dissolved | 13 | .1 | 13 | 34 | 8.8 | 21 | 8.8 | 16 | 22 | 25 | 34 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 22 | 0.01 | 22 | 1.7 | 0.80 | 1.1 | 0.80 | 0.90 | 1.0 | 1.2 | 1.7 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 22 | .10 | 5 | .25 | <.10 | (c) | <.10 | <.10 | <.10 | <.10 | .19 |
| Phosphorus, total as phosphorus | 22 | .01 | 22 | .32 | .09 | .17 | .09 | .12 | .16 | .20 | .31 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Keith Lake Station 1B at center near Melville (60)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Iron, dissolved | 13 | 10 | 8 | 80 | <10 | (c) | <10 | <10 | 30 | 40 | 80 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 1 | 0.001 | 0 | <0.001 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 1 | .001 | 0 | <.001 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 1 | .1 | 0 | <.1 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 1 | .001 | 0 | <.001 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 1 | .01 | 0 | <.01 | (d) | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Buhlow (site 1) at Pineville (2)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 39 | (a) | (a) | 132 | 39 | 106 | 40 | 99 | 117 | 122 | 129 |
| pH (standard units) | 39 | (a) | (a) | 8.5 | 5.7 | 6.4 | 5.7 | 5.9 | 6.3 | 6.5 | 8.1 |
| Water temperature | 39 | (a) | (a) | 34.0 | 8.0 | 22.3 | 8.5 | 18.0 | 23.5 | 29.0 | 31.5 |
| Dissolved oxygen (milligrams per liter) | 39 | (a) | (a) | 12.8 | 2.9 | 6.9 | 2.9 | 5.0 | 6.0 | 8.4 | 10.5 |
| Dissolved solids (milligrams per liter) | 39 | (a) | (a) | 107 | 48 | 78 | 51 | 68 | 77 | 84 | 97 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 39 | 1 | 39 | 40 | 8 | 30 | 9 | 22 | 32 | 37 | 40 |
| Nutrients (milligrams per liter) | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 17 | 0.01 | 17 | 0.37 | 0.02 | 0.20 | 0.02 | 0.12 | 0.19 | 0.29 | 0.37 |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 37 | 20 | 6 | 6,900 | <20 | (c) | <20 | <20 | <20 | 130 | 6,900 |
| Fecal streptococcus | 37 | 1 | 37 | 32,000 | 30 | 2,900 | 39 | 150 | 390 | 1,900 | 25,000 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Buhlow (site 2) at Pineville (1)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 51 | (a) | (a) | 131 | 38 | 103 | 48 | 96 | 109 | 119 | 129 |
| pH (standard units) | 51 | (a) | (a) | 8.5 | 5.4 | 6.6 | 5.5 | 6.0 | 6.5 | 7.1 | 8.4 |
| Water temperature | 51 | (a) | (a) | 33.0 | 8.5 | 24.0 | 9.7 | 18.5 | 27.5 | 29.5 | 31.6 |
| Dissolved oxygen (milligrams per liter) | 51 | (a) | (a) | 15.6 | 2.3 | 7.5 | 2.7 | 6.3 | 7.5 | 8.8 | 10.8 |
| Dissolved solids (milligrams per liter) | 51 | (a) | (a) | 108 | 42 | 77 | 49 | 70 | 77 | 86 | 98 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 51 | 1 | 51 | 41 | 6 | 30 | 8 | 29 | 34 | 36 | 40 |
| Nutrients (milligrams per liter) | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 18 | 0.01 | 18 | 2.5 | 0.07 | 0.44 | 0.07 | 0.13 | 0.21 | 0.24 | 2.5 |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 48 | 2 | 18 | 4,000 | <2 | (c) | <2 | <2 | 5 | 70 | 880 |
| Fecal streptococcus | 49 | 1 | 49 | 22,000 | 12 | 1,700 | 21 | 61 | 290 | 1,000 | 16,000 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Buhlow (site 3) at Pineville (3)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 38 | (a) | (a) | 132 | 39 | 101 | 39 | 95 | 108 | 122 | 132 |
| pH (standard units) | 38 | (a) | (a) | 8.6 | 4.9 | 6.5 | 4.9 | 5.9 | 6.5 | 6.9 | 8.5 |
| Water temperature | 38 | (a) | (a) | 33.0 | 8.5 | 22.5 | 8.5 | 17.5 | 24.0 | 29.0 | 30.6 |
| Dissolved oxygen (milligrams per liter) | 38 | (a) | (a) | 12.0 | 1.8 | 7.4 | 1.8 | 6.0 | 7.6 | 8.8 | 10.3 |
| Dissolved solids (milligrams per liter) | 38 | (a) | (a) | 97 | 42 | 74 | 51 | 64 | 76 | 85 | 97 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 38 | 1 | 38 | 39 | 3 | 28 | 3 | 22 | 34 | 37 | 39 |
| Nutrients (milligrams per liter) | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 16 | 0.01 | 16 | 0.26 | 0.02 | 0.17 | 0.02 | 0.08 | 0.21 | 0.24 | 0.26 |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 34 | 20 | 11 | 3,500 | <20 | (c) | <20 | <20 | <20 | 120 | 2,200 |
| Fecal streptococcus | 36 | 1 | 36 | 12,000 | 20 | 1,300 | 20 | 68 | 170 | 980 | 12,000 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Buhlow (site 4) at Pineville (4)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 39 | (a) | (a) | 140 | 39 | 103 | 40 | 95 | 108 | 124 | 140 |
| pH (standard units) | 39 | (a) | (a) | 9.1 | 5.1 | 6.7 | 5.1 | 6.2 | 6.6 | 6.9 | 8.5 |
| Water temperature | 39 | (a) | (a) | 31.0 | 8.5 | 22.4 | 8.5 | 17.5 | 24.0 | 29.0 | 31.0 |
| Dissolved oxygen (milligrams per liter) | 39 | (a) | (a) | 15.1 | .0 | 7.1 | 2.3 | 4.9 | 8.0 | 8.9 | 11.1 |
| Dissolved solids (milligrams per liter) | 39 | (a) | (a) | 102 | 35 | 73 | 42 | 64 | 73 | 83 | 101 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 39 | 1 | 39 | 45 | 5 | 30 | 5 | 22 | 35 | 38 | 45 |
| Nutrients (milligrams per liter) | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 19 | 0.01 | 19 | 0.27 | 0.02 | 0.17 | 0.02 | 0.13 | 0.20 | 0.24 | 0.27 |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 37 | 20 | 14 | 420 | <20 | (c) | <20 | <20 | <20 | 72 | 360 |
| Fecal streptococcus | 37 | 1 | 37 | 2,600 | 5 | 630 | 24 | 94 | 230 | 1,200 | 2,200 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Henderson near Atchafalaya (54)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 12 | (a) | (a) | 373 | 90 | 198 | 90 | 115 | 175 | 260 | 373 |
| pH (standard units) | 12 | (a) | (a) | 7.8 | 6.4 | 7.0 | 6.4 | 6.6 | 7.0 | 7.3 | 7.8 |
| Water temperature | 12 | (a) | (a) | 32.0 | 10.0 | 20.0 | 10.0 | 13.9 | 20.2 | 27.5 | 32.0 |
| Dissolved oxygen (milligrams per liter) | 12 | (a) | (a) | 9.2 | 3.6 | 6.2 | 3.6 | 4.0 | 6.4 | 8.0 | 9.2 |
| Dissolved solids (milligrams per liter) | 12 | (a) | (a) | 220 | 61 | 124 | 61 | 88 | 115 | 153 | 220 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 12 | 0.01 | 12 | 30 | 9.6 | 18 | 9.6 | 11 | 16 | 25 | 30 |
| Magnesium, dissolved | 12 | .01 | 12 | 11 | 3.5 | 6.1 | 3.5 | 3.9 | 5.8 | 8.2 | 11 |
| Sodium, dissolved | 12 | .01 | 12 | 33 | 3.3 | 11 | 3.3 | 4.6 | 6.9 | 12 | 33 |
