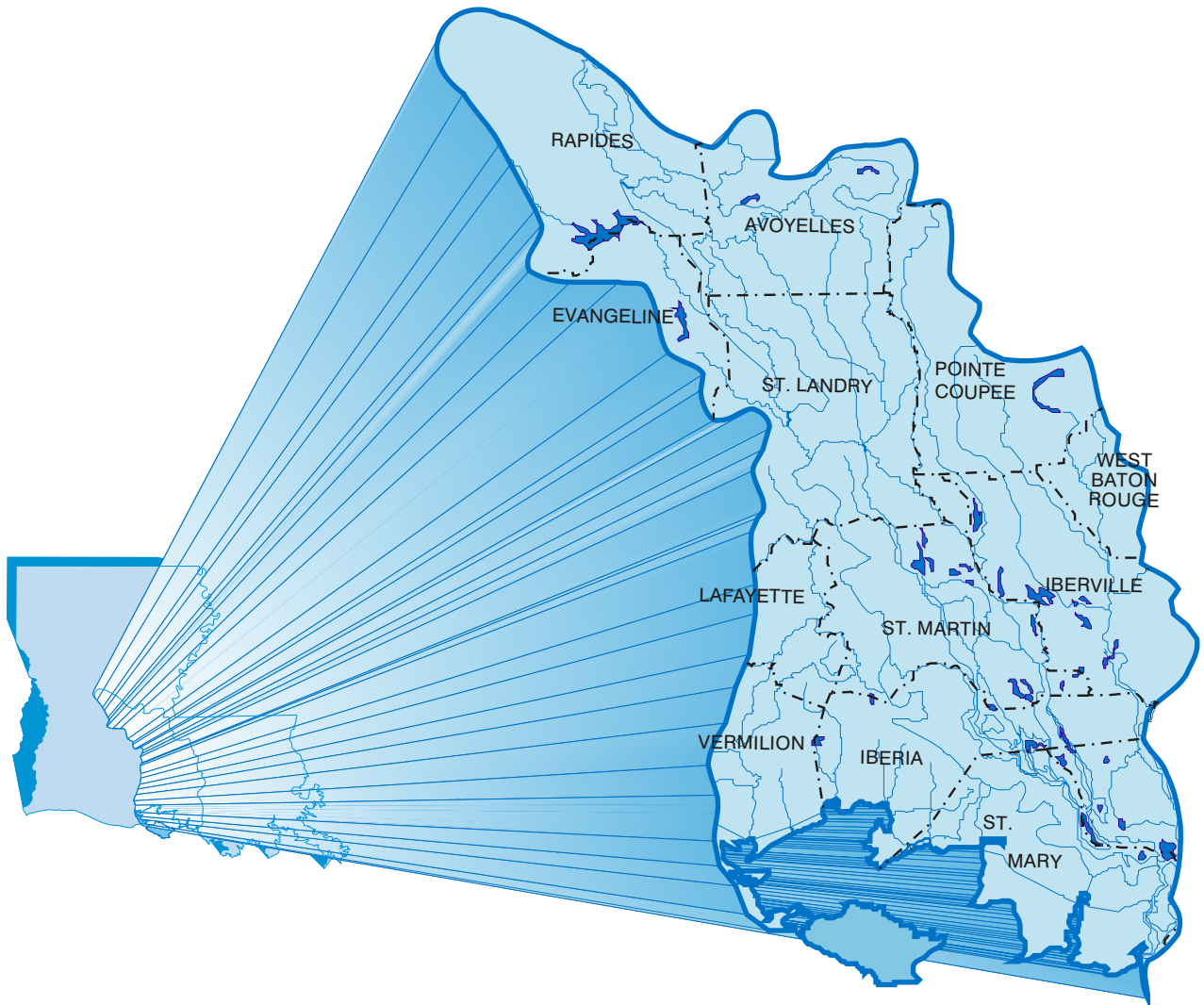


Statistical Summary of Surface-Water Quality in Louisiana--Atchafalaya-Teche-Vermilion Basin, 1944-95

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

in cooperation with the

U.S. GEOLOGICAL SURVEY



2001



STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
PUBLIC WORKS AND WATER RESOURCES DIVISION
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WATER RESOURCES
TECHNICAL REPORT NO. 55F

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By
Charles R. Garrison
U.S. GEOLOGICAL SURVEY

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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 (°C) can be converted to degrees Fahrenheit (°F) as follows: °F = 1.8(°C) + 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

By Charles R. Garrison

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 $\mu\text{g/L}$ (micrograms per liter) for domestic water supplies, and concentrations occasionally exceeded the the agency's criterion of 1,000 $\mu\text{g/L}$ 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” FORMAT¹

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.

¹This 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.

1.0 INTRODUCTION--continued

1.1 Background

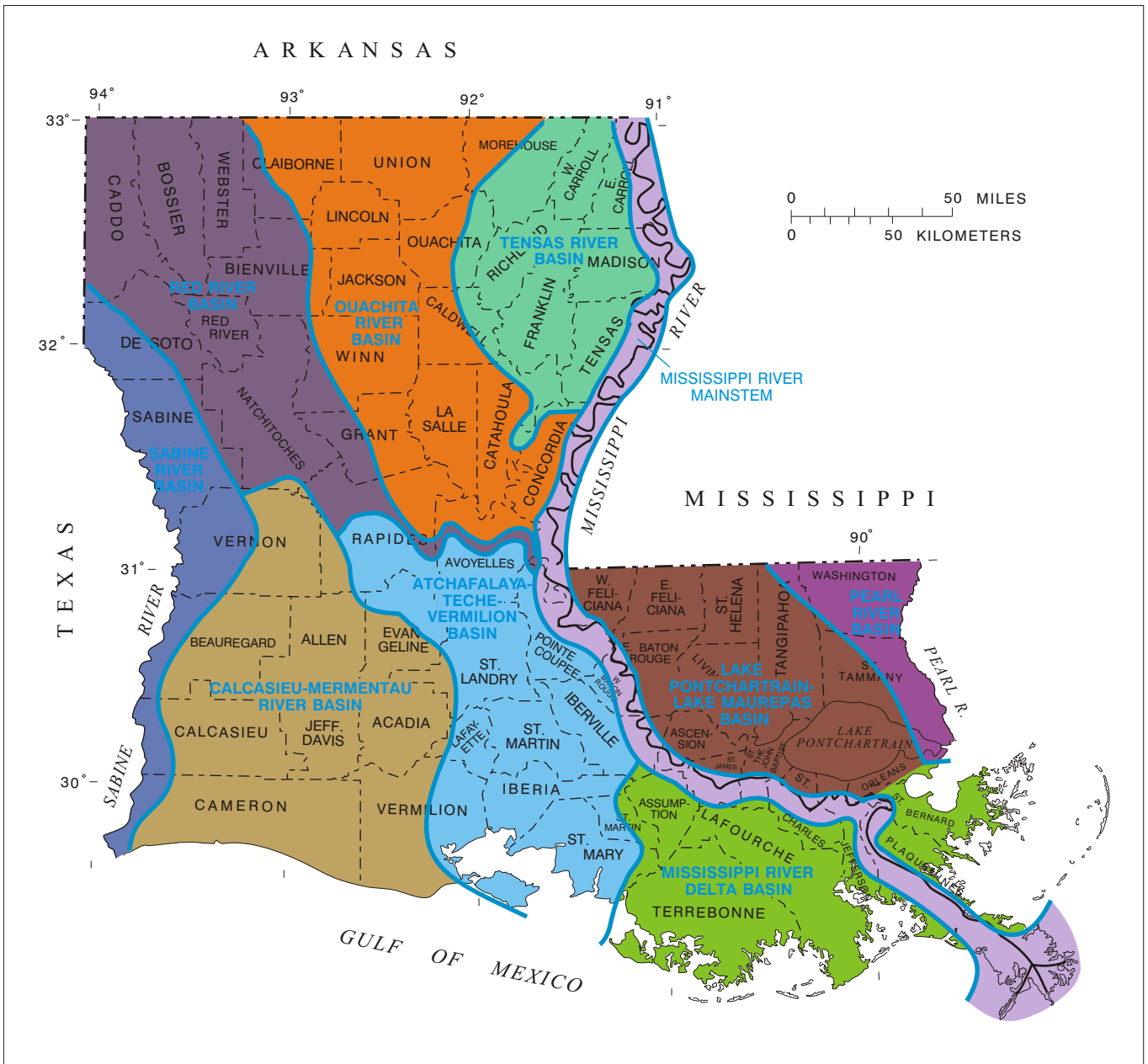
SURFACE-WATER QUALITY OF THE MAJOR DRAINAGE BASINS IN LOUISIANA

*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.

1.0 INTRODUCTION--continued

1.2 Purpose and Scope

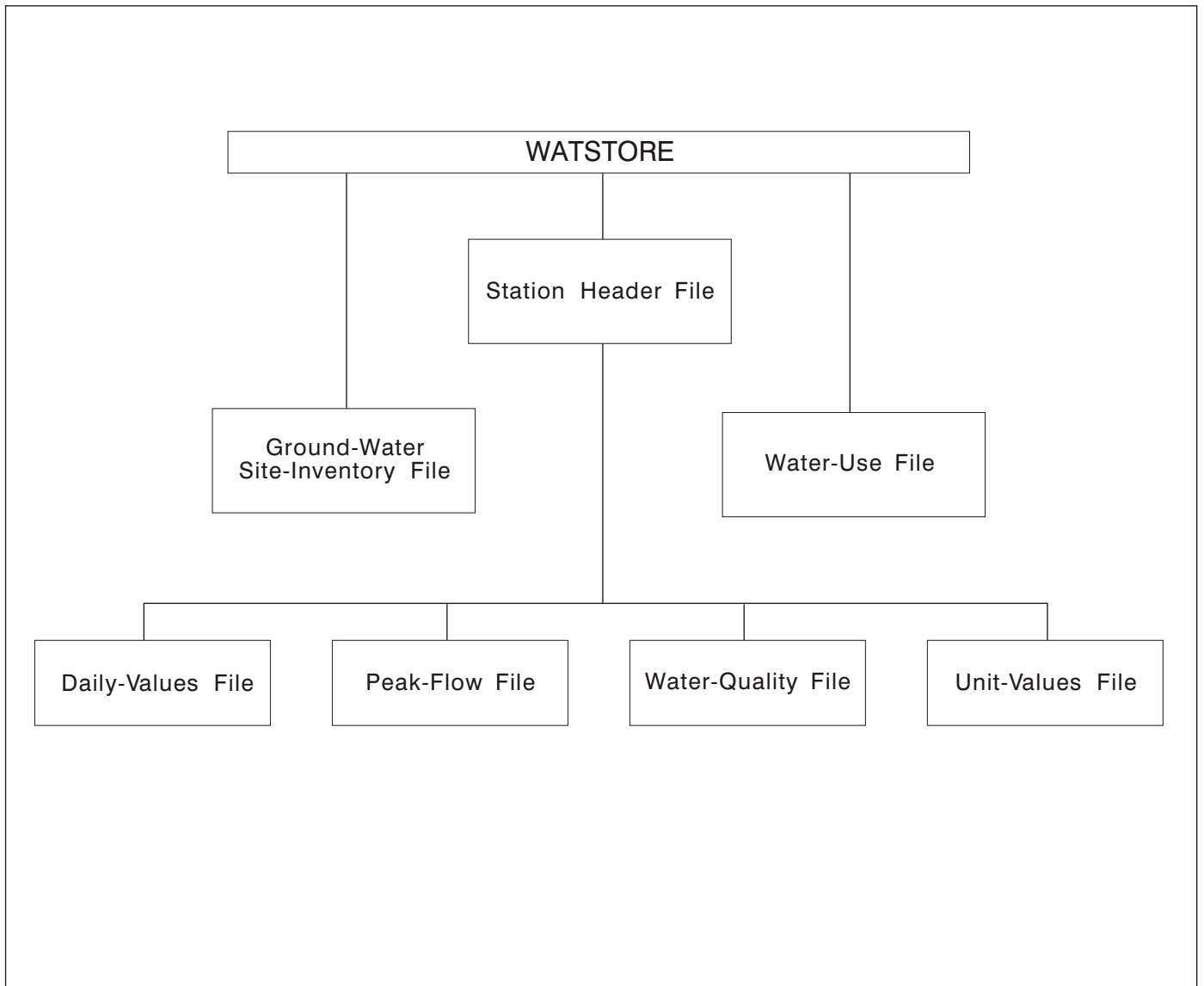
ANALYZE AND SUMMARIZE SURFACE-WATER-QUALITY DATA

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).

1.0 INTRODUCTION--continued

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.

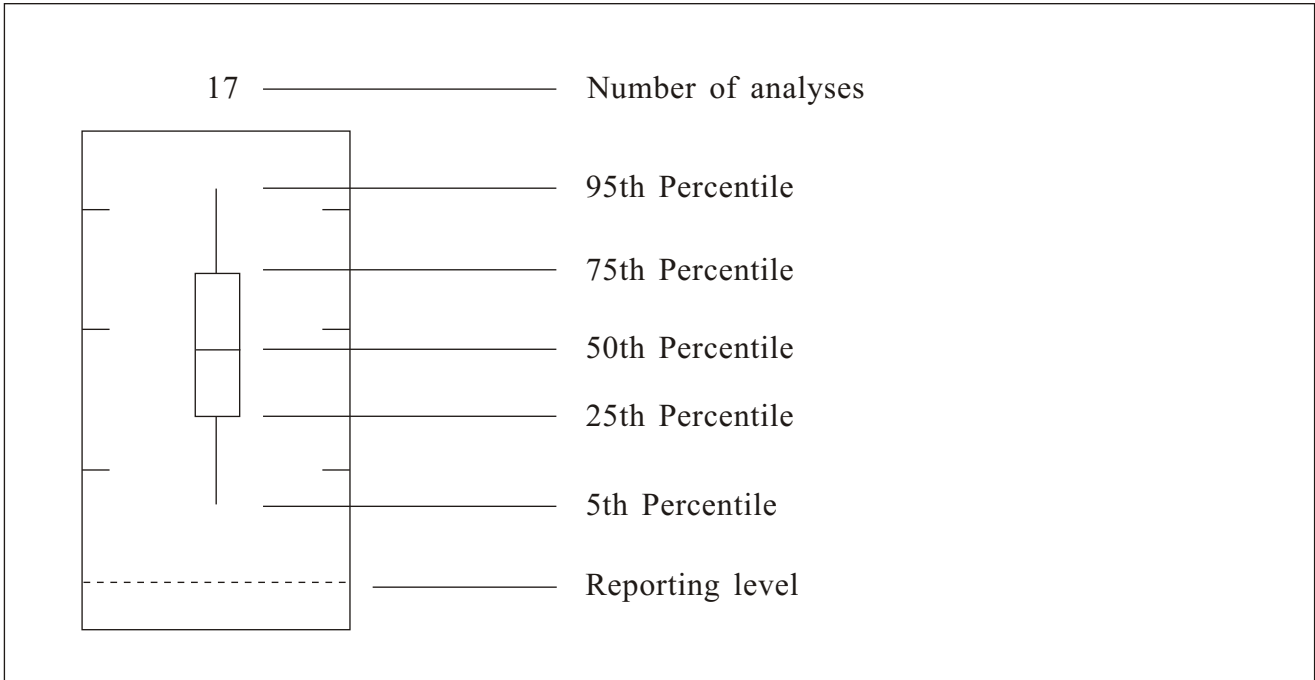
A boxplot summarizes a data set by displaying the values or concentrations representing the 5th, 25th, 50th, 75th, and 95th percentiles of the data. This format allows comparison among streams in the basin. The term percentile as used in this report refers to a distribution of values in the total data 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.