| Potassium, dissolved | 12 | .01 | 12 | 8.8 | 2.2 | 3.8 | 2.2 | 2.8 | 3.1 | 4.5 | 8.8 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 12 | 1 | 12 | 110 | 34 | 67 | 34 | 42 | 69 | 85 | 110 |
| Sulfate, dissolved | 12 | .1 | 12 | 24 | 1.0 | 9.5 | 1.0 | 4.6 | 9.4 | 12 | 24 |
| Chloride, dissolved | 12 | .1 | 12 | 54 | 1.7 | 15 | 1.7 | 5.6 | 9.4 | 16 | 54 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 12 | 0.01 | 12 | 4.3 | 0.57 | 1.3 | 0.57 | 0.82 | 1.1 | 1.4 | 4.3 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 12 | .01 | 12 | .26 | .01 | .06 | .01 | .01 | .02 | .11 | .26 |
| Phosphorus, total as phosphorus | 12 | .01 | 12 | .32 | .11 | .20 | .11 | .16 | .21 | .22 | .32 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Henderson near Atchafalaya (54)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 10 | 10 | 5 | 8,400 | <10 | (c) | <10 | <10 | <10 | 20 | 8,400 |
| Fecal streptococcus | 11 | 1 | 11 | 1,000 | 5 | 230 | 5 | 10 | 40 | 530 | 1,000 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 3 | 2 | 3 | 11 | 9 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 3 | 10 | 3 | 320 | 100 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 3 | 4 | 1 | 4 | <4 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 3 | 2 | 3 | 20 | 5 | (b) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 3 | 0.001 | 0 | <0.001 | <0.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 3 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 3 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 2 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 3 | .01 | 2 | .04 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Henderson near Henderson (53)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 16 | (a) | (a) | 468 | 106 | 222 | 106 | 141 | 198 | 272 | 468 |
| pH (standard units) | 16 | (a) | (a) | 8.3 | 6.3 | 7.2 | 6.3 | 6.8 | 7.3 | 7.6 | 8.3 |
| Water temperature | 16 | (a) | (a) | 35.0 | 6.0 | 20.3 | 6.0 | 13.6 | 20.5 | 28.1 | 35.0 |
| Dissolved oxygen (milligrams per liter) | 15 | (a) | (a) | 12.6 | 4.6 | 8.5 | 4.6 | 6.6 | 8.6 | 10.6 | 12.6 |
| Dissolved solids (milligrams per liter) | 16 | (a) | (a) | 257 | 70 | 135 | 70 | 100 | 122 | 167 | 257 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 16 | 0.01 | 16 | 36 | 9.7 | 20 | 9.7 | 15 | 18 | 28 | 36 |
| Magnesium, dissolved | 16 | .01 | 16 | 12 | 3.0 | 6.9 | 3.0 | 5.0 | 6.6 | 8.2 | 12 |
| Sodium, dissolved | 16 | .01 | 16 | 36 | 3.8 | 12 | 3.8 | 5.6 | 9.6 | 15 | 36 |
| Potassium, dissolved | 16 | .01 | 16 | 4.1 | 2.3 | 3.4 | 2.3 | 2.8 | 3.6 | 4.0 | 4.1 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 16 | 1 | 16 | 130 | 38 | 69 | 38 | 48 | 62 | 88 | 130 |
| Sulfate, dissolved | 16 | .1 | 16 | 62 | 3.1 | 17 | 3.1 | 7.6 | 12 | 21 | 62 |
| Chloride, dissolved | 16 | .1 | 16 | 62 | 3.9 | 19 | 3.9 | 7.0 | 13 | 26 | 62 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 13 | 0.01 | 13 | 1.8 | 0.72 | 1.2 | 0.72 | 0.80 | 1.1 | 1.5 | 1.8 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 16 | .01 | 16 | .38 | .01 | .09 | .01 | .02 | .06 | .12 | .38 |
| Phosphorus, total as phosphorus | 16 | .01 | 16 | .27 | .04 | .16 | .04 | .13 | .15 | .22 | .27 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lake Henderson near Henderson (53)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 14 | 10 | 6 | 4,000 | <10 | (c) | <10 | <10 | <10 | 100 | 4,000 |
| Fecal streptococcus | 14 | 10 | 11 | 720 | <10 | 190 | <10 | 10 | 80 | 210 | 720 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 4 | 2 | 4 | 9 | 3 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 4 | 10 | 4 | 210 | 30 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 4 | 2 | 1 | 2 | <2 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 4 | 20 | 2 | 20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 4 | 0.001 | 0 | <0.001 | <0.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 4 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 4 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 4 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 4 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 2 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 4 | .01 | 3 | .20 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Little Bayou Sorrel near Morgan City (45)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 16 | (a) | (a) | 840 | 225 | 377 | 225 | 276 | 314 | 420 | 840 |
| pH (standard units) | 16 | (a) | (a) | 8.2 | 7.0 | 7.5 | 7.0 | 7.2 | 7.4 | 7.9 | 8.2 |
| Water temperature | 16 | (a) | (a) | 30.0 | 13.0 | 22.2 | 13.0 | 19.5 | 22.2 | 27.2 | 30.0 |
| Dissolved oxygen (milligrams per liter) | 16 | (a) | (a) | 7.8 | 1.2 | 3.5 | 1.2 | 2.0 | 3.0 | 4.9 | 7.8 |
| Dissolved solids (milligrams per liter) | 14 | (a) | (a) | 469 | 135 | 226 | 135 | 162 | 187 | 262 | 469 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 14 | 0.01 | 14 | 38 | 23 | 33 | 23 | 30 | 34 | 37 | 38 |
| Magnesium, dissolved | 14 | .01 | 14 | 13 | 6.8 | 9.9 | 6.8 | 8.1 | 10 | 11 | 13 |
| Sodium, dissolved | 1 | .01 | 1 | 110 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Potassium, dissolved | 1 | .01 | 1 | 4.5 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 14 | 1 | 14 | 118 | 62 | 92 | 62 | 81 | 92 | 103 | 118 |
| Sulfate, dissolved | 14 | .1 | 14 | 59 | 21 | 32 | 21 | 24 | 30 | 36 | 59 |
| Chloride, dissolved | 14 | .1 | 14 | 180 | 11 | 45 | 11 | 14 | 20 | 48 | 180 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 3 | 0.01 | 3 | 0.65 | 0.56 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 6 | .01 | 6 | .17 | .04 | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 14 | .01 | 14 | .16 | .03 | .10 | .03 | .08 | .10 | .13 | .16 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Little Bayou Sorrel near Morgan City (45)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 2 | 2 | 2 | 3 | 3 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 13 | 10 | 7 | 80 | <10 | (c) | <10 | <10 | 20 | 50 | 80 |
| Lead, dissolved | 2 | 2 | 2 | 2 | 2 | (b) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 2 | 20 | 1 | 20 | <20 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 3 | 0.001 | 0 | <0.001 | <0.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 3 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 3 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 3 | .001 | 0 | <.001 | <.001 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 3 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 3 | .01 | 1 | .10 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Loving Creek near Woodworth (66)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 24 | (a) | (a) | 43 | 18 | 33 | 20 | 31 | 34 | 35 | 42 |
| pH (standard units) | 26 | (a) | (a) | 7.4 | 5.5 | 6.7 | 5.5 | 6.6 | 6.9 | 7.0 | 7.3 |
| Water temperature | 26 | (a) | (a) | 27.0 | 10.5 | 19.0 | 10.7 | 15.0 | 19.8 | 22.1 | 26.3 |
| Dissolved oxygen (milligrams per liter) | 25 | (a) | (a) | 10.8 | 7.6 | 8.9 | 7.6 | 8.2 | 8.9 | 9.4 | 10.7 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 26 | 1 | 26 | 16 | 3 | 11 | 5 | 10 | 12 | 13 | 16 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lower Atchafalaya River at Morgan City (15)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 293 | (a) | (a) | 991 | 182 | 374 | 236 | 292 | 368 | 438 | 569 |
| pH (standard units) | 305 | (a) | (a) | 8.3 | 6.2 | 7.6 | 6.9 | 7.4 | 7.6 | 7.8 | 8.1 |
| Water temperature | 254 | (a) | (a) | 32.0 | 5.0 | 19.3 | 6.5 | 12.0 | 20.0 | 27.0 | 30.0 |
| Dissolved oxygen (milligrams per liter) | 284 | (a) | (a) | 12.5 | 3.7 | 8.0 | 5.3 | 6.7 | 7.8 | 9.4 | 11.1 |
| Dissolved solids (milligrams per liter) | 141 | (a) | (a) | 378 | 129 | 220 | 143 | 174 | 215 | 260 | 324 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 278 | 0.01 | 278 | 60 | 17 | 34 | 22 | 28 | 34 | 40 | 48 |
| Magnesium, dissolved | 278 | .01 | 278 | 19 | 2.4 | 10 | 5.7 | 7.8 | 10 | 12 | 16 |
| Sodium, dissolved | 206 | .01 | 206 | 64 | 2.5 | 22 | 10 | 15 | 20 | 27 | 40 |
| Potassium, dissolved | 206 | .01 | 206 | 5.8 | .7 | 3.1 | 2.3 | 2.7 | 3.0 | 3.5 | 4.3 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 290 | 1 | 290 | 152 | 43 | 93 | 59 | 73 | 90 | 110 | 136 |
| Sulfate, dissolved | 300 | .1 | 300 | 220 | 10 | 44 | 23 | 32 | 39 | 52 | 71 |
| Chloride, dissolved | 302 | .1 | 302 | 170 | 10 | 31 | 14 | 20 | 27 | 36 | 60 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 131 | 0.01 | 131 | 2.2 | 0.30 | 0.82 | 0.40 | 0.60 | 0.78 | 1.0 | 1.4 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 274 | .01 | 274 | 2.6 | .10 | .90 | .36 | .62 | .84 | 1.1 | 1.6 |
| Phosphorus, total as phosphorus | 282 | .01 | 282 | 2.7 | .04 | .22 | .07 | .11 | .17 | .25 | .46 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lower Atchafalaya River at Morgan City (15)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Biological constituents** | | | | | | | | | | | |
| Fecal coliform (colonies per 100 milliliters) | 195 | 1 | 195 | 4,500 | 2 | 150 | 4 | 15 | 40 | 100 | 290 |
| Fecal streptococcus (colonies per 100 milliliters) | 191 | 1 | 191 | 9,000 | 2 | 410 | 6 | 28 | 85 | 300 | 2,000 |
| Phytoplankton (cells per milliliter) | 26 | 0 | 26 | 67,000 | 210 | 8,400 | 320 | 2,100 | 2,800 | 8,000 | 60,000 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Copper, dissolved | 207 | 20 | 2 | 28 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 282 | 25 | 167 | 320 | <25 | (c) | <25 | <25 | 30 | 60 | 120 |
| Lead, dissolved | 247 | 5 | 17 | 13 | <5 | (c) | <5 | <5 | <5 | <5 | 5 |
| Zinc, dissolved | 248 | 20 | 29 | 67 | <20 | (c) | <20 | <20 | <20 | <20 | 20 |
| **Organic compounds (micrograms per liter)** | | | | | | | | | | | |
| DDT, total | 267 | 0.01 | 5 | 0.21 | <0.01 | (c) | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| PCB, total | 266 | .1 | 3 | .2 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 243 | .01 | 71 | .11 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .02 |
| Lindane, total | 267 | .01 | 1 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Chlordane, total | 267 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 243 | .01 | 3 | .08 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 267 | .01 | 7 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 243 | .01 | 1 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 267 | .01 | 13 | .08 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endosulfan, total | 202 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| 2,4-D, total | 213 | .5 | 0 | <.5 | <.5 | (c) | <.5 | <.5 | <.5 | <.5 | <.5 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lower Grand River at Bayou Sorrel (9)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 52 | (a) | (a) | 530 | 170 | 365 | 208 | 330 | 366 | 409 | 501 |
| pH (standard units) | 58 | (a) | (a) | 8.2 | 6.0 | 7.2 | 6.5 | 7.0 | 7.3 | 7.4 | 7.8 |
| Water temperature | 52 | (a) | (a) | 32.0 | 8.0 | 22.2 | 8.0 | 16.4 | 23.0 | 28.9 | 31.2 |
| Dissolved oxygen (milligrams per liter) | 52 | (a) | (a) | 10.4 | 2.2 | 6.3 | 3.1 | 5.2 | 6.0 | 7.6 | 10.0 |
| Dissolved solids (milligrams per liter) | 58 | (a) | (a) | 560 | 115 | 236 | 132 | 194 | 218 | 272 | 381 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 52 | 0.01 | 52 | 47 | 13 | 34 | 16 | 29 | 35 | 39 | 45 |
| Magnesium, dissolved | 52 | .01 | 52 | 17 | 4.7 | 11 | 5.6 | 9.4 | 11 | 12 | 16 |
| Sodium, dissolved | 52 | .01 | 52 | 39 | 10 | 21 | 11 | 17 | 19 | 27 | 36 |
| Potassium, dissolved | 52 | .01 | 52 | 6.3 | 2.8 | 3.6 | 3.0 | 3.3 | 3.6 | 3.8 | 4.4 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 52 | 1 | 52 | 136 | 47 | 100 | 61 | 87 | 104 | 114 | 131 |
| Sulfate, dissolved | 58 | .1 | 58 | 80 | 7.2 | 35 | 15 | 23 | 31 | 44 | 66 |
| Chloride, dissolved | 59 | .1 | 59 | 190 | 11 | 38 | 16 | 22 | 26 | 37 | 130 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 50 | 0.1 | 50 | 2.1 | 0.4 | 1.0 | 0.5 | 0.7 | 0.9 | 1.2 | 1.5 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 52 | .01 | 52 | 2.0 | .15 | .88 | .20 | .50 | .84 | 1.1 | 1.9 |
| Phosphorus, total as phosphorus | 50 | .01 | 50 | .38 | .09 | .20 | .10 | .14 | .18 | .25 | .35 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lower Grand River at Bayou Sorrel (9)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents | | | | | | | | | | | |