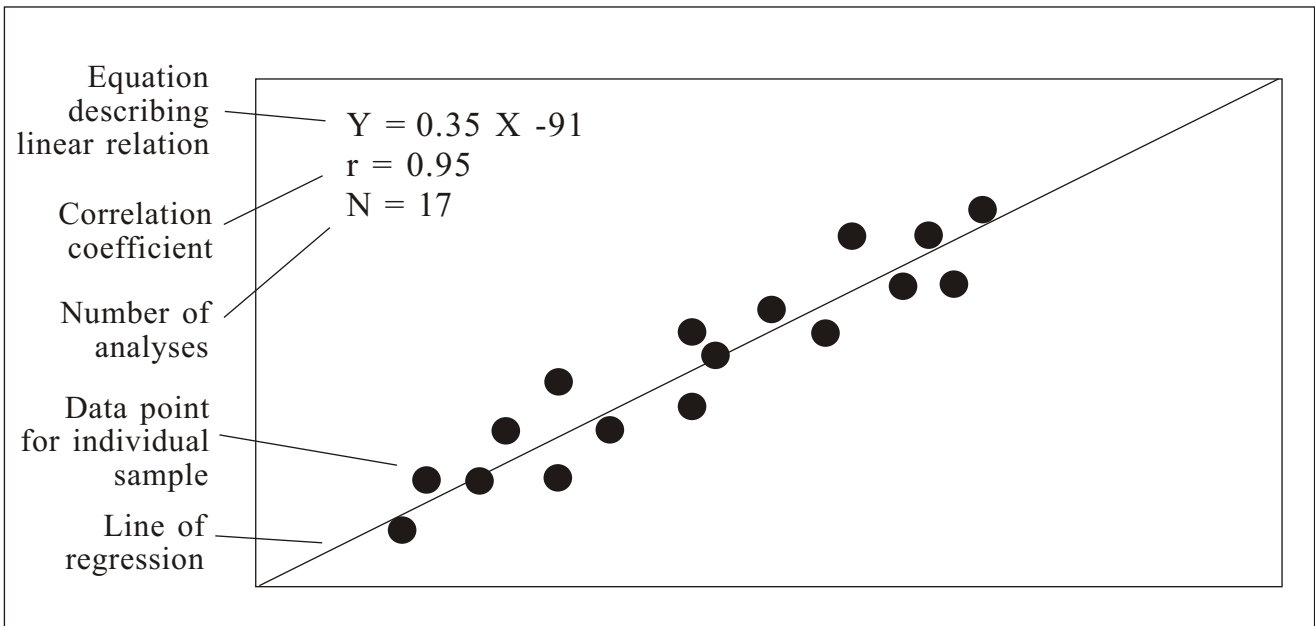
Another method used to evaluate water-quality data in this series of reports is linear regression (fig. 1.3-2). Linear regression equations were calculated in the form of $Y = aX + b$, where a is the slope of the regression line, b is the Y intercept, and Y and X are the dependent and independent variables (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 ± 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.

1.0 INTRODUCTION--continued

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

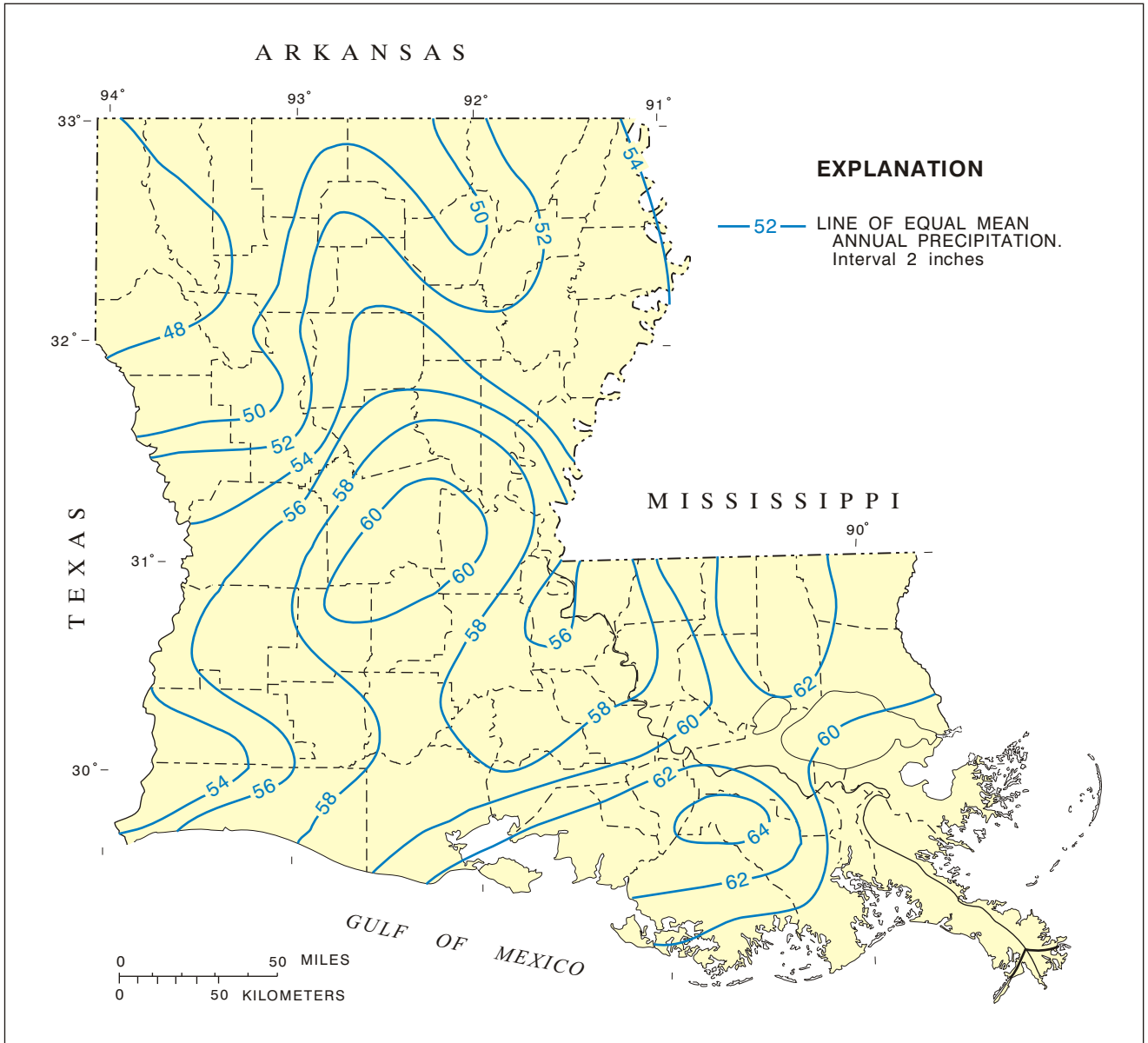
HUMID, SUBTROPICAL CLIMATE PREVAILS IN LOUISIANA

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°C in the northern part of the State to 20.5°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)

1.0 INTRODUCTION--continued

1.4 Hydrologic Setting and Land Use in Louisiana--continued

1.4.2 Physiography

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

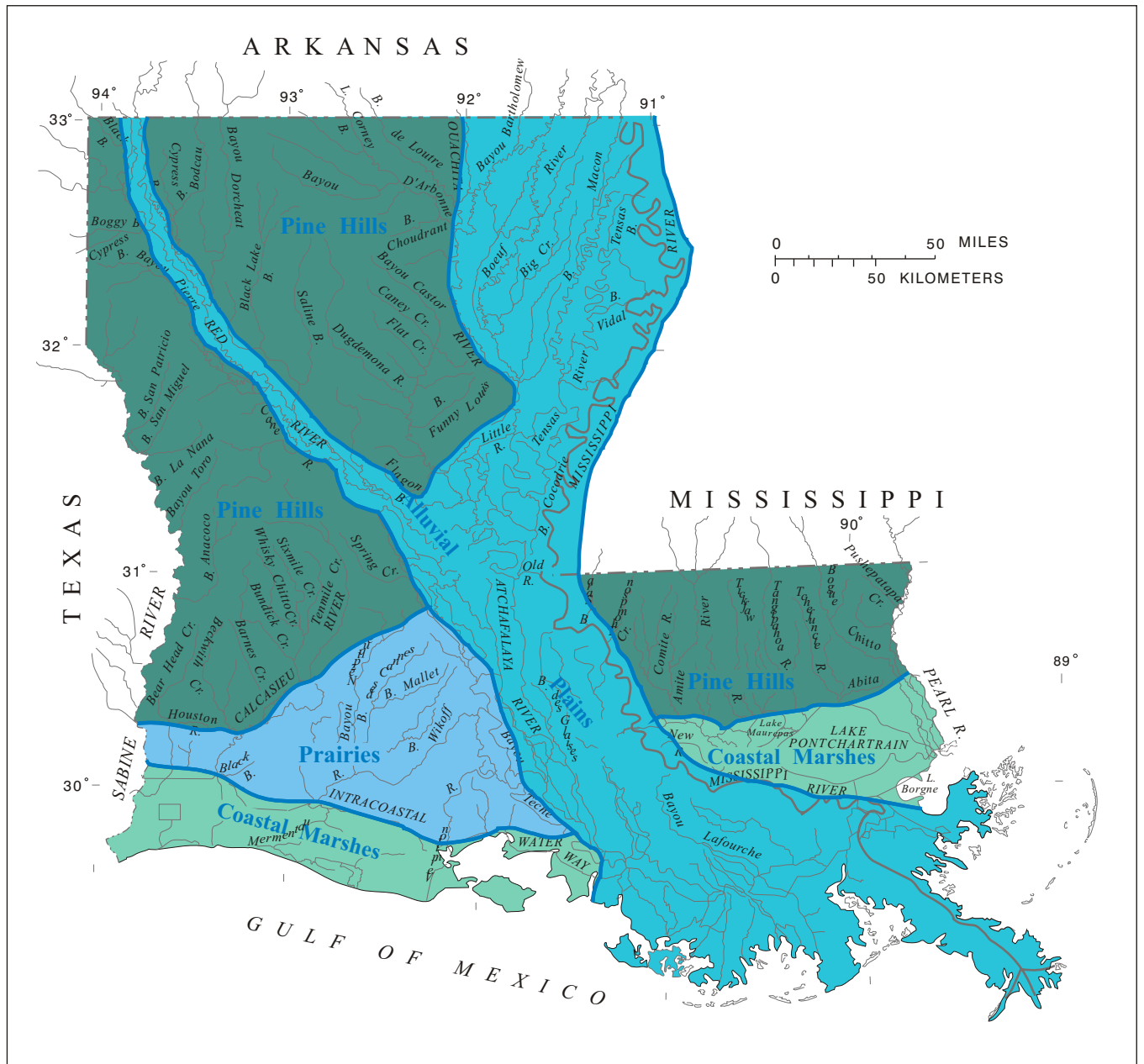
Major land uses include forests and agricultural lands.

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.)

1.0 INTRODUCTION--continued

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: (1) Maximum of 2.8 °C rise above ambient for streams. (2) Maximum of 1.7 °C rise above ambient for lakes. (3) Maximum temperature of 32.2 °C except where otherwise listed. Estuarine and coastal waters: (1) Maximum of 2.2 °C rise above ambient October through May. (2) Maximum of 0.83 °C rise during June through September. (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 freshwater 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 level: 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 Atchafalaya-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	43	Intracoastal Waterway at Vermilion Lock (west) near Intracoastal City
9	Lower Grand River at Bayou Sorrel	44	Duck Lake near Morgan City
10	Atchafalaya River at Simmesport	45	Little Bayou Sorrel near Morgan City
11	Atchafalaya River at Melville	46	Vermilion River near Bancker
12	Atchafalaya River at Krotz Springs	47	Atchafalaya River Basin Station WF
13	Chicot Pass at Myette Point near Charenton	48	Atchafalaya River Basin Station WC
14	Wax Lake Outlet at Calumet	49	Atchafalaya River Basin Station WD
15	Lower Atchafalaya River at Morgan City	50	Buffalo Cove Station WBI near Charenton
16	Spring Creek near Glenmora	51	Atchafalaya River Basin Station WAI
17	Bayou Cocodrie near Clearwater	52	Atchafalaya River above mouth near Bayou Sorrel
18	Bayou Courtableau at Washington	53	Lake Henderson near Henderson
19	Bayou Des Glaives Diversion Channel at Moreauville	54	Lake Henderson near Atchafalaya
20	Bayou Teche at Arnaudville	55	Bayou Courtableau at Drainage Structure east near Courtableau
21	Bayou Teche at Keystone Lock near St. Martinville	56	Bayou Courtableau at Drainage Structure west near Courtableau
22	Bayou Teche near Olivier	57	Bayou Petite Prairie Center Station 3B
23	Bayou Teche near Franklin	58	Bayou Petite Prairie West Shore Station 3A
24	Bayou Teche near Patterson	59	Bayou Petite Prairie (Second Lake) near Melville Station 2B
25	Vermilion River at Surrey Street at Lafayette	60	Keith Lake Station 1B at center near Melville
26	Vermilion River at Lafayette	61	Bayou Petite Prairie Station 4
27	Vermilion River at State Highway 3073 at Lafayette	62	Yellow Bayou near Odenburg
28	Vermilion River at Perry	63	Yellow Bayou (station YB-2) near Simmesport
29	Vermilion River at Bancker Ferry near Abbeville	64	Yellow Bayou (station YB-1) near Simmesport
30	Bayou Teche at Verdunville	65	Lower Grand River at Pigeon
31	Atchafalaya Bay Station LBBH	66	Loving Creek near Woodworth
32	Atchafalaya Bay 9.9 miles south near North Bend	67	Upper Clear Bayou near Woodworth
33	East Cote Blanche Bay Station ECB 3		
34	East Cote Blanche Bay Station ECB 5		
35	Intracoastal Waterway at Wax Lake East Control Structure near Calumet		



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

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

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.1 Overview

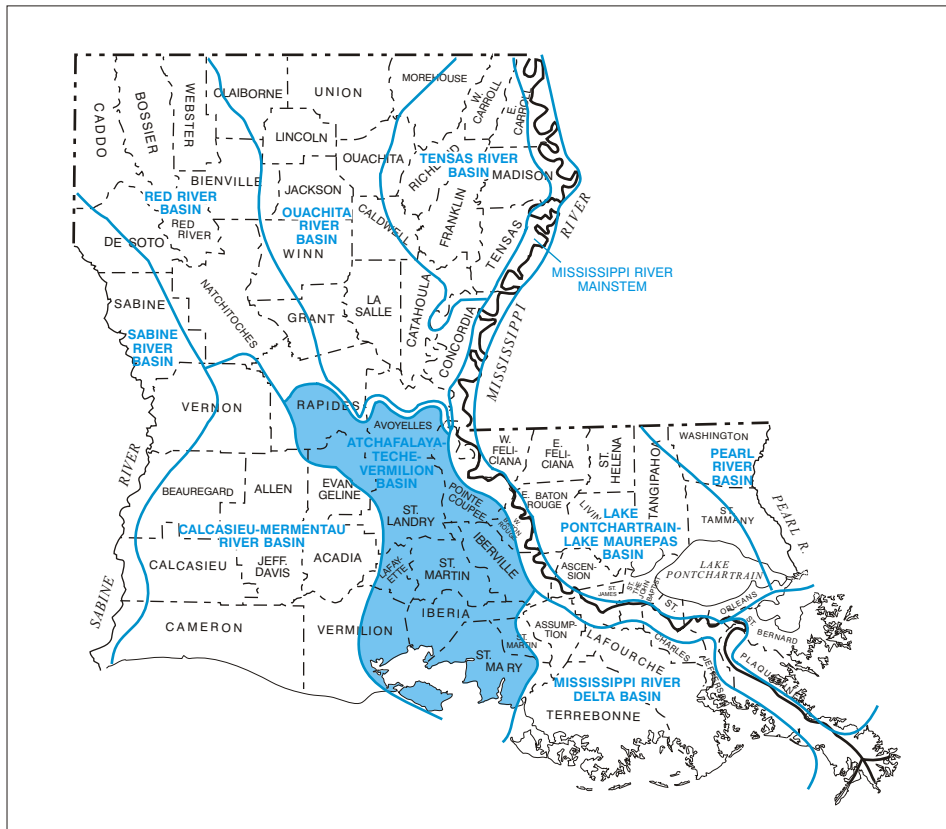
ATCHAFALAYA AND VERMILION RIVERS AND BAYOU TECHE ARE PRINCIPAL SOURCES OF SURFACE WATER

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 ft³/s at Spring Creek

near Glenmora for the period, 1956-86 (Carlson and others, 1987), and the maximum average discharge was 1,120 ft³/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)

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

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 concen-

trations 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.)

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

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.

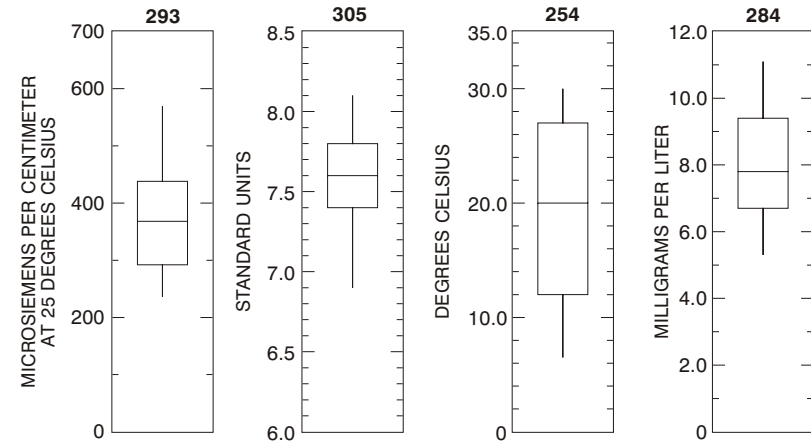
Statistical summaries of water-quality data at 67 sites in the basin are presented in table 2.2-1 at the back of this report, and boxplots summarizing the specific conductance, pH, water temperature, and dissolved-oxygen concentration data are presented in figure 2.2.1-1 for six of the sites. Specific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

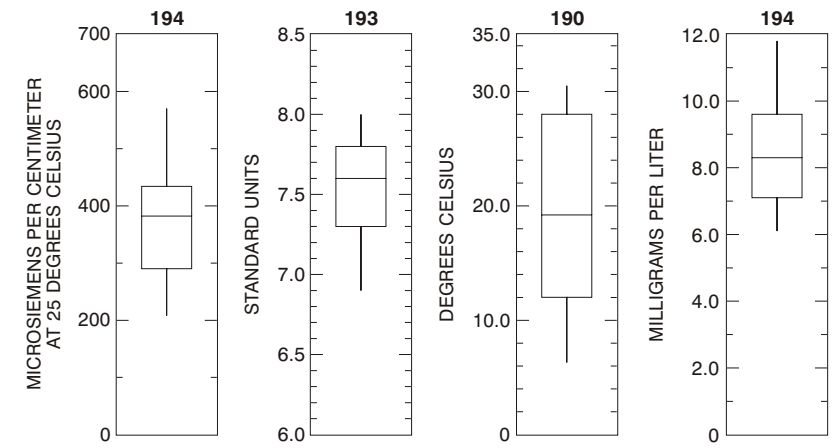
Values for water temperatures at all sites in the basin ranged from 1.0°C at Chicot Pass at Myette Point near Charenton to 37.0°C at Bayou Teche near Franklin. Median values ranged from 17.5 to 27.5°C. Maximum water temperatures at several sites were greater than the State's criterion of 32.2°C. These 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.

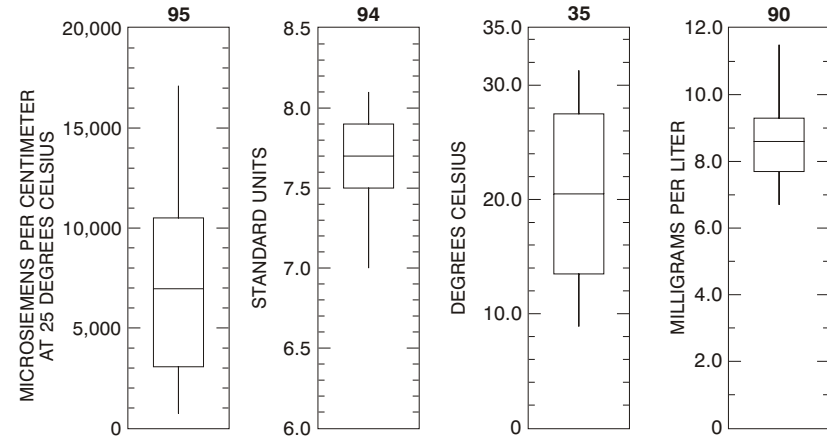
15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY



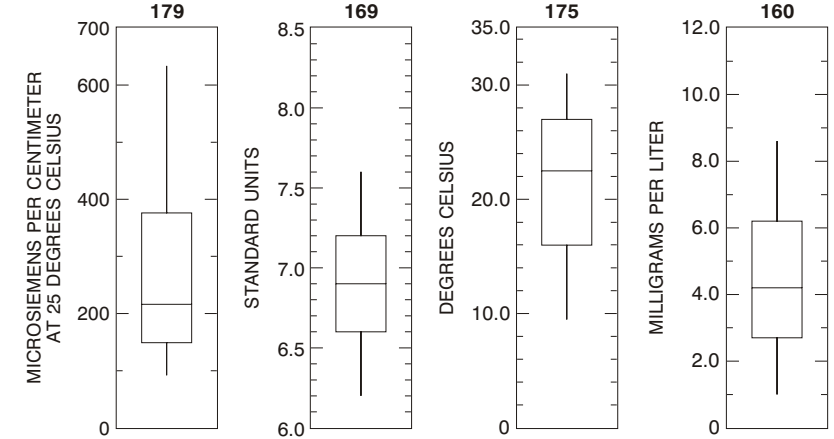
11 ATCHAFALAYA RIVER AT MELVILLE



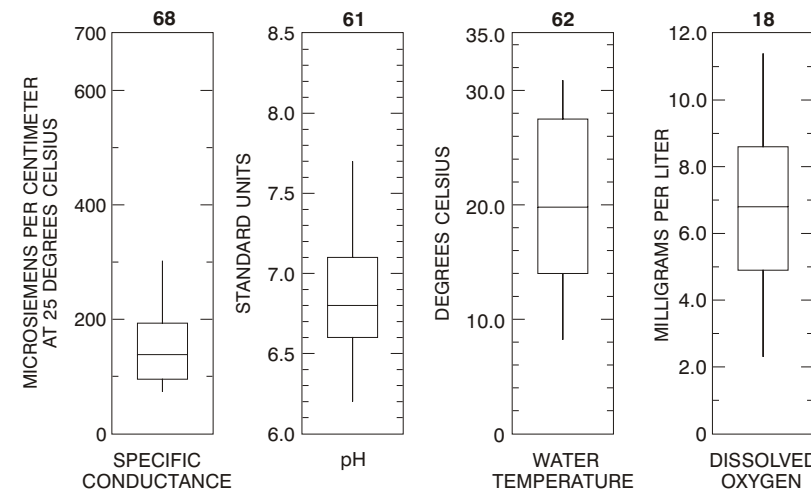
37 VERMILION BAY AT CYPREMORT POINT



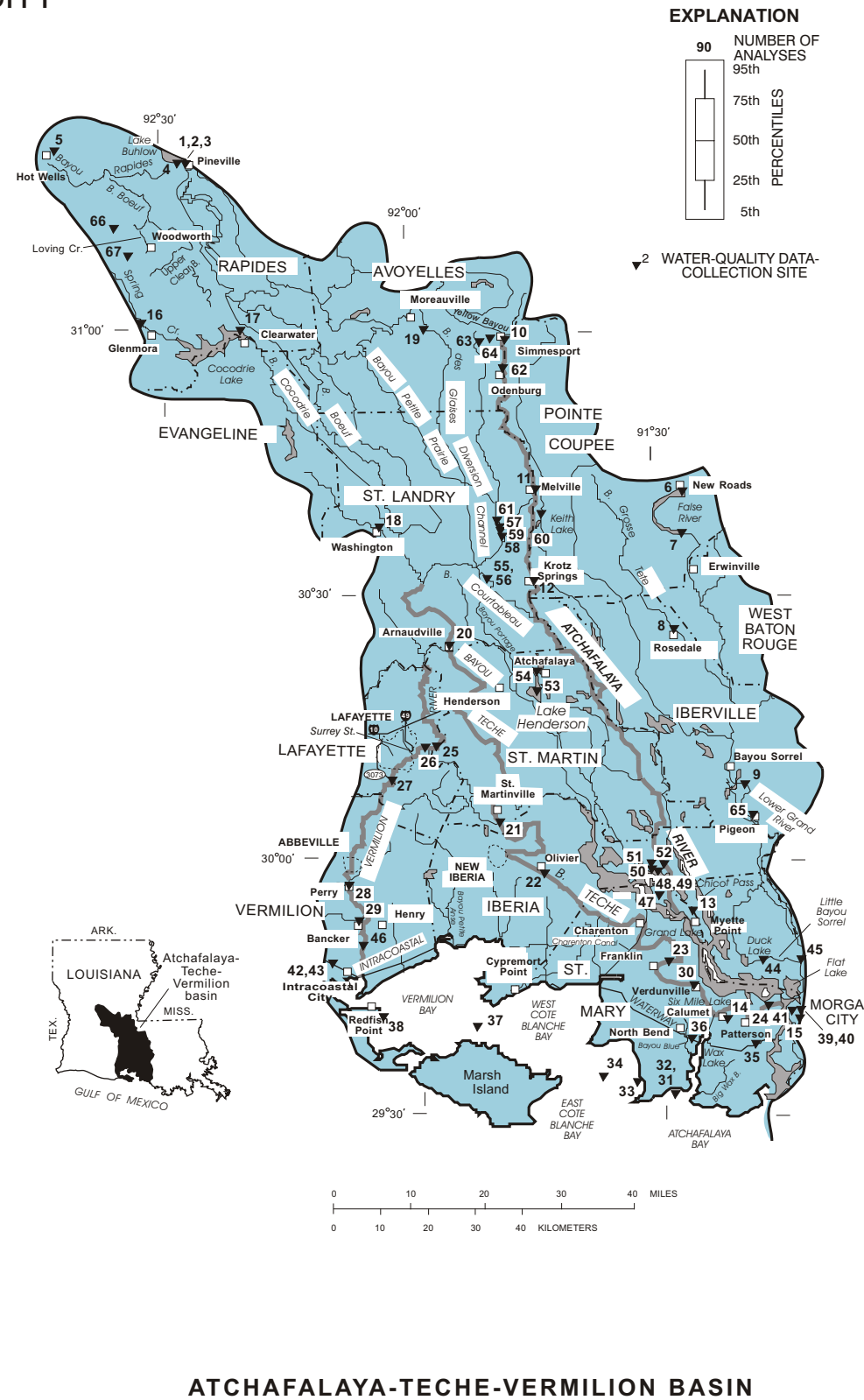
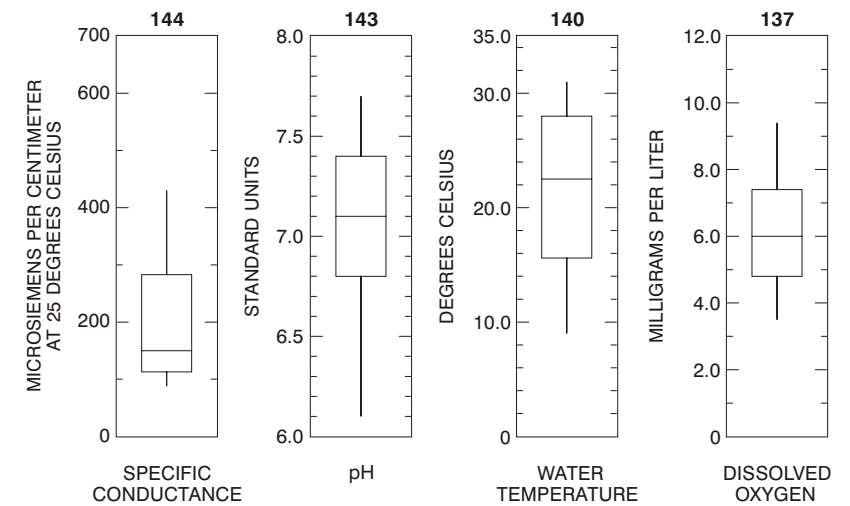
27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



20 BAYOU TECHE AT ARNAUDVILLE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE



ATCHAFALAYA-TECHE-VERMILION BASIN

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.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

2.2.2 Relation Between Specific Conductance and Dissolved Solids

DISSOLVED SOLIDS CONCENTRATIONS CAN BE ESTIMATED FROM SPECIFIC CONDUCTANCE VALUES

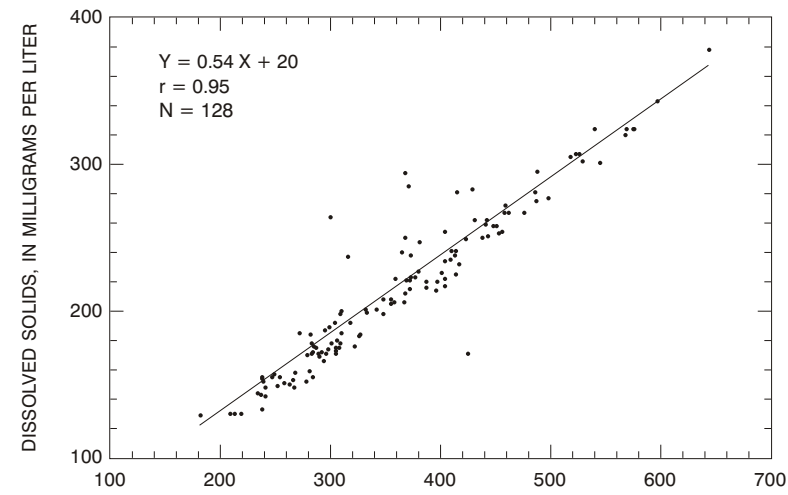
Dissolved solids concentrations in water from the basin met the U.S. Environmental Protection Agency's secondary drinking water regulations for dissolved solids in irrigation water.

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.

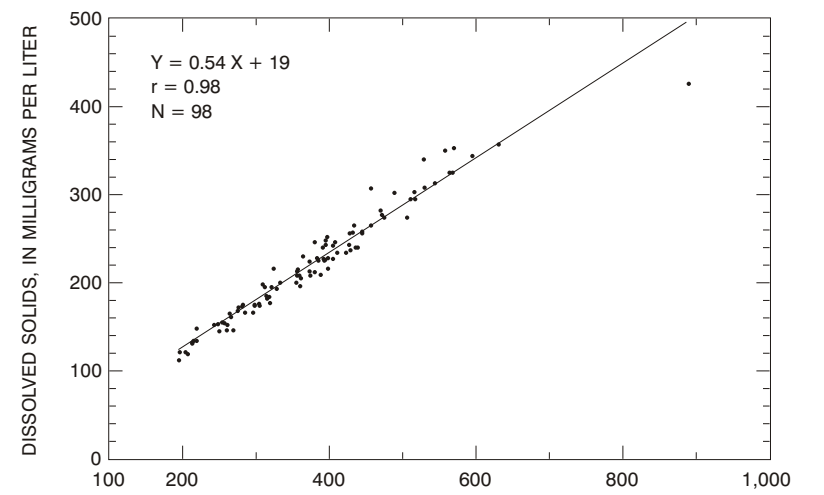
The regression equation for Vermilion River at State Highway 3073 at Lafayette, which was based on

162 chemical analyses, indicates that dissolved solids concentrations at that site can exceed 500 mg/L when specific conductance values exceed 913 $\mu\text{S}/\text{cm}$. The boxplot for specific conductance for Vermilion River at State Highway 3073 at Lafayette (fig. 2.2.1-1) indicates that 913 $\mu\text{S}/\text{cm}$ 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).