| Fecal coliform (colonies per 100 milliliters) | 50 | 1 | 50 | 4,000 | 5 | 370 | 34 | 100 | 200 | 370 | 1,800 |
| Fecal streptococcus (colonies per 100 milliliters) | 50 | 1 | 50 | 43,000 | 5 | 2,500 | 9 | 130 | 400 | 1,500 | 13,000 |
| Phytoplankton (cells per milliliter) | 19 | 0 | 19 | 14,000 | 65 | 4,000 | 65 | 560 | 3,200 | 5,800 | 14,000 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 31 | 1 | 31 | 67 | 1 | 7 | 2 | 3 | 5 | 7 | 39 |
| Iron, dissolved | 32 | 10 | 24 | 130 | <10 | (c) | <10 | <10 | 30 | 60 | 120 |
| Lead, dissolved | 31 | 5 | 5 | 17 | <5 | (c) | <5 | <5 | <5 | <5 | 7 |
| Zinc, dissolved | 31 | 20 | 9 | 33 | <20 | (c) | <20 | <20 | <20 | 20 | 33 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Lower Grand River at Pigeon (65)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| pH (standard units) | 9 | (a) | (a) | 7.8 | 7.0 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved solids (milligrams per liter) | 9 | (a) | (a) | 338 | 217 | (b) | (b) | (b) | (b) | (b) | (b) |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Sulfate, dissolved | 9 | 0.1 | 9 | 59 | 18 | (b) | (b) | (b) | (b) | (b) | (b) |
| Chloride, dissolved | 10 | .1 | 10 | 69 | 29 | 52 | 29 | 42 | 54 | 66 | 69 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Spring Creek near Glenmora (16)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 45 | (a) | (a) | 454 | 21 | 53 | 34 | 40 | 43 | 46 | 83 |
| pH (standard units) | 45 | (a) | (a) | 7.6 | 5.7 | 6.5 | 5.8 | 6.2 | 6.5 | 6.7 | 7.1 |
| Water temperature | 46 | (a) | (a) | 31.0 | 1.5 | 17.9 | 7.0 | 14.5 | 18.5 | 22.2 | 25.2 |
| Dissolved oxygen (milligrams per liter) | 36 | (a) | (a) | 10.1 | 6.9 | 8.5 | 7.2 | 7.6 | 8.6 | 9.3 | 10.1 |
| Dissolved solids (milligrams per liter) | 18 | (a) | (a) | 65 | 41 | 51 | 41 | 48 | 51 | 54 | 65 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 18 | 0.01 | 18 | 2.9 | 1.5 | 2.2 | 1.5 | 2.0 | 2.2 | 2.4 | 2.9 |
| Magnesium, dissolved | 18 | .01 | 18 | 1.0 | .20 | .65 | .20 | .50 | .70 | .72 | 1.0 |
| Sodium, dissolved | 18 | .01 | 18 | 6.2 | 3.9 | 5.0 | 3.9 | 4.5 | 5.0 | 5.4 | 6.2 |
| Potassium, dissolved | 18 | .01 | 18 | 2.4 | .10 | 1.3 | .10 | 1.1 | 1.4 | 1.5 | 2.4 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 44 | 1 | 43 | 37 | <1 | (c) | 4 | 12 | 14 | 15 | 19 |
| Sulfate, dissolved | 18 | .1 | 17 | 2.6 | <.1 | (c) | <.1 | .7 | 1.6 | 1.8 | 2.6 |
| Chloride, dissolved | 18 | .1 | 18 | 6.0 | 2.8 | 4.1 | 2.8 | 3.8 | 3.9 | 4.5 | 6.0 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 8 | 0.01 | 8 | 0.64 | 0.27 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 8 | .01 | 7 | .12 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 8 | .01 | 7 | .23 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Spring Creek near Glenmora (16)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 9 | 1 | 9 | 420 | 50 | (b) | (b) | (b) | (b) | (b) | (b) |
| Fecal streptococcus | 10 | 1 | 10 | 9,600 | 25 | 2,800 | 25 | 30 | 460 | 7,400 | 9,600 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 2 | 2 | 2 | 3 | 2 | (b) | (b) | (b) | (b) | (b) | (b) |
| Iron, dissolved | 2 | 10 | 2 | 130 | 130 | (b) | (b) | (b) | (b) | (b) | (b) |
| Lead, dissolved | 2 | 1 | 1 | 3 | <1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Zinc, dissolved | 2 | 1 | 2 | 10 | 4 | (b) | (b) | (b) | (b) | (b) | (b) |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 2 | 0.01 | 0 | <0.01 | <0.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| PCB, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Diazinon, total | 2 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Lindane, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Chlordane, total | 2 | .1 | 0 | <.1 | <.1 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Malathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Parathion, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Dieldrin, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Endosulfan, total | 2 | .01 | 0 | <.01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| 2,4-D, total | 2 | .01 | 1 | .01 | <.01 | (b,c) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Upper Clear Bayou near Woodworth (67)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 25 | (a) | (a) | 40 | 17 | 31 | 18 | 28 | 31 | 34 | 39 |
| pH (standard units) | 25 | (a) | (a) | 7.2 | 4.6 | 6.6 | 4.9 | 6.6 | 6.8 | 6.9 | 7.2 |
| Water temperature | 26 | (a) | (a) | 28.0 | 9.5 | 19.1 | 9.8 | 15.8 | 20.0 | 22.8 | 27.1 |
| Dissolved oxygen (milligrams per liter) | 25 | (a) | (a) | 12.8 | 6.8 | 8.7 | 6.9 | 7.6 | 8.4 | 9.2 | 12.1 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 25 | 1 | 25 | 14 | 2 | 10 | 2 | 8 | 11 | 12 | 14 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion Bay at Cypremort Point (37)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 95 | (a) | (a) | 20,300 | 111 | 7,340 | 723 | 3,060 | 6,960 | 10,500 | 17,100 |
| pH (standard units) | 94 | (a) | (a) | 8.3 | 6.0 | 7.6 | 7.0 | 7.5 | 7.7 | 7.9 | 8.1 |
| Water temperature | 35 | (a) | (a) | 32.5 | 8.5 | 20.3 | 8.9 | 13.5 | 20.5 | 27.5 | 31.3 |
| Dissolved oxygen (milligrams per liter) | 90 | (a) | (a) | 11.8 | 5.2 | 8.6 | 6.7 | 7.7 | 8.6 | 9.3 | 11.5 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 81 | 0.01 | 81 | 180 | 7.1 | 71 | 19 | 38 | 65 | 95 | 150 |
| Magnesium, dissolved | 81 | .01 | 81 | 480 | 2.3 | 160 | 11 | 40 | 150 | 230 | 420 |
| Sodium, dissolved | 26 | .01 | 26 | 3,800 | 12 | 1,500 | 57 | 650 | 1,200 | 2,400 | 3,600 |
| Potassium, dissolved | 26 | .01 | 26 | 150 | 3.1 | 56 | 4.5 | 26 | 47 | 90 | 140 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 94 | 1 | 94 | 118 | 21 | 62 | 37 | 53 | 62 | 69 | 95 |
| Sulfate, dissolved | 94 | .1 | 94 | 960 | 8.5 | 300 | 25 | 94 | 260 | 440 | 820 |
| Chloride, dissolved | 94 | .1 | 94 | 7,000 | 20 | 2,300 | 160 | 850 | 2,200 | 3,300 | 5,800 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 2 | 0.01 | 2 | 0.94 | 0.86 | (b) | (b) | (b) | (b) | (b) | (b) |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 86 | .10 | 53 | 1.0 | <.10 | (b,c) | <.10 | <.10 | .16 | .34 | .69 |