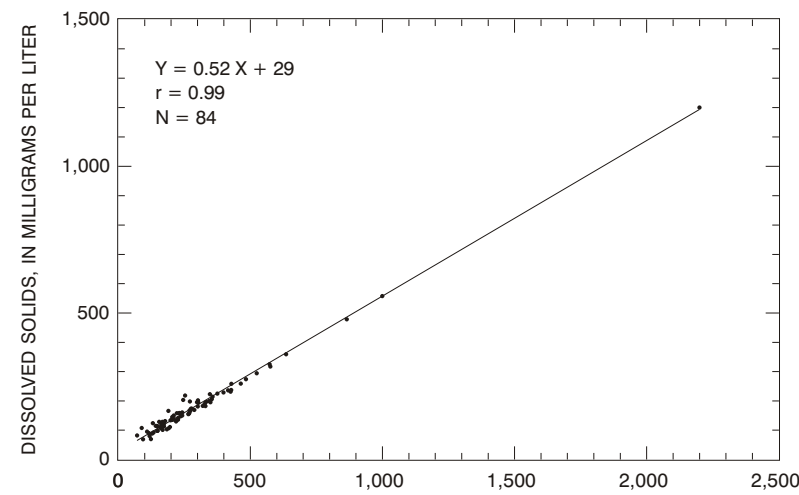
15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY



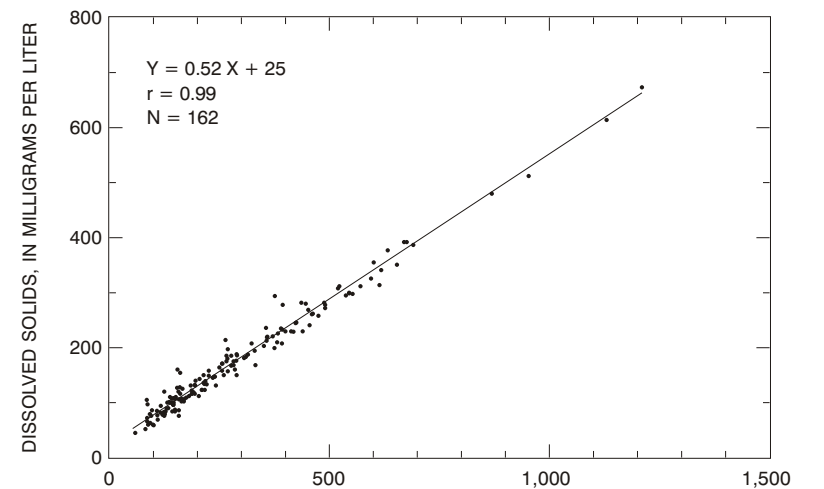
11 ATCHAFALAYA RIVER AT MELVILLE



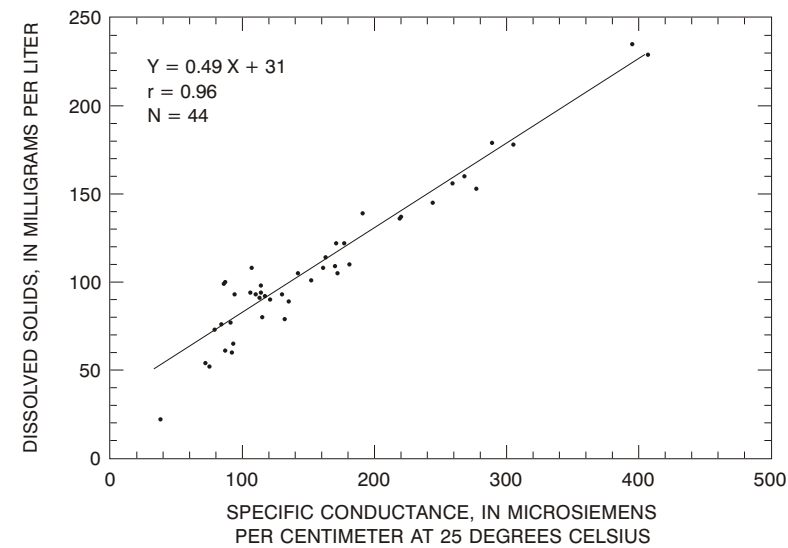
28 VERMILION RIVER AT PERRY



27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



20 BAYOU TECHE AT ARNAUDVILLE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

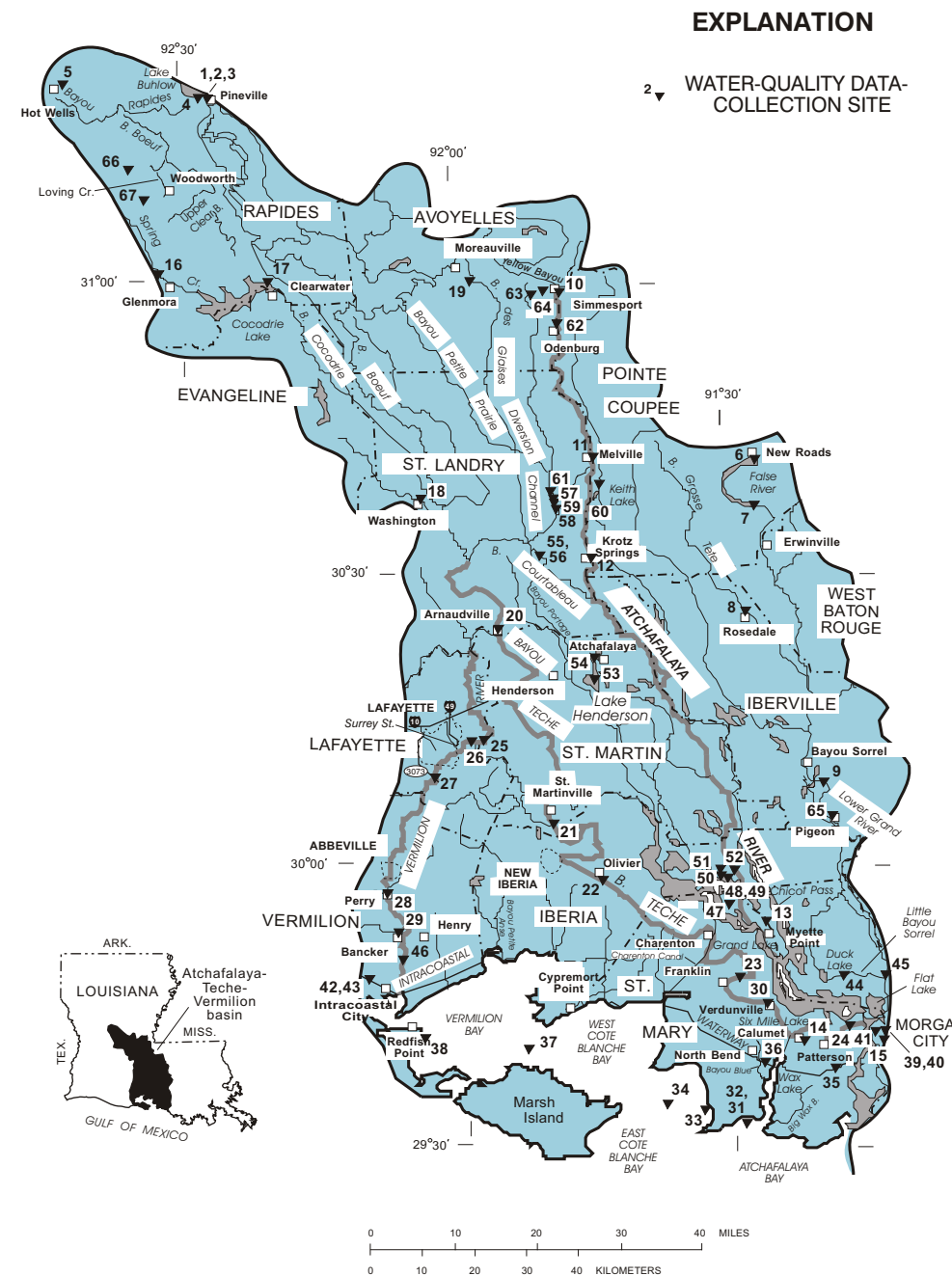
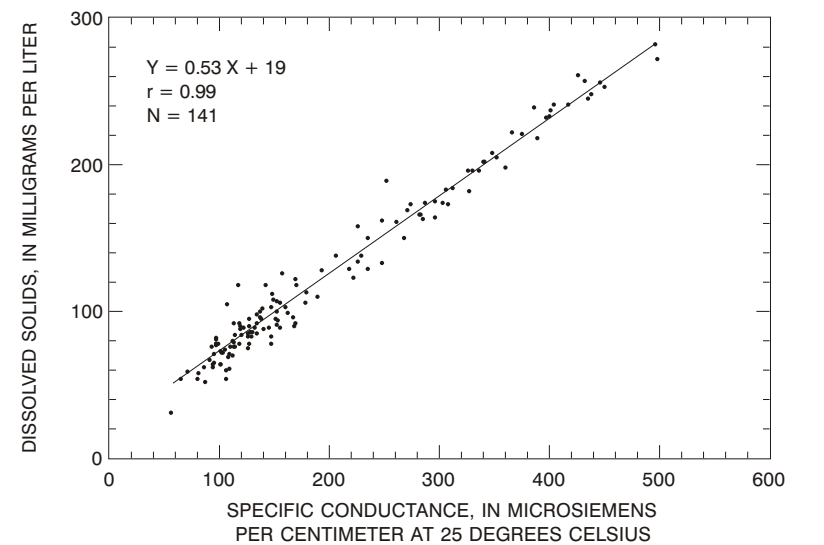


Figure 2.2.2-1. Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and graphs showing relation between specific conductance and dissolved solids in water from selected sites.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

2.2.3 Major Inorganic Cations--Dissolved Calcium, Magnesium, Sodium, and Potassium

HIGHEST CONCENTRATIONS OF DISSOLVED CALCIUM, MAGNESIUM, SODIUM, AND POTASSIUM IN THE BASIN OCCURRED AT VERMILION BAY AT CYPRE-mort POINT

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

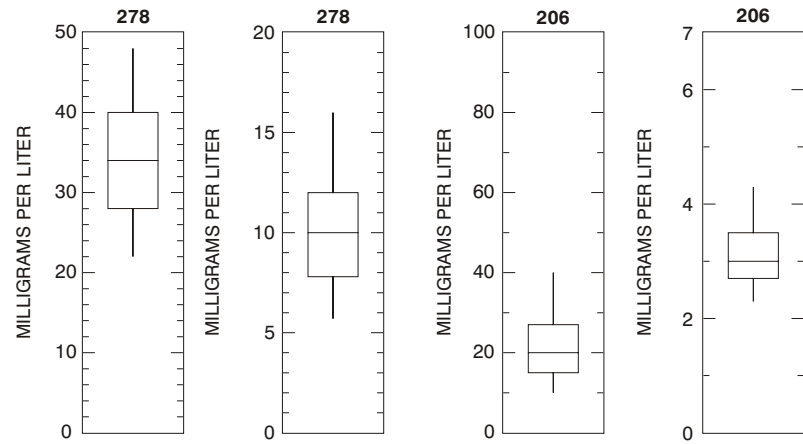
Calcium concentrations at all sites in the Atchafalaya-Teche-Vermilion basin ranged from 0.80 mg/L at Bayou Cocodrie near Clearwater to 180 mg/L at Vermilion Bay at Cypremort Point. Boxplots for six representative sites in the basin (fig. 2.2.3-1) show that the median value for calcium at Vermilion Bay 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.

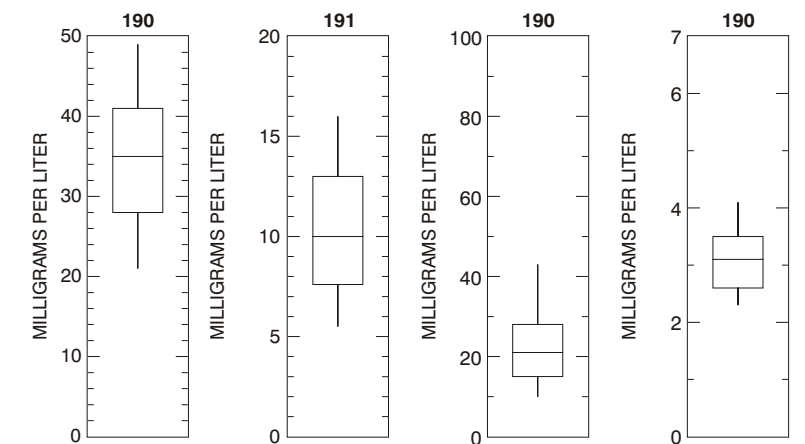
The highest sodium concentration in water from the basin was at Vermilion Bay at Cypremort Point (3,800 mg/L). The minimum sodium concentration (1.8 mg/L) occurred at Bayou Teche at Arnaudville. Boxplots for six representative sites shown in fig. 2.2.3-1 show that at least 75 percent of the samples collected 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.

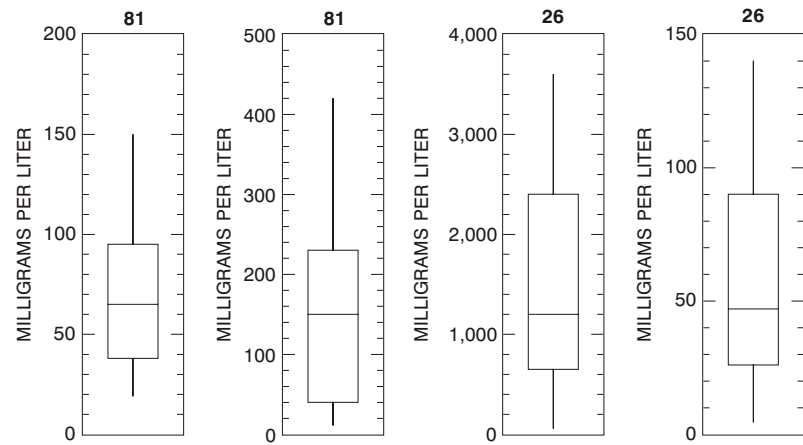
15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY



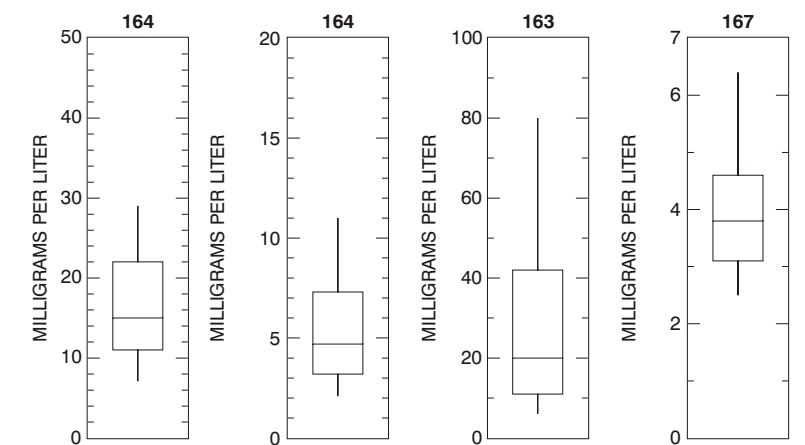
11 ATCHAFALAYA RIVER AT MELVILLE



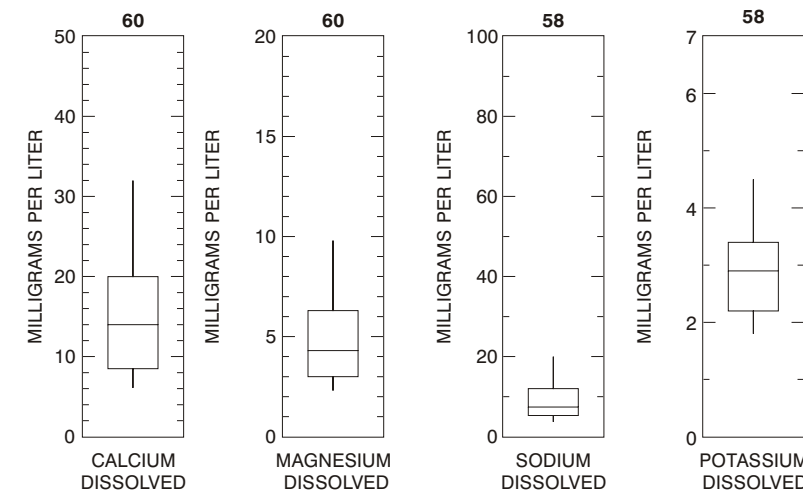
37 VERMILION BAY AT CYPREMORT POINT



27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



20 BAYOU TECHE AT ARNAUDVILLE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

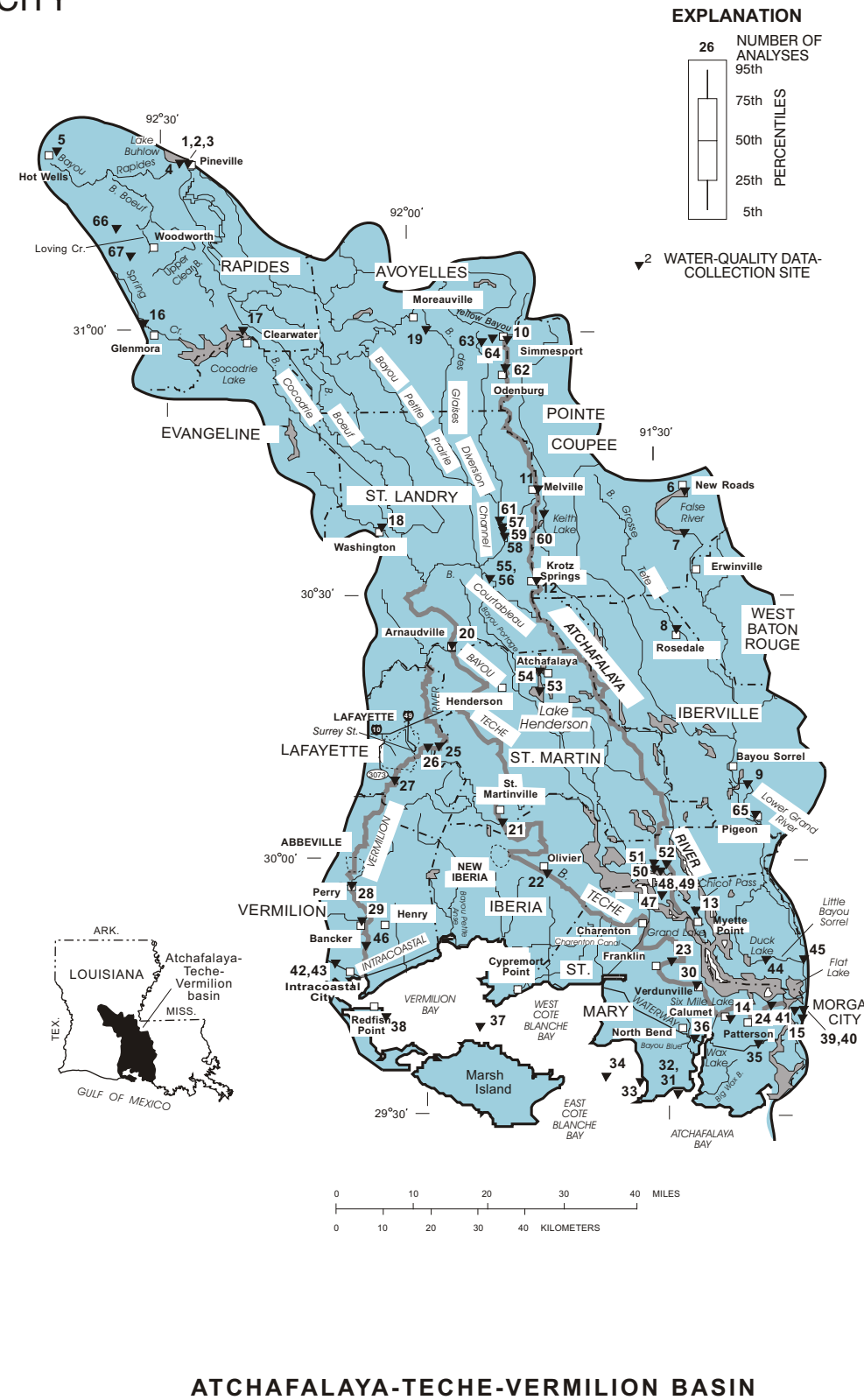
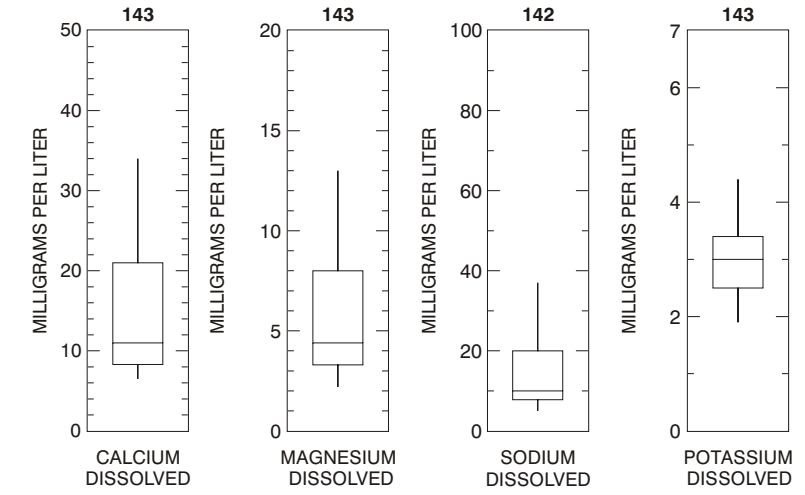


Figure 2.2.3-1. Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots summarizing data for dissolved calcium, magnesium, sodium, and potassium concentrations in water from selected sites.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

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.

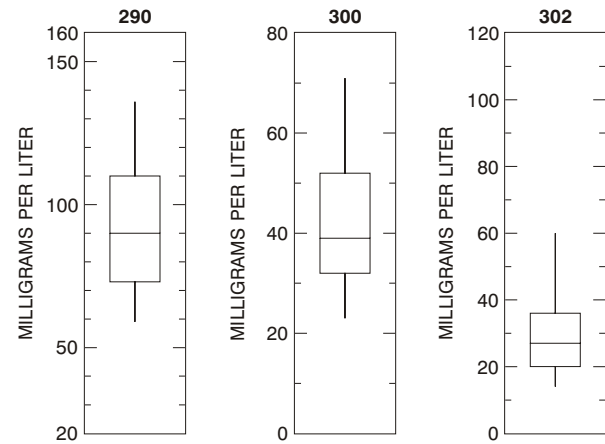
Alkalinity as calcium carbonate in water from the Atchafalaya-Teche-Vermilion basin ranged from less than 1 mg/L at Spring Creek near Glenmora to 317 mg/L at Bayou Des Glaises Diversion Channel at Moreauville. The lowest median concentration (11 mg/L) occurred at Upper Clear Bayou near Woodworth. The 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 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

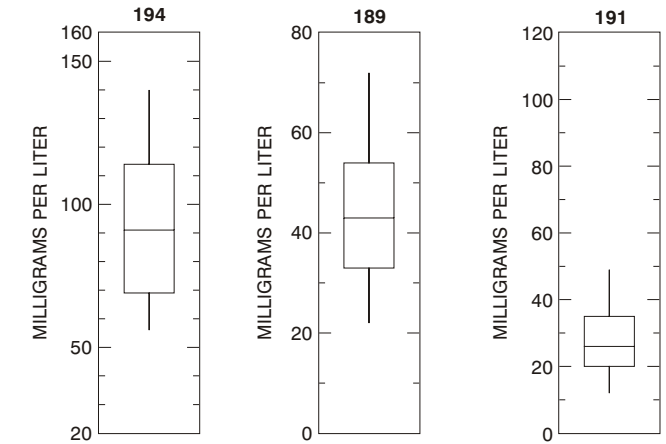
Bay at Cypremort Point. The SMCL for drinking water is 250 mg/L (U.S. Environmental Protection Agency, 1986; Louisiana Department of Environmental Quality, 1984). The boxplots for six representative sites (fig. 2.2.4-1) show that the sulfate concentrations on the Vermilion River and Bayou Teche were 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.

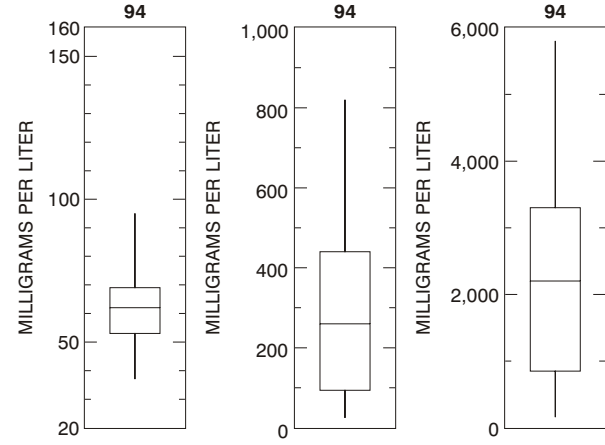
15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY



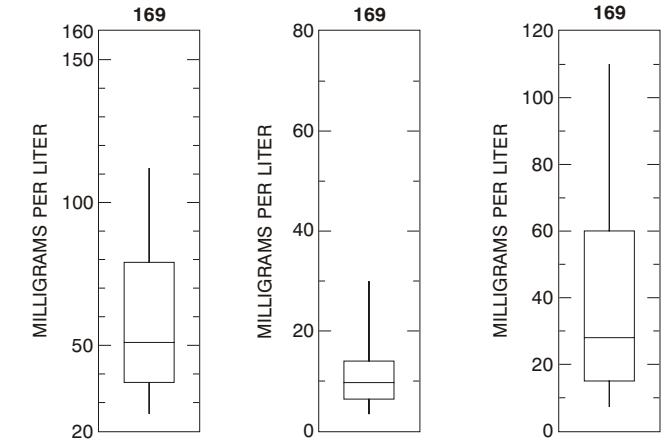
11 ATCHAFALAYA RIVER AT MELVILLE



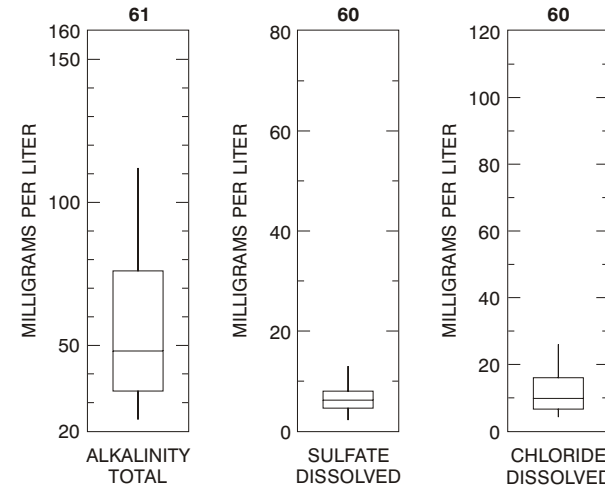
37 VERMILION BAY AT CYPREMORT POINT



27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



20 BAYOU TECHE AT ARNAUDVILLE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

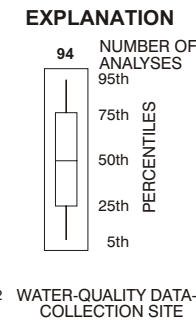
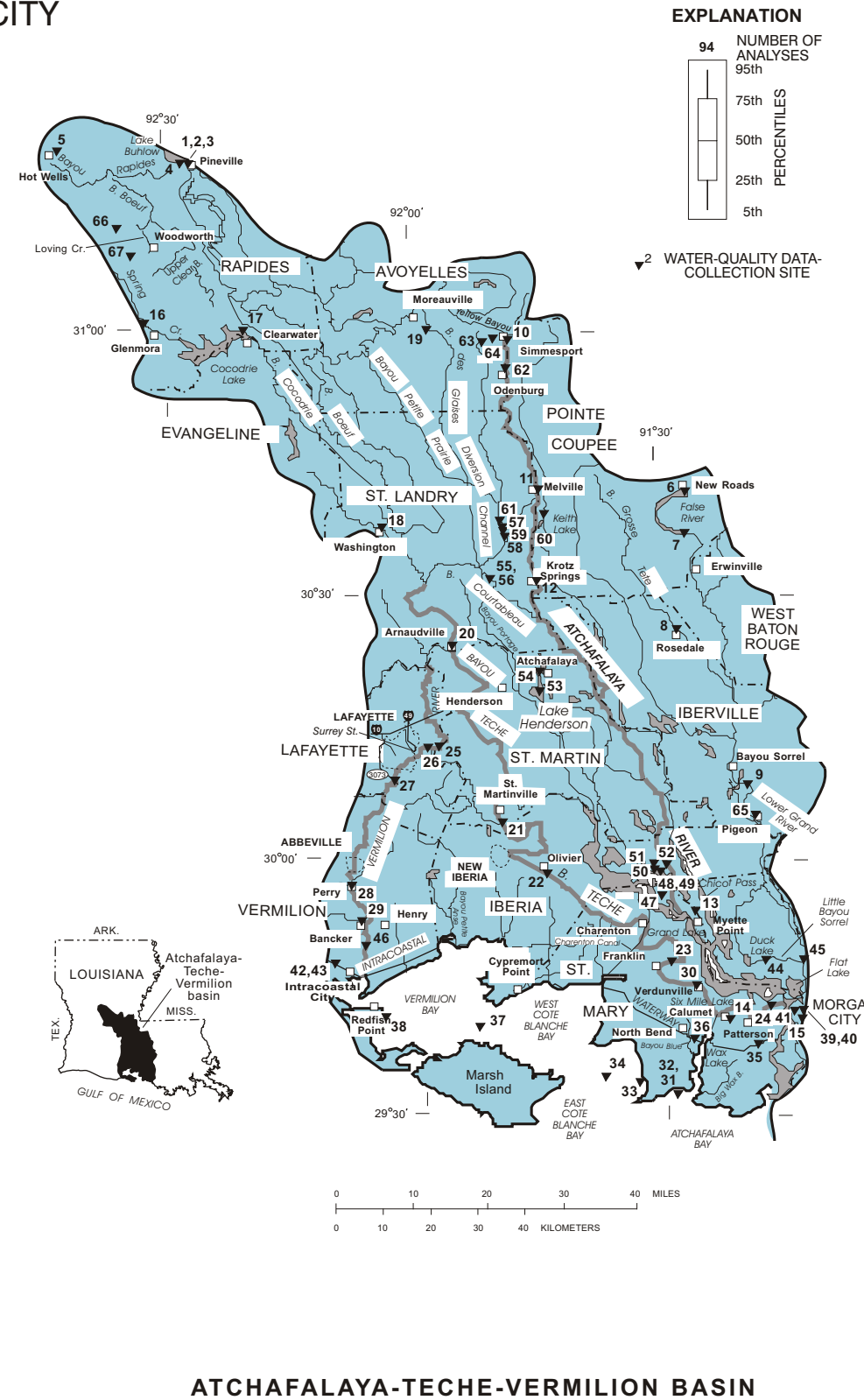
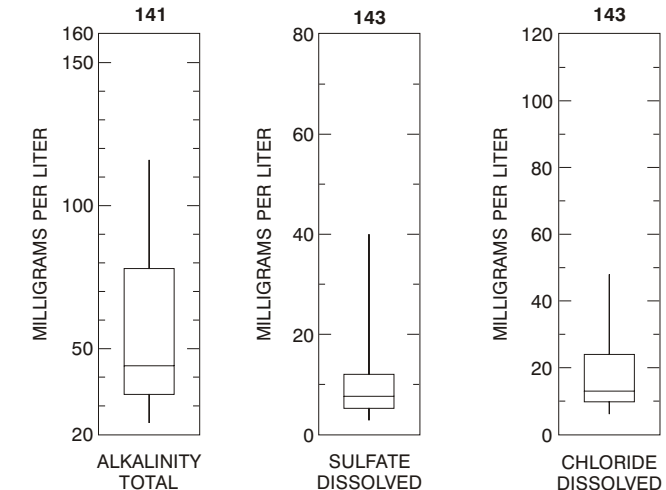