| Phosphorus, total as phosphorus | 93 | .01 | 93 | 1.7 | .04 | .19 | .06 | .08 | .11 | .21 | .65 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion Bay at Cypremort Point (37)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 27 | 5 | 11 | 4,500 | <5 | (c) | <5 | <5 | <5 | 30 | 160 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 52 | 20 | 0 | <20 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 93 | 10 | 71 | 280 | <10 | (c) | <10 | 20 | 30 | 40 | 100 |
| Lead, dissolved | 93 | 2 | 16 | 10 | <2 | (c) | <2 | <2 | <2 | <2 | 5 |
| Zinc, dissolved | 93 | 20 | 29 | 40 | <20 | (c) | <20 | <20 | <20 | 20 | 30 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 92 | 0.001 | 2 | 0.001 | <0.001 | (c) | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 |
| PCB, total | 92 | .1 | 2 | .2 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | .1 |
| Diazinon, total | 68 | .01 | 19 | .10 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .02 |
| Lindane, total | 92 | .001 | 5 | .006 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | .001 |
| Chlordane, total | 92 | .1 | 1 | .1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 68 | .01 | 2 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Endrin, total | 92 | .01 | 1 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 68 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 92 | .01 | 1 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endosulfan, total | 31 | .001 | 0 | <.001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| 2,4-D, total | 39 | .01 | 26 | .36 | <.01 | (c) | <.01 | <.01 | .01 | .04 | .22 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion Bay at Redfish Point near Henry (38)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 25 | (a) | (a) | 18,600 | 1,120 | 8,280 | 1,150 | 3,920 | 8,290 | 12,000 | 17,900 |
| pH (standard units) | 25 | (a) | (a) | 7.9 | 6.9 | 7.5 | 6.9 | 7.2 | 7.6 | 7.7 | 7.9 |
| Water temperature | 4 | (a) | (a) | 22.5 | 15.5 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved oxygen (milligrams per liter) | 25 | (a) | (a) | 11.8 | 5.3 | 8.9 | 5.8 | 7.6 | 8.5 | 10.7 | 11.8 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 24 | 0.01 | 24 | 150 | 13 | 69 | 13 | 41 | 65 | 96 | 150 |
| Magnesium, dissolved | 24 | .01 | 24 | 410 | 18 | 180 | 18 | 97 | 180 | 260 | 400 |
| Sodium, dissolved | 24 | .01 | 24 | 3,500 | 170 | 1,500 | 170 | 820 | 1,400 | 2,200 | 3,400 |
| Potassium, dissolved | 24 | .01 | 24 | 140 | 8.5 | 59 | 8.5 | 33 | 56 | 88 | 140 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 25 | 1 | 25 | 72 | 27 | 49 | 27 | 38 | 52 | 62 | 72 |
| Sulfate, dissolved | 24 | .1 | 24 | 950 | 41 | 370 | 41 | 190 | 340 | 540 | 900 |
| Chloride, dissolved | 28 | .1 | 28 | 6,300 | 280 | 2,400 | 290 | 600 | 2,100 | 3,700 | 6,000 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 24 | 0.01 | 21 | 0.62 | <0.01 | (c) | <0.01 | 0.01 | 0.14 | 0.28 | 0.60 |
| Phosphorus, total as phosphorus | 24 | .01 | 24 | .91 | .03 | .18 | .04 | .08 | .12 | .17 | .83 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion Bay at Redfish Point near Henry (38)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 24 | 10 | 13 | 560 | <10 | (c) | <10 | <10 | 10 | 50 | 380 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 24 | 1 | 23 | 17 | <1 | (c) | <1 | 2 | 3 | 5 | 16 |
| Iron, dissolved | 24 | 10 | 21 | 210 | <10 | (c) | <10 | 20 | 40 | 50 | 120 |
| Lead, dissolved | 24 | 2 | 8 | 4 | <2 | (c) | <2 | <2 | <2 | 2 | 3 |
| Zinc, dissolved | 24 | 20 | 14 | 30 | <20 | (c) | <20 | <20 | 20 | 20 | 30 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 25 | 0.001 | 0 | <0.001 | <0.001 | (c) | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| PCB, total | 25 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 25 | .01 | 16 | .03 | <.01 | (c) | <.01 | <.01 | .01 | .01 | .01 |
| Lindane, total | 25 | .001 | 5 | .001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | .001 |
| Chlordane, total | 25 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 25 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 25 | .001 | 0 | <.001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| Parathion, total | 25 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 25 | .001 | 10 | .004 | <.001 | (c) | <.001 | <.001 | <.001 | .001 | .003 |
| Endosulfan, total | 24 | .001 | 1 | .001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| 2,4-D, total | 23 | .01 | 13 | .08 | <.01 | (c) | <.01 | <.01 | .01 | .03 | .07 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River at Bancker Ferry near Abbeville (29)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 88 | (a) | (a) | 9,350 | 53 | 603 | 121 | 168 | 232 | 340 | 3,730 |
| pH (standard units) | 88 | (a) | (a) | 7.9 | 6.7 | 7.3 | 6.9 | 7.2 | 7.3 | 7.5 | 7.8 |
| Major cations (milligrams per liter) | | | | | | | | | | | |
| Calcium, dissolved | 88 | 0.01 | 88 | 80 | 1.1 | 12 | 4.7 | 6.6 | 8.8 | 12 | 37 |
| Magnesium, dissolved | 88 | .01 | 88 | 200 | 1.5 | 12 | 2.6 | 4.0 | 5.8 | 7.3 | 74 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 88 | 1 | 88 | 78 | 9 | 37 | 20 | 28 | 32 | 47 | 66 |
| Sulfate, dissolved | 88 | .1 | 88 | 410 | 2.0 | 19 | 2.7 | 3.5 | 5.2 | 7.7 | 140 |
| Chloride, dissolved | 88 | .1 | 88 | 2,900 | 10 | 160 | 22 | 30 | 42 | 77 | 1,100 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River at Lafayette (26)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 25 | (a) | (a) | 691 | 126 | 323 | 132 | 183 | 256 | 444 | 685 |
| pH (standard units) | 18 | (a) | (a) | 7.6 | 6.5 | 7.0 | 6.5 | 6.9 | 7.0 | 7.2 | 7.6 |
| Water temperature | 24 | (a) | (a) | 32.0 | 8.0 | 21.6 | 8.2 | 15.5 | 22.0 | 27.8 | 31.8 |
| Dissolved oxygen (milligrams per liter) | 19 | (a) | (a) | 10.0 | .2 | 4.3 | .2 | 2.6 | 4.5 | 5.6 | 10.0 |
| Dissolved solids (milligrams per liter) | 16 | (a) | (a) | 392 | 100 | 235 | 100 | 156 | 228 | 306 | 392 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 17 | 0.01 | 17 | 33 | 10 | 21 | 10 | 16 | 20 | 25 | 33 |
| Magnesium, dissolved | 17 | .01 | 17 | 11 | 2.6 | 6.3 | 2.6 | 4.6 | 5.8 | 7.8 | 11 |
| Sodium, dissolved | 17 | .01 | 17 | 96 | 9.1 | 47 | 9.1 | 20 | 46 | 76 | 96 |
| Potassium, dissolved | 17 | .01 | 17 | 8.3 | 3.3 | 4.8 | 3.3 | 3.7 | 4.2 | 6.0 | 8.3 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 17 | 1 | 17 | 148 | 34 | 76 | 34 | 50 | 74 | 89 | 148 |