Figure 2.2.4-1. Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots summarizing data for total alkalinity as calcium carbonate and dissolved sulfate and chloride concentrations in water from selected sites.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

2.2.5 Relation between Specific Conductance and Dissolved Chloride

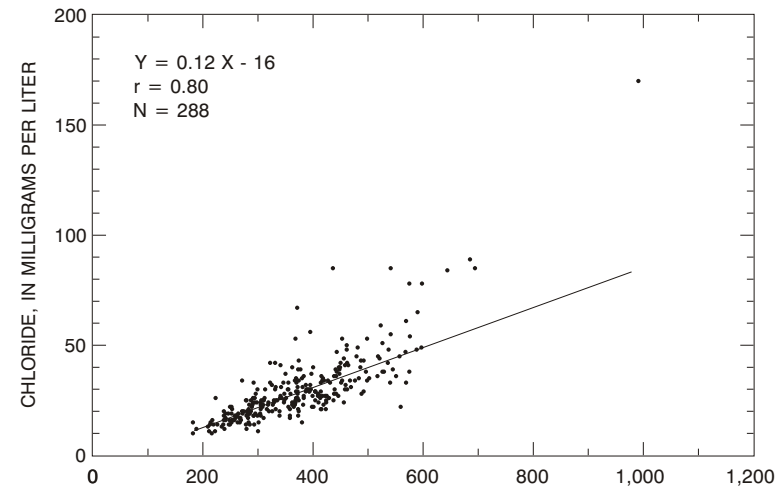
A DIRECT RELATION EXISTS BETWEEN SPECIFIC CONDUCTANCE AND DISSOLVED CHLORIDE

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

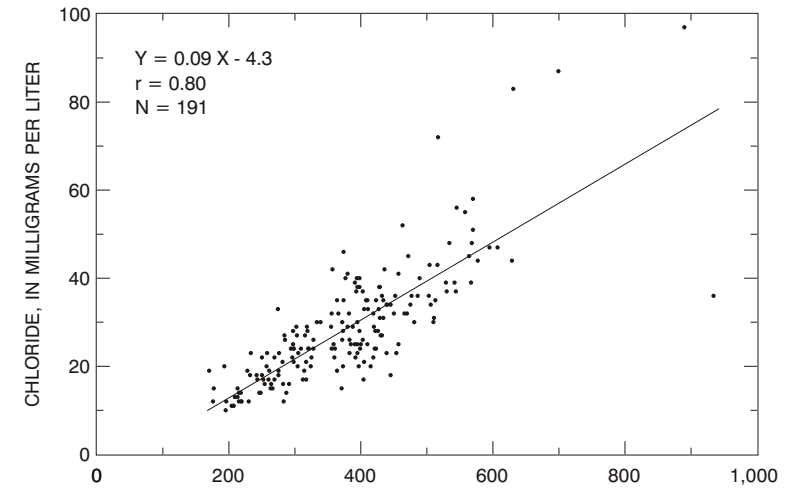
Regression equations relating chloride concentrations to specific conductance values were calculated for six sites in the Atchafalaya-Teche-Vermilion basin (fig. 2.2.5-1). The correlation coefficient values, r , ranged from 0.80 at Lower Atchafalaya River at Morgan City and Atchafalaya River at Melville 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 $\mu\text{S}/\text{cm}$ 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.

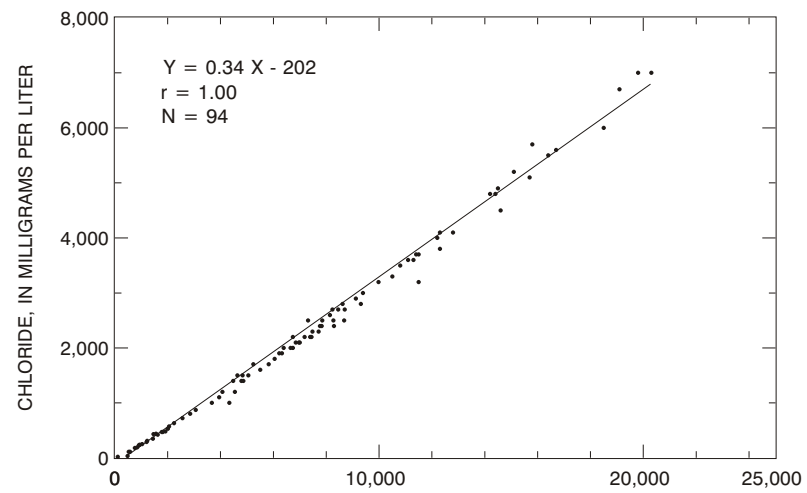
15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY



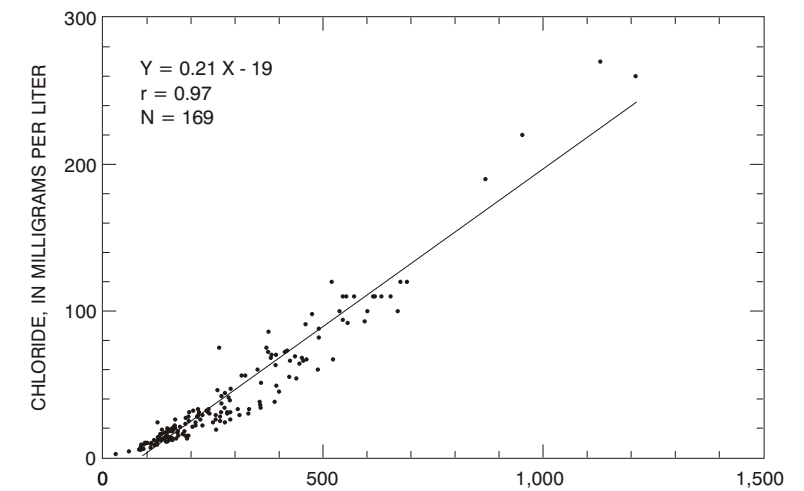
11 ATCHAFALAYA RIVER AT MELVILLE



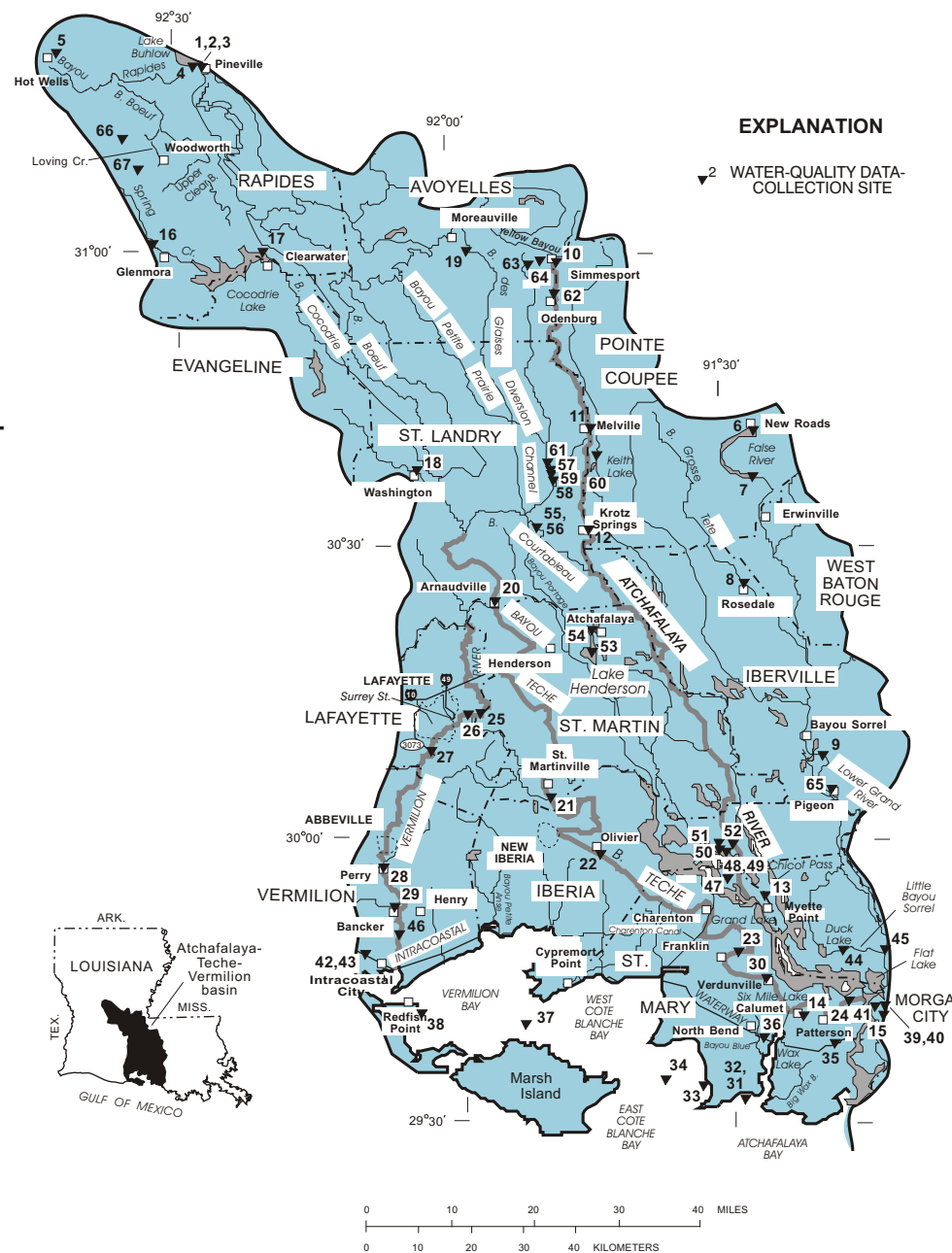
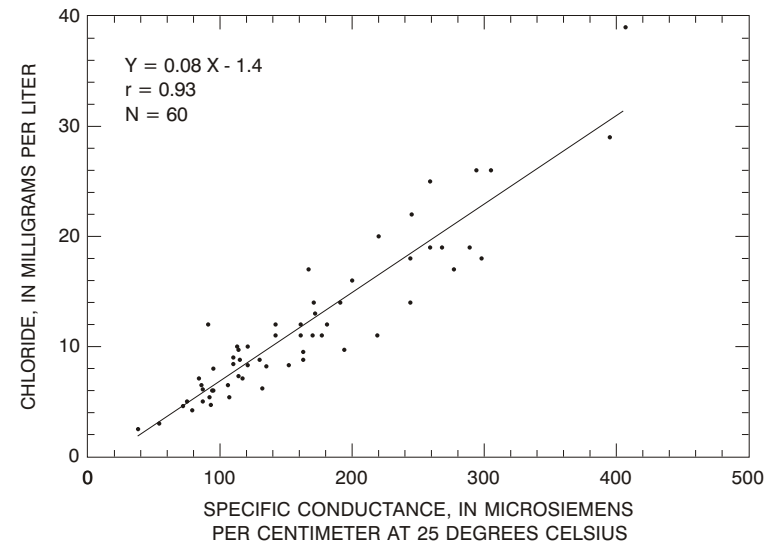
37 VERMILION BAY AT CYPREPOINT POINT



27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



20 BAYOU TECHE AT ARNAUDVILLE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

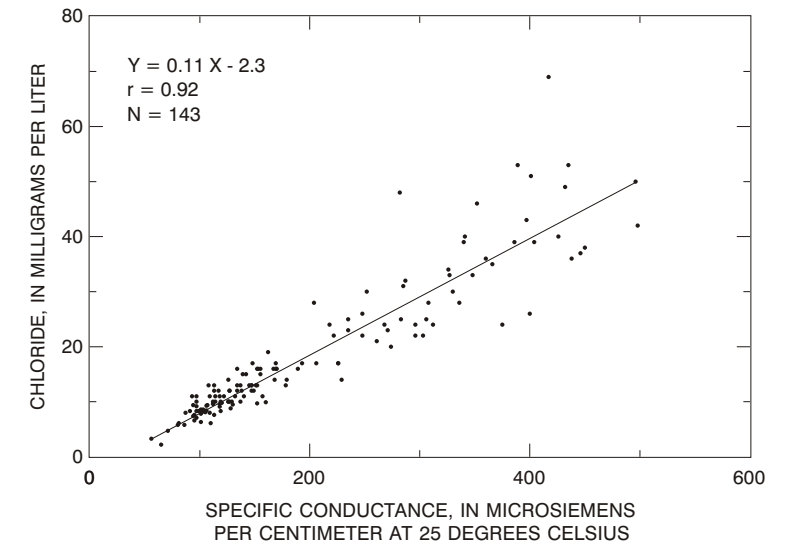


Figure 2.2.5-1. Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and graphs showing relation between specific conductance and dissolved chloride in water from selected sites.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

2.2.6 Trace Metals²--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.

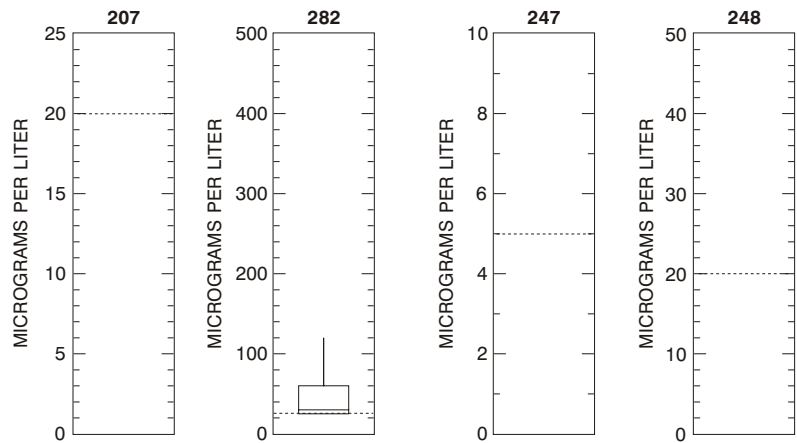
Concentrations of lead in water from the basin were generally low at all sites. The concentrations

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.