| Sulfate, dissolved | 17 | .1 | 17 | 18 | 3.0 | 10 | 3.0 | 6.9 | 10 | 12 | 18 |
| Chloride, dissolved | 17 | .1 | 17 | 120 | 10 | 60 | 10 | 24 | 64 | 99 | 120 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River at Perry (28)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 92 | (a) | (a) | 2,200 | 71 | 285 | 104 | 163 | 229 | 329 | 597 |
| pH (standard units) | 88 | (a) | (a) | 7.6 | 5.7 | 6.8 | 6.1 | 6.5 | 6.7 | 7.1 | 7.5 |
| Water temperature | 86 | (a) | (a) | 31.5 | 6.0 | 21.4 | 10.7 | 14.9 | 21.5 | 27.2 | 31.0 |
| Dissolved oxygen (milligrams per liter) | 8 | (a) | (a) | 8.0 | 2.5 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved solids (milligrams per liter) | 84 | (a) | (a) | 1,200 | 69 | 183 | 84 | 114 | 157 | 201 | 350 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 85 | 0.01 | 85 | 67 | 5.5 | 17 | 6.9 | 10 | 15 | 18 | 33 |
| Magnesium, dissolved | 85 | .01 | 85 | 17 | .40 | 4.6 | 1.2 | 2.9 | 4.1 | 5.6 | 11 |
| Sodium, dissolved | 85 | .01 | 85 | 340 | 5.3 | 34 | 10 | 16 | 24 | 36 | 80 |
| Potassium, dissolved | 86 | .01 | 86 | 15 | 1.0 | 4.0 | 1.7 | 3.0 | 3.6 | 5.0 | 7.3 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 88 | 1 | 88 | 148 | 19 | 54 | 23 | 36 | 51 | 72 | 94 |
| Sulfate, dissolved | 86 | .1 | 86 | 76 | .4 | 9.4 | 4.0 | 6.4 | 8.1 | 10 | 18 |
| Chloride, dissolved | 86 | .1 | 86 | 600 | 5.6 | 50 | 13 | 22 | 33 | 55 | 130 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 1 | 0.01 | 1 | 0.11 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |
| Phosphorus, total as phosphorus | 1 | .01 | 1 | .50 | (d) | (b) | (b) | (b) | (b) | (b) | (b) |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River at State Highway 3073 at Lafayette (27)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 179 | (a) | (a) | 1,210 | 29 | 281 | 92 | 149 | 216 | 376 | 633 |
| pH (standard units) | 169 | (a) | (a) | 8.0 | 5.7 | 6.9 | 6.2 | 6.6 | 6.9 | 7.2 | 7.6 |
| Water temperature | 175 | (a) | (a) | 32.5 | 2.0 | 21.5 | 9.5 | 16.0 | 22.5 | 27.0 | 31.0 |
| Dissolved oxygen (milligrams per liter) | 160 | (a) | (a) | 10.0 | .2 | 4.5 | 1.0 | 2.7 | 4.2 | 6.2 | 8.6 |
| Dissolved solids (milligrams per liter) | 162 | (a) | (a) | 673 | 45 | 176 | 69 | 104 | 148 | 229 | 374 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 164 | 0.01 | 164 | 40 | 3.0 | 17 | 7.1 | 11 | 15 | 22 | 29 |
| Magnesium, dissolved | 164 | .01 | 164 | 15 | .50 | 5.5 | 2.1 | 3.2 | 4.7 | 7.3 | 11 |
| Sodium, dissolved | 163 | .01 | 163 | 190 | 1.8 | 31 | 6.1 | 11 | 20 | 42 | 80 |
| Potassium, dissolved | 167 | .01 | 167 | 11 | 2.0 | 4.0 | 2.5 | 3.1 | 3.8 | 4.6 | 6.4 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 169 | 1 | 169 | 148 | 10 | 59 | 26 | 37 | 51 | 79 | 112 |
| Sulfate, dissolved | 169 | .1 | 169 | 58 | 1.3 | 12 | 3.4 | 6.4 | 9.7 | 14 | 30 |
| Chloride, dissolved | 169 | .1 | 169 | 270 | 2.5 | 42 | 7.2 | 15 | 28 | 60 | 110 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 77 | 0.01 | 77 | 5.8 | 0.70 | 1.8 | 0.80 | 1.3 | 1.5 | 2.1 | 3.7 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 99 | .01 | 98 | 1.7 | <.01 | (c) | .10 | .25 | .36 | .54 | 1.2 |
| Phosphorus, total as phosphorus | 97 | .01 | 97 | 3.9 | .03 | .68 | .28 | .43 | .55 | .74 | 1.7 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River at State Highway 3073 at Lafayette (27)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Biological constituents** | | | | | | | | | | | |
| Fecal coliform (colonies per 100 milliliters) | 69 | 1 | 69 | 54,000 | 20 | 5,300 | 65 | 490 | 2,300 | 6,100 | 24,000 |
| Fecal streptococcus (colonies per 100 milliliters) | 66 | 1 | 66 | 58,000 | 100 | 5,200 | 150 | 390 | 1,800 | 6,400 | 20,000 |
| Phytoplankton (cells per milliliter) | 3 | 0 | 3 | 62,000 | 880 | (b) | (b) | (b) | (b) | (b) | (b) |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Copper, dissolved | 39 | 20 | 1 | 37 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 44 | 1 | 44 | 450 | 6 | 150 | 10 | 60 | 140 | 220 | 400 |
| Lead, dissolved | 39 | 2 | 17 | 9 | <2 | (c) | <2 | <2 | <2 | 3 | 8 |
| Zinc, dissolved | 40 | 20 | 17 | 60 | <20 | (c) | <20 | <20 | <20 | 20 | 40 |
| **Organic compounds (micrograms per liter)** | | | | | | | | | | | |
| DDT, total | 34 | 0.01 | 7 | 0.03 | <0.01 | (c) | <0.01 | <0.01 | <0.01 | <0.01 | 0.02 |
| PCB, total | 33 | .1 | 1 | .1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 33 | .01 | 30 | .43 | <.01 | (c) | <.01 | .02 | .03 | .06 | .27 |
| Lindane, total | 34 | .01 | 2 | .03 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Chlordane, total | 34 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 33 | .01 | 1 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 34 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 33 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 34 | .01 | 11 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .02 |
| Endosulfan, total | 15 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| 2,4-D, total | 33 | .01 | 29 | 1.3 | <.01 | (c) | <.01 | .04 | .09 | .15 | .75 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River at Surrey Street at Lafayette (25)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Specific conductance | 15 | (a) | (a) | 530 | 90 | 229 | 90 | 153 | 219 | 268 | 530 |
| pH (standard units) | 12 | (a) | (a) | 7.8 | 6.1 | 6.8 | 6.1 | 6.3 | 6.7 | 7.1 | 7.8 |
| Water temperature | 13 | (a) | (a) | 31.0 | 9.0 | 18.8 | 9.0 | 12.5 | 18.0 | 26.0 | 31.0 |
| Dissolved oxygen (milligrams per liter) | 4 | (a) | (a) | 3.7 | 2.0 | (b) | (b) | (b) | (b) | (b) | (b) |
| Dissolved solids (milligrams per liter) | 12 | (a) | (a) | 300 | 62 | 150 | 62 | 110 | 138 | 179 | 300 |
| Major cations (milligrams per liter) | | | | | | | | | | | |
| Calcium, dissolved | 12 | 0.01 | 12 | 24 | 4.8 | 15 | 4.8 | 9.0 | 14 | 22 | 24 |
| Magnesium, dissolved | 12 | .01 | 12 | 8.9 | 2.2 | 4.4 | 2.2 | 2.8 | 4.2 | 5.4 | 8.9 |
| Sodium, dissolved | 12 | .01 | 12 | 76 | 5.5 | 23 | 5.5 | 11 | 17 | 28 | 76 |