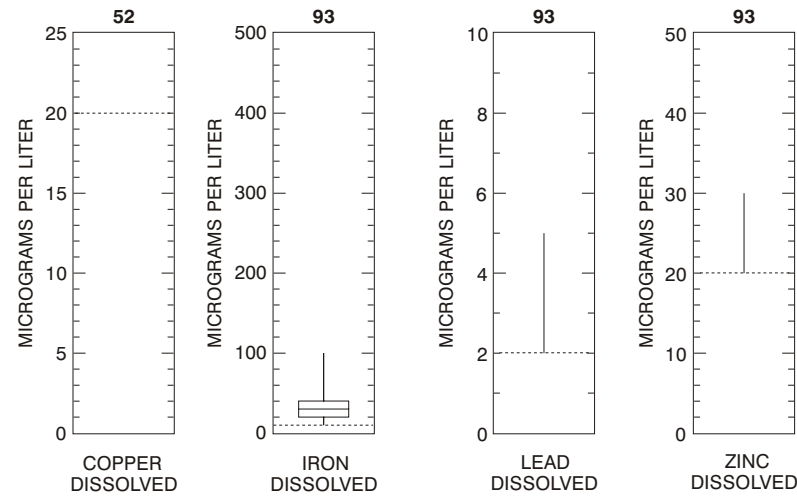
Zinc concentrations in water from the Atchafalaya-Teche-Vermilion basin generally were low at all sites. However, the maximum zinc concentration at Intracoastal Waterway at Vermilion Lock (west) near Intracoastal City was 260 µg/L. Zinc concentrations in the basin ranged from less than the detection 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

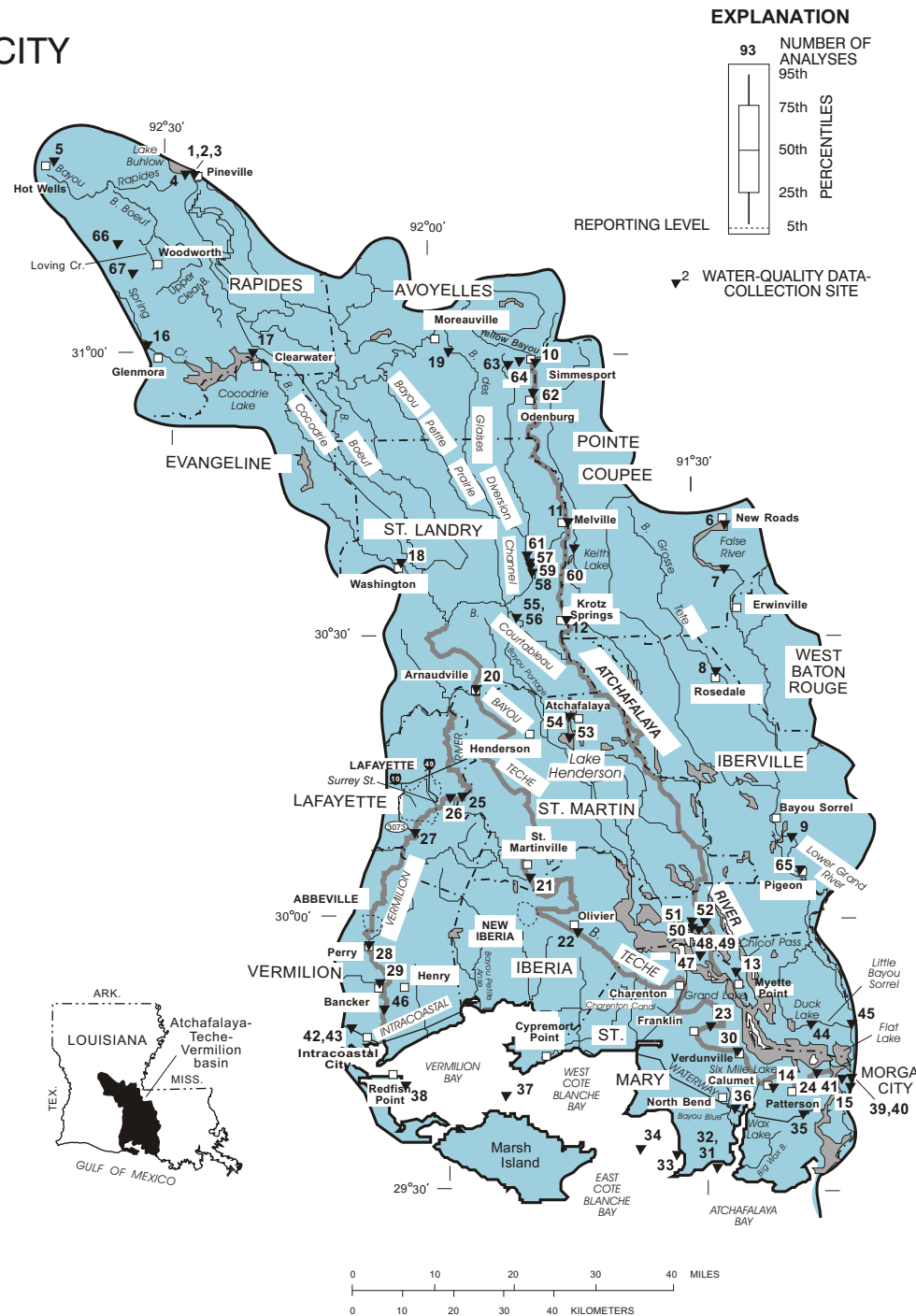


37 VERMILION BAY AT CYPREMORT POINT



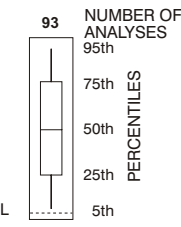
20 BAYOU TECHE AT ARNAUDVILLE

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



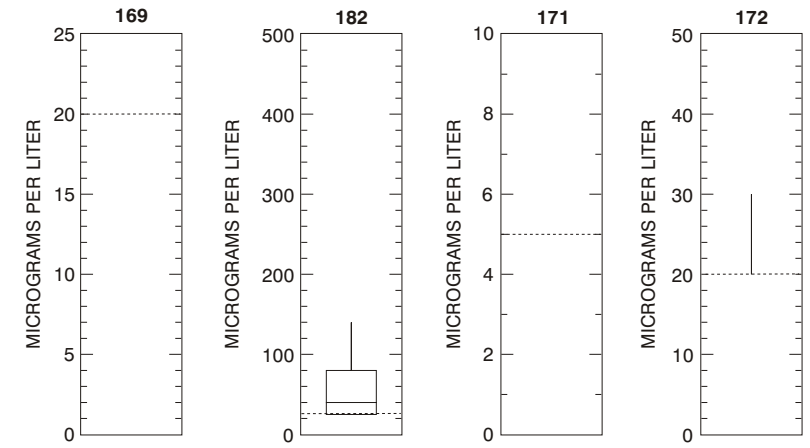
ATCHAFALAYA-TECHE-VERMILION BASIN

EXPLANATION

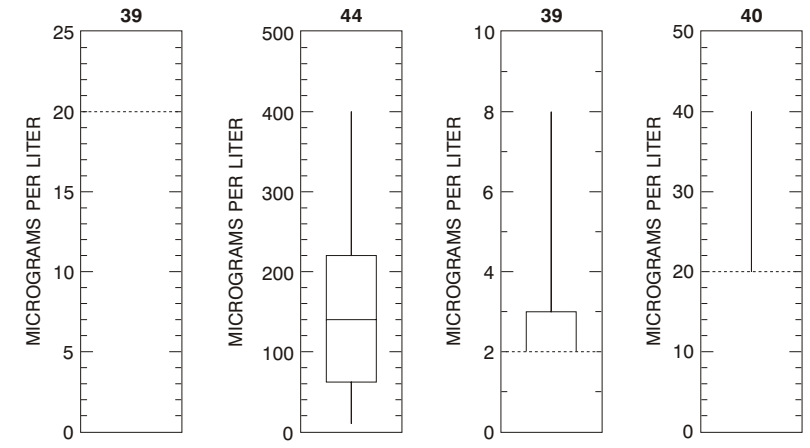


REPORTING LEVEL
 ▼ WATER-QUALITY DATA-COLLECTION SITE

11 ATCHAFALAYA RIVER AT MELVILLE



27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

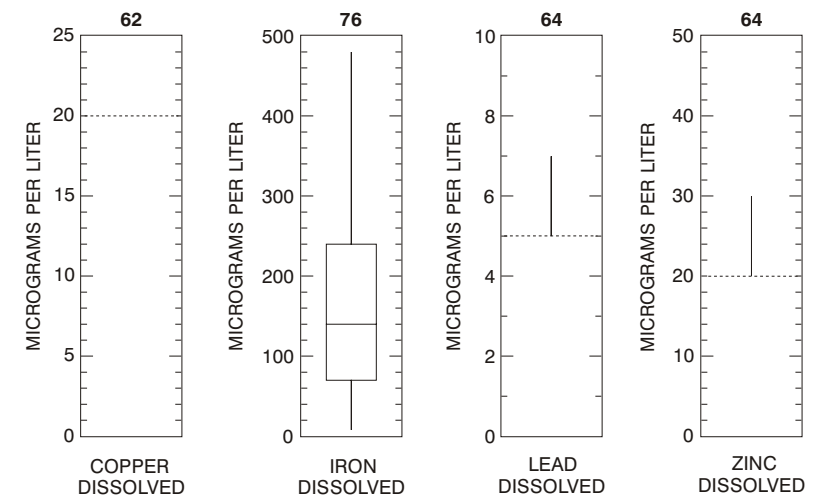


Figure 2.2.6-1. Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots and tables summarizing data for dissolved copper, iron, lead, and zinc concentrations in water from selected sites.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

2.2.7 Nutrients--Nitrogen and Phosphorus Constituents

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.

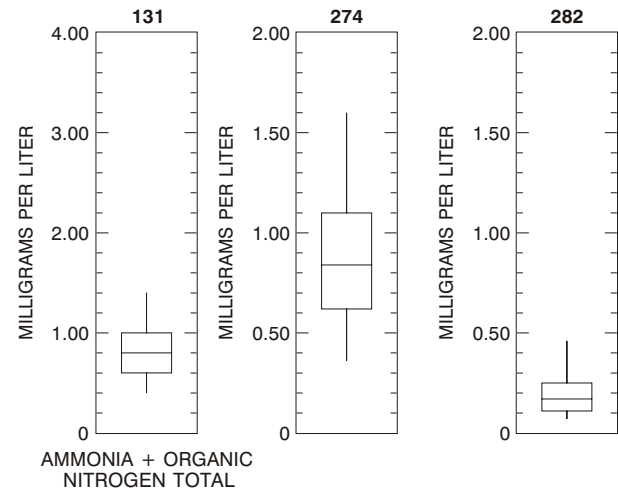
Concentrations of ammonia plus organic nitrogen in water from the basin ranged from 0.12 mg/L at Atchafalaya River at Simmesport to 7.0 mg/L at Yellow Bayou Station YB-2 near Simmesport. Median concentrations ranged from 0.40 to 2.4 mg/L. However, median concentrations of ammonia plus organic nitrogen 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

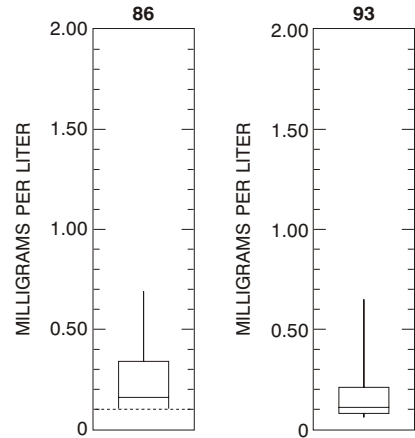
(East) near Courtableau. Median nitrite plus nitrate nitrogen concentrations ranged from 0.01 to 0.96 mg/L. Boxplots at six representative sites show that median concentrations at the sites on the Atchafalaya River were approximately twice the median concentrations at the other sites (fig. 2.2.7-1).

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).

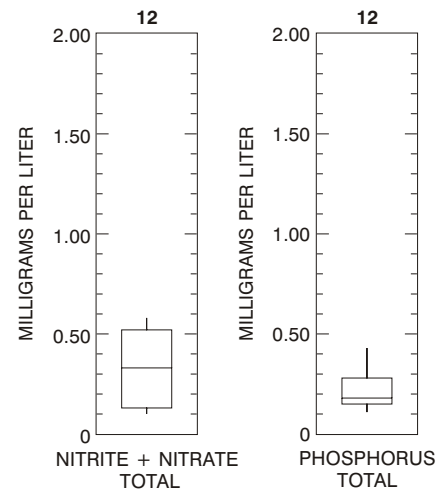
15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY



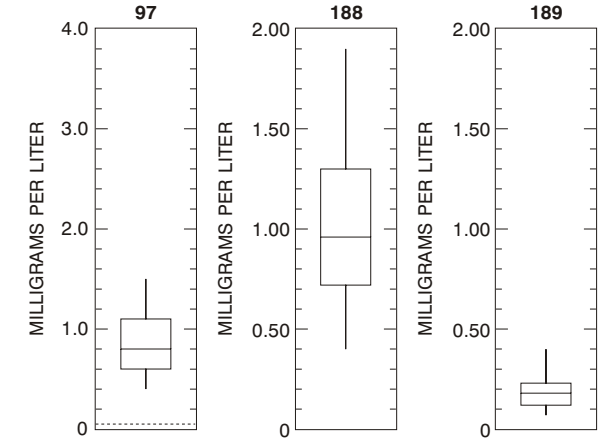
37 VERMILION BAY AT CYPREMORT POINT



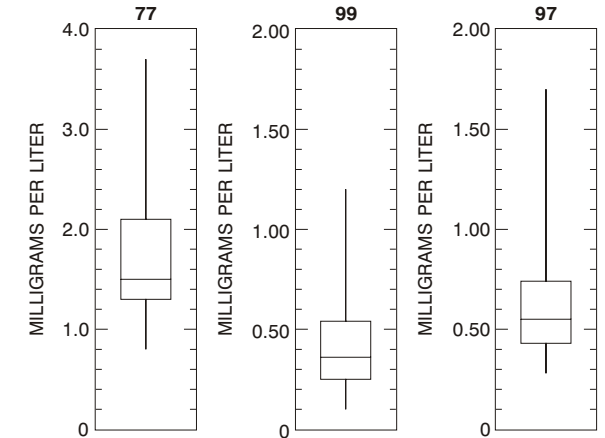
20 BAYOU TECHE AT ARNAUDVILLE



11 ATCHAFALAYA RIVER AT MELVILLE



27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE

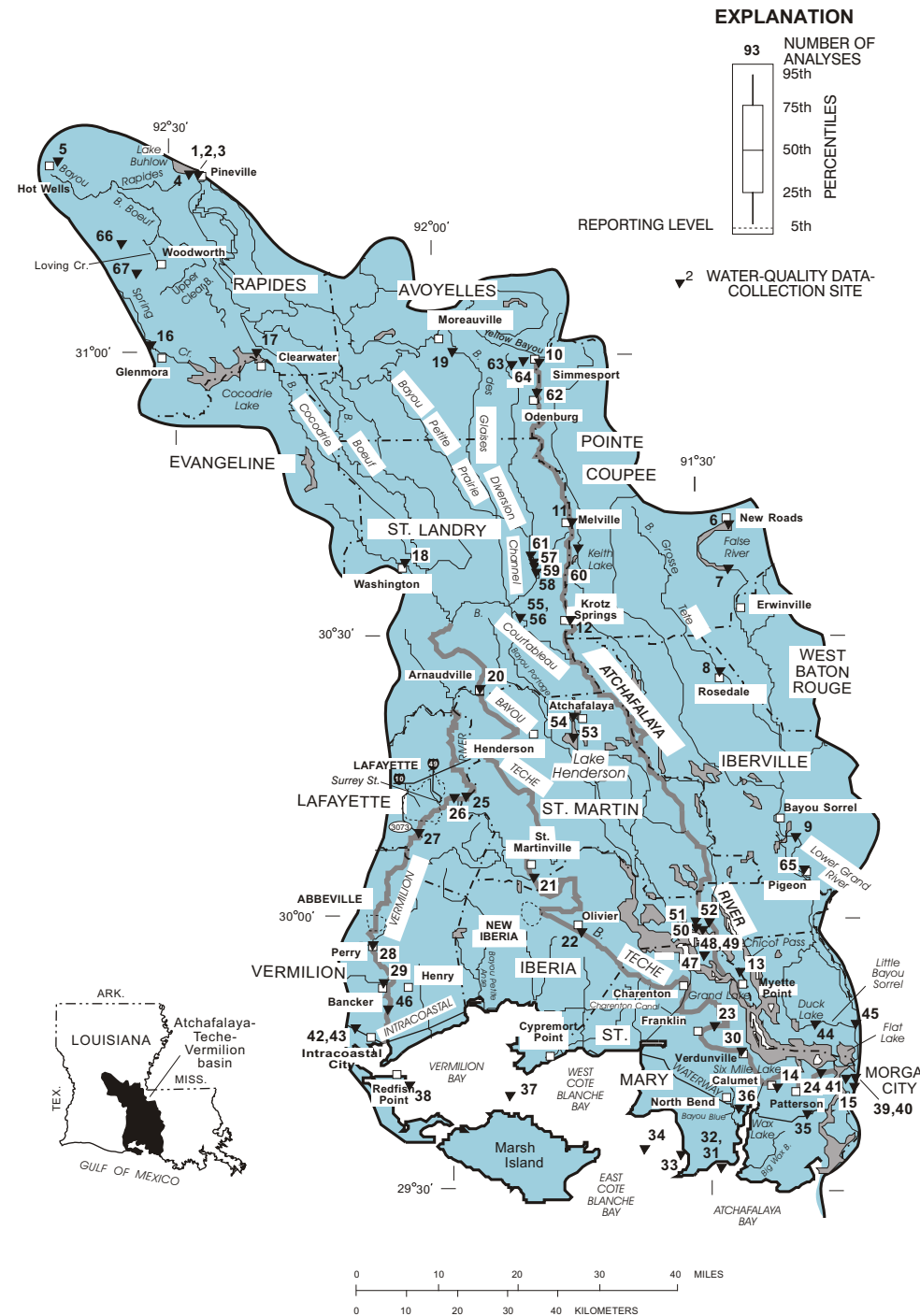
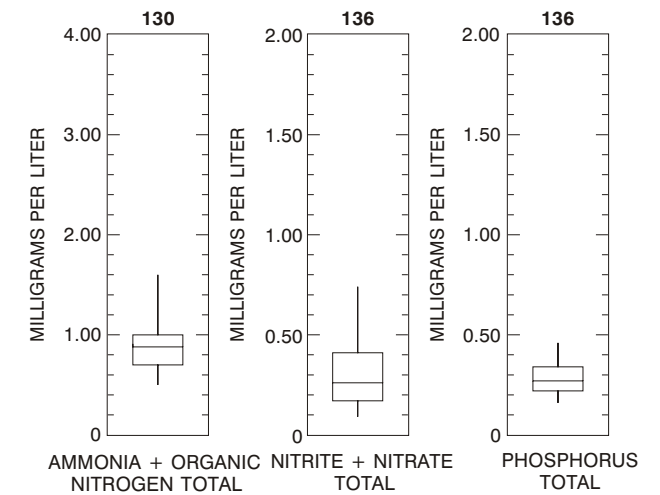