| Potassium, dissolved | 12 | .01 | 12 | 6.0 | 2.6 | 3.9 | 2.6 | 3.4 | 3.6 | 4.0 | 6.0 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Alkalinity, total | 12 | 1 | 12 | 92 | 21 | 52 | 21 | 32 | 42 | 83 | 92 |
| Sulfate, dissolved | 12 | .1 | 12 | 27 | 3.6 | 10 | 3.6 | 6.8 | 8.8 | 10 | 27 |
| Chloride, dissolved | 12 | .1 | 12 | 100 | 7.2 | 31 | 7.2 | 15 | 23 | 34 | 100 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River near Bancker (46)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 16 | (a) | (a) | 14,800 | 73 | 2,880 | 73 | 400 | 1,320 | 3,600 | 14,800 |
| pH (standard units) | 16 | (a) | (a) | 7.7 | 6.4 | 7.1 | 6.4 | 6.9 | 7.1 | 7.4 | 7.7 |
| Dissolved oxygen (milligrams per liter) | 15 | (a) | (a) | 11.5 | 2.8 | 6.5 | 2.8 | 5.2 | 6.5 | 7.2 | 11.5 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 15 | 0.01 | 15 | 130 | 4.1 | 32 | 4.1 | 16 | 19 | 36 | 130 |
| Magnesium, dissolved | 15 | .01 | 15 | 340 | 1.5 | 61 | 1.5 | 6.0 | 25 | 61 | 340 |
| Sodium, dissolved | 15 | .01 | 15 | 2,700 | 5.4 | 510 | 5.4 | 46 | 210 | 600 | 2,700 |
| Potassium, dissolved | 15 | .01 | 15 | 260 | 2.2 | 38 | 2.2 | 5.5 | 9.5 | 32 | 260 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 16 | 1 | 16 | 100 | 17 | 45 | 17 | 34 | 44 | 54 | 100 |
| Sulfate, dissolved | 15 | .1 | 15 | 620 | 2.8 | 140 | 2.8 | 24 | 52 | 210 | 620 |
| Chloride, dissolved | 15 | .1 | 15 | 5,000 | 8.8 | 920 | 8.8 | 76 | 380 | 1,000 | 5,000 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 16 | 0.01 | 15 | 0.63 | <0.01 | (c) | <0.01 | 0.13 | 0.25 | 0.43 | 0.63 |
| Phosphorus, total as phosphorus | 16 | .01 | 15 | .46 | <.01 | (c) | <0.01 | .12 | .22 | .34 | .46 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Vermilion River near Bancker (46)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 15 | 1 | 15 | 2,500 | 5 | 310 | 5 | 35 | 120 | 220 | 2,500 |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 15 | 1 | 15 | 6 | 1 | 3 | 1 | 2 | 3 | 4 | 6 |
| Iron, dissolved | 15 | 10 | 15 | 380 | 20 | 100 | 20 | 40 | 40 | 140 | 380 |
| Lead, dissolved | 15 | 2 | 3 | 4 | <2 | (c) | <2 | <2 | <2 | <2 | 4 |
| Zinc, dissolved | 15 | 20 | 5 | 30 | <20 | (c) | <20 | <20 | <20 | 20 | 30 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 15 | 0.001 | 2 | 0.300 | <0.001 | (c) | <0.001 | <0.001 | <0.001 | <0.001 | 0.300 |
| PCB, total | 15 | .1 | 1 | .2 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | .2 |
| Diazinon, total | 15 | .01 | 11 | .05 | <.01 | (c) | <.01 | <.01 | .01 | .03 | .05 |
| Lindane, total | 15 | .001 | 2 | .001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | .001 |
| Chlordane, total | 15 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 15 | .01 | 1 | .01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | .01 |
| Endrin, total | 15 | .001 | 0 | <.001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| Parathion, total | 15 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 15 | .001 | 8 | .006 | <.001 | (c) | <.001 | <.001 | .001 | .003 | .006 |
| Endosulfan, total | 15 | .001 | 0 | <.001 | <.001 | (c) | <.001 | <.001 | <.001 | <.001 | <.001 |
| 2,4-D, total | 14 | .01 | 8 | .18 | <.01 | (c) | <.01 | <.01 | .02 | .03 | .18 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Wax Lake Outlet at Calumet (14)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 280 | (a) | (a) | 1,140 | 177 | 370 | 225 | 286 | 361 | 432 | 563 |
| pH (standard units) | 282 | (a) | (a) | 8.3 | 6.1 | 7.6 | 6.9 | 7.3 | 7.6 | 7.8 | 8.1 |
| Water temperature | 244 | (a) | (a) | 31.5 | 4.0 | 19.4 | 6.1 | 11.6 | 20.8 | 27.5 | 30.5 |
| Dissolved oxygen (milligrams per liter) | 271 | (a) | (a) | 12.6 | 4.5 | 8.1 | 5.4 | 6.7 | 7.8 | 9.4 | 11.1 |
| Dissolved solids (milligrams per liter) | 18 | (a) | (a) | 268 | 135 | 198 | 135 | 161 | 188 | 241 | 268 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 269 | 0.01 | 269 | 63 | 17 | 34 | 22 | 27 | 34 | 40 | 46 |
| Magnesium, dissolved | 269 | .01 | 269 | 24 | 4.3 | 10 | 5.8 | 7.6 | 10 | 12 | 16 |
| Sodium, dissolved | 209 | .01 | 209 | 61 | 7.6 | 22 | 10 | 14 | 20 | 27 | 40 |
| Potassium, dissolved | 209 | .01 | 209 | 4.6 | 1.9 | 3.1 | 2.3 | 2.7 | 3.1 | 3.5 | 4.2 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 282 | 1 | 282 | 171 | 44 | 93 | 58 | 73 | 90 | 110 | 136 |
| Sulfate, dissolved | 278 | .1 | 278 | 180 | 10 | 45 | 23 | 32 | 40 | 53 | 73 |
| Chloride, dissolved | 280 | .1 | 280 | 210 | 9.8 | 29 | 13 | 19 | 26 | 33 | 50 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 13 | 0.01 | 13 | 0.90 | 0.29 | 0.66 | 0.29 | 0.58 | 0.68 | 0.82 | 0.90 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 266 | .01 | 266 | 2.5 | .02 | .95 | .37 | .67 | .88 | 1.1 | 1.8 |
| Phosphorus, total as phosphorus | 276 | .01 | 276 | 5.9 | .01 | .24 | .07 | .12 | .18 | .26 | .46 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Wax Lake Outlet at Calumet (14)--continued**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Biological constituents--bacteria (colonies per 100 milliliters) | | | | | | | | | | | |
| Fecal coliform | 194 | 10 | 165 | 3,800 | <10 | (c) | <10 | 14 | 35 | 74 | 240 |
| Fecal streptococcus | 9 | 5 | 6 | 540 | <5 | (b,c) | (b) | (b) | (b) | (b) | (b) |
| Trace metals (micrograms per liter) | | | | | | | | | | | |
| Copper, dissolved | 234 | 20 | 0 | <20 | <20 | (c) | <20 | <20 | <20 | <20 | <20 |
| Iron, dissolved | 277 | 25 | 158 | 300 | <25 | (c) | <25 | <25 | 30 | 60 | 120 |
| Lead, dissolved | 273 | 5 | 17 | 12 | <5 | (c) | <5 | <5 | <5 | <5 | 5 |
| Zinc, dissolved | 270 | 20 | 39 | 70 | <20 | (c) | <20 | <20 | <20 | <20 | 20 |
| Organic compounds (micrograms per liter) | | | | | | | | | | | |
| DDT, total | 265 | 0.01 | 7 | 0.02 | <0.01 | (c) | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| PCB, total | 266 | .1 | 4 | .2 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Diazinon, total | 241 | .01 | 72 | .36 | <.01 | (c) | <.01 | <.01 | <.01 | .01 | .02 |
| Lindane, total | 266 | .01 | 1 | .11 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Chlordane, total | 267 | .1 | 0 | <.1 | <.1 | (c) | <.1 | <.1 | <.1 | <.1 | <.1 |
| Malathion, total | 241 | .01 | 4 | .09 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endrin, total | 267 | .01 | 6 | .02 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Parathion, total | 241 | .01 | 4 | .03 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Dieldrin, total | 267 | .01 | 8 | 5.5 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| Endosulfan, total | 203 | .01 | 0 | <.01 | <.01 | (c) | <.01 | <.01 | <.01 | <.01 | <.01 |
| 2,4-D, total | 210 | .5 | 1 | 1.1 | <.5 | (c) | <.5 | <.5 | <.5 | <.5 | <.5 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Wax Lake (west) Drainage Area at Control Structure (36)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| Physical properties | | | | | | | | | | | |
| Water temperature | 278 | (a) | (a) | 33.0 | 4.0 | 20.8 | 8.0 | 14.0 | 22.0 | 28.0 | 30.0 |
| Major anions (milligrams per liter) | | | | | | | | | | | |
| Chloride, dissolved | 288 | .1 | 288 | 110 | 9.6 | 32 | 14 | 23 | 29 | 38 | 58 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Yellow Bayou near Odenburg (62)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 19 | (a) | (a) | 493 | 150 | 308 | 150 | 256 | 293 | 360 | 493 |
| pH (standard units) | 19 | (a) | (a) | 8.6 | 6.8 | 7.6 | 6.8 | 7.4 | 7.6 | 7.9 | 8.6 |
| Water temperature | 19 | (a) | (a) | 28.5 | 10.5 | 20.2 | 10.5 | 13.0 | 22.0 | 26.5 | 28.5 |
| Dissolved oxygen (milligrams per liter) | 18 | (a) | (a) | 9.8 | 2.4 | 6.2 | 2.4 | 3.6 | 6.4 | 8.2 | 9.8 |
| Dissolved solids (milligrams per liter) | 19 | (a) | (a) | 280 | 83 | 179 | 83 | 144 | 176 | 211 | 280 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 14 | 0.01 | 14 | 50 | 17 | 35 | 17 | 28 | 36 | 43 | 50 |
| Magnesium, dissolved | 14 | .01 | 14 | 14 | 6.2 | 11 | 6.2 | 8.8 | 11 | 13 | 14 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 19 | 1 | 19 | 232 | 66 | 139 | 66 | 105 | 134 | 174 | 232 |
| Sulfate, dissolved | 14 | .1 | 14 | 25 | 2.4 | 8.8 | 2.4 | 2.7 | 4.4 | 14 | 25 |
| Chloride, dissolved | 14 | .1 | 14 | 17 | 2.5 | 7.0 | 2.5 | 3.2 | 6.8 | 9.4 | 17 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 19 | 0.01 | 11 | 4.4 | 0.43 | 1.6 | 0.43 | 0.82 | 1.1 | 1.8 | 4.4 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 19 | .01 | 19 | .65 | .01 | .13 | .01 | .03 | .05 | .18 | .65 |
| Phosphorus, total as phosphorus | 19 | .01 | 19 | .94 | .16 | .45 | .16 | .25 | .32 | .71 | .94 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 14 | 10 | 11 | 260 | <10 | (c) | <10 | 20 | 30 | 80 | 260 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Yellow Bayou (station YB-1) near Simmesport (64)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 15 | (a) | (a) | 441 | 157 | 298 | 157 | 247 | 301 | 341 | 441 |
| pH (standard units) | 15 | (a) | (a) | 8.1 | 6.4 | 7.5 | 6.4 | 7.2 | 7.5 | 7.9 | 8.1 |
| Water temperature | 15 | (a) | (a) | 30.0 | 9.5 | 19.2 | 9.5 | 12.0 | 19.0 | 26.5 | 30.0 |
| Dissolved oxygen (milligrams per liter) | 15 | (a) | (a) | 9.5 | 2.8 | 6.2 | 2.8 | 4.0 | 6.2 | 8.7 | 9.5 |
| Dissolved solids (milligrams per liter) | 15 | (a) | (a) | 278 | 90 | 187 | 90 | 142 | 184 | 250 | 278 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 10 | 0.01 | 10 | 52 | 25 | 37 | 25 | 30 | 37 | 40 | 52 |
| Magnesium, dissolved | 10 | .01 | 10 | 16 | 7.7 | 12 | 7.7 | 9.0 | 12 | 15 | 16 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 15 | 1 | 15 | 213 | 80 | 147 | 80 | 133 | 149 | 171 | 213 |
| Sulfate, dissolved | 9 | .1 | 9 | 12 | 2.1 | (b) | (b) | (b) | (b) | (b) | (b) |
| Chloride, dissolved | 10 | .1 | 10 | 53 | 2.2 | 9.8 | 2.2 | 2.6 | 4.6 | 9.1 | 53 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 15 | 0.01 | 15 | 1.7 | 0.57 | 1.1 | 0.57 | 0.72 | 1.0 | 1.4 | 1.7 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 14 | .10 | 5 | 2.1 | <.10 | (c) | <.10 | <.10 | <.10 | .19 | 2.1 |
| Phosphorus, total as phosphorus | 15 | .01 | 15 | .39 | .10 | .21 | .10 | .13 | .17 | .32 | .39 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 10 | 10 | 4 | 190 | <10 | (c) | <10 | <10 | <10 | 30 | 190 |

*Table 2.2-1. Statistical summary of water-quality data for the Atchafalaya-Teche-Vermilion basin in Louisiana, 1944-95--Continued*

**Yellow Bayou (station YB-2) near Simmesport (63)**

| Water-quality property or constituent | Number of analyses | Reporting level | Number of analyses greater than or equal to reporting level | Maximum | Minimum | Mean | Percentiles | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 5th | 25th | 50th (median) | 75th | 95th |
| **Physical properties** | | | | | | | | | | | |
| Specific conductance | 18 | (a) | (a) | 547 | 138 | 306 | 138 | 228 | 286 | 416 | 547 |
| pH (standard units) | 18 | (a) | (a) | 8.0 | 6.3 | 7.1 | 6.3 | 6.8 | 7.0 | 7.4 | 8.0 |
| Water temperature | 18 | (a) | (a) | 28.5 | 10.0 | 18.7 | 10.0 | 13.1 | 18.0 | 25.6 | 28.5 |
| Dissolved oxygen (milligrams per liter) | 17 | (a) | (a) | 19.8 | .0 | 4.1 | .0 | 1.5 | 2.6 | 3.8 | 19.8 |
| Dissolved solids (milligrams per liter) | 18 | (a) | (a) | 304 | 75 | 179 | 75 | 136 | 170 | 228 | 304 |
| **Major cations (milligrams per liter)** | | | | | | | | | | | |
| Calcium, dissolved | 13 | 0.01 | 13 | 54 | 17 | 35 | 17 | 26 | 33 | 48 | 54 |
| Magnesium, dissolved | 13 | .01 | 13 | 18 | 5.7 | 11 | 5.7 | 8.6 | 11 | 16 | 18 |
| **Major anions (milligrams per liter)** | | | | | | | | | | | |
| Alkalinity, total | 18 | 1 | 18 | 296 | 58 | 145 | 58 | 101 | 135 | 186 | 296 |
| Sulfate, dissolved | 13 | .1 | 13 | 15 | 2.2 | 6.6 | 2.2 | 2.9 | 5.7 | 9.4 | 15 |
| Chloride, dissolved | 13 | .1 | 13 | 38 | 1.8 | 9.7 | 1.8 | 3.2 | 6.4 | 10 | 38 |
| **Nutrients (milligrams per liter)** | | | | | | | | | | | |
| Nitrogen, ammonia plus organic, total as nitrogen | 17 | 0.01 | 17 | 7.0 | 0.81 | 2.9 | 0.81 | 1.2 | 2.4 | 4.4 | 7.0 |
| Nitrogen, nitrite plus nitrate, total as nitrogen | 18 | .10 | 3 | 2.6 | <.10 | (c) | <.10 | <.10 | <.10 | <.10 | 2.6 |
| Phosphorus, total as phosphorus | 18 | .01 | 18 | 2.0 | .21 | .68 | .21 | .36 | .58 | .83 | 2.0 |
| **Trace metals (micrograms per liter)** | | | | | | | | | | | |
| Iron, dissolved | 13 | 10 | 12 | 1,400 | <10 | (c) | 20 | 50 | 70 | 180 | 1,400 |

a Not applicable.
b Not calculated because sample size was less than 10.
c Not calculated because data base contained remarked values.
d Only one sample in data base.