Figure 2.2.7-1. Water-quality data-collection sites in the Atchafalaya-Teche-Vermilion basin, Louisiana, and boxplots and tables summarizing data for concentrations of nutrients in water from selected sites.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

2.2.8 Organic Compounds--Pesticides and PCB's

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 num-

ber 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

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

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

27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE

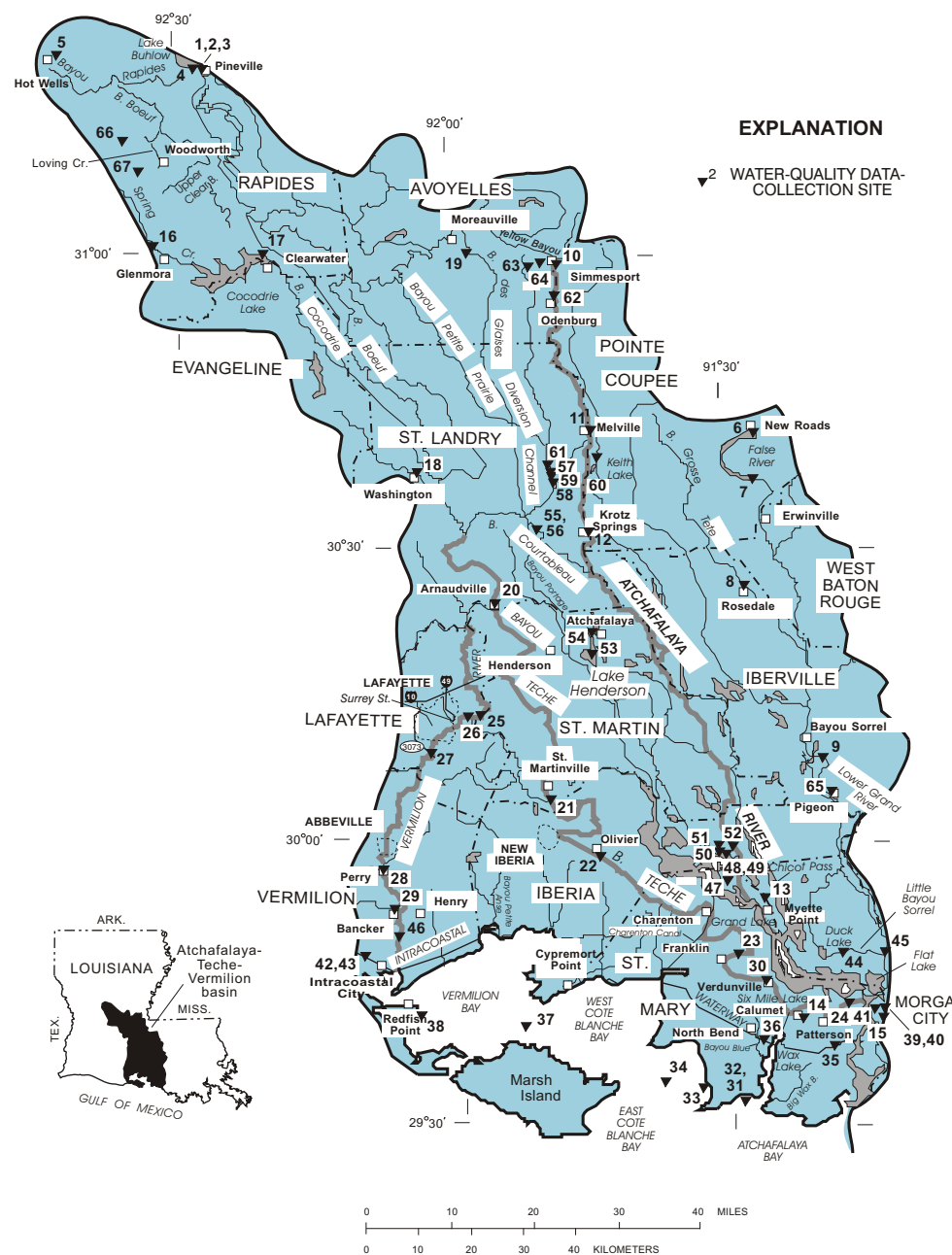
ORGANIC COMPOUND TOTAL	TOTAL NUMBER OF ANALYSES	REPORTING LEVEL (µg/L)	NUMBER OF ANALYSES AT OR ABOVE REPORTING LEVEL
DDT	34	0.01	7
PCB	33	0.1	1
DIAZINON	33	0.01	30
LINDANE	34	0.01	2
CHLORDANE	34	0.1	0
MALATHION	33	0.01	1
ENDRIN	34	0.01	0
PARATHION	33	0.01	0
DIELDRIN	34	0.01	11
ENDOSULFAN	15	0.01	0
2,4-D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

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

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



ATCHAFALAYA-TECHE-VERMILION BASIN

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.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

2.2 Surface-Water Quality--continued

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).

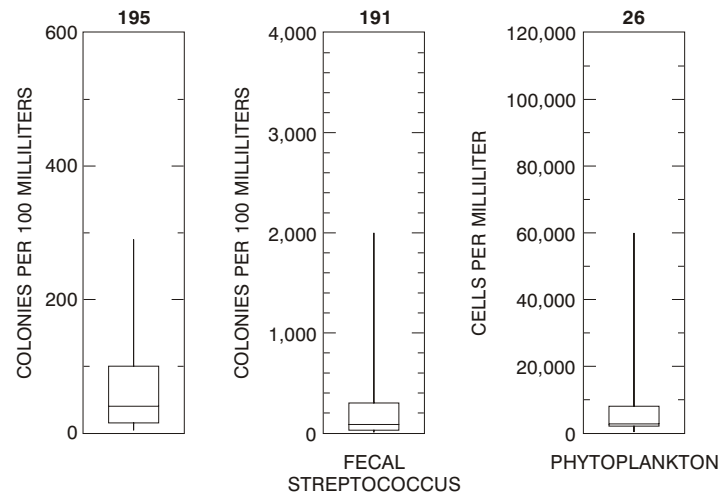
Concentrations of fecal streptococcus bacteria also varied greatly at sites in the basin. Concentrations ranged from 2 cols/100 mL at Lower Atchafalaya River at Morgan City to 74,000 cols/100 mL at Bayou Grosse Tete at Rosedale. Median fecal streptococcus concentrations, which ranged from 40 to 1,800 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).

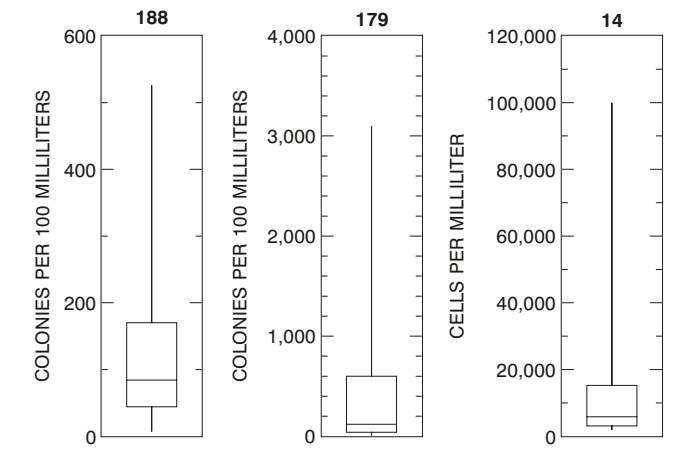
The median ratios of fecal coliform to fecal streptococcus bacteria was less than 0.7 at most of the sites sampled for analysis of bacteria concentrations within the Atchafalaya-Teche-Vermilion basin, indicating that sources of fecal coliform bacteria probably were predominantly livestock or poultry 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).

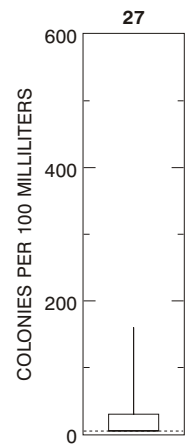
15 LOWER ATCHAFALAYA RIVER AT MORGAN CITY



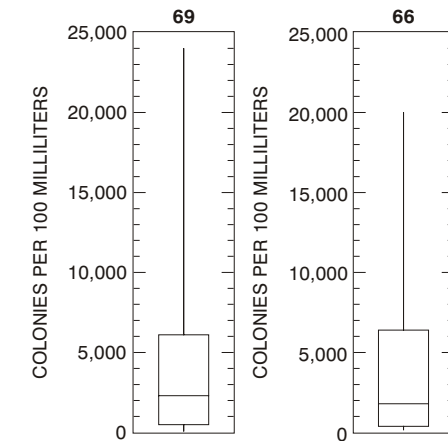
11 ATCHAFALAYA RIVER AT MELVILLE



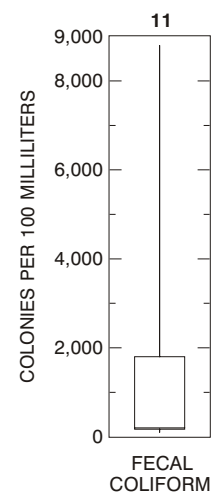
37 VERMILION BAY AT CYPREPOINT POINT



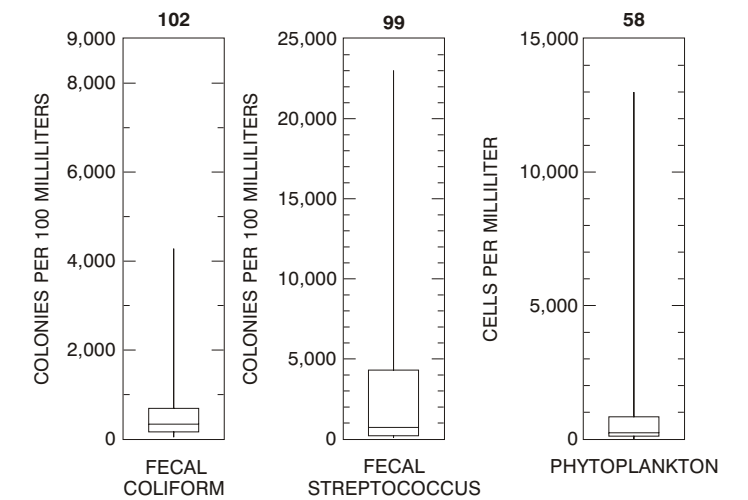
27 VERMILION RIVER AT STATE HIGHWAY 3073 AT LAFAYETTE



20 BAYOU TECHE AT ARNAUDVILLE



21 BAYOU TECHE AT KEYSTONE LOCK NEAR ST. MARTINVILLE



ATCHAFALAYA-TECHE-VERMILION BASIN

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.

2.0 ATCHAFALAYA-TECHE-VERMILION BASIN IN LOUISIANA--continued

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 state-wide 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)	(b)
Iron, dissolved	14	10	7	90	<10	(c)	<10	<10	<10	30	90	90
Lead, dissolved	1	1	1	2	(d)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	1	20	0	<20	(d)	(b,c)	(b)	(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)	(b)
PCB, total	1	.1	0	<.1	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	1	.1	0	<.1	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	2	.01	1	.03	<.01	(b,c)	(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

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)	(b)
Iron, dissolved	13	10	9	50	<10	(c)	<10	<10	30	40	50	50
Lead, dissolved	1	1	1	3	(d)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	1	10	0	<10	(d)	(b,c)	(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)	(b)
PCB, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	2	.01	1	.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	2	.01	1	.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	2	.01	1	.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	3	.01	3	.05	.02	(b)	(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)	(b)
Fecal streptococcus	8	1	8	3,000	12	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Trace metals (micrograms per liter)												
Copper, dissolved	2	1	2	6	2	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Iron, dissolved	2	10	2	620	40	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Lead, dissolved	2	5	1	5	<5	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	2	20	1	20	<20	(b,c)	(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)	(b)
PCB, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endosulfan, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	2	.01	0	<.01	<.01	(b,c)	(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 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)	(b)
Fecal streptococcus	2	1	2	12,000	620	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Trace metals (micrograms per liter)												
Copper, dissolved	2	1	2	21	9	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Iron, dissolved	2	25	2	890	60	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Lead, dissolved	2	1	2	11	2	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	2	20	2	30	20	(b)	(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)	(b)
PCB, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	2	.01	2	.01	.01	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	2	.01	1	.03	<.01	(b,c)	(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 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)	(b)
Fecal streptococcus	8	10	7	150	<10	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Trace metals (micrograms per liter)												
Copper, dissolved	2	2	2	8	2	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Iron, dissolved	2	10	1	20	<10	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lead, dissolved	2	2	1	2	<2	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	2	2	2	40	7	(b)	(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)	(b)
PCB, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endosulfan, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	2	.01	0	<.01	<.01	(b,c)	(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

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	.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)	(b)
pH (standard units)	1	(a)	(a)	8.0	(d)	(b)	(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)	(b)
Major cations (milligrams per liter)												
Calcium, dissolved	1	0.01	1	39	(d)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Magnesium, dissolved	1	.01	1	12	(d)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Major anions (milligrams per liter)												
Alkalinity, total	1	1	1	95	(d)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Sulfate, dissolved	1	.1	1	50	(d)	(b)	(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)	(b)
Phosphorus, total as phosphorus	1	.01	1	.14	(d)	(b)	(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)	(b)
Iron, dissolved	1	10	0	<10	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lead, dissolved	1	10	0	<10	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	1	10	0	<10	(d)	(b,c)	(b)	(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)	(b)
PCB, total	1	.1	0	<.1	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	1	.01	1	.01	(d)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	1	.001	0	<.001	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	1	.1	0	<.1	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	1	.001	0	<.001	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	1	.01	0	<.01	(d)	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	1	.01	1	.25	(d)	(b)	(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	.001	0	<.001	<.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	.001	0	<.001	<.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)	(b)
Iron, dissolved	13	10	7	80	<10	(c)	<10	<10	20	50	80	80
Lead, dissolved	2	2	2	2	2	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	2	20	1	20	<20	(b,c)	(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)	(b)
PCB, total	3	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	3	.001	0	<.001	<.001	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	3	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	3	.001	0	<.001	<.001	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	3	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	3	.01	1	.10	<.01	(b,c)	(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

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)	(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)	(b)
Iron, dissolved	2	10	2	130	130	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Lead, dissolved	2	1	1	3	<1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Zinc, dissolved	2	1	2	10	4	(b)	(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)	(b)
PCB, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Diazinon, total	2	.01	1	.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Lindane, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Chlordane, total	2	.1	0	<.1	<.1	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Malathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Parathion, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Dieldrin, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
Endosulfan, total	2	.01	0	<.01	<.01	(b,c)	(b)	(b)	(b)	(b)	(b)	(b)
2,4-D, total	2	.01	1	.01	<.01	(b,c)	(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

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	.001	2	.001	<.001	(c)	<.001	<.001	<.001	<.001	.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	.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	.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.